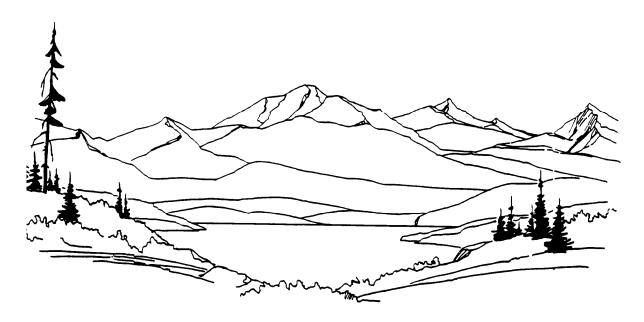
DIVISION OF PARKS AND OUTDOOR RECREATION



PROPOSAL, CONTRACT, BOND AND SPECIAL PROVISIONS

OLD KASILOF LANDING SRS SITE DEVELOPMENT

PROJECT NO. 73032-1

COPY

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(Federal Aid)

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Federal wage rates can be obtained at https://sam.gov/content/wage-determinations for the State of Alaska. Use the federal wage rates that are in effect 10 days before Bid Opening. The Department will include a paper copy of the federal wage rates in the signed Contract.

6. State Wage Rates

State wage rates can be obtained at http://www.labor.state.ak.us/lss/pamp600.htm. Use the State wage rates that are in effect 10 days before Bid Opening. The Department will include a paper copy of the State wage rates in the signed Contract.



INVITATION TO BID

for Construction Contract

	E DEVELOPMENT, PROJECT NO. 73032-1
Project	Name and Number
project described below. The Department will only consider source) on the 29th day of May 20 22	ng all labor, equipment, and materials and performing all work for the bids received before 2:00 PM local time (per the Department's time 4 . On that date, the Department will assemble, open, and then publicly Suite 1340; Anchorage, AK 99501 , at 2:15 PM , or as soon thereafter
Issuing Office: DNR, Division of Parks and Outdoor	Recreation
State Funded	Federal Aid ⊠
Description of Work: This project will construct a public dr facilities. This project will also develop trails and walkway	rift boat retrieval facility including a roadway, parking areas, and park as throughout the site and develop interpretive areas.
Project DBE Utilization Goal: ☐ Race-Neutral, Goal is 0%	☐ Race-Conscious, Goal is 0%
The Engineer's Estimate is: ☐ less than \$100,000 ☐ between \$100,000 and \$250 ☐ between \$250,000 and \$500 ☐ between \$500,000 and \$1,000 ☐ Between \$1,000 And \$1,000 A	0,000 □ greater than \$5,000,000
All work shall be completed in N/A Calendar Days identify interim completion dates, if any, in the Special Pro	visions.
amount of 100% of the contract as security conditioned for	d in the amount of 100% of the contract and a performance bond in the the full, complete and faithful performance of the contract. The apparent within fifteen calendar days, or such further time as may be allowed in ion of the acceptance of their bid.
Submission Bidders may submit bidding documents electronically via	of Bidding Documents the Department's approved online bidding service, through the mail or lectronically submitted bids with a paper bid guaranty, documents shall
Bidding Documents for Project: OLD KASILOF LANDING SRS SITE DEVELOPMENT PROJECT NO. 73032-1	ATTN: DNR, Division of Parks and Outdoor Recreation 550 W. 7th Avenue, Suite 1340 Anchorage, AK 99501
	ments, and/or withdrawal arrive, in its entirety, at the location and before nt or withdrawal via email or fax must transmit its documentation to the lage 2] or fax number: (907) 269-8917.
	5% of the amount bid. (When calculating the bid amount for purposes shall include its base bid amount, plus the amount bid for alternate and
	matively ensure that in any contract entered into pursuant to this rded full opportunity to submit bids and will not be discriminated x in consideration for an award.

NOTICE TO BIDDERS
The following data may assist a bidder in preparing its bid:
SEE SPECIAL NOTICE TO BIDDERS
A bidder may download project plans and specifications from: http://dnr.alaska.gov/parks/designconstruct/bidcalresults.htm . For additional information contact:
Division of Parks and Outdoor Recreation Design & Construction Section Phone: (907) 269-8731
If a bidder has a question relating to design features, constructability, quantities, or other technical aspects of the project, it may direct its inquiry to the contact listed below.
A bidder requesting assistance in viewing the project site must make arrangements at least 48 hours in advance.
The point of contact for inquiries for this project is:
Rangell Soriano, P.E. Email: rangell.soriano@alaska.gov Phone: (907) 269-8937
A bidder may direct questions concerning bidding procedures and requirements to:
Rys Miranda, P.E. Chief, Design & Construction 550 W. 7 th Ave., Suite 1340 Anchorage AK 99501 E-Mail: rys.miranda@alaska.gov Phone: (907) 269-8736
Other Information:
Bid results are available approximately 30 minutes after bid opening at http://dnr.alaska.gov/parks/designconstruct/bidcalresults.htm

SPECIAL NOTICE TO BIDDERS

The Department hereby notifies bidders that information to assist in preparing bids is available.

1. Publications.

- a. Standard Specifications for Highway Construction, 2020 Edition. Available online at: http://www.dot.state.ak.us/stwddes/dcsspecs/assets/pdf/hwyspecs/sshc2020.pdf
- b. Alaska Test Methods Manual (Lab & Field), 2021 Edition. Available online at: http://www.dot.state.ak.us/stwddes/desmaterials/mat_waqtc/pop_testman.shtml
- 2. Other Publications. These items are available upon request from the Department of Natural Resources, Division of Parks & Outdoor Recreation, Design & Construction Section (DNR-DPOR-D&C) at 550 West 7th Avenue, Suite 1340, Anchorage, AK:
 - a. Estimate of Quantity Computations.
- 3. <u>Materials Certification List (MCL)</u>. The MCL provides the Engineer with the appropriate approving authority. Contractor, submit certification for each material to the Engineer. The MCL is included in Appendix D.
- 4. <u>High Visibility Clothing</u>. The Department requires all workers within the project limits to wear an outer visible surface or layer of high visibility color and retro-reflectivity.
- 5. Section 641. ESCP has been provided by the Department in Appendix C.
- 6. <u>Electronic Bidding</u>. The Department is not able to receive bids electronically. All bidding documents must be submitted by mail or hand delivered. Documents shall be submitted in a sealed envelope.
- 7. All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any federal-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g. a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify the Department prior to extracting material. The Department must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a subrecipient or their contractor commencing borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at closeout.

<u>Cultural and Archaeological Survey for Material Sources.</u> All material sources associated with this project must conform to AS 41.35.070 and have documented survey showing no adverse effects to historic, prehistoric, or archaeological resources. A list of qualified consultant approved to perform cultural/archaeological surveys can be found at: http://dnr.alaska.gov/parks/oha/grant/contractorlistcurrent.pdf.



REQUIRED DOCUMENTS

Federal-Aid Contracts (Non-FHWA)

REQUIRED FOR BID. Bids will not be considered if the following documents are not completely filled out and submitted at the time of bidding:

- 1. Bid Forms
 - a. Bid Form (Form 25D-09DNR)
 - b. Bid Schedule
 - c. Bid Attachments (as applicable)
 - d. Addenda Acknowledgement (as applicable)
- 2. Bid Bond (Form 25D-14DNR)

REQUIRED FOR BID MODIFICATIONS. Any bid revisions must be submitted by the bidder prior to bid opening. Use the following form to modify Manual (paper) bids:

3. Bid Modification (Form 25D-16DNR)

REQUIRED AFTER NOTICE OF APPARENT LOW BIDDER. The apparent low bidder is required to complete and submit the following documents within 5 working days after receipt of written notification:

1. Subcontractor List (Form 25D-5DNR)

REQUIRED FOR AWARD. In order to be awarded the contract, the successful bidder must completely fill out and submit the following documents within the time specified in the intent to award letter:

- 1. Construction Contract (Form 25D-10HDNR)
- 2. Payment Bond (Form 25D-12DNR)
- 3. Performance Bond (Form 25D-13DNR)
- 4. Contractor's Questionnaire (25D-08DNR)
- 5. Certificate of Insurance (from carrier)
- 6. EEO-1 Certification (Form 25A-304DNR)
- 7. Material Origin Certificate (Form 25D-60)

REAL PROPERTY OF NATURAL STATES

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES

FEDERAL EEO BID CONDITIONS

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246). FOR ALL NON-EXEMPT FEDERAL AND FEDERALLY-ASSISTED CONSTRUCTION CONTRACTS TO BE AWARDED IN THE STATE OF ALASKA

- 1. <u>Definitions</u>. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "**Director**" means Director, Office of Federal Contract Compliance Programs (OFCCP), United States Department of Labor (DOL), or any persons to whom the Director delegates authority;
 - c. "Employer" identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);
 - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (4) American Indian or Alaska Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- 2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the DOL in the covered area, either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades that have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or subcontractor's failure to make good faith efforts to achieve the Plan goals and timetables.
- 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7(a) through 7(p) of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

Covered construction contractors performing construction work in geographical areas where they do not have a federal or federally-assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any OFCCP office or from federal procurement contracting officers.

- 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
- 6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period of an approved training program and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities.
- 7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligations to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-thestreet applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the DOL. The Contractor shall provide notice of these programs to the sources compiled under 7(b) above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendent, general foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and dispositions of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- 1. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are nonsegregated except that separate or single-used toilet, necessary changing facilities and necessary sleeping facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontractors from minority and female construction contractors and suppliers, including circulations of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
- 8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations 7(a) through 7(p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any or more of its obligations under 7(a) through 7(p) of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

- 9. A single goal for minorities and a separate goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.)
- 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- 11. The Contractor shall not enter into any subcontract with any person or firm debarred from government contracts pursuant to Executive Order 11246.
- 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
- 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunities. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
- 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic apprentice, trainees, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that the existing records satisfy this requirement, Contractors shall not be required to maintain separate records.
- 15. Nothing herein provided shall be construed as a limitation upon the application of other laws that establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Programs).
- 16. The Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
- 17. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as set forth in item 20.

These goals as listed in item 20 are applicable to all the Contractor's construction work (whether or not it is federal or federally-assisted) performed in the covered area.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally and non-federally involved construction.

The hours on minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women

evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

18. The Contractor shall provide written notification to the Department, for all subcontracts documents as follows: the name, address and telephone number of subcontractors and their employer identification number; the estimated dollar amount of the subcontracts; estimated starting and completion dates of the subcontracts; and the geographical area in which the contract is to be performed.

This written notification shall be required for all construction subcontracts in excess of \$10,000 at any tier for construction work under the contract resulting from this project's solicitation.

19. As used in the Bid Notice, and in the contract resulting from this project's solicitation, the "covered area" is the State of Alaska.

20. Goal and Timetable

a. The following goal and timetable for female utilization shall be included in all federal and federally-assisted construction contracts and subcontracts in excess of \$10,000. The goal is applicable to the Contractor's aggregate on-site construction work force whether or not part of that work force is performing work on a federal or federally assisted construction contract or subcontract.

ALASKA GOAL AND TIMETABLE FOR WOMEN*

Timetable Goal **

Until Further Notice 6.9%

b. The following goals and timetable for minority utilization shall be included in all federal or federally-assisted construction contracts and subcontracts in excess of \$10,000 to be performed in Alaska. The goals are applicable to the Contractor's aggregate on-site construction work force whether or not part of that work force is performing work on a federal or federally-assisted construction contract or subcontract.

ALASKA GOALS AND TIMETABLE FOR MINORITY UTILIZATION

<u>Timetable</u>	Economic Area (EA)***	<u>Goals</u> **
Until Further Notice	Anchorage SMSA Area	08.7%
	Remainder of State	15.1%

- * The goal and timetable for women listed above applies to Alaska as well as nationwide.
- ** The Director, from time to time, shall issue goals and timetables for minority and female utilization that shall be based on appropriate work force, demographic or other relevant data and which shall cover construction projects, or construction contracts performed in specific geographical areas. The goals shall be applicable to each construction trade in a covered Contractor's or subcontractor's entire work force which is working in the area covered by the goals and timetables, shall be published as notices in the FEDERAL REGISTER, and shall be inserted by the contracting officers and applicants, as applicable, in the Notice required by 41 CFR 60-4.2. Covered construction contractors performing construction work in geographical areas where they do not have a federal or federally-assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed.

^{***}Refer to the Standard Metropolitan Statistical Areas (SMSA) and Economic Areas (EA), Office of Management and Budget, 1975.



SUBCONTRACTOR LIST

OLD KASILOF LANDING SRS SITE DEVELOPMENT, PROJECT NO. 73032-1

Project Name and Number

The apparent low bidder shall complete this form and submit it so as to be received by the Contracting Officer prior to the close of business on the fifth working day after receipt of written notice from the Department.

An apparent low bidder who fails to submi responsible and may be required to forfeit the		ractor List form	within the time allowed will be declared non-
Scope of work must be clearly defined. If an of work to be done by each.	n item of work is to be p	performed by mo	re than one firm, indicate the portion or percent
subcontr	racts <u>Or</u>		t will be accomplished without
List all f	first tier Subcontrac	tors as follow	s:
FIRM NAME, ADDRESS, PHONE NO.	AK BUSINESS LIC CONTRACT REGISTRATION	TOR'S	SCOPE OF WORK TO BE PERFORMED
For projects with federal-aid funding, I here	tract. For projects withou	ness Licenses and out federal-aid fu	d Contractor Registrations will be valid for all unding (State funding only), I hereby certify the
Signature of Authorized Company Represe	entative T	Γitle	
Company Name		Company Addre	ss (Street or PO Box, City, State, Zip)
Date		Phone Number	

FIRM NAME, ADDRESS, PHONE NO.	AK BUSINESS LICENSE NO., CONTRACTOR'S REGISTRATION NO.	SCOPE OF WORK TO BE PERFORMED



CONTRACTOR'S QUESTIONNAIRE

OLD KASILOF LANDING SRS SITE DEVELOPMENT, PROJECT NO. 73032-1 Project Name and Number

[]No []Yes	If YES, explain:				
Describe any arrangem	nents you have made t	o finance this wor	k:		
EQUIPMENT Describe below the equ					
ITEM	QUAN.	MAKE	MODEL	SIZE/ CAPACITY	PRESENT MARKET VALUE
	l l				

	2.	What percent of the total value of this contract do you is	ntend to subcontract? %
	3.	Do you propose to purchase any equipment for use on t [] No	
-	4.	Do you propose to rent any equipment for this work? [] No	nantity:
- -	5.	Is your bid based on firm offers for all materials necess: [] Yes [] No If NO, please explain:	ary for this project?
С.	EX	(PERIENCE	
-	1.	Have you had previous construction contracts or subcor [] Yes	
]		List, as an attachment to this questionnaire, other constroof work, and total contract amount for each project comreby certify that the above statements are true	
	Nai	me of Contractor	Name and Title of Person Signing
	Sig	nature	Date



BID FORM

for

OLD KASILOF LANDING SRS SITE DEVELOPMENT, PROJECT NO. 73032-1

Project Name and Number

•	

Company Name

Company Address (Street or PO Box, City, State, Zip)

TO THE CONTRACTING OFFICER, DEPARTMENT OF NATURAL RESOURCES:

In compliance with your Invitation to Bid dated <u>May 29th, 2024</u>, the Undersigned proposes to furnish and deliver all the materials and do all the work and labor required in the construction of the above-referenced Project, located at or near <u>Kasilof</u>, Alaska, according to the plans and specifications and for the amount and prices named herein as indicated on the Bid Schedule consisting of 3 sheets, which is made a part of this Bid.

The Undersigned declares that he has carefully examined the contract requirements and that he has made a personal examination of the site of the work; that he understands that the quantities, where such are specified in the Bid Schedule or on the plans for this project, are approximate only and subject to increase or decrease, and that he is willing to perform increased or decreased quantities of work at unit prices bid under the conditions set forth in the Contract Documents.

The Undersigned hereby agrees to execute the said contract and bonds within fifteen calendar days, or such further time as may be allowed in writing by the Contracting Officer, after receiving notification of the acceptance of this bid, and it is hereby mutually understood and agreed that in case the Undersigned does not, the accompanying bid guarantee shall be forfeited to the State of Alaska, Department of Transportation and Public Facilities as liquidated damages, and the said Contracting officer may proceed to award the contract to others.

The Undersigned agrees to commence the work within 10 calendar days, and to complete the work within <u>N/A</u> calendar days, after the effective date of the Notice to Proceed, or by <u>June 30, 2025</u>, unless extended in writing by the Contracting Officer.

The Undersigned proposes to furnish Payment Bond in the amount of 100% (of the contract) and Performance Bond in the amount of 100% (of the contract), as surety conditioned for the full, complete and faithful performance of this contract.

Addenda Number	Date Issued	Addenda Number	Date Issued	Addenda Number	Date Issued
Number	issueu	Number	Issueu	Number	Issueu
		_			
			.1		
		NON-COLLUSIO	N DECLARAT	ION	
		NON-COLLOSIC	N DECLARAT	1014	
e Undersigned decl	ares, under penalt	v of periury under	the laws of the U	Jnited States, that no	either he nor the fi
				or indirectly, entered	
				ee competitive biddi	
s bid.	,				
5 614.					
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he Undersigned ha gnature below:	s read the foreg	Signature of An Typed Name an	uthorized Company		erein by affixing
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BID SCHEDULE

Project Name: OLD KASILOF LANDING SRS SITE DEVELOPMENT

Project Number: 73032-1

Before preparing this bid schedule, read carefully, Section 102 of the 2020 edition of the Standard Specifications for Highway Construction, and the following:

The Bidder shall insert, as called for, a unit price or lump sum price in figures opposite each pay item for which an estimated quantity appears in the bid schedule. A unit price or lump sum price is not to be entered or tendered for any pay item not appearing in the bid schedule. The estimated quantity of work for payment on a lump sum basis will be "All Required" (All Req'd) and as further specified in the contract.

Whenever a Contingent Sum is shown for any item in this schedule, such amount shall govern and be included in the bid total.

Conditioned or qualified bids will be considered non-responsive.

Notice: Contract award will be made on the basis of the total adjusted basic bid.

The bidder shall insert a unit bid price for each pay item listed below. Type or print legibly.

Pay Item Number	Pay Item Description	Pay Unit	Quantity	Unit Bid Price	Amount Bid
		******	BASIC BID **	****	
201.0001.0000	Clearing and Grubbing	Acre	3.75	\$	\$
201.0006.0000	Selective Tree Removal	Each	10	\$	\$
202.0001.0000	Removal of Structures and Obstructions	L.S.	All Req'd	\$ (Lump Sum)	\$
202.2012.0000	Ground Water Well Decommissioning	Each	2	\$	\$
203.0003.0000	Unclassified Excavation	C.Y.	6,000	\$	\$
203.0005.000A	Borrow, Type A	Ton	22,200	\$	\$
301.0001.00D1	Aggregate Base Course, Grading D-1	Ton	3,600	\$	\$
401.0001.200B	Hot Mix Asphalt, Type II, Class B	Ton	1,500	\$	\$
505.0005.0006	Furnish 6-Inch Structural Steel Pile	L.F.	1,000	\$	\$

BID SCHEDULE OLD KASILOF LANDING SRS SITE DEVELOPMENT Project No. 73032-1

Name of Bidding Firm

Pay Item Number	Pay Item Description	Pay Unit	Quantity	Unit Bid Price	Amount Bid
	**	***** CON	TINUE BASIC	C BID *******	,
505.0006.0006	Drive 6-Inch Steel Pile	Each	29	\$	\$
603.0001.0024	24-Inch CSP	L.F.	210	\$	\$
603.0003.0024	End Sections for 24- Inch CSP	Each	10	\$	\$
607.0005.00BF	Barrier Fence	L.F.	1,050	\$	\$
615.0001.0000	Standard Sign	S.F.	97.25	\$	\$
618.0002.0000	Seeding	Pound	160	\$	\$
620.0001.000B	Topsoil, Class B	S.Y.	16,800	\$	\$
622.2014.0000	Spotting Scope	Each	2	\$	\$
622.2015.000A	ELP Walkway	S.F.	288	\$	\$
622.2015.000B	ELP Stairway	S.F.	180	\$	\$
622.2016.0000	Concrete Parking Bumper	Each	63	\$	\$
622.2017.0000	Barrier Rock	Each	69	\$	\$
622.2018.0000	Large Picnic Shelter	Each	1	\$	\$
622.2019.0000	Entrance Sign	Each	1	\$	\$
622.2020.0000	Orientation Kiosk	Each	1	\$	\$
622.2021.000E	Interpretive Panel, Type D	Each	7	\$	\$
622.2022.0000	Kids Don't Float Kiosk	Each	1	\$	\$
622.2023.00DE	Double Entrance Gate	Each	2	\$	\$
622.2024.00SE	Single Entrance Gate	Each	2	\$	\$
630.0001.0003	Geotextile, Seperation, Class 3	S.Y.	13,500	\$	\$
640.0001.0000	Mobilization and Demobilization	L.S.	All Req'd	\$ (Lump Sum)	\$

BID SCHEDULE OLD KASILOF LANDING SRS SITE DEVELOPMENT Project No. 73032-1

Pay Item Number	Pay Item Description	Pay Unit	Quantity	Unit Bid Price	Amount Bid
	**	****** CON	TINUE BASIO	BID ******	
641.0001.0000	Erosion, Sediment and Pollution Control Administration	L.S.	All Req'd	\$ (Lump Sum)	\$
641.0002.0000	Temporary Erosion, Sediment and Pollution Control	C.S.	All Req'd	\$ 20,000.00	\$ 20,000.00
641.0006.0000	Withholding	C.S.	All Req'd	\$ 0.00	\$ 0.00
642.0001.0000	Construction Surveying	L.S.	All Req'd	\$ (Lump Sum)	\$
642.0003.0000	Three Person Survey Party	Hour	20	\$	\$
642.0006.0000	As-Built Survey	L.S.	All Req'd	\$ (Lump Sum)	\$
643.0002.0000	Traffic Maintenance	L.S.	All Req'd	\$ (Lump Sum)	\$
647.0006.0000	Hydraulic Excavator, 1 C.Y., 100 HP Min.	Hour	40	\$	\$
654.0001.0000	Single Concrete Vaulted Toilet	Each	2	\$	\$
670.0001.0000	Traffic Markings	L.S.	All Req'd	\$ (Lump Sum)	\$
687.0000.0000	HDPE Innerduct Installation	L.F.	650	\$	\$
687.0002.0000	Junction Box	Each	3	\$	\$
688.0000.0001	Utility Support	C.S.	All Req'd	\$ 20,000.00	\$ 20,000.00
688.1000.0000	Utility Support Price Adjustment	C.S.	All Req'd	\$ 0.00	\$ 0.00
		\$			

No:	Expires	No:	Expires
Alaska Business License		Alaska Contractor's License	

BID SCHEDULE OLD KASILOF LANDING SRS SITE DEVELOPMENT Project No. 73032-1



CONSTRUCTION CONTRACT

OLD KASILOF LANDING SRS SITE DEVELOPMENT, PROJECT NO. 73032-1

Project Name and Number

This CONTRACT, between the STATE OF ALASKA, DEPARTMENT OF NATURAL RESOURCES, herein called the Department, acting by and through its Contracting Officer, and

Company Name
Company Address (Street or PO Box, City, State, Zip)
a/an [] Individual [] Partnership [] Joint Venture [] Sole Proprietorship [] Corporation incorporated under the laws of the State of
WITNESSETH: That the Contractor, for and in consideration of the payment or payments herein specified and agreed to by the Department, hereby covenants and agrees to furnish and deliver all the materials and to do and perform all the work and labor required in the construction of the above-referenced project at the prices bid by the Contractor for the respective estimated quantities aggregating approximately the sum of
Dollars (\$), and such other items as are mentioned in the original Bid, which Bid and prices named, together
with the Contract Documents are made a part of this Contract and accepted as such. <i>The Alaska Standard Specifications for Highway Construction</i> , 2020 Edition is incorporated by reference and made a part hereof as if set forth in full. <i>The Alaska Standard Specifications for Highway Construction</i> can be downloaded at http://www.dot.state.ak.us/stwddes/dcsspecs/index.shtml .
It is distinctly understood and agreed that no claim for additional work or materials, done or furnished by the Contractor and not

specifically herein provided for, will be allowed by the Department, nor shall the Contractor do any work or furnish any material not covered by this Contract, unless such work is ordered in writing by the Department. In no event shall the Department be liable for any materials furnished or used, or for any work or labor done, unless the materials, work, or labor are required by the Contract or on written order furnished by the Department. Any such work or materials which may be done or furnished by the Contractor without written order first being given shall be at the Contractor's own risk, cost, and expense and the Contractor hereby covenants and agrees to make no claim for compensation for work or materials done or furnished without such written order.

The Contractor further covenants and agrees that all materials shall be furnished and delivered and all labor shall be done and performed, in every respect, to the satisfaction of the Department, on or before: <u>June 30, 2025</u> or within <u>N/A</u> calendar days. It is expressly understood and agreed that in case of the failure on the part of the Contractor, for any reason, except with the written consent of the Department, to complete the furnishing and delivery of materials and the doing and performance of the work before the aforesaid date, the Department shall have the right to deduct from any money due or which may become due the Contractor, or if no money shall be due, the Department shall have the right to recover [Per Subsection 108-.107] dollars (\$1,500.00) per day for each calendar day elapsing between the time stipulated for the completion and the actual date of completion in accordance with the terms hereof; such deduction to be made, or sum to be recovered, not as a penalty but as liquidated damages.

The bonds given by the Contractor in the sum of \$_100% of Contract Amount_ Payment Performance Bond, to secure the proper compliance with the terms and provisions of this a part hereof.	Bond, and \$_100% of Contract Amount Contract, are submitted herewith and made
IN WITNESS WHEREOF, the parties hereto have executed this Contract and hereby agree	to its terms and conditions.
CONTRACTOR	
Company Name	_
Signature of Authorized Company Representative	_
Typed Name and Title	_
Date	_
	(Corporate Seal)
STATE OF ALASKA DEPARTMENT OF NATURAL RESOUR	CES
ignature of Contracting Officer	
Syped Name	_
Pate Pate	_



PAYMENT BOND

Bond No.	

For

OLD KASILOF LANDING SRS SITE DEVELOPMENT, PROJECT NO. 73032-1 Project Name and Number

KNOW ALL W	HO SHALL SEE THESE PRESENTS:	
That		
of		as Principal,
of		as Surety,
firmly bound a	nd held unto the State of Alaska in the penal sum of	Dollars
(\$	good and lawful money of the United States of America for the payment where	eof,
	to be paid to the State of Alaska, we bind ourselves, our heirs, successors, executors, administraterally, firmly by these presents.	tors, and assigns,
	ne said Principal has entered into a written contract with said State of Alaska, on the of for construction of the above-referenced project, said work to be done according to the terms of said	
of law and pay, under said contr subcontract, or a remain in full fo		on or for the work cinal contract, any herwise they shall
IN WITNESS W	WHEREOF, we have hereunto set our hands and seals at this day of A.D., 20	,
	Principal:	
	Address:	
	By:	
	Contact Name:	
	Phone: ()	
Surety:		
Address:		
By:		
Contact Name:		
Phone: (
	The offered bond has been checked for adequacy under the applicable statutes and regulations:	
Alaska Depar	tment of Natural Resources Authorized Representative Date	
	See Instructions on Reverse	

INSTRUCTIONS

- 1. This form, for the protection of persons supplying labor and material, shall be used whenever a payment bond is required. There shall be no deviation from this form without approval from the Contracting Officer.
- 2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
- 3. The penal amount of the bond, or in the case of more than one surety the amount of obligation, shall be typed in words and in figures.
- 4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the Contracting Officer.
- 5. The bond shall be signed by authorized persons. Where such persons are signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.



PERFORMANCE BOND

Bond No.

For

OLD KASI	ILOF LANDING SRS SITE DEVELOPMENT, PROJEC	T NO. 73032-1
ANOM VII MHU CHVII C	Project Name and Number	
KNOW ALL WHO SHALL S	EE THESE PRESENTS:	
That of		as Principal,
and		wo i interpos,
of		as Surety,
firmly bound and held unto the	e State of Alaska in the penal sum of	Dollars
(\$	good and lawful money of the United States of America for th	e payment whereof,
	ne State of Alaska, we bind ourselves, our heirs, successors, execu	
	has entered into a written contract with said State of Alaska, on the on of the above-named project, said work to be done according to the	
complete all obligations and Transportation and Public Faci	ditions of the foregoing obligation are such that if the said Principal work under said contract and if the Principal shall reimburse up ilities any sums paid him which exceed the final payment determine all become null and void; otherwise they shall remain in full force and	on demand of the Department of ed to be due upon completion of the
IN WITNESS WHEREOF, we this	e have hereunto set our hands and seals at A.D., 20	
	Principal:	
	A.J.,	
	By:	
	Contact Name:	
	Phone: ()	
Surety:		
Address:		
By:		
Contact Name:		
Phone: ()		
The off	fered bond has been checked for adequacy under the applicable statutes and	f regulations:
Alaska Department of Natural	I Resources Authorized Representative	Date

See Instructions on Reverse

INSTRUCTIONS

- 1. This form shall be used whenever a performance bond is required. There shall be no deviation from this form without approval from the Contracting Officer.
- 2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
- 3. The penal amount of the bond, or in the case of more than one surety the amount of obligation, shall be typed in words and in figures.
- 4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the Contracting Officer.
- 5. The bond shall be signed by authorized persons. Where such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.



