Stabler Point Quarry
Overburden Disposal

VOLUME I of I

Contract No. BE21-263

File No. 2127

CITY AND BOROUGH OF JUNEAU

ALASKA'S CAPITAL CITY

ENGINEERING DEPARTMENT

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DIVISION 0 - BIDDING AND CONTRACT REQUIREMENTS, CONTRACT FORMS, AND CONDITIONS OF THE CONTRACT

END OF SECTION

SECTION 00030 NOTICE INVITING BIDS

OBTAINING CONTRACT DOCUMENTS. The Contract Documents are entitled:

Stabler Point Quarry Overburden Disposal
Contract No. BE21-263

The Contract Documents may be downloaded from the CBJ Engineering Department webpage at: www.juneau.org/engineering-public-works

PRE-BID CONFERENCE. Prospective Bidders are encouraged to attend a Pre-Bid conference of the proposed WORK, which will be conducted by the OWNER and ARCHITECT, at 10:00 a.m. on May 18, 2021, via teleconference. The object of the conference is to acquaint Bidders with the bid documents and site conditions. Prospective bidders intending to participate shall email contracts@juneau.org by 4:30 p.m., May 17, 2021, to obtain the call-in instructions

DESCRIPTION OF WORK. The WORK covered in the Contract Documents generally includes excavation from site of overburden materials to bedrock and the haulage and disposal of excavated materials at an approved offsite location. WORK may occur during periods of active mining operations and may be subject to Federal Mine Safety and Health Administration (MSHA) jurisdiction. All bidders are required to present evidence of registration with MSHA in the form of a current Mine ID Number. An MSHA contractor ID is not acceptable. The CONTRACTOR is responsible for ensuring all personnel training, equipment used, and work conducted on the CONTRACTOR's behalf is compliant with all applicable MSHA regulations.

COMPLETION OF WORK. The WORK must be completed by October 15, 2021.

DEADLINE FOR BIDDER QUESTIONS: May 25, 2021

DEADLINE FOR BIDS: Sealed bids must be received by the Purchasing Division **prior to 2:00 p.m., Alaska Time on June 3, 2021** or such later time as may be announced by addendum at any time prior to the deadline. Bids will be time and date stamped by the Purchasing Division, which will establish the official time of receipt of bids. Bids will be opened immediately thereafter in the Assembly Chambers of the Municipal Building, 155 S. Seward Street, unless otherwise specified. Bidders may attend this bid opening on the conference call line 907-713-2140, with participant code 258358.

Bid documents delivered in person or by **courier** service must be delivered to:

PHYSICAL LOCATION:
City and Borough of Juneau, Purchasing Division
105 Municipal Way, Room 300
Juneau, AK 99801

Bid documents delivered by **U.S. Postal Service** must be mailed to:

MAILING ADDRESS:
City and Borough of Juneau, Purchasing Division
155 South Seward Street
Juneau, AK 99801

*** A face covering must be worn in the 105 Municipal Way building per the CBJ Emergency Ordinance No. 2020-45**

Please affix the label below to outer envelope in the lower left hand corner.

IMPORTANT NOTICE TO BIDDER

To submit your Bid:

1. Print your company name and address on the upper left corner of your envelope.
2. **Complete this label and place it on the lower left corner of your envelope.**

S E A L E D

BID NUMBER: BE21-263

SUBJECT: STABLER QUARRY OVERBURDEN DISPOSAL

DEADLINE DATE:

PRIOR TO 2:00PM ALASKA TIME

B I D

Mailing/delivery times to Alaska may take longer than other areas of the U.S. Late bids will not be accepted and will be returned.

SITE OF WORK. The site of the WORK is Stabler Point Quarry. Regular mining may occur during the project by other contractors. Site entrances can be shared by multiple contractors.

BIDDING, CONTRACT, or TECHNICAL QUESTIONS. All communications relative to this WORK, prior to opening Bids, shall be directed to the following:

Greg Smith, Contract Administrator
CBJ Engineering Department, 3rd Floor, Marine View Center
Email: greg.smith@juneau.org
Telephone: (907) 586-0800
Fax: (907) 586-4530

BID SECURITY. Each Bid shall be accompanied by a certified or cashier's check or Bid Bond, in the amount of 5% percent of the Bid, payable to the City and Borough of Juneau, Alaska, as a guarantee that the Bidder, if its Bid is accepted, will promptly execute the Agreement. A Bid shall not be considered unless one of the forms of Bidder's security is enclosed with it.

CONTRACTOR'S LICENSE. All contractors are required to have a current Alaska Contractor's License, prior to submitting a Bid, and a current Alaska Business License prior to award.

BID TO REMAIN OPEN. The Bidder shall guarantee the Bid for a period of 120 Days from the date of Bid opening. Any component of the Bid including additive alternates may be awarded anytime during the 120 Days.

OWNER'S RIGHTS RESERVED. The OWNER reserves the right to reject any or all Bids, to waive any informality in a Bid, and to make award to the lowest responsive, responsible Bidder as it may best serve the interests of the OWNER.

OWNER: City and Borough of Juneau

By: For _____
Greg Smith, Contract Administrator

Date 4/30/2021

END OF SECTION

SECTION 00100 - INSTRUCTIONS TO BIDDERS

1.0 DEFINED TERMS. Terms used in these Instructions to Bidders and the Notice Inviting Bids, which are defined in the General Conditions, have the meanings assigned to them in the General Conditions. The term "Bidder" means one who submits a Bid directly to the OWNER, as distinct from a sub-bidder, who submits a Bid to a Bidder.

2.0 INTERPRETATIONS AND ADDENDA.

A. INTERPRETATIONS. All questions about the meaning or intent of the Contract Documents are to be directed to the Engineering Contracts Administrator. Interpretations or clarifications considered necessary by the Engineering Contracts Administrator in response to such questions will be issued by Addendum, mailed, faxed, or delivered to all parties recorded by the Engineering Contracts Administrator, or OWNER, as having received the Contract Documents. Questions received less than seven Days prior to the Deadline for Bids may not be answered. Only questions answered by formal written Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect.

B. ADDENDA. Addenda may be issued to modify the Contract Documents as deemed advisable by the OWNER. Addenda may be faxed or, if addendum format warrants, addenda may be posted to the CBJ Engineering Department website. In any event, notification of addendum issuance will be faxed to planholders. Hard copies are available upon request. The OWNER will make all reasonable attempts to ensure that all planholders receive notification of Addenda, however, it is strongly recommended by the OWNER that bidders independently confirm the contents, number, and dates of each Addendum prior to submitting a Bid.

3.0 FAIR COMPETITION. More than one Bid from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. If the OWNER believes that any Bidder is interested in more than one Bid for the WORK contemplated, all Bids in which such Bidder is interested will be rejected. If the OWNER believes that collusion exists among the Bidders, all Bids will be rejected.

4.0 RESPONSIBILITY OF BIDDERS. Only responsive Bids from responsible Bidders will be considered. A Bid submitted by a Bidder determined to be not responsible may be rejected. The OWNER may find a bidder to be not responsible for any one of the following reasons, but is not limited in its responsibility analysis to the following factors:

A. Evidence of bid rigging or collusion;

B. Fraud or dishonesty in the performance of previous contracts;

C. Record of integrity;

D. More than one bid for the same work from an individual, firm, or corporation under the same or different name;

E. Unsatisfactory performance on previous or current contracts;

F. Failure to pay, or satisfactorily settle, all bills due for labor and material on previous contracts;

G. Uncompleted work that, in the judgment of the OWNER, might hinder or prevent the bidder's prompt completion of additional work, if awarded;

H. Failure to reimburse the OWNER for monies owed on any previous contracts;

I. Default under previous contracts;

J. Failure to comply with any qualification requirements of the OWNER; special standards for responsibility, if applicable, will be specified. These special standards establish minimum standards or experience required for a responsible Bidder on a specific contract;

K. Engaging in any activity that constitutes a cause for debarment or suspension under the CBJ Procurement Code 53.50 or submitting a bid during a period of debarment;

L. Lack of skill, ability, financial resources, or equipment required to perform the contract.

M. Lack of legal capacity to contract.

N. Bidders must be registered as required by law and in good standing for all amounts owed to the OWNER per Paragraph 21.0 of this Section.

O. Failure to submit all completed documents as required and specified on the Bid Form, Section 00300.

Nothing contained in this section deprives the OWNER of its discretion in determining the lowest responsible bidder. Before a Bid is considered for award, a Bidder may be requested to submit information documenting its ability and competency to perform the WORK, according to general standards of responsibility and any special standards which may apply. It is Bidder's responsibility to submit sufficient, relevant, and adequate information. OWNER will make its determination of responsibility and has no obligation to request clarification or supplementary information.

5.0 NON-RESPONSIVE BIDS. Only responsive Bids will be considered. Bids may be considered non-responsive and may be rejected. Some of the reasons a Bid may be rejected for being non-responsive are:

A. If a Bid is received by the CBJ Purchasing Division after the Deadline for Bids.

B. If the Bid is on a form other than that furnished by the OWNER, or legible copies thereof; or if the form is altered or any part thereof is detached; or if the Bid is improperly signed.

C. If there are unauthorized additions, conditional or alternate Bids, or irregularities of any kind which may tend to make the bid incomplete, indefinite, ambiguous as to its meaning, or in conflict with the OWNER's Bid document.

D. If the Bidder adds any unauthorized conditions, limitations, or provisions reserving the right to accept or reject any award, or to enter into a contract pursuant to an award. This does not exclude a Bid limiting the maximum gross amount of awards acceptable to any one Bidder at any one Bid opening, provided that any selection of awards will be made by the OWNER.

E. If the Bid does not contain a Unit Price for each pay item listed, except in the case of

authorized alternate pay items.

F. If the Bidder has not acknowledged receipt of each Addendum.

G. If the Bidder fails to furnish an acceptable Bid guaranty with the Bid.

H. If any of the Unit Prices Bid are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the OWNER.

I. If a Bid modification does not conform to Article 15.0 of this Section.

J. Failure to submit all completed documents as required and specified on the Bid Form, Section 00300.

6.0 BIDDER'S EXAMINATION OF CONTRACT DOCUMENTS AND SITE. It is the responsibility of each Bidder before submitting a Bid:

A. To examine thoroughly the Contract Documents, and other related data identified in the Bidding documents (including "technical data" referred to below):

1. To visit the site to become familiar with and to satisfy the Bidder as to the general and local conditions that may affect cost, progress, or performance, of the WORK,
2. To consider federal, state and local laws and regulations that may affect cost, progress, or performance of the WORK,
3. To study and carefully correlate the Bidder's observations with the Contract Documents, and other related data; and
4. To notify the ENGINEER of all conflicts, errors, or discrepancies in or between the Contract Documents and such other related data.

7.0 REFERENCE IS MADE TO THE SUPPLEMENTARY GENERAL CONDITIONS FOR IDENTIFICATION OF:

A. Those reports of explorations and tests of subsurface conditions at the site which have been utilized by the Engineer of Record in the preparation of the Contract Documents. The Bidder may rely upon the accuracy of the technical data contained in such reports, however, the interpretation of such technical data, including any interpolation or extrapolation thereof, together with non-technical data, interpretations, and opinions contained therein or the completeness thereof is the responsibility of the Bidder.

B. Those Drawings of physical conditions in or relating to existing surface and subsurface conditions (except underground utilities) which are at or contiguous to the site have been utilized by the Engineer of Record in the preparation of the Contract Documents. The Bidder may rely upon the accuracy of the technical data contained in such Drawings, however, the interpretation of such technical data, including any interpolation or extrapolation thereof, together with nontechnical data, interpretations, and opinions contained in such Drawings or the completeness thereof is the responsibility of the Bidder.

C. Copies of such reports and Drawings will be made available by the OWNER to any Bidder on request if said reports and Drawings are not bound herein. Those reports and Drawings are not part of the Contract Documents, but the technical data contained therein upon

which the Bidder is entitled to rely, as provided in Paragraph SGC-4.2 of the Supplementary General Conditions, are incorporated herein by reference.

D. Information and data reflected in the Contract Documents with respect to underground utilities at or contiguous to the site is based upon information and data furnished to the OWNER and the Engineer of Record by the owners of such underground utilities or others, and the OWNER does not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary General Conditions, or in Section 01530 - Protection and Restoration of Existing Facilities of the General Requirements.

E. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders on subsurface conditions, underground utilities and other physical conditions, and possible changes in the Contract Documents due to differing conditions appear in Paragraphs 4.2, 4.3, and 4.4 of the General Conditions.

F. Before submitting a Bid, each Bidder will, at Bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests, and studies and obtain any additional information and data which pertain to the physical conditions (surface, subsurface, and underground utilities) at or contiguous to the site or otherwise which may affect cost, progress, or performance of the WORK and which the Bidder deems necessary to determine its Bid for performing the WORK in accordance with the time, price, and other terms and conditions of the Contract Documents.

G. On request in advance, the OWNER will provide each Bidder access to the site to conduct such explorations and tests as each Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and shall clean up and restore the site to its former condition upon completion of such explorations.

H. The lands upon which the WORK is to be performed, rights-of-way and easements for access thereto and other lands designated for use by the CONTRACTOR in performing the WORK are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by the CONTRACTOR. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by the OWNER unless otherwise provided in the Contract Documents.

I. The submission of a Bid will constitute an incontrovertible representation by the Bidder that the Bidder has complied with every requirement of Article 6.0, "Bidder's Examination of Contract Documents and Site" herein, that without exception the Bid is premised upon performing the WORK required by the Contract Documents and such means, methods, techniques, sequences, or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the WORK.

8.0 BID FORM.

A. The Bid shall be made on the Bid Schedule(s) bound herein, or on the yellow Bid packet provided, or on legible and complete copies thereof, and shall contain the following: Sections 00300, 00310, the required Bid Security, and any other documents required in

Section 00300 – Bid.

B. All blanks on the Bid Form and Bid Schedule must be completed in ink or typed.

C. Bids by corporations must be executed in the corporate name by the president, a vice-president (or other corporate officer). The corporate address and state of incorporation must appear below the signature.

D. Bids by partnerships must be executed in the partnership name and be signed by a managing partner, and the official address of the partnership must appear below the signature.

E. The Bidder's Bid must be signed. All names must be printed or typed below the signature.

F. The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid form. Failure to acknowledge Addenda may render Bid non-responsive and may cause its rejection.

G. The address to which communications regarding the Bid are to be directed must be shown.

9.0 QUANTITIES OF WORK. The quantities of WORK, or material, stated in Unit Price items of the Bid are supplied only to give an indication of the general scope of the WORK; the OWNER does not expressly or by implication agree that the actual amount of WORK, or material, will correspond therewith, and reserves the right after award to increase or decrease the amount of any Unit Price item of the WORK by an amount up to and including 25 percent of any Bid item, without a change in the Unit Price, and shall include the right to delete any Bid item in its entirety, or to add additional Bid items up to and including an aggregate total amount not to exceed 25 percent of the Contract Price (see Section 00700 - General Conditions, Article 10 Changes In the WORK).

10.0 SUBSTITUTE OR "OR-EQUAL" ITEMS. Substitution requests are not accepted during the bidding process.

11.0 SUBMISSION OF BIDS. The Bid shall be delivered by the time and to the place stipulated in Section 00030 - Notice Inviting Bids. It is the Bidder's sole responsibility to see that its Bid is received in proper time. Oral, telegraphic, emailed, or faxed Bids will not be considered. The envelope enclosing the sealed Bids shall be plainly marked in the upper left-hand corner with the name and address of the Bidder and shall also include the label included in Section 00030 – Notice Inviting Bids. The Bid Security shall be enclosed in the same envelope with the Bid

12.0 BID SECURITY, BONDS, AND INSURANCE. Each Bid shall be accompanied by a certified, or cashier's check, or approved Bid Bond in an amount of at least 5 percent of the total Bid price. The "total Bid price" is the amount of the Base Bid, plus the amount of alternate Bids, if any, which total to the maximum amount for which the CONTRACT could be awarded. Said check or Bond shall be made payable to the OWNER and shall be given as a guarantee that the Bidder, if offered the WORK, will enter into an Agreement with the OWNER, and will furnish the necessary insurance certificates, Payment Bond, and Performance Bond; each of said Bonds, if required, and insurance amounts shall be as stated in the Supplementary General Conditions. In case of refusal or failure to enter into said Agreement, the check or Bid Bond, as the case may be, may be forfeited to the OWNER. If the Bidder elects to furnish a Bid Bond as its Bid security, the Bidder shall use

the Bid Bond form bound herein, or one conforming substantially to it in form. Bid Bonds must be accompanied by a legible Power of Attorney.

13.0 RETURN OF BID SECURITY. The OWNER will return all Bid security checks (certified or cashier's) accompanying such of the Bids as are not considered in making the award. All other Bid securities will be held until the Agreement has been executed. Following execution of the Agreement, all other Bid security checks will be returned to the respective Bidders whose Bids they accompanied and Bid security bonds will be appropriately discarded.

14.0 DISCREPANCIES IN BIDS. In the event there is more than one Pay Item in a Bid Schedule, the Bidder shall furnish a price for all Pay Items in the schedule, and failure to do so may render the Bid non-responsive and cause its rejection. In the event there are Unit Price Pay Items in a Bid Schedule and the "amount" indicated for a Unit Price Bid Item does not equal the product of the Unit Price and quantity, the Unit Price shall govern and the amount will be corrected accordingly, and the Bidder shall be bound by said correction. In the event there is more than one Pay Item in a Bid Schedule and the total indicated for the schedule does not agree with the sum of the prices Bid on the individual items, the prices Bid on the individual items shall govern and the total for the schedule will be corrected accordingly, and the Bidder shall be bound by said correction.

15.0 BID MODIFICATIONS AND UNAUTHORIZED ALTERNATIVE BIDS.

A. Any bidder may deliver a modification to a bid in person, by mail or fax (907-586-4561), provided that such modification is received by the Purchasing Division no later than the deadline for bids. Modifications will be time and date stamped by the Purchasing Division, which will establish the official time of receipt of the modification. The modification must not reveal the bid price but should be in the form of an addition or subtraction or other modification so that the final prices will not be known until the sealed bid is opened.

The Bid modifications shall be provided on the **Bid Modification Form** located at the end of this Section. Submittal of any other form by the vendor may deem the modification unacceptable by the OWNER **A mail or fax modification should not reveal the Bid price but should provide the addition or subtraction or other modification so that the final prices will not be known by the City and Borough until the sealed Bid is opened.** Submitted Modification forms shall include the modification to the unit price or lump sum amount of each pay item modified.

FAX DISCLAIMER: It is the responsibility of the bidder to submit modifications in a timely manner. Bidders' use of a fax machine to modify their bid shall be at bidders' sole risk. The Purchasing Division will attempt to keep the fax machine in good working order but will not be responsible for bid modifications that are late due to mechanical failure, a busy fax machine, or any other cause arising from bidder's use of a fax machine, even if bidder submits a transmission report or provides other confirmation indicating that the bidder transmitted a bid modification prior to the deadline. The City will not be responsible for its failure to receive the modification whether such failure is caused by equipment or human error, or otherwise. Bidders are therefore strongly encouraged to confirm receipt of their bid modification with the Purchasing Division (907-586-5258) prior to deadline.

B. Conditioned bids, limitations, or provisos attached to the Bid or bid modification will render it unauthorized and cause its rejection as being non-responsive. The completed

Bid forms shall be without interlineations, alterations, or erasures in the printed text. All changes shall be initialed by the person signing the Bid. Alternative Bids will not be considered unless called for.

16.0 WITHDRAWAL OF BID. Prior to the Deadline for Bids, the Bid may be withdrawn by the Bidder by means of a written request, signed by the Bidder or its properly authorized representative. Such written request must be delivered to the place stipulated in the Notice Inviting Bids for receipt of Bids.

17.0 AWARD OF CONTRACT.

A. Award of a contract, if it is awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Technical Specifications and will be made to the lowest responsive, responsible Bidder whose Bid complies with all the requirements prescribed. Unless otherwise specified, any such award will be made within the period stated in the Notice Inviting Bids that the Bids are to remain open. Unless otherwise indicated, a single award will be made for all the Bid items in an individual Bid Schedule.

B. If the OWNER has elected to advertise this Project with a Base Bid and Alternates, the OWNER may elect to award the contract for the Base Bid, or the Base Bid in combination with one or more Alternates selected by the OWNER. In either case, award shall be made to the responsive, responsible bidder offering the lowest total Bid for the WORK to be awarded.

C. Low Bidder will be determined on the basis of the lowest total of the Base Bid plus combinations of Alternates in order of priority as listed below within the limits of available funding.

Priority No.

1 Northwest site- additional 0.9 Acres to be stripped estimated 7,500 CY
2 Northeast site- additional 0.9 Acres to be stripped estimated 7,500 CY

18.0 EXECUTION OF AGREEMENT.

A. All Bids of value greater than $1,000,000 must be approved by the CBJ Assembly. After the CBJ Assembly has approved the award and after the Bid protest period, the OWNER will issue a Notice of Intent to Award to the approved Bidder. The Bidder to whom award is made shall execute a written Agreement with the OWNER on the Agreement form, Section 00500, collect insurance, and shall furnish all certificates and Bonds required by the Contract Documents within 10 Days (calendar) from the date of the Notice of Intent to Award letter.

B. Failure or refusal to enter into the Agreement as herein provided or to conform to any of the stipulated requirements in connection therewith shall be just cause for annulment of the award and forfeiture of the Bid security. If the lowest responsive, responsible Bidder refuses or fails to execute the Agreement, the OWNER may award the contract to the second lowest responsive, responsible Bidder. If the second lowest responsive, responsible Bidder refuses or fails to execute the Agreement, the OWNER may award the contract to the third lowest responsive, responsible Bidder. On the failure or refusal of such second or

third lowest Bidder to execute the Agreement, each such Bidder's Bid securities shall be likewise forfeited to the OWNER.

19.0 LIQUIDATED DAMAGES. Provisions for liquidated damages if any, are set forth in Section 00500 - Agreement.

20.0 FILING A PROTEST.

A. A Bidder may protest the proposed award of a competitive sealed Bid by the City and Borough of Juneau. The protest shall be executed in accordance with CBJ Ordinance 53.50.062 PROTESTS and CBJ Ordinance 53.50.080 ADMINISTRATION OF PROTEST. The entire text of the CBJ Purchasing Ordinance can be accessed at the CBJ website, *http://www.juneau.org/law/code/code.php*, or call the CBJ Purchasing Division at (907) 586-5258 for a copy of the ordinance.

B. Late protests shall not be considered by the CBJ Purchasing Officer.

21.0 CONTRACTOR'S GOOD STANDING WITH CBJ FINANCE DEPARTMENT: Contractors must be in good standing with the CBJ prior to award, and prior to any contract renewals, and in any event no later than ***seven business days*** following notification by the CBJ of intent to award. **Good standing** means: all amounts owed to the CBJ are current and the Contractor is not delinquent with respect to any taxes, fees, assessment, or other monies due and owed the CBJ, or a Confession of Judgment has been executed and the Contractor is in compliance with the terms of any stipulation associated with the Confession of Judgment, including being current as to any installment payments due; and Contractor is current in all CBJ reporting obligations (such as sales tax registration and reporting and business personal property declarations). Failure to meet these requirements may be cause for rejection of your bid. To determine if your business is in good standing, or for further information, contact the CBJ Finance Department's Sales Tax Division at (907) 586-5265 for sales tax issues, Assessor's Office at (907)586-0930 for business personal property issues, or Collections Division at (907) 586-5268 for all other accounts.

22.0 PERMITS AND LICENSES. The CONTRACTOR is responsible for all WORK associated with meeting any local, state, and/or federal permit and licensing requirements.

CITY AND BOROUGH OF JUNEAU
PURCHASING DIVISION
FAX NO. 907-586-4561

BID MODIFICATION FORM

Modification Number: _____ Modification Page ____ of ____

Note: All modifications shall be made to the original bid amount(s). If more than one Modification form is submitted by any one bidder, changes from all Modification forms submitted will be combined and applied to the original bid. Changes to the modified Bid amounts will be calculated by the OWNER. Bidder may use multiple modification pages if required.

PAY ITEM NO.	**PAY ITEM DESCRIPTION**	**MODIFICATIONS TO UNIT PRICE (*indicate* +/-)**

Base Bid Total Increase or Decrease: $_____

PAY ITEM No.	**ALTERNATE PAY ITEM DESCRIPTION**	**MODIFICATIONS TO UNIT PRICE (*indicate* +/-)**

Alternate Total Increase or Decrease: $_____

_____
Name of Bidding Firm

_____
Responsible Party Signature

_____
Printed Name (must be an authorized signatory for Bidding Firm)

END OF SECTION

SECTION 00300 - BID

BID TO: THE CITY AND BOROUGH OF JUNEAU

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with the OWNER on the form included in the Contract Documents (as defined in Article 7 of Section 00500 - Agreement) to perform the WORK as specified or indicated in said Contract Documents entitled

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2. Bidder accepts all of the terms and conditions of the Contract Documents, including without limitation those in the "Notice Inviting Bids" and "Instructions to Bidders," dealing with the disposition of the Bid Security.

3. This Bid will remain open for the period stated in the "Notice Inviting Bids" unless otherwise required by law. Bidder will enter into an Agreement within the time and in the manner required in the "Notice Inviting Bids" and the "Instructions to Bidders," and will furnish insurance certificates, Payment Bond, Performance Bond, and any other documents as may be required by the Contract Documents.

4. Bidder has familiarized itself with the nature and extent of the Contract Documents, WORK, site, locality where the WORK is to be performed, the legal requirements (federal, state and local laws, ordinances, rules, and regulations), and the conditions affecting cost, progress or performance of the WORK and has made such independent investigations as Bidder deems necessary.

5. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over OWNER.

6. To all the foregoing, and including all Bid Schedule and information required of Bidder contained in this Bid Form, said Bidder further agrees to complete the WORK required under the Contract Documents within the Contract Time stipulated in said Contract Documents, and to accept in full payment therefore the Contract Price based on the total bid price(s) named in the aforementioned Bid Schedule.

7. Bidder has examined copies of all the Contract Documents including the following Addenda (receipt of all of which is hereby acknowledged by the Undersigned):

Addenda No.	Date Issued	Addenda No.	Date Issued

Give number and date of each Addenda above. Failure to acknowledge receipt of all Addenda may cause the Bid to be non-responsive and may cause its rejection.

8. The Bidder has read this Bid and agrees to the conditions as stated herein by signing its signature in the space provided below.

Dated: _____	Bidder: _____ (Company Name)
Alaska CONTRACTOR's Business License No: _____	By: _____ (Signature)
Alaska CONTRACTOR's License No: _____	Printed Name: _____
Telephone No: _____	Title: _____
Fax No: _____	Address: _____ (Street or P.O. Box)
E-mail: _____	_____ (City, State, Zip)

9. TO BE CONSIDERED, ALL BIDDERS MUST COMPLETE AND INCLUDE THE FOLLOWING AT THE TIME OF THE DEADLINE FOR BIDS. **MISSING DOCUMENTS WILL DEEM THIS BID NON-RESPONSIVE:**

- Bid, Section 00300 (includes Addenda receipt statement)
- Completed Bid Schedule, Section 00310
- Bid Security (Bid Bond, Section 00320, or by a certified or cashier's check as stipulated in the Notice Inviting Bids, Section 00030)
- **Contractor Financial Responsibility, Section 00370**

10. The apparent low Bidder is required to complete and submit the following documents by 4:30 p.m. on the ***fifth business day*** following the date of the Posting Notice.

- Subcontractor Report, Section 00360

The apparent low Bidder who fails to submit the completed Subcontractor Report within the time specified in Section 00360 – Subcontractor Report, may be found to be not a responsible Bidder and may be required to forfeit the Bid security. The OWNER may then consider the next lowest Bidder for award of the contract.

11. The successful Bidder will be required to submit, ***within ten Days (calendar)*** after the date of the "Notice of Intent to Award" letter, the following executed documents:

- Agreement Forms, Section 00500
- Performance Bond, Section 00610
- Payment Bond, Section 00620
- Certificates of Insurance, (CONTRACTOR) Section 00700 and Section 00800

END OF SECTION

SECTION 00310 - BID SCHEDULE

BASE BID

PAY ITEM NO.	PAY ITEM DESCRIPTION	PAY UNIT	APPROX. QUANTITY	UNIT PRICE		AMOUNT	
				DOLLARS	CENTS	DOLLARS	CENTS
1505.1	Mobilization	Lump Sum	All Req'd	Lump	Sum		
1570.1	Erosion and Sediment Control	Lump Sum	All Req'd	Lump	Sum		
2202.1	Mining Area Overburden Excavation and Disposal	CY	17,000				
2202.2	Road Cleaning Guarantee	Contingent Sum	All Req'd	Lump	Sum		

TOTAL BASE BID _____

COMPANY NAME: _____

Additive Alternate No. 1				UNIT PRICE		AMOUNT	
PAY ITEM NO.	PAY ITEM DESCRIPTION	PAY UNIT	APPROX. QUANTITY	DOLLARS	CENTS	DOLLARS	CENTS
2202.1A	Northwest site: Additional 0.9 Acres to be stripped	CY	7,500				

TOTAL ADDITIVE ALTERNATE NO. 1 BID _____

COMPANY NAME: _____

Additive Alternate No. 2				UNIT PRICE		AMOUNT	
PAY ITEM NO.	PAY ITEM DESCRIPTION	PAY UNIT	APPROX. QUANTITY	DOLLARS	CENTS	DOLLARS	CENTS
2202.1B	Northeast site: Additional 0.9 Acres to be stripped	CY	7,500				

TOTAL ADDITIVE ALTERNATE NO. 2 BID _____

COMPANY NAME: _____

SECTION 00320 - BID BOND

KNOW ALL PERSONS BY THESE PRESENTS, that_____

_____ as Principal, and _____

as Surety, are held and firmly bound unto **THE CITY AND BOROUGH OF JUNEAU** hereinafter called "OWNER," in the sum of _____

_____dollars, (not less than five percent of the total amount of the Bid) for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, said Principal has submitted a Bid to said OWNER to perform the WORK required under the Bid Schedule of the OWNER's Contract Documents entitled.

