

SPECIAL PROVISIONS

to the

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
2017 STANDARD SPECIFICATIONS for HIGHWAY CONSTRUCTION

KNIK RIVER ACCESS: PALMER HAY FLATS SGR

RECREATION SITE IMPROVEMENTS

PROJECT NUMBER 2021.04

SECTION 101

DEFINITIONS AND TERMS

101-1.03 DEFINITIONS.

DEPARTMENT. Replace with the following: The Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation. (01/01/01)PARKS-Special Provision

ROADWAY. Replace with the following: The portion of a highway or park facility including shoulders within the limits of construction. (01/01/01)PARKS-Special Provision

SECTION 102

BIDDING REQUIREMENTS AND CONDITIONS

102-1.04 EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS, AND WORK SITE. Replace the second paragraph with the following: Material Reports and/or Soils Investigation Reports are not available for this project. (01/01/01)PARKS-Special Provision

SECTION 105

CONTROL OF WORK

105-1.02 PLANS AND WORKING DRAWINGS. Add the following to the first paragraph: Full size plan sheets are 11” by 17”. Plans are not available in CAD digital format. (01/01/01)PARKS-Special Provision

105-1.06 UTILITIES. Add the following:

Request locates from the utilities having facilities in the area. Use the Alaska Digline, Inc. Locate Call Center for the following utilities.

ALASKA DIGLINE, INC.

Locate Call Centers:

Anchorage	278-3121
Statewide	(800) 478-3121

Call Centers will notify the following:

- Alaska Communications Systems (ACS)
- Alaska Fiber Star (WCI)
- AT & T Alascom (AT&T)
- Chugach Electric Association (CEA)
- City of Wasilla (CWPW)
- ENSTAR Natural Gas (ENS)
- General Communications, Inc. (GCI)
- Marathon Pipe Line LLC. (MARATHN)
- Matanuska Electric Association (MEA)
- Matanuska Telephone Association (MTA)
- State of AK, DOT/PF Anchorage Street Lights (DOT)

105-1.13 MAINTENANCE DURING CONSTRUCTION.

Replace the first sentence of the first paragraph with the following: The Contractor shall maintain the entire area located within the project limits from the date construction begins until the Contractor receives a letter of substantial completion. (03/09/17) PARKS-Special Provision

105-1.15 PROJECT COMPLETION. In the third paragraph, first sentence, replace: “Subsection 621-3.04” with “Subsection 618-3.06 and 621-3.04.”

(02/02/15) PARKS-Special Provision

105-1.16 FINAL ACCEPTANCE AND RECORD RETENTION.

Add the follow to the first paragraph:

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

6. Submit a Performance Guarantee at the completion of the final estimate in accordance with Subsection 618-5.01 if a second application of fertilizer is required in accordance with Subsection 618-3.04.

(01/01/01)PARKS-Special Provision

105-1.17 CLAIMS. Add the following: Any appeal to the superior court under AS 36.30.685 must be filed in the third judicial district. (03/21/01)R93-Special Provision

SECTION 106

CONTROL OF MATERIAL

106-1.01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS. Add the following: Pursuant to AS 36.15.050 and AS 36.30.322, agricultural/wood products harvested in Alaska shall be used in state funded projects whenever they are priced no more than seven percent above agricultural/wood products harvested outside the state and are of a like quality as compared with agricultural/wood products harvested outside the state.

The Contractor shall maintain records which establish the type and extent of agricultural/wood products utilized. When such products are not utilized, the Contractor shall document the efforts he made towards obtaining agricultural/wood products harvested in Alaska and include in this documentation a written statement that he contacted the manufacturers and suppliers identified on the Department of Commerce and Economic Development's list of suppliers of Alaska forest products concerning the availability of agricultural/wood products harvested in Alaska and, if available, the product prices. The Contractor shall complete this documentation at a time determined by the Contracting Officer.

The Contractor's use of agricultural/wood products that fail to meet the requirements of this Subsection shall be removed and replaced in accordance with the last paragraph of Subsection 105-1.03, Conformity With Plans and Specifications.

(05/07/91)S18-Special Provision

SECTION 107

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

107-1.02 PERMITS, LICENSES, AND TAXES.

Add the following to the second paragraph:

3. The Department has received the following permits on the Contractor's behalf:
 - a. U.S. Army Permit For Preliminary Determination and USACE Section 404/10 Permit, **PENDING**
 - b. Department of Environmental Conservation Certificate of Reasonable Assurance, **PENDING**
 - c. Department of Natural Resources SHPO Letter of No Historic Properties Impacted, **PENDING**
 - d. Municipality of Anchorage Flood Hazard Permit, **PENDING**
 - e. Matanuska-Susitna Borough Application for Floodplain Development Permit MSB 17.29, **PENDING**
 - f. Alaska Department of Fish and Game Special Area Permit, **PENDING**

(04/16/21)PARKS-Special Provision

Add the following to the fourth paragraph:

5. Provide a wetland specialist to conduct the determination and delineations of sites outside the project limits or not previously permitted, impacted by the Contractor's operations. These delineations will be subject to Corps of Engineers approval. The wetland specialist shall conduct wetlands determinations and delineations according to the Corps of Engineers 1987 Wetland Delineation Manual, and the Regional Supplement to the Corps of Engineers Wetland Delineations Manual (Alaska Region, Version 2.0, September 2007).

(03/21/11)PARKS-Special Provision

107-1.11 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE.

Add the following: If water is required for a construction purpose from a nonmunicipal water source, obtain a Temporary Water Use Permit from the Water Resource Manager, and provide a copy to the Engineer. The Water Resource Manager is with the Department of Natural Resources in Anchorage and may be contacted at (907) 269-8645.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

(02/08/10)CR7-Special Provision

Add the following: All clearing and/or grubbing activities shall take place outside of the Migratory Bird Treaty Act (MBTA) window as determined by the U.S. Fish and Wildlife Service (FWS) under the website publication for the construction year:

http://alaska.fws.gov/fisheries/fieldoffice/anchorage/pdf/vegetation_clearing.pdf

(06/30/98)PARKS-Special Provision

Add the following:

Bald Eagles are protected under the Bald Eagle Protection Act (16 U.S.C. 668-668c) which prohibits “takes” of bald eagles, their eggs, nests, or any part of the bird. The Act defines “taking” as “to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb.”

Maintain a Primary Zone of a minimum 330 ft as an undisturbed habitat buffer around nesting bald eagles. If topography or vegetation does not provide an adequate screen or separation, extend this buffer to 0.25 miles, or a sufficient distance to screen the nest from human activities. The actual distance will depend on site conditions and the individual eagle’s tolerance for human activity. Within the Secondary Zone, between 330 ft and 660 ft from eagles nest tree no obtrusive facilities or major habitat modifications shall occur. If nesting occurs in sparse stands of trees, treeless areas, or where activities would occur within line-of-site of the nest, this buffer shall extend up to 0.5 miles. No blasting, logging and other noisy, disturbing activities should occur during the nesting period (March 1 – August 31) within the primary or secondary zones.

Extremely noisy activities such as road construction or other activities that occur within the Secondary Zone shall be conducted outside the nesting period to avoid disturbance to eagles. If activities occur in proximity to a nest site, employ an individual qualified to observe and assess the impact of such activities on nesting eagles. Behavior generally associated with disturbed eagles includes alarm calls, birds flushed from their nest or perch, and aggressiveness.

If nest trees are discovered within the vicinity of the project site, the U.S. Fish and Wildlife Service must be notified immediately by calling (907) 786-3503 or (907) 271-2772, before starting construction activities, for further site evaluation.

(08/12/10)CR1071-Special Provision

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

SECTION 108

PROSECUTION AND PROGRESS

108-1.01 SUBLETTING OF CONTRACT. Delete paragraph one and replace with the following: The Contractor shall submit a Contractor Self Certification for Subcontractors and Lower Tier Subcontractors, Form 25D-042, before the Contractor or any subcontractor sublets, sells, transfers, assigns, or otherwise disposes of the Contract or any portion of the Contract. The Department has authority to review subcontracts and to deny permission to sublet work. The Department may penalize the Contractor for false statements or omissions made in connection with Form 25D-042.

Delete paragraph four and replace with the following:

1. The Contractor shall ensure that for all subcontracts (agreements):
 - a. The Department is furnished with one completed Contractor Self certification, Form 25D-042, for each subcontract;
 - b. The required prompt payment provisions of AS 36.90.210, as well as other items listed in Form 25D-042, are included in the subcontracts;
 - c. The subcontractors pay current prevailing rate of wages as per Subsection 107-1.04 and file certified payrolls with the Engineer and DOLWD for all work performed on the project; and
 - d. Upon receipt of a request for more information regarding subcontracts, the requested information is provided to the Department within 5 calendar days.

(05/02/11)PARKS-Special Provision

108-1.02 NOTICE TO PROCEED. Add the following: The Contractor may request a Limited Notice to Proceed after the Award has been made, to permit him to order long lead materials which would cause delays in project completion. However, granting is within the sole discretion of the Contracting Officer, and refusal or failure to grant a Limited Notice to Proceed shall not be a basis for claiming for delay, extension of time, or alteration of price.

Notice to Proceed will not be issued prior to April 19, 2021.

(6/30/98)PARKS-Special Provision

108-1.03 PROSECUTION AND PROGRESS. Replace the last sentence of the first paragraph with the following: Submit the following at the Preconstruction Conference:

Replace item 1. A progress schedule. with the following:

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

1. A Critical Path Method (CPM) Schedule is required, in a format acceptable to the Engineer, showing the order the work will be carried out and the contemplated dates the Contractor and subcontractors will start and finish each of the salient features of the work, including scheduled periods of shutdown. Indicate anticipated periods of multiple shift work in the CPM Schedule. Revise to the proposed CPM Schedule promptly. Promptly submit a revised CPM Schedule if there are substantial changes to the schedule, or upon request of the Engineer.

(12/13/02)R261-Special Provisions

SECTION 109

MEASUREMENT AND PAYMENT

109-1.02 MEASUREMENT OF QUANTITIES. Add the following:

14. Hour. Measured items by the hour shall be full payment for the work described in the contract including labor, equipment, and operating costs of the equipment. Items to be measured by the hour will be recorded to the nearest quarter-hour by the Engineer. The measurement shall start when the required equipment & operator, surveyor, or survey party begins work at the specified location as directed by the Engineer. The measurement will stop when the required work is accomplished, when the equipment fails, when directed to stop work by the Engineer, or when the operator stops work. Times will be reconciled with the Contractor on a daily basis.

(02/23/15)PARKS-Special Provision

1091.05 COMPENSATION FOR EXTRA WORK ON TIME AND MATERIALS BASIS. Under item 3. Equipment, subitem a. Hourly Rental Rate, add the following to the second paragraph: The rental rate area adjustment factors for this project shall be as specified on the adjustment maps for the Alaska – South. (04/31/05)R14-Special Provision

SECTION 201

CLEARING AND GRUBBING

201-3.01 GENERAL. Add the following: All clearing and/or grubbing activities shall abide by the Migratory Bird Treaty Act (MBTA). (09/15/08)PARKS-Special Provision

Add the following: The Contractor shall perform the work necessary to preserve and/or restore land monuments and property corners from damage. A land monument or property corner that is disturbed shall be restored according to Section 642 at the Contractor's expense. An undisturbed area 5 foot in diameter may be left around existing monuments and property corners. A list of land monuments and property corners is shown on the Right of Way maps.

(06/10/04)R107-Special Provision

201-3.02 CLEARING. Add the following: Remove branches to provide 12 feet vertical clearance above road surface, shoulder to shoulder. Remove branches to provide 10 feet vertical clearance above sidewalk, deck, trail and pathway surfaces. (01/01/01)PARKS-Special Provision

201-3.03 GRUBBING. Add the following: The Contractor has the option to screen organic soil obtained from grubbing to meet the gradation for topsoil as specified under Section 726, or as approved by the Engineer. The screened material may be used for topsoil onsite. (05/02/11)PARKS-Special Provision

201-3.06 DISPOSAL. Replace paragraphs three and four with the following: Combustible material from any operations shall be disposed of by transporting to locations outside the park controlled lands. Burning will not be permitted in other areas close to the park to cause, as determined by the Engineer, a fire danger to the park resources.

Burning will not be permitted on private lands without the written approval of the property owner. The approval of the Engineer shall be required on a day to day basis when burning is within a two mile radius of the park lands. Constant care by competent watchmen with immediate access to adequate fire fighting equipment shall be required during burning operations. Full compliance with applicable laws and ordinances will be the Contractor's responsibility.

(01/01/01)PARKS-Special Provision

201-4.01 METHOD OF MEASUREMENT.

Add the following: Removal of branches for vertical clearance in accordance with Subsection 201-3.02 will not be measured directly for payment but will be considered subsidiary to work in this Section. (01/01/01)PARKS-Special Provision

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

201-5.01 BASIS OF PAYMENT.

Add the following:

Material from screening and tub grinding incorporated into the project as topsoil will be paid for as topsoil under Section 620. Screening and tub grinding operations shall be subsidiary to Section 620 items.

Material not incorporated into the project and is disposed of offsite shall be subsidiary to clearing and grubbing items.

(05/06/11)PARKS-Special Provision

SECTION 203

EXCAVATION AND EMBANKMENT

203-3.03 EMBANKMENT CONSTRUCTION. Add the following:

Cut and fill slopes shall be constructed to template. At the direction of the Engineer, the Contractor may be required to finish all slopes by a method of hand raking. This work shall be at no additional cost to the State. The finished slope surface parallel to the shoulder line shall not vary more than 0.10 foot when tested using a 10-foot straightedge. The finished slope surface perpendicular to the shoulder line shall not vary more than 0.10 foot for the following slope ratios and corresponding straightedge lengths: 2:1 slope and two-foot length; 3:1 slope and three-foot length; 4:1 slope and four-foot length; 5:1 slope and five-foot length; and 6:1 slope and six-foot length. (01/01/01)PARKS-Special Provision

203-5.01 BASIS OF PAYMENT. Add the following: The contract unit price for borrow is for furnishing the material if suitable selected material is not available in the unclassified excavation. The cost for placing and compacting the imported material is included in the contract unit price. The cost for placing and compacting selected material acquired from unclassified excavation shall be included in the contract unit price for the excavation items. Material paid for as excavation will not be paid for again as selected material. (01/01/01)PARKS-Special Provision

Replace 401 with the following:

SECTION 401

HOT MIX ASPHALT

401-1.01 DESCRIPTION. Construct one or more courses of plant-mixed, hot mix asphalt (HMA) pavement on the areas as shown on the plans.

MATERIALS

401-2.01 COMPOSITION OF MIXTURE - JOB MIX DESIGN. Use an Alaska DOT&PF Type II, Class B approved Job Mix Design. The Job Mix Design must have been accepted within the calendar year of construction.

401-2.02 TACK COAT. Special Tack Emulsion, STE-1 conforming to Subsection 702-2.03.

401-2.03 PROCESS QUALITY CONTROL. Sample and test materials for quality control of the asphalt concrete mixture according to Subsection 106-1.03.

Submit a paving and plant control plan at the pre-paving meeting to be held a minimum of 5 working days before initial paving operations. Address the sequence of operations and joint construction. Outline steps to assure product consistency, to minimize segregation, and to prevent premature cooling of the asphalt concrete mixture. Include a proposed quality control testing frequency for gradation, asphalt cement content, and compaction.

CONSTRUCTION REQUIREMENTS

401-3.01 WEATHER LIMITATIONS. Do not place the hot mix asphalt on a wet surface, on an unstable/yielding roadbed, when the base material is frozen, or when weather conditions prevent proper handling or finishing of the mix. Do not place hot mix asphalt unless the roadway surface temperature is 40 °F or warmer.

401-3.02 EQUIPMENT, GENERAL. Use equipment in good working order and free of hot mix asphalt buildup. Make equipment available for inspection and demonstration of operation a minimum of 24 hours before placement of hot mix asphalt.

401-3.03 ASPHALT MIXING PLANT. Meet AASHTO M 156. Use an asphalt plant designed to dry aggregates, maintain accurate temperature control, and accurately proportion asphalt cement and aggregates. Calibrate the asphalt plant and furnish copies of the calibration data to the Engineer at least 4 hours before hot mix asphalt production.

Provide a scalping screen at the asphalt plant to prevent oversize material or debris from being incorporated into the hot mix asphalt.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

401-3.04 HAULING EQUIPMENT. Haul hot mix asphalt in trucks with tight, clean, smooth metal beds, thinly coated with a minimum amount of paraffin oil, lime water solution, or an approved manufactured asphalt release agent. Do not use petroleum fuel as an asphalt release agent.

During hot mix asphalt hauling activities, the hauling vehicle will have covers attached and available for use. Be prepared to demonstrate deployment of the covers when hauling material or empty. Illustrate the efficiency of deployment and how the materials are protected from the environment and the environment is protected from the materials. Cover the hot mix asphalt in the hauling vehicle(s) when directed by the Engineer.

401-3.05 ASPHALT PAVERS. Use self-propelled pavers equipped with a heated vibratory screed. Control grade and cross slope with automatic grade and slope control devices. Use an erected string line, a 30-foot minimum mobile stringline (ski) or other approved grade follower, to automatically actuate the paver screed control system. Use grade control either (a) both the high and low sides or (b) grade control on the high side and slope control on the low side.

Equip the paver with a receiving hopper having sufficient capacity for a uniform spreading operation and a distribution system to place the hot mix asphalt uniformly in front of the screed.

Use a screed assembly that produces a finished surface of the required smoothness, thickness, and texture without tearing, shoving, or displacing the hot mix asphalt.

Equip the paver with a means of preventing segregation of the coarse aggregate particles from the remainder of the hot mix asphalt when carried from the paver hopper back to the augers. Use means and methods approved by the paver manufacturer. Means and methods may consist of chains, deflector plates, or other similar devices or combination of devices. Provide a Certificate of Compliance that verifies the means and methods required to prevent segregation are being used.

401-3.06 ROLLERS. Use both steel-wheel (static or vibratory) and pneumatic-tire rollers. Avoid crushing or fracturing aggregate. Use rollers designed to compact hot mix asphalt mixtures and reverse without backlash.

Use fully skirted pneumatic-tire rollers having a minimum operating weight of 3,000 pounds per tire.

401-3.07 PREPARATION OF EXISTING SURFACE. Prepare existing surface in conformance with the Plans and Specifications. Clean existing paved surfaces of loose material.

Uniformly coat contact surfaces of curbing, gutters, sawcut pavement, cold joints, manholes, and other structures with tack coat material prior to placing the hot mix asphalt. Allow tack coat to break before placement of hot mix asphalt.

SPECIAL PROVISIONS

401-3.08 PREPARATION OF ASPHALT. Provide a continuous supply of asphalt cement to the asphalt mixing plant at a uniform temperature, within the allowable mixing temperature range.

401-3.09 PREPARATION OF AGGREGATES. Dry the aggregate so the moisture content of the hot mix asphalt does not exceed 0.5% (by total weight of mix), as determined by WAQTC FOP for AASHTO T 329.

Heat the aggregate for hot mix asphalt to a temperature compatible with the mix requirements specified.

Adjust the burner on the dryer to avoid damage to the aggregate and to prevent the presence of unburned fuel on the aggregate. Hot mix asphalt containing soot or fuel is considered unacceptable and is subject to the requirements of Subsection 105.-1.11.

401-3.10 MIXING. Combine the aggregate, asphalt cement, and additives in the mixer in the amounts required by the Job Mix Design. Mix to obtain 98% coated particles when tested according to AASHTO T 195.

For batch plants, put the dry aggregate in motion before addition of asphalt cement.

401-3.11 PLACING AND SPREADING. Place the hot mix asphalt upon the approved surface, spread, strike off, and adjust surface irregularities. Use asphalt pavers to distribute hot mix asphalt, including leveling courses. The maximum compacted lift thickness allowed is 3 inches.

Use hand tools to spread, rake, and lute the hot mix asphalt in areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical.

Do not pave against new Portland cement concrete pads or curbing until it has cured for at least 72 hours.

401-3.12 COMPACTION. Thoroughly and uniformly compact the hot mix asphalt by rolling. In areas not accessible to large rollers, compact with mechanical tampers or trench rollers.

The target value for density is 96% of the maximum specific gravity (MSG), as determined by WAQTC FOP for AASHTO T 209.

Do not leave rollers or other equipment standing on hot mix asphalt that has not cooled sufficiently to prevent indentation.