BID BOND

For

OLD KASILOF LANDING SRS SITE DEVELOPMENT, PROJECT NO. 73032-1

		Project Name and	Number		
		DATE BOND	EXECUTED:		
PRINCIPAL (Legal name and business address): TYPE OF ORGANIZ.				SANIZATION:	
			[] Individual [] Joint Vent		
			STATE OF INC	CORPORATION:	
	(Name and business addre				
A.		B.	C	C.	
PENAL SUM (OF BOND:		D	DATE OF BID:	
date as shown Contracting Off If the Principal contract, then the	above, on the above-reference, and under the Invitation is accepted and he in a obligation to the State of	erenced Project in accordance for Bids therefor, and is	ance with contract required to furnish stract for award, an in full force and ef	omitted the accompanying bid in writing the documents filed in the office of the about in the amount stated above. In the Principal fails to enter into the freet.	ne
FRINCIPAL	1.	2.		3.	
Signature(s)	1.	2.		3.	
Name(s) & Title(s) (Typed)	1.	2.		3.	
				Corporate Seal	
	See Instru	uctions on Reverse			

CORPORATE SURETY(IES)

Surety A	Name of Corporation		State of Incorporation	Liability Limit \$	
Signature(s)	1.	2.	-	Corporate	
Name(s) & Titles (Typed)	1.	2.		Seal	
Surety B	Name of Corporation		State of Incorporation	Liability Limit	
Signature(s)	1.	2.		Corporate	
Name(s) & Titles (Typed)	1.	2.		Seal	
Surety C	Name of Corporation		State of Incorporation	Liability Limit	
Signature(s)	1.	2.	1	Corporate	
Name(s) & Titles (Typed)	1.	2.		Seal	

INSTRUCTIONS

- 1. This form shall be used whenever a bid bond is submitted.
- 2. Insert the full legal name and business address of the Principal in the space designated. If the Principal is a partnership or joint venture, the names of all principal parties must be included (e.g., "Smith Construction, Inc. and Jones Contracting, Inc. DBA Smith/Jones Builders, a joint venture"). If the Principal is a corporation, the name of the state in which incorporated shall be inserted in the space provided.
- 3. Insert the full legal name and business address of the Surety in the space designated. The Surety on the bond may be any corporation or partnership authorized to do business in Alaska as an insurer under AS 21.09. Individual sureties will not be accepted.
- 4. The penal amount of the bond may be shown either as an amount (in words and figures) or as a percent of the contract bid price (a not-to-exceed amount may be included).
- 5. The scheduled bid opening date shall be entered in the space marked Date of Bid.
- 6. The bond shall be executed by authorized representatives of the Principal and Surety. Corporations executing the bond shall also affix their corporate seal.
- 7. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.
- 8. The states of incorporation and the limits of liability of each surety shall be indicated in the spaces provided.
- 9. The date that bond is executed must not be later than the bid opening date.



STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES

BID MODIFICATION

		LANDING SRS SITE DEVELOPMEN Project Name and Number	•	
	n Number:			
	his form to modify Manua			
• All	revisions shall be made t	ototals by bid schedule section. to the unadjusted bid amount(s). amounts will be computed by the Departmen	t.	
LINE NO.	ITEM NO.	PAY ITEM DESCRIPTION	REVISION TO UNIT BID PRICE +/-	REVISION TO BID AMOUNT +/-
	тот	AL REVISION: \$		
		Name of Bidding Firm		
		Responsible Party Signature	Date	

This form may be duplicated if additional pages are needed.



STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES

EEO-1 CERTIFICATION

Federal-Aid Contracts

OLD KASILOF LANDING SRS SITE DEVELOPMENT, PROJECT NO. 73032-1

Project Name and Number

This certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor [41 CFR 60-1.7 (b) (1)] and must be completed by the successful Bidder and each proposed Subcontractor participating in this contract.

(1)] and must be completed by the successful Bidder and each proposed Subcontractor participating in this contract.				
PLEASE CHECK APPROPRIATE BOXES				
The [] Bidder [] Proposed Sub	contractor hereby CERTIFIES:			
	nore year-round employees and a federal contract amounting to Report Form 100 during each year that the two conditions exist			
The company named below (Part C) is exempt from the require	ements of submitting the Standard Report Form 100 this year.			
[] NO (go to PART B)	[] YES (go to PART C)			
Instructions and blank Standard Report Form 100's may be obta to:	ined from a local U.S. Department of Labor office, or by writing			
The Joint Reporting Comm P.O. Box 779 Norfolk, Virginia 23501	nittee			
Telephone number: (757) 461-1213				
PART B The company named below has submitted the Stand	lard Report Form 100 this year.			
[]NO []YES				
	ed the required Standard Report Form 100 and are not exempt subcontract until Form 100 has been filed for the current year			
PART C				
Signature of Authorized Company Representative	Title			
Company Name	Company Address (Street or PO Box, City, State, Zip)			
	()			
Date	Phone Number			



MATERIAL ORIGIN CERTIFICATE

Federal-Aid Contracts

Project Name and Number: OLD KASILOF LANDING SRS SITE DEVELOPMENT, PROJECT NO. 73032-1

FOREIGN CONSTRUCTION MATERIALS AND PRODUCTS ¹	COL	INTRY OF ORIGIN	COST ²
I certify under penalty of law that all construction this project are manufactured in the United State Sections 70901-52, 23 CFR 635.410, and Contrast foreign construction materials and products that attachment. ³ The term "manufactured in the United America Provision.	es, and comply act subsection are listed on t	with the requirements of F 106-1.01, Buy America Prohis page or on a separate ar	Public Law No. 117-58, ovisions; except for those ad clearly identified
I certify that I have knowledge that submitting fapenalties.	alse statement	s and/or information may re	esult in civil and criminal
Authorized Corporate Signature		Date	
Printed Name		Contractor's Company N	ame
Position Title			

Form 25D-60DNR (11/08/22)

11. 2.	5D-60 Instructions: Enter "NONE" on the first line if there are no exceptions.
2.	Invoice cost for foreign construction materials, steel products, and iron products as delivered to the project including
	freight.
3.	When the Contractor becomes aware of a change from or error in a previously submitted Material Origin Certificate, the Contractor shall submit an updated Material Origin Certificate. The Department of Transportation and Public Facilities shall not accept or approve any Material Origin Certificate over the limit specified in the contract.
4.	Attach additional complete form sheets if necessary to include more than one page of materials and products.

Form 25D-60DNR (11/08/22)

SPECIAL PROVISIONS

to the

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
2020 STANDARD SPECIFICATIONS for HIGHWAY CONSTRUCTION

OLD KASILOF LANDING SRS SITE DEVELOPMENT

PROJECT NUMBER 73032-1

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

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

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

105-1.13 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: "Section 621" 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:

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

CONTROL OF MATERIAL

106-1.01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS. Add the following:

PROHIBITION ON CERTAIN TELECOMMUNICATION AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT. On projects using federal funds, the Contractor shall comply with the requirements of 2 CFR 200.216, Prohibition on certain telecommunication and video surveillance services or equipment, including any future amends thereto that are applicable to the project.

By submitting a bid or by execution of the contract, the Contractor certifies that it has not entered into a contract nor extended or renewed a contract to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system produced by:

- Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
- Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
- Any entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

The Contractor further certifies that it has complied with the requirements of 2 CFR 200.216 and that it will continue to do so throughout the term of the Contract.

HSM20-20-123121

106-1.01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS. Replace the BUY AMERICA PROVISION with the following:

BUY AMERICA PROVISION. On projects using federal funds, the Contractor shall comply with the requirements of Public Law No. 117-58, Sections 70901-52 and 23 CFR 635.410, Buy America requirements, and shall submit a completed Material Origin Certificate, Form 25D-60, prior to award of the contract. When the Contractor becomes aware of a change from or error in a previously submitted Material Origin Certificate (Form 25D-60), the Contractor shall submit an updated Material Origin Certificate (Form 25D-60). All construction materials, steel products and iron products which are incorporated

into the work, shall be manufactured in the United States except that minor amounts of construction materials, steel products and iron products of foreign manufacture may be used, provided the aggregate cost of such does not exceed one tenth of one percent (0.001) of the total contract amount, or \$2,500, whichever is greater. For the purposes of this paragraph, the cost is the value of the products as they are delivered to the project including freight.

The Contractor shall ensure that all manufacturing processes for each covered product comply with this Buy America Provision. Non-conforming products shall be replaced at no expense to the State. Failure to comply may also subject the Contractor to default and debarment.

Provide a Certificate of Buy America Act Compliance Form 25D-62 from the supplier for each construction material, steel product, or iron product and each component that is manufactured predominantly of steel or iron, prior to incorporating any construction material, steel products, iron products or any components manufactured predominantly of steel or iron into the project. The supplier certifying Form 25D-62 may be the original manufacturer, fabricator, vendor, contractor, or subcontractor; provided the supplier has sufficient control and knowledge of the manufacturing process to accept responsibility and certify full and complete conformance with the certification statement on the form. Provide mill certificates when required by the Engineer. False statements may result in criminal penalties prescribed under AS 36.30.687 and Title 18 US Code Section 1001 and 1020.

Buy America does not apply to construction materials, steel products, and iron products brought to the construction site and removed at or before the completion of the project. Further, it does not apply to construction materials, steel products, and iron products which remain in place at the Contractor's convenience.

The North American Free Trade Agreement (NAFTA) does not apply to the Buy America requirement. There is a specific exemption within NAFTA (article 1001) for grant programs such as the Federal-aid highway program.

Construction Materials

A construction material includes an article, material, or supply other than

- 1. an item of primarily iron or steel;
- 2. a manufactured product;
- 3. cement and cementitious materials;
- 4. aggregates such as stone, sand, or gravel; or
- 5. aggregate binding agents or additives that is or consists primarily of
 - 1. Non-ferrous metals:
 - 2. Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
 - 3. Glass (including optic glass);
 - 4. Lumber; or
 - 5. Drywall.

For construction materials, manufactured in the United States means the final manufacturing process and the immediately preceding manufacturing stage were undertaken in the United States.

An item that consists of two or more construction materials combined together through a manufacturing process, and items that include at least one construction material combined with another material through a manufacturing process, will be treated as a manufactured product instead of a construction material. Manufactured products that are not predominantly steel or iron are not subject to Buy America requirements.

Steel and Iron Products

"Manufactured in the United States" means all manufacturing processes starting with the initial mixing and melting through the final shaping, welding, and coating processes must be undertaken in the United States. The definition of "manufacturing process" is smelting or any subsequent process that alters the material's physical form, shape or chemical composition. These processes include rolling, extruding, machining, bending, grinding, drilling, etc. The application of coatings, such as epoxy coating, galvanizing, painting or any other coating that protects or enhances the value of steel or iron materials shall also be considered a manufacturing process subject to the requirements of Section 106-1.01, Buy America Provision and of the Buy America Act.

Buy America does not apply to iron ore, pig iron, and processed, pelletized and reduced iron ore.

When steel and iron products manufactured in the United States are shipped to a foreign country where non steel or iron products are installed on or in them (e.g., electronic components in a steel cabinet), the steel and iron is considered to meet the requirements of this subsection.

HSP20.7-110822

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. Kenai Peninsula Borough Habitat Protection District Conditional Use Permit, RC# 13387

(03/01/24)PARKS-Special Provision

Add the following to the fourth paragraph:

10. 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).

(01/04/2021)PARKS-Special Provision

107-1.11 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE.

Add the following:

Non-municipal Water Source. 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.

(05/15/17)CR107.3-Special Provision

Under Item 5. Protection of natural resources, add the following:

d. The Contractor shall revegetate all unauthorized disturbed areas at no cost to the Department. Areas within 100 feet of the Kasilof River shall be revegetated in accordance with permits located in Appendix A. Other areas shall be revegetated as approved by the Engineer.

(1229/2023)PARKS-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:

https://www.fws.gov/alaska/pages/migratory-birds

(01/25/2021)PARKS-Special Provision

Add the following:

<u>Eagles</u>. Eagles are protected under 16 U.S.C. 668-668c Protection of Bald and Golden Eagles, that prohibits "takes" of 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 minimum 330-feet as an undisturbed habitat buffer around nesting eagles. If topography or vegetation does not provide an adequate screen or separation, extend the buffer to 1320-feet, 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-feet and 660-feet from a 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, extend the buffer up to 2640-feet. No blasting, logging and other noisy, disturbing activities should occur during the nesting period (February 1 – August 31) within the primary or secondary zones.

Do not disturb a nesting eagle. Notify the Engineer when an active eagle nest is within the primary or secondary zones. (10/101/18)CR107.1-Special Provision

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.

<u>Delete paragraph four and replace with the following:</u>

- 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.

(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:

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.

(1/29/21)PARKS-Special Provision

MEASUREMENT AND PAYMENT

109-1.01 GENERAL

Replace the 2nd paragraph with the following:

When more than one type of material or work is specified for a pay item, the proposal line number, and the description are used to differentiate the material or work.

(01/01/2020)CR109.4-Special Provision

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

109-1.05 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.

Provide a printed copy of the current EquipmentWatch rate sheet for each piece of equipment utilized on the time and materials work.

(11/1/2018)CR109.2-Special Provision

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: Timber with a 5 inch diameter or larger at breast height shall be cut into 4-foot lengths, de-limbed, and stacked at locations approved by the Engineer for public removal. These locations shall be adjacent to the nearest side street or other approved site which does not create a traffic hazard due to lack of adequate parking for the public. The Department will notify the public of the availability of the timber once it has been stacked. The Contractor shall schedule the clearing and grubbing work so as to provide two weeks for the public to access those areas of the project where such timber is available prior to completion of the clearing and grubbing work in those areas. The Contractor is responsible for disposing all uncollected timber prior to final inspection. The Contractor may dispose of the timber left by the public by chipping into mulch for use by the Contractor as a BMP for temporary erosion, sediment and pollution control with approval from the Engineer.

(01/29/21)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 firefighting 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

203-3.07 EARTH MOUND CONSTRUCTION. Mound size and shape will be field located by Engineer. Mound slopes shall be smooth and shapes irregular, with no slopes steeper than 3:1.

(01/10/97)PARKS-Special Provision

Add the following Subsection:

201-3.08 TUB GRINDING. Material obtained from clearing and grubbing may be processed onsite into a mulch-soil mixture by means of tub grinding. Tub grinding shall be performed with tub grinding equipment capable of reducing clearing and grubbing material down to a homogenous organic material. The resulting material shall not have pieces larger than 6 inches.

The final product is an acceptable substitute for topsoil. Placing, maintaining, and repairing shall comply with Section 620.

Material from tub grinding in excess of what is required for use on the project shall be disposed of by the Contractor in accordance with Subsection 201-3.06.

(05/02/11)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

Add the following: The work required to cut, de-limb and stack timber for public removal and to preserve and restore land monuments and property corners will be subsidiary to Item 201 Pay Items.

(04/23/13)CR201.3-Special Provision

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

Payment will be made under:

Pay Item				
Item Number	Item Description	Unit		
201.0001.0000	Clearing and Grubbing	Acre		
201.0006.0000	Selective Tree Removal	Each		

REMOVAL OF STRUCTURES AND OBSTRUCTIONS

202-1.01 DESCRIPTION. Replace the first sentence with the following: This work shall consist of, but not be limited to, the removal of buildings, foundations, concrete pads, culverts, retired cannery equipment, gates, electrical junction boxes, utility poles, structures and any other obstructions which are not designated or permitted to remain, except for the obstructions to be removed and disposed of under other items in the contract. Remove all materials as shown on the Plans, and by the direction of the Engineer.

(08/16/23)PARKS-Special Provision

Add the following:

Materials which are designated to be salvaged and remain the property of the Division of Parks and Outdoor Recreation are the existing Entrance Gate and Maintenance Shop structure. By arrangement with the Engineer, deliver salvaged materials to:

Kenai Peninsula Region Office Morgan's Landing Campground Mile 85 Sterling Hwy Soldotna, AK 99669.

(10/01/2022)PARKS-Special Provision

202-1.01 DESCRIPTION. Add the following:

This work shall also include the decommissioning of ground water wells.

(09/01/22)PARKS-Special Provision

202-3.01 GENERAL. Replace paragraphs three, four, and five with the following: Remove and satisfactorily dispose of materials not designated to be salvaged and materials determined by the Engineer to be unusable to the Department.

(01/01/01)PARKS-Special Provision

202-3.01 GENERAL. Add the following:

The removal of buildings, foundations, and structures shall include removal of utility lines, sidewalks, and other attached appurtenances.

Buildings being removed may contain asbestos. Take special handling measures when removing this material.

Cut the ends of retaining walls to remain after partial removal neat and true with no shatter outside the removal area.

Remove septic or fuel tanks according to the Department of Environmental Conservation (DEC) regulation. Remove or abandon wells according to DEC regulations.

Remove and dispose of the building foundation, utility lines, and other attached appurtenances on the existing maintenance shop building located on parcel No. 13332039. The building structure and all existing building materials shall be salvaged as stated at the discretion of the Engineer.

01/06/10)CR202.5-Special Provision

Add the following Subsection:

202-3.06 SALVAGE AND DISPOSAL OF CONSTRUCTION AND DEMOLITION MATERIALS.

Unless otherwise noted, remove, handle, salvage, transport, store, and dispose waste materials according to the Occupational, Safety, and Health Administration (OSHA), Environmental Protection Agency (EPA), Alaska Department of Environmental Conservation (ADEC), and other Federal, State and local government agency's statutes, rules and regulations.

Use disposal sites outside the project right-of-way limits unless directed otherwise, in writing, by the Engineer. Obtain written consent from the private or public property owner for such disposal and a waiver of all claims against the State for any damage to such land which may result, together with all permits required by law for such disposal. Furnish a copy of such permission, waiver of claims, and permits to the Engineer before commencing work. Grade disposal areas to drain.

(04/01/20)CR202.1-Special Provision

Add the following Subsection 202-3.08:

202-3.08 GROUND WATER WELL DECOMMISSIONING. Decommission the water wells according to DEC requirements conforming to 18AAC 80.015(e) Well Protection Source Water Protection, and Well Decommissioning, or a DEC approved alternate method. Develop and submit a detailed Ground Water Well Decommissioning Plan to the Engineer. Contact the Soldotna DEC office at (907) 262-5210, for plan review requirements of alternate methods.

(04/01/20)CR202.8-Special Provision

202-4.01 METHOD OF MEASUREMENT. Add the following:

Acquiring waste disposal permits is subsidiary to 202 Pay Items.

(04/01/20)CR202.1-Special Provision

FOR GROUND WATER WELL DECOMMISSIONING

Add the following:

Item 202.2012.0000. At the Contract Unit price for each well decommissioned according to DEC regulations.

(04/01/20)CR202.5-Special Provision

Payment will be made under:

Pay Item				
Item Number	Item Description	Unit		
202.0001.0000	Removal of Structures and Obstructions	Lump Sum		
202.2012.0000	Ground Water Well Decommissioning	Each		

(01/04/21)PARKS-Special Provision

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

203-3.04 COMPACTION WITH MOISTURE AND DENSITY CONTROL. In the second paragraph of this subsection, delete the words: "and ATM 214."

(11/30/20)HSM20-5-Standard Modification

Add the following Subsections:

203-3.06 EARTH MOUND CONSTRUCTION. Mound size and shape will be field located by Engineer. Mound slopes shall be smooth and shapes irregular, with no slopes steeper than 3:1.

(01/10/97)PARKS-Special Provision

203-4.01 METHOD OF MEASUREMENT. Add the following: Earth Mound construction will not be measured directly for payment but will be considered subsidiary to other Section 203 items.

(01/31/94)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

PAY ITEM

Item Number	Item Description	Unit
203.0003.0000 Unclassified Excavation		Cubic Yard
203.0005.000A	Borrow, Type A	Cubic Yard

(03/06/24)PARKS-Special Provision

STRUCTURE EXCAVATION FOR CONDUITS AND MINOR STRUCTURES

204-3.01 CONSTRUCTION REQUIREMENTS. In the first sentence of paragraph four, delete: "bedding and"

(01/27/07)E37-Standard Modification

Add the following after the third paragraph: Excavation, bedding, backfill, and compaction for culverts outside the roadbed may be visually inspected and approved by the Engineer.

(02/06/08)R204-Special Provision

204-5.01 BASIS OF PAYMENT. Replace the third and fourth paragraphs with the following: When 204 pay items do not appear in the Bid Schedule, structure excavation required to complete other items of work will not be paid for directly but will be considered as subsidiary to those items. Excavation of unsuitable material for culverts and pipe required from below a plane 12 inches below the invert elevation of conduits, or from beyond the excavations limits shown on the plans and standard drawings for structures will be considered extra work.

Any backfill material or bedding material required for conduits whose source is other than excavation will be paid for at the contract unit price for the material being used, or as extra work if no unit price has been established. Any backfill material or bedding material required for structures other than conduits will be considered as subsidiary to those items.

(11/21/08)PARKS-Special Provision

AGGREGATE BASE COURSE

301-2.01 MATERIALS. Add the following after the first sentence: Recycled asphalt material (RAM) may be substituted for aggregate base course, inch for inch, if the following conditions are met:

- 1. RAM shall be crushed or processed to 100 percent by weight passing the 1.5 inch sieve and 95-100 percent by weight passing the 1 inch sieve.
- 2. The gradation of the extracted aggregate shall meet the following:

Sieve	Percent Passing by Weight
1 inch	100
3/4 inch	70-100
3/8 inch	42-90
No. 4	28-78
No. 16	11-54
No. 50	5-34
No. 100	3-22
No. 200	2-12

3. The asphalt content shall be 2.5 - 5.0 percent by weight of the RAM

(01/24/07)R176-Special Provision

301-3.01 PLACING. Add the following:

Place base course material, used for the sidewalk and pathway foundations, with equipment capable of providing a specified depth and uniform surface.

(06/21/16)CR301.2-Special Provision

301-3.03 COMPACTION. In the second paragraph of this subsection, delete the words: "and ATM 214."

(11/30/20)HSM20-5-Standard Modification

301-3.03 SHAPING AND COMPACTION. Add the following: If recycled asphalt material is substituted for aggregate base course, the following conditions shall be met:

- Density acceptance will be based determined by control strip method ATM 412. Use a test strip with a vibratory compactor with a minimum dynamic force of 40,000 pounds. The optimum density will be determined by the Engineer using a nuclear densometer gauge to monitor the test strip. Adequate water shall be added to aid compaction.
- 2. After the appropriate coverage with the vibratory compactor, a minimum of 6 passes with a pneumatic tire roller shall be completed. Tires shall be inflated to 80 psi (± 5 psi), and the roller shall have a minimum operating weight per tire of 3,000 pounds.

(01/24/07)R176-Special Provision

301-5.01 BASIS OF PAYMENT. Add the following: If recycled asphalt material is substituted for aggregate base course, it will be paid for as Item 301.0001.00D1 Aggregate Base Course, Grading D-1 at the unit price shown on the bid schedule for that item.

(01/24/07)R176-Special Provision

Payment will be made under:

Pay Item				
Item Number	Item Description	Unit		
301.0001.00D1	Aggregate Base Course, Grading D-1	Ton		

(03/06/24)PARKS-Special Provision

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.

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.

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.

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 401.0001.200B Hot Mix Asphalt, Type II; Class B 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

Item Number	Item Description	Unit
401.0001.200B	Hot Mix Asphalt, Type II, Class B	Ton

(05/02/11)PARKS-Special Provision

PILING

505-2.01 MATERIALS. Add the following:

Pile Caps

Section 716

(10/01/2022)PARKS-Special Provisions

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

(06/09/09)PARKS-Special Provisions

Replace Section 603 with the following:

SECTION 603

CULVERTS AND STORMDRAINS

603-1.01 DESCRIPTION. Construct or reconstruct culvert and storm drain pipe. Install culvert marker posts, and culvert ends.

603-1.02 REFERENCES.

ASTM D3953	Standard Specification for Strapping, Flat Steel and Seals
ASTM D4675	Standard Guide for Selection and Use of Flat Strapping Materials

603-2.01 MATERIALS. Use materials that conform to the following:

Bedding and Backfill	Subsection 204-2.01
Joint Mortar	Subsection 705-2.04
Flexible Watertight Gaskets	Subsection 705-2.05
Non-reinforced Concrete Pipe	Subsection 706-2.01
Reinforced Concrete Pipe	Subsection 706-2.02
Corrugated High Density Polyethylene (HDPE) Pipe	Subsection 706-2.07
Corrugated Steel Pipe and Pipe Arches	Subsection 707-2.01
Corrugated Aluminum Pipe	Subsection 707-2.03
Galvanize	Subsection 716-2.07
Culvert Marker Posts (Flexible Delineator Posts)	Subsection 730-2.05

Item 603.0001.0024 CSP 24 Inch, listed in the bid schedule, furnish Corrugated Steel Pipe (CSP).

For steel pipe, match the end section material to the pipe material.

Culvert marker post is 6-foot tall by 2.5 inches wide with reinforcing ribs, capable of a 9-inch minimum bending radius, and blue with no marking.

Culvert marker Strap and Seals according to ASTM D3953. .625 inch x .02 inch, dry Type 1 regular-duty (magnetic, ferritic), galvanized Finish B (hot-dipped Grade 2 moderate coating, .18 oz./ft² surface or .0002 inch thick minimum. Push type seals, Style III (overlap), regular duty, galvanized Finish B (hot-dipped coating) by 1.75-inch minimum length and matched to strapping width.

CONSTRUCTION REQUIREMENTS

603-3.01. GENERAL. Excavate, bed, and backfill according to the requirements of Subsections 204-2.01 and 204-3.01, and the Plans.

Dewater ground water from work areas; construct and maintain temporary water diversion when working in waterways, and for facilities or structures with active drainage according to Section 204.

603-3.02. LAYING PIPE. Begin the pipe laying at the downstream end of the pipe. Keep the lower segment of the pipe in contact with the bedding throughout its full length. Place bell or groove ends of rigid pipe and outside circumferential laps of flexible pipe facing upstream.

Lay paved or partially lined pipe so that the longitudinal centerline of the paved segment coincides with the flow line. Install elliptical conduit and circular conduit reinforced with other than a full circular cage or cages so the orientation of a vertical plane through the longitudinal axis of the conduit does not vary more than 5 degrees from the design orientation.

Repair damaged metallic coating on metal pipe according to AASHTO M36.

603-3.03 JOINING PIPE. Joints shall provide circumferential and longitudinal strength to preserve the pipe alignment, prevent separation of pipe sections, and provide a watertight joint between new sections of pipe and joints between new and existing sections of pipe of similar and dissimilar materials. Include a continuous gasket (seal) in all joints. Construct the watertight joint capable of passing a laboratory hydrostatic pressure and vacuum test of at least 4 psi for 10 minutes.

- 1. Metal Pipe. Join the metal pipe firmly using connecting bands conforming to ASTM B745 (Corrugated Aluminum Pipe) and ASTM A760 (Corrugated Steel Pipe) and as noted herein. Use bands that are no more than two nominal sheet thicknesses lighter than the pipe jointed, and in no case more than 0.052 inches lighter. Include a gasket each side of the gap.
 - a. Primary Band. Furnish and install corrugated bands so that the band corrugations match and conform to the corrugations of the pipe. Conform to the following guidelines:
 - (1) The gap between the pipes joined is in the center of the band and is no wider than one corrugation width.
 - (2) Band for 12-inch through 30-inch diameter pipe are at least 12 inches wide.
 - (3) Bands for pipe with diameters greater than 30 inches are at least 22 inches wide.

b. Secondary Band. Use this band only where it is not physically possible to use primary bands, such as on field-cut pipe ends, joining new pipe to existing pipe, etc. Furnish and install deformed metal sheet bands (dimple bands) so that the projections match and are the same depth as the pipe corrugations. Form these projections in circumferential rows with one projection for each corrugation of the helical pipe.

Conform to the following guidelines:

- (1) The gap between the pipes joined is in the center of the band and is no wider than 2 inches.
- (2) Bands for 12-inch diameter pipe are at least 12 inches wide and have one circumferential row of projections for each pipe end joined.
- (3) Bands for pipe with diameters greater than 12 inches are at least 24 inches wide and have two circumferential rows of projections for each pipe end joined.

Furnish all bolted connections on coupling bands with cut washers placed between the nut and the angle bracket or use nuts with integral washers.

Take up any pipe that is out of alignment, unduly settled, or damaged and re-lay or replace it

603-4.01 METHOD OF MEASUREMENT. Section 109, and as follows:

1. Culvert Pipe. The length of pipe, measured in place, along the invert.

603-5.01 BASIS OF PAYMENT. Branch connections and elbows are subsidiary to the pipe unless included as a separate Pay Item.

Coupling bands, seals (gaskets), and other items necessary for the proper joining of the sections are subsidiary.

Culvert markers are subsidiary to the pipe.

Excavation, bedding, and backfill paid under Section 204.

PAY ITEM

Item Number	Item Description	Unit
603.0001.0024	CSP 24 Inch	Linear Foot
603.0003.0024	End Section for CSP 24 Inch	Each

(06/15/20)CR603-Special Provision

SECTION 607

FENCES

Add the following Subsections:

607-1.02 APPLICABLE ACCESSIBILITY STANDARD. Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities.