Stabler Point Quarry Overburden Disposal
Contract No. BE21-263

NOW THEREFORE, if said Principal is awarded a contract by said OWNER and, within the time and in the manner required in the "Notice Inviting Bids" and the "Instructions to Bidders" enters into a written Agreement on the form of Agreement bound with said Contract Documents, furnishes the required certificates of insurance, and furnishes the required Performance Bond and Payment Bond, then this obligation shall be null and void, otherwise it shall remain in full force and effect. In the event suit is brought upon this bond by said OWNER and OWNER prevails, said Surety shall pay all costs incurred by said OWNER in such suit, including a reasonable attorney's fee to be fixed by the court.

SIGNED AND SEALED, this _____ day of _____, 20___

(SEAL)_____ (SEAL)_____
(Principal) (Surety)

By:_____ By:_____
(Signature) (Signature)

END OF SECTION

SECTION 00360 - SUBCONTRACTOR REPORT

LIST OF SUBCONTRACTORS (AS 36.30.115)

The apparent low Bidder must submit a list of Subcontractors that the Bidder proposes to use in the performance of this contract ***on the fifth business day*** following the Posting Notice of Bids. If the fifth day falls on a weekend or holiday, the report is due by close of business on the next business Day following the weekend or holiday. The Subcontractor Report list must include each Subcontractor's name, address, location, evidence of valid Alaska Business License, and valid Alaska Contractor's Registration under AS 08.18. ***If no Subcontractors are to be utilized in the performance of the WORK, write in ink or type "NONE" on line (1) below.***

	SUBCONTRACTOR ADDRESS	[1] AK Contractor License No. [2] AK Business License No.	[1] Contact Name [2] Phone No.	Type of Work	Contract Amount	✓ if DBE
1.		[1] [2]			$	☐
2.		[1] [2]			$	☐
3.		[1] [2]			$	☐
4.		[1] [2]			$	☐

I certify that the above listed Alaska Business License(s) and CONTRACTOR Registration(s), if applicable, were valid at the time Bids were opened for this Project.

_____
CONTRACTOR, Authorized Signature

_____
CONTRACTOR, Printed Name

_____
COMPANY

SECTION 00360 - SUBCONTRACTOR REPORT

A. A Bidder may replace a listed Subcontractor if the Subcontractor:

1. fails to comply with AS 08.18;
2. files for bankruptcy or becomes insolvent;
3. fails to execute a contract with the Bidder involving performance of the WORK for which the Subcontractor was listed and the Bidder acted in good faith;
4. fails to obtain bonding;
5. fails to obtain insurance acceptable to the OWNER;
6. fails to perform the contract with the Bidder involving work for which the Subcontractor was listed;
7. must be substituted in order for the CONTRACTOR to satisfy required state and federal affirmative action requirements;
8. refuses to agree or abide with the Bidder's labor agreement; or
9. is determined by the OWNER not to be responsible.
10. is not in "Good Standing" with the OWNER as required in Article 21.0 in Section 00100 – Instructions to Bidders.

B. If a Bidder fails to list a Subcontractor or lists more than one Subcontractor for the same portion of WORK, the Bidder shall be considered to have agreed to perform that portion of WORK without the use of a Subcontractor and to have represented the Bidder to be qualified to perform that WORK.

C. A Bidder who attempts to circumvent the requirements of this section by listing as a Subcontractor another contractor who, in turn, sublets the majority of the WORK required under the contract violates this section.

D. If a contract is awarded to a Bidder who violates this section, the OWNER may:

1. cancel the contract; or
2. after notice and a hearing, assess a penalty on the Bidder in an amount that does not exceed 10 percent of the value of the subcontract at issue.

E. On the Subcontractor Report, the apparent low Bidder must list all Subcontractors anticipated to perform WORK on the project.

F. An apparent low Bidder who fails to submit a completed Subcontractor Report within the time specified in this section may be found to be not a responsible Bidder and may be required to forfeit the Bid security. The OWNER will then consider the next lowest Bidder for award of the contract.

END OF SECTION

SECTION 00370 - CONTRACTOR'S FINANCIAL RESPONSIBILITY

To be considered, all bidders must complete and include this form ***at the time of the deadline for bids***. Attach additional sheets as necessary to respond to questions.

PROJECT: T

As the General Contractor on this project, I intend to subcontract _____% of the total value of this contract.

A. EXPERIENCE

1. Have you ever failed to complete a contract due to insufficient resources?
[ ] No [ ] Yes If YES, explain:

_____
_____
_____
_____

2. Describe arrangements you have made to finance this work:

_____
_____
_____
_____

3. Have you had previous construction contracts or subcontracts with the City and Borough of Juneau?
[ ] Yes [ ] No

4. Describe your most recent or current contract, its completion date, and scope of work:

_____
_____
_____
_____
_____
_____

5. List below, and/or as an attachment to this questionnaire, other construction projects you have completed, dates of completion, scope of work, and total contract amount for each project completed in the past twelve months.

_____
_____
_____
_____
_____

6. Per Alaska Statute 36.90.210, on previously awarded public contracts (including contracts still in progress), have you ever failed to pay a subcontractor **or** material supplier **within eight working days** after receiving payment from the Owner (for projects occurring within the last 3 years)?

[ ] Yes [ ] No If yes, please attach a detailed explanation for **each** occurrence.

B. EQUIPMENT

1. Describe below, and/or as an attachment, the equipment you have available and intend to use for this project.

ITEM	QUANTITY	MAKE	MODEL	SIZE/CAPACITY	PRESENT MARKET VALUE

2. Do you propose to purchase any equipment for use on this project not listed on table B-1?
[ ] No [ ] Yes If YES, describe type, quantity, and approximate cost:

_____
_____
_____
_____

3. Do you propose to rent any equipment for this work not listed on table B-1?
[ ] No [ ] Yes If YES, describe type and quantity:

_____
_____
_____
_____
_____
_____

4. Is your bid based on firm offers for all materials necessary for this project?
[ ] Yes [ ] No If NO, please explain:

_____
_____
_____
_____
_____
_____

I hereby certify that the above statements are true and complete.

_____ _____
Contractor Signature Name and Title of Person Signing

_____ _____
Signature Date

SECTION 00500 - AGREEMENT

THIS AGREEMENT is between THE CITY AND BOROUGH OF JUNEAU (hereinafter called OWNER) and _____ (hereinafter called CONTRACTOR) OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1. WORK.

CONTRACTOR shall complete the WORK as specified or as indicated under the Bid Schedule of the OWNER's Bid Documents entitled **Contract No. BE21-263 STABLER POINT QUARRY OVERBURDEN DISPOSAL.**

The WORK covered in the Contract Documents generally includes excavation from site of overburden materials to bedrock and the haulage and disposal of excavated materials at an approved offsite location. WORK may occur during periods of active mining operations and may be subject to Federal Mine Safety and Health Administration (MSHA) jurisdiction. All bidders are required to present evidence of registration with MSHA in the form of a current Mine ID Number. An MSHA contractor ID is not acceptable. The CONTRACTOR is responsible for ensuring all personnel training, equipment used, and work conducted on the CONTRACTOR's behalf is compliant with all applicable MSHA regulations.

The WORK to be paid under this contract shall include the following: Base Bid and Additive Alternates as shown in Section 00310 - Bid Schedule.

ARTICLE 2. CONTRACT COMPLETION TIME.

The work must be completed by October 15, 2021

ARTICLE 3. DATE OF AGREEMENT

The date of this Agreement will be the date of the last signature on page three of this section.

ARTICLE 4. LIQUIDATED DAMAGES.

OWNER and the CONTRACTOR recognize that time is of the essence of this Agreement and that the OWNER will suffer financial loss if the WORK is not completed within the time specified in Article 2 herein, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense, and difficulties involved in proving in a legal proceeding the actual damages suffered by the OWNER if the WORK is not completed on time. Accordingly, instead of requiring any such proof, the OWNER and the CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) the CONTRACTOR shall pay the OWNER **$ 200** for each Day that expires after the completion time specified in Article 2 herein. The amount of liquidated damages specified above is agreed to be a reasonable estimate based on all facts known as of the date of this Agreement.

ARTICLE 5. CONTRACT PRICE.

OWNER shall pay CONTRACTOR for completion of the WORK in accordance with the Contract Documents in the amount set forth in the Bid Schedule. The CONTRACTOR agrees to accept as full and complete payment for all WORK to be done in this contract for: **Contract No. BE21-263 Stabler Point Quarry Overburden Disposal**, those Unit Price amounts as set forth in the Bid Schedule in the Contract Documents for this Project.

The total amount of this contract shall be _____ ($ _____), except as adjusted in accordance with the provisions of the Bid Documents.

ARTICLE 6. PAYMENT PROCEDURES.

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by the ENGINEER as provided in the General Conditions.

Progress payments will be paid in full in accordance with Article 14 of the General Conditions until ninety (90) percent of the Contract Price has been paid. The remaining ten (10) percent of the Contract Price may be retained, in accordance with applicable Alaska State Statutes, until final inspection, completion, and acceptance of the Project by the OWNER.

ARTICLE 7. CONTRACT DOCUMENTS.

The Contract Documents which comprise the entire Agreement between OWNER and CONTRACTOR concerning the WORK consist of this Agreement (pages 00500-1 to 00500-6, inclusive) and the following sections of the Contract Documents:

- Table of Contents (pages 00005-1 to 00005-2, inclusive)
- Notice Inviting Bids (pages 00030-1 to 00030-2, inclusive).
- Instructions to Bidders (pages 00100-1 to 00100-9, inclusive).
- Bid (pages 00300-1 to 00300-2, inclusive).
- Bid Schedule (pages 00310-1, inclusive).
- Bid Bond (page 00320-1, inclusive) or Bid Security.
- Subcontractor Report (pages 00360-1 to 00360-2, inclusive).
- Contractor Financial Responsibility (pages 00370-1 to 00370-3, inclusive).
- Performance Bond (pages 00610-1 to 00610-2, inclusive).
- Payment Bond (pages 00620-1 to 00620-2, inclusive).
- Insurance Certificate(s).
- General Conditions (pages 00700-1 to 00700-48, inclusive).
- Supplementary General Conditions (pages 00800-1 to 00800-5, inclusive).
- Alaska Labor Standards, Reporting, and Prevailing Wage Determination (page 00830-1).
- Permits, (page 00852-1).
- Special Provisions (pages __1_ to _10_ inclusive)
- Drawings consisting of ____ sheets, as listed in the Table of Contents.
- Addenda numbers _____ to ____, inclusive.
- Change Orders which may be delivered or issued after the Date of the Agreement and which are not attached hereto.

There are no Contract Documents other than those listed in this Article 7. The Contract Documents may only be amended by Change Order as provided in Paragraph 3.3 of the General Conditions.

ARTICLE 8. MISCELLANEOUS.

Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the meanings indicated in the General Conditions.

ARTICLE 8. MISCELLANEOUS. (Cont'd.)

No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation monies that may become due and monies that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents. This Agreement shall be governed by the laws of the State of Alaska. Jurisdiction shall be in the State of Alaska, First Judicial District.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have caused this Agreement to be executed on the date listed below by OWNER.

OWNER:	**CONTRACTOR:**
City and Borough of Juneau	_____ (Company Name)
_____ (Signature)	_____ (Signature)
By: Duncan Rorie Watt, City & Borough Manager (Printed Name)	By: _____ (Printed Name, Authority or Title)
Date: _____	CONTRACTOR Signature Date: _____
OWNER's address for giving notices:	CONTRACTOR's address for giving notices:
155 South Seward Street	_____
Juneau, Alaska 99801	_____
907-586-0800 907-586-4530 (Telephone) (Fax)	_____ (Telephone) (Fax)
	_____ (E-mail address)
	Contractor License No. _____

CERTIFICATE
(if Corporation)

STATE OF)
) SS:
COUNTY OF)

I HEREBY CERTIFY that a meeting of the Board of Directors of the

_____a corporation existing under the laws of

the State of_____, held on _____, 20____, the following resolution was duly passed and adopted:

"RESOLVED, that _____, as _____ President of the Corporation, be and is hereby authorized to **execute the Agreement** with the CITY AND BOROUGH OF JUNEAU and this corporation and that the execution thereof, attested by the Secretary of the Corporation, and with the Corporate Seal affixed, shall be the official act and deed of this Corporation."

I further certify that said resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the

corporation this _____ day of _____, 20____.

_____
Secretary

(SEAL)

CERTIFICATE
(if Partnership)

STATE OF)
) SS:
COUNTY OF)

I HEREBY CERTIFY that a meeting of the Partners of the

_____ a partnership existing under the laws of the State

of _____, held on _____, 20___, the following resolution was duly passed and adopted:

"RESOLVED, that _____, as _____ of the Partnership, be and is hereby authorized to **execute the Agreement** with the CITY AND BOROUGH OF JUNEAU and this partnership and that the execution thereof, attested by the _____shall be the official act and deed of this Partnership."

I further certify that said resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this _____, day of _____, 20_____.

_____
Secretary

(SEAL)

CERTIFICATE
(if Joint Venture)

STATE OF)
) SS:
COUNTY OF)

I HEREBY CERTIFY that a meeting of the Principals of the

_____ a joint venture existing under the laws of the

State of _____, held on _____, 20___, the following resolution was duly passed and adopted:

"RESOLVED, that _____, as _____ of the Joint Venture, be and is hereby authorized to **execute the Agreement** with the CITY AND BOROUGH OF JUNEAU and this joint venture and that the execution thereof, attested by the _____ shall be the official act and deed of this Joint Venture."

I further certify that said resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this _____, day of _____, 20___.

_____
Secretary

(SEAL)

END OF SECTION

SECTION 00610 - PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS: That we _____
(Name of Contractor)
_____ a _____
(Corporation, Partnership, Individual)

hereinafter called "Principal" and _____
(Surety)
of _____, State of _____hereinafter called the "Surety," are held and firmly bound to the CITY AND BOROUGH of JUNEAU, ALASKA hereinafter called "OWNER,"
(Owner) (City and State)
for the penal sum of _____

_____dollars ($_____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the CONTRACTOR has entered into a certain contract with the OWNER, the effective date of which is (CBJ Contracts Office to fill in effective date) _____, a copy of which is hereto attached and made a part hereof for the construction of:

Stabler Point Quarry Overburden Disposal
CBJ Contract No. BE21-263

NOW, THEREFORE, if the Principal shall truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof, which may be granted by the OWNER, with or without notice to the Surety, and if it shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the Specifications.

PROVIDED, FURTHER, that no final settlement between the OWNER and the Principal shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

SECTION 00610 - PERFORMANCE BOND

Stabler Point Quarry Overburden Disposal
CBJ Contract No. BE21-263

IN WITNESS WHEREOF, this instrument is issued in two (2) identical counterparts, each one of which shall be deemed an original.

CONTRACTOR:

By:_____
(Signature)

_____
(Printed Name)

_____
(Company Name)

_____
(Mailing Address)

_____
(City, State, Zip Code)

SURETY:

By: _____ Date Issued:_____
(Signature of Attorney-in-Fact)

_____
(Printed Name)

_____
(Company Name)

_____
(Mailing Address)

_____
(City, State, Zip Code)

(Affix SURETY'S SEAL)

NOTE: If CONTRACTOR is Partnership, all Partners must execute bond.

END OF SECTION

SECTION 00620 - PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS: That we _____
(Name of Contractor)

_____ a _____
(Corporation, Partnership, Individual)

hereinafter called "Principal" and _____
(Surety)

of _____, State of _____hereinafter called the "Surety," are held and firmly bound to the CITY AND BOROUGH of JUNEAU, ALASKA hereinafter called "OWNER,"
(Owner) (City and State)

for the penal sum of _____

_____dollars ($_____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the CONTRACTOR has entered into a certain contract with the OWNER, the effective date of which is (CBJ Contracts Office to fill in effective date) _____, a copy of which is hereto attached and made a part hereof for the construction of:

Stabler Point Quarry Overburden Disposal
CBJ Contract No. BE21-263

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, Subcontractors, and corporations furnishing materials for, or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said work, and for all labor performed in such WORK, whether by Subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the Specifications.

PROVIDED, FURTHER, that no final settlement between the OWNER and the Principal shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

Stabler Point Quarry Overburden Disposal
CBJ Contract No. BE21-263

IN WITNESS WHEREOF, this instrument is issued in two (2) identical counterparts, each one of which shall be deemed an original.

CONTRACTOR:

By:_____
(Signature)

_____
(Printed Name)

_____
(Company Name)

_____
(Mailing Address)

_____
(City, State, Zip Code)

SURETY:

By: _____ Date Issued:_____
(Signature of Attorney-in-Fact)

_____
(Printed Name)

_____
(Company Name)

_____
(Mailing Address)

_____
(City, State, Zip Code)

(Affix SURETY'S SEAL)

NOTE: If CONTRACTOR is Partnership, <u>all</u> Partners must execute bond.

END OF SECTION

SECTION 00700 - GENERAL CONDITIONS

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(Revised 03-2003)

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ARTICLE 16 MISCELLANEOUS

ARTICLE 1 DEFINITIONS

Wherever used in these General Conditions or in the Contract Documents the following terms have the meanings indicated which are applicable to both the singular and plural thereof. Where an entire word is capitalized in the definitions and is found not capitalized in the Contract Documents it has the ordinary dictionary definition.

Addenda - Written or graphic instruments issued prior to the opening of Bids which make additions, deletions, or revisions to the Contract Documents.

Agreement - The written contract between the OWNER and the CONTRACTOR covering the WORK to be performed; other documents are attached to the Agreement and made a part thereof as provided therein.

Application for Payment - The form furnished by the ENGINEER which is to be used by the CONTRACTOR to request progress or final payment and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

Asbestos - Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

Bid - The offer or proposal of the Bidder submitted on the prescribed form setting forth the price or prices for the WORK.

Bonds - Bid, Performance, and Payment Bonds and other instruments which protect against loss due to inability or refusal of the CONTRACTOR to perform its contract.

CBJ Project Manager - The authorized representative of the City and Borough of Juneau Engineering Department, as OWNER, who is responsible for administration of the contract.

Change Order - A document recommended by the ENGINEER, which is signed by the CONTRACTOR and the OWNER and authorizes an addition, deletion, or revision in the WORK, or an adjustment in the Contract Price or the Contract Time, issued on or after the Effective Date of the Agreement.

Contract Documents - The Table of Contents, Notice Inviting Bids, Instructions to Bidders, Bid Forms (including the Bid, Bid Schedule(s), Information Required of Bidder, Bid Bond, and all required certificates and affidavits), Agreement, Performance Bond, Payment Bond, General Conditions, Supplementary General Conditions, Technical Specifications, Drawings, Permits, and all Addenda, and Change Orders executed pursuant to the provisions of the Contract Documents.

Contract Price - The total monies payable by the OWNER to the CONTRACTOR under the terms and conditions of the Contract Documents.

Contract Time - The number of successive calendar Days stated in the Contract Documents for the completion of the WORK.

CONTRACTOR - The individual, partnership, corporation, joint-venture or other legal entity with whom the OWNER has executed the Agreement.

Day - A calendar day of 24 hours measured from midnight to the next midnight.

Defective WORK - WORK that is unsatisfactory, faulty, or deficient; or that does not conform to the Contract Documents; or that does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents; or WORK that has been damaged prior to the ENGINEER's recommendation of final payment.

Drawings - The Drawings, plans, maps, profiles, diagrams, and other graphic representations which indicate the character, location, nature, extent, and scope of the WORK and which have been prepared by the ENGINEER and are referred to in the Contract Documents. Shop Drawings are not within the meaning of this paragraph.

Effective Date of the Agreement - The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

Engineer of Record - The individual, partnership, corporation, joint-venture or other legal entity named as such in the Contract Documents.

ENGINEER - The ENGINEER is the firm or person(s) selected by the City and Borough of Juneau (CBJ) to perform the duties of project inspection and management. CBJ will inform the CONTRACTOR of the identity of the ENGINEER at or before the Notice to Proceed.

Field Order - A written order issued by the ENGINEER which may or may not involve a change in the WORK.

General Requirements - Division 1 of the Technical Specifications.

Hazardous Waste - The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 9603) as amended from time to time.

Holidays - The CBJ legal holidays occur on:

1. New Year's Day - January 1
2. Martin Luther King's Birthday - Third Monday in January
3. President's Day - Third Monday in February
4. Seward's Day - Last Monday in March
5. Memorial Day - Last Monday in May
6. Independence Day - July 4
7. Labor Day - First Monday in September
8. Alaska Day - October 18
9. Veteran's Day - November 11
10. Thanksgiving Day - Fourth Thursday and the following Friday in November
11. Christmas Day – December 25

If any holiday listed above falls on a Saturday, Saturday and the preceding Friday are both legal holidays. If the holiday should fall on a Sunday, Sunday and the following Monday are both legal holidays.

Inspector - The authorized representative of the ENGINEER assigned to make detailed inspections for conformance to the Contract Documents. Any reference to the Resident Project Representative in this document shall mean the Inspector.

Laws and Regulations; Laws or Regulations - Any and all applicable laws, rules, regulations, ordinances, codes, and/or orders of any and all governmental bodies, agencies, authorities and courts having jurisdiction.

Mechanic's Lien - A form of security, an interest in real property, which is held to secure the payment of an obligation. When referred to in these Contract Documents, "Mechanic's Lien" or "lien" means "Stop Notice".

Milestone - A principal event specified in the Contract Documents relating to an intermediate completion date of a portion of the WORK, or a period of time within which the portion of the WORK should be performed prior to Substantial Completion of all the WORK.

Notice of Award - The written notice by the OWNER to the apparent successful bidder stating that the apparent successful bidder has complied with all conditions for award of the contract.

Notice of Completion - A form signed by the ENGINEER and the CONTRACTOR recommending to the OWNER that the WORK is Substantially Complete and fixing the date of Substantial Completion. After acceptance of the WORK by the OWNER's governing body, the form is signed by the OWNER and filed with the County Recorder. This filing starts the 30-day lien filing period on the WORK.

Notice to Proceed - The written notice issued by the OWNER to the CONTRACTOR authorizing the CONTRACTOR to proceed with the WORK and establishing the date of commencement of the Contract Time.

Notice of Intent to Award - The written notice by the OWNER to the apparent successful bidder stating that upon compliance by the apparent successful bidder with the requirements listed therein, within the time specified, the OWNER will enter into an Agreement.

OWNER - The City and Borough of Juneau (CBJ), acting through its legally designated officials, officers, or employees.

Partial Utilization - Use by the OWNER or a substantially completed part of the WORK for the purpose for which it is intended prior to Substantial Completion of all the WORK.

PCB's - Polychlorinated biphenyls.

PERMITTEE – See definition for CONTRACTOR.

Petroleum - Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Wastes and crude oils.

Project - The total construction of which the WORK to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

Radioactive Material - Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

Shop Drawings - All Drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for the CONTRACTOR and submitted by the CONTRACTOR, to the ENGINEER, to illustrate some portion of WORK.

Specifications - Same definition as "Technical Specifications" hereinafter.

Stop Notice - A legal remedy for Subcontractors and suppliers who contribute to public works, but who are not paid for their WORK, which secures payment from construction funds possessed by the OWNER. For public property, the Stop Notice remedy is designed to substitute for mechanic's lien rights.

Sub-Consultant - The individual, partnership, corporation, joint-venture or other legal entity having a direct contract with ENGINEER, or with any of its Consultants to furnish services with respect to the Project.

Subcontractor - An individual, partnership, corporation, joint-venture or other legal entity having a direct contract with the CONTRACTOR, or with any of its Subcontractors, for the performance of a part of the WORK at the site.

Substantial Completion - Refers to when the WORK has progressed to the point where, in the opinion of the ENGINEER as evidenced by Notice of Completion as applicable, it is sufficiently complete, in accordance with the Contract Documents, so that the WORK can be utilized for the purposes for which it is intended; or if no such notice is issued, when final payment is due in accordance with Paragraph 14.8. The terms "substantially complete" and "substantially completed" as applied to any WORK refer to substantial completion thereof.

Supplementary General Conditions (SGC) - The part of the Contract Documents which make additions, deletions, or revisions to these General Conditions.

Supplier - A manufacturer, fabricator, supplier, distributor, materialman, or vendor.

Technical Specifications - Divisions 1 through 16 of the Contract Documents consisting of the General Requirements and written technical descriptions of products and execution of the WORK.

Underground Utilities - All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: water, sewage and drainage removal, electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, traffic, or other control systems.

WORK, Work - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. WORK is the result of performing, or furnishing labor and furnishing and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by the Contract Documents.

ARTICLE 2 PRELIMINARY MATTERS

2.1 DELIVERY OF BONDS/INSURANCE CERTIFICATES. When the CONTRACTOR delivers the signed Agreements to the OWNER, the CONTRACTOR shall also deliver to the OWNER such Bonds and Insurance Policies and Certificates as the CONTRACTOR may be required to furnish in accordance with the Contract Documents.

2.2 COPIES OF DOCUMENTS. The OWNER shall furnish to the CONTRACTOR the required number of copies of the Contract Documents specified in the Supplementary General Conditions.

2.3 COMMENCEMENT OF CONTRACT TIME; NOTICE TO PROCEED. The Contract Time will start to run on the commencement date stated in the Notice to Proceed.

2.4 STARTING THE WORK

A. The CONTRACTOR shall begin to perform the WORK within 10 days after the commencement date stated in the Notice to Proceed, but no WORK shall be done at the site prior to said commencement date.

B. Before undertaking each part of the WORK, the CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. The CONTRACTOR shall promptly report in writing to the ENGINEER any conflict, error, or discrepancy which the CONTRACTOR may discover and shall obtain a written interpretation or clarification from the ENGINEER before proceeding with any WORK affected thereby.

C. The CONTRACTOR shall submit to the ENGINEER for review those documents called for under Section 01300 - CONTRACTOR Submittals in the General Requirements.

2.5 PRE-CONSTRUCTION CONFERENCE. The CONTRACTOR is required to attend a Pre-Construction Conference. This conference will be attended by the ENGINEER and others as appropriate in order to discuss the WORK in accordance with the applicable procedures specified in the General Requirements, Section 01010 - Summary of WORK in the General Requirements.

2.6 FINALIZING CONTRACTOR SUBMITTALS. At least 7 days before submittal of the first Application for Payment a conference attended by the CONTRACTOR, the ENGINEER and others as appropriate will be held to finalize the initial CONTRACTOR submittals in accordance with the General Requirements. As a minimum the CONTRACTOR's representatives should include the project manager and schedule expert. The CONTRACTOR should plan on this meeting taking no less than 8 hours. If the submittals are not finalized at the end of the meeting, additional meetings will be held so that the submittals can be finalized prior to the submittal of the first application for payment. No application for payment will be processed until CONTRACTOR submittals are finalized.

ARTICLE 3 CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.1 INTENT

A. The Contract Documents comprise the entire Agreement between the OWNER and the CONTRACTOR concerning the WORK. The Contract Documents shall be construed as a whole in accordance with Alaska Law.

B. It is the intent of the Contract Documents to describe the WORK, functionally complete, to be constructed in accordance with the Contract Documents. Any work, materials, or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result shall be supplied whether or not specifically called for. When words or phrases which have a well-known technical or construction industry or trade meaning are used to describe work, materials, or equipment such words or phrases shall be interpreted in accordance with that meaning, unless a definition has been provided in Article 1 of the General Conditions. Reference to standard specifications, manuals, or codes of any technical society, organization, or association, or to the Laws or Regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual, or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of the OWNER, the CONTRACTOR, or the ENGINEER or any of their consultants, agents, or employees from those set forth in the Contract Documents.

C. If, during the performance of the WORK, CONTRACTOR discovers any conflict, error, ambiguity or discrepancy within the Contract Documents or between the Contract Documents and any provision of any such Law or Regulation applicable to the performance of the WORK or of any such standard, specification, manual or code or of any instruction of any Supplier referred to in paragraph 6.5, the CONTRACTOR shall report it to the ENGINEER in writing at once, and the CONTRACTOR shall not proceed with the WORK affected thereby (except in an emergency as authorized by the ENGINEER) until a clarification field order, or Change Order to the Contract Documents has been issued.

3.2 ORDER OF PRECEDENCE OF CONTRACT DOCUMENTS

A. In resolving conflicts resulting from, errors, or discrepancies in any of the Contract Documents, the order of precedence shall be as follows:

1. Permits from other agencies as may be required by law, excepting the definition of “PERMITEE” in these permits.
2. Field Orders
3. Change Orders
4. ENGINEER’s written interpretations and clarifications.
5. Agreement
6. Addenda
7. CONTRACTOR's Bid (Bid Form)
8. Supplementary General Conditions
9. Notice Inviting Bids

10. Instructions to Bidders
11. General Conditions
12. Technical Specifications
13. Drawings

B. With reference to the Drawings the order of precedence is as follows:

1. Figures govern over scaled dimensions
2. Detail Drawings govern over general Drawings
3. Addenda/ Change Order drawings govern over Contract Drawings
4. Contract Drawings govern over standard drawings

3.3 AMENDING AND SUPPLEMENTING CONTRACT DOCUMENTS. The Contract Documents may be amended to provide for additions, deletions, and revisions in the WORK or to modify the terms and conditions thereof by a Change Order (pursuant to Article 10 CHANGES IN THE WORK).

3.4 REUSE OF DOCUMENTS. Neither the CONTRACTOR, nor any Subcontractor or Supplier, nor any other person or organization performing any of the WORK under a contract with the OWNER shall have or acquire any title to or ownership rights in any of the Drawings, Technical Specifications, or other documents used on the WORK, and they shall not reuse any of them on the extensions of the Project or any other project without written consent of the OWNER.