401-3.13 JOINTS. Minimize the number of joints. Ensure that all joints have the same texture and smoothness as other sections of the course.

SPECIAL PROVISIONS

Remove to full depth improperly formed joints resulting in surface irregularities. Replace with new material, and thoroughly compacted.

Precut all pavement removal to a neat line with a power saw or by other approved method.

Form transverse joints by cutting back on the previous run to expose the full depth of the layer. Saw cut the joint, use a removable bulkhead, or other method approved by the Engineer.

401-3.14 PATCHING DEFECTIVE AREAS. Remove any hot mix asphalt that becomes contaminated with foreign material, is segregated, flushing, bleeding, or is in any way determined to be defective. Do not skin patch. Remove defective materials for the full thickness of the course. Cut the pavement so that all edges are vertical, the sides are parallel to the direction of traffic. Coat edges with a tack coat and allow to cure. Place and compact fresh hot mix asphalt to grade and smoothness requirements.

401-4.01 METHOD OF MEASUREMENT. Section 109 and the following:

Hot Mix Asphalt.

By weighing. No deduction will be made for the weight of asphalt cement or anti- stripping additive.

Job Mix Design, asphalt cement, anti-strip additive, tack coat, and other incidentals to complete the work under this Section will not be measured separately for payment but shall be considered subsidiary to the respective hot mix asphalt pay item.

401-5.01 BASIS OF PAYMENT.

Item 401(1) Hot Mix Asphalt, Type II; Class A will be paid for by the ton in place completed and accepted. Job Mix Design, asphalt cement, anti-strip additive, tack coat, and other incidentals are subsidiary to this pay item.

Payment will be made under:

Pay Item	Pay Unit
401(1B) Hot Mix Asphalt, Type II; Class B	Ton
401(4) Asphalt Binder, Grade PG 58-28	Ton
401(8B) HMA Price Adjustment, Type II, Class B	Contingent Sum

(05/02/11)PARKS-Special Provision

SPECIAL PROVISIONS

SECTION 505

PILING

505-2.01 MATERIALS. Add the following:

Pile Caps

Section 716

(XX/XX/XX)PARKS-Special Provisions

505-2.02 PILES. Delete fifth paragraph beginning with: “Hot-dip galvanize”

505-3.09 DRIVING PILES. Add the following: Pile shall be driven to a minimum depth of 15 feet and a minimum bearing capacity of 2370 pounds.

(06/09/09)PARKS-Special Provisions

SECTION 615
STANDARD SIGNS

615-2.01 MATERIALS.

Add the following under 2. Sign Fabrication:

d. Custom Signs: The signs shall have high intensity reflective sheeting with color as specified. White sheeting for symbols, letters, and borders shall match the 3M Scotchlite High Intensity Reflective Sheeting #3870 or #6870. Brown sheeting for background shall match 3M Scotchlite Reflective Sheeting #3879 or #6879.

(01/01/01)PARKS -Special Provision

Replace this entire Section with the following:

SECTION 618

SEEDING

618-1.01 DESCRIPTION. This work consists of establishing a perennial stand of grass or other specified living vegetative cover in the areas indicated on the Plans and to acceptably maintain the cover for the term of the Contract.

Topsoil and seed all new or disturbed slopes and any other areas directed by the Engineer. Track soil and apply seed, mulch, fertilizer and water. Provide a living ground cover on all slopes as soon as possible.

618-2.01 MATERIALS. Use materials that conform to the Special Provisions and the following:

Seed	Section 724
Fertilizer	Section 725
Mulch	Subsection 727-2.01
Water	Subsection 712-2.01

CONSTRUCTION REQUIREMENTS

618-3.01 SOIL PREPARATION. Clear all areas to be seeded of stones 4 inches in diameter and larger and of all weeds, plant growth, sticks, stumps, and other debris or irregularities that might interfere with the seeding operation, growth of grass, or subsequent maintenance of the grass-covered areas.

Make areas to be seeded reasonably free of ruts, holes, and humps.

Apply seed as detailed in Subsection 618-3.03 immediately after the shaping of the slopes. Cover all slopes to be seeded with topsoil in accordance with Section 620. Complete slope preparation as soon as topsoil is placed on the slopes.

(01/01/01)PARKS-Special Provision

Roughen the surface to be seeded by grooving the soil in a uniform pattern that is perpendicular to the fall of the slope. Use one or more of the following grooving methods with associated equipment before the application of seed:

1. Manual raking with landscaping rakes;
2. Mechanical track walking with track equipment; or
3. Mechanical raking with a scarifying slope board. Form one inch wide grooves spaced no more than six inches apart.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

Rounding the top and bottom of slopes to facilitate tracking or raking and to create a pleasant appearance is acceptable, but disrupting drainage flow lines is not.

(01/27/07)E42-Standard Modification

Flat surfaces shall also be topsoiled and roughened by using one of the methods described above.

(01/01/01)PARKS-Special Provision

618-3.02 SEEDING SEASONS. Seed disturbed areas that require seeding within 14 days of the permanent cessation of ground disturbing activities in that area.

(01/27/07)E42-Standard Modification

Seed and fertilize during the local growing season. Do not seed during windy conditions or when climatic conditions or ground conditions would hinder placement or proper growth. The seeding season is from May 15 and September 1. (Southcentral Alaska) Written approval from the Engineer is required to seed at a different date.

618-3.03 APPLICATION. Apply seed, mulch and fertilizer as follows per 1000 ft². Apply seed and mulch in one application using the hydraulic method. Apply all fertilizer with the hydraulic method.

Item	Ingredients	Application Rate (per 1000 S.F.)
Seed Mix	Bering Hairgrass (Norcoast) Red Fescue (Arctared) Annual Ryegrass (Lolium)	0.60 lbs 0.35 lbs <u>0.05 lbs</u> Total = 1.00 lbs
Mulch		35.0 lbs
Fertilizer	20-20-10	12.0 lbs

Do not remove the required tags from the seed bags.

Use the following method unless otherwise specified:

Hydraulic Method.

- a. Furnish and place a slurry made of seed, fertilizer, water, and other components as required by the Special Provisions.

SPECIAL PROVISIONS

- b. Use hydraulic seeding equipment that will maintain a continuous agitation and apply a homogeneous mixture through a spray nozzle. The pump must produce enough pressure to maintain a continuous, non-fluctuating spray that will reach the extremities of the seeding area with the pump unit located on the roadbed. Provide enough hose to reach areas not practical to seed from the nozzle unit situated on the roadbed.
- c. If mulch material is required, it may be added to the water slurry in the hydraulic seeder after adding the proportionate amounts of seed and fertilizer. Add seed to the slurry mixture no more than 30 minutes before application.
- d. Mix the slurry and apply it evenly.

618-3.04 PLANT ESTABLISHMENT AND MAINTENANCE. Protect seed areas against traffic and erosion. Promptly repair surfaces that are gullied or otherwise damaged following seeding by re-grading, reseeding, and re-mulching as needed.

Water and maintain seeded areas until acceptance of the work. Use equipment that can water all seeded areas without damaging the seed bed.

Reseed any areas not showing evidence of satisfactory growth within 3 weeks of seeding. Erosion gullies over 4 inches deep must be filled and reseeded. Fill the entire erosion gully to surrounding grade, including the portions less than 4 inches deep.

A reapplication of fertilizer shall be applied with water between May 1 and June 30 of the year following seeding. Re-fertilization shall be applied at a rate of one-half the initial application.

(01/01/01)PARKS-Special Provision

618-3.05 ACCEPTANCE. During final inspection the Engineer will perform a visual inspection of seeding to determine final stabilization. During the visual inspection each station and each side of the road will be considered a separate area. The Engineer will accept seeding that has become a vegetative matt with 70% cover density in the inspection area.

Reseed areas that are not acceptable to the Engineer.

618-3.06 PERIOD OF ESTABLISHMENT. Establishment periods extend for one complete growing season following acceptable seeding. Employ possible means to preserve the new vegetative matt in a healthy and vigorous condition to ensure successful establishment. Reseed areas that do not meet the specifications. Watering and reseeding after the final inspection are subsidiary.

The Engineer may, but is not required to, determine the Project is complete except for the period of establishment, and issue a letter of final acceptance. After final acceptance, work or materials due under this subsection during any remaining period of establishment

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

are considered warranty obligations that continue to be due following final acceptance in accordance with subsection 105-1.16.

(01/27/07)E42-Standard Modification

618-4.01 METHOD OF MEASUREMENT.

Seeding by the acre. By the area of ground surface acceptably seeded and maintained. Seed, mulch, water, and fertilizer are subsidiary.

Seeding by the pound. Weight of seed acceptably placed and maintained. Water, mulch, and fertilizer are subsidiary.

The amounts of fertilizer, seed, mulch and water for application used in this work, including any required reseeding and re-fertilization are subsidiary to other 618 items. The work described under subsection 618-3.01 Soil Preparation is subsidiary to seeding.

Water used in maintenance of seeded areas will not be measured directly for payment but will be considered subsidiary to the seeding item.

618-5.01 BASIS OF PAYMENT. At the contract unit price per unit of measurement for the pay items listed below that appear on the bid schedule.

Payment will be made under:

Pay Item	Pay Unit
618(2) Seeding	MSF

The Contractor may receive final payment prior to the second application of fertilizer by submitting an approved written guarantee that the second application of fertilizer will be accomplished per specifications. A Performance Guarantee form is available from the Engineer.

(01/01/01)PARKS-Special Provision

SPECIAL PROVISIONS

SECTION 620

TOPSOIL

620-2.01 MATERIALS. Replace this Subsection with the following:

Provide topsoil of the class specified on the Plans. Use material that conform to the following:

Topsoil Section 726 or as approved by the Engineer

Topsoil shall be free of invasive material.

(03/09/17)PARKS-Special Provision

Replace Section 641 with the following:

SECTION 641

EROSION, SEDIMENT, AND POLLUTION CONTROL

641-1.01 DESCRIPTION. Provide project administration and Work relating to control of erosion, sedimentation, and discharge of pollutants, according to this section and applicable local, state, and federal requirements, including the Construction General Permit.

641-1.02 DEFINITIONS. These definitions apply only to Section 641.

Alaska Certified Erosion and Sediment Control Lead (AK-CESCL). A person who has completed training, testing, and other requirements of, and is currently certified as, an AK-CESCL from an AK-CESCL Training Program (a program developed under a Memorandum of Understanding between the ADOT&PF and others). The Department recognizes AK-CESCLs as “qualified personnel” required by the CGP. An AK-CESCL must be recertified every three years.

Alaska Department of Environmental Conservation (ADEC). The state agency authorized by EPA to administer the Clean Water Act’s National Pollutant Discharge Elimination System.

Alaska Pollutant Discharge Elimination System (APDES). A system administered by ADEC that issues and tracks permits for storm water discharges.

Best Management Practices (BMPs). Temporary or permanent structural and non-structural devices, schedules of activities, prohibition of practices, maintenance procedures, and other management practices to prevent or minimize the discharge of pollutants to waters of the United States. BMPs also include, but are not limited to, treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from material storage.

Clean Water Act (CWA). Federal Water Pollution Control Amendments of 1972, as amended (33 U.S.C. 1251 et seq.).

Construction Activity. Physical activity by the Contractor, Subcontractor or utility company; that may result in erosion, sedimentation, or a discharge of pollutants into storm water. Construction Activity includes soil disturbing activities (e.g. clearing, grubbing, grading, excavating); and construction materials or equipment storage or maintenance (e.g. material piles, borrow area, concrete truck chute washdown, fueling); and other industrial storm water directly related to the construction process (e.g. concrete or asphalt batch plants).

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

Construction General Permit (CGP). The permit authorizing storm water discharges from Construction Activities, issued and enforced by ADEC. It authorizes stormwater discharges provided permit conditions and water quality standards are met.

Electronic Notice of Intent (eNOI). The electronic Notice of Intent submitted to ADEC, to obtain coverage under the CGP.

Electronic Notice of Termination (eNOT). The electronic Notice of Termination submitted to ADEC, to end coverage under the CGP.

Environmental Protection Agency (EPA). A federal agency charged to protect human health and the environment.

Erosion and Sediment Control Plan (ESCP). The Department's project specific document that illustrates measures to control erosion and sediment on the project. The ESCP provides bidders with the basis for cost estimating and guidance for developing an acceptable Storm Water Pollutant Prevention Plan (SWPPP).

Final Stabilization. Is defined in this section as it is defined in the CGP.

Hazardous Material Control Plan (HMCP). The Contractor's detailed project specific plan for prevention of pollution from storage, use, transfer, containment, cleanup, and disposal of hazardous material (including, but are not limited to, petroleum products related to construction activities and equipment). The HMCP is included as an appendix to the SWPPP.

Inspection. An inspection required by the CGP or the SWPPP, usually performed together by the Contractor's Storm Water Lead and Department's Project Engineer.

Multi-Sector General Permit (MSGP). The Alaska Pollutant Discharge Elimination System General Permit for storm water discharges associated with industrial activity.

Operator(s). The party or co-parties associated with a regulated activity that has responsibility to obtain permit coverage under the CGP. "Operator" for the purpose of the CGP and in the context of stormwater associated with construction activity, means any party associated with a construction project that meets either of the following two criteria:

1. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
2. The party has day to day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g. they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

Pollutant. Any substance or item meeting the definition of pollutant contained in 40 CFR § 122.2. A partial listing from this definition includes: dredged spoil, solid waste, sewage,

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR

Project Number 2021.04

garbage, sewage sludge, chemical wastes, biological materials, wrecked or discarded equipment, rock, sand, cellar dirt and industrial or municipal waste.

Project Area. The physical area provided by the Department for Construction. The Project Area includes the area of the facility under construction, project staging and equipment areas, and material and disposal sites; when those areas, routes and sites, are provided by the Department by the Contract and are directly related to the Contract.

Support Activities including material sites, material processing sites, disposal sites, haul routes, staging and equipment storage areas; that are furnished by the Contractor or a commercial operator, are not included in the Project Area.

Records. Any record, report, information, document, or photograph required to be created or maintained pursuant to the requirements of the CGP storm water requirements of the Clean Water Act; and applicable local, state, and federal laws and regulations regarding document preservation.

Storm Water Discharges From Municipal Separate Storm Sewer Systems (MS4s). A conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains that discharges into waters of the United States and is owned or operated by a public agency.

Spill Prevention, Control, and Countermeasure Plan (SPCC Plan). The Contractor's detailed plan for petroleum spill prevention and control measures that meet the requirements of 40 CFR 112.

Spill Response Field Representative. The Contractor's representative with authority and responsibility for managing, implementing, and executing the HMCP and SPCC Plan.

Storm Water Pollution Prevention Plan (SWPPP). The Contractor's detailed project specific plan to minimize erosion and contain sediment within the Project Area, and to prevent discharge of pollutants that exceed applicable water quality standards. The SWPPP includes, but is not limited to, amendments, records of activities, inspection schedules and reports, qualifications of key personnel, and all other documentation, required by the CGP and this specification, and other applicable local, state, and federal laws and regulations.

Storm Water Lead. The Contractor's qualified representative who conducts Inspections and has authority to suspend work and to implement corrective actions required for CGP compliance.

Storm Water Pollution Prevention Plan Two (SWPPP2). The Contractor's detailed project specific plan to comply with CGP or MSGP requirements, for Contractor construction-related Support Activities outside the Project Area.

SPECIAL PROVISIONS

Subcontractor Spill Response Coordinator. The subcontractor's representative with authority and responsibility for coordinating the subcontractor's activities in compliance with the HMCP and SPCC Plan.

Subcontractor SWPPP Coordinator. The subcontractor's representative with authority to direct the subcontractor's work, and who is responsible for coordination with the Superintendent and Storm water lead, and for the subcontractor's compliance with the SWPPP.

Superintendent. The Superintendent has responsibility and authority for the overall operation of the Project and for Contractor furnished sites and facilities directly related to the Project.

Support Activities. See ADEC CGP definition. Further defined as construction activities in which the Department is not an operator and the activity is outside the Project Area.

SWPPP Amendment. A revision or document that adds to, deletes from, or modifies the SWPPP.

SWPPP Preparer. The Contractor's qualified representative who is responsible for developing the initial SWPPP.

Utility Spill Response Coordinator. The Utility's representative with authority and responsibility for coordinating the Utility's activities in compliance with the HMCP and SPCC Plan.

Utility SWPPP Coordinator. The Utility's representative with authority to direct the Utility's work, and who is responsible for coordination with the Superintendent and Storm Water Lead, and for the Utility's compliance with the SWPPP.

641-1.03 PLAN AND PERMIT SUBMITTALS. For plans listed in Subsection 108-1.03.5 (SWPPP and HMCP) use the Contractor submission and Department review deadlines identified in Subsection 641-1.03.

Partial and incomplete submittals will not be accepted for review. Any submittal that is re-submitted or revised after submission, but before the review is completed, will restart the submittal review timeline. No additional Contract time or additional compensation will be allowed due to delays caused by partial or incomplete submittals, or required re-submittals.

1. Storm Water Pollution Prevention Plan. Submit one hard copy of the SWPPP to the Project Engineer for approval. Deliver this document to the Project Engineer at least 21 days before beginning Construction Activity. Organize and bind the SWPPP and related documents for submittal according to the requirements of Subsection 641-2.01.2.

SPECIAL PROVISIONS

The Department will review the SWPPP submittals within 14 days after they are received. Submittals will be returned to the Contractor, and marked as either “rejected” with reasons listed or as “approved” by the Department. When the submittal is rejected, the Contractor must revise and resubmit the SWPPP. The 14 day review period will restart when the contractor submits an electronic copy and three hard copies of the revised SWPPP to the Project Engineer for approval.

Once the SWPPP is approved by the Department, submit two complete copies of the SWPPP to the Project Engineer.

2. Hazardous Material Control Plan. Submit the HMCP, as an appendix to the SWPPP, to the Project Engineer for approval. The HMCP submittal and review timeline, and signature requirements are the same as the SWPPP.
3. Spill Prevention, Control and Countermeasure Plan. When a SPCC Plan is required under Subsection 641-2.03, submit an two signed hard copies of the SPCC Plan to the Project Engineer. Deliver these documents to the Project Engineer at least 21 days before beginning Construction Activity. The Department reserves the right to review the SPCC Plan and require modifications.
4. CGP Coverage. The Contractor is responsible for permitting of Contractor and subcontractor Construction Activities related to the Project. The Contractor cannot use the SWPPP for Support Activities outside the Project Area where the Department is not an operator.

After Department approval of the SWPPP and prior to beginning Construction Activity, submit an eNOI with the required fee to ADEC for coverage under the Construction General Permit (CGP). Submit a copy of the signed eNOI and ADEC’s acknowledgement letter to the Project Engineer when the eNOI is submitted to ADEC.

Do not begin Construction Activity until the conditions listed in Subsection 641-3.01.1 are completed.

The Department will submit an eNOI to ADEC for Construction Activities inside the Project Area. The Project Engineer will provide the Contractor with a copy of the Department’s eNOI and ADEC’s acknowledgement letter, for inclusion in the SWPPP.

5. Ending CGP Coverage. Submit an eNOT to ADEC, and submit both a copy of the signed eNOT and ADEC’s acknowledgement letter to the Department, within 30 days after the Project Engineer has determined the conditions listed in Subsection 641-3.01.6 have been met.
6. ADEC SWPPP Review. When CGP, Part 2.1.3 - requires ADEC SWPPP review:
 - a. Transmit a copy of the Department-approved SWPPP to ADEC using delivery receipt confirmation;
 - b. Transmit a copy of the delivery receipt confirmation to the Project Engineer within seven days of receiving the confirmation; and

SPECIAL PROVISIONS

- c. Retain a copy of delivery receipt confirmation in the SWPPP.
7. Local Government SWPPP Review. When local government or the CGP Part 2.1.4 requires local government review:
 - a. Transmit a copy of the Department-approved SWPPP and other information, as required, to local government, with the required fee using delivery receipt confirmation;
 - b. Transmit a copy of the delivery receipt confirmation to the Project Engineer within seven days of receiving the confirmation;
 - c. Transmit a copy of any comments by the local government to the Project Engineer within seven days of receipt;
 - d. Amend the SWPPP as necessary to address local government comments and transmit SWPPP Amendments to the Project Engineer within seven days of receipt of the comments;
 - e. Include a copy of local government SWPPP review letter in the SWPPP; and
 - f. Before ending permit coverage file a project ending notification with local government and allow them to inspect the work.
 8. Modifying Contractor's eNOI. When required by The CGP Part 2.7, modify your eNOI to update or correct the information. Reasons for modification include change to the start or end dates, small changes in number of acres to be disturbed, change in decision to use or not use treatment chemicals, or changed location of SWPPP Records.