607-1.03 SUBMITTALS AND SUBSTITUTIONS. Conform to Subsection 106-1.01.

Add the following Subsections:

607-2.04 BARRIER FENCE. Construct in accordance with the Plans. All materials shall be new and conform to the details shown on the plans or as specified. Lumber to be used shall be approved by the Engineer. Final alignment of the barrier fence shall be approved by the Engineer.

Add the following Subsections:

607-3.02 CONCRETE. Conform to the requirements of Section 501 and the details on the plans.

607-3.03 STRUCTURAL STEEL. Welding to conform to American Welding Society D1.1.

607-3.04 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:

Metal. Prime and paint exposed metal surfaces as required. Finish is not required for fasteners that are galvanized or corrosion resistant.

607-4.01 METHOD OF MEASUREMENT. Add the following:

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.

607-5.01 BASIS OF PAYMENT. Add the following:

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.

Payment will be made under:

Pay Item			
Item Number	Item Description	Unit	
607.0005.00BF	Barrier Fence	Linear Foot	

(03/06/24)PARKS-Special Provision

SECTION 615

STANDARD SIGNS

615-1.01 DESCRIPTION. Furnish and install standard signs and delineators. Remove and relocate or remove and dispose of existing signs and markers, as specified.

615-2.01 MATERIALS. Use materials that conform to the following Subsections:

Sheet Aluminum	730-2.01
High Density Overlaid Plywood	730-2.02
Retroreflective Sheeting, ASTM D4956	730-2.03
Sign Posts	730-2.04
Delineator Posts	730-2.05
Acrylic Prismatic Reflectors	730-2.06
Sign Support Fasteners	730-2.07

- 1. <u>Shop Drawings</u>. Submit shop drawings, for all signs that must meet the ASDS letter width and spacing charts, for approval before fabrication. Submit 4 sets of collated shop drawings prepared according to Subsection 105-1.02. Show the following on each sign drawing:
 - a. Dimensions of all horizontal and vertical characters and spaces
 - b. Overall dimensions
 - c. Sign material and sheeting material type
 - d. Panel thickness
 - e. Legend and letter series
 - f. Whether the sign will be framed
- 2. <u>Sign Fabrication</u>. Use ASTM D4956 Type IV retroreflective sheeting (for lettering, symbols, borders, and background) on sheet aluminum panels for all signs except the following:
 - a. <u>Orange Background Signs</u>. Use Type IX or XI fluorescent orange reflective sheeting placed on sheet aluminum panels, except:
 - (1) For temporary installations, the reflective sheeting place on aluminum, plastic, or plywood sheet panels.
 - (2) For flexible signs, (Roll-Up Signs) use fluorescent reflective sheeting Type VI or better (based on durability and reflectivity, as determined by the Engineer). Roll-Up Sign 3M Series RS 24, Reflexite Marathon Orange, or approved equal.
 - b. Railroad Crossbucks and Vertical Crossbuck Supports: Use white ASTM D4956

Type VIII or Type IX or XI retroreflective sheeting for background of sign and all strips.

- c. Non-Illuminated Overhead Signs with White Legends on Green Backgrounds: Use ASTM D4956 Type IX or XI retroreflective sheeting for legends and background. Create the legend in one of the following ways:
 - (1) Cut border and legend from white ASTM D4956 Type IX or XI retroreflective sheeting and adhere them to a green ASTM D4956 Type IX background, or
 - (2) Cut stencil of border and legend out of green transparent acrylic film and use transparent adhesive to overlay the film on a white ASTM D4956 Type IX or XI retroreflective background.
- d. <u>Fluorescent Yellow-Green School Area Signs</u>: Use ASTM D4956 Type VIII, Type IX or XI retroreflective sheeting for background.

Use a manufacturer-recommended clear coat on all screened signs.

Use sign layouts (including characters, symbols, corner radii, and borders) that conform to the ASDS.

3. <u>Sign Posts and Bases.</u> Use sign posts and bases of the types specified. The structural aspects of design and materials for sign supports must comply with the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals. Do not splice sign posts.

Use Class A concrete meeting the requirements of Section 501 for overhead Sign support foundations.

Use Class B concrete for steel-reinforced roadside sign foundations meeting the requirements of Section 550. Concrete for other sign foundations may be Class W.

- 4. <u>Delineators.</u> Use delineator assemblies that conform to the requirements shown on the Plans. Fabricate flexible delineators using ASTM 4956 Type III, IV, V, IX or XI retroreflective sheeting.
- 5. <u>Reflective Sheeting Warranty</u>. Supply manufacturer's warranty for reflective sheeting, including retention of fluorescent yellow-green (measured in accordance with ASTM E2301) for ten years according to the following criteria:
 - a. Minimum Fluorescent Luminance Factor Y_F: 20%
 - b. Minimum Total Luminance Factor Y_T: 35%

The warranty shall stipulate that: If the sheeting fails to meet the minimum fluorescence values within the first 7 years from the date of fabrication of the sign, the manufacturer shall, at the manufacturer's expense, restore the sign surface to its original effectiveness. If the reflective sheeting fails to meet the minimum fluorescence values within the 8th through 10th year from the date of fabrication, the manufacturer shall, at the manufacturer's expense, provide enough new replacement sign sheeting to the Department to restore the sign surface to its original effectiveness.

CONSTRUCTION REQUIREMENTS.

615-3.01 GENERAL.

- 1. Place posts in excavated holes to the depth shown on the Alaska Standard Plans.
- 2. Backfill the space around the posts and foundations placed in holes to finish ground with selected earth or sand, free of rocks or deleterious material. Place backfill in layers approximately 6 to 12 inches thick and thoroughly compact it.
- 3. Dispose of surplus excavated material neatly along the adjacent roadway as directed.4. Install flexible delineator posts according to the manufacturer's recommendations.
- 5. Attach sign panels to posts, electroliers, traffic signal standards, bridge rails, piers, and abutments using the types and sizes of fastening hardware shown on the Plans.
- 6. If using existing signs and mileposts that are removed and relocated, ensure they conform to the details shown on the Plans or as directed.

7. Sign Salvage:

Notify the Engineer 5 working days prior to beginning sign salvage activities. The Engineer will physically identify those signs to salvage.

a. <u>Property of the State</u>. When 615-3.01 7a identifies a maintenance station to receive sign salvage, the signs (sign panels, posts, and hardware) are the property of the State.

Protect all items from damage during salvaging and delivery. For each sign so designated, disconnect sign post from panel and group the panels together. Group posts together with their hardware. Deliver sign panels, posts, and hardware to the State Maintenance Station noted in these Special Provisions. Do not deliver salvaged materials until inspected and approved by the Engineer. Replace any items damaged by you at no additional cost to the Department.

Deliver salvaged sign panels, posts, and hardware to the State Maintenance and Operations Station, located at:

Kenai Peninsula Region Office Morgan's Landing Campground Mile 85 Sterling Hwy Soldotna, AK 99669

b. <u>Property of the Contractor</u>. When 615-3.01 7a does not identify a State Maintenance and Operations Station; the signs salvaged (sign panels, posts, and hardware) are the property of the Contractor.

Remove project signs and/or parts designated for salvage, off the project site.

Dispose of foundations from salvaged existing signs in a manner approved of by the Engineer (remove and dispose, abandoned in place, or otherwise). If abandoned in place, remove the tops of the foundations, reinforcing steel, anchor bolts, and conduits to a depth of not less than 12 inches below roadway subgrade or unimproved ground, whichever applies. All signs and posts at a single installation considered as one unit.

Dispose of sign salvage not wanted by the Contractor, not used in the project, and not accepted by the Local Maintenance and Operations Station as required by Federal, State, and Municipal environmental regulations.

- 8. All materials and finished signs are subject to inspection and acceptance in place.
 - a. Surfaces exposed to weathering must be free of defects in the coating that impair serviceability or detract from general appearance or color match.
 - b. Finished signs must be clean and have no chatter marks, burrs, sharp edges, loose rivets, delaminated reflective sheeting, or aluminum marks. Do not make repairs to the face sheet.
- 9. Install the various breakaway assemblies according to the manufacturer's written instructions. Meet MASH crashworthiness requirement for breakaway hardware, unless approved otherwise by the Engineer.
- 10. Secure the anchors in templates and install them according to the manufacturer's written instructions.
- 11. Finish the foundation according to these tolerances:
 - Do not use more than two shims per coupling.
 - b. Do not use more than three shims to plumb each post.

Remove and replace all foundations requiring more than three shims to plumb a post without extra compensation.

- 12. Construct the top of any foundation located on a slope so that the finished slope passes through the top center of the foundation. Grade the area 24 inches up and down slope of the foundation edge so that no portion of the foundation projects above the surrounding slope and water will drain away from the foundation.
- 13. Attach a label to the back of all standard signs in the lower right corner. Make the label at least 15 square inches and show the year the sign was purchased from the manufacturer. Show the last two digits of the year in clear and bold numbers. Make the label from ASTM D4956 Type I or brighter retroreflective sheeting. Use background and legend colors meeting Table 615-1.

TABLE 615-1

DECAL COLORS

YEAR	BACKGROUND COLOR	LEGEND COLOR
XXX1	Yellow	Black
XXX2	Red	White
XXX3	Blue	White
XXX4	Green	White
XXX5	Brown	White
XXX6	Orange	Black
XXX7	Black	White
XXX8	White	Black
XXX9	Purple	White
XXX0	Strong Yellow-Green	Black

Central values and tolerance limits for each color, as referenced in the MUTCD, are available from the Federal Highway Administration, (HHS-30), 400 7th St. SW, Washington, D.C. 20590

615-3.02 SIGN PLACEMENT AND INSTALLATION. The location and type of installation will be as shown on the Plans. Sign locations are approximate and subject to field adjustment by the Engineer.

Do not allow the top of the embedded steel tube to extend more than 2 inches above the surrounding ground and concrete foundation.

On all signs, install 2-inch diameter wind washers, colored to match the sign face, between the fastener head and the sign. Use rust-resistant washers fabricated from a material equal in strength to the sign blank.

Mount signs on mast arms level.

Bring existing signs that are to remain, into conformance with Standard Drawing S-05. Keep existing signs in service until they are no longer needed.

615-4.01 METHOD OF MEASUREMENT.

<u>Standard Signs and Object Markers</u>. By the total area of legend-bearing sign panel erected in place. No deductions in quantity for corner rounding will be made. Nominal dimensions for sign sizes indicated on the Plans will be used to calculate sign pay quantities. Octagons and round signs will be measured as rectangles. Only one side of each double-faced sign will be measured for payment.

Removal and Relocation. By each, complete in place.

<u>Delineators</u>. By each, complete in place. A single delineator consists of one post equipped with three reflectors.

Salvage Sign. By each complete sign delivered in acceptable condition.

615-5.01 BASIS OF PAYMENT. Sign posts, bases, and mounting hardware are subsidiary.

PAY ITEM

Item Number	Item Description	Unit
615.0001.0000	Standard Sign	Square Feet

(01/01/20)CR615-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

Topsoil Section 726 Soil Stabilization Section 619

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.

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.

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.

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

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.

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.

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)	0.65 lbs <u>0.35 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.
- 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 MAINTENANCE AND WATERING. 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.

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

618-4.01 METHOD OF MEASUREMENT. <u>Seeding by the pound</u>. 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.

- 1. Pay Items 618.0002.0000 Seeding. Payment is for healthy established vegetative groundcover through the establishment period.
 - a. The initial surface preparation, seed, fertilizer, mulch when applied hydraulically, their application, and the water for hydraulic application are subsidiary.
 - Maintenance fill, stabilization material, topsoil, surface preparation, seed, fertilizer, mulch when applied hydraulically, and the water required for hydraulic application are subsidiary.

Except for maintenance, stabilization material is paid under Section 619 and topsoil under Section 620.

Payment will be made under:

PAY ITEM

Item Number	Item Description	Unit
618.0002.0000	Seeding	LB

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

SECTION 622

PARK FACILITIES

- **622-1.01 DESCRIPTION.** This work shall consist of furnishing, constructing and placing park facilities and installation of Elevated Light Penetrating Walkways and Stairways in conformance with the Plans and Special Provisions.
- **622-1.02 APPLICABLE ACCESSIBILITY STANDARD.** Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities.
- 622-1.03 SUBMITTALS AND SUBSTITUTIONS. Conform to Subsection 106-1.01.
- 622-1.04 DEFINITIONS.
 - 1. Elevated Light Penetrating (ELP). Elevated steel structures supported by steel piling and consisting of a steel frame with fiberglass grating top surface.

MATERIALS

- **622-2.01 GENERAL.** All materials shall be new and conform to the details shown on the plans or as specified.
- **622-2.02** BACKFILL. Selected Material, Type A conforming to Subsection 703-2.07.
- **622-2.03 CONCRETE.** Class A Concrete conforming to Section 501.
- **622-2.04 STRUCTURAL STEEL.** Structural steel shall conform to the requirements of ASTM Specification A36 (Standard Specification for Carbon Structural Steel).
- **622-2.05 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).
- **622-2.06 STRUCTURAL ALUMINUM.** Structural aluminum shall conform to the requirements of ANSI 6061-T6.
- **622-2.07 LUMBER.** Conform to Section 713. Wood species shall be Douglas Fir or Hem-fir unless otherwise specified.

- 1. <u>Dimensional</u>. 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.

622-2.08 TREATED LUMBER. Wood species conforms to Subsection 622-2.06.

Treatment shall be as follows:

- 1. <u>Above Ground Applications</u>. 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.
- 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.
- **622-2.09 RECYCLED PLASTIC LUMBER.** Recycled plastic lumber shall contain a minimum of 90% recycled HDPE. Recycled plastic lumber shall have a minimum flexural strength of 1355 psi and compressive strength of 1420 psi as determined by ASTM D6109, minimum specific gravity of 0.861 g/cc as determined by ASTM D6111, and a maximum thermal expansion of 0.000033 inch/inch/degree F as determined by ASTM D6341. The lumber shall also incorporate an ultraviolet stabilizer at the time of manufacturing. Color shall be as determined by the Engineer.
- **622-2.10 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.

- Roof Panels. Minimum 29 gauge, 36 inch net width panel with 9 inch on center rollformed 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. <u>Closure Strips</u>. Polyethylene foam type to fit panel profile or 1 inch by 1 inch universal closures.
- 4. <u>Sidelap Mastics</u>. Closed cell neoprene butyl.
- 5. <u>Fasteners</u>. 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.
- **622-2.11 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.
- **622-2.12 STANDARD PARK 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.
- **622-2.13 PAINT.** Unless otherwise specified, use the following paint types and colors, or approved equals:
- 1. <u>Solid Oil Stain</u>. 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. <u>Semi-Transparent Oil Stain</u>. Exterior alkyd based stain, color Sherwin Williams "SW 3507 Riverwood", Behr Superdeck "#1907 Canyon Brown", or PPG Architectural Finishes Olympic "Russet".
- 3. <u>Clear Oil Stain</u>. Non-pigmented penetrating exterior alkyd base stain formulated for water repellency.
- 4. Metal Primer Paint. As recommended by enamel paint manufacturer.
- 5. <u>Enamel Paint</u>. Exterior alkyd base gloss enamel. Color to match solid oil stain color.

- 6. <u>Concrete Sealer</u>. Clear acrylic copolymer conforming to AASHTO M148/ASTM C309 (Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete, for Type 1 Compounds).
- 7. <u>Above Ground Wood Preservative</u>. 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. <u>Below Ground Wood Preservative</u>. Preservative with active ingredient of minimum 16 percent copper naphthenate (equivalent to minimum 2 percent metallic copper).
- 9. <u>End Cut Preservative for Treated Wood</u>. 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.

622-2.14 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.

622-2.15 SPOTTING SCOPE. Public use commercial grade telescope with weatherproof housing and base. Viewer head removable from column for storage by unlocking pedestal cap barrel lock. No coin chute shall be ordered or provided, special instructions must be given to manufacturer to set the scope to operate with coin chute removed. The telescope shall have the following characteristics of the Model Mark I Telescope as manufactured by See Coast Manufacturing Company, Inc. or approved equal:

Height: 57 Inches Weight: 85 Pounds

Castings: 356 Aluminum Alloy

Column: 4-1/2 Inch Diameter Aluminum Stanchion

Base: 30 Inch Diameter

Telescope Width: 9 Inches Telescope Length: 25 Inches

Housing Movement: 360° Rotation, 33° Up and 40° Down

Power/Field of View: 20x, 121' at 1,000 Yards

Coin Chute: None Timing Mechanism: None

Color: Gray

See Coast Manufacturing Company, Inc., Fairhope, Alabama 36533, Telephone (800) 343-8882, (205) 928-8882, www.seecoast.com.

622-2.16 ELP STARIWAY. Construct in accordance with the Plans and Specifications.

622-2.17 FIBERGLASS GRATING. Corrosion resistant, slip resistant, fire retardant, minimum 40% open area, ADA compliant, pultruded fiberglass grating with UV protection. Fiberglass grating shall be 1 1/2 inch thick grating, dark grey in color, and have a maximum deflection of 0.223 inches when spanned 36 inches and loaded at 500 pounds per square feet. Attach grating to substructure w/ clips & stainless self drilling & tapping screws provided by manufacturer.

The following are approved manufacturers with product series:

- Fibergrate Safe-T-Span Industrial Grating Series I4015 5151 Beltline Rd. Ste 1212 Dallas, TX 75254 http://www.fibergrate.com
- Seasafe GatorDeck
 GatorDeck Pultruded Grating Selection I-4015
 209 Glaser Dr.
 Lafayette, LA 70508
 http://www.seasafe.com
- McNichols Fiberglass Grating Duragrid Series MS-I-4015 3400-B Industry Drive East Fife, WA 98424 http://www.mcnichols.com

For other equal manufacturers, submit for approval by the Engineer.

622-2.18 HANDRAIL. RAS handrail shall be 1 1/2 inch outer diameter standard weight aluminum pipe. Handrail brackets shall be mechanical, slip on type fittings with aluminum or stainless steel set screws able to be removed seasonally. Handrail shall be ADA compliant.

622-2.19 SHOP DRAWINGS. Submit shop drawings for the ELP Walkway. Shop drawings shall include sufficient plan, elevation and section views necessary to identify the dimension and location of all components of design. Indicate all structural member, types, sizes, spacing, splices, welds, quantities, lengths, and connections. Include, dimensions, locations, and quantities of all external hardware including but not limited to

fiberglass grating, fiberglass fasteners, hinges, handrails, guardrails, pile caps, lifting frame, and fasteners. Shop drawings must be drawn to scale using computer drafting software. Provide a list showing all materials to be incorporated into the work with exact quantities.

Submit shop drawings to the engineer for approval prior to beginning fabrication. Allow at least 7 days for the initial review and 7 days for each subsequent review of resubmitted drawings. Copying and resubmitting the provided plans will not be accepted as shop drawings.

622-2.20 CONCRETE PARKING BUMPER. Conform to Standard Drawing P-6, Parking Bumper.

622-2.21 BARRIER ROCK. Barrier rocks shall be 3 to 5 feet in diameter when measured in every direction.

622-2.22 LARGE PICNIC SHELTER. Conform to Standard Drawing R-1, Picnic Shelter. Metal roofing shall conform to subsection 622-2.09. 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 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 ½" x 9 ½"	3 ga x 3" strap	2 each 3/4"	6,650 pounds

622-2.23 ENTRANCE SIGN. Conform to Standard Drawing S-3C, Entrance Sign. Sign board will be installed by others. Aluminum for back plate to conform to alloy 6061-T6, 5052-H36, or 5052-H38. Provide one pin-in-head torx machine bolt driver per sign. 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 can't 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 CB88R.

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

622-2.24 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 622-2.09.

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 /	Beam Flange	Post Flange	Allowable	Allowable
Post Size	Gage & Dimension	Gage & Dimension	Uplift Load	Lateral Load
8 X 8 /	18 ga &	18 ga &	1 000 paupda	2 000 paunda
8 X 8	7-1/2" X 7-1/2"	7-1/2" X 7-1/2"	1,600 pourius	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 /	Beam Flange	Post Flange	Allowable
Post Size	Gage & Dimension	Gage & Height	Uplift Load
8 X 8 /	14 ga &	14 ga &	1 205 nounda
8 X 8	7-1/2" X 2-1/2"	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.

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.

- **622-2.25 INTERPRETIVE PANEL, TYPE D.** Galvanize steel brackets after fabrication. Aluminum for back plate to conform to alloy 6061-T6, 5052-H36, or 5052-H38. Provide one pin-in-head torx machine bolt driver per sign.
- **622-2.26 KIDS DON'T FLOAT KIOSK, TYPE A.** Conform to Standard Drawing S-12A, Kids Don't Float Kiosk. Metal roof shall conform to subsection 622-2.09. "Life Jackets" sign shall conform to subsection 622-2.13 and shall be brown with white lettering. Text shall be 3 inches in height and Claredon Bold font.
- **622-2.27 SINGLE ENTRANCE GATE.** Conform to Standard Drawing G-1, Single Entrance Gate. High intensity reflective sheeting for gates shall match 3M Scotchlite Reflective Sheeting #3820 and have alternating red and white 4 inch wide stripes sloping downward at an angle of 45 degrees. Provide one standard Park padlock for each gate.
- **622-2.28 DOUBLE ENTRANCE GATE.** Conform to Standard Drawing G-2, Double Entrance Gate. High intensity reflective sheeting for gates shall match 3M Scotchlite Reflective Sheeting #3820 and have alternating red and white 4 inch wide stripes sloping downward at an angle of 45 degrees. Provide two standard Park padlock for each gate.

CONSTRUCTION REQUIREMENTS

- **622-3.01 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.
- **622-3.02 EXCAVATION AND BACKFILL.** Conform to the requirements of Section 204 and the details on the plans.
- **622-3.03 CONCRETE**. Conform to the requirements of Section 501 and the details on the plans.
- **622-3.04 WELDING.** Conform to Structural Welding Code AWS D1.1 when welding all steel structures.

Perform Quality Control inspection necessary to ensure the materials and workmanship meets the requirements of the Contract documents. Use a CWI for welding inspection.

Correct deficiencies in materials and workmanship revealed by Quality Control and Quality Assurance inspections without additional compensation.

Furnish completed Quality Control inspection documents to the Engineer and to the Quality Assurance representative designated by the State (when designated).

622-3.05 STRUCTURAL STEEL. Welding to conform to American Welding Society D1.1. Piecemealing of steel components will not be accepted for payment. Metal components shall be continuous through the full length of each component to the extent possible in order to minimize the number of welds.

622-3.06 STRUCTURAL ALUMINUM. Welding to conform to American Welding Society D1.2. Piecemealing of aluminum components will not be accepted for payment. Metal components shall be continuous through the full length of each component to the extent possible in order to minimize the number of welds.

622-3.07 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.

622-3.08 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.

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.

622-3.09 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.

- a. Recycled Plastic Lumber. No Finish Required
- b. Metal. Galvanized, No Finish Required
- 3. Park Bench, Type A, B, and C.
 - a. Recycled Plastic Lumber. No Finish Required
 - b. Metal. Powder Coated or Galvanized, No Additional Finish Required
- 4. Spotting Scope. Factory Applied Gray Enamel Finish
- 5. ELP Stairway.
 - a. Wood. Semi-Transparent Oil Stain
 - b. Non-Galvanized Metal. Primer and Enamel Paint
 - c. Recycled Plastic Lumber. No Finish Required.
- 6. Barrier Rail.

a. Wood. Clear Oil Stain

7. Barrier Post.

- a. Wood. Clear Oil Stain
- b. Metal. Primer and Enamel Paint

8. Removable Barrier Post.

- a. Wood. Clear Oil Stain
- b. Metal. Primer and Enamel Paint

9. Concrete Parking Bumper.

a. Concrete. Sealer

10. Barrier Fence.

- a. Wood. Preservative
- b. Metal. Hot Dipped Galvanized, No Finish Required

11. 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

12. Entrance Sign.

- a. Wood. Semi-Transparent Oil Stain
- b. Metal. Primer and Enamel Paint

13. Fee Payment Station.

- a. Other Wood. Semi-Transparent Oil Stain
- b. Metal. Primer and Enamel Paint

14. 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

15. Interpretive Panel, Type D.

- a. Wood. Solid Oil Stain
- b. Back Plate. Aluminum, No Finish Required
- c. Other Metal. Primer and Enamel Paint

16. Kids Don't Float Kiosk, Type A.

- a. Wood. Semi-Transparent Oil Stain
- b. Metal. Primer and Enamel Paint
- c. Bulletin Board Sound Board. Off White Flat Latex Paint

- 17. Single Entrance Gate.
 - a. Metal. Primer and Heavy Duty Aluminum Enamel Paint
- 18. Double Entrance Gate.
 - a. Metal. Primer and Heavy Duty Aluminum Enamel Paint
- **622-3.10 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.
- **622-3.11 SPOTTING SCOPE.** Install with concrete foundation in accordance with plans and manufacturer's recommendations.
- **622-3.12 ELP WALKWAY.** Construct in accordance with the Plans and Specifications. Use mitered ends to join steel frame components together. Install fiberglass grating using stainless steel saddle type clips as recommended by the manufacturer.
- **622-3.13 ELP STAIRWAY.** Construct in accordance with the Plans and Specifications. Use mitered ends to join aluminum frame components together. Install fiberglass grating using stainless steel saddle type clips as recommended by the manufacture. Install EPDM spacers between steel and aluminum frame contact surfaces.
- **622-3.14 CONCRETE PARKING BUMPER.** Construct in accordance with Standard Drawing P-6, Parking Bumper.
- **622-3.15 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. Barrier rocks in interpretive areas shall be installed with a flat side upward that is conducive for seating. 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.
- **622-3.16 LARGE PICNIC SHELTER.** Construct in accordance with Standard Drawing R-1, Picnic Shelter.
- **622-3.17 ENTRANCE SIGN.** Construct in accordance with Standard Drawing S-3, Entrance Sign.
- **622-3.18 ORIENTATION KIOSK.** Construct in accordance with Standard Drawing S-10D, Orientation Kiosk.
- **622-3.19 INTERPRETIVE PANEL, TYPE D.** Construct in accordance with the Plans and Standard Drawing S-11D, Interpretive Panel, Type D.
- **622-3.20 KIDS DON'T FLOAT KIOSK, TYPE A.** Construct in accordance with Standard Drawing S-12A, Kids Don't Float Kiosk, Type A.

622-3.21 DOUBLE ENTRANCE GATE. Construct in accordance with Standard Drawing G-2, Double Entrance Gate.

622-3.22 SINGLE ENTRANCE GATE. Construct in accordance with Standard Drawing G-1, Single Entrance Gate.

622-4.01 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.

Item 622.2015.000A ELP Walkway will be measured by the square foot of horizontal stair surface constructed, completed and accepted.

Item 622.2015.000B ELP Stairway will be measured by the square foot of horizontal deck surface 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.

622-5.01 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.

All work required to construct and install the interpretive sign brackets, lifting frame, handrail, pile caps, and timber supports will be considered subsidiary to item 622.2015.000A ELP Walkway.

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

Payment will be made under:

PAY ITEM

Item Number	Item Description	Unit
622.2014.0000	Spotting Scope	Each
622.2015.000A	ELP Walkway	SF
622.2015.000A	ELP Stairway	SF
622.2016.0000	Concrete Parking Bumper	Each
622.2017.0000	Barrier Rock	Each
622.2018.0000	Large Picnic Shelter	Each
622.2019.0000	Entrance Sign	Each
622.2020.0000	Orientation Kiosk	Each
622.2021.000D	Interpretive Panel, Type D	Each
622.2022.0000	Kids Don't Float Kiosk	Each
622.2022.00DE	Double Entrance Gate	Each
622.2023.00SE	Single Entrance Gate	Each

(03/01/2024)PARKS-Special Provision

SECTION 640

MOBILIZATION AND DEMOBILIZATION

640-4.01 METHOD OF MEASUREMENT. Replace paragraph No. 4 with the following:

4. Progress payments for Worker Meals and Lodging, or Per Diem will be subsidiary to 640(1) Mobilization and Demobilization.

(07/07/17)PARKS-Special Provision

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 APDES Construction General Permit. The state APDES program is administered by DEC. Section 301(a) of the Clean Water Act (CWA) and 18 AAC 83.015 provide that the discharge of pollutants to water of the U.S. is unlawful except as allowed by the CGP.

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

ACTIVE TREATMENT SYSTEM (ATS) OPERATOR. The Contractor's qualified representative who is responsible for maintaining and operating an active treatment system (as defined in the CGP) for storm water runoff.

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 Department and others). The Department recognizes AK-CESCLs as "qualified personnel" required by the CGP. An AK-CESCL must be recertified every three years. (See Qualified Person)

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC). 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 DEC 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 establishment of construction materials or equipment storage or maintenance areas (e.g. material piles, borrow area, concrete truck chute wash-down, fueling); and industrial activities that may discharge storm water and are directly related to the construction process (e.g. concrete or asphalt batch plants).

CONSTRUCTION GENERAL PERMIT (CGP). The permit authorizing storm water discharges from Construction Activities, issued and enforced by Alaska DEC. It authorizes storm water discharges provided permit conditions and water quality standards are met.