ARTICLE 4 AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS

4.1 AVAILABILITY OF LANDS. The OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the WORK is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of the CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by the OWNER, unless otherwise provided in the Contract Documents. Nothing contained in the Contract Documents shall be interpreted as giving the CONTRACTOR exclusive occupancy of the lands or rights-of-way provided. The CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment; provided, that the CONTRACTOR shall not enter upon nor use any property not under the control of the OWNER until a written temporary construction easement, lease or other appropriate agreement has been executed by the CONTRACTOR and the property owner, and a copy of said agreement furnished to the ENGINEER prior to said use; and, neither the OWNER nor the ENGINEER shall be liable for any claims or damages resulting from the CONTRACTOR's unauthorized trespass or use of any such properties.

4.2 PHYSICAL CONDITIONS - SUBSURFACE AND EXISTING STRUCTURES

A. Explorations and Reports. Reference is made to SGC 4.2 Physical Conditions of the Supplementary General Conditions for identification of those reports of explorations and tests of sub-surface conditions at the site that have been utilized by the ENGINEER in the preparation of the Contract Documents. The CONTRACTOR may rely upon the accuracy of the technical data contained in such reports, however, reports are not to be considered complete or comprehensive and nontechnical data, interpretations, and opinions contained in such reports are not to be relied on by the CONTRACTOR. The CONTRACTOR is

responsible for any further explorations or tests that may be necessary and any interpretation, interpolation, or extrapolation that it makes of any information shown in such reports.

B. Existing Structures. Reference is made to SGC 4.2 Physical Conditions of the Supplementary General Conditions for identification of those drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Utilities referred to in Paragraph 4.4 herein) which are at or contiguous to the site that have been utilized by the ENGINEER in the preparation of the Contract Documents. The CONTRACTOR may rely upon the accuracy of the technical data contained in such drawings, however, nontechnical data, interpretations, and opinions contained in such drawings are not to be relied on by the CONTRACTOR. The CONTRACTOR is also responsible for any interpretation, interpolation, or extrapolation that it makes of any information shown in such drawings.

4.3 DIFFERING SITE CONDITIONS

A. The CONTRACTOR shall promptly upon discovery (but in no event later than 14 days thereafter) and before the following conditions are disturbed, notify the ENGINEER, in writing of any:

1. Material that the CONTRACTOR believes may be material that is hazardous waste, as defined in Article 1 of these General Conditions, or asbestos, PCB's, petroleum or any other substance or material posing a threat to human or to the environment.
2. Subsurface or latent physical conditions at the site differing from those indicated.
3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the contract.

B. The OWNER shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the CONTRACTOR's cost of, or the time required for, performance of any part of the WORK shall issue a Change Order under the procedures described in the contract.

C. In the event that a dispute arises between the OWNER and the CONTRACTOR whether the conditions materially differ, or involved hazardous waste or other materials listed above, or cause a decrease or increase in the CONTRACTOR's cost of, or time required for, performance of any part of the WORK, the CONTRACTOR shall not be excused from any scheduled completion date provided for by the contract, but shall proceed with all WORK to be performed under the contract. The CONTRACTOR shall retain any and all rights provided either by contract or by Law which pertain to the resolution of disputes and protests between the contracting parties.

4.4 PHYSICAL CONDITIONS - UNDERGROUND UTILITIES

A. Indicated. The information and data indicated in the Contract Documents with respect to existing Underground Utilities at or contiguous to the site are based on information and data furnished to the OWNER or the ENGINEER by the owners of such Underground Utilities or by others. Unless it is expressly provided in the Supplementary General Conditions and/or Section 01530 - Protection and Restoration of Existing Facilities of the General Requirements, the OWNER and the ENGINEER shall not be responsible for the accuracy or

completeness of any such information or data, and the CONTRACTOR shall have full responsibility for reviewing and checking all such information and data, for locating all Underground Utilities indicated in the Contract Documents, for coordination of the WORK with the owners of such Underground Utilities during construction, for the safety and protection thereof and repairing any damage thereto resulting from the WORK, the cost of which will be considered as having been included in the Contract Price.

B. Not Indicated. If an Underground Utility is uncovered or revealed at or contiguous to the site which was not indicated in the Contract Documents and which the CONTRACTOR could not reasonably have been expected to be aware of, the CONTRACTOR shall identify the owner of such Underground Utility and give written notice thereof to that owner and shall notify the ENGINEER in accordance with the requirements of the Supplementary General Conditions and Section 01530 - Protection and Restoration of Existing Facilities of the General Requirements.

4.5 REFERENCE POINTS

A. The ENGINEER will provide one bench mark, near or on the site of the WORK, and will provide two points near or on the site to establish a base line for use by the CONTRACTOR for alignment control. Unless otherwise specified in the General Requirements, the CONTRACTOR shall furnish all other lines, grades, and bench marks required for proper execution of the WORK.

B. The CONTRACTOR shall preserve all bench marks, stakes, and other survey marks, and in case of their removal or destruction by its own employees or by its Subcontractor's employees, the CONTRACTOR shall be responsible for the accurate replacement of such reference points by personnel qualified under the Alaska Statute governing the licensing of Architects, Engineers, and Land Surveyors.

4.6 USE OF THE CBJ/STATE LEMON CREEK GRAVEL PIT

A. On City and Borough of Juneau (CBJ) construction projects, the CBJ may make unclassified material available to CONTRACTORs, from the CBJ/State Lemon Creek gravel pit, at a rate less than charged other customers. CONTRACTORs are not required to use material from the CBJ/State pit and the CBJ makes no guarantee as to the quantity or quality of the available material. For this Project, contact Michael Eich, CBJ Material Source Manager, at (907) 586-0874 for the current material rates.

B. CONTRACTORs proposing to use gravel from the CBJ/State pit are required to be in good standing for all amounts owed to the CBJ, for previous gravel operations, prior to submitting a mining plan for approval. CONTRACTORs using the pit must comply with Allowable Use Permit USE 2008-00061. Failure to meet these requirements, if so subject, shall be sufficient reason to deny use of the CBJ/State pit as a gravel source. To determine if your company is subject to these requirements, contact the CBJ Engineering Department, Gravel Pit Management, at (907) 586-0874.

C. CONTRACTORs deciding to use material from the CBJ/State pit shall provide an Individual Mining Plan prepared by a professional engineer registered in the State of Alaska. The Individual Mining Plan must be reviewed and approved by the CBJ, prior to commencing

operations within the pit. CONTRACTORs shall also secure a Performance Bond to ensure compliance with contract provisions, including any Individual Mining Plan stipulations. The bond shall remain in full force and effect until a release is obtained from the CBJ.

D. If CONTRACTOR operations for a project do not exceed 500 tons of material, the CONTRACTOR will not be required to provide an Individual Mining Plan prepared by an engineer. However, the CONTRACTOR must submit an Individual Mining Plan that is in compliance with Allowable Use Permit USE 2008-00061 for gravel extraction within the CBJ/State pit. The CONTRACTOR must contact the CBJ Engineering Department for conditions for the extraction.

E. CONTRACTORs using the CBJ material may do primary dry separation (screening) of materials within the pit. Crushing and washing of material will not be allowed. CONTRACTORs shall account for placement of materials removed from the pit. The CBJ may require CONTRACTORs to cross-check weight tickets, submit to an audit, or participate in other measures required by the CBJ to ensure accountability. Unprocessed overburden removed from the pit will not be weighed. All other material mined will be weighed at the CBJ scale. CONTRACTORs will be responsible for loading and/or screening their own material. If asphalt pavement is removed as part of the WORK, CONTRACTORs shall dispose of the material at a to-be-specified location within the pit area, as directed by the CBJ Project Manager.

F. The gravel pit overhead charge shall be paid to the CBJ by the CONTRACTOR within 60 days after removal of all materials from the pit and prior to requesting and/or receiving final payment. Upon completion of each excavation CONTRACTORs shall notify the CBJ, in writing, in sufficient time to perform a field-compliance examination prior to vacating the pit. Any significant deviation from the stipulations of the Individual Mining Plan identified during the field inspection shall be corrected by the CONTRACTOR prior to release of the bond. A signed release from CBJ will be required prior to releasing the CONTRACTOR's bond.

G. If asphalt pavement is removed as part of this WORK, the CONTRACTOR shall dispose of the material at the location designated as the Asphalt Storage Facility, or as directed by the ENGINEER.

H. The CBJ/State pit is a seasonal operation. The hours of operation are from 7:00 a.m. to 6:00 p.m., Monday through Friday, from April 1 through October 15 of the year. CONTRACTORS may obtain gravel on weekends, or during the off-season, by applying for a separate agreement with the City and Borough of Juneau Engineering Department. The CONTRACTOR will be responsible for any additional costs incurred during weekend or off-season operations at the gravel pit.

I. All Contractors/Equipment Operators using the CBJ/State Pit shall be in compliance with Federal Mine Safety and Health Administration regulations for quarry and gravel operations.

ARTICLE 5 BONDS AND INSURANCE

5.1 PERFORMANCE, PAYMENT, AND OTHER BONDS

A. The CONTRACTOR shall furnish, when required, Performance and Payment Bonds on forms provided by the CBJ for the penal sums of 100% of the amount of the Bid award. The surety on each bond may be any corporation or partnership authorized to do business in the State of Alaska as an insurer under AS 21.09. These bonds shall remain in effect for 12 months after the date of final payment and until all obligations and liens under this contract have been satisfied. The CONTRACTOR shall also furnish such other Bonds as are required by the Supplementary General Conditions. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff, Bureau of Government Financial Operations, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.

B. If the surety on any Bond furnished by the CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the WORK is located, the CONTRACTOR shall within 7 days thereafter substitute another Bond and Surety, which must be acceptable to the OWNER.

C. All Bonds required by the Contract Documents to be purchased and maintained by CONTRACTOR shall be obtained from surety companies that are duly licensed or authorized in the State of Alaska to issue Bonds for the limits so required. Such surety companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary General Conditions. The City Engineer may, on behalf of the OWNER, notify the surety of any potential default or liability.

5.2 INSURANCE

A. The CONTRACTOR shall purchase and maintain the insurance required under this paragraph. Such insurance shall include the specific coverages set out herein and be written for not less than the limits of liability and coverages provided in the Supplementary General Conditions, or required by law, whichever are greater. All insurance shall be maintained continuously during the life of the Agreement up to the date of Final Completion and at all times thereafter when the CONTRACTOR may be correcting, removing, or replacing Defective WORK in accordance with Paragraph 13.6, but the CONTRACTOR's liabilities under this Agreement shall not be deemed limited in any way to the insurance coverage required.

B. All insurance required by the Contract Documents to be purchased and maintained by the CONTRACTOR shall be obtained from insurance companies that are duly licensed or authorized in the State of Alaska to issue insurance policies for the limits and coverages so required. Such insurance companies shall have a current Best's Rating of at least an "A" (Excellent) general policy holder's rating and a Class VII financial size category and shall also meet such additional requirements and qualifications as may be provided in the Supplementary General Conditions.

C. The CONTRACTOR shall furnish the OWNER with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of policies. All of the policies of insurance so required to be purchased and maintained (or the certificates or other

evidence thereof) shall contain a provision or endorsement that the coverage afforded will not be cancelled, reduced in coverage, or renewal refused until at least 30 days' prior written notice has been given to the OWNER by certified mail. All such insurance required herein (except for Workers' Compensation and Employer's Liability) shall name the OWNER, its Consultants and subconsultants and their officers, directors, agents, and employees as "additional insureds" under the policies. The CONTRACTOR shall purchase and maintain the following insurance:

1. Workers' Compensation and Employer's Liability. This insurance shall protect the CONTRACTOR against all claims under applicable state workers' compensation laws. The CONTRACTOR shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a Workers' Compensation law. This policy shall include an "all states" endorsement. The CONTRACTOR shall require each Subcontractor similarly to provide Workers' Compensation Insurance for all of the latter's employees to be engaged in such WORK unless such employees are covered by the protection afforded by the CONTRACTOR's Workers' Compensation Insurance. In case any class of employees is not protected, under the Workers' Compensation Statute, the CONTRACTOR shall provide and shall cause each Subcontractor to provide adequate employer's liability insurance for the protection of such of its employees as are not otherwise protected.
2. Commercial General Liability. This insurance shall be written in comprehensive form and shall protect the CONTRACTOR against all claims arising from injuries to persons other than its employees or damage to property of the OWNER or others arising out of any act or omission of the CONTRACTOR or its agents, employees, or Subcontractors. The policy shall contain no exclusions for any operations within the scope of this contract.
3. Comprehensive Automobile Liability. This insurance shall be written in comprehensive form and shall protect the CONTRACTOR against all claims for injuries to members of the public and damage to property of others arising from the use of motor vehicles, and shall cover operation on or off the site of all motor vehicles licensed for highway use, whether they are owned, non-owned, or hired. Coverage for hired motor vehicles should include endorsement covering liability assumed under this Agreement.
4. Subcontractor's Commercial General Liability Insurance and Commercial Automobile Liability Insurance. The CONTRACTOR shall either require each of its Subcontractors to procure and to maintain Subcontractor's Commercial General Liability and Property Damage Insurance and Vehicle Liability Insurance of the type and in the amounts specified in the Supplementary General Conditions or insure the activities of its Subcontractors in the CONTRACTOR's own policy, in like amount.
5. Builder's Risk. This insurance shall be of the "all risks" type, shall be written in completed value form, and shall protect the CONTRACTOR, the OWNER, and the ENGINEER, against risks of damage to buildings, structures, and materials and equipment. The amount of such insurance shall be not less than the insurable value of the WORK at completion. Builder's risk insurance shall provide for losses to be payable to the CONTRACTOR and the OWNER, as their interests may appear. The policy shall contain a provision that in the event of payment for any loss under the coverage provided, the insurance company shall have no rights of recovery against the

CONTRACTOR, the OWNER, and the ENGINEER. The Builder's Risk policy shall insure against all risks of direct physical loss or damage to property from any external cause including flood and earthquake. Allowable exclusions, if any, shall be as specified in the Supplementary General Conditions.

ARTICLE 6 CONTRACTOR'S RESPONSIBILITIES

6.1 SUPERVISION AND SUPERINTENDENCE

A. The CONTRACTOR shall supervise, inspect, and direct the WORK competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the WORK in accordance with the Contract Documents. The CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incidental thereto. The CONTRACTOR shall be responsible to see that the completed WORK complies accurately with the Contract Documents.

B. The CONTRACTOR shall designate in writing and keep on the WORK site at all times during its progress a technically qualified, English-speaking superintendent, who is an employee of the CONTRACTOR and who shall not be replaced without written notice to the OWNER and the ENGINEER. The superintendent will be the CONTRACTOR's representative at the site and shall have authority to act on behalf of the CONTRACTOR. All communications given to the superintendent shall be as binding as if given to the CONTRACTOR. The CONTRACTOR shall issue all its communications to the OWNER through the ENGINEER and the ENGINEER only.

C. The CONTRACTOR's superintendent shall be present at the site of the WORK at all times while WORK is in progress. Failure to observe this requirement shall be considered suspension of the WORK by the CONTRACTOR until such time as such superintendent is again present at the site.

6.2 LABOR, MATERIALS, AND EQUIPMENT

A. The CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the WORK and perform construction as required by the Contract Documents. The CONTRACTOR shall furnish, erect, maintain, and remove the construction plant and any temporary works as may be required. The CONTRACTOR shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the WORK or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all WORK at the site shall be performed during regular working hours, and the CONTRACTOR will not permit overtime work or the performance of work on Saturday, Sunday, or any legal holiday without the OWNER's written consent. The CONTRACTOR shall apply for this consent through the ENGINEER.

B. Except as otherwise provided in this Paragraph, the CONTRACTOR shall receive no additional compensation for overtime work, i.e., work in excess of 8 hours in any one calendar day or 40 hours in any one calendar week, even though such overtime work may be required under emergency conditions and may be ordered by the ENGINEER in writing. Additional compensation will be paid the CONTRACTOR for overtime work only in the

event extra work is ordered by the ENGINEER and the Change Order specifically authorizes the use of overtime work and then only to such extent as overtime wages are regularly being paid by the CONTRACTOR for overtime work of a similar nature in the same locality.

C. All costs of inspection and testing performed during overtime work by the CONTRACTOR which is allowed solely for the convenience of the CONTRACTOR shall be borne by the CONTRACTOR. The OWNER shall have the authority to deduct the cost of all such inspection and testing from any partial payments otherwise due to the CONTRACTOR.

D. Unless otherwise specified in the Contract Documents, the CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up, and completion of the WORK.

E. All materials and equipment to be incorporated into the WORK shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly run to the benefit of the OWNER. If required by the ENGINEER, the CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents; but no provisions of any such instructions will be effective to assign to the ENGINEER, or any of the ENGINEER consultants, agents, or employees, any duty or authority to supervise or direct the furnishing or performance of the WORK or any duty or authority to undertake responsibility contrary to the provisions of Paragraphs 9.9C and 9.9D.

F. The CONTRACTOR shall at all times employ sufficient labor and equipment for prosecuting the several classes of WORK to full completion in the manner and time set forth in and required by these specifications. All workers shall have sufficient skill and experience to perform property the WORK assigned to them. Workers engaged in special WORK, or skilled WORK, shall have sufficient experience in such WORK and in the operation of the equipment required to perform all WORK, properly and satisfactorily.

G. Any person employed by the CONTRACTOR or by any Subcontractor who, in the opinion of the ENGINEER, does not perform the WORK in a proper and skillful manner, or is intemperate or disorderly shall, at the written request of the ENGINEER, be removed forthwith by the CONTRACTOR or Subcontractor employing such person, and shall not be employed again in any portion of the WORK without the approval of the ENGINEER. Should the CONTRACTOR fail to remove such person or persons as required above, or fail to furnish suitable and sufficient personnel for the proper prosecution of the WORK, the ENGINEER may suspend the WORK by written notice until such orders are complied with.

6.3 ADJUSTING PROGRESS SCHEDULE. The CONTRACTOR shall submit monthly updates of the progress schedule to the ENGINEER for acceptance in accordance with the provisions in Section 01300 - CONTRACTOR Submittals in the General Requirements.

6.4 SUBSTITUTES OR "OR-EQUAL" ITEMS. The CONTRACTOR shall submit proposed substitutes or "or-equal" items in accordance with the provisions in Section 01300 - CONTRACTOR Submittals in the General Requirements.

6.5 CONCERNING SUBCONTRACTORS, SUPPLIERS, AND OTHERS.

A. The CONTRACTOR shall be responsible to the OWNER and the ENGINEER for the acts and omissions of its Subcontractors and their employees to the same extent as CONTRACTOR is responsible for the acts and omissions of its own employees. Nothing contained in this Paragraph shall create any contractual relationship between any Subcontractor and the OWNER or the ENGINEER nor relieve the CONTRACTOR of any liability or obligation under the prime contract.

B. The CONTRACTOR shall perform not less than 40% of the WORK with its own forces (i.e., without subcontracting). The 40% requirement shall be understood to mean that the CONTRACTOR shall perform, with its own organization, WORK amounting to at least 40% of the awarded contract amount. The 40% requirement will be calculated based upon the total of the subcontract amounts submitted for contract award, and any other information requested by the OWNER from the apparent low bidder.

6.6 PERMITS

A. Unless otherwise provided in the Supplementary General Conditions, the CONTRACTOR shall obtain and pay for all construction permits and licenses from the agencies having jurisdiction, including the furnishing of insurance and bonds if required by such agencies. The enforcement of such requirements under this contract shall not be made the basis for claims for additional compensation. The OWNER shall assist the CONTRACTOR, when necessary, in obtaining such permits and licenses. The CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the WORK, which are applicable at the time of opening of Bids. The CONTRACTOR shall pay all charges of utility owners for connections to the WORK.

B. These Contract Documents may require that the WORK be performed within the conditions and/or requirements of local, state and/or federal permits. These permits may be bound within the Contract Documents, included within the Contract Documents by reference, or included as part of the WORK, as designated in this Section. The CONTRACTOR is responsible for completing the WORK required for compliance with all permit requirements; this WORK is incidental to other items in the Contract Documents. Any reference to the PERMITTEE in the permits shall mean the CONTRACTOR. If any permits were acquired by the OWNER, this action was done to expedite the start of construction. If the CONTRACTOR does not complete the WORK within the specified permit window, the CONTRACTOR shall be responsible for the permit extension, and for completing any additional requirements placed upon the permit.

C. The OWNER shall apply for, and obtain, the necessary building permit for this Project, however, the CONTRACTOR is responsible for scheduling and coordinating all necessary inspections. The CBJ Inspection number is 586-1703. All other provisions of this Section remain in effect.

6.7 PATENT FEES AND ROYALTIES. The CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the WORK or the incorporation in the WORK of any invention, design, process, product, software or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the WORK and if to the actual knowledge of the OWNER or the ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by the OWNER in the Contract Documents. The CONTRACTOR shall indemnify, defend and hold harmless the OWNER and the ENGINEER and anyone directly or indirectly employed by either of them from and against all claims, damages, losses, and expenses (including attorneys' fees and court costs) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the WORK or resulting from the incorporation in the WORK of any invention, design, process, product, or device not specified in the Contract Documents, and shall defend all such claims in connection with any alleged infringement of such rights.

6.8 LAWS AND REGULATIONS. The CONTRACTOR shall observe and comply with all federal, state, and local laws, ordinances, codes, orders, and regulations which in any manner affect those engaged or employed on the WORK, the materials used in the WORK, or the conduct of the WORK. If any discrepancy or inconsistency should be discovered in this contract in relation to any such law, ordinance, code, order, or regulation, the CONTRACTOR shall report the same in writing to the ENGINEER. The CONTRACTOR shall indemnify, defend, and hold harmless the OWNER, the ENGINEER, and their officers, agents, and employees against all claims or liability arising from violation of any such law, ordinance, code, order, or regulation, whether by CONTRACTOR or by its employees, Subcontractors, or third parties. Any particular law or regulation specified or referred to elsewhere in the Contract Documents shall not in any way limit the obligation of the CONTRACTOR to comply with all other provisions of federal, state, and local laws and regulations.
The OWNER may, per AS 36.30, audit the CONTRACTOR's or Subcontractor(s) records that are related to the cost or pricing data for this contract, all related Change Orders, and/or contract modifications.

6.9 TAXES. The CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by the CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the WORK.

6.10 USE OF PREMISES. The CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers to (1) the Project site, (2) the land and areas identified in and permitted by the Contract Documents, and (3) the other land and areas permitted by Laws and Regulations, rights-of-way, permits, leases and easements. The CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the WORK. Should any claim be made against the OWNER or the ENGINEER by any such owner or occupant because of the performance of the WORK, the CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim through litigation. The CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify, defend, and hold the OWNER and the ENGINEER harmless from and against all claims, damages, losses, and expenses (including, but not limited to, fees of engineers attorneys, and other professionals and court costs) arising directly, indirectly, or consequentially out of any action, legal or equitable, brought by any such owner or occupant against the OWNER, the ENGINEER, their Consultants, Sub-consultants, and the officers,

directors, employees and agents of each and any of them to the extent caused by or based upon the CONTRACTOR's performance of the WORK.

6.11 SAFETY AND PROTECTION

A. The CONTRACTOR shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the WORK. The CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all employees on the WORK and other persons and organizations who may be affected thereby;
2. all the WORK and materials and equipment to be incorporated therein, whether in storage on or off the site; and
3. other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

B. The CONTRACTOR shall comply with all applicable Laws and Regulations whether referred to herein or not) of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss and shall erect and maintain all necessary safeguards for such safety and protection. The CONTRACTOR shall notify owners of adjacent property and utilities when prosecution of the WORK may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

C. The CONTRACTOR shall designate a qualified and experienced safety representative at the site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and program.

D. Materials that contain hazardous substances or mixtures may be required on the WORK. A Material Safety Data Sheet shall be requested by the CONTRACTOR from the manufacturer of any hazardous product used.

E. Material usage shall be accomplished with strict adherence to all safety requirements and all manufacturer's warnings and application instructions listed on the Material Safety Data Sheet and on the product container label.

F. The CONTRACTOR shall be responsible for coordinating communications on any exchange of Material Safety Data Sheets or other hazardous material information that is required to be made available to, or exchanged between, or among, employers at the site in accordance with Laws or Regulations.

G. The CONTRACTOR shall notify the ENGINEER if it considers a specified product or its intended usage to be unsafe. This notification must be given to the ENGINEER prior to the product being ordered, or if provided by some other party, prior to the product being incorporated in the WORK.

6.12 SHOP DRAWINGS AND SAMPLES

A. After checking and verifying all field measurements and after complying with applicable procedures specified in the General Requirements, the CONTRACTOR shall submit to the ENGINEER for review, all Shop Drawings in accordance with Section 01300 - CONTRACTOR Submittals in the General Requirements.

B. The CONTRACTOR shall also submit to the ENGINEER for review all samples in accordance with Section 01300 - CONTRACTOR Submittals in the General Requirements.

C. Before submittal of each shop drawing or sample, the CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar data with respect thereto and reviewed or coordinated each Shop Drawing or sample with other Shop Drawings and samples and with the requirements of the WORK and the Contract Documents.

6.13 CONTINUING THE WORK. The CONTRACTOR shall carry on the WORK and adhere to the progress schedule during all disputes or disagreements with the OWNER. No work shall be delayed or postponed pending resolution of any disputes or disagreements, except as the CONTRACTOR and the OWNER may otherwise agree in writing.

6.14 INDEMNIFICATION

A. To the fullest extent permitted by Laws and Regulations, the CONTRACTOR shall indemnify, defend, and hold harmless the OWNER, the ENGINEER, their Consultants, Sub-consultants and the officers, directors, employees, and agents of each and any of them, against and from all claims and liability arising under, by reason of or incidentally to the contract or any performance of the WORK, but not from the sole negligence or willful misconduct of the OWNER, and the ENGINEER. Such indemnification by the CONTRACTOR shall include but not be limited to the following:

1. Liability or claims resulting directly or indirectly from the negligence or carelessness of the CONTRACTOR, its employees, or agents in the performance of the WORK, or in guarding or maintaining the same, or from any improper materials, implements, or appliances used in its construction, or by or on account of any act or omission of the CONTRACTOR, its employees, agents, or third parties;
2. Liability or claims arising directly or indirectly from bodily injury, occupational sickness or disease, or death of the CONTRACTOR’s or Subcontractor’s own employees engaged in the WORK resulting in actions brought by or on behalf of such employees against the OWNER, and the ENGINEER;
3. Liability or claims arising directly or indirectly from or based on the violation of any law, ordinance, regulation, order, or decree, whether by the CONTRACTOR, its employees, or agents;
4. Liability or claims arising directly or indirectly from the use or manufacture by the CONTRACTOR, its employees, or agents in the performance of this contract of any copyrighted or non-copyrighted composition, secret process, patented or non-patented invention, computer software, article, or appliance, unless otherwise specifically stipulated in this contract.

5. Liability or claims arising directly or indirectly from the breach of any warranties, whether express or implied, made to the OWNER or any other parties by the CONTRACTOR, its employees, or agents;
6. Liabilities or claims arising directly or indirectly from the willful or criminal misconduct of the CONTRACTOR, its employees, or agents; and,
7. Liabilities or claims arising directly or indirectly from any breach of the obligations assumed herein by the CONTRACTOR.

B. The CONTRACTOR shall reimburse the ENGINEER and the OWNER for all costs and expenses, (including but not limited to fees and charges of engineers, attorneys, and other professionals and court costs including all costs of appeals) incurred by said OWNER, and the ENGINEER in enforcing the provisions of this Paragraph 6.14.

C. The indemnification obligation under this Paragraph 6.14 shall not be limited in any way by any limitation of the amount or type of damages, compensation, or benefits payable by or for the CONTRACTOR or any such Subcontractor or other person or organization under workers' compensation acts, disability benefit acts, or other employee benefit acts.

6.15 CONTRACTOR'S DAILY REPORTS. The CONTRACTOR shall complete a daily report indicating total manpower for each construction trade, major equipment on site, each Subcontractor's manpower, weather conditions, etc., involved in the performance of the WORK. The daily report shall be completed on forms provided by the ENGINEER and shall be submitted to the ENGINEER at the conclusion of each workday. The report should comment on the daily progress and status of the WORK within each major component of the WORK. These components will be decided by the ENGINEER. CONTRACTOR shall record the name, affiliation, time of arrival and departure, and reason for visit for all visitors to the location of the WORK.

6.16 ASSIGNMENT OF CONTRACT. The CONTRACTOR shall not assign, sublet, sell, transfer, or otherwise dispose of the contract or any portion thereof, or its right, title, or interest therein, or obligations thereunder, without the written consent of the OWNER except as imposed by law. If the CONTRACTOR violates this provision, the contract may be terminated at the option of the OWNER. In such event, the OWNER shall be relieved of all liability and obligations to the CONTRACTOR and to its assignee or transferee, growing out of such termination.

6.17 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES. It is understood that any turn-on or turn-off, line locates and any other work or assistance necessary by the CBJ Water Utilities Division, will be at the CONTRACTOR's expense unless otherwise stated in the bid documents. All cost must be agreed to prior to any related actions, and will be considered incidental to the project cost. Billing to the CONTRACTOR will be direct from the CBJ Water Utilities Division.

6.18 OPERATING WATER SYSTEM VALVES

A. The CONTRACTOR shall submit a written request, to the ENGINEER, for approval to operate any valve on any in-service section of the CBJ water system. The request must be submitted at least 24-hours prior to operating any valves. The CBJ Water Utilities Division reserves the right to approve or deny the request. The request shall specifically identify each valve to be operated, the time of operation, and the operation to be performed. The

CONTRACTOR shall obtain the written approval of the ENGINEER for any scheduled operation before operating any valve.

B. The CONTRACTOR shall be responsible for all damages, both direct and consequential, to the City or any other party, caused by unauthorized operation of any valve of the CBJ water system.

6.19 CONTRACTOR'S WORK SCHEDULE LIMITATIONS. Construction of Buildings and Projects. It is unlawful to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or similar heavy construction equipment before 7:00 a.m. or after 10:00 p.m., Monday through Friday, or before 9:00 a.m. or after 10:00 p.m., Saturday and Sunday, unless a permit shall first be obtained from the City and Borough Building Official. Such permit shall be issued by the Building Official only upon a determination that such operation during hours not otherwise permitted hereunder is necessary and will not result in unreasonable disturbance to surrounding residents.