The Contractor must submit an eNOT and then submit a new eNOI instead of an eNOI modification when: the operator has changed, the original eNOI indicates disturbed area less than five acres and the project will disturb more than five acres, or a project over five disturbed acres grows by more than 50%.

641-1.04 PERSONNEL QUALIFICATIONS. The SWPPP Preparer must meet at least one of the following qualifications:

- a. Current certification as a Certified Professional in Erosion and Sediment Control (CPESC);
- b. Current certification as AK-CESCL, and at least two years experience in erosion and sediment control, as a Storm Water Lead or SWPPP writer, or equivalent. Provide documentation including project names, project timelines, and work responsibilities demonstrating the experience requirement; or
- c. Professional Engineer registered in the State of Alaska with current certification as AK-CESCL

For Projects disturbing more than 20 acres, the SWPPP Preparer must also have completed a Department approved SWPPP Preparation course.

The Superintendent must meet the following qualifications:

- a. Current certification as AK-CESCL; and

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

- b. Duly authorized representative, as defined in the CGP, Appendix A, Part 1.12.3

The Storm Water Lead must have current certification as AK-CESCL, and be knowledgeable in the requirements of that position as defined in the CGP, Appendix C, Qualified Person.

The Active Treatment System (ATS) operator must have current certification as AK-CESCL, and be knowledgeable in the principals and practices of treatment systems in general, and the operation of the ATS in particular. Minimum experience to be 6 months field experience or completion of an ATS manufacturer's training course.

The Department accepts people having any of the following certificates as equivalent to AK-CESCL, if the certificates are current according to the sponsoring organization's policies:

- a. CPESC, Certified Professional in Erosion and Sediment Control; or
- b. CISEC, Certified Inspector in Sediment and Erosion Control

641-1.05 SIGNATURE/CERTIFICATION REQUIREMENTS AND DELEGATIONS.

1. eNOI and eNOT. The eNOI and eNOT must be signed and certified by a responsible corporate officer according to CGP Appendix A, Part 1.12.2. Signature and certification authority for the eNOI and eNOT cannot be delegated.
2. Delegation of Signature Authority for Other SWPPP Documents and Reports. Use Form 25D-108 to delegate signature authority and certification authority to the Superintendent position, according to CGP Appendix A, Part 1.12.3, for the SWPPP, Inspection Reports and other reports required by the CGP. The Project Engineer will provide the Department's delegation Form 25D-107, which the Contractor must include in the SWPPP.
3. Subcontractor Certification. Subcontractors must certify that they have read and will abide by the CGP and the conditions of the project SWPPP.

641-1.06 RESPONSIBILITY FOR STORM WATER PERMIT COVERAGE.

1. The Department and the Contractor are jointly responsible for permitting and permit compliance within the Project Area.
2. The Contractor is responsible for permitting and permit compliance outside the Project Area for Support Activities. The Contractor has sole responsibility for compliance with ADEC and other applicable federal, state, and local requirements, and for securing all necessary clearances, rights, and permits. Subsection 107-1.02 describes the requirement to obtain permits, and to provide permit documents to the Project Engineer.

SPECIAL PROVISIONS

3. An entity that owns or operates, a commercial plant (as defined in Subsection 108-1.01.3) or material source or disposal site outside the Project Area, is responsible for permitting and permit compliance. The Contractor has sole responsibility to verify that the entity has appropriate permit coverage. Subsection 107-1.02 describes the requirement to obtain permits, and to provide permit documents to the Project Engineer.
4. The Department is not responsible for permitting or permit compliance, and is not liable for fines resulting from noncompliance with permit conditions:
 - a. For areas or Support Activities outside the Project Area and
 - b. For commercial plants, commercial material sources, and commercial disposal sites.

641-1.07 UTILITY RELOCATION COVERAGE. A Utility company is not an Operator when utility relocation is performed concurrently with the Project, as outlined in Section 105-1.06. The Department maintains operational control over the Utility’s plans and specifications for coordination with project construction elements, and the Contractor has day-to-day control over the various utility construction activities that occur in support of the Project. A Utility company is considered a subcontractor for concurrent relocation.

After the Contractor has an active NOI for the Project, a Utility Company performing advance relocation work under a separate SWPPP no longer has Operator status and files the NOT for the Utility Company’s SWPPP covering only the completed utility work. Remaining utility relocation work is included in and performed under the Project SWPPP.

641-2.01 STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS.

1. SWPPP Preparer and Pre-Construction Site Visit. Use a SWPPP Preparer to develop the SWPPP and associated documents, according to the requirements of the CGP. The SWPPP Preparer must put their name, qualifications (including the expiration date of any certifications), title and company name in the SWPPP.

The SWPPP Preparer must conduct a pre-construction inspection at the Project site before construction activity begins. If the SWPPP Preparer is not a Contractor employee, the SWPPP Preparer must visit the site accompanied by the Contractor. Give the Department at least seven days notice of the site visit, so that the Department may participate.

During the pre-construction inspection, the SWPPP Preparer must identify, or if a draft of the SWPPP has already been prepared verify that the SWPPP fully addresses and describes:

- a. Opportunities to phase construction activities;
- b. Appropriate BMPs and their sequencing; and

SPECIAL PROVISIONS

c. Sediment controls that must be installed prior to beginning Construction Activities.

Document the SWPPP Preparer's pre-construction inspection in the SWPPP on Form 25D-106, SWPPP Pre-Construction Site Visit, including the names of attendees and the date.

2. Developing the SWPPP. Use the Department's ESCP and other Contract documents as a starting point for developing the SWPPP. The approved SWPPP replaces the ESCP.

Develop the SWPPP framework according to the ADNR SWPPP template with additional information as required. Include information required by the CGP, Part 5, and this specification.

When using the ADNR SWPPP template:

The following appendices can found on the ADNR D&C website:
<http://dnr.alaska.gov/parks/designconstruct/swppp.htm>

- Include the following appendices:
 - Appendix A – Site Maps and Drawings
 - Appendix B – BMP Details
 - Appendix C – Project Schedule
 - Appendix D – Supporting Documentation: TMDLs, Endangered Species, Historical Properties, & Project Permits
 - Appendix E – Certifications and Delegation of Authority
 - Appendix F – Subcontractor Certifications
 - Appendix G – Permit Conditions: Copy of Signed Notice of Intent (Include both Department's and Contractor's), Confirmation of Delivery of NOI to ADEC (Include both Department's and Contractor's), Copy of Letter from ADEC Authorizing Coverage with ADEC NOI Tracking Number (Include both Department's and Contractor's), and Copy of 2011 Alaska Construction General Permit
 - Appendix H – Personnel Qualifications and Training Certificates for:
 - SWPPP Preparer
 - Storm Water Lead/Inspector
 - Contractor's ATS Operator
 - Qualified personnel must be described in a list with names and dates in positions
 - Appendix I – SWPPP Pre-Construction Site Visit
 - Appendix J – Amendment Log
 - Appendix K – Corrective Action Log
 - Appendix L – Grading and Stabilization Records
 - Appendix M – Hazardous Material Control Plan

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

- Appendix N– Training Log
- Appendix O– Rainfall Record
- Appendix P– Inspection Reports
- Appendix Q– Delayed Action Item Report
- Appendix R– Project Staff Tracking Form
- Appendix S– Monitoring Plan (If applicable) and Reports

Obtain the following forms after they have been completed by the Department and include them in the SWPPP:

- SWPPP Delegation of Signature Authority – ADNR (25D-107)
- SWPPP Certification for ADNR (25D-109)

Use the following Department forms for recording information in the SWPPP:

- SWPPP Amendment Log (25D-114)
- SWPPP Certification for Contractor (25D-111)
- SWPPP Construction Site Inspection Report (25D-100)
- SWPPP Corrective Action Log (25D-112)
- SWPPP Daily Record of Rainfall (25D-115)
- SWPPP Delegation of Signature Authority – Contractor (25D-108)
- SWPPP Grading and Stabilization Activities Log (25D-110)
- SWPPP Pre-Construction Site Visit (25D-106)
- SWPPP Project Staff Tracking (25D-127)
- SWPPP Subcontractor Certification (25D-105)
- SWPPP Training Log (25D-125)

SWPPP Forms are at: <http://dnr.alaska.gov/parks/designconstruct/swppp.htm>

Compile the SWPPP in three ring binders with tabbed and labeled dividers for each section and appendix.

3. SWPPP Considerations and Contents.

The SWPPP must provide erosion and sediment control measures for all Construction Activity within the Project Area. Support Activities outside the Project Area must have permit coverage, using separate SWPPP2s, and separate Contractor Inspections.

The SWPPP must consider the activities of the Contractor and all subcontractors and utility companies performing work in the Project Area. The SWPPP must describe the roles and responsibilities of the Contractor, subcontractors, utility companies, and the Department with regard to implementation of the SWPPP. The SWPPP must identify all operators for the Project, including utility companies performing Construction Activity, and identify the areas:

SPECIAL PROVISIONS

- a. Over which each operator has operational control; and
- b. Where the Department and Contractor are co-operators.

For work outside the Project Area the SWPPP must identify the entity that has stormwater permit coverage, the operator, and the areas that are:

- a. Dedicated to the Project and where the Department is not an operator; and
- b. Not dedicated to the project, but used for the project.

Develop the SWPPP according to the requirements of the CGP and this specification, and account for the Contractor's construction methods and phasing.

Design temporary BMPs for a 2 year 24 hour precipitation amount. Describe BMPs in the SWPPP and in SWPPP Amendments, including source controls, sediment controls, discharge points, and all temporary and permanent stabilization measures. Describe the design, placement, installation, and maintenance of each BMP, using words and drawings as appropriate. Provide a citation to the BMP Manual or publication used as a source for the BMP, including the title of the BMP Manual or publication, the author (individual or agency), and date of publication. If no published source was used to select or design a BMP, then the SWPPP or SWPPP amendment must state that "No BMP manual or publication was used for this design."

Describe the sequence and timing of activities that disturb soils and of BMP implementation and removal. Phase earth disturbing activities to minimize unstabilized areas, and to achieve temporary or final stabilization quickly. Whenever practicable incorporate final stabilization work into excavation, embankment, and grading activities.

Identify in the SWPPP whether Inspections are conducted:

- a. Areas where the mean annual precipitation is 15 inches or less, inspect once at least once every fourteen (14) calendar days and within twenty-four (24) hours of the end of a storm event that resulted in a discharge from the project area.
- b. Areas where the mean annual precipitation is greater than 15 and less than 40 inches: inspect once every seven (7) days;
- c. Areas where the mean annual precipitation is 40 inches or greater: inspect once every seven (7) days, and twice every seven days during periods of relatively continuous precipitation or sequential storm events.

The SWPPP must cite and incorporate applicable requirements of the Project permits and commitments related to historic preservation. Make additional consultations or obtain permits as necessary for Contractor specific activities which were not included in the Department's permitting and consultation.

The SWPPP is a dynamic document. Keep the SWPPP current by noting installation, modification, and removal of BMPs, and by using amendments, SWPPP amendment logs, Inspection Reports, corrective action logs, records of land disturbance and

SPECIAL PROVISIONS

stabilization, and any other records necessary to document storm water pollution prevention activities and to satisfy the requirements of the CGP and this specification. See Subsection 641-3.03 for more information.

4. Recording Personnel and Contact Information in the SWPPP.

Include in the SWPPP, Records of the AK-CESCL cards or certificates for the Storm Water Lead, and for any acting Storm Water Lead. If the Storm Water Lead is replaced permanently or temporarily, by an acting Storm Water Lead; record in the SWPPP (use Form 25D-127) the names of the replacement personnel, the date of the replacement. For temporary personnel record their beginning and ending dates.

Provide 24 hour contact information for the Storm Water Lead. The Storm Water Lead must have 24 hour contact information for all Subcontractor SWPPP Coordinators and Utility SWPPP Coordinators.

Include in the SWPPP, Records of the AK-CESCL cards or certificates of storm water inspectors, and ATS operators. Record their beginning and ending dates.

641-2.02 HAZARDOUS MATERIAL CONTROL PLAN (HMCP) REQUIREMENTS.

Prepare the HMCP for prevention of pollution from storage, use, containment, cleanup, and disposal of all hazardous material, including petroleum products related to construction activities and equipment. Include the HMCP as an appendix to the SWPPP. Compile Material Safety Data Sheets in one location and reference that location in the HMCP.

Designate a Contractor's Spill Response Field Representative with 24 hour contact information. Designate a Subcontractor Spill Response Coordinator for each subcontractor. The Superintendent and Contractor's Spill Response Field Representative must have 24 hour contact information for each Subcontractor Spill Response Coordinator and the Utility Spill Response Coordinator.

List and give the location and estimated quantities of hazardous materials (Including materials or substances listed in 40 CFR 117 and 302, and petroleum products) to be used or stored on the Project. Hazardous materials must be stored in covered storage areas. Include secondary containment for all hazardous material storage areas.

Identify the locations where fueling and maintenance activities will take place, describe the activities, and list controls to prevent the accidental spillage of petroleum products and other hazardous materials. Controls include placing absorbent pads or other suitable containment under fill ports while fueling, and under equipment during maintenance or repairs.

Use secondary containment under all stationary equipment (equipment that does not have a seat for driving) that contains petroleum products. Use secondary containment under pumps, compressors, and generators.

SPECIAL PROVISIONS

List the types and approximate quantities of response equipment and cleanup materials available on the Project. Include a list and location map of cleanup materials, at each different work site and readily available off site (materials sources, material processing sites, disposal sites, staging areas, etc). Spill response materials must be stored in sufficient quantity at each work location, appropriate to the hazards associated with that site.

Describe procedures for containment and cleanup of hazardous materials. Describe a plan for the prevention, containment, cleanup, and disposal of soil and water contaminated by spills. Describe a plan for dealing with contaminated soil and water encountered during construction. Clean up of spills or contaminated surfaces must be initiated immediately and completed as soon as practicable.

Describe methods of disposing of waste petroleum products and other hazardous materials generated by the Project, including routine maintenance. Identify haul methods and final disposal areas. Assure final disposal areas are permitted for hazardous material disposal.

Describe methods of complying with the requirements of AS 46.04.010-900, Oil and Hazardous Substances Pollution Control, and 18 AAC 75. Include contact information for reporting hazardous materials and petroleum product spills to the Project Engineer and reporting to federal, state and local agencies.

641-2.03 SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN (SPCC Plan) REQUIREMENTS. Prepare and implement an SPCC Plan when required by 40 CFR 112; when both of the following conditions are present on the Project:

- a. Oil or petroleum products from a spill may reach navigable waters (as defined in 40 CFR 112); and
- b. Total above ground storage capacity for oil and any petroleum products is greater than 1,320 gallons (not including onboard tanks for fuel or hydraulic fluid used primarily to power the movement of a motor vehicle or ancillary onboard oil-filled operational equipment, and not including containers with a storage capacity of less than 55 gallons)

Reference the SPCC Plan in the HMCP and SWPPP.

641-2.04 RESPONSIBILITY AND AUTHORITY OF THE SUPERINTENDENT AND STORM WATER LEAD

The Superintendent is responsible for the overall operation of the Project and all Contractor furnished sites and facilities directly related to the Project. The Superintendent shall sign and certify the SWPPP. The Storm Water Lead shall sign and certify the SWPPP, Inspection Reports and other reports required by the CGP, except the NOI and NOT. The Superintendent and Storm Water Lead may not delegate the task or responsibility of signing and certifying the SWPPP submitted under Subsection 641-1.03.1, Inspection Reports, and other reports required by the CGP.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

The Superintendent may assign certain duties to the Storm Water Lead; those duties may include:

1. Ensuring Contractor's and subcontractor's compliance with the SWPPP and CGP;
2. Ensuring the control of erosion, sedimentation, or discharge of pollutants;
3. Directing and overseeing installation, maintenance, and removal of BMPs;
4. Performing Inspections; and
5. Updating the SWPPP including adding amendments and forms.

The Storm Water Lead has authority to work in the following positions named in the CGP, Appendix C, Qualified Person: Storm Water Lead and Storm Water Inspector. The Storm Water Lead has authority to work in all the position of ATS Operator if they meet the knowledge and experience qualifications listed in 1.04..

The Superintendent and Storm Water Lead shall be knowledgeable in the requirements of this Section 641, the SWPPP, CGP, BMPs, HMCP, SPCC Plan, environmental permits, environmental commitments, and historic preservation commitments.

The Superintendent and Storm Water Lead shall have the Contractor's complete authority and be responsible for suspending construction activities that do not conform to the SWPPP or CGP.

641-2.05 MATERIALS. Use materials suitable to withstand hydraulic, wind, and soil forces, and to control erosion and trap sediments according to the requirements of the CGP and the Specifications.

- Use the temporary seed mixture specified by special provision, or use annual rye grass if no temporary seed mix is specified.
- Use soil stabilization material as specified in Section 727.
- Use silt fences as specified in Section 729.
- Use straw that is certified as free of noxious weed by the United States Department of Agriculture, Natural Resources Conservation Service, Local Soil and Water Conservative District. Alaska Weed Free Forage Certification Program must be used when available. Hay may not be substituted for straw.
- Use a rain gauge.

641-2.06 CONTRACTOR REQUIREMENTS. The Contractor must be familiar with the requirements of the CGP because Contractor's employees will be conducting duties that relate to compliance with the CGP.

641-3.01 CONSTRUCTION REQUIREMENTS. Comply with the SWPPP and CGP requirements.

1. Before Construction Activity may Begin.

- a. Confirm the following:

SPECIAL PROVISIONS

- 1) The SWPPP Preparer must visit the Project, the visit must be documented in the SWPPP, and the SWPPP must be developed (or amended) with findings from the visit;
- 2) The SWPPP must be approved by the Project Engineer;
- 3) The Contractor must be authorized to begin by the Project Engineer;
- 4) The Project eNOIs for the Department and for the Contractor, as well as any other eNOIs if there are additional operators, must be listed as Active Status on the ADEC website; and
- 5) The Department approved SWPPP must be submitted to ADEC and Local Government (when required).

b. Post notices containing the following information:

- 1) Copy of all eNOIs related to this project;
- 2) Name and 24 hour phone number of Storm Water Lead; and
- 3) Location of the SWPPP.

Post notices on the outside wall of the Contractor's project office, and near the main entrances of the construction project. Protect postings from the weather. Locate postings so the public can read them without obstructing construction activities or the traveling public (for example, at an existing pullout). Do not use retroreflective signs for the SWPPP posting. Do not locate SWPPP signs in locations where the signs may be confused with traffic control signs or devices. Update the notices if the listed information changes, for instance if the location of the SWPPP or contact person changes during the winter.

- c. Install an outdoor rain gauge per manufacturer's guidance, in a accessible location on the Project.
- d. Delineate the site for both land disturbing activities and areas that will be left undisturbed. Install sediment controls and other BMPs that must be placed prior to the initiation of Construction Activity.

The CGP Part 4.10.3 allows cutting of trees and brush while the ground is frozen, without disturbing the vegetative mat, prior to submitting an eNOI.

2. During Construction.

Make copies of the applicable portions of the SWPPP available to subcontractors and utility companies before they begin soil disturbing activities. Inform subcontractors and utility companies of amendments that affect them in a timely manner. Ensure all subcontractors who engage in soil-disturbing activities understand and comply with the SWPPP and the CGP, and have signed a SWPPP Subcontractor Certification, Form 25D-105, before they conduct the activity. Include SWPPP Subcontractor Certifications as an appendix to the SWPPP. Provide SWPPP information to utility companies. Coordinate with subcontractors and utility companies doing work in the

SPECIAL PROVISIONS

Project Area so that BMPs, including temporary and permanent stabilization, are installed, maintained, and protected from damage.

Provide on-going training to employees and subcontractors, on control measures at the site and applicable storm water pollution prevention procedures. Training must be specific to the installation, maintenance, protection, and removal of control measures. Training must be given at a frequency that will be adequate to ensure proper implementation and protection of control measures. Document on the SWPPP Training Log. Form 25D-125, the dates and attendees to these trainings. Include the SWPPP Training Log as an appendix to the SWPPP.

Notify the Project Engineer immediately if the actions of any utility company or subcontractor do not comply with the SWPPP and the CGP.

Comply with Subsection 107-1.11 Protection and Restoration of Property and Landscape. Do not install concrete washout containment within 100 feet of wetlands and/or other water bodies.