CORPS OF ENGINEERS PERMIT (COE PERMIT). A U.S. Army Corps of Engineers Permit for construction in waters of the US. Such permit may be issued under Section 10 of the Rivers and Harbors Act of 1899, or Section 404 of the Clean Water Act.

ELECTRONIC NOTICE OF INTENT (ENOI). The electronic Notice of Intent submitted to DEC, to obtain coverage under the CGP.

ELECTRONIC NOTICE OF TERMINATION (ENOT). The electronic Notice of Termination submitted to DEC, to end coverage under the CGP.

ENVIRONMENTAL PROTECTION AGENCY (EPA). A federal agency charged to protect human health and the environment.

ERODIBLE STOCKPILE. Any material storage area or stockpile consisting of mineral aggregate, organic material, or a combination thereof, with greater than 5 percent passing the #200 sieve, and any material storage where wind or water transports sediments or other pollutants from the stockpile. Erodible Stockpile also includes any material storage area or stockpile where the Engineer determines there is potential for wind or water transport of sediments or other pollutants away from the stockpile.

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, Appendix C.

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 SWPPP Manager and Department's Storm Water Inspector.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT. A DEC storm water discharge permit issued to certain local governments and other public bodies, for operation of storm water conveyances and drainage systems. See CGP for further definition.

MULTI-SECTOR GENERAL PERMIT (MSGP). The Alaska Pollutant Discharge Elimination System General Permit for storm water discharges associated with industrial activity.

LOW-ERODIBLE STOCKPILE. Any material stockpile identified in the CGP definition for Final Stabilization Section 1.b, and includes: riprap, gabion backfill, porous backfill, railroad ballast, and sub-ballast, ditch lining, or fill material with low erodibility. The stockpile shall not have a gradation of more than 5 percent passing the #200 sieve unless approved by an Engineer. There shall be no possibility of sediment transport due to water or wind erosion.

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

PROJECT ZONE. The physical area provided by the Department for Construction. The Project Zone includes the area of highway or facility under construction, project staging and equipment areas, and material and disposal sites; when those areas, routes and sites, are provided by the Contract.

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 Zone.

QUALIFIED PERSON. A person knowledgeable in the principles and practice of erosion and sediment controls. A qualified Person must be certified under the Alaska Certified

Erosion and Sediment Control Lead (AK-CESCL) training program. One of the following training and certification programs may substitute for AK-CESCL certification: CPESC, CESSWI, CPSWQ, OR CISEC (CGP, Appendix C).

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

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 EVENT. A rainfall event that produces more than 0.5-inch of precipitation in 24 hours and that is separated from the previous storm event by at least 3 days of less than 0.1 inch of rain per day.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP). The Contractor's detailed project specific plan to minimize erosion and contain sediment within the Project Zone, 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 POLLUTION PREVENTION PLAN TWO (SWPPP2). The Contractor's detailed project specific plan to comply with CGP or MSGP requirements, for Contractor construction-related activities outside the Project Zone.

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 SWPPP Manager, and for the subcontractor's compliance with the SWPPP.

SUPERINTENDENT. The Contractor's duly authorized representative in responsible charge of the work. 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.

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

SWPPP MANAGER. The Contractor's qualified representative who conducts Inspections, updates SWPPP records, and has authority to suspend work and to implement corrective actions required for CGP compliance.

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

TEMPORARY STABILIZATION. Protecting soils from erosion and sediment loss by rainfall, snow melt, runoff, or wind with a temporary vegetative and/or non-vegetative protection cover. Temporary stabilization may include a combination of seeding, geotextiles, mulches, surface tackifiers, rolled erosion control products, low-erodible gravel or paving, or the mentioned BMP's combined together with trackwalking.

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 SWPPP Manager, 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, HMCP, and SPCC), 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 resubmittals.

1. <u>Storm Water Pollution Prevention Plan</u>. Submit an electronic copy and three hard copies of the SWPPP to the Engineer for approval. Deliver these documents to the 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.

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 Engineer for approval.

After the SWPPP is approved by the Department, the Contractor must sign and certify the approved SWPPP using Form 25D-111. See Subsection 641-1.03.4 for further SWPPP submittal requirements.

- 2. <u>Hazardous Material Control Plan</u>. The HMCP Template can be found at the following webpage: http://www.dot.state.ak.us/stwddes/dcsconst/pop_constforms.shtml. Submit an electronic copy and three hard copies of the HMCP, as an appendix to the SWPPP, to the Engineer for approval. The HMCP submittal and review timeline, and signature requirements are the same as the SWPPP.
- 3. <u>Spill Prevention, Control, and Countermeasure Plan</u>. When a SPCC Plan is required under Subsection 641-2.03, submit an electronic copy and three signed hard copies of the SPCC Plan to the Engineer. Deliver these documents to the Engineer at least 21 days before beginning Construction Activity. The Department reserves the right to review the SPCC Plan and require modifications.
- 4. <u>CGP Coverage</u>. The Contractor is responsible for permitting of Contractor and subcontractor Construction Activities related to the Project. Do not use the SWPPP for Construction Activities outside the Project Zone where the Department is not an operator. Use a SWPPP2 for Construction Activities outside the Project Zone.

After Department approval of the SWPPP and prior to beginning Construction Activity, submit an eNOI with the required fee to DEC for coverage under the Construction General Permit (CGP). Submit a copy of the signed eNOI and DEC's written acknowledgement (by letter or other document), to the Engineer as soon as practicable and no later than 3 days after filing eNOI or receiving a written response.

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

The Department will submit an eNOI to DEC for Construction Activities inside the Project Zone. The Engineer will provide the Contractor with a copy of the Department's eNOI and DEC's written acknowledgment (by letter or other document), for inclusion in the SWPPP.

Before Construction Activities occur, transmit to the Engineer an electronic copy of the approved and certified SWPPP, with signed Delegations of Signature Authorities on Forms 25D-107 and 25D-108, SWPPP Certifications on Forms 25D-111 and 25D-109, both permittee's signed eNOIs and DEC's written acknowledgement.

5. <u>Ending CGP Coverage</u>. Submit an eNOT to DEC within 30 days after the Engineer has determined the conditions listed in Subsection 641-3.01.6 have been met. Submit a copy of the signed eNOT and DEC's acknowledgement letter to the Department within 3 days of filing the eNOT or receiving a written response.

- 6. DEC SWPPP Review. When CGP Part 2.1.3, requires DEC SWPPP review:
 - a. Transmit a copy of the Department-approved SWPPP to DEC using delivery receipt confirmation;
 - b. Transmit a copy of the delivery receipt confirmation to the Engineer within 7 days of receiving the confirmation; and
 - c. Retain a copy of delivery receipt confirmation in the SWPPP.
- 7. <u>Local Government SWPPP Review</u>. 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. Use delivery receipt confirmation:
 - b. Transmit a copy of the delivery receipt confirmation to the Engineer within 7 days of receiving the confirmation;
 - c. Transmit a copy of any comments by the local government to the Engineer within 7 days of receipt;
 - d.Amend the SWPPP as necessary to address local government comments and transmit SWPPP Amendments to the Engineer within 7 days of receipt of the comments:
 - e.Include a copy of local government SWPPP review letter in the SWPPP; and
 - f. File a notification with local government that the project is ending.
- 8. Modifying Contractor's eNOI. When required by the CGP Part 2.7, modify your eNOI to update or correct information within 30 calendar days of the change. Reasons for modification include a change in start or end dates, change in Owner/Operator address and contact information, change in site information, any changes in number of acres to be disturbed, change in decision to use or not use treatment chemicals, or change in 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.

641-1.04 PERSONNEL QUALIFICATIONS. Provide documentation in the SWPPP that the individuals serving in these positions meet the personnel qualifications.

- 1. The SWPPP Preparer.
 - a. Total disturbed acreage, 20 acres or less, must meet at least one of the following qualifications:

- (1). Current certification as a Certified Professional in Erosion and Sediment Control (CPESC);
- (2). Current certification as AK-CESCL, and at least two years' experience in erosion and sediment control, as a SWPPP Manager or SWPPP writer, or equivalent. Provide documentation including project names, project timelines, and work responsibilities demonstrating the experience requirement; or
- (3). Professional Engineer registered in the State of Alaska with current certification as AK-CESCL.
- b. Total disturbed acreage greater than 20 acres, must meet Subsection 641-1.04.1.a. above, and complete a SWPPP Preparation course.
- 2. The Superintendent must meet the following qualifications:
 - a. Current certification as AK-CESCL; and
 - b. Duly authorized representative, as defined in the CGP, Appendix A, Part 1.12.3.
- 3. The SWPPP Manager must have current certification as AK-CESCL. The SWPPP Manager must meet the experience, and authority requirements identified in the CGP for the Storm Water Lead and Storm Water Inspector positions.
- 4. The Active treatment System (ATS) operator must have current certification as AK-CESCL, and be knowledgeable in the principles and practices of treatment systems in general, and the operation of the project-specific ATS. The ATS operator must have at least three months field experience with ATS, or completion of an ATS manufacturer's training course, or completion of system operator certification course.
- 5. 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. <u>eNOI and eNOT</u>. The eNOI and eNOT must be signed and certified by a responsible corporate officer according to CGP Appendix A, Part 1.12. Signature and certification authority for the eNOI and eNOT cannot be delegated.
- 2. <u>Delegation of Signature Authority for Other SWPPP Documents and Reports</u>. 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 Superintendent position is responsible for signing and certifying the SWPPP, Inspection Reports, and other reports required by the CGP, except the eNOI and eNOT.

The Engineer will provide the Department's delegation on Form 25D-107, which the Contractor must include in the SWPPP.

- 3. <u>Subcontractor Certification</u>. Subcontractors must certify on Form 25D-105, that they have read and will abide by the CGP and the conditions of the project SWPPP.
- 4. <u>Signatures and Initials</u>. Handwrite signatures or initials on CGP documents and SWPPP forms, wherever a signature or initial is required.

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 Zone.
- 2. The Contractor is responsible for permitting and permit compliance outside the Project Zone. The Contractor has sole responsibility for compliance with DEC, COE, 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 Engineer.

An entity that owns or operates, a commercial plant (as defined in Subsection 108-1.01.4) or material source or disposal site outside the Project Zone, is responsible for permitting and permit compliance. The Contractor has sole responsibility to verify that the entity has appropriate permit coverage.

- 3. Subsection 107-1.02 describes the requirement to obtain permits, and to provide permit documents to the 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 outside the Project Zone;
 - b. For Construction Activity and Support Activities outside the Project Zone; and
 - c. 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. <u>SWPPP Preparer and Pre-Construction Site Visit</u>.

Use a SWPPP Preparer to develop the SWPPP and associated documents, according to the requirements of the CGP and COE permit. 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 7 days advance 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
- 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 project ESCP, Environmental commitments, and other Contract documents as a starting point for developing the SWPPP. The approved SWPPP

replaces the ESCP.

Develop the SWPPP with sections and appendices, according to the current DOT&PF SWPPP template. Include information required by the Contract and described in the CGP Part 5.0.

- a. Obtain the following forms after they have been completed by the Department and include them in the SWPPP:
 - (1) SWPPP Delegation of Signature Authority DOT&PF (25D-107)
 - (2) SWPPP Certification for DOT&PF (25D-109)
 - (3) SWPPP Delayed Action Item Report (25D-113), if needed
- b. Use the following Department forms for recording information in the SWPPP:
 - (1) SWPPP Amendment Log (25D-114)
 - (2) SWPPP Certification for Contractor (25D-111)
 - (3) SWPPP Construction Site Inspection Report (25D-100)
 - (4) SWPPP Corrective Action Log (25D-112)
 - (5) SWPPP Daily Record of Rainfall (25D-115)
 - (6) SWPPP Delegation of Signature Authority Contractor (25D-108)
 - (7) SWPPP Grading and Stabilization Activities Log (25D-110)
 - (8) SWPPP Pre-Construction Site Visit (25D-106)
 - (9) SWPPP Project Staff Tracking (25D-127)
 - (10) SWPPP Subcontractor Certification (25D-105)
 - (11) SWPPP Training Log (25D-125)
 - (12) SWPPP Noncompliance (25D-143)

SWPPP Template forms and instructions are available online at:

http://www.dot.state.ak.us/stwddes/dcsconst/pop constforms.shtml

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

section and appendix.

3. SWPPP Considerations and Contents.

- a. The SWPPP must provide erosion and sediment control measures for all Construction Activity within the Project Zone. Construction activity outside the Project Zone must have permit coverage, using a separate SWPPP2, and separate Contractor Inspections.
- b. The SWPPP must consider the activities of the Contractor and all subcontractors and utility companies performing work in the Project Zone. 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:
 - (1) Over which each operator has operational control; and
 - (2) Where the Department and Contractor are co-operators.
- c. For work outside the Project Zone the SWPPP must identify the entity that has storm water permit coverage, the operator, and the areas that are:
 - (1) Dedicated to the Project and where the Department is not an operator; and
 - (2) Not dedicated to the project, but used for the project.
- d. Account for the Contractor's construction methods and phasing. Identify the amount of mean annual precipitation.
- e. Comply with the CGP Part 1.4.3 Authorized Non-Storm Water Discharges. List locations where authorized non-storm water will be used, including the types of water that will be used on-site.
- f. Include the Department's Antidegradation Analysis in the SWPPP if storm water from the Project Zone discharges into receiving water that is considered a high quality water and that constitutes an outstanding national resource, according to CGP Part 2.1.6.
- g. Where the project intersects a Public Water System (PWS), the Engineer will notify the PWS contact for the Department and Contractor according to the CGP Part 4.10. Contractor Amend a copy of the communications in Appendix Q.
- h. There are special requirements in the CGP Part 3.2, for storm water discharges into an impaired water body, and they may include monitoring of storm water discharges. For Projects meeting the permit criteria, the Contractor shall

implement a monitoring plan approved by the Department for the storm water within the Project Zone, and shall provide the required information and reports for inclusion in the SWPPP. The Contractor is responsible for monitoring and reporting outside the Project Zone.

- i. Preserve natural topsoil unless infeasible. Delineate the site according to CGP Part 4.2.1. Use stakes, flags, or silt fence, etc. to identify areas where land disturbing activities will occur and areas that will be left undisturbed. Minimize the amount of soil exposed during Construction activity according to CGP Part 4.2.2.
- j. Comply with CGP Part 4.4, and the DEC General Permit for Excavation Dewatering (AKG002000), requirements for dewatering for trenches and excavations.
- k. The SWPPP must identify specific areas where potential erosion, sedimentation, or pollution may occur. The potential for wind erosion must be addressed. The potential for erosion at drainage structures must be addressed.
- I. Describe methods and time limits, to initiate temporary or final soil stabilization, CGP Part 4.5.1.1. Begin stabilization no later than the end of the next work day, following the day when the earth-disturbing activities have permanently ceased on any portion of the site or temporarily ceased on any portion of the site and will not resume for a period exceeding:
 - (1) 7 days for areas with mean annual precipitation 40 inches or greater; or
 - (2) 14 days for areas with mean annual precipitation less than 40 inches.

Time allotted to complete temporary and final stabilization, Subsection 641-2.01, 3.m.

- m. Within 7 days of initiating final stabilization, CGP Part 4.5.1.4, either complete final stabilization or continue maintenance of work until final stabilization is complete. Complete temporary stabilization within 14 days of initiating stabilization, CGP Part 4.5.1.2.
- n. Include in the "Stabilize Soils" section of the SWPPP, a description of how you will minimize the amount of disturbed and unstabilized ground in the fall season. Identify anticipated dates of fall freeze-up and spring thaw. Describe how you will stabilize areas when it is close to or past the seasonal time of snow cover or frozen conditions, and before the first seasonal thaw. Include a plan for final stabilization.
- o. Plans for Active Treatment Systems must be submitted to DEC for review at least 14 days prior to use of the system and the Operator of the ATS identified in the SWPPP. Any use of treatment chemicals must be identified on the NOI, documented in the SWPPP, and meet with the requirements in the CGP Part 4.6.
- p. The SWPPP must provide designated areas for equipment and wheel washing,

equipment fueling and maintenance, chemical storage, staging or material storage, waste or disposal sites, concrete washouts, paint and stucco washouts, and sanitary toilets. These activities must be done in designated areas that are located, to the extent practicable, away from drain inlets, conveyance channels, and waters of the US. No discharges are allowed from concrete washout, paint and stucco washout; or from release oils, curing compounds, fuels, oils, soaps, and solvents. Equipment and wheel washing water that doesn't contain detergent may be discharged on-site if it is treated before discharge.

- q. 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 temporary and final stabilization measures. Describe the design, placement, installation, and maintenance of each BMP, using words, and drawings as appropriate. Describe the design capacity of sediment basins (including sediment ponds and traps). Provide a citation to the BMP Manual or publication used as a source for the BMP, including the manufacturer's or BMP manual specifications for installation (CGP Part 5.3.6.2). 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."
- r. 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. Include drawings showing each phase of the project with the BMPs implemented in the Phase.
- s. Provide a legible site map or set of maps in the SWPPP, showing the entire site and identifying boundaries of the property where construction and earth-disturbing activities will occur, as described in the CGP Part 5.3.5. Include all BMPs on the site map.
- t. Identify the inspection frequency in the SWPPP:
 - (1) Inspect once every 7 calendar days regardless of the precipitation amount.
- u. Linear Project Inspections, described in CGP Part 6.5, are not applicable to this contract.
- v. The SWPPP must cite and incorporate applicable requirements of the Project permits, environmental commitments, COE permit, and commitments related to historic preservation. Make additional consultations or obtain permits as necessary for Contractor specific activities that were not included in the Department's permitting and consultation.
- w. 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 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.

Identify the SWPPP Manager as the Storm Water Lead and Storm Water Inspector positions in the SWPPP. Document the SWPPP Manager's responsibilities in Section 2.0 Storm Water Contacts, of the SWPPP template and:

- a. Identify that the SWPPP Manager does not have authority to sign inspection reports (unless the SWPPP Manager is also the designated project Superintendent).
- b. Identify that the SWPPP Manager cannot prepare the SWPPP unless the SWPPP Manager meets the Contract requirements for the SWPPP Preparer.

Include in the SWPPP, proof of AK-CESCL, or equivalent certifications for the Superintendent and SWPPP Manager, and for any acting Superintendent and acting SWPPP Managers. If the Superintendent or SWPPP Manager is replaced permanently or temporarily, by an acting Superintendent or acting SWPPP Manager, 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 Superintendent and SWPPP Manager. The Superintendent and SWPPP Manager must have 24-hour contact information for all Subcontractor SWPPP Coordinators and Utility SWPPP Coordinators.

Include in the SWPPP, proof of AK-CESCL, or equivalent certifications of ATS operators. Record the names of ATS operators and their beginning and ending dates, on Form 25D-127.

The Department will provide proof of AK-CESCL, or equivalent certifications for the Department's Project Engineer, Storm Water Inspectors, and Monitoring Person (if applicable), and names and dates they are acting in that position. Include the Department's staff certifications in Appendix E. Include the Department's staff names, dates acting, and assignments, in Section 2.0 of the SWPPP.

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

 Prepare the HMCP using the DOT&PF template located at the following DOT&PF link; (http://www.dot.state.ak.us/stwddes/dcsconst/pop_constforms.shtml) 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.

- 2. 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.
- 3. 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.
- 4. 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, under equipment during maintenance or repairs, and under leaky equipment.
- 5. 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 spills or contaminated surfaces
 immediately.
- 7. 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.
- 8. 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:

- 1. Oil or petroleum products from a spill may reach navigable waters (as defined in 40 CFR 112); and
- 2. 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 SWPPP MANAGER.

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, Inspection Reports, and other reports required by the CGP, except the NOI and NOT. The Superintendent 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.

The Superintendent may assign certain duties to the SWPPP Manager.

- 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 SWPPP Manager must be available at all times to administer SWPPP requirements, and be physically present within the Project Zone or the project office, for at least eight hours per day when construction activities are occurring.

The Superintendent and SWPPP Manager 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 SWPPP Manager 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, and if not specified as directed.

Use soil stabilization material as specified in Section 727.

Use silt fences as specified in Section 729.

Use straw and straw products certified weed free of prohibited and restricted noxious weed seed and quarantined pests, according to Alaska Administrative Code, Title 11, Chapter 34 (11 AAC 34). When straw or straw products certified according to 11 AAC 34 are not available, use non-certified products manufactured within Alaska before certified products manufactured in another state, country, or territory. Non-certified straw or straw products manufactured in another state, country, or territory shall not be used. Grass, legumes, or any other herbaceous plants produced as hay, shall not be substituted for straw, or straw products.

Use Oregon Scientific RGR126 wireless rain gauge with temperature, or Taylor 2751 Digital Wireless Rain Gauge with Thermometer, or approved equivalent.

641-3.01 CONSTRUCTION REQUIREMENTS. Comply with the SWPPP and the requirements of the CGP Part 5.0.

1. Before Construction.

The following actions must be completed before Construction Activity begins:

- a. The SWPPP Preparer must visit the Project, the visit must be documented in the SWPPP Form (25D-106), and the SWPPP must be developed (or amended) with findings from the visit;
- b. The SWPPP must be approved by the Engineer on Form 25D-109;
- The Contractor must be authorized to begin by the Engineer;
- d. 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 DEC website;
- e. The Department approved SWPPP must be submitted to DEC and Local Government (when required); and
- f. The Contractor has transmitted to the Engineer an electronic copy, and at least

one hardcopy of the approved SWPPP.

- g. The Delegation of Authority (Forms 25D-108 and 25D-107) for both the Contractor and DOT&PF Engineer are signed.
- h. Begin winter construction activity according to CGP Part 4.12.2, provided actions a, c, and g are completed. If winter construction activities may extend beyond spring thaw, the following actions must be completed before spring thaw:
 - (1) Actions a through g, listed above, and
 - (2) Appropriate control measures to minimize erosion and sediment runoff during spring thaw and summer rainfall are installed.

Post notices.

Include the following information:

- (1) Copy of all eNOIs related to this project;
- (2) 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 safely 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.

- J. Install an outdoor rain gauge per manufacturer's guidance in a readily accessible location on the Project. Projects may utilize the nearest National Weather Service (NWS) precipitation gauge station, if within 20 miles of the project, to determine rainfall amounts during storm events.
- k. Delineate the site for both land disturbing activities and areas that will be left undisturbed.
- I. Install sediment controls and other BMPs that must be placed prior to the initiation of Construction Activity.

2. During Construction.

Before subcontractors or utility companies begin soil-disturbing activities, provide to them copies of applicable portions of the SWPPP, and require them to sign a SWPPP Subcontractor Certification, Form 25D-105. Include SWPPP Subcontractor

Certifications as an appendix to the SWPPP. Ensure subcontractors and utility companies understand and comply with the SWPPP and the CGP. Inform subcontractors and utility companies of SWPPP amendments that affect them in a timely manner. Coordinate with subcontractors and utility companies doing work in the Project Zone so BMPs, including temporary and final 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 CGP 4.14. Training must be given at a frequency that will be adequate to ensure proper implementation and protection of control measures, and no less frequently than once a month during construction activity. 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 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. Concrete washout must be fully contained.

Comply with CGP Part 4.8.2 for fueling and maintenance activities. Place absorbent pads or other suitable containment under fill ports while fueling, under equipment during maintenance or repairs, and under leaky equipment.

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. <u>Pollutant and Hazardous Materials Reporting Requirements.</u>

If an incident of non-compliance occurs that may endanger health or the environment a report must be made, CGP, Appendix A, Part 3.4:

- a. Orally report to the Engineer as soon as the permittee becomes aware of the incident,
- b. Orally report to DEC within 24 hours after the permittee becomes aware of the incident, and
- c. In writing, report to DEC within 5 days after the permittee becomes aware of the circumstances. To report in writing, complete the written noncompliance report on

Form 25D-143, and file the written report with DEC. Coordinate the report with the Engineer. Include in the report:

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

Notify the Engineer and COE Regulatory Program as soon as the permittee becomes aware of an incident of noncompliance with COE Permits.

Report spills of petroleum products or other hazardous materials to the Engineer as soon as the permittee becomes aware of the incident, the DEC (CGP Part 9.3), and other agencies as required by law. Use the HMCP and SPCC Plan (if available) for contact information to report spills to regulatory agencies.

4. Corrective Action and Maintenance of BMPs.

Implement maintenance as required by the CGP, SWPPP, and manufacturer's specifications, whichever is more restrictive.

- a. Implement corrective action:
 - (1) If an incident of noncompliance with the SWPPP, or CGP is identified;
 - (2) If an Inspection or the Engineer identifies the SWPPP or any part of the SWPPP is ineffective in preventing erosion, sedimentation or the discharge of pollutants;
 - (3) If a required BMP was not installed according to the SWPPP schedule or phasing, or was installed incorrectly, or was not installed according to the CGP Part 4.0;
 - (4) If a BMP is not operating as intended, has not been maintained in an effective operation condition, or is unable to effectively perform the intended function;
 - (5) If sediment accumulates more than one-third of the distance of the aboveground height of the silt fence;
 - (6) If sediment accumulates to more than one-half retention height for an inlet BMP, check dam, berm, wattle, or other control measures;

- (7) If a prohibited discharge of pollutants, as specified in CGP Part 4.7, is occurring or will occur; or
- (8) If there is accumulation of sediment or other pollutants, that is in or near any storm water conveyance channels, or that may enter a discharge point or storm sewer system. If there is accumulation of sediment or other pollutants that is being tracked outside the project zone.
- b. Implement corrective actions so that they comply with the following time requirements:
 - (1) For 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) If a discharge occurs during a local 2-year, 24-hour storm event, initiate a corrective action the day after the storm event ends;
 - (3) If installation of a new control measure is needed or an existing control measure requires redesign and reconstruction or replacement to make it operational, the corrective action must be completed within 7 calendar days from the time discovered.
 - (4) For all other conditions initiate corrective actions so both of the following requirements are met:
 - (a) Corrective action is completed in time to protect water quality; and
 - (b) 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 Engineer, and implement corrective action as soon as possible.

If a corrective action could affect a subcontractor, notify the subcontractor within 3 days of taking the corrective action. Require in your written subcontract, that subcontractors must notify the Contractor within 24 hours of becoming aware of a condition that requires a corrective action.

Stabilization.

a. 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:

- (1) Not later than the end of the next work day, following the day when the earthdisturbing activities have temporarily or permanently ceased (CGP Part 4.5.1.1, Note:).
- (2) As soon as necessary to avoid erosion, sedimentation, or the discharge of pollutants; and
- (3) As identified in the SWPPP.
- b. 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.
- c. 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, low-erodible cover, dust palliatives, or other approved methods.
- d. 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.
- e. 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.
- f. 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.
- g. When installing a culvert or other drainage structure where stream bypass is not used, install temporary, or final 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 or final stabilization:
 - (1) At the culvert or drainage structure inlet and outlet; and

- (2) 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.
- h. Before deactivating a stream bypass or stream diversion used for construction of a bridge, culvert, or drainage structure, install final or temporary stabilization when approved by the Engineer:
 - (1) At the inlet and outlet of the culvert, drainage structure, or bridge;
 - (2) 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
 - (3) Under the bridge.

Within 7 days of initiating final stabilization, either complete final stabilization or continue maintenance of work until final stabilization is complete, CGP Part 4.5.1.5,

Complete temporary stabilization within 14 days of initiating stabilization, CGP Part 4.5.1.2.

- 6. Ending CGP Coverage and BMP Maintenance in the Project Zone.
 - a. The Engineer will determine the date that all the following conditions for ending CGP coverage have been met within the Project Zone:
 - (1) Land disturbing activities have ceased;
 - (2) Final Stabilization has been achieved on all portions of the Project Zone, according to the CGP PART 4.5.2 (including at Department furnished material sources, disposal sites, staging areas, equipment areas, etc.); and
 - 3) Temporary BMPs have been removed.
 - b. After the Engineer has determined the conditions for ending CGP coverage have been met, the Department will:
 - (1) Send written notice to the Contractor with the date that the conditions were met;
 - (2) Submit an eNOT to DEC; and
 - (3) Provide a copy of the eNOT and DEC's acknowledgement letter to the Contractor.

The Contractor is responsible for ending permit coverage within the Project Zone, by

submitting an eNOT to DEC 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 and any other areas 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 and separate SWPPP2(s), to indicate the Department's CGP coverage has ended, and the Department is no longer an Operator within the Project Zone.

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 DEC, and insert copies of the Department's and the Contractor's eNOTs with DEC's acknowledgement letters in the appendix of the SWPPP.

The Contractor must submit a copy of each signed eNOT and DEC's acknowledgement letter to the Department within 3 days of filing the eNOT or receiving a written response.

The Contractor is responsible for coordinating local government inspections of work and ending permit coverage with local government. See Subsection 641-1.03.5 for more information.

7. <u>Transmit final SWPPP</u>.

Transmit one copy of the final SWPPP, including all amendments, appendices, and maps, to the 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 at least one 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 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 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. Update on-site postings if records are relocated during winter shutdown. 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 DEC 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 DEC 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. See CGP Parts 5.10, 6.6 and 9.5.

641-3.03 SWPPP INSPECTIONS, AMENDMENTS, REPORTS, AND LOGS. Perform Inspections, prepare Inspection Reports, and prepare SWPPP Amendments in compliance with the SWPPP and the CGP. Update SWPPP Corrective Action Log Form 25D-112, SWPPP Amendment Log Form 25D-114, SWPPP Grading and Stabilization Activities Log Form 25D-110, SWPPP Project Staff Tracking Form 25D-127, and SWPPP Daily Record of Rainfall Form 25D-115. For active projects update the Records daily.