ARTICLE 7 OTHER WORK

7.1 RELATED WORK AT SITE

A. The OWNER may perform other work related to the Project at the site by the OWNER's own forces, have other work performed by utility owners, or let other direct contracts therefor which may contain General Conditions similar to these. If the fact that such other work is to be performed was not noted in the Contract Documents, written notice thereof will be given to the CONTRACTOR prior to starting any such other work.

B. The CONTRACTOR shall afford each other contractor who is a party to such a direct contract and each utility owner (or the OWNER, if the OWNER is performing the additional work with the OWNER's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the WORK with theirs. The CONTRACTOR shall do all cutting, fitting, and patching of the WORK that may be required to make its several parts come together properly and integrate with such other work. The CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of the ENGINEER and the others whose work will be affected.

C. If the proper execution or results of any part of the CONTRACTOR's work depends upon the work of any such other contractor or utility owner (or OWNER), the CONTRACTOR shall inspect and report to the ENGINEER in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for such proper execution and results. The CONTRACTOR's failure to report such delays, defects, or deficiencies will constitute an acceptance of the other work as fit and proper for integration with the CONTRACTOR's work except for latent or nonapparent defects and deficiencies in the other work.

7.2 COORDINATION. If the OWNER contracts with others for the performance of other work on the Project at the site, the person or organization who will have authority and responsibility for coordination of the activities among the various prime contractors will be identified in the Supplementary General Conditions, and the specific matters to be covered by such authority and

responsibility will be itemized and the extent of such authority and responsibilities will be provided in the Supplementary General Conditions.

ARTICLE 8 OWNER'S RESPONSIBILITIES

8.1 COMMUNICATIONS

A. The OWNER shall issue all its communications to the CONTRACTOR through the ENGINEER.

B. The CONTRACTOR shall issue all its communications to the OWNER through the ENGINEER.

8.2 PAYMENTS. The OWNER shall make payments to the CONTRACTOR as provided in Paragraphs 14.5, 14.8, 14.9 and 14.10.

8.3 LANDS, EASEMENTS, AND SURVEYS. The OWNER's duties in respect of providing lands and easements and providing surveys to establish reference points are set forth in Paragraphs 4.1 and 4.5.

8.4 CHANGE ORDERS. The OWNER shall execute Change Orders as indicated in Paragraph 10.1F.

8.5 INSPECTIONS AND TESTS. The OWNER's responsibility in respect of inspections, tests, and approvals is set forth in Paragraph 13.3.

8.6 SUSPENSION OF WORK. In connection with the OWNER's right to stop WORK or suspend WORK, see Paragraphs 13.4 and 15.1.

8.7 TERMINATION OF AGREEMENT. Paragraphs 15.2 and 15.3 deal with the OWNER's right to terminate services of the CONTRACTOR.

ARTICLE 9 ENGINEER'S STATUS DURING CONSTRUCTION

9.1 OWNER'S REPRESENTATIVE. The ENGINEER will be the OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of the ENGINEER as the OWNER's representative during construction are set forth in the Contract Documents.

9.2 VISITS TO SITE. The ENGINEER will make visits to the site during construction to observe the progress and quality of the WORK and to determine, in general, if the WORK is proceeding in accordance with the Contract Documents. Exhaustive or continuous on-site inspections to check the quality or quantity of the WORK will not be required of the ENGINEER. The ENGINEER will not, during such visits, or as a result of such observations of the CONTRACTOR's WORK in progress, supervise, direct, or have control over the CONTRACTOR's WORK.

9.3 PROJECT REPRESENTATION. The ENGINEER may furnish an Inspector to assist in observing the performance of the WORK. The duties, responsibilities, and limitations of authority are as follows:

A. Duties, Responsibilities and Limitations of Authority of Inspector

General. The Inspector, who is the ENGINEER's Agent, will act as directed by and under the supervision of the ENGINEER and will confer with the ENGINEER regarding its actions. The Inspector's dealings in matters pertaining to the on-site WORK shall, in general, be only with the ENGINEER and the CONTRACTOR, and dealings with Subcontractors shall only be through or with the full knowledge of the CONTRACTOR. Written communication with the OWNER will be only through or as directed by the ENGINEER.

Duties and Responsibilities. The Inspector may:

1. Review the progress schedule, list of Shop Drawing submittals and schedule of values prepared by the CONTRACTOR and consult with the ENGINEER concerning their acceptability.
2. Attend pre-construction conferences. Arrange a schedule of progress meetings and other job conferences as required in consultation with the ENGINEER and notify those expected to attend in advance. Attend meetings and maintain and circulate copies of minutes thereof.
3. Serve as the ENGINEER's liaison with the CONTRACTOR, working principally through the CONTRACTOR's superintendent and assist said superintendent in understanding the intent of the Contract Documents. Assist the ENGINEER in serving as the OWNER's liaison with the CONTRACTOR when the CONTRACTOR's operations affect the OWNER's on-site operations.
4. As requested by the ENGINEER, assist in obtaining from the OWNER additional details or information, when required at the site for proper execution of the WORK.
5. Receive and record date of receipt of Shop Drawings and samples, receive samples which are furnished at the site by the CONTRACTOR and notify the ENGINEER of their availability for examination.
6. Conduct on-site observations of the WORK in progress to assist the ENGINEER in determining if the WORK is proceeding in accordance with the Contract Documents.
7. Report to the ENGINEER whenever the Inspector believes that any WORK is unsatisfactory, faulty, or defective or does not conform to the Contract Documents, or does not meet the requirements of any inspection, tests or approval required to be made or has been damaged prior to final payment; and advise the ENGINEER when the Inspector believes WORK should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection, or approval.
8. Verify that the tests, equipment, and systems startups and operating and maintenance instruction are conducted as required by the Contract Documents and in presence of the required personnel, and that the CONTRACTOR maintains adequate records thereof; observe, record and report to the ENGINEER appropriate details relative to the test procedures and start-ups.
9. Accompany visiting inspectors representing public or other agencies having jurisdiction over the WORK, record the outcome of these inspections, and report to the ENGINEER.
10. Transmit to the CONTRACTOR the ENGINEER's clarifications and interpretations of the Contract Documents.
11. Consider and evaluate the CONTRACTOR's suggestions for modifications in the Contract Documents and report them with recommendations to the ENGINEER.
12. Maintain at the job site orderly files for correspondence, reports of job conferences, Shop Drawings and sample submittals, reproductions of original Contract Documents including all addenda, Change Orders, field orders, additional Drawings issued

subsequent to the execution of the contract, the ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, and other related documents.

13. Keep a diary or log book, recording hours on the job site, weather conditions, data relative to questions of extras or deductions, list all project visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of performing and observing test procedures. Send copies to the ENGINEER.
14. Record names, addresses, and telephone numbers of the CONTRACTOR, Subcontractors, and major suppliers of materials and equipment.
15. Furnish the ENGINEER with periodic reports as required of progress of the WORK and the CONTRACTOR's compliance with the accepted progress schedule and schedule of CONTRACTOR submittals.
16. Consult with the ENGINEER in advance of scheduled major tests, inspections, or start of important phases of the WORK.
17. Report immediately to the ENGINEER upon the occurrence of any accident.
18. Review applications for payment with the CONTRACTOR for compliance with the established procedure for their submittal and forward them with recommendations to the ENGINEER, noting particularly their relation to the schedule of values, WORK completed, and materials and equipment delivered at the site but not incorporated in the WORK.
19. During the course of the WORK, verify that certificates, maintenance and operation manuals, and other data required to be assembled and furnished by the CONTRACTOR are applicable to the items actually installed; and deliver this material to the ENGINEER for its review and forwarding to the OWNER prior to final acceptance of the WORK.
20. Before the ENGINEER prepares a Certificate of Substantial Completion/Notice of Completion, as applicable, review the CONTRACTOR's punch list items requiring completion or correction and add any items that CONTRACTOR has omitted.
21. Conduct final inspection in the company of the ENGINEER, the OWNER, and the CONTRACTOR, and prepare a final punch list of items to be completed or corrected.
22. Verify that all items on the punch list have been completed or corrected and make recommendations to the ENGINEER concerning acceptance.

Limitations of Authority. Except upon written instruction of the ENGINEER, the Inspector:

1. Shall not authorize any deviation from the Contract Documents or approve any substitute material or equipment.
2. Shall not exceed limitations on the ENGINEER's authority as set forth in the Contract Documents.
3. Shall not undertake any of the responsibilities of the CONTRACTOR, Subcontractors or CONTRACTOR's superintendent, or expedite the WORK.
4. Shall not advise on or issue directions relative to any aspect of the means, methods, techniques, sequences, or procedures of construction unless such is specifically called for in the Contract Documents.
5. Shall not advise on or issue directions as to safety precautions and programs in connection with the WORK.

9.4 CLARIFICATIONS AND INTERPRETATIONS. The ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract

Documents (in the form of Drawings or otherwise) as the ENGINEER may determine necessary, which shall be consistent with, or reasonably inferred from, the overall intent of the Contract Documents.

9.5 AUTHORIZED VARIATIONS IN WORK. The ENGINEER may authorize variations in the WORK from the requirements of the Contract Documents. These may be accomplished by a Field Order and will require the CONTRACTOR to perform the WORK involved in a manner that minimizes the impact to the WORK and the contract completion date. If the CONTRACTOR believes that a Field Order justifies an increase in the Contract Price or an extension of the Contract Time, the CONTRACTOR may make a claim therefor as provided in Article 11 or 12.

9.6 REJECTING DEFECTIVE WORK. The ENGINEER will have authority to reject WORK which the ENGINEER believes to be defective and will also have authority to require special inspection or testing of the WORK as provided in Paragraph 13.3G, whether or not the WORK is fabricated, installed, or completed.

9.7 CONTRACTOR SUBMITTALS, CHANGE ORDERS, AND PAYMENTS

A. In accordance with the procedures set forth in the General Requirements, the ENGINEER will review all CONTRACTOR submittals, including Shop Drawings, samples, substitutes, or "or equal" items, etc., in order to determine if the items covered by the submittals will, after installation or incorporation in the WORK, conform to the requirements of the Contract Documents and be compatible with the design concept of the completed project as a functioning whole as indicated by the Contract Documents. The ENGINEER's review will not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions or programs incident thereto.

B. In connection with the ENGINEER's responsibilities as to Change Orders, see Articles 10, 11, and 12.

C. In connection with the ENGINEER's responsibilities in respect of Applications for Payment, see Article 14.

9.8 DECISIONS ON DISPUTES

A. The ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the WORK thereunder. Claims, disputes, and other matters relating to the acceptability of the WORK; the interpretation of the requirements of the Contract Documents pertaining to the performance of the WORK; and those claims under Articles 11 and 12 in respect to changes in the Contract Price or Contract Time will be referred initially to the ENGINEER in writing with a request for formal decision in accordance with this paragraph, which the ENGINEER will render in writing within 30 days of receipt of the request. Written notice of each such claim, dispute, and other matter will be delivered by the CONTRACTOR to the ENGINEER promptly (but in no event later than 30 days) after the occurrence of the event giving rise thereto. Written supporting data will be submitted to the ENGINEER within 60 days after such occurrence unless the ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim.

B. The rendering of a decision by the ENGINEER with respect to any such claim, dispute, or other matter (except any which have been waived by the making or acceptance of final payment as provided in Paragraph 14.12) will be a condition precedent to any exercise by the OWNER or the CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Law or Regulations in respect of any such claim, dispute, or other matter.

9.9 LIMITATION ON ENGINEER'S RESPONSIBILITIES

A. Neither the ENGINEER's authority to act under this Article or other provisions of the Contract Documents nor any decision made by the ENGINEER in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of the ENGINEER to the CONTRACTOR, any Subcontractor, any Supplier, any surety for any of them, or any other person or organization performing any of the WORK.

B. Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed," "as reviewed," "as approved," or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper," or "satisfactory" or adjectives of like effect or import are used to describe a requirement, direction, review, or judgment of the ENGINEER as to the WORK, it is intended that such requirement, direction, review, or judgment will be solely to evaluate the WORK for compliance with the requirements of the Contract Documents, and conformance with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents, unless there is a specific statement indicating otherwise. The use of any such term or adjective shall not be effective to assign to the ENGINEER any duty or authority to supervise or direct the performance of the WORK or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.9C or 9.9D.

C. The ENGINEER will not supervise, direct, control, or have authority over or be responsible for the CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of the CONTRACTOR to comply with Laws and Regulations, applicable to the performance of the WORK. The ENGINEER will not be responsible for the CONTRACTOR's failure to perform the WORK in accordance with the Contract Documents.

D. The ENGINEER will not be responsible for the acts or omissions of the CONTRACTOR nor of any Subcontractor, supplier, or any other person or organization performing any of the WORK.

ARTICLE 10 CHANGES IN THE WORK

10.1 GENERAL

A. Without invalidating the Agreement and without notice to any surety, the OWNER may at any time or from time to time, order additions, deletions, or revisions in the WORK; these will be authorized by a written Field Order and/or a Change Order issued by the ENGINEER.

B. If the CONTRACTOR believes that it is entitled to an increase or decrease in the Contract Price, or an extension or shortening in the Contract Time as the result of a Field Order, a claim may be made as provided in Articles 11 and 12.

C. If the OWNER and CONTRACTOR agree on the value of any work, or the amount of Contract Time that should be allowed as a result of a Field Order, upon receiving written notice from the ENGINEER, the CONTRACTOR shall proceed so as to minimize the impact on and delays to the work pending the issuance of a Change Order.

D. If the OWNER and the CONTRACTOR are unable to agree as to the extent, if any, of an increase or decrease in the Contract Price or an extension or shortening of the Contract Time that should be allowed as a result of a Field Order, the ENGINEER can direct the CONTRACTOR to proceed on the basis of Time and Materials so as to minimize the impact on and delays to WORK, and a claim may be made therefor as provided in Articles 11 and 12.

E. The CONTRACTOR shall not be entitled to an increase in the Contract Price nor an extension of the Contract Time with respect to any work performed that is not required by the Contract Documents as amended, modified, supplemented by Change Order, except in the case of an emergency and except in the case of uncovering work as provided in Paragraph 13.3G.

F. The OWNER and the CONTRACTOR shall execute appropriate Change Orders covering:

1. changes in the WORK which are ordered by the OWNER pursuant to Paragraph 10.1A;
2. changes required because of acceptance of Defective WORK under Paragraph 13.7;
3. changes in the Contract Price or Contract Time which are agreed to by the parties; or
4. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by the ENGINEER pursuant to Paragraph 9.8.

G. If notice of any change is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be the CONTRACTOR's responsibility, and the amount of each applicable Bond shall be adjusted accordingly.

10.2 ALLOWABLE QUANTITY VARIATIONS

A. In the event of an increase or decrease in Bid item quantity of a unit price contract, the total amount of WORK actually done or materials or equipment furnished shall be paid for according to the unit price established for such WORK under the Contract Documents, wherever such unit price has been established; provided, that an adjustment in the Contract Price may be made for changes which result in an increase or decrease in excess of 25% of

the estimated quantity of any major item of the WORK. Major Item is defined as any bid item amount that is ten percent (10%) or more of the total contract amount.

B. In the event a part of the WORK is to be entirely eliminated and no lump sum or unit price is named in the Contract Documents to cover such eliminated work, the price of the eliminated work shall be agreed upon in writing by the OWNER and the CONTRACTOR. If the OWNER and the CONTRACTOR fail to agree upon the price of the eliminated work, said price shall be determined in accordance with the provisions of Article 11.

ARTICLE 11 CHANGE OF CONTRACT PRICE

11.1 GENERAL

A. The Contract Price constitutes the total compensation payable to the CONTRACTOR for performing the WORK. All duties, responsibilities, and obligations assigned to or undertaken by the CONTRACTOR to complete the WORK shall be at its expense without change in the Contract Price.

B. The Contract Price may only be changed by a Change Order. Any claim for an increase in the Contract Price shall be based on written notice delivered by the CONTRACTOR to the ENGINEER promptly (but in no event later than 7 days) after the start of the occurrence or the event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within 14 days after such occurrence (unless the ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the CONTRACTOR's written statement that the amount claimed covers all known amounts (direct, indirect, and consequential) to which the CONTRACTOR is entitled as a result of said occurrence or event. All claims for adjustment in the Contract Price shall be determined by the ENGINEER in accordance with Paragraph 9.8A if the OWNER and the CONTRACTOR cannot otherwise agree on the amount involved. No claim for an adjustment in the Contract Price will be valid if not submitted in accordance with this Paragraph 11.1B.

C. The value of any WORK covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

1. Where the WORK involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved.
2. By mutual acceptance of a lump sum, which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.4.
3. On the basis of the cost of WORK (determined as provided in Paragraphs 11.3) plus a CONTRACTOR's fee for overhead and profit (determined as provided in Paragraph 11.4).

11.2 COSTS RELATING TO WEATHER. The CONTRACTOR shall have no claims against the OWNER for damages for any injury to WORK, materials, or equipment, resulting from the action of the elements. If, however, in the opinion of the ENGINEER, the CONTRACTOR has made all reasonable efforts to protect the materials, equipment and work, the CONTRACTOR may be granted a reasonable extension of Contract Time to make proper repairs, renewals, and replacements of the work, materials, or equipment.

11.3 COST OF WORK (BASED ON TIME AND MATERIALS)

A. General. The term "cost of work" means the sum of all costs necessarily incurred and paid by the CONTRACTOR for labor, materials, and equipment in the proper performance of extra work. Except as otherwise may be agreed to in writing by the OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project; shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.5 EXCLUDED COSTS.

B. Labor. The costs of labor will be the actual cost for wages prevailing for each craft or type of workers performing the extra work at the time the extra work is done, plus employer payments of payroll taxes, worker's compensation insurance, liability insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. Labor costs for equipment operators and helpers shall be paid only when such costs are not included in the invoice for equipment rental. The labor costs for forepersons shall be proportioned to all of their assigned work and only that applicable to extra work shall be paid. Non-direct labor costs including superintendence shall be considered part of the mark-up set out in paragraph 11.4.

C. Materials. The cost of materials reported shall be at invoice or lowest current price at which materials are locally available and delivered to the job in the quantities involved, plus the cost of freight, delivery and storage, subject to the following:

1. Trade discounts available to the purchaser shall be credited to the OWNER notwithstanding the fact that such discounts may not have been taken by the CONTRACTOR.
2. For materials secured by other than a direct purchase and direct billing to the purchaser, the cost shall be deemed to be the price paid to the actual supplier as determined by the ENGINEER. Mark-up except for actual costs incurred in the handling of such materials will not be allowed.
3. Payment for materials from sources owned wholly or in part by the purchaser shall not exceed the price paid by the purchaser for similar materials from said sources on extra work items or the current wholesale price for such materials delivered to the work site, whichever price is lower.
4. If in the opinion of the ENGINEER the cost of material is excessive, or the CONTRACTOR does not furnish satisfactory evidence of the cost of such material, then the cost shall be deemed to be the lowest current wholesale price for the quantity concerned delivered to the work site less trade discount. The OWNER reserves the right to furnish materials for the extra work and no claim shall be allowed by the CONTRACTOR for costs and profit on such materials.

D. Equipment. The CONTRACTOR will be paid for the use of equipment at the rental rate listed for such equipment specified in the Supplementary General Conditions. Such rental rate will be used to compute payments for equipment whether the equipment is under the CONTRACTOR's control through direct ownership, leasing, renting, or another method of acquisition. The rental rate to be applied for use of each item of equipment shall be the rate resulting in the least total cost to the OWNER for the total period of use. If it is deemed

necessary by the CONTRACTOR to use equipment not listed in the publication specified in the Supplementary General Conditions, an equitable rental rate for the equipment will be established by the ENGINEER. The CONTRACTOR may furnish cost data which might assist the ENGINEER in the establishment of the rental rate.

1. All equipment shall, in the opinion of the ENGINEER, be in good working condition and suitable for the purpose for which the equipment is to be used.
2. Before construction equipment is used on the extra work, the CONTRACTOR shall plainly stencil or stamp an identifying number thereon at a conspicuous location, and shall furnish to the ENGINEER, in duplicate, a description of the equipment and its identifying number.
3. Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.
4. Individual pieces of equipment or tools having a replacement value of $200 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefor.
5. Rental time will not be allowed while equipment is inoperative due to breakdowns.
6. Equipment Rental Rates. Unless otherwise agreed in writing, the CONTRACTOR will be paid for the use of equipment at the rental rate listed for such equipment specified in the current edition of the following reference publication: "Rental Rate Blue Book" as published by Dataquest (a company of the Dunn and Bradstreet Corporation), 1290 Ridder Park Drive, San Jose, CA 95131, telephone number (800) 227-8444.

E. Equipment on the Work Site. The rental time to be paid for equipment on the work site shall be the time the equipment is in productive operation on the extra work being performed and, in addition, shall include the time required to move the equipment to the location of the extra work and return it to the original location or to another location requiring no more time than that required to return it to its original location; except, that moving time will not be paid if the equipment is used on other than the extra work, even though located at the site of the extra work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power, except that no payment will be made for loading and transporting costs when the equipment is used at the site of the extra work on other than the extra work. The following shall be used in computing the rental time of equipment on the work site.

1. When hourly rates are listed, any part of an hour less than 30 minutes of operation shall be considered to be 1/2-hour of operation, and any part of an hour in excess of 30 minutes will be considered one hour of operation.
2. When daily rates are listed, any part of a day less than 4 hours operation shall be considered to be 1/2-day of operation. When owner-operated equipment is used to perform extra work to be paid for on a time and materials basis, the CONTRACTOR will be paid for the equipment and operator, as set forth in Paragraphs (3), (4), and (5), following.
3. Payment for the equipment will be made in accordance with the provisions in Paragraph 11.3D, herein.
4. Payment for the cost of labor and subsistence or travel allowance will be made at the rates paid by the CONTRACTOR to other workers operating similar equipment already

on the work site, or in the absence of such labor, established by collective bargaining agreements for the type of worker and location of the extra work, whether or not the operator is actually covered by such an agreement. A labor surcharge will be added to the cost of labor described herein in accordance with the provisions of Paragraph 11.3B, herein, which surcharge shall constitute full compensation for payments imposed by state and federal laws and all other payments made to or on behalf of workers other than actual wages.

5. To the direct cost of equipment rental and labor, computed as provided herein, will be added the allowances for equipment rental and labor as provided in Paragraph 11.4, herein.

F. Specialty Work. Specialty work is defined as that work characterized by extraordinary complexity, sophistication, or innovation or a combination of the foregoing attributes which are unique to the construction industry. The following shall apply in making estimates for payment for specialty work:

1. Any bid item of WORK to be classified as Specialty Work shall be listed as such in the Supplementary General Conditions. Specialty work shall be performed by an entity especially skilled in the work to be performed. After validation of invoices and determination of market values by the ENGINEER, invoices for specialty work based upon the current fair market value thereof may be accepted without complete itemization of labor, material, and equipment rental costs.
2. When the CONTRACTOR is required to perform work necessitating special fabrication or machining process in a fabrication or a machine shop facility away from the job site, the charges for that portion of the work performed at the off-site facility may, by agreement, be accepted as specialty work and accordingly, the invoices for the work may be accepted without detailed itemization.
3. All invoices for specialty work will be adjusted by deducting all trade discounts offered or available, whether the discounts were taken or not. In lieu of the allowances for overhead and profit specified in Paragraph 11.4, herein, an allowance of 5 percent will be added to invoices for specialty work.

G. Sureties. All work performed hereunder shall be subject to all of the provisions of the Contract Documents and the CONTRACTOR's sureties shall be bound with reference thereto as under the original Agreement. Copies of all amendments to surety bonds or supplemental surety bonds shall be submitted to the OWNER for review prior to the performance of any work hereunder.

11.4 CONTRACTOR'S FEE

A. Extra work ordered on the basis of time and materials will be paid for at the actual necessary cost as determined by the ENGINEER, plus allowances for overhead and profit. The allowance for overhead and profit shall include full compensation for superintendence, bond and insurance premiums, taxes, field office expense, extended overhead, home office overhead, and all other items of expense or cost not included in the cost of labor, materials, or equipment provided for under Paragraph 11.3. The allowance for overhead and profit will be made in accordance with the following schedule:

Actual Overhead and Profit Allowance

Labor	15 percent
Materials	10 percent
Equipment	10 percent

To the sum of the costs and mark-ups provided for in this Article, one percent shall be added as compensation for bonding.

B. It is understood that labor, materials, and equipment may be furnished by the CONTRACTOR or by the Subcontractor on behalf of the CONTRACTOR. When all or any part of the extra work is performed by a Subcontractor, the allowance specified herein shall be applied to the labor, materials, and equipment costs of the Subcontractor, to which the CONTRACTOR may add 5 percent of the Subcontractor's total cost for the extra work. Regardless of the number of hierarchical tiers of Subcontractors, the 5 percent increase above the Subcontractor's total cost which includes the allowances for overhead and profit specified herein may be applied one time only.

11.5 EXCLUDED COSTS. The term "Cost of the Work" shall not include any of the following:

A. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, estimators, attorneys' auditors, accountants, purchasing and contracting agents, expenditures, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR's principal or a branch office for general administration of the work, or not specifically covered by paragraph 11.3, all of which are to be considered administrative costs covered by the CONTRACTOR's fee.

B. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.

C. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the WORK and charges against CONTRACTOR for delinquent payments.

D. Cost of premiums for all bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by paragraph 11.4 above).

E. Costs due to the negligence of CONTRACTOR , any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of Defective WORK, disposal of materials or equipment wrongly supplied and making good any damage to property.

F. Other overhead or general expense costs of any kind and the cost of any item not specifically and expressly included in paragraph 11.4.

ARTICLE 12 CHANGE OF CONTRACT TIME

12.1 GENERAL

A. The Contract Time may only be changed by a Change Order. Any claim for an extension of the Contract Time (or Milestones) shall be based on written notice delivered by the CONTRACTOR to the ENGINEER promptly (but in no event later than 30 days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within 60 days after such occurrence (unless the ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the CONTRACTOR's written statement that the adjustment claimed is the entire adjustment to which the CONTRACTOR has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Time shall be determined by the ENGINEER in accordance with Paragraph 9.8 if the OWNER and the CONTRACTOR cannot otherwise agree. No claim for an adjustment in the Contract Time will be valid if not submitted in accordance with the requirements of this Paragraph 12.1A. An increase in Contract Time does not mean that the Contractor is due an increase in Contract Price. Only compensable time extensions will result in an increase in Contract Price.

B. All time limits stated in the Contract Documents are of the essence of the Agreement.

C. Where CONTRACTOR is prevented from completing any part of the WORK within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost on the critical path of the project due to such delay if a claim is made therefor as provided in paragraph 12.1. Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by OWNER, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, unprecedented weather conditions or acts of God. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

D. Where CONTRACTOR is prevented from completing any part of the WORK within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost on the critical path of the project due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay. In no event shall the OWNER be liable to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from (i) delays caused by or within the control of CONTRACTOR, or (ii) delays beyond the control of both parties including but not limited to fires, floods, epidemics abnormal weather conditions, acts of God or acts or neglect by utility owners or other contractors performing other work as contemplated by Article 7.

12.2 EXTENSIONS OF TIME FOR DELAY DUE TO WEATHER. Contract Time may be extended by the ENGINEER because of delays in completion of the WORK due to unusually severe weather, provided that the CONTRACTOR shall, within 10 days of the beginning of any such delay, notify the ENGINEER in writing of the cause of delay and request an extension of Contract Time. The

ENGINEER will ascertain the facts and the extent of the delay and extend the time for completing the work when, in the ENGINEER's judgment, the findings of fact justify such an extension. Unprecedented, abnormal, or unusually severe weather will be defined as an event, or events, with a greater than 50-year recurrence interval, as determined by the National Weather Service, or equivalent State or Federal agency

ARTICLE 13 WARRANTY AND GUARANTEE; TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

13.1 WARRANTY AND GUARANTEE. The CONTRACTOR warrants and guarantees to the OWNER and the ENGINEER that all work will be in accordance with the Contract Documents and will not be defective. Prompt notice of defects known to the OWNER or ENGINEER shall be given to the CONTRACTOR. All defective work, whether or not in place, may be rejected, corrected, or accepted as provided in this Article 13.

13.2 ACCESS TO WORK. OWNER, ENGINEER, their Consultants, sub-consultants, other representatives and personnel of OWNER, independent testing laboratories and governmental agencies with jurisdictional interests will have access to the WORK at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's site safety procedures and programs so that they may comply therewith as applicable.

13.3 TESTS AND INSPECTIONS

A. The CONTRACTOR shall give the ENGINEER timely notice of readiness of the WORK for all required inspections, tests, or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. If Laws or Regulations of any public body having jurisdiction other than the OWNER require any WORK to specifically be inspected, tested, or approved, the CONTRACTOR shall pay all costs in connection therewith. The CONTRACTOR shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with the OWNER's or the ENGINEER's acceptance of a Supplier of materials or equipment proposed as a substitution or (or-equal) to be incorporated in the WORK, or of materials or equipment submitted for review prior to the CONTRACTOR's purchase thereof for incorporation in the WORK. The cost of all inspections, tests, and approvals in addition to the above which are required by the Contract Documents shall be paid by the OWNER (unless otherwise specified).

C. The ENGINEER will make, or have made, such inspections and tests as the ENGINEER deems necessary to see that the WORK is being accomplished in accordance with the requirements of the Contract Documents. Unless otherwise specified in the Supplementary General Conditions, the cost of such inspection and testing will be borne by the OWNER. In the event such inspections or tests reveal non-compliance with the requirements of the Contract Documents, the CONTRACTOR shall bear the cost of corrective measures deemed necessary by the ENGINEER, as well as the cost of subsequent reinspection and retesting. Neither observations by the ENGINEER nor inspections, tests, or approvals by others shall relieve the CONTRACTOR from the CONTRACTOR's obligation to perform the WORK in accordance with the Contract Documents.