Fuel in designated areas. Place absorbent pads or other suitable containment under fill ports while fueling, and under equipment during maintenance or repairs. Install secondary containment under all stationary equipment that contains petroleum products.

Comply with requirements of the HMCP and SPCC Plan, and all local, state and federal regulations that pertain to the handling, storage, containment, cleanup, and disposal of petroleum products or other hazardous materials.

Keep the SWPPP and HMCP current (refer to Subsection 641-2.01.3, SWPPP Considerations and Contents)

3. Pollutant and Hazardous Materials Reporting Requirements.

If there has been an incident of non-compliance with the CGP that may endanger health or the environment, immediately report the incident to ADEC according to the CGP, Appendix A, Part 3.0. Notify the Project Engineer immediately and to the extent possible coordinate reports to ADEC with the Project Engineer. The report must include:

- A description of the noncompliance and its causes;
- The exact dates and times of noncompliance ;
- If not yet corrected the anticipated time the project will be brought back into compliance; and
- The corrective actions taken, or planned, to reduce, eliminate and prevent reoccurrence.

Report spills of petroleum products or other hazardous materials to the Project Engineer and other agencies as required by law. Use the HMCP and SPCC Plan (if available) for contact information to report spills to regulatory agencies. See CGP Part 4.8.

4. Corrective Action and Maintenance of BMPs.

a. Implement corrective action:

- 1) If an incident of non-compliance with the SWPPP, or CGP is identified;
- 2) If an Inspection identifies the SWPPP or any part of the SWPPP is ineffective in preventing erosion, sedimentation or the discharge of pollutants;
- 3) If the Project Engineer determines the SWPPP or any part of the SWPPP is ineffective in preventing the erosion, sedimentation, or the discharge of pollutants;
- 4) If a required BMP was never installed, was installed incorrectly, or not in accordance with the CGP Part 4.0;
- 5) If any BMP is not operating as intended, or has not been maintained in an effective operation condition, or is unable to effectively perform the intended function;
- 6) Before sediment or debris fills a BMP to the percentage of design capacity or available storage allowed by the CGP (or manufacturer's specifications or SWPPP requirements, whichever is lower);
- 7) Whenever there is a change in conditions, design, construction, operation, or maintenance that could result in erosion, sedimentation, or the discharge of pollutants;
- 8) If a prohibited discharge as specified in CGP Part 4.6 is occurring or will occur; or
- 9) If there are accumulations and tracking of sediment or other pollutants, in or near any storm water conveyance channels, on roadways or parking lots within and adjacent to the project area, in the immediate vicinity of control measures, at discharge points or entry points into the storm sewer system, or in other areas within the project area.

b. Implement corrective actions so that all of the following time requirements are satisfied:

- 1) Conditions that are easily remedied (i.e. removal of tracked sediment, maintenance of control measure, or spill clean-up), initiate corrective action within 24 hours and complete as soon as possible;
- 2) Corrective action is completed before the next storm event;
- 3) Corrective action is completed in time to protect water quality; and
- 4) Corrective action is completed no later than the Complete-by-Date that was entered in an Inspection Report (see Subsection 641-3.03.2 for more information).

If a corrective action is not implemented within the time requirements of this section, document the situation in the SWPPP, notify the Project Engineer, and implement corrective action as soon as possible.

SPECIAL PROVISIONS

If a corrective action could affect a subcontractor, notify the subcontractor within three days of taking the corrective action.

Train subcontractors to identify conditions that require corrective action. Subcontractors are required to notify the Contractor within 24 hours of becoming aware of a condition(s) that requires corrective action.

5. Stabilization.

Stabilization may be accomplished using temporary or permanent measures. Initiate stabilization of disturbed soils, erodible stockpiles, disposal sites, and of erodible aggregate layers so that all of the following conditions are satisfied:

- a. As soon as practicable;
- b. As soon as necessary to avoid erosion, sedimentation, or the discharge of pollutants; and
- c. As identified in the SWPPP.

Land may be disturbed and stabilized multiple times during a project. Coordinate work to minimize the amount of disturbed soil at any one time. Do not disturb more soil than you can stabilize with the resources available.

Temporarily stabilize from wind and water erosion portions of disturbed soils, portions of stockpiles, and portions of disposal sites, that are not in active construction. Temporary stabilization measures may require a combination of measures including but not limited to vegetative cover, mulch, stabilizing emulsions, blankets, mats, soil binders, non-erodible cover, dust palliatives, or other approved methods.

Temporary or Permanent Seeding.

When temporary or permanent seeding is required, provide a working hydro seeding equipment located within 100 miles of the project by road; with 1,000 gallon or more tank capacity, paddle agitation of tank, and the capability to reach the seed areas with an uniform mixture of water, seed, mulch and tackifier. If the project is located in an isolated community the hydro-seeder must be located at the project.

Before applying temporary or permanent seeding, prepare the surface to be seeded to reduce erosion potential and to facilitate germination and growth of vegetative cover. Apply seed and maintain seeded areas. Reseed areas where growth of temporary vegetative cover is inadequate to stabilize disturbed ground.

Apply permanent seed according to Sections 618 and 724, within the time periods allowed by the CGP and the Contract, at locations where seeding is indicated on the plans and after land-disturbing activity is permanently ceased.

Stream By Pass.

SPECIAL PROVISIONS

When installing a culvert or other drainage structure where stream bypass is not used, install temporary or permanent stabilization concurrently or immediately after placing the culvert or drainage structure in a manner that complies with the SWPPP, applicable project permits and prevents discharge of pollutants.

Install temporary and permanent stabilization:

- a. At the culvert or drainage structure inlet and outlet; and
- b. In the areas upstream and downstream that may be disturbed by the process of installing the culvert, culvert end walls, culvert end sections, or drainage structure.

Before deactivating a stream bypass or stream diversion used for construction of a bridge, culvert, or drainage structure, install permanent stabilization:

- a. At the inlet and outlet of the culvert, drainage structure, or bridge;
- b. In the area upstream and downstream of the culvert, drainage structure, or bridge, that is disturbed during installation or construction of the culvert, drainage structure, or bridge; and
- c. Under the bridge.

6. Ending CGP Coverage and BMP Maintenance.

The Project Engineer will determine the date that all the following conditions for ending CGP coverage have been met within the Project Area:

- a. Land disturbing activities have ceased;
- b. Final Stabilization has been achieved (including at Department furnished material sources, disposal sites, staging areas, equipment areas, etc.); and
- c. Temporary BMPs have been removed.

After the Project Engineer has determined the conditions for ending CGP coverage have been met, the Department will:

- a. Send written notice to the Contractor with the date that the conditions were met;
- b. Submit an eNOT to ADEC; and
- c. Provide a copy of the eNOT and ADEC's acknowledgement letter to the Contractor.

The Contractor is responsible for ending permit coverage within the Project Area, by submitting an eNOT to ADEC within 30 days of meeting the conditions for ending CGP coverage. The Contractor is responsible for BMP maintenance and SWPPP updates until permit coverage is ended.

If the Contractor's CGP eNOI acreage includes Support Activities where the Department is not an Operator, the Contractor may not be able to file an eNOT at the same time as the Department. In this case, the Contractor must amend the SWPPP

SPECIAL PROVISIONS

and separate SWPPP2(s), to indicate the Department's CGP coverage has ended, and the Department is no longer an Operator within the Project Area.

The Contractor must indicate in the SWPPP the areas that have reached Final Stabilization, and the dates land disturbing activities ended and Final Stabilization was achieved. The Contractor must submit an eNOT to ADEC, and insert copies of the Department's and the Contractor's eNOTs with ADEC's acknowledgement letters in the appendix of the SWPPP.

The Contractor must submit a copy of each signed eNOT and ADEC's acknowledgement letter to the Department within 30 days of receiving them.

7. Transmit final SWPPP.

Transmit one copy of the final SWPPP, including all amendments and appendices, to the Project Engineer when the project eNOTs are filed, or within 30 days of the Department's eNOT being filed, whichever is sooner. Transmittal must be by both electronic and hard copy.

641-3.02 SWPPP DOCUMENTS, LOCATION ON-SITE, AVAILABILITY, AND RECORD RETENTION. The SWPPP and related documents maintained by the Contractor are the Record for demonstrating compliance with the CGP. Copies of SWPPP documents transmitted to the Project Engineer under the requirements of this specification are informational and do not relieve the Contractor's responsibility to maintain complete records as required by the CGP and this specification.

Keep the SWPPP, HMCP and SPCC Plan at the on-site project office. If there is not an on-site project office, keep the documents at a locally available location that meets CGP requirements and is approved by the Project Engineer. Records may be moved to another office for record retention after the eNOTs are filed. Records may be moved to another office during winter shutdown, but this will require updating on-site posted notices. Provide the Department with copies of all Records.

Retain Records and a copy of the SWPPP, for at least three years after the date of eNOT. If EPA or ADEC inspects the project, issues a Notice of Violation (NOV), or begins investigation for a potential NOV before the retention period expires, retain the SWPPP and all Records related to the SWPPP and CGP until at least three years after EPA and/or ADEC has determined all issues related to the investigation are settled.

The SWPPP and related documents must be made available for review and copy, to the Department and other regulatory agencies that request them. The Project, including any related off-site areas or support activities, must be made available for inspection, or sampling and monitoring, by the Department and other regulatory agencies. See CGP Parts 5.10, 6.6 and 9.4.

641-3.03 SWPPP INSPECTIONS, AMENDMENTS, REPORTS, AND LOGS. Perform Inspections, prepare Inspection Reports, and prepare SWPPP Amendments in

SPECIAL PROVISIONS

compliance with the SWPPP and the CGP. Update SWPPP Corrective Action Log, SWPPP Amendment Log, SWPPP Grading and Stabilization Activities Log, and SWPPP Daily Record of Rainfall forms. For active projects update the Records daily.

1. Inspection during Construction.

Conduct Inspections according to the schedule and requirements of the SWPPP and CGP:

- a. Areas where the mean annual precipitation is 15 inches or less inspect once at least every fourteen (14) calendar days and within twenty-four (24) hours of the end of a storm event that resulted in a discharge from the project area.
- b. Areas where the mean annual precipitation is greater than 15 and less than 40 inches: inspect once every seven (7) days.
- c. Areas where the mean annual precipitation is 40 inches or greater: inspect once every seven (7) days, and twice every seven days during periods of relatively continuous precipitation or sequential storm events.

Inspections required by the CGP and SWPPP must be performed by the Contractor's Storm Water Lead. The Department's Project Engineer shall be contacted 24 hours prior to an Inspection. The Department's Project Engineer shall be present during inspections if available. If Department's Project Engineer is unavailable to attend the Inspection, the Contractor shall provide a copy of the Inspection to Project Engineer within three days of the Inspection date and pictures taken during the inspection.

2. Inspection Reports.

Use only the ADNR SWPPP Construction Site Inspection Report, Form 25D-100 to record Inspections. Changes or revisions to Form 25D-100 are not permitted; except for adding or deleting data fields that list: Location of Discharge Points and Site Specific BMPs. Complete all fields included on the Inspection Report form; do not leave any field blank.

Unless otherwise directed by the Project Engineer, insert a Complete-by-Date for each corrective action listed that is (1) a date that complies with the time requirements listed in Subsection 641-3.01.4, or (2) seven days from the date of the Inspection, whichever is sooner. Provide a copy of the completed, unsigned Inspection Report to the Project Engineer by noon of the day after inspection.

The Superintendent must review the Inspection Report. The Project Engineer may coordinate with the Superintendent to review the Inspection Report. Corrections are limited to adding missing information or correcting entries to match field notes and conditions present at the time the Inspection was performed. Deliver a copy of the signed and certified Inspection Report to the Project Engineer with three days.

The Project Engineer may recommend corrections on the Inspection Report after the Superintendent has signed and certified the Inspection Report. If the Superintendent

SPECIAL PROVISIONS

makes corrections, the Superintendent must recertify the Inspection Report by entering a new signature and date in the white space below the original signature and date lines. Send a copy of the recertified Inspection Report to the Project Engineer on the day it is recertified.

3. Inspection before Seasonal Suspension of Work.

Conduct an Inspection before seasonal suspension of work to confirm BMPs are installed and functioning according to the requirements of the SWPPP and CGP.

4. Reduced Inspection Frequencies.

Conduct Inspections according to the inspection schedule indicated in the approved SWPPP. Any change in inspection frequency must be approved by the Project Engineer, and beginning and ending dates documented as an amendment to the SWPPP.

The Project Engineer may waive winter Inspection requirements 14 days after the freeze-up. Inspections must resume inspections 21 days before thawing conditions are expected to result in a discharge, if all the following requirements are met:

- a. Frozen conditions are anticipated to continue for more than one month; and
- b. Soil disturbing or soil stabilizing activities have been suspended.

The Project Engineer may waive requirements for updating the Grading and Stabilization Activities Log and Daily Record of Rainfall during seasonal suspension of work. If so, resume collecting and recording weather data on the Daily Record of Rainfall form one month before thawing conditions are expected to result in runoff. Resume recording land disturbance and stabilization activities on the Grading and Stabilization Activities Log when Construction Activity resumes.

5. Stabilization before Seasonal Thaw.

Construction Activities within the Project Area must be stabilized with appropriate BMPs prior to seasonal thaw. Seasonal thaw is the annual (first) recurrence of snow and ice melting after a prolonged period of freezing conditions.

6. Inspection before Project Completion.

Conduct Inspection to ensure Final Stabilization is complete throughout the Project, and temporary BMPs that are required to be removed are removed. Temporary BMPs that are biodegradable and are specifically designed and installed with the intent of remaining in place until they degrade, may remain in place after project completion.

7. Items and Areas to Inspect.

SPECIAL PROVISIONS

Conduct Inspections of the areas required by the CGP and SWPPP.

8. SWPPP Amendments and SWPPP Amendment Log.

The Superintendent and the Storm Water Lead are the only persons authorized to amend the SWPPP and update the SWPPP Amendment Log, Form 25D-114. The Superintendent or the Storm Water Lead must sign and date amendments to the SWPPP and updates to the SWPPP Amendment Log.

SWPPP Amendments must be approved by the Project Engineer.

Amendments must occur:

- a. Whenever there is a change in design, construction operation, or maintenance at the construction site that has or could cause erosion, sedimentation or the discharge of pollutants that has not been previously addressed in the SWPPP;
- b. If an Inspection identifies that any portion of the SWPPP is ineffective in preventing erosion, sedimentation, or the discharge of pollutants;
- c. Whenever an Inspection identifies a problem that requires additional or modified BMPs
- d. Whenever a BMP is modified during construction, or a BMP not shown in the original SWPPP is added;
- e. If the Inspection frequency is modified (note beginning and ending dates); or
- f. When there is a change in personnel who are named in the SWPPP, according to Subsection 641-2.01.4.

Do not record removal of BMPs as amendments to the SWPPP. See Subsection 641-3.03.9 for documenting removal of BMPs.

Amend the SWPPP narrative as soon as practicable after any change or modification, but in no case, later than seven days following identification of the need for an amendment. Every SWPPP Amendment must be signed and dated. Cross-reference the amendment number with the Corrective Action Log or SWPPP page number, as applicable. When a BMP is modified or added, describe the BMP according to Subsection 641-2.01.3.

Keep the SWPPP Amendment Log current. Prior to performing each scheduled Inspection, submit to the Project Engineer a copy of the pages of the Amendment Log that contain new entries since the last submittal. Include copies of any documents amending the SWPPP.

Keep the SWPPP Amendment Log as an appendix to the SWPPP.

9. Site Maps.

SPECIAL PROVISIONS

Document installation, routine maintenance, and removal of BMPs by making notes on the SWPPP Site Maps. Include the date and the recording person's initials by these notes. Identify areas where Construction Activities begin, areas where Construction Activities temporarily or permanently cease, and areas that are temporarily or permanently stabilized.

10. Corrective Action Log.

The Storm Water Lead is the only person authorized to make entries on the SWPPP Corrective Action Log, Form 25D-112. Document the need for corrective action within 24 hours of discovery.

Modification or replacement of a BMP, installation of a new BMP not shown in the original SWPPP, or overdue maintenance (after a sediment trap exceeds 50% of design capacity) is a corrective action and must be documented on the Corrective Action Log. Do not record removal of BMPs on the Corrective Action Log.

After each Inspection Report has been signed and certified, update the corrective action log with the date of inspection and include all proposed corrective actions noted on the Inspection Report.

After the corrective action has been accomplished, note the action taken, if a SWPPP amendment was needed, and date and initial the entry.

Keep the Corrective Action Log current and submit a copy to the Project Engineer prior to performing each scheduled SWPPP Inspection.

Keep the Corrective Action Log as an appendix to the SWPPP.

11. Grading and Stabilization Activities Log.

The Storm Water Lead is the only person authorized to date and initial entries on the SWPPP Grading and Stabilization Activities Log, Form 25D-110. Use the SWPPP Grading and Stabilization Activities Log, to record land disturbance and stabilization activities.

Keep the Grading and Stabilization Activities Log current and submit a copy to the Project Engineer prior to performing each scheduled SWPPP Inspection.

Keep the Grading and Stabilization Activities Log as an appendix to the SWPPP.

12. Daily Record of Rainfall.

Use SWPPP Daily Record of Rainfall, Form 25D-115, to record weather conditions at the Project. Update the form daily and include the initials of the person recording each day's entry. Submit a copy to the Project Engineer prior to performing each scheduled inspection. Keep the Daily Record of Rainfall as an appendix to the SWPPP.

641-3.04 FAILURE TO PERFORM WORK. The Project Engineer has authority to suspend work and withhold monies, for an incident of non-compliance with the CGP or SWPPP that may endanger health or the environment. If the suspension is to protect workers, the public, or the environment from imminent harm, the Project Engineer may orally order the suspension of work. Following an oral order of suspension, the Project Engineer will promptly give written notice of suspension. In other circumstances, the Project Engineer will give the Contractor written notice of suspension before suspension of work. A notice of suspension will state the defects or reasons for a suspension, the corrective actions required to stop suspension, and the time allowed to complete corrective actions.

1. If the Contractor fails to take the corrective action within the specified time, the Project Engineer may:

- a. Suspend the work until corrective action is completed;
- b. Withhold monies due the Contractor until corrective action is completed;
- c. Assess damages or equitable adjustments against the Contract Amount; and
- d. Employ others to perform the corrective action and deduct the cost from the Contract amount.

2. Reasons for the Project Engineer to take action under this section include, but are not limited to, the Contractor's failure to:

- a. Obtain appropriate permits before Construction Activities occur;
- b. Perform SWPPP Administration;
- c. Perform timely Inspections;
- d. Update the SWPPP;
- e. Transmit updated SWPPP, Inspection Reports, and other updated SWPPP forms to the Project Engineer;
- f. Maintain effective BMPs to control erosion, sedimentation, and pollution in accordance with the SWPPP, the CGP, and applicable local, state, and federal requirements;
- g. Perform duties according to the requirements of this Section 641; or
- h. Meet requirements of the CGP, SWPPP, or other permits, laws, and regulations related to erosion, sediment, or pollution control.

No additional Contract time or additional compensation will be allowed due to delays caused by the Project Engineer's suspension of work under this subsection.

641-4.01 METHOD OF MEASUREMENT. Section 109.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR

Project Number 2021.04

641-5.01 BASIS OF PAYMENT. See Subsection 641-3.04 Failure to Perform Work, for additional work and payment requirements.

The total value of this Contract will be adjusted as specified herein. Withholding will be determined by the Department and assessed under Pay Item 641(6) SWPPP Price Adjustment, as follows:

**TABLE 641-1 BMP VALUES
- RESERVED -**

**TABLE 641-2 EROSION, SEDIMENT AND POLLUTION CONTROL – LIQUIDATED DAMAGES
- RESERVED -**

1. Fines and Penalties: A Price adjustment equal to any penalties and fines levied against the Department by local, state, or federal agencies for pollutant violations, including violations of the CWA and the CGP, except when due to Department negligence. An amount equal to the anticipated penalties and fines for the violation or violations, excluding any due to negligence by the Department, will be withheld until the actual cost of the penalties and fines is known. Anticipated penalties and fines will be determined by the Project Engineer. The Contractor is also responsible for the payment of penalties and fines levied against the Contractor.
2. Failure to perform Inspections: By each 24 hour period, that a required SWPPP inspection is delayed or is not signed, certified, or completed in accordance with the schedule identified in the approved SWPPP a price adjustment of \$750 will be assessed.
3. Failure to perform Corrective Action. By each 24 hour period following 24 hours after written notice by the Project Engineer, per occurrence, a price adjustment of \$750 will be assessed where the Contractor:
 - fails to complete SWPPP administrative requirements as identified in the Contract or the CGP,
 - fails to initiate work required by the SWPPP, or
 - fails to initiate corrective action to respond to a deficiency noted during an inspection or by the Project Engineer.