1. Inspection during Construction.

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

Inspections required by the CGP and SWPPP must be performed by the Contractor's SWPPP Manager and the Department's Storm Water Inspector jointly, unless approved by the Engineer, when:

- a. One of the inspectors is not on site, access is only by air, and weather delayed or canceled flights;
- b. One of the inspectors is sick;
- The project is on a reduced frequency inspection schedule with no staff on site, the only access to the site is by air, and it is economical to send only one inspector; or
- d. When the Engineer determines a safety concern that makes joint inspection impracticable.

When this is the case, the Operator who conducts the Inspection must provide a copy of the Inspection Report to the other Operator within 3 days of the Inspection date and document the date of the report transmittal.

2. <u>Inspection Reports</u>.

Use only the DOT&PF 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.

Insert a Complete-by-Date for each corrective action listed that complies with:

- a. Section 641-3.01 (4), and
- b. The CGP.

Provide a copy of the completed, unsigned Inspection Report to the Engineer by the end of the next business day following the inspection.

The Superintendent must review, correct errors, and sign and certify the Inspection Report, within 3 days of the date of Inspection. The Engineer may coordinate with the Superintendent to review and correct any errors or omissions before the Superintendent signs the 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 the signed and certified Inspection Report to the Engineer on the same day the Superintendent signs it.

The Engineer will sign and certify the Inspection Report and will return the original to the Contractor within three working days.

The Engineer may make corrections after the Superintendent has signed and certified the Inspection Report. The Engineer will initial and date each correction. If the Engineer 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 Engineer on the day it is recertified.

If subsequent corrections to the certified Inspection Report are needed, document the corrections in an amendment memo that addresses only the omitted or erroneous portions of the original Inspection Report. The Superintendent and the Engineer must both sign and certify the amendment memo. The issuance of an amendment memo does not relieve the Contractor of liquidated damages that may have been incurred as a result of the error on the original certified inspection report.

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 Engineer, and beginning and ending dates documented as an amendment to the SWPPP.

If the Engineer approves and the entire site is stabilized, the frequency of inspections may be reduced to at least one inspection every 30 days. At actively staffed sites, inspect within 2 business days of the end of a storm event that results in a discharge from the site.

When work is suspended due to fall freeze-up, the Engineer may suspend inspection requirements after fourteen days of freezing conditions if:

- a. Soil disturbing activities are suspended; and
- b. Soil stabilizing activities are suspended.

Inspections must resume according to the normal inspection schedule identified in the SWPPP, at least 21 days before anticipated spring thaw. See CGP Part 6.2.3.

The 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 Fall Freeze-up and Spring Thaw.

Stabilize Construction Activities within the Project Zone with appropriate BMPs prior to the anticipated date of fall freeze-up, in accordance with the CGP Part 4.12.

Exceptions to stabilization prior to anticipated date of fall freeze up include:

- a. When stabilization activities are precluded by snow cover or frozen ground conditions prior to the anticipated date of fall freeze up, or
- b. When winter construction activity is authorized by the Engineer and conducted according to the contract.

Stabilize Construction Activities within the Project Zone with appropriate BMPs prior to spring thaw, as defined in the CGP.

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. <u>Items and Areas to Inspect</u>.

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

8. SWPPP Amendments and SWPPP Amendment Log.

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

SWPPP Amendments must be approved by the 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.

Amend the SWPPP narrative as soon as practicable after any change or modification, but in no case, later than 7 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 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.

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 Superintendent and SWPPP Manager are the only persons authorized to make entries on the SWPPP Corrective Action Log, Form 25D-112. Document the need for corrective action within 24 hours of either:

- a. Identification during an inspection; or
- b. Discovery by the Department's or Contractor's staff, a subcontractor, or a regulatory agency inspector.

Modification or replacement of a BMP, installation of a new BMP not shown in the original SWPPP, overdue BMP maintenance, or other reasons listed as corrective actions in 641-3.01.4 must be documented on the Corrective Action Log.

Within 24 hours of discovery, update the Corrective Action Log Form 25D-112, with the date of discovery and proposed corrective action. If discovered during an inspection, update log with inspection date and proposed corrective actions noted on the Inspection Report. If discovered outside of an inspection, update the log with the date of discovery, the proposed corrective action, and the date the corrective action was completed.

After the corrective action has been accomplished, note in the Corrective Action Log the action taken and if a SWPPP amendment was needed. Date and initial the entry.

Keep the Corrective Action Log current and submit a copy to the 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 Superintendent and SWPPP Manager are the only persons 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 Engineer prior to performing each scheduled SWPPP Inspection. Keep the Grading and Stabilization Activities Log organized and completed to demonstrate compliance with the CGP Part 4.5.

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

12. <u>Daily Record of Rainfall</u>.

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 Engineer prior to performing each scheduled Inspection. Keep the Daily Record of Rainfall as an appendix to the SWPPP.

13. Staff Tracking Log.

Use the SWPPP Project Staff Tracking, Form 25D-127, to keep staff records current. Include Records of the AK-CESCL or equivalent qualifications for the Superintendent, SWPPP Manager, ATS operator, any acting Superintendent and acting SWPPP Managers, and beginning and end dates for temporary personnel assignments related to administration of the CGP or Section 641. Update the SWPPP Staff Tracking Log within 24 hours of any changes in personnel, qualifications, or other staffing items related to administration of the CGP or Section 641.

641-3.04 FAILURE TO PERFORM WORK. The 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 or for failure to perform work related to Section 641.

1. Non-compliance.

a. **Incidents of Non-compliance.** Failure to:

- (1) Obtain appropriate permits before Construction Activities occur;
- (2) Perform SWPPP Administration;
- (3) Perform timely Inspections;
- (4) Update the SWPPP;
- (5) Transmit updated SWPPP, Inspection Reports, and other updated SWPPP

forms to the Engineer;

- (6) Maintain effective BMPs to control erosion, sedimentation, and pollution in accordance with the SWPPP, the CGP, and applicable local, state, and federal requirements;
- (7) Perform duties according to the requirements of Section 641; or
- (8) Meet requirements of the CGP, SWPPP, or other permits, laws, and regulations related to erosion, sediment, or pollution control.
- b. **Notice of non-compliance**, either oral or written will include:
 - (1) Reason/defects
 - (2) Corrective actions required
 - (3) Time allowed for completing the corrective action
- c. **Levels of Non-compliance and Response** correspond with harm to the workers, the public or the environment and whether the harm is:
 - (1) **Not-imminent**, the Engineer will either orally or in writing, or both, provide notice to the Contractor indicating the incident of non-compliance.
 - Contractor's that take corrective action and complete the action to the satisfaction of the Engineer, within the time specified, may return to the status of compliance, and avoid elevating the response to imminent.
 - (2) Imminent, the Engineer will orally provide notice to the Contractor of noncompliance and promptly provide written notice to suspend work until corrective action is completed.

Additional actions, taken against the Contract whether the level of non-compliance is Not-imminent or Imminent, may include:

- (1) Withholding monies until corrective action is completed
- (2) Assessing damages or equitable adjustments
- (3) Employing others to perform the corrective action and deduct the cost

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

641-3.05 ACCESS TO WORK.

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 Part 6.6.

641-4.01 METHOD OF MEASUREMENT.

See Section 109 and as follows:

Item 641.0001.0000 Erosion, Sediment, and Pollution Control Administration is lump sum.

Item 641.0002.0000 Temporary Erosion, Sediment, and Pollution Control is measured on a contingent sum basis as specified by the Directive authorizing the work.

Item 641.0006.0000 Withholding is measured on a contingent sum basis with withholding determined by the Department.

TABLE 641-1 BMP VALUES - RESERVED

Liquidated Damages assessed according to Table 641-2 are not an adjustment to the Contract amount. These damages charges are related to Contract performance but are billed by the Department to the Contractor, independent of the Contract amount. An amount equal to the Liquidated Damages may be withheld for unsatisfactory performance, from payment due under the Contract, until the Contractor remits payment for billed Liquidated Damages.

TABLE 641-2- VERSION C
EROSION, SEDIMENT AND POLLUTION CONTROL – LIQUIDATED DAMAGES

		Deductible	Cumulative Deductible
	Specification Section Number and	Amount in	Amounts in
Code	Description	Dollars	Dollars
Α	641-1.04 Failure to have a qualified (AK-	Calculated in	
	CESCL or equivalent) SWPPP Manager	Code B or F	
В	Failure to meet SWPPP requirements of:	\$750 per	
	(1) 641-2.01.1 Name of SWPPP	omission	
	Preparer		
	(2) Not Applicable		
	(3) 641-3.03.8 Sign and Date SWPPP		
	amendments by qualified person.		
	(4) 641-3.02 Records maintained at		
	project and made available for review		
С	Not Applicable.		
D	641-3.03.5 Failure to stabilize a Project	\$5,000 per	

Code	Specification Section Number and Description	Deductible Amount in Dollars	Cumulative Deductible Amounts in Dollars
	prior to fall freeze-up.	Project per year	
E	641-2.01.1. Failure to conduct pre- construction inspections before Construction Activities on all projects greater than 1 acre.	\$2,000 per Project	
F*	641-3.03. Failure to conduct and record CGP Inspections 641-3.03.1 Personnel conducting Inspections and Frequency 641-3.03.2 Inspection Reports, use Form 25D-100, completed with all required information	\$750 per Inspection	Additional \$750 for every additional 7 day period without completing the required inspection.
G	641-3.01.4 Corrective action, failure to timely accomplish BMP maintenance and/or repairs. In effect until BMP maintenance and/or repairs is completed.	\$500 per Project per day	
Н	641-3.01.3 Failure to provide to the Engineer and DEC a timely oral noncompliance report of violations or for a deficient oral noncompliance report	\$750 for the first day the report is late or deficient	Additional \$750 for every 14 day period without the required information
ı	641-3.01.3 Failure to provide to the Engineer and DEC a timely written noncompliance report, use Form 25D-143, of violations or for a deficient written noncompliance report	\$750 for the first day the report is late or deficient	Additional \$750 for every 14 day period without the required information
J	641-3.04 Failure to comply with the requirements of the CGP, approved SWPPP, and Section 641, except as listed above	\$750 per occurrence for the first day of noncompliance	Additional \$750 for every day the deficiency remains uncorrected

*CODE F. Liquidated Damages according to Code F will not be billed for typographic errors and minor data entry errors, except the liquidated damages will be assessed for these errors when:

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

a. the Contractor has previously been notified and subsequent inspection reports repeat the same or similar error,

b. multiple inspection reports are submitted after the submission due date and the same or similar errors are repeated on multiple overdue reports,

an error in recording the inspector's AK-CESCL certification date results in an inspector performing the inspection during a period when their certification was lapsed or was otherwise invalid

Item 641.0001.0000 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, 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.

Item 641.0002.0000 Temporary Erosion, Sediment and Pollution Control. 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 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 641.0006.0000 Withholding. The Engineer may withhold an amount equal to Liquidated Damages, assessed according to Section 641, from payment due the Contractor. Liquidated Damages for violations of the Contract, CWA, and CGP are determined by the Engineer according to Table 641-2. The Engineer may withhold payment due the Contractors until the Contractor pays the Liquidated Damages to the Department.

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

<u>Work under other pay items</u>. 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:

- Dewatering;
- 2. Shoring;
- 3. Bailing:
- 4. Permanent seeding;
- 5. Installation and removal of temporary work pads;
- 6. Temporary accesses;
- 7. Temporary drainage pipes and structures;
- 8. Diversion channels;
- 9. Settling impoundment; and
- 10. Filtration.

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

<u>Work at the Contractor's Expense</u>. 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 Engineer, or for the Contractor's convenience, are at the Contractor's expense.

Payment will be made under:

PAY ITEM

Item Number	Item Description	Unit
641.0001.0000	Erosion, Sediment and Pollution Control Administration	Lump Sum
641.0002.0000	Erosion, Sediment and Pollution Control	Contingent Sum
641.0006.0000	Withholding	Contingent Sum

(03/03/24)CR641-Special Provisions

SECTION 642

CONSTRUCTION SURVEYING AND MONUMENTS

642-3.02 CROSS-SECTION SURVEYS Add the following:

Original ground, post-grubbing, post-excavation, and aggregate cross sections shall be taken at identical stations so that no interpolation of data is needed to calculate end areas.

Where an exact placement is not shown on the plans, the Department will be responsible for field locating the structures, signs, and mounds. The Contractor shall provide the Engineer with sufficient horizontal and vertical control to enable the Engineer to field locate these facilities. The Contractor shall be responsible for all surveying required to construct the field located item.

(05/02/11)PARKS-Special Provision

642-3.04 OFFICE ENGINEERING. Delete third sentence and replace with:

Perform the work by, or under the responsible charge of, a person registered in the State of Alaska as a Professional Land Surveyor or a Professional Engineer.

(05/01/07)E53-Standard Modification

642-3.06 AS-BUILT SURVEY. Add the following:

Perform as-built survey work with OPUS Solution in conformance with the State of Alaska, Department of Natural Resources, Division of Parks and Outdoor Recreation As-Built Survey Instructions found in Appendix B.

(03/03/24)PARKS-Special Provision

642-4.01 METHOD OF MEASUREMENT. Add the following: Clearing required for stake visibility shall not be measured. Maintenance of stakes will not be measured.

Item 642.0001.0000 As-Built Survey will not be measured separately for payment. Final acceptance of as-built drawings and OPUS Solution report will constitute method of measurement.

(01/01/06)PARKS-Special Provision

642-5.01 BASIS OF PAYMENT. Add the following:

Clearing required for stake visibility is subsidiary to Item 201.0001.0000 and no separate payment shall be made.

Lump sum payment for Item 642.0001.0000 As-Built Survey shall be full compensation for all fieldwork, research, office work, and incidentals necessary to produce as-built drawings, signed, and sealed, in conformance with these specifications and accepted by the State of Alaska, Department of Natural Resources, Division of Parks and Outdoor Recreation with OPUS Solution report.

Payment will be made under:

PAY ITEM

Item Number	Item Description	Unit
642.0006.0000	As-Built Survey	Lump Sum

(03/03/24)PARKS-Special Provision

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.

643-1.02 **DEFINITIONS**.

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

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

<u>Traffic Control Plan (TCP)</u>. 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.

<u>Traffic Control Zone</u>. 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. <u>Signs</u>. Use signs, including sign supports, that conform to Section 615, the ATM, and ASDS.
- 2. <u>Barricades and Vertical Panels</u>. 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.
- 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 state recreation site will be closed to traffic during construction. 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.

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 643.0002.0000Traffic Maintenance is a lump 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 653.0002.0000 Traffic Maintenance 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

Item Number	Item Description	Unit
643.0002.0000	Traffic Maintenance	Lump Sum

(10/01/2022)PARKS-Special Provision

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 work is to be accomplished under the direction of the Engineer, and the Contractor's operations shall at all times be in accordance with the Engineer's instructions. These instructions by the Engineer shall be to the Contractor's supervisory personnel only, not to the operators or laborers. In no case shall these instructions 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.

The Contractor shall 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, supplies, and materials provided by the Contractor and involved in the

performance of the work. Also, the Contractor shall furnish, without direct compensation, such transportation as may be appropriate for the personnel.

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 (6) days per week, Mondays through Saturdays, except holidays.

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 is for the time that fully operational equipment is engaged in the performance of the work directed by the Engineer. Time not payed for includes: idle periods, maintaining/servicing and repairing the equipment, making change-overs of equipment parts, and time to travel to and from the project. Payment will only be for time supported by certified payroll. Furnishing and operating equipment that is heavier, has larger capacity, or greater power than specified will not entitle the Contractor to extra compensation.

Payment will be made under:

PAY ITEM

Item Number	Item Description	Unit
647.0006.0000	Hydraulic Excavator, 1 CY, 100 Hp, Minimum	Hour

(01/29/21)PARKS-Special Provision

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 (Vault Restroom)

Style: Single Vault Rocky Mountain (Right-Hand Model)

Roof Texture & Color: Simulated Cedar Shakes in Granite Rock

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

Lower Exterior Wall Texture & Color: Simulated Flag Stone in Natural Grey

Other: - Marine Package

- 654-2.05 Signs shall comply

-Deadbolt shall be Schlage Model B660P

-Exterior Doors and Trim shall be brown in color.

-Door shall have Privacy Latch ADA Handle

-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

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:

<u>Shop Drawings</u>: 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.

<u>Product Data</u>: 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.

<u>Samples</u>: 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

Regulatory Requirements: Conform to ADA for accessibility requirements.

654-1.06 DELIVERY, STORAGE, AND HANDLING.

<u>Acceptance at Site</u>: 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.

<u>Storage and Protection</u>: 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.

<u>Handling</u>: 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.

<u>Toilets and Vaults</u>: 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

<u>Paint</u>: 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.

<u>Toilets</u>: Single vault toilets shall be "Single 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.

<u>Vaults</u>: 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.

<u>Vault Liners</u>: 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.

<u>Concrete - General</u>: 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.

<u>Colored Concrete</u>: The following items shall contain colored concrete:

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.

<u>Cold Weather Concrete</u>: 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.

<u>Hot Weather Concrete</u>: 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.

<u>Concrete Reinforcement</u>: 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.

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

<u>Caulking</u>, <u>Adhesive and Grout</u>: 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.

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

<u>Steel Doors and Frames</u>: 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.

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

<u>Hinges (Butts)</u>: 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.

<u>Handle</u>: 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.

<u>Deadbolt</u>: 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.

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

<u>Door Stop</u>: 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.

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

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

<u>Door Sweep</u>: 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.

<u>Wall Louvers</u>: 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.

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

<u>Vault Cleanout Covers</u>: 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.

<u>Paint</u>: 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.

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:

<u>Toilet Risers</u>: 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.

<u>Grab bars</u>: 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.

<u>Toilet Paper Dispenser (Two per Toilet Riser)</u>: 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.

<u>Double Coat Hook</u>: 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.

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

PLEASE HELP

Help lower maintenance costs by properly disposing of trash and not placing trash in toilet.

Please close toilet lid

THANK YOU

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.

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.
 - 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.
 - 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.
- **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

Item Number	Item Description	Unit
654.0001.0000	Single Concrete Vaulted Toilet	EACH

(02/02/21)PARKS-Special Provision

1.25-INCH HDPE INNERDUCT INSTALLATION

- **687-1.01 DESCRIPTION.** Furnish and install HDPE innerduct conduit and junction boxes as shown on the Plans, to serve future park facilities with electrical service.
- **687-1.02 DEFINITIONS.** Use the definitions in Section 706 and the State of Alaska DOT&PF Alaska Utilities Manual, along with the following:
 - HDPE Innerduct. Conduit. Smooth walled non-rigid pipe fabricated out of highdensity polyethylene. Industry standard conduit for underground utility applications.
- **687-1.02 MATERIALS.** Use materials that conform to Section 740, the Materials Certification List, the Plans, specifications, and the following:
 - 1. <u>HDPE Innerduct.</u> Use materials that conform to Section 706, the Materials Certification List, the Plans, and Specifications.
 - 2. <u>Junction Boxes.</u> Use materials that conform to the following:
 - a. Concrete Section 501 (Class A)
 - b. Grout Subsection 701-2.03
 - c. Reinforcing Steel Section 503
 - d. Paint Subsection 708-2.01
 - e. Steel Pipe Pile Section 715
 - f. Anchor Plate ASTM A709
 - g. Galvanizing Subsection 716-2.07

CONSTRUCTION REQUIREMENTS

687-3.01 GENERAL. Install the HDPE Innerduct and Junction Boxes as shown on the Plans and in accordance with the Specifications. Do not excavate wider than necessary for the proper installation of conduit and junction boxes. Avoid unnecessary tree clearing and damage to vegetated areas.

Dispose of all surplus excavated material according to Section 203. Backfill excavation according to Section 204.

687-3.01 CONDUIT. Install 1.25-inch diameter smooth-walled high-density polyethylene pipe conduit as shown on the plans. Use fittings that are appropriate to the manufacturer's recommendations.

- Thread and ream the ends of all conduits, whether shop or field cut, to remove burrs and rough edges. Make cuts square and true so that the ends butt together for the full circumference. Do not use slip joint or running threads for coupling conduit.
- 2. Until wiring is started, cap all conduit ends with standard pipe caps or approved plug and coupling combinations. When caps are removed, provide the threaded ends with approved conduit grounding bushings.
- 3. Bury conduit at least 30 inches below the finished grade. However, under paved areas behind a curb, bury the conduit at least 18 inches below the top back of curb or abutting pavement, whichever is lower. See Subsection 660-3.01.3 for backfill requirements.
- 4. Unless trenching is called for in the Plans, install conduits under existing pavements greater than 30 feet wide by boring or drilling methods.
- 5. When encountering obstructions during jacking or drilling operations, obtain approval and cut small test holes in the pavement to clear the obstruction. Locate the bottom inside face of the borepit no closer than the catch point of a 1-1/4:1 slope from the edge of pavement. Do not leave these pits unattended until the means of protection has been approved.
- 6. Keep the bottom of trenches for non-metallic conduit relatively free of sharp irregularities that would cause pinching and excessive bending of the conduit.
- 7. Ensure that the first 6 inches of backfill is free of rocks exceeding 1 inch maximum dimension.
- 8. Terminate the conduit entering the bottom of concrete junction boxes with a 90-degree sweep inside the box wall. Terminate conduit openings not less than 5 inches above the bottom of all boxes, a minimum of 6 inches below the top of the Type IA boxes, and 12 inches below the top of Type II and Type III boxes. Extend conduits entering through the junction box wall a minimum of 2 inches beyond the inside box wall, and ensure it is a minimum of 6 inches above the bottom of the box.
- 9. Furnish foundations with conduits as shown on the Plans. Extend the conduits a maximum of 2 inches vertically above the foundation and slope towards the handhole opening.
- 10. At low points in all conduit runs, install a drain and sump containing approximately 2 cubic feet of coarse aggregate material. Compact aggregate used for sump as directed to prevent settlement of foundations, junction boxes, or adjacent improvements. Place additional drains adjacent to all junction boxes and structures, regardless of the method of conduit placement used. The drains

must be a 3/8-inch hole drilled in the bottom of the lower straight section of the sweep elbow. Prevent scraping of conductors by deburring drilled drain holes in conduit. Wrap the exterior of the hole with approved filter cloth material and secure it as directed or approved by the Engineer.

- 11. Provide conduits for future use with grounding bushings, bonded to ground, and capped with an approved plastic insert type plug. Install a polypropylene pull rope with 500 pound minimum tensile strength in all conduits that are to receive future conductors. Double back at least 2 feet of pull rope into the conduits at each end. Pull rope shall be visible and accessible on each end of the conduit and securely stored.
- 12. Mark all underground conduit with a continuous strip of polyethylene marker tape that is 4 mils thick and 6 inches wide. Mark the tape with a black legend on a red background and bury it 9 inches (±3 inches) below the finished grade. Lay two strips of marker tape side-byside under all road crossings.
- 13. Seal the conduit leading to soffit, wall, or other lights or fixtures below the grade of the junction box by using an approved sealing fitting and sealing compound.
- 14. Use conduit of larger size than shown on the Plans, when desired. If used, it must be for the entire length of the run from junction box to junction box. Reducing couplings are not allowed. Increase the size of the junction boxes and perform any additional work at the foundations due to the use of larger size conduit, without extra compensation.
- 15. Conduits may require routing under or over existing or proposed culverts or storm drain systems and other underground utilities with additional drains and aggregate sumps at the low spots.
- 16. When extending existing conduits or installing junction boxes in existing conduit runs, extend the conduit into the proposed junction box or foundation using drains, elbows, and bonding as required for new installations. When adjusting junction boxes, shorten or lengthen existing conduits to meet clearance requirements. Complete extensions and modifications to existing conduits using the same size and types of materials.

687-3.03 JUNCTION BOXES. Furnish pre-cast reinforced concrete junction boxes of the sizes and details shown on the Plans and in Standard Drawing L-23.03. Use cast iron lids. Emboss the word ELECTRIC on the lids of all junction boxes.

Install junction boxes at the approximate locations shown on the Plans or when a location is not specific, locate the junction boxes as directed by the Engineer. You may, at your expense, install additional junction boxes to facilitate the work. Locate junction boxes so they are not in the roadway, sidewalk, or pathway surfaces. Do not locate

junction boxes in drainage collection areas. Final location of junction boxes is subject to approval by the Engineer.

Effectively ground the covers of all junction boxes with metal covers. Use a 3-foot tinned copper braid for Type IA Junction Boxes and a 6-foot tinned copper braid for Type II and Type III Junction Boxes.

Bed the entire bottom of all junction boxes on coarse concrete aggregate material of a minimum depth of 18 inches.

Place the top of junction boxes flush with the sidewalk grade or top of adjacent curb. When located in an unpaved section adjacent to a paved shoulder, locate the junction box 1 inch below the finished grade. Install flush with the surface in paved areas. Adjust as directed the junction boxes located in areas requiring grading. Adjust junction boxes located in seeded areas to 2 inches below the surface.

Locate junction boxes immediately adjacent to the fixture they serve with the following limitations:

- 1. 300 feet maximum for any single cable conduit run or any conduit run that exclusively contains 2 or fewer 2/C No. 12 AWG loop lead-in cables.
- 2. 200 feet maximum for any other conduit runs.
- 3. If the limitations require additional junction boxes, locate them on equal spacing subject to the above limitations.

687-4.01 METHOD OF MEASUREMENT. See Section 109 and the following:

Item 687.0000.0000 HDPE Innerduct shall be measured by the linear foot along the length of conduit measured in place.

687-5.01 BASIS OF PAYMENT. The accepted quantity of HDPE Innerduct will be paid for at the contract unit price for each linear foot installed in conformance. Minor conduit routing changes as directed by the Engineer are subsidiary to existing contract pay items.

Payment will be made under:

PAY ITEM

Item Number	Item Description	Unit
687.0001.0000	HDPE Innerduct Installation	Linear Foot
687.0002.0000	Junction Box	Each

UTILITY SUPPORT

688-1.01 DESCRIPTION. Coordinate the project work with all utility work by others in accordance with subsection 105-1.06 and these Specifications. Utility work by others includes all installation, service connections and disconnections. The Contractor shall perform utility support work including scheduling work by others; erosion, sediment, and pollution control; excavation, backfill, surveying, and traffic maintenance. After utility work by others is complete the Contractor shall commence remaining contract work.

CONTACTS, NOTIFICATIONS, AND SCHEDULING

688-1.02 UTILITY NOTIFICATION AND CONTACT INFORMATION. The Contractor shall work through the Engineer to establish initial contact and coordination with each utility to develop a utility installation schedule.

Contact information for the Utilities:

HEA (Homer Electric Association)

Name of Contact James Cress Title Engineer

Address 3977 Lake Street, Homer, Alaska 99603-7680

Cell Phone (907) 398-1485 Desk Phone (907) 283-2336

Email jamesc@homerelectric.com

Name of Contact Karla Appelhans

Title Engineering Services Representative

Address 280 Airport Way, Kenai, Alaska 99611-5280

Cell Phone (907) 283-5831 Desk Phone (907) 283-2310

Email kappelhans@homerelectric.com

Name of Contact Chris Edgar

Title Engineering Services Supervisor

Address 3977 Lake Street, Homer, Alaska 99603-7680

Cell Phone (907) 398-7831 Desk Phone (907) 283-2350

Email cedgar@homerelectric.com

688-1.03 SCHEDULING AND COORDINATING THE UTILITY WORK BY OTHERS.

Prior to commencing Utility related ground breaking activities the Contractor shall develop a detailed schedule for the complete installation of all utility work. The Contractor shall develop and maintain the schedule based on information provided by the Utilities. Develop and furnish a project schedule identifying utility support work in accordance with subsections 105-1.06 and 108-1.03. The schedule shall be incorporated into the CPM schedule and updated as required.

The Contractor shall work with the Engineer and Utilities to develop two week look ahead schedules. The Contractor's Superintendent, or Engineer approved designee, shall be the singular point of contact for coordinating scheduling with the Engineer. Two week look ahead schedules shall be submitted to the Engineer on a weekly basis and in sufficient detail to plan any supplemental needs for traffic maintenance, Storm water management, surveying support, and/or other activities authorized by the Engineer though directive.

The Contractor shall ensure that support work and coordination with the Utilities is performed in a manner that limits utility outages and outage durations. The Contractor shall expect longer utility outages will be scheduled during non-peak hours and anticipate performing support activities during these times which may include night and weekend work.

Each Utility has determined the timeframes that their utility relocation work is anticipated to take place, see section 651 Control of Work – Supplemental Requirements for these timeframes. These general work timeframes are subject to change.

688.2.03 PHASING UTILITY AND REMAINING CONTRACT WORK. Once utility relocation work is complete the Contractor shall submit a request for approval to commence the remaining contract work to the Engineer, in writing. If the utility work is complete, the Department will issue a Notice to Proceed (NTP) for the remaining contract work.

Prior to utility work being complete for the entire project work area, the Contractor may submit written request to the Engineer for specific segments of the work area to be evaluated for a limited release allowing commencement of remaining contract work in a specifically approved location. If the requested work area will not impact the ongoing utility relocation, the Department may issue a Limited Notice to Proceed (LNTP) for the location requested.