D. All inspections, tests, or approvals other than those required by Laws or Regulations of any public body having jurisdiction shall be performed by organizations acceptable to the ENGINEER and the CONTRACTOR.

E. If any WORK (including the work of others) that is to be inspected, tested, or approved is covered without written concurrence of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for observation. Such uncovering shall be at the CONTRACTOR's expense unless the CONTRACTOR has given the ENGINEER timely notice of the CONTRACTOR's intention to perform such test or to cover the same and the ENGINEER has not acted with reasonable promptness in response to such notice.

F. If any WORK is covered contrary to the written request of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for the ENGINEER's observation and recovered at the CONTRACTOR's expense.

G. If the ENGINEER considers it necessary or advisable that covered WORK be observed by the ENGINEER or inspected or tested by others, the CONTRACTOR, at the ENGINEER's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, material, and equipment. If it is found that such WORK is defective, the CONTRACTOR shall bear all direct, indirect, and consequential costs and damages of such uncovering, exposure, observation, inspection, and testing and of satisfactory reconstruction, including but not limited to fees and charges of engineers, attorneys, and other professionals. However, if such WORK is not found to be defective, the CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction; and, if the parties are unable to agree as to the amount or extent thereof, the CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

13.4 OWNER MAY STOP THE WORK. If the WORK is defective, or the CONTRACTOR fails to perform work in such a way that the completed WORK will conform to the Contract Documents, the OWNER may order the CONTRACTOR to stop the WORK, or any portion thereof, until the cause for such order has been eliminated; however, this right of the OWNER to stop the WORK shall not give rise to any duty on the part of the OWNER to exercise this right for the benefit of the CONTRACTOR or any other party.

13.5 CORRECTION OR REMOVAL OF DEFECTIVE WORK. If required by the ENGINEER, the CONTRACTOR shall promptly, either correct all defective work, whether or not fabricated, installed, or completed, or, if the WORK has been rejected by the ENGINEER, remove it from the site and replace it with non-defective work. The CONTRACTOR shall bear all direct, indirect and consequential costs and damages of such correction or removal, including but not limited to fees and charges of engineers, attorneys, and other professionals made necessary thereby.

13.6 ONE YEAR CORRECTION PERIOD

A. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any work is found to be defective, the CONTRACTOR shall promptly, without cost to the OWNER and in accordance with OWNER's written notification, (i) correct such Defective WORK, or, if it has been rejected by the OWNER, remove it from the site and replace it with non-defective work, and (ii) satisfactorily correct or remove and replace any damage to other work of others resulting therefrom. If the CONTRACTOR does not promptly comply with such notification, or in an emergency where delay would cause serious risk of loss or damage, the OWNER may have the Defective WORK corrected or the rejected WORK removed and replaced, and all direct, indirect, and consequential costs and damages of such removal and replacement including but not limited to fees and charges of engineers, attorneys and other professionals will be paid by the CONTRACTOR.

B. Where Defective WORK (and damage to other WORK resulting therefrom) has been corrected, removed or replaced under this paragraph 13.6, the correction period hereunder with respect to such WORK will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

13.7 ACCEPTANCE OF DEFECTIVE WORK. If, instead of requiring correction or removal and replacement of defective work, the OWNER prefers to accept the WORK, the OWNER may do so. The CONTRACTOR shall bear all direct, indirect, and consequential costs attributable to the OWNER's evaluation of and determination to accept such defective work. If any such acceptance occurs prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the WORK, and the OWNER shall be entitled to an appropriate decrease in the Contract Price.

ARTICLE 14 PAYMENTS TO CONTRACTOR AND COMPLETION

14.1 SCHEDULE OF VALUES (LUMP SUM PRICE BREAKDOWN). The schedule of values or lump sum price breakdown established as provided in the General Requirements shall serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to the ENGINEER.

14.2 UNIT PRICE BID SCHEDULE. Progress payments on account of Unit Price work will be based on the number of units completed.

14.3 APPLICATION FOR PROGRESS PAYMENT

A. Unless otherwise prescribed by law, on the 25th of each month, the CONTRACTOR shall submit to the ENGINEER for review, an Application for Payment filled out and signed by the CONTRACTOR covering the WORK completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.

B. The Application for Payment shall identify, as a sub-total, the amount of the CONTRACTOR'S Total Earnings to Date, plus the Value of Materials Stored at the Site which have not yet been incorporated in the WORK, and less a deductive adjustment for

materials installed which were not previously incorporated in the WORK, but for which payment was allowed under the provisions for payment for Materials Stored at the Site, but not yet incorporated in the WORK.

C. The Net Payment Due the CONTRACTOR shall be the above-mentioned subtotal from which shall be deducted the total amount of all previous payments made to the CONTRACTOR. Progress payments will be paid in full in accordance with Article 14 of the General Conditions until 90% of the Contract Price has been paid. The remaining 10% of the Contract Price amount may be withheld until:

1. final inspection has been made;
2. completion of the Project; and
3. acceptance of the Project by the OWNER.

D. The Value of Materials Stored at the Site shall be an amount equal to the specified percent of the value of such materials as set forth in the Supplementary General Conditions. Said amount shall be based upon the value of all acceptable materials and equipment not incorporated in the WORK but delivered and suitably stored at the site or at another location agreed to in writing; provided, each such individual item has a value of more than $5,000.00 and will become a permanent part of the WORK. The Application for Payment shall also be accompanied by an invoice (including shipping), a certification that the materials meet the applicable contract specifications, and any evidence required by the OWNER that the materials and equipment are covered by appropriate property insurance and other arrangements to protect the OWNER's interest therein, all of which will be satisfactory to the OWNER. Payment for materials will not constitute final acceptance. It shall be the CONTRACTOR’s responsibility to protect the material from damage, theft, loss, or peril while in storage. Unless otherwise prescribed by law, the Value of Materials Stored at the Site shall be paid at the invoice amount up to a maximum of 85% of the Contract Price for those items.

14.4 CONTRACTOR'S WARRANTY OF TITLE. The CONTRACTOR warrants and guarantees that title to all work, materials, and equipment covered by an Application for Payment, whether incorporated in the WORK or not, will pass to the OWNER no later than the time of payment free and clear of all liens.

14.5 REVIEW OF APPLICATIONS FOR PROGRESS PAYMENT

A. The ENGINEER will, within 7 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to the OWNER, or return the Application to the CONTRACTOR indicating in writing the ENGINEER's reasons for refusing to recommend payment. In the later case, the CONTRACTOR may make the necessary corrections and resubmit the Application. If the ENGINEER still disagrees with a portion of the Application, it will submit the Application recommending the undisputed portion of the Application to the OWNER for payment and provide reasons for recommending non-payment of the disputed amount. Thirty days after presentation of the Application for Payment with the ENGINEER's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.5B) become due and when due will be paid by the OWNER to the CONTRACTOR.

B. The OWNER may refuse to make payment of the full amount recommended by the ENGINEER because claims have been made against the OWNER on account of the CONTRACTOR's performance of the WORK or Liens have been filed in connection with the WORK or there are other items entitling the OWNER to a credit against the amount recommended, but the OWNER must give the CONTRACTOR written notice within 7 days (with a copy to the ENGINEER) stating the reasons for such action.

14.6 PARTIAL UTILIZATION

A. The OWNER shall have the right to utilize or place into service any item of equipment or other usable portion of the WORK prior to completion of the WORK. Whenever the OWNER plans to exercise said right, the CONTRACTOR will be notified in writing by the OWNER, identifying the specific portion or portions of the WORK to be so utilized or otherwise placed into service.

B. It shall be understood by the CONTRACTOR that until such written notification is issued, all responsibility for care and maintenance of all of the WORK shall be borne by the CONTRACTOR. Upon issuance of said written notice of partial utilization, the OWNER will accept responsibility for the protection and maintenance of all such items or portions of the WORK described in the written notice.

C. The CONTRACTOR shall retain full responsibility for satisfactory completion of the WORK, regardless of whether a portion thereof has been partially utilized by the OWNER and the CONTRACTOR's one year correction period shall commence only after the date of Substantial Completion for the WORK.

14.7 SUBSTANTIAL COMPLETION. When the CONTRACTOR considers the WORK ready for its intended use the CONTRACTOR shall notify the OWNER and the ENGINEER in writing that the WORK is substantially complete. The CONTRACTOR will attach to this request a list of all work items that remain to be completed and a request that the ENGINEER prepare a Notice of Completion. Within a reasonable time thereafter, the OWNER, the CONTRACTOR, and the ENGINEER shall make an inspection of the WORK to determine the status of completion. If the ENGINEER does not consider the WORK substantially complete, or the list of remaining work items to be comprehensive, the ENGINEER will notify the CONTRACTOR in writing giving the reasons therefor. If the ENGINEER considers the WORK substantially complete, the ENGINEER will prepare and deliver to the OWNER, for its execution and recording, the Notice of Completion signed by the ENGINEER and CONTRACTOR, which shall fix the date of Substantial Completion.

14.8 FINAL APPLICATION FOR PAYMENT. After the CONTRACTOR has completed all of the remaining work items referred to in Paragraph 14.7 and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, record as-built documents (as provided in the General Requirements) and other documents, all as required by the Contract Documents, and after the ENGINEER has indicated that the WORK is acceptable, the CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers (satisfactory to the OWNER) of all liens arising out of or filed in connection with the WORK.

14.9 FINAL PAYMENT AND ACCEPTANCE

A. If, on the basis of the ENGINEER's observation of the WORK during construction and final inspection, and the ENGINEER's review of the final Application for Payment and accompanying documentation, all as required by the Contract Documents, the ENGINEER is satisfied that the WORK has been completed and the CONTRACTOR's other obligations under the Contract Documents have been fulfilled, the ENGINEER will, within 14 days after receipt of the final Application for Payment, indicate in writing the ENGINEER's recommendation of payment and present the Application to the OWNER for payment.

B. After acceptance of the WORK by the OWNER's governing body, the OWNER will make final payment to the CONTRACTOR of the amount remaining after deducting all prior payments and all amounts to be kept or retained under the provisions of the Contract Documents, including the following items:

1. Liquidated damages, as applicable.
2. Two times the value of outstanding items of correction work or punch list items yet uncompleted or uncorrected, as applicable. All such work shall be completed or corrected to the satisfaction of the OWNER within the time stated on the Notice of Completion, otherwise the CONTRACTOR does hereby waive any and all claims to all monies withheld by the OWNER to cover the value of all such uncompleted or uncorrected items.

14.10 RELEASE OF RETAINAGE AND OTHER DEDUCTIONS

A. After executing the necessary documents to initiate the lien period, and not more than 45 days thereafter (based on a 30-day lien filing period and 15-day processing time), the OWNER will release to the CONTRACTOR the retainage funds withheld pursuant to the Agreement, less any deductions to cover pending claims against the OWNER pursuant to Paragraph 14.5B.

B. After filing of the necessary documents to initiate the lien period, the CONTRACTOR shall have 30 days to complete any outstanding items of correction work remaining to be completed or corrected as listed on a final punch list made a part of the Notice of Completion. Upon expiration of the 45 days, referred to in Paragraph 14.10A, the amounts withheld pursuant to the provisions of Paragraph 14.9B herein, for all remaining work items will be returned to the CONTRACTOR; provided, that said work has been completed or corrected to the satisfaction of the OWNER within said 30 days. Otherwise, the CONTRACTOR does hereby waive any and all claims for all monies withheld by the OWNER under the Contract to cover 2 times the value of such remaining uncompleted or uncorrected items.

14.11 CONTRACTOR'S CONTINUING OBLIGATION. The CONTRACTOR's obligation to perform and complete the WORK in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by the ENGINEER, nor the issuance of a Notice of Completion, nor any payment by the OWNER to the CONTRACTOR under the Contract Documents, nor any use or occupancy of the WORK or any part thereof by the OWNER, nor any act of acceptance by the OWNER nor any failure to do so, nor any review of a Shop Drawing or sample submittal, will constitute an acceptance of work not in accordance with the Contract Documents or a release of the CONTRACTOR's obligation to perform the WORK in accordance with the Contract Documents.

14.12 FINAL PAYMENT TERMINATES LIABILITY OF OWNER. Final payment is defined as the last progress payment made to the CONTRACTOR for earned funds, less monies withheld as applicable, pursuant to Paragraph 14.10A. The acceptance by the CONTRACTOR of the final payment referred to in Paragraph 14.9 herein, shall be a release of the OWNER and its agents from all claims of liability to the CONTRACTOR for anything done or furnished for, or relating to, the WORK or for any act of neglect of the OWNER or of any person relating to or affecting the WORK, except demands against the OWNER for the remainder, if any, of the amounts kept or retained under the provisions of Paragraph 14.9 herein; and excepting pending, unresolved claims filed prior to the date of the Notice of Completion.

ARTICLE 15 SUSPENSION OF WORK AND TERMINATION

15.1 SUSPENSION OF WORK BY OWNER. The OWNER, acting through the ENGINEER, may, at any time and without cause, suspend the WORK or any portion thereof for a period of not more than 90 days by notice in writing to the CONTRACTOR. The CONTRACTOR shall resume the WORK on receipt from the ENGINEER of a notice of resumption of work. The CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if the CONTRACTOR makes an approved claim therefor as provided in Articles 11 and 12.

15.2 TERMINATION OF AGREEMENT BY OWNER (CONTRACTOR DEFAULT)

A. In the event of default by the CONTRACTOR, the OWNER may give 10 days written notice to the CONTRACTOR of OWNER's intent to terminate the Agreement and provide the CONTRACTOR an opportunity to remedy the conditions constituting the default. It shall be considered a default by the CONTRACTOR whenever CONTRACTOR shall: (1) declare bankruptcy, become insolvent, or assign its assets for the benefit of its creditors; (2) fail to provide materials or quality of work meeting the requirements of the Contract Documents; (3) disregard or violate provisions of the Contract Documents or ENGINEER's instructions; (4) fail to prosecute the WORK according to the approved progress schedule; or, (5) fail to provide a qualified superintendent, competent workers, or materials or equipment meeting the requirements of the Contract Documents. If the CONTRACTOR fails to remedy the conditions constituting default within the time allowed, the OWNER may then issue the Notice of Termination.

B. In the event the Agreement is terminated in accordance with Paragraph 15.2A, herein, the OWNER may take possession of the WORK and may complete the WORK by whatever method or means the OWNER may select. The cost of completing the WORK shall be deducted from the balance which would have been due the CONTRACTOR had the Agreement not been terminated and the WORK completed in accordance with the Contract Documents. If such cost exceeds the balance which would have been due, the CONTRACTOR shall pay the excess amount to the OWNER. If such cost is less than the balance which would have been due, the CONTRACTOR shall not have claim to the difference.

15.3 TERMINATION OF AGREEMENT BY OWNER (FOR CONVENIENCE). The OWNER may terminate the Agreement at any time if it is found that reasons beyond the control of either the OWNER or CONTRACTOR make it impossible or against the OWNER's interests to complete the WORK. In such a case, the CONTRACTOR shall have no claims against the OWNER except: (1) for

the value of work performed up to the date the Agreement is terminated; and, (2) for the cost of materials and equipment on hand, in transit, or on definite commitment, as of the date the Agreement is terminated which would be needed in the WORK and which meet the requirements of the Contract Documents. The value of work performed and the cost of materials and equipment delivered to the site, as mentioned above, shall be determined by the ENGINEER in accordance with the procedure prescribed for the making of the final application for payment and payment under Paragraphs 14.8 and 14.9.

15.4 TERMINATION OF AGREEMENT BY CONTRACTOR. The CONTRACTOR may terminate the Agreement upon 10 days written notice to the OWNER, whenever: 1) the WORK has been suspended under the provisions of Paragraph 15.1, herein, for more than 90 consecutive days through no fault or negligence of the CONTRACTOR, and notice to resume work or to terminate the Agreement has not been received from the OWNER within this time period; or, 2) the OWNER should fail to pay the CONTRACTOR any monies due him in accordance with the terms of the Contract Documents and within 60 days after presentation to the OWNER by the CONTRACTOR of a request therefor, unless within said 10-day period the OWNER shall have remedied the condition upon which the payment delay was based. In the event of such termination, the CONTRACTOR shall have no claims against the OWNER except for those claims specifically enumerated in Paragraph 15.3, herein, and as determined in accordance with the requirements of said paragraph.

ARTICLE 16 MISCELLANEOUS

16.1 GIVING NOTICE. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

16.2 RIGHTS IN AND USE OF MATERIALS FOUND ON THE WORK

A. The CONTRACTOR may use on the Project, with ENGINEER's approval, such stone, gravel, sand, or other material determined suitable by the ENGINEER, as may be found in the excavation. The CONTRACTOR will be paid for the excavation of such material at the corresponding contract unit price. No additional payment will be made for utilizing the material from excavation as borrow, or select borrow.

B. The CONTRACTOR shall replace, at its own expense, with other acceptable material, all of that portion of the excavated material so removed and used which was needed for use on the project. No charge for the materials so used will be made against the CONTRACTOR except that the CONTRACTOR shall be responsible for payment of any royalties required.

C. The CONTRACTOR shall not excavate or remove any material from within the Project location which is not within the grading limits, as indicated by the slope and grade lines, without written authorization from the ENGINEER.

D. In the event the CONTRACTOR has processed materials from OWNER-furnished sources in excess of the quantities required for performance of this contract, including any waste material produced as a by-product, the CBJ may retain possession of such materials without obligation to reimburse the CONTRACTOR for the cost of their production. When such

materials are in a stockpile, the ENGINEER may require: That it remain in stockpile; the CONTRACTOR level such stockpile(s); or that the CONTRACTOR remove such materials and restore the premises to a satisfactory condition at the CONTRACTOR's expense. This provision shall not preclude the CBJ from arranging with the CONTRACTOR to produce material over and above the contract needs, payment for which shall be by written agreement between the CBJ and the CONTRACTOR.

E. Unless otherwise provided, the material from any existing old structure may be used temporarily by the CONTRACTOR in the erection of the new structure. Such material shall not be cut or otherwise damaged except with the approval of the ENGINEER.

16.3 RIGHT TO AUDIT. If the CONTRACTOR submits a claim to the OWNER for additional compensation, the OWNER shall have the right, as a condition to considering the claim, and as a basis for evaluation of the claim, and until the claim has been settled, to audit the CONTRACTOR's books to the extent they are relevant. This right shall include the right to examine books, records, documents, and other evidence and accounting procedures and practices, sufficient to discover and verify all direct and indirect costs of whatever nature claimed to have been incurred or anticipated to be incurred and for which the claim has been submitted. The right to audit shall include the right to inspect the CONTRACTOR's plants, or such parts thereof, as may be or have been engaged in the performance of the WORK. The CONTRACTOR further agrees that the right to audit encompasses all subcontracts and is binding upon Subcontractors. The rights to examine and inspect herein provided for shall be exercisable through such representatives as the OWNER deems desirable during the CONTRACTOR's normal business hours at the office of the CONTRACTOR. The CONTRACTOR shall make available to the OWNER for auditing, all relevant accounting records and documents, and other financial data, and upon request, shall submit true copies of requested records to the OWNER.

16.4 ARCHEOLOGICAL OR HISTORICAL DISCOVERIES. When the CONTRACTOR's operation encounters prehistoric artifacts, burials, remains of dwelling sites, paleontological remains, such as shell heaps, land or sea mammal bones or tusks, or other items of historical significance, the CONTRACTOR shall cease operations immediately and notify the ENGINEER. No artifacts or specimens shall be further disturbed or removed from the ground and no further operations shall be performed at the site until so directed. Should the ENGINEER order suspension of the CONTRACTOR's operations in order to protect an archaeological or historical finding, or order the CONTRACTOR to perform extra work, such order(s) shall be covered by an appropriate contract change document.

16.5 CONSTRUCTION OVER OR ADJACENT TO NAVIGABLE WATERS. All work over, on, or adjacent to navigable waters shall be so conducted that free navigation of the waterways will not be interfered with and the existing navigable depths will not be impaired, except as allowed by permit issued the U.S. Coast Guard and/or the U.S. Army Corps of Engineers, as applicable.

16.6 GRATUITY AND CONFLICT OF INTEREST. The CONTRACTOR agrees to not extend any loan, gratuity or gift of money of any form whatsoever to any employee or elected official of the OWNER, nor will the CONTRACTOR rent or purchase any equipment or materials from any employee or elected official of the OWNER, or to the best of the CONTRACTOR’s knowledge, from any agent of any employee or elected official of the OWNER. Before final payment, the CONTRACTOR shall execute and furnish the OWNER an affidavit certifying that the CONTRACTOR has complied with the above provisions of the contract.

16.7 SUITS OF LAW CONCERNING THE WORK

A. Should a suit of law be entered into, either by the CONTRACTOR (or the CONTRACTOR's surety) against the OWNER, or by the OWNER against the CONTRACTOR (or the CONTRACTOR's surety), the suit of law shall be tried in the First Judicial District of Alaska.

B. If one of the questions at issue is the satisfactory performance of the work by the CONTRACTOR and should the appropriate court of law judge the work of the CONTRACTOR to be unsatisfactory, then the CONTRACTOR (or the CONTRACTOR's surety) shall reimburse the OWNER for all legal and all other expenses (as may be allowed and set by the court) incurred by the OWNER because of the suit of the law and, further, it is agreed that the OWNER may deduct such expense from any sum or sums then, or any that become due the CONTRACTOR under the contract.

16.8 CERTIFIED PAYROLLS

A. All CONTRACTORs or Subcontractor who perform work on a public construction contract for the OWNER shall file a certified payroll with the Alaska Department of Labor before Friday of each week that covers the preceding week (Section 14-2-4 ACLA 1949; am Section 4 ch 142 SLA 1972).

B. In lieu of submitting the State payroll form, the CONTRACTOR's standard payroll form may be submitted, provided it contains the information required by AS 36.05.040 and a statement that the CONTRACTOR is complying with AS 36.10.010.

C. A contractor or subcontractor, who performs work on public construction in the State, as defined by AS 36.95.010(3), shall pay not less than the current prevailing rate of wages as issued by the Alaska Department of Labor before the end of the pay period. (AS 36.05.010).

16.9 PREVAILING WAGE RATES

A. Wage rates for Laborers and Mechanics on Public Contracts, AS 36.05.070. The CONTRACTOR, or Subcontractors, shall pay all employees unconditionally and not less than once a week. Wages may not be less than those stated in Paragraph 16.8C, regardless of the contractual relationship between the CONTRACTOR or Subcontractors and laborers, mechanics, or field surveyors. The scale of wages to be paid shall be posted by the CONTRACTOR in a prominent, easily accessible place at the site of the WORK.

B. Failure to Pay Agreed Wages, AS 36.05.080. If it is found that a laborer, mechanic, or field surveyor employed by the CONTRACTOR or Subcontractor has been, or is being, paid a rate or wages less than the established rate, the OWNER may, by written notice, terminate the CONTRACTOR or Subcontractors right to proceed with the work. The OWNER may prosecute the work to completion by contract or otherwise, and the CONTRACTOR and sureties will be held liable to the OWNER for excess costs for completing the WORK. (Section 2 ch 52 SLA 1959).

C. Listing Contractor's Who Violate Contracts, AS 36.05.090. In addition, a list giving the names of persons who have disregarded the rights of their employees shall be distributed to all departments of State government and all political subdivisions. No person appearing on this

list, and no firm, corporation, partnership or association in which the person has an interest, may work as a CONTRACTOR or Subcontractor on a public construction contract for the State, or a political subdivision of the state, until three years after the date of publication of the list. (Section 3 ch 52 SLA 1959; am Section 9 ch 142 SLA).

16.10 EMPLOYMENT REFERENCE. Workers employed in the execution of the contract by the CONTRACTOR or by any Subcontractor under this contract shall not be required or permitted to labor more than 8 hours a day or 40 hours per week in violation of the provisions of the Alaska Wage and Hour Act, Section 23.10.060.

16.11 COST REDUCTION INCENTIVE

A. At any time within 45 days after the date of the Notice of Award, the CONTRACTOR may submit to the ENGINEER in writing, proposals for modifying the plans, specifications, or other requirements of this contract for the sole purpose of reducing the total cost of construction. The cost reduction proposal shall not impair in any manner the essential functions or characteristics of the project, including but not limited to, service life, economy of operation, ease of maintenance, desired appearance or design and safety standards.

B. The cost reduction proposal shall contain the following information:

1. Description of both the existing contract requirements for performing the WORK and the proposed changes.
2. An itemization of the contract requirements that must be changed if the proposal is adopted.
3. A detailed estimate of the time required and the cost of performing the WORK under both the existing contract and the proposed change.
4. A statement of the date by which the CONTRACTOR must receive the decision from the OWNER on the cost reduction proposal.
5. The contract items of WORK effected by the proposed changes including any quantity variations.
6. A description and estimate of costs the OWNER may incur in implementing the proposed changes, such as test and evaluation and operating and support costs.
7. A prediction of any effects the proposed change would have on future operations and maintenance costs to the OWNER.

C. The provisions of this section shall not be construed to require the OWNER to consider any cost reduction proposal which may be submitted; nor will the OWNER be liable to the CONTRACTOR for failure to accept or act upon any cost reduction proposal submitted, or for delays to the work attributable to the consideration or implementation of any such proposal.

D. If a cost reduction proposal is similar to a change in the plans or specifications for the project under consideration by the OWNER at the time the proposal is submitted, the OWNER will not accept such proposal and reserves the right to make such changes without compensation to the CONTRACTOR under the provisions of this section.

E. The CONTRACTOR shall continue to perform the work in accordance with the requirements of the contract until an executed Change Order incorporating the cost reduction proposal has

been issued. If any executed Change Order has not been issued by the date upon which the CONTRACTOR's cost reduction proposal specifies that a decision should be made by the OWNER, in writing, the cost reduction proposal shall be considered rejected.

F. The OWNER, shall be the sole judge of the acceptability of a cost reduction proposal and of the estimated net savings in Contract Time and construction costs resulting from the adoption of all or any part of such proposal. Should the CONTRACTOR disagree with OWNER's decision on the cost reduction proposal, there is no further consideration. The OWNER reserves the right to make final determination.

G. If the CONTRACTOR's cost reduction proposal is accepted in whole or in part, such acceptance will be made by a contract Change Order, which specifically states that the change is executed pursuant to this cost reduction proposal section. Such Change Order shall incorporate the changes in the plans and specifications which are necessary to permit the cost reduction proposal or such part of it as has been accepted to be put into effect and shall include any conditions upon which the OWNER's approval is based, if such approval is conditional. The Change Order shall also describe the estimated net savings in the cost of performing the work attributable to the cost reduction proposal, and shall further provide that the contract cost be adjusted by crediting the OWNER with the estimated net savings amount.

H. Acceptance of the cost reduction proposal and performance of the work does not extend the time of completion of the contract, unless specifically provided in the Change Order authorizing the use of the submitted proposal. Should the adoption of the cost reduction proposal result in a Contract Time savings, the total Contract Time shall be reduced by an amount equal to the time savings realized.

I. The amount specified to the CONTRACTOR in the Change Order accepted in the cost reduction proposal shall constitute full compensation for the performance of WORK. No claims for additional costs as a result of the changes specified in the cost reduction proposal shall be allowed.

J. The OWNER reserves the right to adopt and utilize any approved cost reduction proposal for general use on any contract administered when it is determined suitable for such application. Cost reduction proposals identical, similar, or previously submitted will not be accepted for consideration if acceptance and compensation has previously been approved. The OWNER reserves the right to use all or part of any cost reduction proposal without obligation or compensation of any kind to the CONTRACTOR.

K. The CONTRACTOR shall bear the costs, if any, to revise all bonds and insurance requirements for the project, to include the cost reduction WORK.

END OF SECTION

SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS

GENERAL. These Supplementary General Conditions make additions, deletions, or revisions to the General Conditions as indicated herein. All provisions which are not so added, deleted, or revised remain in full force and effect. Terms used in these Supplementary General Conditions which are defined in the General Conditions have the meanings assigned to them in the General Conditions.

SGC 1 DEFINITIONS. ***Remove*** the definition for Contract Documents and ***replace*** with the following:

Contract Documents – The Table of Contents, Notice Inviting Bids, Instructions to Bidders, Bid Forms (including the Bid, Bid Schedule(s), Subcontractor Report, Bid Bond, and all required certificates and affidavits), Agreement, Performance Bond, Payment Bond, General Conditions, Supplementary General Conditions, Alaska Labor Standards, Reporting, and Prevailing Wage Rate Determination, Special Provisions, Standard Specifications, Technical Specifications, Drawings, Permits, and all Addenda, and Change Orders executed pursuant to the provisions of the Contract Documents.

SGC 2.2 COPIES OF DOCUMENTS. ***Add*** the following:

The OWNER shall furnish to the CONTRACTOR two (2) hard copies of the Contract Documents which will include bound reduced Drawings and one (1) electronic copy (pdf format) on a CD-ROM. Additional copies of contract documents are the responsibility of the contractor.

SGC 3.2 ORDER OF PRECEDENCE OF CONTRACT DOCUMENTS. ***Remove*** No. 12. Technical Specifications and No. 13. Drawings, and ***add*** the following:

12. Special Provisions Section
13. Standard Specifications for Civil Engineering Projects and Subdivision Improvements December 2003 Edition with current Errata Sheets.
14. Drawings.

SGC 4.2 PHYSICAL CONDITIONS - SUBSURFACE AND EXISTING STRUCTURES. ***Add*** the following:

C. In the preparation of the Contract Documents, the Engineer of Record has relied upon the following:

1. The following mapping data of land and quarry topography and existing conditions at the site of the WORK:

    a. Topographic mapping based on LIDAR data collected in 2013 by Watershed Sciences, INC., contracted by the City and Borough of Juneau and published by the National Geodetic Survey (NGS).

    b. Quarry topographic mapping services provided by DOWL Engineers and updated in March 2020, contracted by the City and Borough of Juneau.

SGC - 4.6 USE OF THE CBJ/STATE LEMON CREEK GRAVEL PIT. ***Add*** the following.

The CBJ/State Lemon Creek Gravel Pit is available for this Project.