The same deficiency remaining uncorrected will be considered an additional occurrence for each additional 24 hour period, without requiring additional written notice by the Project Engineer.

Item 641(1) Erosion, Sediment and Pollution Control Administration. At the Contract lump sum price for administration of all work under this Section. Includes, but is not limited to, SWPPP and HMCP and SPCC Plan preparation, agency fees for SWPPP reviews, Storm

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

Water Lead (when not included as a separate Pay Item under 641(7)) SWPPP amendments, pre-construction Inspections, Inspections, monitoring, reporting, and Record keeping or copying Records related to the SWPPP and required by the CGP, and Record retention.

Work required by the HMCP and SPCC Plan including hazardous material storage, containment, removal, cleanup and disposal, are subsidiary to Pay Item 641(1) Erosion, Sediment and Pollution Control Administration.

Item 641(2) Temporary Erosion, Sediment and Pollution Control. At the contingent sum prices specified for all labor, supervision, material, equipment, and incidentals to install, maintain, remove and dispose of approved temporary erosion, sedimentation, and pollution control BMPs required to implement the SWPPP and SPCC Plan.

Item 641(3) Temporary Erosion, Sediment and Pollution Control. At the Contract lump sum price for all labor, supervision, material, equipment, and incidentals to install, maintain, remove and dispose of temporary erosion, sedimentation, and pollution control BMPs identified in the SWPPP and SPCC Plan.

Item 641(4) Temporary Erosion Sediment and Pollution Control Additives. At the contingent sum prices specified in the Directive to authorize the work, for all labor, supervision, materials, equipment, and incidentals for extra, additional, or unanticipated work, to install, maintain, remove and dispose of temporary erosion, sedimentation, and pollution control BMPs. All additional Erosion, Sediment, and Pollution Control Administration necessary due to this item will not be paid for separately but will be subsidiary to other bid items.

Item 641(5) Temporary Erosion Sediment and Pollution Control by Directive. At the contingent sum prices specified in the Directive using time and materials to authorize the work, for all labor, supervision, materials, equipment, and incidentals to install, maintain, remove and dispose of temporary erosion, sedimentation, and pollution control BMPs. Prices for this item will be by time and materials according to Subsection 109-1.05, or by mutual agreement between the Project Engineer and Contractor. All additional Erosion, Sediment, and Pollution Control Administration necessary due to this item will not be paid for separately but will be subsidiary to other bid items.

Item 641(6) SWPPP Price Adjustment. Withholding according to Section 641-3.04, equal to any penalties and fines levied against the Department by local, state, or federal agencies for pollutant violations, including violations of the CWA, CGP, and any other Permit, except when due to the Department's sole negligence. The Contractor is also responsible for the payment of any and all penalties and fines levied against the Department or Contractor by entities (including agencies) other than the Department.

The Department will not release performance bonds until penalties and fines, assessed according to Section 641, are paid to the Department; and all requirements, according to Subsection 103-1.05, are satisfied.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

Subsidiary Items. Temporary erosion, sediment, and pollution control measures that are required outside the Project Area are subsidiary. Work required by the HMCP and SPCC Plan including hazardous material storage, containment, removal, cleanup and disposal, are subsidiary to Item 641(1) Erosion, Sediment and Pollution Control Administration.

Work under other pay items. Work that is paid for directly or indirectly under other pay items will not be measured and paid for under Section 641. This work includes but is not limited to:

- a. Dewatering;
- b. Shoring;
- c. Bailing;
- d. Permanent seeding;
- e. Installation and removal of temporary work pads;
- f. Temporary accesses;
- g. Temporary drainage pipes and structures;
- h. Diversion channels;
- i. Settling impoundment; and
- j. Filtration.

Permanent erosion, sediment and pollution control measures will be measured and paid for under other Contract items, when shown on the bid schedule.

Work at the Contractor's Expense. Temporary erosion, sediment, and pollution control measures that are required due to carelessness, negligence, or failure to install temporary or permanent controls as scheduled or ordered by the Project Engineer, or for the Contractor's convenience, are at the Contractor's expense.

Payment will be made under:

5.01. Use Pay Items 641(1), (2), (6), (7). Do not use Pay Items (3), (4), (5) unless specifically approved by the Project Manager and Construction Engineer.

Pay Item	Pay Unit
641(1)Erosion, Sediment, and Pollution Control Administration	Lump Sum
641(5)Temporary Erosion, Sediment, and Pollution Control	Contingent Sum
641(6)Withholding	Contingent Sum

(10/20/11)PARKS-Special Provision

SPECIAL PROVISIONS

Replace Section 643 with the following:

SECTION 643

TRAFFIC MAINTENANCE

643-1.01 DESCRIPTION. Protect and control traffic during the contract. Furnish, erect, maintain, replace, clean, move and remove the traffic control devices required to ensure the safety of the park users and general public. Perform all administrative responsibilities necessary to implement the work. Site will be closed except for boat ramp.

643-1.02 DEFINITIONS.

Alaska Traffic Manual (ATM). The Manual on Uniform Traffic Control Devices (MUTCD) along with Alaska Supplement.

Traffic. The movement of the park users and general public through and around the project site. Traffic may consist of vehicles, pedestrians, and bicyclists.

Traffic Control Plan (TCP). A drawing or drawings indicating the method or scheme for safely guiding and protecting traffic and workers in a traffic control zone. The TCP depicts the traffic control devices and their placement and times of use.

Traffic Control Zone. A portion of the project that affects traffic and requires traffic control to safely guide and protect traffic and workers.

643-1.03 TRAFFIC CONTROL PLAN. Create and implement an approved TCP before beginning work within the project limits.

The TCP includes, but is not limited to, signs, barricades, traffic cones, plastic safety fence, and all other items required to direct traffic through or around the traffic control zone according to these Specifications and the ATM. Address in the TCPs placement of traffic control devices, including location, spacing, size, mounting height and type. Include code designation, size, and legend per the ATM and Alaska Sign Design Specifications (ASDS).

Submit new or modified TCPs to the Engineer for approval. Allow 1 week for the Engineer to review any TCP or each subsequent correction. You may change an approved TCP during construction provided you allow 48 hours for review and the Engineer approves the changes.

643-2.01 MATERIALS. Provide traffic control devices meeting the following requirements:

1. Signs. Use signs, including sign supports, that conform to Section 615, the ATM, and ASDS.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

2. Barricades and Vertical Panels. Use barricades and vertical panel supports that conform to the ATM. Use Type III Barricades at least 8 feet long. Use reflective sheeting that meet AASHTO M 268 Type II or III.
3. Warning Lights. Use Type A (low intensity flashing), Type B (high intensity flashing) or Type C (steady beam) warning lights that conform to the ATM.
4. Drums. Use plastic drums that conform to the requirements of the ATM. Use reflective sheeting that meets AASHTO M 268 Type II or III.
5. Traffic Cones and Tubular Markers. Use reflectorized traffic cones and tubular markers that conform to the requirements of the ATM. Use traffic cones and tubular markers at least 28 inches high. Use reflective sheeting that meets AASHTO M 268 Type II or III.
6. Plastic Safety Fence. Use 4 foot high construction orange fence manufactured by one of the following companies, or an approved equal:
 - a. "Safety Fence" by Jackson Safety, Inc., Manufacturing and Distribution Center, 5801 Safety Drive NE, Belmont, Michigan, 49306. Phone (800) 428-8185.
 - b. "Flexible Safety Fencing" by Carsonite Composites, LLC, 19845 U.S. Highway 76, Newberry, South Carolina, 29108. Phone (800) 648-7916.
 - c. "Reflective Fencing" by Plastic Safety Systems, Inc., 2444 Baldwin Road, Cleveland, Ohio 44104. Phone (800) 662-6338.

643-3.01 GENERAL CONSTRUCTION REQUIREMENTS. Keep the work, and portions of the project affected by the work, in good condition to accommodate traffic safely. Provide and maintain traffic control devices and services inside and outside the project limits, day and night, to guide traffic safely.

The campground may be closed to traffic. Campground closure is intended to complete the work in this contract. All closures must be included in the Traffic Control Plan (TCP) and coordinated through the Project Engineer. Please give the Project Engineer 2 weeks notice prior to any closures.

Immediately notify the Engineer of any traffic related accident that occurs within the project limits as soon as you, an employee, or a subcontractor becomes aware of the accident

643-3.02 TRAFFIC CONTROL DEVICES. Before starting construction, erect permanent and temporary traffic control devices required by the approved TCPs. Use traffic control devices only when they are needed.

Use only one type of traffic control device in a continuous line of delineating devices.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

Keep signs, drums, barricades, and other devices clean at all times. Immediately replace any devices provided under this Section that are lost, stolen, destroyed, inoperable or deemed unacceptable while used on the project.

Use only traffic control devices that meet the requirements of the "Acceptable" category in the American Traffic Safety Services Association (ATSSA) "Quality Guidelines for Temporary Traffic Control Devices".

643-3.03 AUTHORITY OF THE ENGINEER. When existing conditions adversely affect the public's safety or convenience, the Contractor will receive an oral notice. A written notice will follow the oral notice according to Subsection 105-1.01, Authority of the Engineer. The notice will state the defects, the corrective actions required, and the time required to complete such actions. If you fail to take corrective actions within the specified time, the Engineer will immediately close down the offending operations until you correct the defects. The Engineer may require outside forces to correct unsafe conditions. The cost of work by outside forces will be deducted from any monies due under the terms of this Contract.

643-4.01 METHOD OF MEASUREMENT. Item 643(25) Traffic Control is a contingent sum item and will not be measured directly for payment. The approved schedule of values and Engineer's approval shall constitute method of measurement.

643-5.01 BASIS OF PAYMENT. Item 643(25) Traffic Control will be paid for at the contract lump sum price. Payment shall be full compensation for all the labor, equipment, material, and incidentals necessary to complete the work under this Section.

Payment will be made under:

Pay Item	Pay Unit
643(25) Traffic Control	Contingent Sum

(06/18/13)PARKS-Special Provision

Add the following Section:

SECTION 647

EQUIPMENT RENTAL

647-1.01 DESCRIPTION. This item consists of furnishing construction equipment, operated, fueled and maintained, on a rental basis for use in construction of extra or unanticipated work at the direction of the Engineer. Construction equipment is defined as that equipment actually used for performing the items of work specified and shall not include support equipment such as hand tools, power tools, electric power generators, welders, small air compressors and other shop equipment needed for maintenance of the construction equipment.

The Engineer will provide direction to the Contractor's supervisory personnel only, not to the operators or laborers. In no case shall direction by the Engineer be construed as making the Department liable for the Contractor's responsibility to prosecute the work in the safest and most expeditious manner.

647-2.01 EQUIPMENT FURNISHED. In the performance of this work, furnish, operate, maintain, service, and repair equipment of the numbers, kinds, sizes, and capacities set forth on the Bid Schedule or as directed by the Engineer. The kinds, sizes, capacities, and other requirements set forth shall be understood to be minimum requirements. The number of pieces of equipment to be furnished and used shall be, as the Engineer considers necessary for economical and expeditious performance of the work. The equipment shall be used only at such times and places as the Engineer may direct.

Equipment shall be in first class working condition and capable of full output and production. The minimum ratings of various types of equipment shall be as manufactured and based on manufacturer's specifications. Alterations will not be considered acceptable in achieving the minimum rating. Equipment shall be replaced when, in the opinion of the Engineer, their condition is below that normal for efficient output and production.

Equipment shall be fully operated, which shall be understood to include the operators, oilers, tenders, fuel, oil, air hose, lubrication, repairs, maintenance, insurance, and incidental items and expenses.

647-2.02 EQUIPMENT OPERATORS AND SUPERVISION PERSONNEL. Equipment operators shall be competent and experienced and shall be capable of operating the equipment to its capacity. Personnel furnished by the Contractor shall be, and shall remain during the work hereunder, employees solely of the Contractor.

Furnish, without direct compensation, a job superintendent or Contractor's representative together with such other personnel as are needed for Union, State, or Federal requirements and in servicing, maintaining, repairing and caring for the equipment, tools,

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

supplies, and materials provided by the Contractor and involved in the performance of the work.

647-3.01 CONSTRUCTION REQUIREMENTS. The performance of the work shall be according to the instructions of the Engineer, and with recognized standards and efficient methods.

Furnish equipment, tools, labor, and materials in the kinds, number, and at times directed by the Engineer and shall begin, continue, and stop the several operations involved in the work only as directed by the Engineer.

Normally, the work is to be done when weather conditions are reasonably favorable, six days per week, Mondays through Saturdays, holidays excepted.

The Engineer will begin recording time for payment each shift when the equipment begins work on the project. The serial number and brief description of each item of equipment listing in the bid schedule and the number of hours, or fractions thereof to the nearest one quarter hour, during which equipment is actively engaged in construction of the project shall be recorded by the Engineer. Each day's activity will be recorded on a separate sheet or sheets, which shall be verified and signed by the Contractor's representative at the end of each shift, and a copy will be provided to the Contractor's representative.

647-4.01 METHOD OF MEASUREMENT. The number of hours of equipment operation to be paid for shall be the actual number of hours each fully operated specified unit of equipment is actually engaged in the performance of work in the designated areas according to the direction of the Engineer. The pay time will not include idle periods, time used in oiling, servicing, or repairing of equipment, or in making changeovers of parts to the equipment. Travel time to or from the work site project will not be authorized for payment.

647-5.01 BASIS OF PAYMENT. Payment for Item 647(2) Wide Pad Dozer, 65 HP Minimum will be paid as a contingent sum to complete the work according to the Engineer's direction. This shall be full compensation for furnishing, operating, maintaining, servicing and repairing the equipment, and for incidental costs related to the equipment. Furnishing and operating of equipment of heavier type, larger capacity, or higher wattage than specified will not entitle the Contractor to extra compensation.

Payment will be made under:

Pay Item	Pay Unit
647(5) Backhoe, 4WD, 1 CY Bucket, 75 HP Min	Contingent Sum

(08/24/05)R15-Special Provision

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

Add the following Section:

SECTION 650

PARK FACILITIES

650-1.01 DESCRIPTION. This work shall consist of furnishing, constructing and placing park facilities in conformance with the plans and Special Provisions.

650-1.02 APPLICABLE ACCESSIBILITY STANDARD. Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities.

650-1.03 SUBMITTALS AND SUBSTITUTIONS. Conform to Subsection 106-1.01.

MATERIALS

650-2.01 GENERAL. All materials shall be new and conform to the details shown on the plans or as specified.

650-2.02 BACKFILL. Selected Material, Type A conforming to Subsection 703-2.07.

650-2.03 CONCRETE. Class A Concrete conforming to Section 501.

650-2.04 GALVANIZING. Conform to AASHTO M111/ASTM A123 (Standard Specification for Zinc [Hot-Dip Galvanized] Coatings on Iron and Steel Products), or AASHTO M232/ASTM A153 (Standard Specification for Zinc Coating[Hot-Dip] on Iron and Steel Hardware). Repair damaged galvanizing by using low melting point zinc repair rods in conformance with ASTM A780 (Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings).

650-2.05 LUMBER. Conform to Section 713. Wood species shall be Douglas Fir or Hem-fir unless otherwise specified.

1. Dimensional. Dimensional lumber and timbers are shown on the plans in nominal dimensions, i.e.; 2x4, indicating surfaced four sides (S4S) or planed material. Use classification for light framing shall be Construction Grade. Use classification for structural joists and planks shall be No. 2 Grade or Better. Manufacturing classification shall be Dressed (Surfaced) Lumber. Size classification shall be Nominal Size Designations of Boards, Dimension, and Timbers.
2. Rough Cut. Unless otherwise indicated, rough cut lumber and timbers are shown on the plans in actual dimensions, i.e.; 2"x4", indicating rough cut material. Use classification shall be Structural Lumber, No. 2 Grade or Better. Manufacturing classification shall be Rough Lumber. Size classification shall be Rough Dry Sizes.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

650-2.06 TREATED LUMBER. Wood species conforms to Subsection 650-2.05.

Treatment shall be as follows:

1. Above Ground Applications. Preservative pressure treatment shall conform to Section 714. Pressure treat with preservative Ammonical Copper Quat - Type A,B,C, or D(ACQ-A,B,C, or D) or Copper Azole – Type A (CBA-A). Minimum retention shall be 0.40 pounds per cubic foot or to refusal. Treated materials shall be uniformly brown in color and nonincised. This type of treated lumber is commonly used for residential decks for above ground applications. Incising may be used on 4x and thicker material to obtain minimum retention.
2. Ground Contact Applications. Preservative pressure treatment shall conform to Section 714. Pressure treat with preservative Ammonical Copper Quat - Type A,B,C, or D(ACQ-A,B,C, or D) or Copper Azole – Type A (CBA-A). Minimum retention shall be 0.60 pounds per cubic foot. Exposed treated materials shall be pigmented uniformly brown in color by manufacturer.

650-2.07 METAL ROOFING. Exposed fastener metal roof system with panel base metal steel conforming to ASTM A446, Grade 80, (80,000 psi minimum tensile strength) with a protective coating of zinc-aluminum alloy conforming to ASTM A924/ASTM A792, 45 percent zinc and 55 percent aluminum by weight applied to a thickness of 1.9 mils. Alternate coatings proposed for substitution will not be accepted. Exterior paint finish to be a 0.8 mil Acrylic Emulsion finish coat over a 0.2 mil baked-on acrylic primer. Exterior color to match Denali Green by IMSA Building Products Inc., or approved equal. Interior paint finish to be a 0.25 mil off-white backer over a 0.15 mil baked-on acrylic primer.

1. Roof Panels. Minimum 29 gauge, 36 inch net width panel with 9 inch on center roll-formed profile pattern consisting of three evenly spaced ribs, one tall rib followed by two shorter ribs.
2. Gable Trim and Universal Ridge. Shall be approximately 6 inches wide.
3. Closure Strips. Polyethylene foam type to fit panel profile or 1 inch by 1 inch universal closures.
4. Sidelap Mastics. Closed cell neoprene butyl.
5. Fasteners. Metal to wood fasteners as recommended by the manufacturer. Fastener length should assure penetration of at least one inch into the wood. Fastener heads shall be pre-painted the same color as roof panels.

650-2.08 FASTENERS. Commercial quality and type of nails and screws as required to securely hold all members in place in accordance with National Design Specifications (NDS). Nails shall be hot dipped galvanized. All other fasteners shall be corrosion resistant. Fasteners in pressure treated wood shall be hot dipped galvanized. Nails and wood screws below grade in pressure treated wood shall be stainless steel.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

650-2.09 PAINT. Unless otherwise specified, use the following paint types and colors, or approved equals:

1. Solid Oil Stain. Exterior oil/alkyd flat finish stain, color “Russet”. DF7XX as manufactured by Fuller O’Brien / Devoe Products, Sun-Proof Solid Alkyd/Oil Stain (77-1354) as manufactured by Pittsburgh Paint Company, Behr Plus 10 Solid Stain, Rural Manor II Solid Color Stain (714401x) as manufactured by Rodda Paint Co., or approved equivalent. Submit color samples of proposed substitutions for approval.
2. Semi-Transparent Oil Stain. Exterior alkyd based stain, color Sherwin Williams “SW 3507 Riverwood”, Behr Superdeck “#1907 Canyon Brown”, or PPG Architectural Finishes Olympic “Russet”.
3. Clear Oil Stain. Non-pigmented penetrating exterior alkyd base stain formulated for water repellency.
4. Metal Primer Paint. As recommended by enamel paint manufacturer.
5. Enamel Paint. Exterior alkyd base gloss enamel. Color to match solid oil stain color.
6. Concrete Sealer. Clear acrylic copolymer conforming to AASHTO M148/ASTM C309 (Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete, for Type 1 Compounds).
7. Above Ground Wood Preservative. Brown preservative with active ingredient of minimum 9.08 percent copper naphthenate (equivalent to minimum 1 percent metallic copper). Color to be approved by Engineer.
8. Below Ground Wood Preservative. Preservative with active ingredient of minimum 16 percent copper naphthenate (equivalent to minimum 2 percent metallic copper).
9. End Cut Preservative for Treated Wood. Brown preservative with active ingredient of minimum 10 percent copper naphthenate (equivalent to minimum 1 percent metallic copper). Color to match preservative pressure treatment color.