CONSTRUCTION REQUIREMENTS

688.3.01 WORK BY THE UTILITIES. The Utilities will perform installation of permanent utilities and removal or abandonment of utilities that are decommissioned in accordance with the Utility Agreements and dispositions completed between the Department and each Utility.

688-3.02 WORK BY THE CONTRACTOR SUPPORTING THE UTILITIES. The Contractor shall perform support work to facilitate Utilities performing their work. The Contractor's Superintendent, or designee approved by the Engineer, shall be onsite at all times utility work by others is occurring.

688-4.01 METHOD OF MEASUREMENT. Utility support will be measured in accordance with the directive authorizing the work.

688-5.01 BASIS OF PAYMENT. The Contractor shall provide all work necessary to support installation of permanent utilities by others. Payment for utility support work by the Contractor shall be paid on a Time and Material Basis in accordance with subsection 109-1.05 and the directive that authorizes the work.

Erosion, Sediment, and Pollution Control work in support of Utilities will be paid for under Section 641.

Surveying in support of Utilities will be paid for under item 642.0003.0000 Three Person Survey Party.

Traffic Maintenance in support of Utilities will be paid for under Section 643.

Utility Support Price Adjustment. The total value of this contract will be adjusted by \$1,500 per calendar day for failure to provide the utility support or scheduling of utility work.

Payment shall be made under:

PAY ITEM

Item Number	Item Description	Unit
688.0000.0001	Utility Support	CS
688.1000.0000	Utility Support Price Adjustment	CS

(01/04/24)PARKS-Special Provision

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	
3/4 inch	60-90	70-100	70-100	
3/8 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 %		8	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)

0:	Gradation						
Sieve	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. <u>Type D</u>. 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

SEED

724-2.01 DESCRIPTION. Grass seed to provide a living vegetative cover.

724-2.02 MATERIALS. Provide seed mix as specified in the Special Provisions. Provide seed collected or harvested within 2 years of the targeted seeding date. Provide all seed in pure live seed (PLS) unless otherwise directed.

Furnish seed true of genus and species. Meet applicable requirements of the State of Alaska Seed Regulations, Alaska Administrative Code, Title 11, Chapter 34, (11 AAC 34), and the Federal Seed Act, 7 CFR Part 201.

The Engineer will review requests for genus, species, or cultivar substitutions(s). The Contractor shall submit a proposed seed mix accompanied by approval from the Alaska Plant Materials Center, and confirmation the vendor can provide the requested mix in quantities adequate for the project.

- 1. <u>Prohibited and Restricted Noxious Weeds and Quarantined Pests</u>. Furnish seed certified to be free of prohibited noxious weeds or quarantined pests, and certified to contain no more than the maximum allowable tolerances for restricted noxious weeds, according to 11 ACC 34.
 - a. Seed found to contain prohibited noxious weeds or quarantined pests will be rejected, according to 11 AAC 34.020(a) and 11 AAC 34.105 through 34.180, respectively.
 - b. Seed found to contain restricted noxious weed seed in excess of the maximum allowable tolerance per pound will be rejected, according to 11 AAC 34.020(b).

Prohibited and restricted noxious weeds are listed in 11 AAC 34.020, and can be viewed at the following URL: http://plants.alaska.gov/invasives/noxious-weeds.htm.

- 2. <u>Labeling</u>. Ensure each bag or container of individual seed species is labeled to meet requirements of 11 AAC 34.010. Do not remove labels from bags or containers.
- 3. <u>Certification</u>. Certify seed is free of prohibited noxious weeds and restricted noxious weeds are within allowable tolerances. Furnish to the Engineer a statement signed by the vendor identifying the lot number or lot numbers, certifying each lot of seed has been tested within the preceding nine months, by a recognized seed testing laboratory, a member of the Association of Official Seed Certifying Agency (AOSCA), or the Alaska Plant Materials Center.

Seed will be rejected if:

- a. Contains prohibited noxious weeds;
- b. Contains restricted noxious weeds above maximum allowable tolerances:
- c. Not certified as tested within the preceding nine months;
- d. Wet, moldy, or otherwise damaged in transit or storage; or
- e. Containers do not have labels or the labels have been removed.

Seed may be rejected for:

a. Discrepancies in the lot numbers listed on the statement to the lot numbers indicated on the labels of the seed containers.

The Contractor shall immediately remove rejected seed from the project premises. If seed is rejected for containing prohibited noxious weeds or for exceeding maximum allowable tolerances of restricted noxious weeds, dispose of rejected seed according to 11 AAC 34.075(g).

(11/30/20)CR724-Special Provision

TOPSOIL

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

Reasonably free from roots, clods, hard clay, tall grass, brush, sticks, stuble 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

SOIL STABILIZATION MATERIAL

727-2.00 GENERAL. Free of restricted and prohibited noxious weeds (11 AAC 34), seeds, chemical printing ink, germination and growth inhibitors, herbicide residue, chlorine bleach, (except where specified: rock, metal, plastics) and other deleterious materials and not harmful to plants, animals and aquatic life. Wood cellulose "paper" fiber, wood chips, sawdust, and hay are not permitted as stabilization materials.

727-2.01 MULCH. Flexible blanket/covering, temporary degradable (bio/photo) form of erosion control. Use one of the following:

Dry Erosion Control, Stabilization Products. Hand applied or spread with mulch blower equipment.

- 1. <u>Straw</u>. Use straw, in an air-dried condition, from oats, wheat, rye, barley, or other approved grain crops that are free from noxious weeds, seeds, mold, or other materials detrimental to plant life. Straw material shall be certified weed-free straw using North American Invasive Species Management Association (NAISMA) Standards. In-lieu of certified weed-free straw provide documentation that the material is steam or heat treated to kill seeds or provide U.S. or state's department of agriculture laboratory test reports, dated within 90 days prior to the date of application showing that there are no viable seeds in the straw.
- 2. Shredded Bark Mulch. Shredded bark and wood with the following characteristics:
 - a. Not containing resin, tannin, or other compounds in quantities harmful to plant life.
 - b. Maximum length of individual pieces is 2 inches with 75% passing through a 1 inch sieve.
 - c. Will form a uniform ground cover/mat, have moisture absorption, retention, and percolation properties, not be susceptible to spreading by wind or rain providing a good growth medium.
 - d. May contain up to 50% shredded wood material.
 - e. Shredded wood material aged 1 year minimum prior to use.

Hydraulic Erosion Control Products (HECPs) Applied hydraulically.

A fiber mulch matrix: biodegradable and composed of wood, straw, coconut and other fibers natural and man-made. When applied, create a continuous, porous, absorbent high water holding, flexible blanket/mat/mulch/covering making intimate contact with, and adhering to sloped soil surface; permitting water infiltration; resists erosion and promotes rapid germination and accelerated plant growth. The fibers may be thermally processed, and cross-linked with a hydro-colloidal or linear anionic tackifier (curing period 24-48 hours) or mechanically-bonded (no curing period). When agitated in slurry tanks with

water the fibers will become uniformly suspended, without clumping to form homogeneous slurry.

The HECPs shall be delivered premixed by the manufacturer. The HECP will contain only the materials provided in the sealed containers from the manufacturer. No added components are permitted after the manufacturer seals the product container, before application, during application or otherwise. Submit documentation dated within 3 years of application, from an independent accredited laboratory as approved by the Engineer, showing that the product's testing performance meets the requirements for the slope(s) to be protected on the project, according to the National Transportation Product Evaluation Program (NTPEP), Erosion Control Technology Council (ECTC) and or the Texas DOT/Texas Transportation Institute (TTI) Laboratory.

If the HECP contains cotton or straw provide documentation that the material is certified weed free using NAISMA Standards. In-lieu of certified weed-free straw, provide documentation that the material is steam or heat treated to kill seeds or provide U.S. or state's department of agriculture laboratory test reports, dated within 90 days prior to the date of application showing that there are no viable seeds in the straw.

The HECP shall contain a dye to facilitate placement and inspection of the material.

1. Wood Strand, Fiber.

A blend of angular, loose, long thin wood pieces with a high length to width ratio and that are frayed. Minimum 95% of strands between 2 inches and 10 inches, at least 50% of the length shall have a width thickness between 1/16 and 1/8 inch. No single strand shall have a width or thickness greater than 1/2 inch. Processed wood fiber with the following characteristics:

- a. Will remain in uniform suspension in water under agitation and will blend with grass seed, fertilizer and other additives to form homogeneous slurry.
- b. Will form a blotter-like uniform ground cover on application, have moisture absorption, retention and percolation properties, the ability to cover, and hold grass seed in contact with soil, and not create a hard crust upon drying providing a good growth medium.
- 2. <u>Dried Peat Moss</u>. Partially decomposed fibrous or cellular stems and leaves of any of several species of Sphagnum mosses with the following characteristics:
 - a. Chopped or shredded to allow distribution through normal hydraulic type seeding equipment and capable of being suspended in water to form part of a homogeneous slurry.
 - b. Free from woody substances and mineral matter such as sulfur or iron and with a pH value of between 4.0 and 6.5.
 - c. Furnished in an air dry condition and containing less than 35% moisture by weight. Have a water holding capacity of not less than 800% by weight on an oven dry basis.
- 3. Fiber Matrix (FM) Mulch Types.

- a. Stabilized Mulch Matrices (SMMs)
- b. Bonded Fiber Matrices (BFMs)
- c. Mechanical Bonded Fiber Matrix (MBFM)
- d. Polymer Stabilized Fiber Matrix (PSFM)
- e. Fiber Reinforced Matrices (FRMs)
 - Flexible Growth Medium (FGM)
 - Extended-Term Flexible Growth Medium (ET-FGM)

727-2.02 MATTING. Fiber mulches, mulch matrices, nets and turf reinforcement mats manufactured from wood fibers, straw, jute, coir, polyolefins, PVC, nylon and others creating dimensionally stable nets, meshes, geotextiles and blankets; creating a continuous, porous, absorbent, flexible blanket/mat/mulch/covering making intimate contact with and adhering to sloped soil surface, resisting erosion and promoting rapid germination and accelerated plant growth.

Rolled Erosion Control Products (RECPs) (Temporary Degradable and Permanent Erosion Control)

Use RECPs that bear the Quality and Date Oversight and Review (QDOR) Seal from the ECTC. Independent test results from the NTPEP, that the mulch, when tested according to ASTM 6459 Standard Test Method for Determination of Rolled Erosion Control Products (RECP), Performance in Protecting Hillslopes from Rainfall-Induced Erosion, meets the performance requirement using the Revised Universal Soil Loss Equation (RUSL).

Functional Longevity.

- 1. <u>Temporary Degradable</u>.
 - a. Duration.
 - Short-Term RECPs. (RECPs 3 12 months)
 C Factor = .15 maximum
 Test Soil Type = Sandy Loam
 (National Resources Conservation Service (NCRS) Soil Texture Triangle)
 - Moderate (Extended) -Term RECPs. (RECPs 24 months)
 C Factor = .05 maximum
 Test Soil Type = Sandy Loam (NCRS Soil Texture Triangle)
 - 3) Long-Term RECPs. (RECPs 36 months)
 C Factor = .01 maximum
 Test Soil Type = Sandy Loam (NCRS Soil Texture Triangle)
 - b. Product types.
 - 1) Mulch-Control Nets (MCNs). Planar woven natural fiber or extruded

geosynthetic mesh used to anchor loose fiber matting/mulches.

- 2) <u>Erosion Control Blankets (ECBs)</u>. Processed natural and/or polymer fibers, yarns or twines mechanically, structurally, or chemically bound together to form a continuous matrix with a minimum weight of 8 oz/yd² and a limiting shear stress of 0.45 lb/ft².
- 3) <u>Netless</u>. Fibers mechanically interlocked and/or chemically adhered together.
- 4) <u>Single-net and Double-net</u>. Fibers mechanically bound together by single or double netting.
- 5) Open Weave Textiles (OWTs). Fibers woven into a continuous matrix.

c. Materials.

- 1) Burlap. Standard weave with a weight of 3.5 to 10 oz/yd².
- 2) <u>Jute Mesh Fabric</u>. Cloth of a uniform, open, plain weave of undyed and unbleached single jute yarn. Use yarn that is loosely twisted and not varying in thickness more than one-half its normal diameter. Furnish jute mesh in rolled strips meeting the following requirements:
 - a) Width: 45 to 48 inches, \pm 1 inch
 - b) 78 warp-ends per width of cloth (minimum)
 - c) 41 weft-ends per yard (minimum)
 - d) Weight: 20 ounces per linear yard, ± 5%
- 3) Woven Paper or Sisal Mesh Netting. Woven from twisted yarns available in rolls 45 to 48 inches wide. Mesh may vary from closed to open weave, ranging from 1/8 to 1/4 inch openings. Shrinkage after wetting may not exceed 20% of the surface area.
- 4) Knitted Straw Mat. Commercially manufactured ECB. Use photodegradable netting and biodegradable thread. Use straw, in an air-dried condition, from oats, wheat, rye, barley, or other approved grain crops that are certified weed free of prohibited and restricted noxious weed seed and quarantined pests, according to Alaska Administrative Code, Title 11, Chapter 34 (11 AAC 34), and in conjunction with North American Invasive Species Management Association (NAISMA) standards, and free of mold, or other objectionable materials detrimental to plant life. When straw or straw products certified according to 11 AAC 34 are not available, use non-certified products manufactured within Alaska before certified products manufactured in another state, country, or territory. Non-certified products manufactured in Alaska Inlieu of certified weed-free straw, provide documentation that the material is steam or heat treated to kill seeds or provide U.S. or state's department of

agriculture laboratory test reports, dated within 90 days prior to the date of application showing that there are no viable seeds in the straw. Non-certified straw or straw products manufactured in another state, country, or territory shall not be used. ECB may contain coconut or fiber to reinforce the straw.

- 5) Woven/Curled Wood blanket. Machine produced mat of curled wood shavings with a minimum of 80% 6-inch or longer fibers, with consistent thickness and the fibers evenly distributed over the entire area of the blanket. Smolder resistant without the use of chemical additives. Cover the top side of the blanket with biodegradable extruded plastic mesh.
- 6) <u>Coconut (Coir Fiber)</u>. Machine produced mat, ECB of consistent thickness and coir fiber evenly distributed over the area of the mat. Use bio/photo degradable netting and thread.

2. Permanent.

- a. Product Types and Materials.
 - 1) Turf Reinforcement Mats (TRMs). A rolled erosion control product composed of non-degradable synthetic fibers, filaments, nets, wire mesh, and/or other elements, processed into a permanent, three-dimensional matrix of sufficient thickness with a minimum weight of 8 oz/yd² and a minimum limiting shear stress of 1.5 lb/ft². TRMs (may be supplemented with degradable components) shall impart immediate erosion protection, enhance vegetation establishment during and after maturation and permanent vegetation reinforcement providing long-term functionality.

727-2.03 SEDIMENT RETENTION FIBER ROLLS (SRFRs). Fiber rolls also referred to as wattles. Manufacture of photodegradable or biodegradable fabric netting without preservative treatment, evenly woven, free of crusted material, cuts, and tears. Manufacture stakes of photodegradable or biodegradable material (wood stakes, except as approved by the Engineer).

- 1. <u>Filter Sock</u> (Wattle)
 - a. Fabric netting.
 - b. Filled with wood fiber, straw, flax, rice, coconut fiber material.
 - c. Minimum diameter 5 inches.

2. Compost Sock.

- a. Extra Heavy weight fabric netting with a minimum strand width of 5 mils.
- b. Filled with coarse compost.
- c. Minimum diameter 8 inches.

Coir Log.

a. Woven wrap bristle coir twine netting.

- b. Filled with 100% coconut (coir) fiber uniformly compacted.
- c. Segments maximum length 20 foot, diameter as suited to the application and a density of 7 lbs/pcf or greater.
- d. Coir twine strength equal to 80 lb minimum weaved to a 2 inch x 2 inch opening pattern.
- e. Ties made of hemp rope by 1/4 inch diameter.

727-2.04 COMPOST. Suitable for serving as a soil amendment or an erosion control material. Sanitized, mature compost meeting local, state, and Federal quality requirements tested and certified by the U.S. Composting Council (USCC) under the Seal of Testing Assurance (STA) Program. Biosolids compost must meet the Standards for Class A biosolids outlined in 40 Code of Federal Regulations (CFR) Part 503. Additionally, meet the requirements of the AASHTO specifications:

- 1. <u>Compost Blankets</u>. Standard Practice for Compost for Erosion/Sediment Control (Compost Blankets) R 52.
- 2. <u>Compost Filter Berms and Filter Socks</u>. Standard Practice for Compost for Erosion/Sediment Control (Filter Berms and Filter socks) R 51.

727-2.05 TACKIFIER. Tackifier, viscous overspray, generally composed of dry powered vegetable gums derived from guar gum, psyllium and sodium alginase; asphaltic emulsions; petroleum distillates; co-polymer emulsions; and lignosulfonates and used to anchor soil, compost, seed, the mulch fibers to one another, and the ground. Contain no growth or germination inhibiting materials nor significantly reduce infiltration rates. Tackifier shall hydrate in water and readily blend with other slurry material. Tackifier options include:

- 1. Type A. Organic tackifier with certification of plant sources; or
- 2. <u>Type B</u>. Synthetic tackifier with certification confirming product is not harmful to plants, animals, or aquatic life.

727-2.06 POLYACRYLAMIDE (PAM). Use as a tie-down for soil, compost, seed and as a flocculent. Polyacrylamide (PAM) products shall meet the requirements of American National Standards Institute (ANSI)/National Sanitation Foundation International (NSF) Standard 60 for drinking water treatment, be anionic (not cationic), linear and not cross-linked with an average molecular weight greater than 5 Mg/mole, minimum 30 percent charge density; contain at least 80% active ingredients and a moisture content not exceeding 10% by weight.

Deliver PAM in a dry granular powder or liquid form.

727-2.07 GEOTEXTILE-ENCASED CHECK DAM AND SEDIMENT BARRIER. Urethane foam core encased in geotextile material (silt fence material Section 633), minimum 8 inches height by minimum base width of 16 inches by minimum 7 foot length.

Overhang the geotextile 6 inch minimum each end with apron type ties by 24 inches each side of the foam core.

727-2.08 SANDBAG.

- 1. <u>Sandbag Sack Fabric</u>. Fabric shall be a nonwoven, needle punched design meeting the Minimum Average Roll Values (MARV) verified in accordance with ASTM D4759.
- 2. Seam Thread. Similar durability to the sandbag sack fabric.
- 3. Sandbag Fill Material.
 - a. Selected Material 703-2.07 Type B
- 4. <u>Cinch Ties</u>. Plastic ties or equivalent tie recommended by the sandbag manufacturer.

727-2.09 MANUFACTURED INLET PROTECTION SYSTEM.

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

727-2.10 CLEAR PLASTIC COVERING. A clear plastic covering meeting the requirements of the National Institute of Standards and Technology (NIST) voluntary Product Standard PS 17 - 69 for polyethylene sheeting having a minimum thickness of 6 mils.

727-2.11 STAPLES. U-shaped staples for anchoring matting, approximately 6 inches long and 1 inch wide. Machine-made: No. 11 gage or heavier steel wire. Hand-made: 12-inch lengths of No. 9 gage or heavier steel wire.

(12/31/20)CR727-Special Provisions

APPENDIX A PERMITS

PERMIT DESCRIPTION	ISSUE DATE	EXPIRE DATE
Kenai Peninsula Borough Habitat Protection District Conditional Use Permit, RC# 13387	01/22/2024	01/22/2027
The Office of History and Archaeology A.S. 41.35.070 Review	03/08/2024	N/A



Donald E. Gilman River Center

514 Funny River Road, Soldotna, Alaska 99669 • (907) 714-2460 • (907) 260-5992 Fax

A Division of the Planning Department

Peter A Micciche Borough Mayor

RC# 13387

Issue Date: 01/22/2024

Expiration Date: 01/22/2027

1/25/2024
Alaska Department of Natural Resources
Division of Parks and Recreation
550 W 7th Ave, Suite 1340

Anchorage, AK 99501

RE: Conditional Use Permit Application

Dear Applicant:

Enclosed is Resolution 2024-01 the Kenai Peninsula Borough Planning Commission approved at their January 22, 2024 meeting. The resolution is your permit to place gravel fill within the 50-foot Habitat Protection District of the Kasilof River. During construction, a copy of the resolution/permit must be kept and posted on site. Permit conditions and requirements are listed in the resolution.

Please reach out if you have any further questions or concerns.

Sincerely,

Morgan Aldridge

Planner

Donald E. Gilman River Center Kenai Peninsula Borough

Morgan M. aldridge

907-714-2465

Enc: KPB Planning Commission Resolution 2024-01

DISPLAY THIS SIGN SO IT IS VISIBLE FROM THE $\overline{ ext{ROAD}}$ AND A SECOND COPY THAT IS VISIBLE FROM THE $\overline{ ext{RIVER}}$ THIS SIGN SHOULD BE POSTED DURING ALL PHASES OF CONSTRUCTION



RIVER CENTER PERMITTED PROJECT

Applicant:	Project:	=======================================
ADNR-DPOR Old Kasilof Boat Retrieval Facility		Ē
13332039 and 13354004	Permits Issued:	Expiration:
	KPB Floodplain	Not required
Legal Description:	KPB Habitat Protection	1/22/2027
COAL CREEK COUNTRY ESTATES TRUJILLO ADDN LOT 4B		
13354004 - T 3N R 12W SEC 13 SEWARD MERIDIAN KN 0900001	ADFG Division of Habitat	Not required
COAL CREEK COUNTRY ESTATES SUB ADDN NO 6 TRACT A		

Questions regarding this permit should be directed to the Gilman River Center: (907) 714-2460

MULTI-AGENCY PERMIT PACKAGE

ADNR-DPOR Old Kasilof Boat Retrieval Facility 550 W 7th Ave., Suite 1340 Anchorage, AK 99501

RC# 13387 1/25/2024

PARCEL ID: 13332039 and 13354004

PROJECT TITLE:

FISH CLEANING TABLE, WETLAND FILL

Enclosed please find the individual permits from the following River Center Agencies:

Expiration	Agency
1/22/2027	Kenai Peninsula Borough, Habitat Protection
Not required	Kenai Peninsula Borough, Floodplain Development
Not required	State of Alaska, Department of Fish & Game Habitat Section

Please review them carefully. If you are unable to complete your project by the expiration dates, you must apply for an extension to your permits.

The permittee is responsible for the actions of the contractors, agents, or other persons who perform work to accomplish the approved plan. For any activity that deviates from the approved plan, the permittee shall notify the River Center and obtain written approval before beginning the activity.

If you have any questions regarding your project, please contact the River Center at (907) 714-2460 or kenairivcenter@kpb.us.





A Division of the Planning Department

Peter A. Micciche Borough Mayor

FLOODPLAIN DEVELOPMENT PERMIT - NOT REQUIRED

1/9/2024 RC# 13387

ADNR-DPOR Old Kasilof Boat Retrieval Facility 550 W 7th Ave., Suite 1340 Anchorage, AK 99501

Dear Applicant:

Pursuant to KPB Chapter 21.06 Floodplain Management, it has been determined that your proposed project does not require a Floodplain Development Permit. This project is either located outside the regulatory floodplain, or the proposed activities do not currently require a Floodplain Development Permit.

Advisories:

While your project does not require a KPB Floodplain Development Permit, it may still require permits from other local, state and/or federal agencies. As the applicant, it is your responsibility to ensure you have obtained all the necessary permits for your project.

KPB regulates development in the floodplain throughout the Kenai Peninsula, with the exceptions of the cities of Homer, Kenai and Seward, who manage their own floodplain programs, and the City of Soldotna, who does not participate in the National Flood Insurance Program (NFIP). Please contact city planning officials with questions about development within those jurisdictions.

This document does not imply that the project areas will or will not be free from flooding or damage, nor does it imply that the location of this project may not be within the regulatory floodplain in the future. This document is for informational purposes only and does not constitute a regulatory determination on any specific project. This information does not create liability on the part of the borough, or its officers or employees, for any damage that may result from reliance on this information.

If the project location or description changes in any way, you are required to alert this office in writing for further review to determine if a Floodplain Development Permit is required.

Please contact the River Center with any questions at (907) 714-2460 or kenairivcenter@kpb.us.

Sincerely,

Julie Hindman

Julie Hindman

Planner

KENAI PENINSULA BOROUGH PLANNING COMMISSION

RESOLUTION 2024-01

A RESOLUTION GRANTING A CONDITIONAL USE PERMIT PURSUANT TO KPB 21.18 FOR THE CONSTRUCTION OF FILL WITHIN THE 50-FOOT HABITAT PROTECTION DISTRICT OF THE KASILOF RIVER.

- WHEREAS, Chapter 21.18 provides for the approval of Conditional Use Permits for certain activities within the habitat protection district; and
- WHEREAS, KPB 21.18.081 provides that a conditional use permit is required for construction not meeting the standards of KPB 21.18.071; and
- WHEREAS, KPB 21.18.091 provides for mitigation measures by the planning department staff to address impacts to the Habitat Protection District from a proposed, ongoing, or completed project; and
- WHEREAS, public notice was sent to all property owners within a 300-foot radius of the proposed activity as provided in Section 21.11.030; and
- WHEREAS, public notice was published in the Peninsula Clarion on December 28, 2023 and January 3, 2024 as provided in Section 21.11.020; and
- WHEREAS, public testimony was received at the January 8, 2024 meeting of the Kenai Peninsula Borough Planning Commission;

NOW, THEREFORE, BE IT RESOLVED BY THE PLANNING COMMISSION OF THE KENAI PENINSULA BOROUGH:

That the Planning Commission makes the following findings of fact pursuant to KPB 21.18:

Section 1. Project Details Within the 50-foot Habitat Protection District:

- 1. Placement of 110 cubic yards of gravel fill.
- 2. Removal of a minimum amount of vegetative material.

Section 2. Findings of fact pursuant to KPB 21.18.081:

- Portions of this proposed project are within the 50-foot habitat protection district as defined by KPB 21.18.040.
- 2. Pursuant to KPB 21.18.081(B)(4), construction of public owned facilities, parks, campgrounds, and their related uses and structures may be approved as a conditional structure/use within the habitat protection district.
- Pursuant to 21.18.081(D) General Standards, staff finds that the proposed project meets the five general standards.
- Pursuant to KPB 21.18.020(A), this chapter was established to protect and preserve the stability
 of anadromous fish through controlling shoreline alterations and disturbances along anadromous
 waters and to preserve nearshore habitat.

- 5. Pursuant to KPB 21.18.20(B)(5), one purpose of this chapter was established to separate conflicting land uses.
- 6. Additional gravel area will allow for easier movement of vehicles through the facility.
- 7. Pursuant to KPB 21.06.081(D)(3), the proposed work will occur on the applicant's property and shall not have an adverse effect on adjoining properties.
- 8. Kenai Peninsula Borough Planning Commission Resolution 2015-35 defines water-dependent as:
 - "...a use or structure located on, in or adjacent to water areas because the use requires access to the waterbody. The definition is applicable to facilities or activities that must be located at or near the shoreline and within the 50-foot buffer. An activity is considered water dependent if it is dependent on the water as part of the intrinsic nature of its operation. Examples of water dependent facilities may include, but are not limited to, piers, boat ramps, and elevated walkways."
- 9. The River Center found the application complete and scheduled a public hearing for January 8, 2024.
- 10. Agency review was distributed on December 22, 2023. No comments or objections have been received from resource agencies to date.
- 11. Pursuant to KPB 21.11.030, public notice was mailed to all property owners within a radius of 300 feet of the project on December 22, 2023. A total of 8 mailings were sent.
- 12. Pursuant to KPB 21.11.020, public notice was published in the Peninsula Clarion on December 28, 2023 and January 3, 2024.
- 13. The applicant is currently in compliance with Borough permits and ordinances.
- 14. Applicant initially requested three fish cleaning stations as a part of this project. At the January 8, 2024 meeting, the Planning Commission voted to deny the request for fish cleaning stations, finding that General Standard #3 could not be met because the design and location of the fish cleaning tables would not be sufficient to push the fish carcasses out into the river.
- 15. Applicant initially requested three fish cleaning stations as a part of this project. At the January 8, 2024 meeting, the Planning Commission voted to deny the request for fish cleaning stations, finding that General Standard #3 could not be met because the fish cleaning tables would have an adverse effect on adjacent properties due to the lack of water flow in the river which would cause an accumulation of fish carcasses on the surrounding banks.

Section 3. Permit Conditions:

- Construction techniques and best management practices shall be utilized to ensure that land disturbing activities do not result in runoff or sedimentation to the Kasilof River.
- 2. The placement of fill must be designed and installed to meet KPB floodplain requirements.
- The permittee shall minimize damage to all vegetation and shall revegetate all disturbed areas with native vegetation.
- 4. For each tree removed, two seedlings less than 5.5-feet tall of a species native to the region will be planted within the 50-foot HPD.
- 5. Storage or use of fuel is prohibited within 50-feet of any open water.
- 6. The River Center shall be notified at least 3 days prior to the start of the project.
- If changes to the approved project described above are proposed prior to or during its siting, construction, or operation, the permittee is required to notify the River Center to determine if additional approval is required.
- 8. The permittee shall be held responsible for the actions of the contractors, agents, or others who perform work to accomplish the approved plan.