SGC - 4.6 USE OF THE CBJ/STATE LEMON CREEK GRAVEL PIT.

Wherever the land use permits are referenced, ***delete*** and ***replace with*** the permit number USE2008-00061.

- ***Delete*** the last sentence of Paragraph A and ***replace with*** the following: "Contact Alec Venechuck, CBJ Material Source Manager, at (907) 586-0874 for the current material rates."

- ***Delete*** paragraph C., and ***replace*** with the following paragraph C.

  C. CONTRACTORs deciding to use material from the CBJ/State pit shall provide an Individual Mining Plan prepared by a professional engineer registered in the State of Alaska. The Individual Mining Plan must be reviewed and approved by the CBJ, prior to commencing operations within the pit. CONTRACTORs shall also secure a Performance Bond to ensure compliance with contract provisions, including any Individual Mining Plan stipulations. The bond shall remain in full force and effect until a release is obtained from the CBJ. A $10,000 cash processing restoration bond is required prior to screening or primary crushing operations.

- ***Add*** the following paragraphs:

  J. Contractors choosing to mine material from CBJ material sources are also subject to the conditions contained in each site's Multi Sector General Permit for Stormwater Discharges associated with industrial activities (MSGP) and the Storm Water Pollution Prevention Plan (SWPPP).

  K. Contractors choosing to perform screening or primary crushing shall comply with all requirements of Mine Safety and Health Administration (MSHA) Part 46, and must obtain a Contractor ID number (7000-52) from MSHA.

Add the following SGC 4.7**:**

SGC 4.7 USE OF CITY/STATE STABLER'S POINT ROCK QUARRY. ***Add*** the following:

The CBJ/State Stabler's Point Rock Quarry is available for this Project.

Add the following SGC 4.7**:**

SGC 4.7 USE OF CITY/STATE STABLER'S POINT ROCK QUARRY.

A. On City and Borough of Juneau construction projects, the CBJ may make unclassified material available to the CONTRACTOR, from the City/State Stabler's Point rock quarry, at a rate less than charged other customers. The CONTRACTOR is not required to use material from the CBJ/State quarry and the CBJ makes no guarantee as to the quantity or quality of material. Contact Michael Eich, CBJ Material Source Manager, at (907) 586-0874 for the current material rates.

B. The CONTRACTOR proposing to use material from the City/State quarry is required to be in good standing for all amounts owed to the CBJ, for previous gravel operations, prior to submitting a mining plan for approval. The CONTRACTOR using the quarry must comply with Conditional Use Permit USE2011-00017. Failure to meet these requirements, if so subject, shall be sufficient reason to deny use of the City/State Stabler's Point rock quarry as a rock source. To determine if your company is subject to these requirements, contact the CBJ Engineering Department, Rock Quarry Management, at

(907) 586-0874.

C. The CONTRACTOR deciding to use material from the CBJ/State Stabler's Point rock quarry shall provide an Individual Mining Plan prepared by a professional engineer registered in the State of Alaska. The Individual Mining Plan must be reviewed and approved by the CBJ, prior to commencing operations with the pit. The CONTRACTOR shall also secure a Performance Bond to ensure compliance with contract provisions, including any Individual Mining Plan stipulations. The bond shall remain in full force and effect until a release is obtained from the CBJ. A $10,000.00 cash processing restoration bond is required prior to screening or primary crushing operations.

D. The CONTRACTOR must submit an Individual Mining Plan that is in compliance with Conditional Use Permit No. USE 2011-00017 for rock extraction with the City/State Stabler's Point rock quarry. The CONTRACTOR must contact the CBJ Engineering Department for conditions for the extraction.

E. The CONTRACTOR shall account for placement of materials removed from the quarry. The CBJ may require the CONTRACTOR to cross-check weight tickets, submit to an audit, or participate in other measures required by the CBJ to ensure accountability. Unprocessed overburden removed from the quarry will not be weighed. All other material mined will be measured by truck load or survey. The CONTRACTOR will be responsible for loading, screening and sorting their own material. Primary screening may be allowed in the quarry. Primary crushing may be allowed according to the conditions of the Conditional Use Permit No USE2011-00017.

F. The rock quarry overhead charge shall be paid to the CBJ within 60 days after removing material from the quarry and prior to requesting and/or receiving final payment. Upon completion of the excavation the CONTRACTOR shall notify the CBJ, in writing, in sufficient time to perform a field-compliance examination prior to vacating the quarry. Any significant deviation from the stipulations of the Individual Mining Plan identified during the field inspection shall be corrected by the CONTRACTOR prior to release of the bond. A signed release from CBJ will be required prior to releasing the CONTRACTOR's bond.

G. The City/State Stabler's Point rock quarry is a by-project operation. The hours of operation are stipulated in Conditional Use Permit No. USE2011-00017.

H. All Contractors/Equipment Operators using the CBJ/State Stabler's Point rock quarry shall be in compliance with Federal Mine Safety and Health Administration regulations for quarry and gravel operations.

I. Contractors choosing to mine material from CBJ material sources are also subject to the conditions contained in each site's Multi Sector General Permit for Stormwater Discharges associated with industrial activities (MSGP) and the Storm Water Pollution Prevention Plan (SWPPP).

SGC 5.1 PERFORMANCE, PAYMENT, AND OTHER BONDS. The Contractor shall furnish Performance and Payment Bonds in the amount of 100% of the Bid.

SGC 5.2 INSURANCE AMOUNTS. The limits of liability for the insurance required by Paragraph 5.2 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations**.** The CONTRACTOR must provide certification of proper insurance coverage and amendatory endorsements or copies of the applicable policy language affecting coverage required in this agreement to the City and Borough of Juneau. All certificates of insurance supplied to the OWNER shall state that the OWNER is named as **"Additional Insured for any and all work performed for the City**

& Borough of Juneau" for the Commercial General Liability policy and any other policies, if required in this Section. NOTE: This requirement has changed. The OWNER no longer requires certificates of insurance referencing project names and contract numbers.

Delete paragraph C and ***Replace*** with the following paragraph C:

C. The CONTRACTOR shall furnish the OWNER with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of policies. Failure of CBJ to demand such certificate or other evidence of full compliance with these insurance requirements or failure of CBJ to identify a deficiency from evidence that is provided shall not be construed as a waiver of the obligation of the Contractor to maintain the insurance required by this contract. The coverage afforded will not be cancelled, reduced in coverage, or renewal refused until at least 30 days' prior written notice has been given to the OWNER by the CONTRACTOR. **All such insurance required herein (except for Workers' Compensation and Employer's Liability) shall name the OWNER, its Consultants and subconsultants and their officers, directors, agents, and employees as "additional insureds" under the policies.**

The CONTRACTOR shall purchase and maintain the following insurance:

1. Workers' Compensation and Employer's Liability. This insurance shall protect the CONTRACTOR against all claims under applicable state workers' compensation laws. The CONTRACTOR shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a Workers' Compensation law. The CONTRACTOR shall require each Subcontractor similarly to provide Workers' Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the CONTRACTOR's Workers' Compensation Insurance. In case any class of employees is not protected, under the Workers' Compensation Statute, the CONTRACTOR shall provide and shall cause each subcontractor to provide adequate employer's liability insurance for the protection of such of its employees as are not otherwise protected. **The CONTRACTOR grants a waiver of any right to subrogation against the OWNER by virtue of the payment of any loss under such insurance.** This provision applies regardless of whether or not the OWNER has received a waiver of subrogation endorsement from the insurer.

Workers' Compensation: (under Paragraph 5.2C.1 of the General Conditions) as in accordance with AS 23.30.045:

a. State: Statutory
b. Applicable Federal (e.g., Longshore): Statutory

Note: If the WORK called for in the Contract Documents involves work in or on any navigable waters, the CONTRACTOR shall provide Workers' Compensation coverage which shall include coverage under the Longshore and Harbor Workers' Compensation Act, the Jones Act, and any other coverage required under Federal or State laws pertaining to workers in or on navigable waters.

a. Employers Liability

Bodily Injury by Accident:	$100,000.00	Each Accident
Bodily Injury by Disease:	$100,000.00	Each Employee
Bodily Injury by Disease:	$500,000.00	Policy Limit

1. CONTRACTOR agrees to waive all rights of subrogation against the OWNER for WORK performed under contract.
2. If CONTRACTOR directly utilizes labor outside of the State of Alaska in the prosecution of the WORK, "Other States" endorsement shall be required as a condition of the contract.

2. Commercial General Liability (CGL), including products and completed operations, property damage, bodily injury and personal and advertising injury, with limits no less than $1,000,000 each occurrence and $2,000,000 aggregate. (under Paragraph 5.2C.2 of the General Conditions) **This insurance policy is to contain, or be endorsed to contain, additional insured status for the CBJ, its officers, officials, employees, and volunteers.** If Additional insured status is provided in the form of an endorsement to the Contractor's insurance, the endorsement shall be at least as broad as ISO Form CG 20 10 11 85 or **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; **and** CG 20 37 forms if later revisions used).

3. Commercial Automobile Liability: (under Paragraph 5.2C.3 of the General Conditions) including Owned, Hired, and Non-Owned Vehicles:

   Combined Single Limit, Bodily Injury and Property Damage $1,000,000.00

   This insurance policy is to contain, or be endorsed to contain, additional insured status for the CBJ, its officers, officials, employees, and volunteers The CONTRACTOR shall require each Subcontractor similarly to provide Commercial Automobile Liability Insurance for all of the latter's employees to be engaged in such WORK unless such employees are covered by the protection afforded by the CONTRACTOR's Commercial Automobile Liability Insurance.

Add the following paragraphs:

C. Builder's Risk: CONTRACTOR is not required to obtain a Builder's Risk insurance policy for this project.

D. All Subcontractors are required to secure and maintain the insurance coverages listed above, unless otherwise noted.

E. If the CONTRACTOR maintains higher limits than the minimums shown above, the OWNER requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the OWNER.

F. Policies shall also specify insurance provided by CONTRACTOR will be considered primary and not contributory to any other insurance available to the OWNER.

G. Should any of the policies described above be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

SGC 6.5 CONCERNING SUBCONTRACTORS, SUPPLIERS, AND OTHERS. ***Add*** the following:

B. The CONTRACTOR shall perform not less than 40% of the WORK with its own forces (i.e., without subcontracting). The 40% requirement shall be understood to mean that the CONTRACTOR shall perform, with its own organization, WORK amounting to at least 40% of the original contract amount. The 40% requirement will be calculated based upon the total of the subcontract amounts submitted for Contract Award, and any other information requested by the OWNER from the apparent low Bidder.

SGC 6.5 CONCERNING SUBCONTRACTORS, SUPPLIERS, AND OTHERS, ***Add*** the following paragraph:

C. CONTRACTOR must pay Subcontractors and/or Suppliers within 30 days of receiving payment from the OWNER, if that payment was made for Work performed by the Subcontractor and/or materials received. Failure to pay Subcontractors within 30 days of receiving payment from which Subcontractor and/or Supplier is to be paid may result in the OWNER initiating debarment proceedings as prescribed in the City and Borough of Juneau Purchasing Code. *The 30 day City and Borough of Juneau requirement does not supersede AS 36.90.210.*

SGC 6.6 PERMITS, ***Add*** the following paragraph:

D. Contractor is responsible for obtaining a Hot Works permit from the CBJ Permit Center, if performing work which requires such a permit. Work requiring a Hot Works Permit includes but is not limited to the following: cutting, welding, Thermit welding, brazing, soldering, grinding, thermal spraying, thawing pipe, installation of torch-applied roof systems or any other similar activity.

SGC 14.3 APPLICATION FOR PROGRESS PAYMENT. Paragraph D.

D. The Value of Materials Stored at the site shall be an amount equal to 85%.

SGC 14.9 FINAL PAYMENT AND ACCEPTANCE. ***Add*** the following paragraph:

C. Prior to the final payment the CONTRACTOR shall contact the Alaska Department of Labor and Workforce Development (ADOL) and provide the OWNER with clearance from the ADOL for the CONTRACTOR and all Subcontractors that have worked on the Project. This clearance shall indicate that all Employment Security Taxes have been paid. A sample form for this purpose is at the end of this section. The CONTRACTOR shall also submit a "NOTICE OF COMPLETION OF PUBLIC WORKS" signed by ADOL.

SGC 16.8 CERTIFIED PAYROLLS. ***Change*** paragraph A. to read:

A. All CONTRACTORs or Subcontractors who perform work on a public construction contract for the OWNER shall file a certified payroll with Alaska Department of Labor. See Section 00830 - Alaska Labor Standards, Reporting, and Prevailing Wage Rate Determination.
Add the following SGC 17**:**

SGC 17 GENERAL INFORMATION. This Project is currently funded by the City and Borough of Juneau, Alaska.

END OF SECTION

THE STATE of ALASKA
GOVERNOR MICHAEL J. DUNLEAVY

Department of Labor and Workforce Development

Division of Employment and Training Services
Employment Security Tax

P.O. Box 115509
Juneau, AK 99811-5509
Relay Alaska (in state): (800) 770-8973 or 7.1.1
Relay Alaska (out of state): (800) 770-8255
Toll free: (888) 448-2937
Phone: (907) 465-2787
Fax: (907) 465-2374

Tax Clearance Request Form for Contractors

Date of request: _____

Business name of the contractor a Tax Clearance is being requested for: _____

_____

Business address: _____

Business contact phone number: _____

Federal Identification Number: _____

Alaska Employer Account Number: _____

Specific time period a tax clearance is being requested for *(i.e. beginning and ending date of a subcontract agreement)*:

_____

Subcontract project name: _____

_____

Name and address of the person this Tax Clearance is to be returned to: _____

_____

Comments or additional information: _____

_____

For agency use only:

☐ Tax Clearance is granted

☐ Tax Clearance is not granted *(please have employer contact the department)*

☐ No account on file, liability unknown *(please have employer contact the department)*

☐ Employer has stated no employees, Tax Clearance not required.

Agency representative signature: _____ Date:_____

Agency representative title: _____

We are an equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities. labor.alaska.gov/estax

SECTION 00830 - ALASKA LABOR STANDARDS, REPORTING, AND PREVAILING WAGE RATE DETERMINATION

State of Alaska, Department of Labor, Laborers' and Mechanics' Minimum Rates of Pay, AS 36.05.010 and AS 36.05.050, Wage and Hour Administration Pamphlet No. 600, the latest edition published by the State of Alaska, Department of Labor inclusive, are made a part of this contract by reference.

The CONTRACTOR is responsible for contacting the Alaska Department of Labor to determine compliance with current regulations.

Correspondence regarding Title 36 requirements may be submitted electronically or paper copies can be submitted by mail. To submit Title 36 documents electronically, go to https://myalaska.state.ak.us/home/app. If filing electronically, submit certified payrolls to ADOL at the website above and email a copy of all certified payrolls to Greg Smith at the email address below. If Contractor elects to submit paper copies, they should be submitted to the physical addresses below.

Within 10 Days of "Notice of Award/Notice to Proceed" make a list of **all** Subcontractors. Include their name, address, phone, estimated subcontract amount, and estimated start and finish dates. Send this list to the Wage and Hour Section (contact information below).

Certified Payrolls must be submitted every two weeks. Before the second Friday, each CONTRACTOR and Subcontractor must file Certified Payrolls with Statements of Compliance for the previous two weeks. Indicate ***"Start"*** on your first payroll, and ***"Final"*** on your last payroll for this Project.

As part of the **final payment request package,** CONTRACTOR must submit a "NOTICE OF COMPLETION OF PUBLIC WORKS" form signed by ADOL personnel.

Contact Information:

Wage and Hour Section
State of Alaska
Department of Labor and Workforce Development
Labor Standards and Safety Division
Wage and Hour Administration
P.O. Box 11149
Juneau, AK 99811-1149
907-465-4842
http://labor.state.ak.us/lss/home.htm

and

Greg Smith, Contract Administrator
City and Borough of Juneau
155 S. Seward Street
Juneau, AK 99801
(907) 586-0800
Greg.Smith@juneau.org

END OF SECTION

SECTION 00830

APPENDIX A

Laborers' & Mechanics'
Minimum Rates of Pay

Pamphlet 600

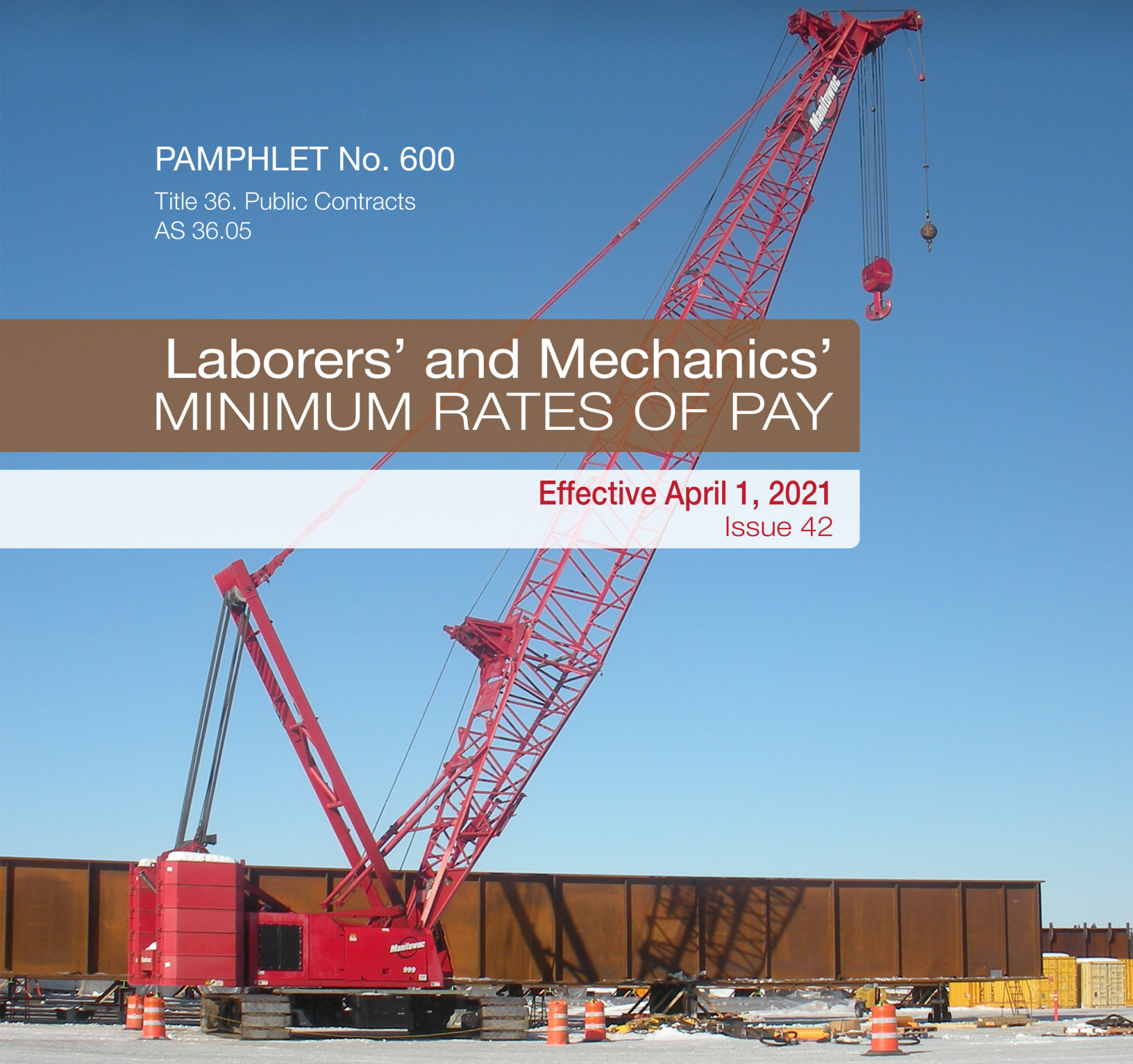
Effective April 2021

PAMPHLET No. 600

Title 36. Public Contracts
AS 36.05

Laborers' and Mechanics' MINIMUM RATES OF PAY

Effective April 1, 2021
Issue 42



DEPARTMENT OF LABOR
AND WORKFORCE DEVELOPMENT
Wage and Hour Administration

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THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Labor and Workforce Development

Office of the Commissioner

Post Office Box 111149
Juneau, Alaska 99811
Main: 907.465.2700
fax: 907.465-2784

April 1, 2021

TO ALL CONTRACTING AGENCIES:

At the Alaska Department of Labor and Workforce Development, our goal is putting Alaskans to work. This pamphlet is designed to help contractors awarded public construction contracts understand the most significant laws of the State of Alaska pertaining to prevailing wage.

This pamphlet identifies current prevailing wage rates for public construction contracts (any construction projects awarded for the State of Alaska or its political subdivisions, such as local governments and certain non-profit organizations). Because these rates may change in a subsequent determination, please be sure you are using the appropriate rates. The rates published in this edition become effective April 1, 2021.

The prevailing wage rates contained in this pamphlet are applicable to public construction projects with a final bid date of April 11, 2021, or later. As the law now provides, these rates will remain stable during the life of a contract or for 24 calendar months, whichever is shorter. **The 24-month period begins on the date the prime contract is awarded.** Upon expiration of the initial 24-month period, the latest wage rates issued by the department shall become effective for a subsequent 24-month period or until the original contract is completed, whichever occurs first. This process shall be repeated until the original contract is completed.

The term "original contract" means the signed contract that resulted from the original bid and any amendments, including changes of work scope, additions, extensions, change orders, and other instruments agreed to by the parties that have not been subject to subsequent open bid procedures.

If a higher federal rate is required due to partial federal funding or other federal participation, the higher rate must be paid.

For additional copies of this pamphlet go to: http://labor.state.ak.us/lss/pamp600.htm

For questions regarding prevailing wage or employment preference requirements, please contact the nearest Wage and Hour office. These offices are listed on Page x.

Sincerely,

Dr. Tamika L. Ledbetter
Commissioner

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Table of Contents

Note to Readers: The statutes and administrative regulations listed in this publication were taken from the official codes, as of the effective date of the publication. However, there may be errors or omissions that have not been identified and changes that occurred after the publication was printed. This publication is intended as an informational guide only and is not intended to serve as a precise statement of the statutes and regulations of the State of Alaska. To be certain of current laws and regulations, please refer to the official codes.

EXCERPTS FROM ALASKA LAW

Sec. 36.05.005. Applicability.
This chapter applies only to a public construction contract that exceeds $25,000.

Sec. 36.05.010. Wage rates on public construction.
A contractor or subcontractor who performs work on a public construction contract in the state shall pay not less than the current prevailing rate of wages for work of a similar nature in the region in which the work is done. The current prevailing rate of wages is that contained in the latest determination of prevailing rate of wages issued by the Department of Labor and Workforce Development at least 10 days before the final date for submission of bids for the contract. The rate shall remain in effect for the life of the contract or for 24 calendar months, whichever is shorter. At the end of the initial 24-month period, if new wage determinations have been issued by the department, the latest wage determination shall become effective for the next 24-month period or until the contract is completed, whichever occurs first. This process shall be repeated until the contract is completed.

Sec. 36.05.040. Filing schedule of employees, wages paid, and other information.
All contractors or subcontractors who perform work on a public construction contract for the state or for a political subdivision of the state shall, before the Friday of every second week, file with the Department of Labor and Workforce Development a sworn affidavit for the previous reporting period, setting out in detail the number of persons employed, wages paid, job classification of each employee, hours worked each day and week, and other information on a form provided by the Department of Labor and Workforce Development.

Sec. 36.05.045. Notice of work and completion; withholding of payment.

(a) Before commencing work on a public construction contract, the person entering into the contract with a contracting agency shall designate a primary contractor for purposes of this section. Before work commences, the primary contractor shall file a notice of work with the Department of Labor and Workforce Development. The notice of work must list work to be performed under the public construction contract by each contractor who will perform any portion of work on the contract and the contract price being paid to each contractor. The primary contractor shall pay all filing fees for each contractor performing work on the contract, including a filing fee based on the contract price being paid for work performed by the primary contractor's employees. The filing fee payable shall be the sum of all fees calculated for each contractor. The filing fee shall be one percent of each contractor's contract price. The total filing fee payable by the primary contractor under this subsection may not exceed $5,000. In this subsection, "contractor" means an employer who is using employees to perform work on the public construction contract under the contract or a subcontract.

(b) Upon completion of all work on the public construction contract, the primary contractor shall file with the Department of Labor and Workforce Development a notice of completion together with payment of any additional filing fees owed due to increased contract amounts. Within 30 days after the department's receipt of the primary contractor's notice of completion, the department shall inform the contracting agency of the amount, if any, to be withheld from the final payment.

(c) A contracting agency

(1) may release final payment of a public construction contract to the extent that the agency has received verification from the Department of Labor and Workforce Development that

(A) the primary contractor has complied with (a) and (b) of this section;

(B) the Department of Labor and Workforce Development is not conducting an investigation under this title; and

(C) the Department of Labor and Workforce Development has not issued a notice of a violation of this chapter to the primary contractor or any other contractors working on the public construction contract; and

(2) shall withhold from the final payment an amount sufficient to pay the department's estimate of what may be needed to compensate the employees of any contractors under investigation on this construction contract, and any unpaid filing fees.

(d) The notice and filing fee required under (a) of this section may be filed after work has begun if
   (1) The public construction contract is for work undertaken in immediate response to an emergency; and
   (2) The notice and fees are filed not later than 14 days after the work has begun.

(e) A false statement made on a notice required by this section is punishable under AS 11.56.210.

Sec. 36.05.060. Penalty for violation of this chapter.

A contractor who violates this chapter is guilty of a misdemeanor and upon conviction is punishable by a fine of not less than $100 nor more than $1,000, or by imprisonment for not less than 10 days nor more than 90 days, or by both. Each day a violation exists constitutes a separate offense.

Sec. 36.05.070. Wage rates in specifications and contracts for public works.

(a) The advertised specifications for a public construction contract that requires or involves the employment of mechanics, laborers, or field surveyors must contain a provision stating the minimum wages to be paid various classes of laborers, mechanics, or field surveyors and that the rate of wages shall be adjusted to the wage rate under AS 36.05.010.

(b) Repealed by §17 ch 142 SLA 1972.

(c) A public construction contract under (a) of this section must contain provisions that
   (1) the contractor or subcontractors of the contractor shall pay all employees unconditionally and not less than once a week;
   (2) wages may not be less than those stated in the advertised specifications, regardless of the contractual relationship between the contractor or subcontractors and laborers, mechanics, or field surveyors;
   (3) the scale of wages to be paid shall be posted by the contractor in a prominent and easily accessible place at the site of the work;
   (4) the state or a political subdivision shall withhold so much of the accrued payments as is necessary to pay to laborers, mechanics, or field surveyors employed by the contractor or subcontractors the difference between
      (A) the rates of wages required by the contract to be paid laborers, mechanics, or field surveyors on the work; and
      (B) the rates of wages in fact received by laborers, mechanics, or field surveyors.

Sec. 36.05.080. Failure to pay agreed wages.

Every contract within the scope of AS 36.05.070 shall contain a provision that if it is found that a laborer, mechanic, or field surveyor employed by the contractor or subcontractor has been or is being paid a rate of wages less than the rate of wages required by the contract to be paid, the state or its political subdivision may, by written notice to the contractor, terminate the contractor's right to proceed with the work or the part of the work for which there is a failure to pay the required wages and to prosecute the work to completion by contract or otherwise, and the contractor and the contractor's sureties are liable to the state or its political subdivision for excess costs for completing the work.

Sec. 36.05.090. Payment of wages from withheld payments and listing contractors who violate contracts.

(a) The state disbursing officer in the case of a state public construction contract and the local fiscal officer in the case of a political subdivision public construction contract shall pay directly to laborers, mechanics, or field surveyors from accrued payments withheld under the terms of the contract the wages due laborers, mechanics, or field surveyors under AS 36.05.070.

(b) The state disbursing officer or the local fiscal officer shall distribute to all departments of the state government and to all political subdivisions of the state a list giving the names of persons who have disregarded their obligations to employees. A person appearing on this list and a firm, corporation, partnership, or association in which the person has an interest may not work as a contractor or

subcontractor on a public construction contract for the state or a political subdivision of the state until three years after the date of publication of the list. If the accrued payments withheld under the contract are insufficient to reimburse all the laborers, mechanics, or field surveyors with respect to whom there has been a failure to pay the wages required under AS 36.05.070, the laborers, mechanics, or field surveyors have the right of action or intervention or both against the contractor and the contractor's sureties conferred by law upon persons furnishing labor or materials, and in the proceedings it is not a defense that the laborers, mechanics, or field surveyors accepted or agreed to accept less than the required rate of wages or voluntarily made refunds.

Sec. 36.05.900. Definition.
In this chapter, "contracting agency" means the state or a political subdivision of the state that has entered into a public construction contract with a contractor.

EXCERPTS FROM ALASKA ADMINISTRATIVE CODE

Notice:** Regulations relating to board and lodging and per diem went into effect on November 25, 2018. The new regulations are excerpted here

8 AAC 30.051. Purpose. The purpose of 8 AAC 30.052 – 8 AAC 30.056 is to ensure that wages paid to laborers, mechanics, and field surveyors do not fall below the prevailing rate of pay.

8 AAC 30.052. Board and lodging; remote sites. (a) A contractor on a public construction project located 65 or more road miles from the international airport closest to the project area in either Fairbanks, Juneau, or Anchorage, or that is inaccessible by road in a two-wheel drive vehicle, shall provide adequate board and lodging to each laborer, mechanic, or field surveyor while the person is employed on the project. If commercial lodging facilities are not available, the contractor shall provide temporary lodging facilities. Lodging facilities must comply with all applicable state and federal laws. For a highway project, the location of the project is measured from the midpoint of the project.

(b) A contractor is not required to provide board and lodging:

(1) to a laborer, mechanic, or field surveyor who is a domiciled resident of the project area; or

(2) on a laborer, mechanic, or field surveyor's scheduled days off, when the person can reasonably travel between the project and the person's permanent residence; for the purposes of this paragraph, "scheduled day off" means a day in which a person does not perform work on-site, is not required to remain at or near the job location for the benefit of the contractor, and is informed of the day off at least seven days before the day off.