Paint that has been frozen or is out of date shall be replaced at no additional cost to the Department.

650-2.10 SIGNS. Fabricate sign panels to the dimensions shown on Plans. Metal sign panels shall be 0.125 inch thick alloy 6061-T6, 5052-H36, or 5052-H38 aluminum. Wood sign panels shall be medium density overlay (MDO) plywood. Signs shall have Type II (medium intensity) reflective sheeting background with color as specified. White high intensity sheeting for symbols, letters, and borders shall match 3M Scotchlite Reflective Sheeting #3290. Brown medium intensity sheeting for background shall match 3M Scotchlite Reflective Sheeting #3279.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

650-2.11 PICNIC TABLE. Lumber dimensions shall meet dimensions shown on Standard Drawing C-1, Picnic Table, which typically vary from manufactured kits. Steel picnic table frames shall have 2-3/8 inch O.D. galvanized pipe legs with minimum 1/8 inch wall thickness, and galvanized hardware as follows:

- 2 each Welded Pipe End Frame
- 2 each Pipe Brace (minimum 15/16 inch O.D.) with bolts, washers, and nuts.
- 1 each Table Top Center Channel or Angle (minimum 1/8 inch)
- 26 each 3/8 inch x 2-1/4 inch Carriage Bolt with nut and washers.

Note: Hardware dimensions may vary according to model and manufacturer.

Listed below are possible sources of picnic tables. It is the responsibility of the Contractor to ensure that the above fabrication requirements are met and that the final product is in conformance with DPOR Standard Drawing C-1.

Iron Mountain Forge / Little Tykes
P.O. Box 897
One Iron Mountain Drive
Farmington, MO 63640
800-325-8828

Pilot Rock
R.J. Thomas Manu. Co, Inc.
P.O. Box 946
Cherokee, Iowa 51012
800-762-5002

Game Time
626 128th Street SW, #104-A
Everett, Washington 98204
800-541-0869

Gerber Manufacturing, Inc.
2917 Latham Drive
Madison, WI 53713
(800) 393-9923

Seat and table top lumber shall be recycled plastic lumber conforming to subsection 650-2.09. Table top and bench lumber support may vary from what is shown on DPOR Standard Drawing C-1.

Steel reinforcement plates and angle iron shall be galvanized.

The tie down anchor system shall consist of 3/16-inch diameter high strength galvanized steel tie down cable with an earth driven anchor. Earth driven anchor shall be Duckbill Earth Anchor Model 68-ATI as manufactured by Foresight Products, LLC, Commerce City, Colorado, or approved equivalent.

Provide one standard Park padlock for each table.

650-2.12 PARK BENCH, TYPE B. Parking benches shall be CPB-C 72" benches manufactured by:

Petersen Manufacturing Co. Inc.
2471 Hwy. 30
Denison, IA 51442
712-263-2442

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

Benches shall be constructed to the manufacturer's specifications and construction requirements.

650-2.13 BOARDWALK. All lumber shall be surfaced four sides and preservative pressure treated. Wood sills shall be pressure treated with water borne salts preservative with minimum retention of 0.60 pounds per cubic foot.

Steel connectors for wood construction shall be as follows:

1. Post Cap. Galvanized post cap fabricated of steel. Unit has an allowable compression/tension capacity of 8 Tons. Cap collar tube will be .25 inches by 3.13 inches. Cap will connect to helical pile with 1 7/8 inch bolt. Dimensions of bracket are 3-5/8 inch by 3-5/8 inch by 2 inch high. Similar to Magnum MHC1160-3B 4x4 Post Cap.
2. High Performance Coiled Strap. Galvanized strap fabricated of steel for connecting the curb to the joists for stability. Allowable load is 1320 pounds. Similar to Simpson CSHP High-Performance Coiled Strap. Attach per manufacturers recommendations.
3. Hurricane Tie. Galvanized tie fabricated of minimum 18 gage hot-rolled steel connects double wood joist to wood cross beam. Unit has minimum allowable uplift load of 760 pounds and minimum allowable lateral load of 395 pounds. Similar to Simpson H2.5A. Attach per manufacturer recommended fastener frequency.
4. Joist Hanger. Galvanized face mount joist hanger fabricated of minimum 18 gage hot-rolled steel for connecting 2x8 joist to 2x8 blocking member. Unit has minimum allowable floor load of 1,100 pounds, is 7-13/16 inches high, and has a 1-9/16 inch wide by 2 inch deep joist support base. Similar to Simpson U210. Attach per manufacturer recommended fastener frequency.
5. Fasteners. Steel clips to connect the fiber glass deck to the joists. Similar to T-5000 Saddle Clips. Attach per manufacture recommended fastener frequency.

650-2.14 CONCRETE PARKING BUMPER. Conform to Standard Drawing P-6, Parking Bumper.

650-2.15 BARRIER ROCK Barrier rocks shall be 3 to 5 feet in diameter when measured in every direction.

650-2.16 PICNIC SHELTER. Conform to Standard Drawing R-1, Picnic Shelter. Metal roofing shall conform to subsection 650-2.07. Column bases shall be corrosion resistant and embedded in wet concrete for subsequent connection of wood post to the concrete footing. Size column base to dimension of post. Posts shall have commercially fabricated column bases inset a maximum of 1/2 inch. If commercial bases cannot meet the 1/2

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

inch requirement, custom fabricate full dimension column bases. Stirrup shall be provided with holes for two galvanized bolts with washers. Similar to Simpson CB1010.

Post Size	Base Plate Gage & Dimension	Stirrup Material	Post Bolts	Allowable Uplift Load
10 X 10	3 ga & 9 1/2" x 9 1/2"	3 ga x 3" strap	2 each 3/4"	6,650 pounds

650-2.17 ORIENTATION KIOSK. Conform to Standard Drawing S-10D, Orientation Kiosk. Interpretive panel frame and bulletin board frame shall be surfaced four sides clear cedar. Metal Roof shall conform to subsection 650-2.07.

Column bases shall be corrosion resistant and embedded in wet concrete for subsequent connection of wood post to concrete footing. Size column base to dimension of post. Posts shall have commercially fabricated column bases inset a maximum of 1/2 inch. If commercial bases cannot meet the 1/2 inch requirement, custom fabricate full dimension column bases. Stirrup shall be provided with holes for two galvanized bolts with washers. Similar to Simpson CB88.

Post Size	Base Plate Gage & Dimension	Stirrup Material	Post Bolts	Allowable Uplift Load
8 X 8	7 ga & 7-1/2" X 7-1/2"	3 ga x 3" strap	2 each 3/4"	6,650 pounds

Column caps to connect front posts to front horizontal beam shall be corrosion resistant. Size column cap to dimension of the timbers. If commercial column caps cannot meet the timber dimensions, custom fabricate full dimension column caps. Install with manufacturer recommended fasteners. Similar to Simpson BC8.

Beam Size / Post Size	Beam Flange Gage & Dimension	Post Flange Gage & Dimension	Allowable Uplift Load	Allowable Lateral Load
8 X 8 / 8 X 8	18 ga & 7-1/2" X 7-1/2"	18 ga & 7-1/2" X 7-1/2"	1,800 pounds	2,000 pounds

Face mount hangers to connect the side horizontal beam to the front posts shall be corrosion resistant. Size hangers to dimension of the timbers. If commercial hangers cannot meet the timber dimensions, custom fabricate full dimension hangers. Hangers shall have concealed flanges. Install with manufacturer recommended fasteners to achieve the allowable uplift load specified below. Similar to Simpson HUC88.

Beam Size / Post Size	Beam Flange Gage & Dimension	Post Flange Gage & Height	Allowable Uplift Load
8 X 8 / 8 X 8	14 ga & 7-1/2" X 2-1/2"	14 ga & 6-5/8"	1,285 pounds

Corner bracket to connect the side horizontal beams to the rear posts and rear horizontal beam shall be custom fabricated as shown on the Standard drawing.

SPECIAL PROVISIONS

Hurricane tie to secure roof trusses to horizontal front and rear beams shall be 18 gauge steel and corrosion resistant. Install with manufacturer recommended fasteners to achieve 320 pounds minimum uplift load and 105 pounds minimum lateral load. Similar to Simpson H3.

650-2.18 KIDS DON'T FLOAT KIOSK, TYPE A. Conform to Standard Drawing S-12A, Kids Don't Float Kiosk. Metal roof shall conform to subsection 650-2.07. "Life Jackets" sign shall conform to subsection 650-2.10 and shall be brown with white lettering. Text shall be 3 inches in height and Claredon Bold font.

CONSTRUCTION REQUIREMENTS

650-3.01 GENERAL. The location shown on the drawings for park facilities placement are approximate. The Engineer will field locate park facilities at the time of construction.

650-3.02 EXCAVATION AND BACKFILL. Conform to the requirements of Section 204 and the details on the plans.

650-3.03 CONCRETE. Conform to the requirements of Section 501 and the details on the plans.

650-3.04 STRUCTURAL STEEL. Welding to conform to American Welding Society D1.1.

650-3.05 WOOD. Competent carpenters shall be employed and all framing shall be true and exact. Unless otherwise specified, nails and spikes shall be hand driven with just sufficient force to set the heads flush with the surface of wood. Power nail guns may be used if the pressure may be adjusted to drive the nail flush with the face of the lumber. All non-removable shipping, storage, weathering and erection marks on fabricated lumber shall be hidden from view in the completed work. Use of damaged lumber shall not be allowed. Store on-site lumber above the ground and protected from damage and weathering.

Holes for round drift-bolts and dowels shall be bored with a bit 1/16 inch smaller in diameter than that of the bolt or dowel used. Holes for machine and carriage bolts shall be bored with a bit of the same diameter as that of the bolt. Holes for lag screws shall be bored with a bit not larger than the body of the screw at the root of the thread.

Unless otherwise specified, USS flat washers shall be used in contact with all bolt heads and nuts that would otherwise be in contact with wood.

650-3.06 METAL ROOFING. Store sheets and other roofing components above the ground and keep dry. Metal roofing shall not come into contact with lead, aluminum, copper, alkalines, fertilizers, or acids. Panels shall be clean and unmarked during and after erection.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

Place roofing felt over 2x6 T&G. Lap felt 4 inches minimum at sides and top and 10 inches at ridge.

Position first roof panel at gable end away from prevailing wind and check for alignment with building structure. Panels shall overhang sheathing at eave, as shown on the drawing, as a drip edge. Sidelap mastic shall be installed continuously along edge of panels. Do not place fasteners through the sidelap mastic. Install wood-metal screws at 24 inches on center at major ribs and stitch screws at 12 inches on center at sidelaps.

Align roof panels correctly prior to ridge cap installation. Install closure strips under ridge cap and fasten through cap, closure strips, and roofing at each major rib.

Install closure strip under panel prior to flashing installation. Fasten at 12 inches on center with stitch screws.

Apply gable trim to both roof ends. Fasten at top and sides at 24 inches on center.

650-3.07 PAINT. Deliver in sealed containers with labels legible and intact. Remove dirt, grease, oil and other construction debris prior to painting. Ensure that surfaces to be painted are even, smooth, sound, clean, dry, and free from defects affecting proper application. Metal surfaces to receive paint shall be corrosion free. Apply per manufacturer's recommendations. Apply paint material evenly without runs, sags, or other defects. Work each coat into the material being coated at an average rate of coverage recommended by the manufacturer. Cover surfaces completely to provide uniform color and appearance. Remove all paint, stain, or other finish material where it has spilled or spattered.

1. General. Unless otherwise specified, schedule finishes as follows:

- a. Non-Treated Wood, Surfaced. Finish surfaces not scheduled to receive stain or clear oil stain with wood preservative.
- b. Non-Treated Wood, Rough Cut. Saturate below and above ground surfaces not scheduled to receive stain with wood preservative.
- c. Treated Wood, Hidden. Dado cuts, cut ends, drilled holes and field cuts in wood materials shall be brush coated to saturation with end cut preservative.
- d. Treated Wood, Exposed. Saturate cut surfaces with scheduled finish. Finish surfaces not scheduled to receive stain with wood preservative.
- e. Concrete and Masonry. Seal exposed surfaces.
- f. Metal. Prime and paint exposed metal surfaces as required. Finish is not required for fasteners that are galvanized or corrosion resistant.

2. Picnic Table.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

- a. Recycled Plastic Lumber. No Finish Required
 - b. Metal. Galvanized, No Finish Required
3. Park Bench, Type A, B, and C.
- a. Concrete. Refer to manufacturer requirements.
9. Boardwalk (Deck or Wood Stairs).
- a. Wood, Visible surfaces and Between Decking). Semi-Transparent Oil Stain
 - b. Non-Galvanized Metal. Primer and Enamel Paint
13. Concrete Parking Bumper.
- a. Concrete. Sealer
15. Picnic Shelter.
- a. Exposed Tongue and Groove Wood. Clear Oil Stain
 - b. Other Wood. Semi-Transparent Oil Stain
 - c. Metal Roof. Manufacture applied finish.
 - d. Other Metal, except Fasteners. Primer and Enamel Paint
24. Orientation Kiosk.
- a. Interp/Bulletin Board Frame and Exposed T&G Wood. Clear Oil Stain
 - b. Other Wood. Semi-Transparent Oil Stain
 - c. Metal. Primer and Enamel Paint
 - d. Bulletin Board Sound Board. Off White Flat Latex Paint
29. Kids Don't Float Kiosk, Type A.
- a. Wood. Semi-Transparent Oil Stain
 - c. Metal. Primer and Enamel Paint
 - d. Bulletin Board Sound Board. Off White Flat Latex Paint

650-3.8 PICNIC TABLE. Construct in accordance with Standard Drawing C-1, Picnic Table. Bury anchor a minimum of 2-1/2 feet. Wrap anchor cable around table braces at center of table and connect back to cable with padlock.

650 3.9 PARK BENCH, TYPE B. Install bench in accordance with plans and manufacturer's recommendations. Remove all decals and stickers from bench.

650-3.10 BOARDWALK(OR DECK). Boardwalk consists of a continuous series of decks and ramps along a pathway. The actual location and lengths of boardwalk and wood ramps will be field located by the Engineer at the time of construction. The design criteria for construction of boardwalk is:

- 1. Deck.
 - a. Grade of ramp 5 percent maximum
 - b. Ground Clearance 12 inches minimum 36 inches maximum

SPECIAL PROVISIONS

650-3.11 CONCRETE PARKING BUMPER. Construct in accordance with Standard Drawing P-6, Parking Bumper.

650-3.12 BARRIER ROCK Place barrier rocks 4 feet apart, edge to edge, with approximately 20 percent of the height of each rock set below ground level. When finish surface is pavement or concrete, place barrier rocks prior to paving or pouring operations. Cutting pavement to place barrier rocks and then patching is not acceptable.

650-3.13 PICNIC SHELTER. Construct in accordance with Standard Drawing R-1, Picnic Shelter.

650-3.14 ORIENTATION KIOSK. Construct in accordance with Standard Drawing S-10D, Orientation Kiosk.

650-3.15 KIDS DON'T FLOAT KIOSK, TYPE A. Construct in accordance with Standard Drawing S-12A, Kids Don't Float Kiosk, Type A.

650-4.01 METHOD OF MEASUREMENT. Park facilities with the unit measure each will be measured by the actual number of facilities completed and accepted.

Excavation and embankment for park facilities outside the limits shown on the plans will be measured for payment only if directed by the Engineer. Excavation and backfill required for items paid for under this Section will not be measured for payment.

Fence and Barrier Rail will be measured by the linear foot along the slope, from end to end of the fence and barrier rail, completed and accepted.

Boardwalk will be measured by the linear foot of boardwalk constructed, completed and accepted.

Seat rocks at Interpretive Kiosk, Type B, and Orientation Kiosk will be subsidiary to that item and will not be measured separately for payment.

650-5.01 BASIS OF PAYMENT. The accepted quantity of park facilities will be paid for at the contract unit price per unit of measurement for the type specified completed in place, and listed below excluding all clearing, grubbing, topsoil and crushed aggregate base course, which shall be paid for separately at contract unit prices.

ADA Accessible models of a park facility item will be compensated at the same unit price as the standard model.

SPECIAL PROVISIONS

Payment will be made under:

Pay Item	Pay Unit
650(1) Picnic Table	Each
650(3B) Park Bench, Type B	Each
650(17) Concrete Parking Bumper	Each
650(21) Barrier Rock	Each
650(26) Picnic Shelter	Each
650(39B) Orientation Kiosk	Each
650(51A) Kids Don't Float Kiosk, Type A	Each

(05/02/11)PARKS-Special Provision

Add the following Section:

SECTION 654

VAULTED TOILET

654-1.01 DESCRIPTION. Provide all labor, materials, and equipment and services necessary to furnish and install accessible pre-manufactured concrete toilet and vaults finished and complete with all accessories and incorporating Sweet Smelling Technology.

Concrete Vaulted Toilet shall be the following or approved equivalent:

Manufacturer: CXT Precast Products

Style: Double Rocky Mountain with Chase Area
(Alaska State Parks Model)

Roof Texture & Color: Simulated Cedar Shakes in Granite Rock

Exterior Wall Texture & Color: Horizontal Lap with Simulated Stone in Sand Beige

Other: - Marine Package

- 654-2.05 Signs shall comply

- Deadbolt shall be Schlage Model B660P

- Exterior Doors and Trim shall be brown in color.

- Supply padlocks for each toilet paper roll and
manhole cover, complying with 654-2.06.

The Contractor shall obtain the necessary City and/or Borough permits for the construction and installation of the concrete toilet.

If Concrete Vaulted Toilet is the approved equivalent, the toilet shall comply with the remainder of this section.

654-1.02 CODES AND STANDARDS.

ACI 211.1 - Standard Practice for selecting Proportions for Normal, Heavyweight and Mass Concrete.

ADA - Americans with Disabilities Act

ASTM C 33 - Specification for Concrete Aggregates

ASTM C 39 - Test Method for Compressive Strength of Cylindrical Concrete Specimens

WAQTC FOP for AASHTO T119 - Test Method for Slump of Hydraulic Cement Concrete

ASTM C 150 - Specification for Portland Cement

ASTM C 192 - Method of Making and Curing Test Specimens in the Laboratory

PCI MINL 116 - Quality Control for Plants and Production of Precast Prestressed Concrete Products

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR

Project Number 2021.04

654-1.03 DESIGN AND PERMIT REQUIREMENTS. Units must meet or exceed “Sweet Smelling Technology” (SST) as developed by Briar Cook of the U.S. Forest Service. Vault Clean-outs must be lockable and outside the toilet enclosure.

Units shall also meet 120mph wind loading, 250 lbs/sq.ft. snow loading and seismic zone 4 earthquake requirements in accordance with the current version of the IBC.

The Contractor shall obtain the necessary City and/or Borough permits for the construction and installation of the concrete toilet.

654-1.04 SUBMITTALS. Submittals are required for the following:

Shop Drawings: Shop drawings must be stamped by a professional engineer and shall include plans, elevations and a section of the pre-manufactured units. Include dimensions for sizes and locations of walls, floor, roof, vaults, vent pipes, wall vents, doors, windows, signs and accessories. Indicate reinforcement types, sizes and spacing. Provide details showing anchors or method of attachment for doors, windows, vents, vent risers and accessories.

Product Data: Provide manufacturer's product data for all doors, frames, hardware, toilet accessories, signs, manholes, risers and sealants. Submit data on all parts and accessories indicating manufacturer, supplier, model or part number and finish.

Samples: Submit two 8-1/2 inch x 11 inch samples each of the wood texture and simulated shake roof, clearly displaying texture and color for approval by the Engineer.

Quality Control:

Test Reports: Submit concrete test results.

Contract Closeout:

Operations and Maintenance Data: Submit information for repairs, replacement of parts and accessories.

Warranty:

1. Submit Manufacturer's warranty against leakage from the vault for 7 years.
2. Submit Manufacturer's warranty against materials and labor on the building for 1 year.

654-1.05 QUALITY ASSURANCE.

Manufacturer Qualifications:

1. Shall have three years minimum experience producing toilets of similar design.
2. Must be ISO 9001 certified
3. Plant must be PCI certified

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

Regulatory Requirements: Conform to ADA for accessibility requirements.

654-1.06 DELIVERY, STORAGE, AND HANDLING.

Acceptance at Site: Deliver one pre-fabricated concrete double vaulted outhouse to the Project site. The Contractor shall be responsible for repairing and/or replacing any damaged work or products.