- 9. The construction or installation phase of this Conditional Use Permit must be completed within three calendar years from the date of the permit's issuance, or the Conditional Use Permit shall expire unless the Planning Commission finds that more time is necessary to effectuate the purposes of this chapter, in which case the commission may extend the deadline for a maximum of six years from the date of issuance. Prior to its expiration date and upon written request, the Planning Director may grant a Conditional Use Permit extension for 12 months (KPB 21.18.081 (H)).
- 10. In addition to the penalties provided by KPB 21.18.110, and pursuant to KPB 21.50, the permit may be revoked if the permittee fails to comply with the provisions of this chapter or the terms and conditions of a permit issued under this chapter. The Borough Clerk shall provide at least 15 day's written notice to the permittee of a revocation hearing before the hearing officer (KPB 21.18.082).
- 11. The permittee shall comply with the terms, conditions and requirements of the Kenai Peninsula Borough Code of Ordinances Chapter 21.18, and any regulations adopted pursuant to this chapter.
- 12. The permittee is responsible for abiding by all other federal, state, and local laws, regulations, and permitting requirements applicable to the project (KPB 21.18.081 (G)).

Section 4. Pursuant to 21.18.081(D) General Standards, the following standards shall be met before conditional use approval may be granted:

- 1. The use or structure will not cause significant erosion, sedimentation, damage within the habitat protection district, an increase in ground or surface water pollution, and damage to riparian wetlands and riparian ecosystems; **Conditions 1-3 appear to support this standard.**
- 2. Granting of the conditional use shall be consistent with the purposes of this chapter, the borough comprehensive plan, other applicable chapters of the borough Code, and other applicable planning documents adopted by the borough; **Findings 1-4, 7-12 appear to support this standard.**
- 3. The development of the use or structure shall not physically damage the adjoining property; Finding 7 appears to support this standard.
- 4. The proposed use or structure is water-dependent; **Findings 4 and 8 appear to support this standard.**
- 5. Applicant's or owner's compliance with other borough permits and ordinance requirements. Finding 13 appears to support this standard.

THIS CONDITIONAL USE PERMIT EFFECTIVE ON 8th DAY OF JANUARY, 2024.

Veremy Brantley, Chairperson

Planning Commission

ATTEST:

Ann Shirnberg

Administrative Assistant

Note: An appeal of a decision of the Planning Commission may be filed to the hearing officer, in accordance with the requirements of the KPB Code of Ordinances, Chapter 21.20.250. An appeal must be filed with the Borough Clerk within 15 days of date of the notice of the decision using the proper forms and be accompanied by the filing and records preparation fee.

 From:
 Meitl, Sarah J (DNR)

 To:
 Fehrmann, Chester W (DNR)

 Cc:
 Meitl, Sarah J (DNR)

Subject: RE: Old Kasilof Landing Project Review Date: Friday, March 8, 2024 4:35:02 PM

Attachments: <u>image001.png</u>

3130-2R DPOR / 2024-01074

Good afternoon,

The Alaska Office of History and Archaeology received the subject request (dated February 8, 2024) for review under the Alaska Historic Preservation Act (AS 41.35.70[d]) on February 15, 2024. Upon review of the documentation provided, we agree that it is unlikely that significant cultural resource sites would be affected by the proposed actions and that a finding of no historic properties affected is appropriate for the project. Our office may need to re-evaluate our concurrence if changes are made to the project's scope or design.

Please note that this review was conducted solely under the Alaska Historic Preservation Act and only pertains to the proposed actions on State lands or authority. Should inadvertent discoveries of cultural resources occur during the duration of the project, work must stop and our office be notified so that we may evaluate whether the resources should be preserved in the public interest (as specified at Section 41.35.70[d]). Please note that some sites can be deeply buried and that fossils are considered cultural resources subject to the Alaska Historic Preservation Act.

We look forward to continued consultation on the project and thank you for the opportunity to review. Please contact me if you have any questions or if our office can be of further assistance.

Best,

Sarah

Sarah Meitl

Review and Compliance Coordinator Office of History and Archaeology Alaska State Historic Preservation Office 907-269-8720

From: DNR, Parks OHA Review Compliance (DNR sponsored) <oha.revcomp@alaska.gov>

Sent: Thursday, February 15, 2024 1:58 PM

To: Fehrmann, Chester W (DNR) <chester.fehrmann@alaska.gov>

Cc: Meitl, Sarah J (DNR) <sarah.meitl@alaska.gov> **Subject:** Fw: Old Kasilof Landing Project Review

Hi Chet,

Documentation received and logged in with me under 2020-01074. I'll get this back to you as soon as I can.

Best,

Sarah

Sarah Meitl

Review and Compliance Coordinator

Alaska State Historic Preservation Office

Office of History and Archaeology

907-269-8720

From: Fehrmann, Chester W (DNR) < chester.fehrmann@alaska.gov">chester.fehrmann@alaska.gov>

Sent: Thursday, February 8, 2024 4:00 PM

To: Meitl, Sarah J (DNR) < sarah.meitl@alaska.gov>

Cc: DNR, Parks OHA Review Compliance (DNR sponsored) <oheanne oha.revcomp@alaska.gov>

Subject: Old Kasilof Landing Project Review

Sarah,

The Old Kasilof Landing SRS Development Project was last reviewed in 2020. There have been some minor changes (mostly reduction in scope) since the last review. Given the timespan since the last review, I believe another review may be warranted. There is some local objection to this project so I am taking extra caution to ensure everything is in order on my end.

Let me know if you have any questions.

Thank you!

Environmental Impact Analyst

Chet Fehrmann

Alaska State Parks, Design & Construction

907.269.8506



APPENDIX B SURVEY REQUIREMENTS

- 1. Alaska Construction Surveying Requirements (US Customary Units)
- 2. Alaska DNR Parks and Outdoor Recreation; As-Built Survey Instructions



Alaska Department of Transportation and Public Facilities

Alaska Construction Surveying Requirements (US Customary Units)

Alaska Construction Surveying Requirements (US Customary Units)

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1. Survey accuracy requirements

Third order survey

- ✓ Use a 1/5000 horizontal closure.
- ✓ Use an angle closure of $30\sqrt{N}$ seconds, where N equals the number of angles in the traverse.
- ✓ An Alaska-registered professional land surveyor must perform or supervise replacement of survey monuments (property, USGS, USC&GS, BLM, etc.) or establishment of monuments (including centerline).
- ✓ All monument work must comply with AS 34.65.040 and meet standards in the latest version of the Alaska Society of Professional Land Surveyors' *Standards of Practice Manual*.
- ✓ The allowable vertical error for misclosure is $e = 0.05 \sqrt{M}$ e = maximum misclosure in feet, M = length of the level circuit in miles.

Table 1—Survey accuracy requirements (in feet)

	Stationing	HI	Closure	Horizontal Angle	Distance To center line	Grade
Additional cross sections	1.0	0.01	0.04	**	0.1	0.1
Benches		0.01	0.02			
Blue tops***	1.0	0.01	0.04		0.1	0.02
Bridges	*	0.01	0.02			0.01
Centerline	*			*		
Clearing & Grubbing	1.0				1.0	
Culverts	1.0	0.01	0.04	**	0.1	0.1
Curb & gutter	1.0	0.01	0.02		0.1	0.02
Grade stakes	1.0				0.1	0.1
Guardrail	1.0				0.1	
Manholes, catch basins & inlets	1.0	0.01	0.02		0.1	0.02
Monuments	*			*		
Red tops***	1.0	0.01	0.02		0.1	0.05
Riprap	1.0	0.1	0.04		1.0	0.1
Signs	1.0				0.1	
Slope stakes & RP's	1.0	0.01	0.04	**	0.1	0.1
Under drains & sewer	1.0	0.01	0.02		0.1	0.02

^{*} Third order survey

^{**}Right angle prism or transit angles from center line

^{***} Use blue tops for top of base course and red tops for the bottom of base course.

1. Survey frequency requirements

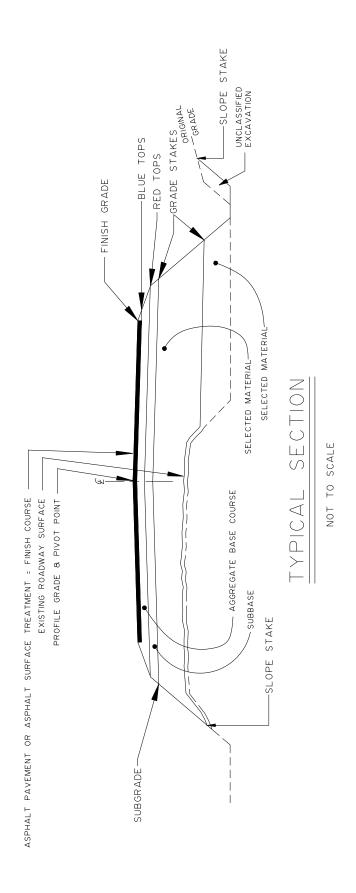
Table 2—Survey frequency requirements (in feet)

	Tangents	Curves	Interchange ramps	Stake each per plan	See special instructions on sample notes
Additional cross sections	*	*	*		
Bench marks					X
Blue tops	100	100**	25		X
Blue tops within 100 feet both sides of railroad track crossings and bridge approaches	25	25	25		X
Bridges				X	X
Center line	100	100**	25		
Clearing	100	100**	25		X
Culverts				X	X
Curb and gutter	25	25	25		
Grade stakes	100	100**	50		
Guardrail	25	25	25		
Manholes, catch basins & inlets				X	
Monuments				X	
Red tops	100	100**	25		X
Riprap	50	50	50		
Signs				X	
Slope stake / cross sections	100	100**	25		X
Under drains and sewers	50	25	25		

^{*} Establish additional cross sections and slope stakes at all breaks in topography and where structures begin and end.

^{**}Curves shall be staked on 50-foot stations if the curve is greater than six degrees.

2. Typical Section Drawing



3. Survey point materials requirements

- ✓ These are minimum requirements; larger sizes may be necessary.
- ✓ Use only stakes with planed sides.

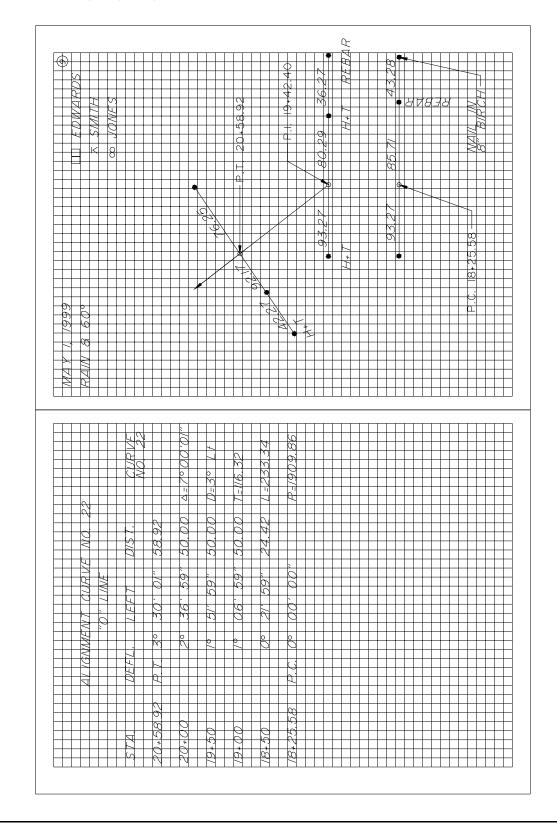
Table 3—Survey point materials requirements

	24" lath or whiskers	2" x 2" x 8" hub	2" x 2" x 12" hub	1" x 2" x 18" stake	1" x 2" x 24" stake	48" lath	Hub and tack	40d nail	60d nail	½" x 24" rebar
Benchmarks									X	
Blue tops	X	X								
Centerline P.C., P.T., P.O.T.			X	X			X *			X*
Centerline reference points			X	X			X *			X *
Centerline station				X				X		
Clearing						X				
Culvert stake			X		X	X				
Culvert stake references			X		X	X				
Curb and gutter			X		X		X			
Guardrail								X		
Major structures			X	X *	X *	X	X *			X *
Red tops	X	X								
Signs						X				
Slope stake					X	X				
Slope stake references			X		X	X				

^{*} Optional depending on conditions, and to be determined by the Project Engineer.

4. Typical alignment notes

- ✓ The Chief of Parties must prepare the alignment book before actual staking.
- ✓ Don't use swing ties for reference points.
- ✓ Use three point right angle ties, two to the right and one left, or vice versa.
- ✓ Reference P.C., P.I., P.T., and P.O.T.



5. Typical clearing notes

- ✓ Exclude areas not needing clearing.✓ Draw a diagram as required to show unusual or confusing areas.

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				CL.RT.	215'	200,	216'	192,	200,				
1999		EAR			+12,								
406. 6, 1999		80°± CLEAR	CALM	CA TCH	203'	188,	204'	180,	188,				
S GRUBBING -				CATCH	137'	152'	147,	155'	167'				
CLEARING &					+12,								
+ CLEA				CL.LT.	149,	164,	159'	167'	179,				
				S7A.	5+50	00+9	05+9	7+00	7+50				

6. Typical level notes

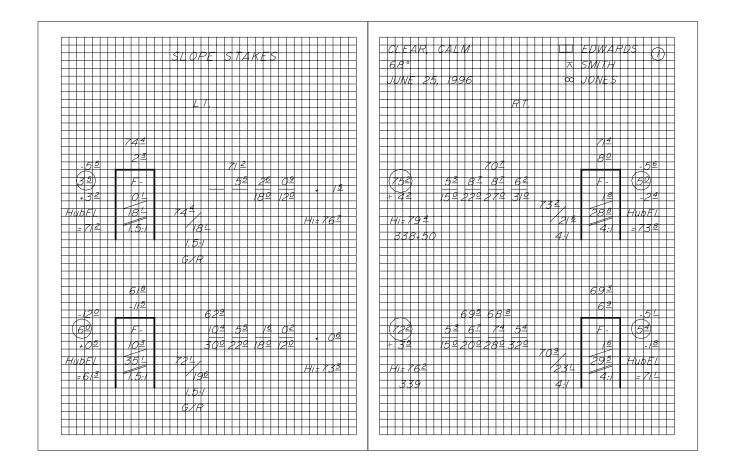
- ✓ Balance back sights and foresights.
- ✓ Establish all benchmarks and take the centerline profile before doing any staking involving elevations.
- ✓ Don't set benchmarks in utility poles.
- ✓ Don't use side shots on benchmarks.
- ✓ Use the turn through method when establishing benchmarks.
- ✓ Re-check benchmarks after each major freeze/thaw cycle and/or any environmental event that may change the benchmark elevation.
- ✓ Do not use double rodding.
- ✓ Run separate level loops between all benchmarks
- ✓ Set benchmarks in trees of at least six-inch diameter, unless approved by the Project Engineer.

- ✓ Correct errors in benchmark elevations so they will not affect the elevations of succeeding benchmarks.
- ✓ Consult with the Project Engineer before placing benchmarks in areas of permafrost or other unstable ground.
- ✓ Establish benchmarks at intervals and locations consistent with good engineering practice, and generally not more than 1000 feet.
- ✓ Completely describe benchmarks when establishing or re-establishing their elevation. Give centerline stationing, offset, benchmark projection, and observable benchmark characteristics. When checking into or out of benchmarks, note the book and page number that contains the most recent elevation establishment for that benchmark.
- ✓ Write the station on the top twelve inches facing centerline, with numerals a minimum of one inch in height.

					111411 111 1	_				
STA.	BS+	HI	FS-	ELEV.	45°± CLE WARM CA	AR LM			⊼ Ш	Ø EDWARDS
					WILD 413		3-2	3-90		SMITH
TD14 "4										
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07/2				101.309		17011 111	85' 10	7 12 3 7 1 T	6+72	
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6+00			1.95	163.24						
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6+50			2.96	162.23						
<i>T.P.</i>			3.246	161.940						
	1.103	163.043								
6+75			2.31	160.73						
7+00			2.56	160.48						
T.P.			2.823	160.220						
	2.332	162.552				Nail in	base d	of 18" s	stump	
TBM #1	02		1.143	161.409		60' 4		7+21		161.413

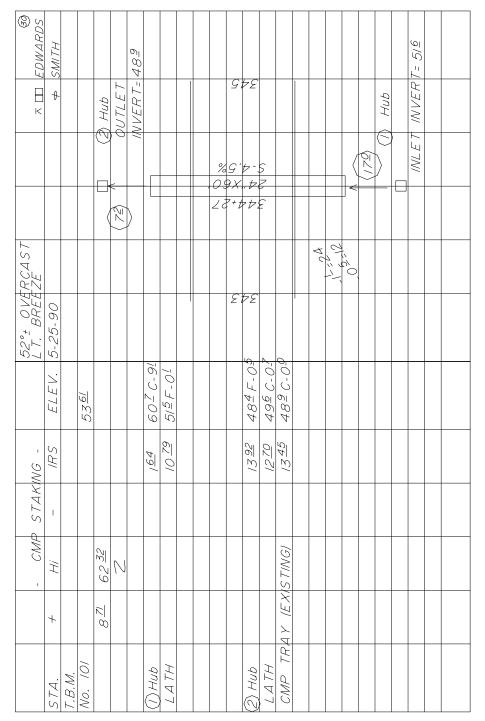
7. Typical slope stake notes

- ✓ Enter the station, elevations, shoulder distance or ditch distances, and slope in the slope stake book before staking begins.
- ✓ In areas where slides or overbreak are anticipated, extend the sections beyond the construction limits.
- ✓ Slope-stake each section that is cross-sectioned.
- ✓ Final re-cross sections are required where there are overbreaks, undercuts, etc. Re-cross section book and page numbers shall be noted on the original cross-section and slope staking page for the relevant stations.
- ✓ Use a hand level only for one turn up or down from the instrument.
- ✓ Clearly note hand level turns.
- ✓ Use a reference point that is 10-20 feet beyond the slope stake.
- ✓ The reference point must show the cut or fill to the slope stake and must include the slope stake information.
- ✓ Slope stake all abrupt changes in typical sections.
- ✓ Position all laths to face centerline.
- ✓ Include at least the following information on the stake: (1) where to begin the cut or fill (2) the slope ratio (3) the depth of cut or height of fill and (4) the station.

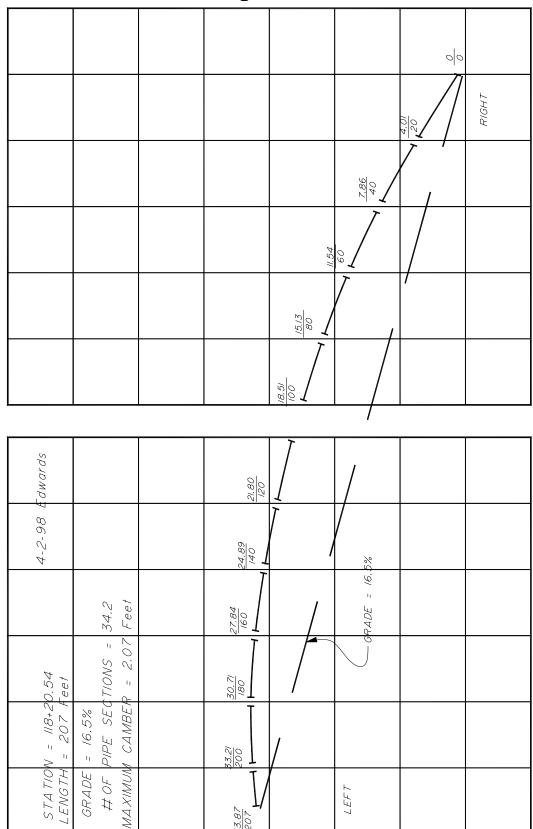


8. Typical culvert notes

- ✓ Show at least the following information on culvert stakes
 - station
 - size
 - length
 - type of pipe (e.g., 24" x 80' CMP)
- cut or fill from top of hub to inlet & outlet
- skew angle
- horizontal distance from hub to end of pipe
- gradient of pipe
- drop of pipe
- ✓ Ensure that all culverts have a minimum camber equal to 1% of the length of the pipe, unless the Project Engineer directs otherwise.
- ✓ Develop a culvert camber diagram showing each section of pipe and its elevation and offset.



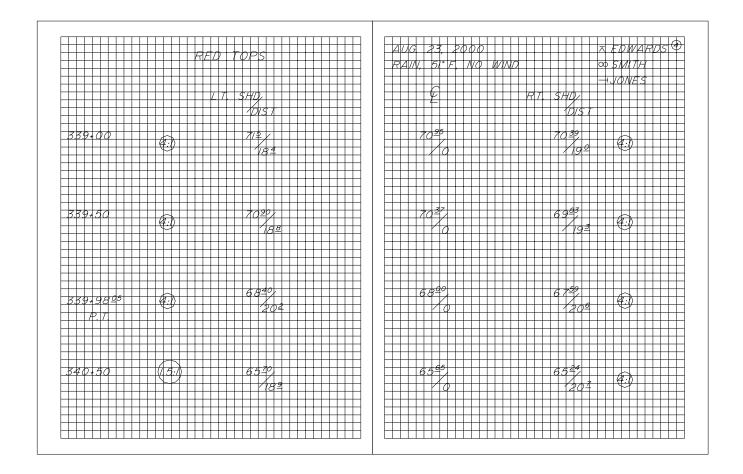
9. Typical culvert camber diagram



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10. Typical blue or red tops and grade stake notes

- ✓ Place blue and red tops at each break in typical section and on centerline.
- ✓ Use blue tops for top of base course.
- ✓ Use red tops for the bottom of the base course.
- ✓ Evenly space red/blue tops at and between crown section break points with a maximum spacing of 25 feet between red/blue tops.
- ✓ Establish horizontal control from centerline references and vertical control from benchmarks.
- ✓ Place blue tops at the same interval as slope stakes.
- ✓ Stake all curve transitions.



STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES DIVISION OF PARKS AND OUTDOOR RECREATION

AS-BUILT SURVEY INSTRUCTIONS



SEPTEMBER 2017

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LIST OF ABBREVIATIONS

AAC Alaska Administrative Code ADL Alaska Division of Lands

ADNR or DNR Alaska Department of Natural Resources

AS Alaska Statute

ASLS Alaska State Land Survey

ASP Alaska State Plane

DMLW Division of Mining, Land and Water

DMLW-SS Division of Mining, Land and Water, Survey Section

DPOR Division of Parks and Outdoor Recreation

EPF Engineering Plat File

GIS Geographic Information System
GNSS Global Navigation Satellite System
LAS Land Administration System

MHW Mean High Water
MLW Mean Low Water
MLLW Mean Low Low Water
NAD North American Datum

NAVD North American Vertical Datum

OHW Ordinary High Water

OPUS Online Positioning User Service

PPM Parts Per Million ROS Record of Survey

A. OVERVIEW

These instructions define general survey and platting criteria on Department of Natural Resources, Division of Parks and Outdoor Recreation (DPOR) managed land for as-built surveys. These instructions provide procedures for surveys of post-construction conditions and graphical representation of the affected real property, improvements, and easement locations to produce clear and complete final as-built Record of Survey (ROS) plat.

- 1. Goals of the As-Built Survey Include the Following:
 - a. Location. The plat will be of sufficient detail to allow a surveyor to locate the installed or constructed improvements relative to the boundaries of the DPOR managed parcel including riparian and fixed and limited boundaries.
 - b. State Mapping. As-built plats and files will be used to position the improvements and easements in the State GIS database to facilitate effective land management.
 - c. Protection of Rights. Accurate and thorough ROSs are the basis for the unique and accurate legal descriptions of the land being utilized for DPOR facilities. Those ROSs will also aid in future DPOR projects.

These instructions include survey and drafting standards, typical notes, and certifications. The survey standards include general, upland¹, tideland², shore³, and submerged land⁴ subsections. Contractors are urged to confer with Department of Natural Resources, Division of Mining, Land and Water, Survey Section (DMLW-SS)⁵.

B. DELIVERABLES

The required deliverables are:

1. Final Record of Survey Plat. Sealed hardcopies and electronic copies conforming to the requirements listed herein.

¹ Uplands shall be all lands above mean high water or ordinary high water.

² Tidelands shall be all land that is periodically covered by tidal water between the elevations of mean high water and mean low water [AS 38.05.365(23)].

³ Shorelands shall be land belonging to the State which is covered by non-tidal water that is navigable under the laws of the United States up to ordinary high water as modified by accretion, erosion, and reliction [AS 38.05.965(20)].

⁴ Submerged land shall be all land lying seaward from the line of mean low tide [AS 38.05.365].

⁵ Alaska Department of Natural Resources, Division of Mining, Land and Water, Survey Section contacts: Eric Simons (907) 269-8524 and Stanley Brown (907) 269-8521; 550 West 7th Avenue, Suite 650; Anchorage, AK 99501.

2. OPUS Solution Report. Hardcopies of the OPUS Solution Report. OPUS Shared Solutions are preferred.

C. <u>COMPREHENSIVE SURVEY REQUIREMENTS</u>

1. General. Contact the DMLW-SS staff to obtain an Engineering Plat File (EPF) number specific to this project. DMLW-SS staff are also available for consultation and contractors are encouraged to contact them to discuss these standards and how they relate specifically to this project.

2. Standards.

- a. General. Land surveys affecting legal real property rights of the State of Alaska, the adjoining land owner, or both shall be performed in accordance with applicable laws, regulations, rules of procedure, acceptable professional practices, and AS 34.65.020. They shall be performed under direct supervision of a Professional Land Surveyor licensed to practice in the State of Alaska. All survey work must be accomplished with equipment and procedures sufficient to ensure at least the degree of accuracy prescribed in these instructions. DMLW-SS shall track the survey on the LAS system, assign an EPF number, and notify the contractor of the LAS File type, number, and legal description for the plat title block.
- b. Measurements. As-built surveys are generally metes and bounds or positional type surveys of install or constructed improvements on DPOR lands relative to legal boundaries, monuments, other improvements, and natural features. The survey and plat shall represent the project's post-construction location and condition.
 - 1) Metes and Bounds: Conventional type surveys are designated as Class III Surveys under 11 AAC 53.110.
 - Positional and Radial Type Surveys on Tidelands and/or Uplands: The allowable relative positional accuracy on these lands shall be better than \pm 0.26 feet + 200 ppm⁶.
 - 3) Distances: Distances on the as-built plats shall be horizontal ground distances. Use Alaska State Plane NAD 83 (ASP). Distances may be shown in tabular form. Show average scale factor for each sheet if ASP distances are used for more accurate acreage computation based on horizontal ground distances.
 - 4) Bearing: All bearings on the as-built plats shall be ASP bearings relative to the Basis of Bearing. Bearings shall be shown to the nearest second.
 - 5) Area: Total area of the improvements in as-built shall be shown.

⁶ National Society of Professional Land Surveyors, NSPS Classification and Accuracy Standards for Property Surveys, Section C, approved March 12, 2002. http://www.nspsmo.org/

3. Control Monumentation.

- a. Overall Concept. A control network of reliable control monuments with accurate geographic positions based on OPUS generated coordinates will be used as overall control of the survey. Intermediate monuments will be found and/or set and tied geographically. Water meander line points and as-built survey points will be tied to the control network. All data will comply with specified standards.
- b. Site Control. All projects shall have reliable control monuments of record or newly established primary reference monuments on or near the improvements with good quality geographic coordinates shown. If project design drawings are available, monuments from the survey control sheet should be used.
 - Project Control Monuments. Control will be one record monument with NAD 83 geographic coordinates and ASP coordinates derived and shown located in the vicinity of the project. Additionally, a new OPUS Solution is required for this position.
 - 2) Local Control Monument. Three monuments within the project site and near the improvements will need to be recovered or set. OPUS Solutions are required for those monuments. Those monuments will be used for future projects and should be located where they are unlikely to be disturbed. The local control monuments are to be 5/8 inch rebar with a 2-1/2 inch aluminum cap provided by DPOR.
 - 3) Lacking Reliable Monuments. Set primary monuments per 11 AAC 53.190 and 11 AAC 53.200.
- c. Vertical Control to Establish Mean High Water and Ordinary High Water.
 - 1) Basis of Elevation. Elevation information will be shown in the drawings only on the control points and to referenced bench marks or vertical control on all projects, unless otherwise specified.
 - 2) Vertical Reference Ties. Include an explanation in one of the notes or on graphics of how mean high water (MHW) and ordinary high water (OHW) meander were determined or established.
- d. Basis of Coordinates. All project geodetic coordinates will be based on geodetic positions of the control monuments.

4. Items to be Surveyed and Mapped.

a. Boundaries.