(c) Upon a contractor's written request, the commissioner may waive the requirements of (a) of this section where:

(1) the project is inaccessible by road in a two-wheel drive vehicle, but the laborer, mechanic, or field surveyor can reasonably travel between the project and the person's permanent residence within one hour; or

(2) a laborer, mechanic, or field surveyor is not a domiciled resident of the project area, but has established permanent residence, with the intent to remain indefinitely, within 65 road miles of the project, or for a highway project, the mid-point of the project.

8 AAC 30.054. Per diem instead of board and lodging. (a) A contractor may pay a laborer, mechanic, or field surveyor per diem instead of providing board and lodging, when the following conditions are met:

(1) the department determines that per diem instead of board and lodging is an established practice for the work classification; the department shall publish and periodically revise its determinations in the pamphlet *Laborers' and Mechanics' Minimum Rates of Pay*;

(2) the contractor pays each laborer, mechanic, or field surveyor the appropriate per diem rate as published and periodically revised in the pamphlet *Laborers' and Mechanics' Minimum Rates of Pay*; and

(3) the contractor pays the per diem to each laborer, mechanic, or field surveyor on the same day that wages are paid.

(b) A contractor may not pay per diem instead of board and lodging on a highway project located

(1) west of Livengood on the Elliot Highway, AK-2;

(2) on the Dalton Highway, AK-11;

(3) north of milepost 20 on the Taylor Highway, AK-5;

(4) east of Chicken on the Top of the World Highway; or

(5) south of Tetlin Junction to the Alaska-Canada border on the Alaska Highway, AK-2.

8 AAC 30.056. Alternative arrangement. Upon a contractor's written request, the commissioner may approve an alternative board and lodging or per diem arrangement, provided

(1) the arrangement does not reduce the laborer, mechanic, or field surveyor's wages below the prevailing wage rate; and

(2) the laborer, mechanic, or field surveyor voluntarily enters into and signs the written arrangement; a labor organization representing laborers, mechanics, or field surveyors may enter into the written agreement on their behalf.

8 AAC 30.900. General definitions (selected excerpts only):

In this chapter and in AS 36

(22) "domiciled resident" means a person living within 65 road miles of a public construction project, or in the case of a highway project, the mid-point of the project, for at least 12 consecutive months prior to the award of the public construction project;

(23) "employed on the project" means the time period from the date the laborer, mechanic, or field surveyor first reports on-site to the project through the final date the person reports on-site to the project.

ADDITIONAL INFORMATION

PER DIEM

Notice: New regulations relating to board and lodging and per diem went into effect on November 25, 2018. The regulations provide a comprehensive set of requirements for the provision of board and lodging or per diem for workers on remote projects. Please refer to Alaska Administrative Code 8 AAC Chapter 30 and read the chapter carefully.

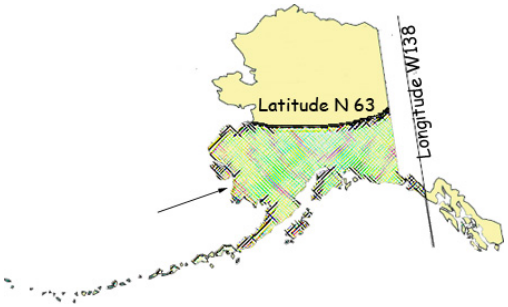
The Alaska Department of Labor and Workforce Development has determined that per diem is an established work practice for certain work classifications. These classifications are indicated throughout the Pamphlet by an asterisk (*) under the classification title. If all of the conditions of 8 AAC 30.054 are met, an employer may pay workers in these classifications per diem instead of providing board and lodging on a remote project.

Per Diem Rate: As of May 1st, 2019, the minimum per diem rate is $100.00 per day, or part thereof, the worker is employed on the project. In the event that a contractor provides lodging facilities, but no meals, the department will accept a payment of $48 per day for meals to meet the per diem requirements.

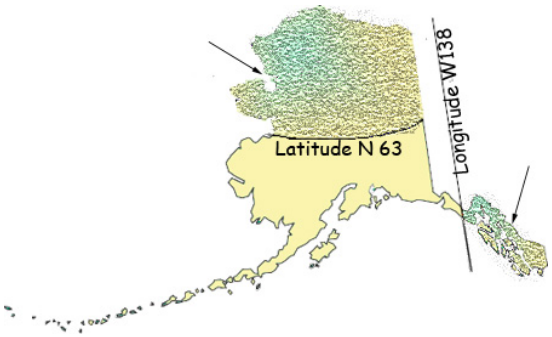
LABORER CLASSIFICATION CLARIFICATION

The laborer rates categorized in class code S1201-S1206 apply in one area of Alaska; the area that is south of N63 latitude and west of W138 Longitude. The laborer rates categorized in class code N1201-N1206 apply in two areas of Alaska; the Alaska areas north of N63 latitude and east of W138 longitude. The following graphic representations should assist with clarifying the applicable wage rate categories:

S1201-
S1206



N1201-
N1206



APPRENTICE RATES

Apprentice rates at less than the minimum prevailing rates may be paid to apprentices according to an apprentice program which has been registered and approved by the Commissioner of the Alaska Department of Labor and Workforce Development in writing or according to a bona fide apprenticeship program registered with the U.S. Department of Labor, Office of Apprenticeship Training. **Any employee listed on a payroll at an apprentice wage rate who is not registered as above shall be paid the journeyman prevailing minimum wage in that work classification.** Wage rates are based on prevailing crew makeup practices in Alaska and apply to work performed regardless of either the quality of the work performed by the employee or the titles or classifications which may be assigned to individual employees.

FRINGE BENEFIT PLANS

Contractors/subcontractors may compensate fringe benefits to their employees in any one of three methods. The fringe benefits may be paid into a union trust fund, into an approved benefit plan, or paid directly on the paycheck as gross wages.

Where fringe benefits are paid into approved plans, funds, or programs including union trust funds, the payments must be contributed at least monthly. If contractors submit their own payroll forms and are paying fringe benefits into approved plans, funds, or programs, the employer's certification must include, in addition to those requirements of 8 AAC 30.020(c), a statement that fringe benefit payments have been or will be paid at least monthly. Contractors who pay fringe benefits to a plan must ensure the plan is one approved by the Internal Revenue Service and that the plan meets the requirements of 8 AAC 30.025 (eff. 3/2/08) in order for payments to be credited toward the prevailing wage obligation.

SPECIAL PREVAILING WAGE RATE DETERMINATION

Special prevailing wage rate determinations may be requested for special projects or a special worker classification if the work to be performed does not conform to traditional public construction for which a prevailing wage rate has been established under 8 AAC 30.050(a) of this section. Requests for special wage rate determinations must be in writing and filed with the Commissioner at least 30 days before the award of the contract. An applicant for a special wage rate determination shall have the responsibility to support the necessity for the special rate. An application for a special wage rate determination filed under this section must contain:

(1) a specification of the contract or project on which the special rates will apply and a description of the work to be performed;
(2) a brief narrative explaining why special wage rates are necessary;
(3) the job class or classes involved;
(4) the special wage rates the applicant is requesting, including survey or other relevant wage data to support the requested rates;
(5) the approximate number of employees who would be affected; and
(6) any other information which might be helpful in determining if special wage rates are appropriate.

Requests made pursuant to the above should be addressed to:

Director
Alaska Department of Labor and Workforce Development
Labor Standards and Safety Division
Wage and Hour Administration
P.O. Box 111149
Juneau, AK 99811-1149
-or-
Email: statewide.wagehour@alaska.gov

EMPLOYMENT PREFERENCE INFORMATION

In October 2019, the Alaska Attorney General issued a formal opinion stating that the Alaska Statutes 36.10.150 of the State's 90% Employment Preference law, also known as the Alaska Resident Hire law, violates both the U.S. and Alaska Constitutions. As a result, the state has stopped all enforcement activity.
A copy of the Attorney General opinion is found here:

http://law.alaska.gov/pdf/opinions/opinions_2019/19-005_AK-hire.pdf

Alaska Department of Labor and Workforce Development
Labor Standards and Safety Division
Wage and Hour Administration
Web site: http://labor.state.ak.us/lss/pamp600.htm

Anchorage	Juneau	Fairbanks
1251 Muldoon Road, Suite 113 Anchorage, Alaska 99504-2098 Phone: (907) 269-4900 Email: statewide.wagehour@alaska.gov	PO Box 111149 Juneau, Alaska 99811 Phone: (907) 465-4842 Email: statewide.wagehour@alaska.gov	Regional State Office Building 675 7th Ave., Station J-1 Fairbanks, Alaska 99701-4593 Phone: (907) 451-2886 Email: statewide.wagehour@alaska.gov

LABOR STANDARDS AND SAFETY NOTICE REQUESTS

If you would like to receive Wage and Hour Administration or Mechanical Inspection **regulation notices** or **publications information**, they are available via electronic mail, by signing up in the GovDelivery System, https://public.govdelivery.com/accounts/AKDOL/subscriber/new and selecting topics *LSS – Wage and Hour – Forms and Publications*, *LSS – Mechanical Inspection Regulations*, or *LSS – Wage and Hour Regulations*.

Publications are also available online at http://labor.alaska.gov/lss/home.htm

DEBARMENT LIST

AS 36.05.090(b) states that "the state disbursing officer or the local fiscal officer shall distribute to all departments of the state government and to all political subdivisions of the state a list giving the names of persons who have disregarded their obligations to employees."

A person appearing on the following debarment list and a firm, corporation, partnership, or association in which the person has an interest may not work as a contractor or subcontractor on a public construction contract for the state or a political subdivision of the state for three years from the date of debarment.

Company Name	Debarment Expires

No companies are currently debarred.

Laborers' & Mechanics' Minimum Rates of Pay

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Boilermakers	*See per diem note on last page							
						VAC	**SAF**	
A0101	Boilermaker (journeyman)	47.03	8.57	17.02	1.90	3.50	0.34	78.36
Bricklayers & Blocklayers	*See per diem note on last page							
						L&M		
A0201	Blocklayer	42.16	9.00	10.05	0.62	0.20		62.03
	Bricklayer Marble or Stone Mason Refractory Worker (Firebrick, Plastic, Castable, and Gunite Refractory Applications) Terrazzo Worker Tile Setter							
						L&M		
A0202	Tuck Pointer Caulker	42.16	9.00	10.05	0.62	0.20		62.03
	Cleaner (PCC)							
						L&M		
A0203	Marble & Tile Finisher	35.99	9.00	10.05	0.62	0.20		55.86
	Terrazzo Finisher							
						L&M		
A0204	Torginal Applicator	40.10	9.83	8.50	0.55	0.15	0.87	60.00
Carpenters, Region I (North of 63 latitude)	*See per diem note on last page							
						L&M	**SAF**	
N0301	Carpenter (journeyman)	38.34	10.08	15.23	1.10	0.10	0.10	64.95
	Lather/Drywall/Acoustical							
Carpenters, Region II (South of N63 latitude)	*See per diem note on last page							
						L&M	**SAF**	
S0301	Carpenter (journeyman)	38.34	10.08	15.77	1.10	0.10	0.10	65.49
	Lather/Drywall/Acoustical							
Cement Masons	*See per diem note on last page							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Cement Masons							
	*See per diem note on last page						
						L&M	
A0401	Group I, including:	39.38	8.70	11.80	1.43	0.10	61.41
	Application of Sealing Compound						
	Application of Underlayment						
	Building, General						
	Cement Finisher						
	Cement Mason (journeyman)						
	Concrete						
	Concrete Paving						
	Concrete Polishing						
	Concrete Repair						
	Curb & Gutter, Sidewalk						
	Curing of All Concrete						
	General Concrete Pour Tender						
	Grouting & Caulking of Tilt-Up Panels						
	Grouting of All Plates						
	Patching Concrete						
	Screed Pin Setter						
	Screeder or Rodder						
	Spackling/Skim Coating						
						L&M	
A0402	Group II, including:	39.38	8.70	11.80	1.43	0.10	61.41
	Form Setter						
						L&M	
A0403	Group III, including:	39.38	8.70	11.80	1.43	0.10	61.41
	Concrete Saw Cutter Operator (All Control Joints and Self-powered)						
	Curb & Gutter Machine						
	Floor Grinder						
	Pneumatic Power Tools						
	Power Chipping & Bushing						
	Sand Blasting Architectural Finish						
	Screed & Rodding Machine Operator						
	Troweling Machine Operator (all concrete surfaces)						
						L&M	
A0404	Group IV, including:	39.38	8.70	11.80	1.43	0.10	61.41
	Acoustical or Imitation Acoustical Finish						
	Application of All Composition Mastic						
	Application of All Epoxy Material						
	Application of All Plastic Material						
	Finish Colored Concrete						
	Gunite Nozzleman						

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Cement Masons							
	*See per diem note on last page						
A0404	Group IV, including:	39.38	8.70	11.80	1.43	L&M 0.10	61.41
	Hand Powered Grinder						
	Preparing, scratching and browsing of all ceilings and walls, finished with terrazo or tile						
	Tunnel Worker						
A0405	Group V, including:	39.38	8.70	11.80	1.43	L&M 0.10	61.41
	Casting and finishing						
	EIFS Systems						
	Finishing of all interior and exterior plastering						
	Fireproofing (Pryocrete, Cafco, Albi-Clad, sprayed fiberglass)						
	Gypsum, Portland Cement						
	Kindred material and products						
	Operation and control of all types of plastering machines, including power tools and floats, used by the industry						
	Overcoating and maintenance of interior/exterior plaster surfaces						
	Plasterer						
	Veneer plastering process (Rapid Plaster, U.S.G. "Imperial Systems", and Pabcoat Systems")						
	Venetian plaster and color-integrated Italian/Middle-Eastern line plaster						
Culinary Workers							
A0501	Baker/Cook	28.37	7.31	7.56		LEG	43.24
A0503	General Helper	25.07	7.31	7.56		LEG	39.94
	Housekeeper						
	Janitor						
	Kitchen Helper						
A0504	Head Cook	28.97	7.31	7.56		LEG	43.84
A0505	Head Housekeeper	25.45	7.31	7.56		LEG	40.32
	Head Kitchen Help						
Dredgemen							
	*See per diem note on last page						

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Dredgemen								
	*See per diem note on last page							
A0601	Assistant Engineer	41.76	10.70	13.50	1.00	**L&M** 0.10	0.05	67.11
	Craneman							
	Electrical Generator Operator (primary pump/power barge/dredge)							
	Engineer							
	Welder							
A0602	Assistant Mate (deckhand)	40.60	10.70	13.50	1.00	**L&M** 0.10	0.05	65.95
A0603	Fireman	41.04	10.70	13.50	1.00	**L&M** 0.10	0.05	66.39
A0605	Leverman Clamshell	44.29	10.70	13.50	1.00	**L&M** 0.10	0.05	69.64
A0606	Leverman Hydraulic	42.53	10.70	13.50	1.00	**L&M** 0.10	0.05	67.88
A0607	Mate & Boatman	41.76	10.70	13.50	1.00	**L&M** 0.10	0.05	67.11
A0608	Oiler (dredge)	41.04	10.70	13.50	1.00	**L&M** 0.10	0.05	66.39
Electricians								
	*See per diem note on last page							
A0701	Inside Cable Splicer	42.02	14.05	13.90	0.95	**L&M** 0.20	**LEG** 0.15	71.27
A0702	Inside Journeyman Wireman, including:	41.69	14.05	14.14	0.95	**L&M** 0.20	**LEG** 0.15	71.18
	Technicians (including use of drones in electrical construction)							
A0703	Power Cable Splicer	60.79	14.05	19.01	0.95	**L&M** 0.25	**LEG** 0.15	95.20
A0704	Tele Com Cable Splicer	50.53	14.05	16.67	0.95	**L&M** 0.20	**LEG** 0.15	82.55
A0705	Power Journeyman Lineman, including:	59.04	14.05	18.96	0.95	**L&M** 0.25	**LEG** 0.15	93.40
	Power Equipment Operator							
	Technician (including use of drones in electrical construction)							
A0706	Tele Com Journeyman Lineman, including:	48.78	14.05	16.61	0.95	**L&M** 0.20	**LEG** 0.15	80.74
	Technician (including use of drones in telecommunications construction)							
	Tele Com Equipment Operator							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Electricians								
	*See per diem note on last page							
						L&M	**LEG**	
A0707	Straight Line Installer - Repairman	48.78	14.05	16.61	0.95	0.20	0.15	80.74
						L&M	**LEG**	
A0708	Powderman	57.04	14.05	18.90	0.95	0.25	0.15	91.34
						L&M	**LEG**	
A0710	Material Handler	26.57	13.76	5.30	0.15	0.15	0.15	46.08
						L&M	**LEG**	
A0712	Tree Trimmer Groundman	28.37	14.05	12.59	0.15	0.15	0.15	55.46
						L&M	**LEG**	
A0713	Journeyman Tree Trimmer	37.30	14.05	12.86	0.15	0.15	0.15	64.66
						L&M	**LEG**	
A0714	Vegetation Control Sprayer	40.85	14.05	12.97	0.15	0.15	0.15	68.32
						L&M	**LEG**	
A0715	Inside Journeyman Communications CO/PBX	40.27	14.05	13.85	0.95	0.20	0.15	69.47
Elevator Workers								
	*See per diem note on last page							
						L&M	**VAC**	
A0802	Elevator Constructor	42.76	15.88	19.31	0.64	0.54	4.74	83.87
						L&M	**VAC**	
A0803	Elevator Constructor Mechanic	61.08	15.88	19.31	0.64	0.54	6.78	104.23
Heat & Frost Insulators/Asbestos Workers								
	*See per diem note on last page							
						SAF		
A0902	Asbestos Abatement-Mechanical Systems	38.68	9.24	11.01	1.20	0.12		60.25
						SAF		
A0903	Asbestos Abatement/General Demolition All Systems	38.68	9.24	11.01	1.20	0.12		60.25
						SAF		
A0904	Insulator, Group II	38.68	9.24	11.01	1.20	0.12		60.25
						SAF		
A0905	Fire Stop	38.68	9.24	11.01	1.20	0.12		60.25
IronWorkers								
	*See per diem note on last page							
						L&M	**IAF**	
A1101	Ironworkers, including:	38.87	9.51	24.28	0.74	0.20	0.24	73.84

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
IronWorkers								
	*See per diem note on last page							
						L&M	**IAF**	
A1101	Ironworkers, including:	38.87	9.51	24.28	0.74	0.20	0.24	73.84
	Bender Operators							
	Bridge & Structural							
	Hangar Doors							
	Hollow Metal Doors							
	Industrial Doors							
	Machinery Mover							
	Ornamental							
	Reinforcing							
	Rigger							
	Sheeter							
	Signalman							
	Stage Rigger							
	Toxic Haz-Mat Work							
	Welder							
						L&M	**IAF**	
A1102	Helicopter	39.87	9.51	24.28	0.74	0.20	0.24	74.84
	Helicopter (used for rigging and setting)							
	Tower (energy producing windmill type towers to include nacelle and blades)							
						L&M	**IAF**	
A1103	Fence/Barrier Installer	35.37	9.51	23.93	0.74	0.20	0.24	69.99
						L&M	**IAF**	
A1104	Guard Rail Layout Man	36.11	9.51	23.93	0.74	0.20	0.24	70.73
						L&M	**IAF**	
A1105	Guard Rail Installer	36.37	9.51	23.93	0.74	0.20	0.24	70.99
Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)								
	*See per diem note on last page							
						L&M	**LEG**	
N1201	Group I, including:	32.00	8.95	20.66	1.30	0.20	0.20	63.31
	Asphalt Worker (shovelman, plant crew)							
	Brush Cutter							
	Camp Maintenance Laborer							
	Carpenter Tender or Helper							
	Choke Setter, Hook Tender, Rigger, Signalman							
	Concrete Labor (curb & gutter, chute handler, curing, grouting, screeding)							
	Crusher Plant Laborer							
	Demolition Laborer							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
						L&M	LEG	
Laborers (The Alaska areas north of N63 latitude and east of W138 longitude) *See per diem note on last page								
N1201	Group I, including:	32.00	8.95	20.66	1.30	0.20	0.20	63.31
	Ditch Digger							
	Dumpman							
	Environmental Laborer (hazard/toxic waste, oil spill)							
	Fence Installer							
	Fire Watch Laborer							
	Flagman							
	Form Stripper							
	General Laborer							
	Guardrail Laborer, Bridge Rail Installer							
	Hydro-seeder Nozzleman							
	Laborer, Building							
	Landscaper or Planter							
	Laying of Mortarless Decorative Block (retaining walls, flowered decorative block 4 feet or less - highway or landscape work)							
	Material Handler							
	Pneumatic or Power Tools							
	Portable or Chemical Toilet Serviceman							
	Pump Man or Mixer Man							
	Railroad Track Laborer							
	Sandblast, Pot Tender							
	Saw Tender							
	Slurry Work							
	Steam Cleaner Operator							
	Steam Point or Water Jet Operator							
	Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer)							
	Tank Cleaning							
	Utiliwalk & Utilidor Laborer							
	Watchman (construction projects)							
	Window Cleaner							
						L&M	LEG	
N1202	Group II, including:	33.00	8.95	20.66	1.30	0.20	0.20	64.31
	Burning & Cutting Torch							
	Cement or Lime Dumper or Handler (sack or bulk)							
	Certified Erosion Sediment Control Lead (CESCL Laborer)							
	Choker Splicer							
	Chucktender (wagon, air-track & hydraulic drills)							
	Concrete Laborer (power buggy, concrete saws, pumpcrete nozzleman, vibratorman)							
	Culvert Pipe Laborer							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
						L&M	LEG	

Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)
*See per diem note on last page

N1202	Group II, including:	33.00	8.95	20.66	1.30	0.20	0.20	64.31

Cured Inplace Pipelayer
Environmental Laborer (asbestos, marine work)
Floor Preparation, Core Drilling
Foam Gun or Foam Machine Operator
Green Cutter (dam work)
Gunite Operator
Hod Carrier
Jackhammer/Chipping Gun or Pavement Breaker
Laser Instrument Operator
Laying of Mortarless Decorative Block (retaining walls, flowered decorative block over 4 feet - highway or landscape work)
Mason Tender & Mud Mixer (sewer work)
Pilot Car
Pipelayer Helper
Plasterer, Bricklayer & Cement Finisher Tender
Powderman Helper
Power Saw Operator
Railroad Switch Layout Laborer
Sandblaster
Scaffold Building & Erecting
Sewer Caulker
Sewer Plant Maintenance Man
Thermal Plastic Applicator
Timber Faller, Chainsaw Operator, Filer
Timberman

N1203	Group III, including:	33.90	8.95	20.66	1.30	0.20	0.20	65.21

Bit Grinder
Camera/Tool/Video Operator
Guardrail Machine Operator
High Rigger & Tree Topper
High Scaler
Multiplate
Plastic Welding
Slurry Seal Squeegee Man
Traffic Control Supervisor
Welding Certified (in connection with laborer's work)

N1204	Group IIIA	37.18	8.95	20.66	1.30	0.20	0.20	68.49

Asphalt Raker, Asphalt Belly Dump Lay Down

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
						L&M	LEG	
Laborers (The Alaska areas north of N63 latitude and east of W138 longitude) *See per diem note on last page								
N1204	Group IIIA	37.18	8.95	20.66	1.30	0.20	0.20	68.49
	Drill Doctor (in the field) Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills) Pioneer Drilling & Drilling Off Tugger (all type drills) Pipelayers Powderman (Employee Possessor) Storm Water Pollution Protection Plan Specialist (SWPPP Specialist) Traffic Control Supervisor, DOT Qualified							
N1205	Group IV	21.57	8.95	20.66	1.30	0.20	0.20	52.88
	Final Building Cleanup Permanent Yard Worker							
N1206	Group IIIB	40.97	6.24	20.66	1.30	0.20	0.20	69.57
	Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)(over 5,000 hours) Federal Powderman (Responsible Person in Charge) Grade Checking (setting or transferring of grade marks, line and grade, GPS, drones) Pioneer Drilling & Drilling Off Tugger (all type drills)(over 5,000 hours) Stake Hopper							
Laborers (The area that is south of N63 latitude and west of W138 longitude) *See per diem note on last page								
S1201	Group I, including:	32.00	8.95	20.66	1.30	0.20	0.20	63.31
	Asphalt Worker (shovelman, plant crew) Brush Cutter Camp Maintenance Laborer Carpenter Tender or Helper Choke Setter, Hook Tender, Rigger, Signalman Concrete Labor (curb & gutter, chute handler, curing, grouting, screeding) Crusher Plant Laborer Demolition Laborer Ditch Digger Dumpman Environmental Laborer (hazard/toxic waste, oil spill) Fence Installer							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
						L&M	LEG	

Laborers (The area that is south of N63 latitude and west of W138 longitude)
*See per diem note on last page

S1201	Group I, including:	32.00	8.95	20.66	1.30	0.20	0.20	63.31

Fire Watch Laborer
Flagman
Form Stripper
General Laborer
Guardrail Laborer, Bridge Rail Installer
Hydro-seeder Nozzleman
Laborer, Building
Landscaper or Planter
Laying of Mortarless Decorative Block (retaining walls, flowered decorative block 4 feet or less - highway or landscape work)
Material Handler
Pneumatic or Power Tools
Portable or Chemical Toilet Serviceman
Pump Man or Mixer Man
Railroad Track Laborer
Sandblast, Pot Tender
Saw Tender
Slurry Work
Steam Cleaner Operator
Steam Point or Water Jet Operator
Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer)
Tank Cleaning
Utiliwalk & Utilidor Laborer
Watchman (construction projects)
Window Cleaner

S1202	Group II, including:	33.00	8.95	20.66	1.30	0.20	0.20	64.31

Burning & Cutting Torch
Cement or Lime Dumper or Handler (sack or bulk)
Certified Erosion Sediment Control Lead (CESCL Laborer)
Choker Splicer
Chucktender (wagon, air-track & hydraulic drills)
Concrete Laborer (power buggy, concrete saws, pumpcrete nozzleman, vibratorman)
Culvert Pipe Laborer
Cured Inplace Pipelayer
Environmental Laborer (asbestos, marine work)
Floor Preparation, Core Drilling
Foam Gun or Foam Machine Operator

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
						L&M	LEG	

Laborers (The area that is south of N63 latitude and west of W138 longitude)
*See per diem note on last page

S1202	Group II, including:	33.00	8.95	20.66	1.30	0.20	0.20	64.31

Green Cutter (dam work)
Gunite Operator
Hod Carrier
Jackhammer/Chipping Gun or Pavement Breaker
Laser Instrument Operator
Laying of Mortarless Decorative Block (retaining walls, flowered decorative block over 4 feet - highway or landscape work)
Mason Tender & Mud Mixer (sewer work)
Pilot Car
Pipelayer Helper
Plasterer, Bricklayer & Cement Finisher Tender
Powderman Helper
Power Saw Operator
Railroad Switch Layout Laborer
Sandblaster
Scaffold Building & Erecting
Sewer Caulker
Sewer Plant Maintenance Man
Thermal Plastic Applicator
Timber Faller, Chainsaw Operator, Filer
Timberman

S1203	Group III, including:	33.90	8.95	20.66	1.30	0.20	0.20	65.21

Bit Grinder
Camera/Tool/Video Operator
Guardrail Machine Operator
High Rigger & Tree Topper
High Scaler
Multiplate
Plastic Welding
Slurry Seal Squeegee Man
Traffic Control Supervisor
Welding Certified (in connection with laborer's work)

S1204	Group IIIA	37.18	8.95	20.66	1.30	0.20	0.20	68.49

Asphalt Raker, Asphalt Belly Dump Lay Down
Drill Doctor (in the field)
Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)
Pioneer Drilling & Drilling Off Tugger (all type drills)

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Laborers (The area that is south of N63 latitude and west of W138 longitude) *See per diem note on last page								
						L&M	**LEG**	
S1204	Group IIIA	37.18	8.95	20.66	1.30	0.20	0.20	68.49
	Pipelayers Powderman (Employee Possessor) Storm Water Pollution Protection Plan Specialist (SWPPP Specialist) Traffic Control Supervisor, DOT Qualified							
						L&M	**LEG**	
S1205	Group IV	21.57	8.95	20.66	1.30	0.20	0.20	52.88
	Final Building Cleanup Permanent Yard Worker							
						L&M	**LEG**	
S1206	Group IIIB	40.97	6.24	20.66	1.30	0.20	0.20	69.57
	Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)(over 5,000 hours) Federal Powderman (Responsible Person in Charge) Grade Checking (setting or transferring of grade marks, line and grade, GPS, drones) Pioneer Drilling & Drilling Off Tugger (all type drills)(over 5,000 hours) Stake Hopper							
Millwrights *See per diem note on last page								
						L&M		
A1251	Millwright (journeyman)	40.77	10.08	12.28	1.10	0.40	0.05	64.68
						L&M		
A1252	Millwright Welder	41.77	10.08	12.28	1.10	0.40	0.05	65.68
Painters, Region I (North of N63 latitude) *See per diem note on last page								
						L&M		
N1301	Group I, including:	34.19	8.71	14.30	1.08	0.07		58.35
	Brush General Painter Hand Taping Hazardous Material Handler Lead-Based Paint Abatement Roll							
						L&M		
N1302	Group II, including:	34.71	8.71	14.30	1.08	0.07		58.87