Storage and Protection: Store all pre-fabricated items in the designated location at the Project Site. The items shall be protected from any damage. Do not stack or lean items against trees, equipment, or each another.

Handling: Protect all pick points or lifting lug locations with wooden or plastic plugs, metal covers, or their equivalent to protect the threads and exclude foreign matter or ice while in storage or in transit. Pre-fabricated toilet units shall only be lifted with cables or nylon chokers or straps and spreader bars in accordance with the manufacturers printed lifting/rigging instructions. Do not lift without spreader bars.

MATERIALS

654-2.01 GENERAL. All material shall be new and conform to the manufacturer's plans. Toilet must meet ADA requirements.

654-2.02 MANUFACTURERS.

Toilets and Vaults: CXT Incorporated, Precast Products Division, 3808 N. Sullivan Road, Building 7 Spokane WA. 99216. Phone: (800) 696-5766 and Fax: (509) 928-8270 or approved equal.

Vault Liner:	"Lustran ABS" by Bayer Corporation– Polymers Division or approved equal
Vents/Louvers:	Anemostat or approved equal
Doors and Frames:	Amweld, Ceco, Curries, Fenestra, Republic, Steelcraft

Hardware:

Hinges (Butts):	Lawrence; McKiney; Hager
Locks/Pull Plates /Strikes:	IlcoUnican; Hager Companies; Schlage; Best
Closers:	LCN; Norton; Sargent
Door Stops:	Hager Companies; Glynn Johnson; Rixson; Quality
Door Silencers:	Quality; Glynn Johnson; Ives
Weatherstripping:	Pemko; Reese; Zero; 3M

SPECIAL PROVISIONS

Paint: Dunn Edwards, Dupont, Fuller O'Brien, Preservative Paint, Sherwin Williams, United Coatings.

Accessories:

Toilet Risers:	Romtec, Inc., Roseburg, Oregon or approved equal
Grab Bars:	ASI, Bobrick, Mckinney/Parker, Seachrome
Toilet Paper Dispenser:	Romtec, Inc., Aslin or approved equal
Double Coat Hook:	TSM, ASI, Bobrick, Ives
Signs:	Screen Tek, Inc.; Letters Unlimited or approved equal

654-2.03 MANUFACTURED UNITS: Pre-fabricated concrete toilet structure shall be provided by the Contractor. The Contractor shall provide the necessary equipment and materials to install the vaulted structures.

Toilets: Double vault toilets shall be "Double Rocky Mountain with Chase Area" by CXT Precast Products or approved equal meeting these specifications. Both vaults shall be accessible. Texture shall "horizontal lap with simulated stone" on walls and "cedar shake" texture on roof as produced by CXT Precast Products or approved equal. Provide colors for board, stone, and roof.

Vaults: One piece, 4 inch thick steel reinforced concrete, 1,000 gallon capacity each with bottoms sloped to cleanout and with one piece vault liner cast in place.

Vault Liners: One sheet black ABS/752 virgin plastic. Initial sheet thickness shall be a minimum of 0.375 inch with a final stamped thickness of a minimum of 0.060 inch. The vault liner shall have molded dovetail embeds to attach the liner to the concrete walls of the vault. The vault liner shall have two J-rails to attach the liner to the bottom of the vault. Vaults with the ABS liner shall be warranted against leads for a period of seven years into or out of the vault itself.

Concrete - General: The concrete mix design shall be designed to ACI 211.1 to produce concrete of good workability.

Concrete shall contain a minimum of 610 pounds of cement per cubic yard. Cement shall be a low alkali type I or III conforming to ASTM C150. Coarse aggregates used in the concrete mix design shall conform to ASTM C33 with the designated size of coarse aggregate #67. Minimum water/cement ratio shall not exceed 0.45. Slump shall not exceed 4 inches.

Air-entraining admixtures shall not be used without approval of the Engineer.

Colored Concrete: The following items shall contain colored concrete:

SPECIAL PROVISIONS

Toilet building roof panels; Building walls; Screen panels

Color additives will conform to ASTM C979.

The same brand and type of color additive shall be used throughout the manufacturing process. All ingredients shall be weighed and the mixing operation shall be adequate to ensure uniform dispersion of the color. Wall panel color and roof color shall be Sand Beige and Granite Rock, respectively, as identified by CXT Precast Products, Inc. or approved equivalent.

Cold Weather Concrete: Concrete shall not be placed if ambient temperature is expected to be below 35° F. during the curing period unless heat is readily available to maintain the surface temperature of the concrete to at least 45° F. Materials containing frost or lumps of frozen materials shall not be used.

Hot Weather Concrete: The temperature of the concrete shall not exceed 80° F at the time of placement and when the ambient reaches 90° F, the concrete shall be protected with moist covering.

Concrete Reinforcement: All reinforcing steel will conform to ASTM A615. All welded wire fabric will conform to ASTM A185. All reinforcement will be new, free of dirt, oil, paint, grease, loose mill scale and loose or thick rust when placed.

Full lengths of reinforcing steel shall be used when possible. When splices are necessary on long runs, splices shall be alternated from opposite sides of the component for adjacent steel bars. Lap bars #4 or smaller a minimum of 12 inches. Lap bars larger than #4 a minimum of 24 bar diameters.

Steel reinforcement shall be centered in the cross-sectional area of the walls and shall have at least 1 inch of cover on the under surface of the floor and roof. The maximum allowable variation for center to center spacing of reinforcing steel shall be 1/2 inch.

Reinforcing bars shall be bent cold. No bars partially embedded in concrete shall be field bent unless approved by the Engineer.

Sealers and Curing Compounds: Curing compounds, if used, shall be colorless. Weather-proofing sealer for exterior of building shall be a clear water repellent penetrating sealer.

Caulking, Adhesive and Grout: All caulking shall remain flexible and non-sag at temperatures from 50° to 140° Fahrenheit. Interior joints shall be caulked with a paintable rubber-based caulk. Exterior joints will be caulked with a tripolymer sealant caulk which compliments the exterior color.

Epoxy concrete adhesive will be two-component, rigid, non-sag gel adhesive for bonding to dry or damp surfaces, moisture insensitive. Color shall compliment surrounding concrete as nearly as possible.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

Grout shall be water-proof and resistant to alkali and freeze-thaw cycles. It shall be painted to match the color of surrounding concrete as nearly as possible.

Cement base coating shall be formulated with a very fine aggregate system and a built in bonding agent.

Caulking between vault and toilet floor to be 1 inch x 1 inch Butyl tape designed specifically to bond precast concrete to precast concrete

Steel Doors and Frames: Doors shall be 3 feet x 6 feet 8 inches, flush panel type, 1-3/4 inches thick, minimum 18 gauge prime-coated steel panels, minimum 12 gauge internal bracing channels, 14 gauge edge reinforcement, rigid foam plastic core, SDI grade II, model 2. Hinge reinforcement shall be 10 gauge minimum.

Door frames shall be welded type, single rabbet, minimum 16 gauge prime-coated steel, width to suit wall thickness, SDI grade II. Hinge reinforcement shall be 10 gauge minimum.

Doors and door frames shall be reinforced to accept butts, deadlock and strike.

Doors and frames shall be factory treated with a three stage iron phosphate and given one shop coat of synthetic resin, rust-inhibitive alkyd enamel primer.

Hardware: finish shall be BHMA 630 (Satin Stainless Steel)/US32D.

Hinges (Butts): Three per door. Hinges shall be ANSI 156.1, BHMA 5112, full mortise, ball bearing design with a stainless steel non-removable pin, stainless steel, 4-1/2 inches x 4-1/2 inches.

Strikes: Mortised ANSI strikes with strike boxes.

Handle: Pull plate shall be a barrier free round grip pull plate with 2-1/2 inch handle clearance, 3/4 inch diameter by 8 inch long handle, 316 stainless steel with dull finish. Plate shall be 3-1/2 inch x 15 inch and .050 inch thick.

Deadbolt: Heavy duty single cylinder deadbolt with 2-3/4 inch backset, ANSI 156.5 Grade 1, US26D, U.L. Listed. Deadbolt shall be Schlage Model B660P or approved equal. Deadbolt shall be keyed to accept Schlage Series C, No. 56349. Provide two keys per deadbolt.

Trim: Series 1000, Grade 2.

Closers: shall be ANSI 156.4, BHMA C02022, Grade 1, similar to LCN 4041 (5 lb. closing force), heavy duty parallel arm, Cush mount, metal cover or approved equal accepted by the Contracting Officer. Closers shall be equipped with extreme temperature fluid and

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

capable of adjustments for latches, closing speed and back check intensity. Closers shall have a corrosion protective coating on all metal surfaces.

Door Stop: Door stop shall be ANSI 156.16, BHMA LO2252, cast brass; rubber, 1-3/4 inch diameter bumper, convex pad, 1 inch projection, base thickness of 1/8 inch.

Wall Stop: Wall stop shall be ANSI 156.16, BHMA LO2252, brass; rubber, 2-7/16 inch diameter bumper, convex pad, 13/16 inch projection.

Door Silencers: Door silencers shall be BHMA LO3011. Three (3) rubber door silencers shall be provided on latch side of frame.

Door Sweep: Provide door sweep at the bottom of door. Polypropylene pile, adjustable brush type, 1/4 inch x 1-1/2 inches, Pemko 18062 CP or approved equal.

Wall Louvers: Louvers shall be 12 inches x 12 inches, fixed, inverted split Y, non-vision, 18 gauge cold rolled steel with a factory prime coat equal to FDLS series. One in each restroom.

Windows and Frames: Window frames shall be constructed from steel. Window glazing shall be 1/4 inch thick translucent LEXAN polycarbonate with a pebble finish.

Vault Cleanout Covers: Plate for vault cleanout cover shall be 1/4 inch thick, diamond plate steel. Lid shall be hinged and configured so that it can be locked with a padlock. Provide a neoprene gasket around the entire perimeter of lid for an airtight seal.

Paint: All paints and materials shall conform to all Federal specifications. Paints shall not contain more than .06 percent by weight of lead. Color shall be as selected from manufacturer's standard palette by the Engineer.

Types of paints for toilets:

Interior Stain - "Canyon Tone Stain" by United Coatings or approved equal. Stain shall be single-component, water-based, and quick setting. Color shall be white. Inside stain shall be sealed with "Monocryl 50" clear acrylic semi-gloss, water-repellent sealer by United Coatings or approved equal.

Floor Paint - "Armorseal Floor-plex 7100" by The Sherwin-Williams Company or approved equal. Shall be glossy, two component, water based epoxy floor coating capable of withstanding heavy traffic. Color shall be gray.

Floor Anti-Slip Additive - "SharkGrip" by H&C Beautiful Concrete Protection or approved equal.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

Trim Paint - "Direct-To-Metal Enamel" by The Sherwin-Williams Company or approved equal. Enamel shall be a semi-gloss high-build alkyd coating with rust-inhibitive properties. Color shall be white.

Exterior Walls and Roof - Water repellent penetrating stain in the same color as the walls and/or roof followed by a clear acrylic anti-graffiti sealer.

Exterior slab shall be clear sealer

654-2.04 ACCESSORIES:

Toilet Risers: Toilet riser shall be cross-linked polyurethane. Toilet risers shall have a heavy duty seat and lid, and constructed with high-impact polystyrene. Risers shall be mounted at an 18 inch height from floor to top of seat. All mounting materials shall consist of stainless steel hardware.

Grab bars: Grab bars shall be 18 gauge, type 304 stainless steel with 1-1/2 inch clearance. Grab bars shall each be able to withstand 300 pound top loading. Grab bars shall be either two separate bars with supports each end, one 36 inches (914 mm) and the other 42 inches long or a single "L" shaped bar with 3 supports and one leg 54 inches long and the other 36 inches – 42 inches long.

Toilet Paper Dispenser (Two per Toilet Riser): Dispenser shall be constructed of 1/4 inch thick, 304 type stainless steel with a satin finish. Dispenser shall be capable of holding two standard rolls of toilet paper; 18 inch x 2 inch, "restricted" type and have a heavy duty locking feature. Toilet paper dispenser mechanical attachment system shall withstand 300 pound top loading.

Double Coat Hook: Coat hooks shall be constructed of stainless steel and have tamper-proof mounting screws.

Vent Riser: Shall be 12 inch I.D., unpainted, black, polyethylene vent pipe.

SPECIAL PROVISIONS

654-2.05 SIGNS.

1. General

Layout details of custom signs not shown shall conform to the Alaska Sign Design Specifications.

Base Material:	Solid color, alloy 6061-T6 aluminum
Base Color:	Brown
Total Thickness:	0.080 inch
Size:	Uniform for all signs, large enough to accommodate text and pictograms, 6 x 9 inches minimum
Edges:	Rounded

2. Raised Character Size and Style: Solid color, metal, character adhered to or integral with base material –

Character Color:	White
Background Color:	Brown
Sign Material:	Reflective sheeting shall be Type II (medium intensity)
Character Thickness:	1/32 inch
Height:	12 inch x 12 inch
Edges:	Square
Character Font:	Helvetica
Character Case:	Upper and lower
Braille:	Grade II
Text:	See Below



SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR

Project Number 2021.04

3. Raised Pictogram Size and Style: Solid color, metal, character adhered to or integral with base material –

Character Color:	White
Background Color:	Brown
Character Thickness:	1/32 inch
Size:	6 inch minimum Square
Edges:	Rounded
Character Font:	International Symbol
Mounting Hardware:	Mechanical, tamper resistant
Braille:	Grade II
Text:	"Toilet"
Pictograms:	Men & Women ("Unisex") and accessibility

654-2.06 PADLOCK. Master Lock No. 1 with 5/16 inch shackle diameter, 15/16 inch vertical clearance, 3/4 inch horizontal clearance, 1-3/4 inch case width, and keyed alike to a key number provided by the Engineer specific to the Park area. Provide two keys with each padlock.

654-2.07 BEDDING. Bedding material for the concrete vaulted toilet shall be aggregate base course, grading D-1, and shall meet all the requirements of Section 301.

FABRICATION AND CONSTRUCTION

654-3.01 SITE WORK. Excavation and backfill shall conform to Subsection 204-3.01 and the details on the plans. Finish ground profile to slope away from the building except for areas that abut adjacent sidewalk or parking areas. Place aggregate base course extending a minimum 1 foot from all sides of the concrete floor at up to the floor finish grade except for areas that abut adjacent sidewalk or parking areas.

654-3.02 MIXING AND DELIVERY OF CONCRETE. Mixing and delivery of concrete will be in accordance with ASTM C94, section 10.6 through 10.9 with the following additions:

1. Aggregate and water will be adjusted to compensate for differences in the saturated surface-dry condition.
2. Concrete will be discharged as soon as possible after mixing is complete. This time will not exceed 30 minutes.

654-3.03 PLACING AND CONSOLIDATING CONCRETE. Concrete will be consolidated by the use of mechanical vibrators. Vibration will be sufficient to accomplish compaction but not to the point that segregation occurs.

SPECIAL PROVISIONS

654-3.04 FINISHING CONCRETE. Interior floor and exterior slabs will be floated and troweled. A light broom finish will be applied to the exterior slab.

All exterior top portions of the building walls and exterior screen walls will be a board & batt siding texture. The bottom section of the walls will be a field stone textured stone finish.

All exterior surfaces of the roof panels will be cast to simulate a cedar shake roof. The underside of the overhang will have a smooth finish.

654-3.05 CRACKS AND PATCHING. Cracks in concrete components which are judged to affect the structural integrity of the building will be rejected. Small holes, depressions and air voids will be patched with a suitable concrete material. The patch will match the finish and texture of the surrounding surface. Patching will not be allowed on defective areas if the structural integrity of the building is affected.

654-3.06 CURING AND HARDENING CONCRETE. Concrete surfaces will not be allowed to dry out from exposure to hot, dry weather during initial curing period.

654-3.07 STRUCTURAL JOINTS. Wall components will be joined together with two welded plate pairs at each joint. Each weld plate will be 6 inches long and located one pair in the top quarter and one pair in the bottom quarter of the seam. Weld plates will be anchored into the concrete panel and welded together with a continuous weld. The inside seams will be a paintable caulk. The outside seams will use a caulk in a coordinating building color or clear. Walls and roof will be joined with weld plates, 3 inch x 6 inch, at each building corner. The joint between the floor slab and walls will be joined with a grout mixture on the inside, a matched colored caulk on the outside and two weld plates 6 inches long per wall.

654-3.08 PAINTING/STAINING. An appropriate curing time will be allowed before paint is applied to concrete. Some applications may require acid etching. A 30% solution of hydrochloric acid will be used, flushed with water and allowed to thoroughly air dry. Painting will not be done outside in cold, frosty or damp weather. Painting will not be done outside in winter unless the temperature is 50 degrees F. or higher. Painting will not be done in dusty areas.

654-3.09. TESTING. The following tests will be performed on concrete used in the manufacture of toilets. Testing will only be performed by qualified individuals who have been certified ACI Technician Grade 1. Sampling will be in accordance with ASTM C172.

1. The slump of the concrete will be performed on the first batch of concrete in accordance with ASTM C143. This slump will be in the 3-4 inch range. Slump may be increased using chemical admixtures provided that the concrete maintains same or lower water to cement ratio and does not exhibit segregation. Slump will never exceed 9 inches.

SPECIAL PROVISIONS

2. The air content of the concrete will be checked per ASTM C231 on the first batch of concrete. The air content will be in the range of 5.5% +/- 1%.
3. The compressive strength of the cylinders will be tested to ASTM C39. We will make one (1) cylinder for release, one (1) for 7 days and one (1) for 28 days. The release must be a minimum strength of 2500 psi, the 7-day must be a minimum of 4500 psi and the 28-day must be a minimum of 5000 psi.
4. A copy of all test reports will be available to the customer as soon as 28-day test results are available.

654-3.10 EXCAVATION AND ELEVATION. Excavate for the installation of the toilet vault to a depth that will allow the structure site to be free draining after installation is completed. Allow for a 2 inch leveling course beneath the toilet vault. Stockpile topsoil in a separate pile at sites.

No excavation will be left open more than seven days unless otherwise approved by the Engineer. All excavations left open overnight will be fenced with wire mesh or plastic mesh fence secured to steel posts all around the excavation.

654-3.11 BEDDING, BACKFILL AND COMPACTION. Backfill and compaction shall conform to the requirements of Section 203 and Section 301. Rocks larger than six inches in maximum dimension shall not be placed within six inches of the exterior vault walls.

654-3.12 FINISH GRADING. Final grade shall be flush with the top of the front slab. Grade backfill away from the structure at maximum slope of five percent unless otherwise approved by the Engineer.

654-3.13 VAULT TOILET RISER. Polyurethane caulk will be applied between toilet riser flange and concrete floor before the toilet riser is installed.

654-3.14 EXHAUST PIPE INSTALLATION. After exhaust pipe is installed, seal around pipe at top and underside of roof with polyurethane caulk. Seal around pipe at top of floor slab will be accomplished by using polyurethane caulk.

654-3.15 SIGNS. Position signs level, 60 inches above finished floor (AFF) to the center and on the deadbolt side of the door.

654-3.16 GRAB BARS. Mount grab bars at 33-36 inches above finished floor.

654-3.17 TOILET PAPER DISPENSERS. Mount toilet paper dispensers at 19 inches minimum above finished floor to center for accessible units and 16 inches minimum above finished floor to center for standard units. Mount toilet paper dispensers at 36 inches maximum from rear wall.

654-3.18 COAT HOOKS. Mount coat hooks at 54 inches maximum above finished floor in accessible units.

SPECIAL PROVISIONS

654-4.01 METHOD OF MEASUREMENT. Measurement will be the actual number of pre-manufactured vaulted toilets completed and accepted. Excavation, embankment, and leveling course required for Concrete Vaulted Toilet construction are considered subsidiary to this item and will not be measured separately for payment.

Work required in preparing and acquiring the necessary City and Borough permits for the construction and installation of the concrete vaulted toilet and paying the applicable fees will be considered subsidiary to 654(2) Concrete Vaulted Toilet.

654-5.01 BASIS OF PAYMENT. The accepted quantity of pre-manufactured vaulted toilets will be paid for the contract unit price for each Concrete Vaulted Toilet completed and in conformance with the plans and specifications.