- 1) Property Boundaries. DPOR park unit boundaries which are crossed by the improvements, or border on, or lie within 100 feet of the improvements must be tied and shown. Survey of at least two reliable monuments and accessories are required to define a boundary location. Rubbings, photos, or a sketch of the monument markings, type, and condition will be noted in the field books and on the plats.
- 2) Other Record Easements. Identify, and survey if necessary, other easements which abut or cross the project limits and show them on the as-built plats. State section line easements are not required to be shown unless specified.
- 3) Survey of MHW and OHW. Lines of MHW and OHW shall be surveyed and mapped as specified herein. Generally acceptable methods to locate the and map MHW, MLLW, and OHW are addressed in the DMLW-SS website under Alaska tideland surveys, link to 2002 Survey Conference Alaska Tideland Surveys, "Who, What, When, Where, How and Why" pursuant to 11 AAC 53.120.
 - a) MHW or OHW on Navigable Waters in areas of Manmade Fill (when applicable). Determine and map as best as possible, the pre-construction MHW or OHW meander line prior to placement of the fill (this requires a unique line type for the fixed and limiting boundary) on navigable waters shall be mapped to a distance of 50 feet beyond the project area or the Parks Unit boundary. In the fill area, the post-construction MHW or OHW with current toe and top of fill will be surveyed and shown. Best available evidence may include a timely land survey showing current OHW and/or MHW prior to the installation of the fill; water edges or levels in the plan and profile view; engineering and planning mapping or data which indicated water levels and profiles of conditions existing when the fill was planned for prior to placement; and aerial photos which would help located the OHW line at the time.
 - b) MHW or OHW in Navigable Waters in Areas of Avulsion. Determine and map as best as possible the current meander and if possible the record meander line. The survey shall be to standards as stated for uplands.
- b. Project Improvements, Improvement Centerline, and Centerline Marker. Structures, pads, and appurtenances shall be located and mapped to include toe and fill, top edge of fill, structure perimeter, intake structures, and utilities.

- c. Pre-Existing Improvements and Natural Features.
 - 1) Major Natural Features and Pre-Existing Improvements within 50 Feet of Project Improvements. Other existing improvements such as buildings, roads, trails, manholes, utilities, etc. and major natural features such as water bodies, cliffs, etc. within 50 feet of the improvements under the project will be tied and shown on the as-built plat.
 - 2) Features within 300 Feet of Centerline. Pre-existing improvements and major natural features beyond 50 feet but less than 300 feet from centerline of the project and on state land shall be mapped on the as-built plat using aerial photography or mapping grade tools.
 - 3) Shorelines. Shorelines shall be shown adjacent to the submerged lands segments and land masses and waterbodies labeled.
- d. Typical Cross Section of Linear Improvements. A typical section of roads, driveways, etc. showing width, depth, different materials used, etc.
- e. Typical Cross Section of Rip Rap Areas. A typical section of the erosion control area showing approximate width, length, depth of the erosion control fill and material used.
- f. Pre-Construction Survey on Projects that Fill-In Tidelands or Shore Lands. Wherever possible, MHW or OHW will be surveyed prior to placement of the fill. This meander line will be to a minimum of two new or record upland monuments. Note the methods by which the OHW elevation and position was determined. The meanders of the MHW or OHW just prior to placement of the fill will become fixed and limiting boundary lines in the area of the fill.

D. DRAFTING REQUIREMENTS AND STANDARDS

- 1. Medium and Format. Submit the final as-built plats on stable Mylar or equivalent film that does not exceed 24 x 36 inches' sheet size in the "Record of Survey" format. Samples can be obtained from DMLW-SS. Project name, "Record of Survey of Project No. XXXXXXX" and "EPF 20XXXXXX" must be at least 0.25 inch tall. Scanned copies in PDF format of the final as-built plats, signed and sealed, shall also be submitted either on disc or portable drive.
- 2. Content Format. Provided as-built plat samples are the format guide. The title block, vicinity map, legend, notes, surveyor's seal, and graphics shall be shown substantially as indicated. Individual firm or company logos, title block, certificates, notes, north arrow, etc. are acceptable if in a reasonably similar format as the sample drawing. Submit the final as-built plats with original stamps and signatures. The final as-built plat must be neat, orderly, easily read, and complete.
- 3. Recordation. DPOR will record the completed plats. The plat will need to meet standards set forth by 11 AAC 06.040 (Prerequisites for Recording Documents).

- 4. Line Work. All line work on the as-built drawing must be of professional quality in black drafting ink and of such width and contrast as to clearly convey all information.
- 5. Text (Lettering) Clarity and Minimum Size. All lettering on the plats must be of professional quality in black drafting ink and of such size and contrast to clearly depict all information. No lettering shall be smaller than 0.8 inch high.
- 6. Drawing Scale. The plat must be in an appropriate engineering scale preferably one inch representing 40 feet and/or one inch representing 100 feet. If the 40 and 100 scales are impractical then use standard civil scales in multiples of 10 feet per inch.. Details shall be shown to scale and on the sheet to which they apply.
- 7. Vicinity Map. A vicinity map is required. It shall be at whatever scale is necessary to show the entire project and clearly indicate section, township, range, and geographic information. The vicinity map should be on the first sheet and on others as needed. If multiple sheets are required, the vicinity map shall indicate the coverage by each sheet. The vicinity map will generally be oriented to north.
- 8. Multiple Sheets in a Set. If more than one sheet is required to clearly show the project, the vicinity map, legend, notes, surveyor's certificate, approved title block, and any other required certificates shall appear on the first sheet. All other sheets shall also show ADL number, scale, and sheet number/total number of sheets, location by section, township, and range, match lines and stations, and project scale.
- 9. Sheet Match Lines. Match lines at the left and right margins of each sheet will be shown at common centerline stations.
- 10. Control Diagram. Larger view control diagram may be beneficial and necessary.
- 11. Boundary Lines and Bearing and Distance Labels. All surveyed legal boundaries, including aliquot part boundaries adjacent to, surrounding, and or crossing the project shall be shown with recorded and measured bearings and distances and tied to the improvement. The extent of this provision can be abbreviated in areas congested with legal boundaries with written permission.
 - a. Boundary Line Type and Weight. All surveyed lines of record shall be shown with a solid line type. All non-surveyed lines, tie lines, and easement lines shall be contrasting line types and scales.
 - b. Boundary Line Label Specifics. Record bearings and measured bearings of the boundaries will be labeled on the boundary line itself or referenced and shown in a table. The measured distances shall be horizontal ground distances unless specified otherwise.

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 $^{^{7}}$ Measured shall mean the distance and/or bearing between two found and surveyed monuments.

- c. Line Status. Except for the ties and centerline information itself, all bearings and distances shall be labeled (R) for record, (M) for measured, or (C) for computed⁸.
- d. Section Lines and Section Line Easements. Surveyed and protracted section lines will be shown. Section line easements will not be shown unless otherwise specified. Surveyed section lines shall be solid line types. Protracted, unsurveyed section lines and easement boundaries shall be dashed lines.
- e. Riparian Park Unit Boundaries (where applicable): Upland boundaries will be the identified meander line of MHW or OHW. If applicable the meander line prior to fill will be a fixed and limiting boundary described by bearings and distances tied to control. Seaward boundary will be the line described by bearing and distances tied to control which generally encompass the toe of fill.

12. Monuments.

- a. Monument Markings. Exact markings on all found⁹ or recovered and set monuments and their accessories must be shown on the plat. If particular monumented corners were not surveyed during the filed survey, record monuments must be indicated with a unique symbol. No markings of any kind shall be added to any recovered survey monuments or existing bearing trees.
- b. Monument Type and Dimensions. The monument type, material, diameter, and length of rod and cap shall be noted.
- c. Control Monument Notations. The control monuments will be shown. NAD 83 Lat, Long, NAVD 88 Elevation, and ASP coordinates/zone shall be shown in a table directly next to the cap. The inverse between any two upland/tideland control monuments will be labeled in mean geodetic bearings, horizontal ground distance.
- 13. Improvement Mapping. Survey and map in an accurate and scalable manner: the tops and toes of fill, structures, drainage features, and improvement appurtenances such as junction boxes, elbows, ports, etc. All project improvements will be dimensioned and labeled. All elevation critical improvements (e.g, culvert inverts, septic line inverts, manhole inverts, etc.) shall have elevation information.
- 14. Acreage. Show approximate acreage on state lands.
- 15. Topographic, Natural, and Pre-Existing Improvement Feature Depiction. Pre-existing improvements (e.g., roads, buildings, utilities, etc.) and major topographic features (e.g., bodies of water, drainage features, cliffs, etc.) shall be located and labeled on the as-built drawing if they lie within 50 feet of the project improvements. Current meander lines of

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⁸ Computed shall mean a position, bearing, or distance on a point or between two points which have not been surveyed in the execution of these instructions.

⁹ Found shall mean a recovered and surveyed monument.

water bodies which border or lie within 50 feet of the project improvements will be mapped out to 50 feet from the project improvements. Major features and pre-existing improvements within 300 feet of the project improvements, and within state land, will be mapped for general location only.

- 16. Land Ownership Labels. Ownership of adjoining land within 100 feet of the project area shall be labeled (e.g., federal, state, private, native corporation, etc.) and with the legal parcel identification (e.g., lot, block, subdivision designation, U.S. survey number, ASLS, section, aliquot part, etc.).
- 17. Encroachments. Encroachments onto the park unit shall be tied in the same manner as other improvements.
- 18. North Arrow. A north arrow is required on each sheet, to include the magnetic declination and source and date of declination.
- 19. Graphic Scale. A graphic scale in inches and U.S. Survey feet is required on each as-built sheet. The foot scale must be identical to that used in the survey portion of the plat. Two equations must also be shown: 1 meter = 3.280833 U.S. Survey Feet and 1 U.S. Acre = 0.4047 hectare.
- 20. Graphics Orientation. The graphics of plats shall be generally oriented with north towards the top of the sheet, unless impractical.

21. Title Block Requirements. The recommended Record of Survey title block is as follows:

STAT	E OF ALASKA	SURVEYOR:
DEPARTMENT O	F NATURAL RESOURCES	[INSERT SURVEY CO.]
DIVISION OF MIN	NING, LAND AND WATER	[INSERT ADDRESS]
ANCHO	RAGE, ALASKA	[INSERT PHONE NO.]
	RECOD OF SU	URVEY
Ooc Title: RS – [INSER	RT PROJECT NAME SHOW	N ON CONTRACT DOCUMENTS]*
	-	SHOWN ON CONTRACT DOCS]
2. DIVISION	OF PARKS AND OUTDOOR I	RECREATION
3. [INSERT P	PARK UNIT]	
-	•	N CONTRACT DOCUMENTS]
4. [INSERT P	•	N CONTRACT DOCUMENTS]
4. [INSERT P	ROJECT TITLE SHOWN OF RT ADL NUMBER]	N CONTRACT DOCUMENTS]
4. [INSERT P 5. ADL [INSE	ROJECT TITLE SHOWN OF RT ADL NUMBER]	N CONTRACT DOCUMENTS]
4. [INSERT P. 5. ADL [INSE 6. AS-BUILT S	ROJECT TITLE SHOWN OF RT ADL NUMBER SURVEY	•
4. [INSERT P. 5. ADL [INSE 6. AS-BUILT S	ROJECT TITLE SHOWN OF RT ADL NUMBER SURVEY	N CONTRACT DOCUMENTS] NSHIP, RANGE, MERIDIAN INFO],
4. [INSERT P. 5. ADL [INSE 6. AS-BUILT S	ROJECT TITLE SHOWN OF RT ADL NUMBER] SURVEY I: [INSERT SECTION, TOW]	•
4. [INSERT P. 5. ADL [INSE 6. AS-BUILT S	ROJECT TITLE SHOWN OF RT ADL NUMBER] SURVEY I: [INSERT SECTION, TOW] ALASKA	•
4. [INSERT P. 5. ADL [INSE 6. AS-BUILT S LOCATED WITHIN	ROJECT TITLE SHOWN OF RT ADL NUMBER] SURVEY I: [INSERT SECTION, TOW] ALASKA	NSHIP, RANGE, MERIDIAN INFO],
4. [INSERT P. 5. ADL [INSE 6. AS-BUILT S LOCATED WITHIN [INSERT RE SHEET OF	ROJECT TITLE SHOWN OF RT ADL NUMBER] SURVEY T: [INSERT SECTION, TOWN ALASKA CCORDING DISTRICT] RECTOR OF THE CONTROL OF THE C	NSHIP, RANGE, MERIDIAN INFO],
4. [INSERT P. 5. ADL [INSE 6. AS-BUILT S LOCATED WITHIN [INSERT RE SHEET OF	ROJECT TITLE SHOWN OF RT ADL NUMBER] SURVEY T: [INSERT SECTION, TOWN ALASKA CCORDING DISTRICT] RECTOR OF THE CONTROL OF THE C	NSHIP, RANGE, MERIDIAN INFO],
4. [INSERT P. 5. ADL [INSE 6. AS-BUILT S LOCATED WITHIN [INSERT RE SHEET OF DATES OF SURVEY:	ROJECT TITLE SHOWN OF RT ADL NUMBER] SURVEY I: [INSERT SECTION, TOWN ALASKA CORDING DISTRICT] RECURDING APPROVAL	NSHIP, RANGE, MERIDIAN INFO],

*Note that [INSERT PROJECT NAME SHOWN ON CONTRACT DOCUMENTS] is limited to 40 characters

22. As-Built Plat Submittal Process. Upon completion of preliminary as-built plats, submit two full-sized paper copies of each sheet, along with supporting documents, to DMLW-SS for review and a third courtesy set to the Project Engineer. The roll or folded package should state "As-Built Drawings" on the outside of the submittal. Reviews will be completed by DMLW-SS and returned with red-lined documents, a check list, and review letter with required changes.

E. TYPICAL NOTES

- 1. Use the following notes as applicable to the specific project. Insert queued information relevant to the specific project.
 - a. History. "This Record of Survey represents a post-construction survey of [INSERT PROJECT NAME AND NUMBER SHOWN ON CONTRACT DRAWINGS], which were completed in [INSERT YEAR OF COMPLETION]. The improvements include [INSERT LIST OF IMPROVEMENTS UNDER THE PROEJCT]."

- b. Post-Construction Statement. "This as-built represents a post-construction survey of [INSERT PROJECT NAME AND NUMBER SHOWN ON CONTRACT DRAWINGS]. It is intended to depict the location portion of the improvements as it pertains to state land is not to be presumed to plat or dedicate those portions pertaining to non-state lands. This as-built is not intended to be used to re-establish property boundaries. Except as indicated, no encroachments within the vicinity of the project area exist with the park unit."
- c. Record of Survey Note. "This survey does not constitute a subdivision as defined by AS 40.15.900(5)(A)."
- d. The Basis of Coordinates. "The basis of coordinates is [DESCRIBE MONUMENT AND CORNER REPRESENTED] as shown, more exactly on sheet [INSERT SHEET NUMBER] of these drawings, positional data derived from [INSERT WHERE DERIVED FROM] as indicated."

Show in the graphics the geodetic position of the monument, associated ASP position, NAD 83, and epoch of data.

e. Basis of Bearing Based on Record Bearing Between Two Monuments. "All bearings are [INSERT TRUE MEAN OR GRID – SPECIFY ASP, LOCAL, OR OTHER GRID IF GRID] bearings as oriented to the Basis of Bearing."

Indicate on the drawing the bearing between two found monuments of record and source of record used as the basis of bearing for depiction of the data.

- f. GNSS Survey.
 - a) Other than ASP, the use of grid bearings that are based on the bearings as shown on the project design drawing's survey control sheet may be approved by DMLW-SS. Notes from the survey control sheet should be verified and at a minimum contain the data in item b):
 - b) How to convert the shown grid data to ASP data: (Consider the order in which this data was originally changed to non-ASP grid values and reverse)
 - i. Values to add or subtract from each coordinate set to translate to ASP values.
 - ii. Angle and direction or rotation to rotate the data to ASP values in position.
 - iii. Note the scale factor to use to bring the data to ASP values.
- g. Distances. "All distances are reduced to horizontal ground distances unless otherwise noted" or "All distances are Alaska State Plane Zone [INSERT ZONE], NAD [INSERT NAD DESIGNATION] distances with scale factor shown to reduce to horizontal ground distances."

- h. Meander Lines. "The natural meander of the ordinary high water line form the true bounds of [INSERT PROJECT NAME AND NUMBER SHOWN ON CONTRACT DRAWINGS] and the [INSERT WATER BODY] as shown.
- i. Method(s) Used to Establish Ordinary High Water. "Ordinary high water on all public and navigable waters shown was determine by [INSERT METHOD]."
- j. Easement Sidelines. "Easement sidelines are extended or shortened to meet at angle points and terminate at boundaries with non-state lands."
- k. Conventional Closure. "The error of closure of this survey does not exceed 1:5000."
- 1. Positional Accuracy. "All survey data produced by this as-built survey is no less accurate than ± 0.26 feet + 200 PPMA relative to any and all other points in this upland and tideland survey segment located within [INSERT SECTION, TOWNSHIP, RANGE, MERIDIAN]."
- m. All Parcels. "All parcels of land owned by the State of Alaska, located within 50.00 feet of, or bisected by a surveyed or protracted section line, are subject to a fifty-foot (50') easement, each side of the section line, which is reserved to the State of Alaska for public highways under AS 19.10.010.

F. CERTIFICATES

Certificates should be shown substantially as follows with headings capitalized and underlined.

1. Surveyor Certificate.

SURVEYOR'S CERTIFICATE

I hereby certify that I am properly registered and licensed to practice land surveying in the State of Alaska, that this plat represents a survey made by me or under my direct supervision, that the monuments shown hereon actually exist as described, and that all dimensions and other details are correct.

Date:	Registration Number:
[SURVEYOR'S SEAL]	[SIGNATURE IN BLACK INK]
	Registered Land Surveyor

APPENDIX C EROSION & SEDIMENT CONTROL PLAN

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 HMCP, SPCC, contractor furnished material sites, 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.

OZ

RESOURC RECREATION 7.269.8731

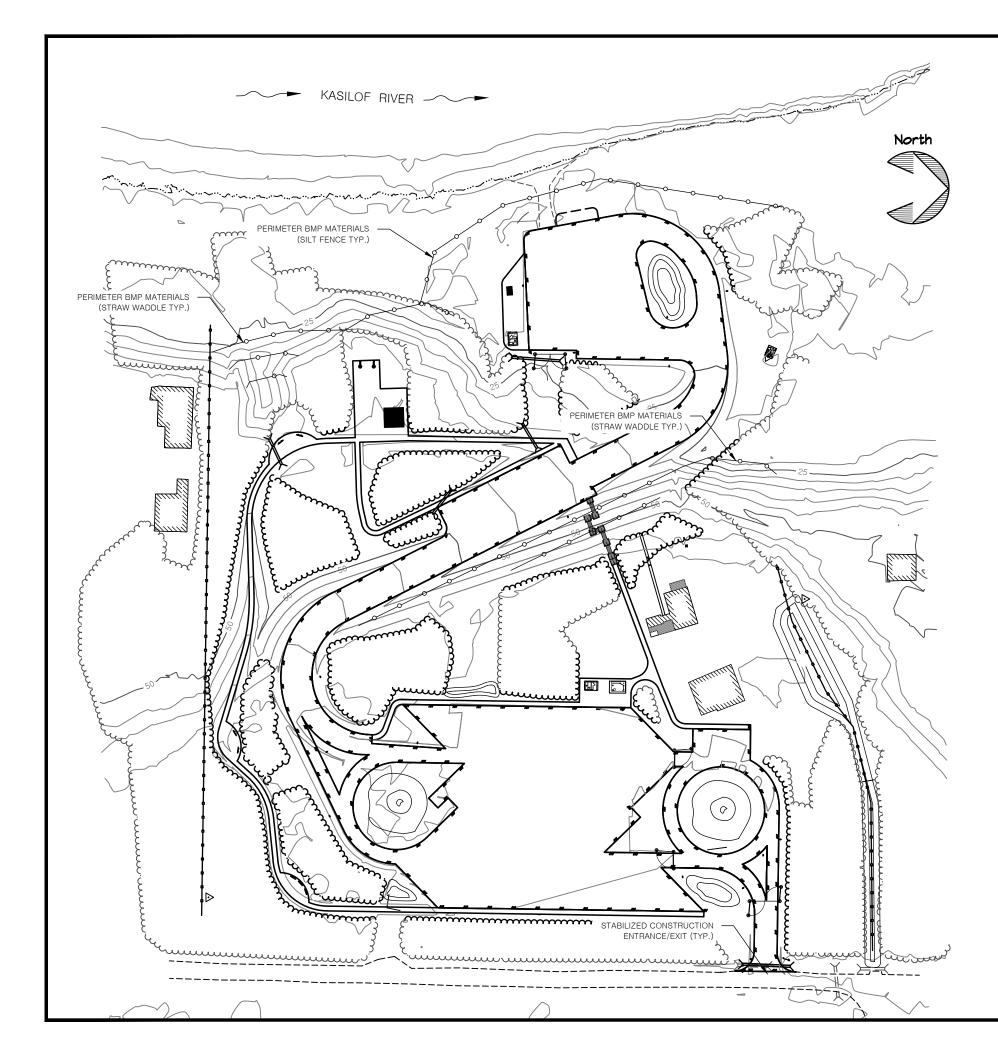
| ATURAL | OUTDOOR | K 99501 - 907.

Z G X

MENT OF OF PARKS AN INCHORAGE,

SHEET

OF 1 SHEETS



SITE DESCRIPTION:

- 1 SITE FUNCTION: PUBLIC USE STATE RECREATIONAL FACILITY
- THIS PROJECT INCLUDES EARTHWORK, CONSTRUCTION OF DRIFT BOAT RETRIEVAL FACILITIES, VEHICLE AND TRAILER PARKING, AND DAY-USE FACILITIES.
- 3. PROJECT AREA: 11.97 ACRES
- 4. PROJECT DISTURBED AREA: 8.10 ACRES
- 5. PERCENT IMPERVIOUS AREA BEFORE CONSTRUCTION: 0.61%
- 6. RUNOFF COEFFICIENT AFTER CONSTRUCTION: 0.25
- 7. PERCENT IMPERVIOUS AREA AFTER CONSTRUCTION: 0.61%
- 8. RUNOFF COEFFICIENT AFTER CONSTRUCTION: 0.38
- 9. MATERIAL SITES: ALL CONSTRUCTION MATERIALS WILL BE OBTAINED FROM CONTRACTOR FURNISHED SITES.
- 10. EXISTING SOILS CONSIST OF SOLDOTNA SILT LOAM, CLUNIE PEAT, AND TYPIC CRYAQUENTS.

- 1. RECEIVING WATER BODIES: KASILOF RIVER
- 2. IMPAIRED WATER BODIES: NONE
- 3. TOTAL MAXIMUM DAILY LOAD (TMDL) WATERS: N/A
- 4. THREATENED AND ENDANGERED SPECIES (ESA): NONE
- 5. HISTORIC IMPACTS: HISTORICAL TRUJILLO PROPERTY
- 6 MIGRATORY BIRD TREATY ACT: CLEARING AND GRUBBING ACTIVITIES BETWEEN MAY 1ST AND JULY 15 MAY INTERFERE WITH MIGRATORY BIRDS. REFER TO THE U.S. FISH AND WILDLIFE SERVICE FOR DETAILS.
- 7. CONTACT THE PROJECT ENGINEER WITH ADDITIONAL QUESTIONS/CONCERNS REGARDING

EROSION AND SEDIMENT CONTROL PLAN (ESCP) NOTES:

- THE ESCP IS A GENERAL PLAN FOR GUIDING THE DEVELOPMENT OF THE CONTRACTOR'S EROSION SEDIMENT CONTROL PLAN (ESCP). THE CONTRACTOR IS EXPECTED TO PROVIDE ADDITIONAL DETAILS AND BEST MANAGEMENT PRACTICES (BMPs) BASED ON THE CONTRACTOR'S ACTUAL SCHEDULE AND CONSTRUCTION METHODS, AND ARE REQUIRED TO COMPLY WITH SECTION 641 OF THE SPECIFICATIONS.
- 2. SEDIMENT CONTROL MEASURES AND TEMPORARY EROSION CONTROL FEATURES SHALL BE BASED ON BMPs AS CONTAINED IN THE DOT&PF'S MANUAL "CONTRACTOR GUIDANCE FOR PREPARING AND EXECUTING STORMWATER POLLUTION PREVENTION PLANS."
- THE CONTRACTOR SHALL PROVIDE INLET AND OUTLET PROTECTION FOR ANY DRAINAGE DITCHES, CULVERTS, AND STORM DRAINS THAT MAY BE IMPACTED BY STORMWATER FROM PROJECT ACTIVITIES
- 4. THE CONTRACTOR SHALL MINIMIZE THE AMOUNT OF DISTURBED AREA OPEN TO EROSION AT ANY ONE TIME.
- EROSION AND SEDIMENT CONTROL BMPs SHALL BE INSTALLED WITHIN 1 DAYS IN AREAS WHERE EARTHWORK DISTURBANCE HAS TEMPORARILY OR PERMANENTLY CEASED.
- ALL DISTURBED GROUND CAPABLE OF SUPPORTING VEGETATION SHALL BE REVEGETATED ACCORDING TO SECTION 621 FOR FINAL STABILIZATION. FINAL STABILIZED AREAS NOT REVEGETATED SHALL BE 100% COVERED BY ROCK, ASPHALT, CONCRETE, OR OTHER PERMANENT NON-ERODABLE MATERIAL
- 7. TEMPORARY PERIMETER CONTROLS SHALL BE INSTALLED FOR ANY FILL PLACED WITHIN 100 FEET OF ORDINARY HIGH WATER.
- TEMPORARY PERIMETER CONTROL BMPs SHALL BE INSTALLED BEFORE ANY UP-GRADIENT SOIL DISTURBANCE OCCURS.
- 9. PROVIDE PERIMETER CONTROLS IN AREAS NOT SHOWN ON THE PLANS AS NEEDED TO PREVENT SEDIMENT FROM LEAVING THE PROJECT AREA.
- 10. RETAIN A VEGETATIVE BUFFER STRIP IN UPLAND AREAS WHEREVER POSSIBLE, VEGETATIVE BUFFER STRIPS MAY BE USED IN LIEU OF SILT FENCE OR OTHER TEMPORARY DEVICES PROVIDED THEY ARE OF SUFFICIENT WIDTH FOR THE CATCHMENT AREA.
- 11. AVOID CONDITIONS WHICH PROMOTE CONCENTRATED FLOWS. INSTALL VELOCITY CONTROL BMPs WHEN CONCENTRATED FLOWS OCCUR.
- 12 SLOPE PROTECTION MAY INCLUDE SLOPE BOUGHENING TACKIEYING EROSION CONTROL BLANKETS, SEEDING, ROCK LINING, OR OTHER METHODS AS APPROVED BY THE PROJECT
- 13. ALL STOCKPILES OF ERODIBLE MATERIALS SHALL HAVE PERIMETER CONTROL IN PLACE. ERODIBLE MATERIALS SHALL NOT BE STOCKPILED WITHIN 100 FEET OF ORDINARY HIGH WATER

APPENDIX D MASTER MATERIAL CERTIFICATION LIST (MCL)

MATERIALS CERTIFICATION LIST

		Construction		Design			Statewide	
	Approved	Project	QA/Materials	Design	Bridge	Traffic	State	Manufacturer/
Specifications	Products	Engineer	Engineer	Engineer	Engineer	Engineer	Materials	Remarks
	List						Engineer	

Project Name: Old Kasilof Landing SR	s	MASTER MA	TERIAL CERTIFIC	CATION LIST			
Project Number: 73032-1							
Project Engineer Signature: DKM							
203 SELECTED MATERIAL, TYPE A							
Selected Material Type A	203.0005.000A						
301 AGGREGATE BASE COURSE, GRA							
Aggregate Base Course, Grading D-1	301.0001.00D1						
401 HOT MIX ASPHALT, TYPE II, CLAS							
Hot Mix Asphalt, Type II, Class B	401.0001.200B						
505 FURNISH 6 INCH STEEL PILE							
Steel Pile	505.0005.0006				1		
Steel Pile	505.0005.0006						
603 24 INCH CSP							
24 Inch CSP Culvert	603.0001.0024						
End Sections for 24 Inch CSP	603.0003.0024						
	000.0000.002						
604 BARRIER FENCE							
Barrier Fence	604.0003.0024						
				<u> </u>		•	
607 DRIVE GATE							
Drive Gate, Single Entrance	607.0005.00SE						
Drive Gate, Double Entrance	607.0005.00DE						
			•	•			
618 SEEDING							
Seeding	618.0002.0000						
620 TOPSOIL, CLASS B							
Topsoil, Class B	620.0001.000B						

		Approved	Project	QA/Materials	Design	Bridge	Traffic	State	Manufacturer/	
	Specifications	Products	Engineer	Engineer	Engineer	Engineer	Engineer	Materials	Remarks	
		List						Engineer		
622 PARK FACILITIES										
Spotting Scope	622.2014.0000									
ELP Walkway & Stairway	622.2015.000A									
Concrete Parking Bumper	622.2016.0000									
Barrier Rock	622.2017.0000									
Large Picnic Shelter	622.2018.0000									
Entrance Sign	622.2019.0000									
Oreintation Kiosk	622.2020.0000									
Interpretive Panel, Type D	622.2021.000E									
Kids Don't Float Kiosk	622.2024.0000									
				-		-	=			
630 GEOTEXTILE										
Geotextile, Separation, Class 3	630.0001.0003									
641 EROSION SEDIMENT AND POLLUTION	ON CONTROL									
Erosion, Sediment and Pollution Control	641.0002.0000									
654 SINGLE VAULTED TOILET										
Single Vaulted Toilet	654.0001.0000									
687 HDPE INNERDUCT INSTALLTION										
1.25-Inch HDPE Innerduct	687.0000.0001									
Junction Box, Type A	687.0000.0001									

Construction

Design

Statewide