Payment will be made under:

Pay Item	Pay Unit
654(2) Double Concrete Vaulted Toilet	Each

(03/04/10)PARKS-Special Provision

Sandbags: Sand bags shall measure 15 inches by 30 inches. Use prayer type seams with a minimum of two rows of stitching using a Federal Stitch Type 401 Chain Stitch. Place approximately 1.0 cubic foot of Select Material, Type B, in each sandbag sack. Close the open end of the sandbag, after filling, with 2 cinch ties or as recommended by the manufacturer of the sandbag material.

690-3.04 PLACEMENT AND INSTALLATION. Place and install where shown and detailed in the Plans and Specifications including Section 641, and as recommended by the manufacturer, directed by the Engineer and as follows:

Temporary Seeding. Annual Ryegrass per Subsection 724-2.02, Table 724-1. Apply at a rate of 1/2 lb/1000 sq. ft., minimum, on level ground to a maximum of 1 1/2 lb/1000 sq. ft., maximum, on sloping ground and highly erodible soils. Confirm application of temporary seeding with the Engineer.

Prepare the surface to be seeded to reduce erosion potential and to facilitate germination and growth of vegetation cover. Maintain seeded areas. Refer to Section 620 for further surface/topsoil preparation requirements.

Reseed where water quality standards are being exceeded as a result of insufficient vegetative cover. Review with Engineer prior to reseeding.

Refer to Section 618 for further information.

690-3.05 MAINTENANCE. Maintain the integrity of the erosion, sediment and pollution control measures for the duration of the project. Inspect as required by the APDES CGP and SWPPP and correct any deficiencies immediately. Remove and dispose of temporary measures including trapped sediment contaminants off project at approved locations. Materials manufactured as biodegradable may be left in place when approved by the Engineer.

690-4.01 METHOD OF MEASUREMENT. Section 109 and as follows:

Fiber Rolls: By length, measured along the centerline of the fiber roll, complete in place.

Manufactured Inlet Protection Systems: By each, complete in place.

Sandbag Inlet Sediment Trap: By each, complete in place.

Silt Fence: Section 633.

Seeding: Section 618.

Stabilization: Section 619.

690-5.01 BASIS OF PAYMENT. Section 641.

(08/12/10) CR690-Special Provision

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR

Project Number 2021.04

SECTION 703

AGGREGATES

703--2.03 AGGREGATE FOR BASE.

Delete Table 703-2 and substitute the following:

TABLE 703-2
AGGREGATE FOR UNTREATED BASE
(Percent Passing By Weight)

Sieve Designation	Grading C-1	Grading D-1	Grading E-1
1 ½ inch	100	-	-
1 inch	70-100	100	100
¾ inch	60-90	70-100	70-100
⅜ inch	45-75	50-79	50-85
No. 4	30-60	35-58	35-65
No. 8	22-52	20-47	23-50
No. 30	10-33	10-26	13-31
No. 50	6-23	6-19	10-26
No. 200	0-6	0-6	8-15

Replace Subsection 703-2.04 with the following:

703-2.04 AGGREGATE FOR HOT MIX ASPHALT PAVEMENT. Process and crush aggregate that is free from clay balls, organic matter, other deleterious material, and not coated with dirt or other finely divided mineral matter. Aggregate used must consist of sound, tough, durable rock of uniform quality.

Remove all natural fines passing a No. 4 sieve before crushing aggregates for Type IV, V and R mixtures.

Coarse Aggregate. Aggregate retained on the No. 4 Sieve.

Meet the following requirements:

Description	Specification	Type IIA	Type I, IIB, III	Type IV	Type V, R
LA Wear, % max	AASHTO T 96	45	45	45	45
Degradation Value, Min	ATM 313	30	30	30	30
Sodium sulfate Loss % max (5 cycles)	AASHTO T 104	9	9	9	9
Fracture, min %	WAQTC FOP for AASHTO TP 61	90, 2 face	80, 1 face	90, 2 face	98, 2 face
Flat-Elongated Pieces, max %	ATM 306	1:5	8	8	8
		1:3	20	-	20
Absorption, max. %	AASHTO T 85	2.0	2.0	2.0	2.0

Fine Aggregate. Aggregate passing the No. 4 sieve.

Aggregate shall meet the quality requirements of AASHTO M 29, including S1.1, Sulfate Soundness.

Aggregate for Type IV, V, and R mixes:

- do not blend back natural sand
- shall be non-plastic as determined by WAQTC FOP for AASHTO T 90
- shall have a minimum uncompacted void content (Fine Aggregate Angularity) determined by AASHTO T 304, Method A, of 45%

TABLE 703-3
BROAD BAND GRADATIONS FOR HOT MIX ASPHALT PAVEMENT AGGREGATE
 (Percent Passing by Weight)

Sieve	Gradation					
	Type I	Type II	Type III	Type IV	Type V	Type R
1 inch	100	-	-	-	-	-
3/4 inch	80-90	100	-	-	100	100
1/2 inch	60-84	75-90	100	100	65-90	70-100
3/8 inch	48-78	60-84	80-90	80-95	55-80	50-70
No. 4	28-63	33-70	44-81	55-70	40-60	30-42
No. 8	14-55	19-56	26-70	35-50	≤ 45	20-32
No. 16	9-44	10-44	16-59	20-40	≤ 35	15-25
No. 30	6-34	7-34	9-49	15-30	≤ 25	10-20
No. 50	5-24	5-24	6-36	10-24	≤ 20	7-15
No. 100	4-16	4-16	4-22	5-15	≤ 12	5-12
No. 200	3-8	3-8	3-8	4-8	3-8	4-10

Note:

1. No tolerance is allowed beyond the Broad Band Limits of the No. 200 Sieve.
2. For Type R, the mix design gradation JMD shall provide a minimum of 8% difference of percent passing the No. 4 and the No. 8 sieve.

(10/11/10)CR7031-Special Provision

703-2.07 SELECTED MATERIAL. Add the following:

4. Type D. Earth, sand, gravel, or rock materials obtained from the excavation, and shall contain no wood, concrete, or other debris.

(11/21/08)PARKS-Special Provision

Add the following Subsections:

SPECIAL PROVISIONS

703-2.08 GRAVEL BEDDING. Gravel bedding for the concrete boat ramp planks shall meet the following gradation requirements:

Sieve	% Passing
2 in	100
1-1/2 in	90-100
1 in	20-55
3/4 in	0-15
3/8 in	0-5

(01/01/01)PARKS-Special Provision

703-2.09 JOINT AGGREGATE. Joint aggregate for filling between the concrete boat ramp planks shall meet the following requirements:

Sieve	% Passing
3/4 in	100
#4	0-5

(01/01/01)PARKS-Special Provision

703-2.10 SEWER ROCK. Durable, washed, coarse aggregate grades as follows:

Sieve	% Passing
2-1/2 in	100
1-1/2 in	90-100
1 in	20-55
3/4 in	0-15
3/8 in	0-5

(08/20/93)PARKS-Special Provision

703-2.11 SEEDING AGGREGATE. Durable, washed, rounded river gravel containing no deleterious materials or staining substances such as iron oxides and iron pyrites.

Sieve	% Passing
3/4 in	100
1/2 in	0

Submit seeding aggregate samples to Engineer for acceptance prior to placement.

(01/01/01)PARKS-Special Provision

SPECIAL PROVISIONS

SECTION 706

CONCRETE AND PLASTIC PIPE

706-2.06 PLASTIC PIPE. Delete the first sentence and replace with the following:

Semi-rigid, smooth-wall pipe meeting the following:

(07/28/08)E63-Standard Modification

SECTION 710

FENCE AND GUARDRAIL

710-2.03 CHAIN LINK FABRIC.

In the 1st sentence between the parenthesis, replace "Class D" with the following:

(Class C or D coating)

(11/04/10)CR7101-Special Provision

Delete Subsection 710-2.04 METAL BEAM RAIL and replace with the following:

710-2.04 METAL BEAM RAIL. Meet AASHTO M 180-00, Class A, Type II. Galvanize the rail per ASTM A653 after factory roll formed and punched.

(10/04/10)E83-Standard Modification

Delete Subsection 710-2.06 GUARDRAIL POSTS AND BLOCKS and replace with the following:

710-2.06 GUARDRAIL POSTS AND BLOCKS. Furnish posts and blocks, as specified, meeting the following requirements.

1. Wood Posts and Blocks. Use timber with a stress grade of 1200 psi or more. Testing must meet the standards of the West Coast Lumber Inspection Bureau. Use timber for posts and blocks that is either rough sawn (unplaned) or S4S with nominal dimensions indicated. Allowable size tolerance of rough sawn blocks in the direction of the bolt holes is $\pm 1/4$ inch. Only one combination of post and block finish may be used for any one continuous length of guardrail. Treat all timber to meet Section 714.
2. Steel Posts and Blocks. Meet the section and length specified or shown on the Plans. Use copper bearing steel when so specified. Use steel meeting the requirements of ASTM A 36 and galvanized per ASTM A 123.
3. Synthetic Blocks. Product made from alternate materials may be used if accepted by the FHWA for use on the National Highway System.

(10/04/10)E84-Standard Modification

Delete Subsection 710-2.11 GUARDRAIL TERMINALS and replace with the following:

710-2.11 GUARDRAIL TERMINALS. Meet coating requirements of AASHTO M 180, Class A, Type II. Galvanize after fabrication. Fabrication includes forming, cutting, shearing, punching, drilling, bending, welding, and riveting. Provide one of the following

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

terminal types, as shown on the plans, for single-rail W-beam guardrail. Provide terminals that pass NCHRP 350 or MASH Test Level 3 and meet the following requirements:

1. Controlled Release Terminal. Meet the requirements of Standard Drawing G-25.
2. Parallel Terminal.
 - a. Requirements:
 - (1) Crashworthiness: Provide terminals that pass NCHRP 350 or Mash Test Level 3.
 - (2) Length: 50 feet.
 - (3) End Offset: 0 to 2 feet (25:1 or flatter straight taper) offset end as shown on the plans.
 - (4) Posts: Use posts that are:
 - (a) Steel post with hinge or
 - (b) Yielding or breakaway steel post in steel tube
 - b. Acceptable models include the following or approved equivalent:
 - (1) Sequential Kinking Terminal (SKT) manufactured by Road Systems, Inc., 3616 Old Howard County Airport, Big Spring, Texas 79720, Telephone (432) 263-2435.
 - (2) Extruder Terminal (ET-Plus) manufactured by Trinity Highway Products, L.L.C., 950 West 400 South, Centerville, Utah 84014, Telephone (801) 292-4461.
 - c. Install AASHTO M 268, Type III, IV, or V retro-reflective sheeting (2.0 square feet, minimum) on the end section of parallel terminals consisting of yellow and black bars sloping 45 degrees downward toward the traffic side of the terminal.
3. Buried in Backslope Terminal. Meet the requirements of Standard Drawing G-15.

(10/04/10)E85-Standard Modification

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

SECTION 712

MISCELLANEOUS

712-2.06 FRAMES, GRATES, COVERS, AND LADDER RUNGS. Under Gray iron castings, replace text with: AASHTO M 306 and AASHTO M 105, Class 35B. (01/27/07)E46-Standard Modification

712-2.17 METHYL METHACRYLATE PAVEMENT MARKINGS. Replace No. 1. Quality Requirements: with the following:

1. Quality Requirements: Use a marking material formulated for the application type specified. Use a marking material manufactured from new materials and free from dirt and other foreign material. Use a methyl methacrylate based resin system for part "A". Use benzoyl peroxide system for part "B".

Extruded or stenciled application: Material formulated for extruded or direct stenciled application with factory intermix beads, and anti skid aggregate and the application of additional surface applied beads.

Submit a manufacturer certification for both the methyl methacrylate material, glass beads and anti-skid aggregate to ensure that the materials furnished conform to these Specifications.

2. Performance Properties: Add the following:
 - I. Color: Yellow, PR-1 Chart, 33538 Federal Yellow. White, minimum daylight reflectance of 84.

712-2.18 GLASS BEADS FOR METHYL METHACRYLATE PAVEMENT MARKINGS. Replace the bead table with the following:

Use the type and quantity of beads specified in writing by the marking material manufacturer required to satisfy the specified performance requirements. The written certification will note the bead coating is compatible with the marking material binder.

1. Bead Manufacturer and Type.
 - a. Swarco, Megalux-Beads or
 - b. Approved equal beads

Approved Equal Beads. Equal beads will demonstrate:

- (1) Bead coatings compatible with marking materials. Marking Material Manufacturer will certify compatibility.

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

(2) Lasting retroreflectivity. For the two year specified Warranty Period and retroreflectivity levels, Subsection 670-3.07. The Engineer will determine the test location.

(01/01/09) CR246-Special Provision

SECTION 724

SEED

724-2-02. MATERIALS. Replace Table 724-1 with the following:

**TABLE 724-1
SEED REQUIREMENTS**

Species	Sproutable Seed*, %, Min.
Arctared Red Fescue	78
Egan American Sloughgrass	67
Norcoast Bering Hairgrass	71
Nortran Tufted Hairgrass	71
Wainwright Slender Wheatgrass	88
Alyeska Polargrass	71
Bluejoint	71
Tilesy Sagebrush	71
Tundra Glaucous Bluegrass	76
Gruening Alpine Bluegrass	72
Nugget Kentucky Bluegrass	76
Beach Wildrye	70
Annual Ryegrass	76
Perennial Ryegrass	76

* Sproutable Seed is the mathematical product of Germination and Purity.

(01/27/07)R52-Special Provision

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

SECTION 726

TOPSOIL

726-2.01 TOPSOIL. Replace Item No. 1 with the following:

Reasonably free from roots, clods, hard clay, tall grass, brush, sticks, stubble or other litter, and be free-draining and non-toxic. Must be free of noxious weeds or invasive material.

Replace Item No. 3 with the following:

3. Grading Requirements:

TABLE 726-1

TOPSOIL REQUIREMENTS

REQUIREMENT	CLASS A	CLASS B
Sieve Designation	Percent Passing by Weight	
3 in	-	100
1/2 in	100	-
No. 4	95-100	75-100
No.16	64-90	50-95
No. 200	30-60	20-80
Organic Content*	10% - 40%	5% - 40%
Limestone	1.5 Ton/Acre	-

*Determined by loss on ignition of oven dried sample in accordance with ALASKA FOP for AASHTO T 267

(01/01/03)PARKS-Special Provision

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

SECTION 727

SOIL STABILIZATION MATERIAL

Add the following subsection 727-2.04:

727-2.04 COMPOST BLANKET. Compost blanket media shall be a composted weed free organic matter source derived from: peat agricultural, food, or industrial residuals; biosolids (treated sewage sludge); yard trimmings; source-separated or mixed solid waste. Particle size shall be as described below in the product parameters table. The compost shall possess no objectionable odors, will be reasonably free (<1% by dry weight) of man-made foreign matter and will meet the product parameters outlined below.

Parameters ¹⁻⁴	Reported as (units of measure)	Vegetated Compost
pH ²		5.0-8.5
Soluble Salt Concentration ² (electrical conductivity)	dS/m (mmhos/cm)	Maximum 5
Moisture Content	%, wet weight basis	30-60
Organic Matter Content	%, dry weight basis	25-65
Particle Size	% passing a selected mesh size, dry weight basis	<ul style="list-style-type: none"> • 3" 100% passing • 1", 90% to 100% passing • ¾", 65% to 100% passing • ¼", 0% to 75% passing • 6" maximum particle length
Stability ³ Carbon Dioxide Evolution Rate	Mg CO ₂ -C per g OM Per day	<8
Physical Contaminants (man-made inerts)	%, dry weight basis	<1

Compost Blanket Parameters

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

1. Recommended test methodologies are provided in Test Methods for the Examination of Composting and Compost (TMECC, The US Composting Council)
2. Each specific plant species requires a specific pH range. Each plant also has a salinity tolerance rating; maximum tolerable quantities are known. When specifying the establishment of any plant or turf species, it is important to understand the pH and soluble salt requirements and how they relate to the compost in use.
3. Stability/Maturity rating is an area of compost science that is still evolving and, as such, other various test methods could be considered. Also, never base compost quality conclusions on the result of a single stability/maturity test.
4. Landscape architects and project (field) RCEs may modify the allowable compost specification ranges based on specific field conditions and plant requirements.

The product shall be certified through the U.S. Composting Council's (USCC) Seal of Testing Assurance (STA) program. Before delivery of the compost, supplier must provide a copy of the lab analysis, performed by a STA Program certified lab, verifying that the compost meets the product parameters listed below. The lab analysis should not be more than 90 days old.

(3/17/10)E17-Standard Modification

SECTION 730

SIGN MATERIALS

730-2.04 SIGN POSTS. Add the following item:

7. Structural Tubing and W-Shape Beams.
 - a. Structural tubing shall conform to either ASTM A500, grade B, or ASTM A501. The tubing shall be square and of the dimensions called for in the Plans with 0.2 inch thick walls. 0.4 inch diameter holes shall be drilled as required to permit mounting of the sign.
 - b. W-shape beams shall conform to ASTM A36.
 - a. Structural tubing and W shape beams shall be hot dip galvanized according to 1.b. of this subsection. Damaged and abraded tubes and beams shall be repaired according to 1.c. of this subsection.

(06/22/04)R81-Special Provision

Add the following Section:

SECTION 744

EROSION, SEDIMENT, AND POLLUTION CONTROL - MATERIAL

744-2.01 MATERIAL.

Fiber Roll: (commonly called straw wattle)

- a. Comprised of UV-degradable plastic netting or 100 percent biodegradable material.
- b. Filled with straw, flax, rice, coconut fiber material or composted material.
- c. Staking shall be made of 100 percent biodegradable materials.

Provide the Engineer certification stating the name of the manufacturer, product name, style number, chemical composition of the fiber, netting and certification of the weed-free status from the manufacturer. Furnish a sample to the Engineer seven days before the scheduled installation.

Manufactured Inlet Protection System:

- a. Manufacturers:
 - Ultra Tech International – Ultra-DrainGuard
 - Bowhead Environmental and Safety - StreamGuard Exert II Sediment Insert
 - Enpac - Catch Basin Insert, Oil and Sediment or
- b. Approved equal.

Sand Bag Inlet Sediment Trap:

- a. Sandbag sack fabric shall be a nonwoven, needle punched design meeting the following requirements:

Grab Tensile Strength	ASTM D 4632	200 pounds (min.)
Grab Elongation	ASTM D 4632	15 – 70%
Mullen Burst Strength	ASTM D 3786	400 psi. (min.)
Trapezoidal Tear Strength	ASTM D 4533	95 lbs. (min.)
Apparent Opening Size	ASTM D 4751	No. 30 U.S. STD sieve (max)
Permittivity	ASTM D 4491	0.01 sec-1 (min.)
Ultraviolet Light Stability, Retained Strength	ASTM D 4355	90%
Puncture Strength	ASTM D 4833	120 lbs. (min.)

These requirements are for Minimum Average Roll Values (MARV) verified in accordance with ASTM D 4759.

- b. Seam Thread:
 - Similar durability to the sandbag sack fabric.
- c. Sandbag Fill Material:
 - Select Material Type B 703-2.07.
- d. Cinch Ties: Plastic ties or equivalent tie recommended by the sandbag manufacturer.

(02/23/09) CR744-Special Provision

SPECIAL PROVISIONS

Knik River Access: Palmer Hay Flats SGR
Project Number 2021.04

APPENDIX A

PERMITS

PERMIT DESCRIPTION	ISSUE DATE	EXPIRE DATE
U.S. Army Permit Preliminary Determination, Section 404/10	PENDING	PENDING
Certificate of Reasonable Assurance Department of Environmental Conservation	PENDING	PENDING
SHPO Letter of No Historic Properties Impacted Department of Natural Resources Office of History and Archeology	PENDING	PENDING
Municipality of Anchorage Flood Hazard Permit	PENDING	PENDING
Matanuska-Susitna Borough Application For Floodplain Development Permit MSB 17.29	PENDING	PENDING
Alaska Department of Fish and Game Special Area Permit	PENDING	PENDING

APPENDIX B

SURVEY REQUIREMENTS

1. Alaska Construction Surveying Requirements (US Customary Units)

APPENDIX C

STORM WATER POLLUTION PROVENTION PLAN (SWPPP)

The Alaska Department of Natural Resources (ADNR) Division of Parks and Outdoor Recreation (DPOR) Design and Construction Section (D&C) has created this Erosion and Sediment Control Plan (ESCP). This ESCP shall be amended by the Contractor to incorporate the projects material source sites, HMCP, SPCC, and any other modification the contractor determines is necessary.

The Contractor shall use the attached ESCP to meet Alaska Department of Environmental Conservation requirements for construction.