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Painters, Region I (North of N63 latitude) *See per diem note on last page							
						L&M	
N1302	Group II, including:	34.71	8.71	14.30	1.08	0.07	58.87
	Bridge Painter Epoxy Applicator General Drywall Finisher Hand/Spray Texturing Industrial Coatings Specialist Machine/Automatic Taping Pot Tender Sandblasting Specialty Painter Spray Structural Steel Painter Wallpaper/Vinyl Hanger						
N1304	Group IV, including:	39.80	8.71	17.71	1.05	0.05	67.32
	Glazier Storefront/Automatic Door Mechanic						
N1305	Group V, including:	28.63	8.71	5.02	0.83	0.07	43.26
	Carpet Installer Floor Coverer Heat Weld/Cove Base Linoleum/Soft Tile Installer						
Painters, Region II (South of N63 latitude) *See per diem note on last page							
						L&M	
S1301	Group I, including :	31.33	8.71	15.15	1.08	0.07	56.34
	Brush General Painter Hand Taping Hazardous Material Handler Lead-Based Paint Abatement Roll Spray						
						L&M	
S1302	Group II, including :	32.58	8.71	15.15	1.08	0.07	57.59
	General Drywall Finisher Hand/Spray Texturing Machine/Automatic Taping						

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Painters, Region II (South of N63 latitude) *See per diem note on last page							
						L&M	
S1302	Group II, including :	32.58	8.71	15.15	1.08	0.07	57.59
	Wallpaper/Vinyl Hanger						
						L&M	
S1303	Group III, including :	32.68	8.71	15.15	1.08	0.07	57.69
	Bridge Painter Epoxy Applicator Industrial Coatings Specialist Pot Tender Sandblasting Specialty Painter Structural Steel Painter						
						L&M	
S1304	Group IV, including:	40.01	8.71	16.75	1.08	0.07	66.62
	Glazier Storefront/Automatic Door Mechanic						
						L&M	
S1305	Group V, including:	28.63	8.71	5.02	0.83	0.07	43.26
	Carpet Installer Floor Coverer Heat Weld/Cove Base Linoleum/Soft Tile Installer						
Piledrivers *See per diem note on last page							
						L&M	**IAF**
A1401	Piledriver	38.34	10.08	15.23	1.10	0.10	0.10 64.95
	Assistant Dive Tender Carpenter/Piledriver Rigger Sheet Stabber Skiff Operator						
						L&M	**IAF**
A1402	Piledriver-Welder/Toxic Worker	39.34	10.08	15.23	1.10	0.10	0.10 65.95
						L&M	**IAF**
A1403	Remotely Operated Vehicle Pilot/Technician	42.65	10.08	15.23	1.10	0.10	0.10 69.26
	Single Atmosphere Suit, Bell or Submersible Pilot						
						L&M	**IAF**
A1404	Diver (working) **See note on last page	82.45	10.08	15.23	1.10	0.10	0.10 109.06

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Piledrivers								
	*See per diem note on last page							
						L&M	**IAF**	
A1405	Diver (standby) **See note on last page	42.65	10.08	15.23	1.10	0.10	0.10	69.26
						L&M	**IAF**	
A1406	Dive Tender **See note on last page	41.65	10.08	15.23	1.10	0.10	0.10	68.26
						L&M	**IAF**	
A1407	Welder (American Welding Society, Certified Welding Inspector)	43.90	10.08	15.23	1.10	0.10	0.10	70.51
Plumbers, Region I (North of N63 latitude)								
	*See per diem note on last page							
						L&M	**S&L**	
N1501	Journeyman Pipefitter	41.91	11.25	17.20	1.50	0.65		72.51
	Plumber							
	Welder							
Plumbers, Region II (South of N63 latitude)								
	*See per diem note on last page							
						L&M		
S1501	Journeyman Pipefitter	41.00	11.13	15.02	1.55	0.20		68.90
	Plumber							
	Welder							
Plumbers, Region IIA (1st Judicial District)								
	*See per diem note on last page							
						L&M		
X1501	Journeyman Pipefitter	38.82	13.37	11.75	2.50	0.24		66.68
	Plumber							
	Welder							
Power Equipment Operators								
	*See per diem note on last page							
						L&M		
A1601	Group I, including:	42.53	10.70	13.50	1.00	0.10	0.05	67.88
	Asphalt Roller: Breakdown, Intermediate, and Finish							
	Back Filler							
	Barrier Machine (Zipper)							
	Beltcrete with Power Pack & similar conveyors							
	Bending Machine							
	Boat Coxswain							
	Bulldozer							
	Cableways, Highlines & Cablecars							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	L&M	THR
Power Equipment Operators *See per diem note on last page								
A1601	Group I, including:	42.53	10.70	13.50	1.00	0.10	0.05	67.88

Cleaning Machine

Coating Machine

Concrete Hydro Blaster

Cranes (45 tons & under or 150 feet of boom & under (including jib & attachments))

(a) Hydralifts or Transporters, (all track or truck type)

(b) Derricks

(c) Overhead

Crushers

Deck Winches, Double Drum

Ditching or Trenching Machine (16 inch or over)

Drag Scraper, Yarder, and similar types

Drilling Machines, Core, Cable, Rotary and Exploration

Finishing Machine Operator, Concrete Paving, Laser Screed, Sidewalk, Curb & Gutter Machine

Grade Checker and/or Line and Grade including Drone

Helicopters

Hover Craft, Flex Craft, Loadmaster, Air Cushion, All-Terrain Vehicle, Rollagon, Bargecable, Nodwell, & Snow Cat

Hydro Ax, Feller Buncher & similar

Hydro Excavation (Vac-Truck and Similar)

Loaders (2 1/2 yards through 5 yards, including all attachments):

(a) Forklifts (with telescopic boom & swing attachment)

(b) Front End & Overhead, (2-1/2 yards through 5 yards)

(c) Loaders, (with forks or pipe clamp)

(d) Loaders, (elevating belt type, Euclid & similar types)

Material Transfer Vehicle (Elevating Grader, Pickup Machine, and similar types)

Mechanic, Welder, Bodyman, Electrical, Camp & Maintenance Engineer

Micro Tunneling Machine

Mixers: Mobile type with hoist combination

Motor Patrol Grader

Mucking Machine: Mole, Tunnel Drill, Horizontal/Directional Drill Operator and/or Shield

Off-Road Hauler (including Articulating and Haul Trucks)

Operator on Dredges

Piledriver Engineer, L.B. Foster, Puller or similar paving breaker

Plant Operator (Asphalt & Concrete)

Power Plant, Turbine Operator 200 k.w & over (power plants or combination of power units over 300 k.w.)

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Power Equipment Operators *See per diem note on last page								
						L&M		
A1601	Group I, including:	42.53	10.70	13.50	1.00	0.10	0.05	67.88
	Remote Controlled Equipment							
	Scraper (through 40 yards)							
	Service Oiler/Service Engineer							
	Shot Blast Machine							
	Shovels, Backhoes, Excavators with all attachments, and Gradealls (3 yards & under)							
	Sideboom (under 45 tons)							
	Sub Grader (Gurries & similar types)							
	Tack Tractor							
	Truck Mounted Concrete Pump, Conveyor/Tele-belt, & Creter							
	Wate Kote Machine							
						L&M		
A1602	Group IA, including:	44.29	10.70	13.50	1.00	0.10	0.05	69.64
	Camera/Tool/Video Operator (Slipline)							
	Certified Welder, Electrical Mechanic, Camp Maintenance Engineer, Mechanic (over 10,000 hours)							
	Cranes (over 45 tons or 150 feet including jib & attachments)							
	(a) Clamshells & Draglines (over 3 yards)							
	(b) Tower Cranes							
	Licensed Water/Waste Water Treatment Operator							
	Loaders (over 5 yards)							
	Motor Patrol Grader, Dozer, Grade Tractor (finish: when finishing to final grade and/or to hubs, or for asphalt)							
	Power Plants (1000 k.w. & over)							
	Profiler, Reclaimer, and Roto-Mill							
	Quad							
	Scrapers (over 40 yards)							
	Screed							
	Shovels, Backhoes, Excavators with all attachments (over 3 yards)							
	Sidebooms (over 45 tons)							
	Slip Form Paver, C.M.I. & similar types							
	Topside (Asphalt Paver, Slurry machine, Spreaders, and similar types)							
						L&M		
A1603	Group II, including:	41.76	10.70	13.50	1.00	0.10	0.05	67.11
	Boiler - Fireman							
	Cement Hogs & Concrete Pump Operator							
	Conveyors (except those listed in Group I)							
	Hoists on Steel Erection, Towermobiles & Air Tuggers							
	Horizontal/Directional Drill Locator							
	Locomotives, Rod & Geared Engines							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Power Equipment Operators *See per diem note on last page								
						L&M		
A1603	Group II, including:	41.76	10.70	13.50	1.00	0.10	0.05	67.11
	Mixers							
	Screening, Washing Plant							
	Sideboom (cradling rock drill, regardless of size)							
	Skidder							
	Trenching Machines (under 16 inches)							
	Water/Waste Water Treatment Operator							
						L&M		
A1604	Group III, including:	41.04	10.70	13.50	1.00	0.10	0.05	66.39
	"A" Frame Trucks, Deck Winches							
	Bombardier (tack or tow rig)							
	Boring Machine							
	Brooms, Power (sweeper, elevator, vacuum, or similar)							
	Bump Cutter							
	Compressor							
	Farm Tractor							
	Forklift, Industrial Type							
	Gin Truck or Winch Truck (with poles when used for hoisting)							
	Hoists, Air Tuggers, Elevators							
	Loaders:							
	(a) Elevating-Athey, Barber Greene & similar types							
	(b) Forklifts or Lumber Carrier (on construction job sites)							
	(c) Forklifts, (with tower)							
	(d) Overhead & Front End, (under 2-l/2 yards)							
	Locomotives: Dinkey (air, steam, gas & electric) Speeders							
	Mechanics, Light Duty							
	Oil, Blower Distribution							
	Posthole Digger, Mechanical							
	Pot Fireman (power agitated)							
	Power Plant, Turbine Operator, (under 200 k.w.)							
	Pumps, Water							
	Roller (other than Asphalt)							
	Saws, Concrete							
	Skid Hustler							
	Skid Steer (with all attachments)							
	Stake Hopper							
	Straightening Machine							
	Tow Tractor							
						L&M		
A1605	Group IV, including:	34.83	10.70	13.50	1.00	0.10	0.05	60.18

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
Power Equipment Operators								
	*See per diem note on last page							
						L&M		
A1605	Group IV, including:	34.83	10.70	13.50	1.00	0.10	0.05	60.18
	Crane Assistant Engineer/Rig Oiler							
	Drill Helper							
	Parts & Equipment Coordinator							
	Spotter							
	Steam Cleaner							
	Swamper (on trenching machines or shovel type equipment)							
Roofers								
	*See per diem note on last page							
						L&M		
A1701	Roofer & Waterproofer	44.62	12.75	3.91	0.81	0.10	0.06	62.25
						L&M		
A1702	Roofer Material Handler	31.23	12.75	3.91	0.81	0.10	0.06	48.86
Sheet Metal Workers, Region I (North of N63 latitude)								
	*See per diem note on last page							
						L&M		
N1801	Sheet Metal Journeyman	48.64	11.50	14.11	1.65	0.12		76.02
	Air Balancing and duct cleaning of HVAC systems							
	Brazing, soldering or welding of metals							
	Demolition of sheet metal HVAC systems							
	Fabrication and installation of exterior wall sheathing, siding, metal roofing, flashing, decking and architectural sheet metal work							
	Fabrication and installation of heating, ventilation and air conditioning ducts and equipment							
	Fabrication and installation of louvers and hoods							
	Fabrication and installation of sheet metal lagging							
	Fabrication and installation of stainless steel commercial or industrial food service equipment							
	Manufacture, fabrication assembly, installation and alteration of all ferrous and nonferrous metal work							
	Metal lavatory partitions							
	Preparation of drawings taken from architectural and engineering plans required for fabrication and erection of sheet metal work							
	Sheet Metal shelving							
	Sheet Metal venting, chimneys and breaching							
	Skylight installation							
Sheet Metal Workers, Region II (South of N63 latitude)								
	*See per diem note on last page							

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Sheet Metal Workers, Region II (South of N63 latitude) *See per diem note on last page							
S1801	Sheet Metal Journeyman	43.20	11.50	14.09	1.68	L&M 0.43	70.90
	Air Balancing and duct cleaning of HVAC systems Brazing, soldering or welding of metals Demolition of sheet metal HVAC systems Fabrication and installation of exterior wall sheathing, siding, metal roofing, flashing, decking and architectural sheet metal work Fabrication and installation of heating, ventilation and air conditioning ducts and equipment Fabrication and installation of louvers and hoods Fabrication and installation of sheet metal lagging Fabrication and installation of stainless steel commercial or industrial food service equipment Manufacture, fabrication assembly, installation and alteration of all ferrous and nonferrous metal work Metal lavatory partitions Preparation of drawings taken from architectural and engineering plans required for fabrication and erection of sheet metal work Sheet Metal shelving Sheet Metal venting, chimneys and breaching Skylight installation						
Sprinkler Fitters *See per diem note on last page							
A1901	Sprinkler Fitter	47.35	10.55	18.05	0.52	L&M 0.25	76.72
Surveyors *See per diem note on last page							
A2001	Chief of Parties	45.16	11.83	13.14	1.15	L&M 0.10	71.38
A2002	Party Chief	43.57	11.83	13.14	1.15	L&M 0.10	69.79
A2003	Line & Grade Technician/Office Technician/GPS, Drones	42.97	11.83	13.14	1.15	L&M 0.10	69.19
A2004	Associate Party Chief (including Instrument Person & Head Chain Person)/Stake Hop/Grademan	40.85	11.83	13.14	1.15	L&M 0.10	67.07
A2006	Chain Person (for crews with more than 2 people)	36.51	11.83	13.14	1.15	L&M 0.10	62.73

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Truck Drivers							
	*See per diem note on last page						
						L&M	
A2101	Group I, including:	41.94	11.83	13.14	1.15	0.10	68.16
	Air/Sea Traffic Controllers						
	Ambulance/Fire Truck Driver (EMT certified)						
	Boat Coxswain						
	Captains & Pilots (air & water)						
	Deltas, Commanders, Rollagons, & similar equipment (when pulling sleds, trailers or similar equipment)						
	Dump Trucks (including rockbuggy, side dump, belly dump, & trucks with pups) over 40 yards up to & including 60 yards						
	Helicopter Transporter						
	Liquid Vac Truck/Super Vac Truck						
	Material Coordinator or Purchasing Agent						
	Ready-mix (over 12 yards up to & including 15 yards) (over 15 yards to be negotiated)						
	Semi with Double Box Mixer						
	Tireman, Heavy Duty/Fueler						
	Water Wagon (250 Bbls and above)						
						L&M	
A2102	Group 1A including:	43.21	11.83	13.14	1.15	0.10	69.43
	Dump Trucks (including rockbuggy, side dump, belly dump & trucks with pups) over 60 yards up to & including 100 yards (over 100 yards to be negotiated)						
	Jeeps (driver under load)						
	Lowboys, including tractor attached trailers & jeeps, up to & including 12 axles (over 12 axles or 150 tons to be negotiated)						
						L&M	
A2103	Group II, including:	40.68	11.83	13.14	1.15	0.10	66.90
	All Deltas, Commanders, Rollagons, & similar equipment						
	Batch Trucks (8 yards & up)						
	Batch Trucks (up to & including 7 yards)						
	Boom Truck/Knuckle Truck (over 5 tons)						
	Cacasco Truck/Heat Stress Truck						
	Construction and Material Safety Technician						
	Dump Trucks (including rockbuggy, side dump, belly dump, & trucks with pups) over 20 yards up to & including 40 yards						
	Gin Pole Truck, Winch Truck, Wrecker (truck mounted "A" frame manufactured rating over 5 tons)						
	Mechanics						
	Oil Distributor Driver						
	Partsman						
	Ready-mix (up to & including 12 yards)						
	Stringing Truck						

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Truck Drivers	*See per diem note on last page						
						L&M	
A2103	Group II, including:	40.68	11.83	13.14	1.15	0.10	66.90
	Turn-O-Wagon or DW-10 (not self loading)						
						L&M	
A2104	Group III, including:	39.86	11.83	13.14	1.15	0.10	66.08
	Boom Truck/Knuckle Truck (up to & including 5 tons)						
	Dump Trucks (including rockbuggy, side dump, belly dump, & trucks with pups) over 10 yards up to & including 20 yards						
	Expeditor (electrical & pipefitting materials)						
	Gin Pole Truck, Winch Truck, Wrecker (truck mounted "A" frame manufactured rating 5 tons & under)						
	Greaser - Shop						
	Semi or Truck & Trailer						
	Thermal Plastic Layout Technician						
	Traffic Control Technician						
	Trucks/Jeeps (push or pull)						
						L&M	
A2105	Group IV, including:	39.28	11.83	13.14	1.15	0.10	65.50
	Air Cushion or similar type vehicle						
	All Terrain Vehicle						
	Buggymobile						
	Bull Lift & Fork Lift, Fork Lift with Power Boom & Swing Attachment (over 5 tons)						
	Bus Operator (over 30 passengers)						
	Cement Spreader, Dry						
	Combination Truck-Fuel & Grease						
	Compactor (when pulled by rubber tired equipment)						
	Dump Trucks (including rockbuggy, side dump, belly dump, & trucks with pups) up to & including 10 yards						
	Dumpster						
	Expeditor (general)						
	Fire Truck/Ambulance Driver						
	Flat Beds, Dual Rear Axle						
	Foam Distributor Truck Dual Axle						
	Front End Loader with Fork						
	Grease Truck						
	Hydro Seeder, Dual Axle						
	Hyster Operators (handling bulk aggregate)						
	Loadmaster (air & water operations)						
	Lumber Carrier						
	Ready-mix, (up to & including 7 yards)						
	Rigger (air/water/oilfield)						

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
Truck Drivers *See per diem note on last page							
						L&M	
A2105	Group IV, including:	39.28	11.83	13.14	1.15	0.10	65.50
	Tireman, Light Duty Track Truck Equipment Truck Vacuum Sweeper Warehouseperson Water Truck (Below 250 Bbls) Water Truck (straight) Water Wagon, Semi						
						L&M	
A2106	Group V, including:	38.52	11.83	13.14	1.15	0.10	64.74
	Buffer Truck Bull Lifts & Fork Lifts, Fork Lifts with Power Boom & Swing Attachments (up to & including 5 tons) Bus Operator (up to 30 passengers) Farm Type Rubber Tired Tractor (when material handling or pulling wagons on a construction project) Flat Beds, Single Rear Axle Foam Distributor Truck Single Axle Fuel Handler (station/bulk attendant) Gear/Supply Truck Gravel Spreader Box Operator on Truck Hydro Seeders, Single axle Pickups (pilot cars & all light-duty vehicles) Rigger/Swamper Tack Truck Team Drivers (horses, mules, & similar equipment)						
Tunnel Workers, Laborers (The Alaska areas north of N63 latitude and east of W138 longitude) *See per diem note on last page							
						L&M	**LEG**
N2201	Group I, including:	35.20	8.95	20.66	1.30	0.20	0.20	66.51
	Brakeman Mucker Nipper Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer) Topman & Bull Gang Tunnel Track Laborer						
						L&M	**LEG**
N2202	Group II, including:	36.30	8.95	20.66	1.30	0.20	0.20	67.61
	Burning & Cutting Torch						

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
						L&M	LEG	
Tunnel Workers, Laborers (The Alaska areas north of N63 latitude and east of W138 longitude) *See per diem note on last page								
N2202	Group II, including:	36.30	8.95	20.66	1.30	0.20	0.20	67.61
	Certified Erosion Sediment Control Lead (CESCL Laborer) Concrete Laborer Floor Preparation, Core Drilling Jackhammer/Chipping Gun or Pavement Breaker Laser Instrument Operator Nozzlemen, Pumpcrete or Shotcrete Pipelayer Helper							
						L&M	LEG	
N2203	Group III, including:	37.29	8.95	20.66	1.30	0.20	0.20	68.60
	Miner Retimberman							
						L&M	LEG	
N2204	Group IIIA, including:	40.90	8.95	20.66	1.30	0.20	0.20	72.21
	Asphalt Raker, Asphalt Belly Dump Lay Down Drill Doctor (in the field) Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills) Pioneer Drilling & Drilling Off Tugger (all type drills) Pipelayer Powderman (Employee Possessor) Storm Water Pollution Protection Plan Specialist (SWPPP Specialist) Traffic Control Supervisor, DOT Qualified							
						L&M	LEG	
N2206	Group IIIB, including:	45.07	6.24	20.66	1.30	0.20	0.20	73.67
	Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)(over 5,000 hours) Federal Powderman (Responsible Person in Charge) Grade Checking (setting or transferring of grade marks, line and grade, GPS, drones) Pioneer Drilling & Drilling Off Tugger (all type drills)(over 5,000 hours) Stake Hopper							
Tunnel Workers, Laborers (The area that is south of N63 latitude and west of W138 longitude) *See per diem note on last page								
						L&M	LEG	
S2201	Group I, including:	35.20	8.95	20.66	1.30	0.20	0.20	66.51
	Brakeman Mucker							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
						L&M	LEG	
S2201	Group I, including:	35.20	8.95	20.66	1.30	0.20	0.20	66.51
	Nipper							
	Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer)							
	Topman & Bull Gang							
	Tunnel Track Laborer							
						L&M	LEG	
S2202	Group II, including:	36.30	8.95	20.66	1.30	0.20	0.20	67.61
	Burning & Cutting Torch							
	Certified Erosion Sediment Control Lead (CESCL Laborer)							
	Concrete Laborer							
	Floor Preparation, Core Drilling							
	Jackhammer/Chipping Gun or Pavement Breaker							
	Laser Instrument Operator							
	Nozzlemen, Pumpcrete or Shotcrete							
	Pipelayer Helper							
						L&M	LEG	
S2203	Group III, including:	37.29	8.95	20.66	1.30	0.20	0.20	68.60
	Miner							
	Retimberman							
						L&M	LEG	
S2204	Group IIIA, including:	40.90	8.95	20.66	1.30	0.20	0.20	72.21
	Asphalt Raker, Asphalt Belly Dump Lay Down							
	Drill Doctor (in the field)							
	Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)							
	Pioneer Drilling & Drilling Off Tugger (all type drills)							
	Pipelayer							
	Powderman (Employee Possessor)							
	Storm Water Pollution Protection Plan Specialist (SWPPP Specialist)							
	Traffic Control Supervisor, DOT Qualified							
						L&M	LEG	
S2206	Group IIIB, including:	45.07	6.24	20.66	1.30	0.20	0.20	73.67
	Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)(over 5,000 hours)							
	Federal Powderman (Responsible Person in Charge)							
	Grade Checking (setting or transferring of grade marks, line and grade, GPS, drones)							
	Pioneer Drilling & Drilling Off Tugger (all type drills)(over 5,000 hours)							

Tunnel Workers, Laborers (The area that is south of N63 latitude and west of W138 longitude)

*See per diem note on last page

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits		THR
						L&M	LEG	
Tunnel Workers, Laborers (The area that is south of N63 latitude and west of W138 longitude) *See per diem note on last page								
S2206	Group IIIB, including:	45.07	6.24	20.66	1.30	0.20	0.20	73.67
	Stake Hopper							
Tunnel Workers, Power Equipment Operators *See per diem note on last page								
						L&M		
A2207	Group I	46.78	10.70	13.50	1.00	0.10	0.05	72.13
						L&M		
A2208	Group IA	48.72	10.70	13.50	1.00	0.10	0.05	74.07
						L&M		
A2209	Group II	45.94	10.70	13.50	1.00	0.10	0.05	71.29
						L&M		
A2210	Group III	45.14	10.70	13.50	1.00	0.10	0.05	70.49
						L&M		
A2211	Group IV	38.31	10.70	13.50	1.00	0.10	0.05	63.66

*** Per diem is an established practice for this classification. This means that per diem is an allowable alternative to board and lodging if all criteria are met. See 8 AAC 30.051-08 AAC 30.056, and the per diem information on page vii of this Pamphlet.**

**** Work in combination of classifications: Employees working in any combination of classifications within the diving crew (working diver, standby diver, and tender) in a shift are paid in the classification with the highest rate for a minimum of 8 hours per shift.**

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SECTION 00852 - PERMITS

PART 1 - GENERAL

1.1 INDEX OF PERMITS

A. AKDEC Multi-Sector General Permit (MSGP) – Industrial Site SWPPP permit, Permit No. AKR06AC70. NOTE: An updated copy of the site SWPPP is kept in the scale house on site.

C. CBJ Planning Commission conditional use permit for quarry operations – Permit No. SGE2016-0001

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

Storm Water Pollution Prevention Plan

for:

Stabler Point Rock Quarry
Glacier Highway near Auke Bay
Juneau, AK 99801

SWPPP Contact(s):

City & Borough of Juneau
Michael Eich - Materials Sources Manager
155 South Seward Street
Juneau, Alaska 99801
Phone: 907.586.0874
michael.eich@juneau.org

SWPPP Preparation Date:

04/ 30 / 2020

APDES Permit Tracking Number: AKR06AC70

Contents

SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION

1.1 Facility Information

Facility Information

Name of Facility: Stabler Point Rock Quarry

Street: Mile 13 Veterans Memorial Highway

City: Juneau State: AK ZIP Code: 99801

Borough or Similar Government Subdivision: None

Permit Tracking Number: AKR06AC70

Latitude/Longitude (Use one of three possible formats, and specify method)

Latitude:	Longitude:
1. _ _ º _ _ ' _ _" N (degrees, minutes, seconds)	1. _ _ º _ _ ' _ _" W (degrees, minutes, seconds)
2. _ _ º _ _ . _ _' N (degrees, minutes, decimal)	2. _ _ º _ _ . _ _' W (degrees, minutes, decimal)
3. 58.3835º N (decimal)	3. 134.6729º W (decimal)

Method for determining latitude/longitude (check one):

☐ USGS topographic map (specify scale: _____) ☐ EPA Web site ☐ GPS

☒ Other (please specify): Google Earth

Is the facility located in Indian Country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable." Not Applicable

Is this facility considered a Federal Facility? ☐ Yes ☒ No

Estimated area of industrial activity at site exposed to storm water: 27 (acres)

Discharge Information

Does this facility discharge storm water into an MS4? ☐ Yes ☒ No

If yes, name of MS4 operator: _____

Name(s) of water(s) that receive storm water from your facility: Auke Nu Creek

Are any of your discharges directly into any segment of an "impaired" water? ☐ Yes ☒ No

If Yes, identify name of the impaired water (and segment, if applicable): _____

Identify the pollutant(s) causing the impairment: _____

For pollutants identified, which do you have reason to believe will be present in your discharge? _____

For pollutants identified, which have a completed TMDL? _____

Are any of your storm water discharges subject to effluent guidelines? ☐ Yes ☒ No

If Yes, which guidelines apply? _____

Primary SIC Code or 2-letter Activity Code (refer to Appendix D of the 2020 MSGP): 1422-1429 Crushed and Broken Stone, Including Rip Rap

Identify your applicable sector and subsector: Sector J: Mineral Mining and Dressing: Subsector J2

1.2 Contact Information/Responsible Parties

Facility Owner & Operator:

Name: City & Borough of Juneau
Address: 155 South Seward Street
City, State, Zip Code: Juneau, AK 99801
Telephone Number: 907.586.0800

SWPPP Contact:

Name: Michael Eich
Telephone number: 907.586.0874
Mobile number: 907.500.4401
Email address: michael.eich@juneau.org
Fax number: 907.463.2606

1.3 Storm Water Pollution Prevention Team

Staff Names	Individual Responsibilities
Material Sources Manager	Development and oversight of material source activities for compliance, inspections, and monitoring.
Engineer Associate	Inspections and monitoring assistance.
Lands Officer	Inspections and monitoring assistance.
Contracted Consultant	Inspections and monitoring assistance.

1.4 Activities at the Facility

Location: This facility is located along Veteran's Memorial Highway (Alaska Hwy 7) in Auke Bay, a suburb of Juneau, Alaska. The site is accessed directly from the highway, via a driveway immediately west of Auke Nu Creek.

Operations: The material source is owned by the City & Borough of Juneau (CBJ) and is managed by CBJ staff. Use of the site is governed by the CBJ through Individual Mining Plans (IMPs), which are issued to each quarry user and specify a unique area of the material source for their mining operations. The CBJ controls compliance with this SWPPP through the Individual Mining Plans and through a document signed by each user for each use of the facility. Submitting IMPs and signing the document will be required for all quarry users. The letter confirms their knowledge and understanding of their responsibility to perform their mining operations in accordance with the requirements of this SWPPP. They are also made responsible for any subcontractors that they sell rock to or otherwise use within the material site. All IMPs are made a part of this SWPPP by reference while the IMP is active. Active IMPs are kept in the CBJ quarry manager's files.

Mining operation locations will vary continuously including blasting, sorting, crushing, screening, stock piles, and surge piles, in accordance with the IMPs.

Activities at the Facility

1. Site Development:
   Equipment Involved: excavators, bulldozers, haul trucks.
   Activity: Includes removal of trees and overburden down to bedrock. Overburden material is stockpiled on the site and seeded until needed for restoration activities.
   Location: Development will proceed to the permitted site limits as material is needed by users. The CBJ contracts this work out to others, who will be required to perform the work in accordance with this SWPPP.

2. Blasting:
   Equipment Involved: drill rigs
   Activity: Includes drilling and loading holes with explosives in accordance with an approved blast plan. The amount shot is controlled by project needs, sound and safety requirements.
   Location: Blasting locations vary on the site. Locations are designated on the Blasting Plan and/or Individual Mining Plan (IMP), which is submitted and approved by the CBJ prior to every blast.

3. Rock Extraction:
   Equipment Involved: excavators, bulldozers, loaders, haul trucks
   Activity: Includes excavating material from the muck pile with an excavator, bulldozer, and/or loader. Excavated material is either fed directly into crushers, loaded directly into haul trucks, or sorted and placed in stockpiles.

Location: Extraction operation locations vary on the site. Locations are designated on the IMPs, which are part of the SWPPP as long as the IMP is active.

4. Crushing and Screening:
   Equipment Involved: loaders, excavators, vibratory screens, crushers and haul trucks
   Activity: Handling material from a stockpile or muck pile location into a screen or crusher; stockpiling / loading processed material; developing stockpiles and surge piles of processed material.
   Location: Crushing and screening locations vary on the site. Locations are designated by the mining area specified on the IMPs, which are part of the SWPPP as long as the IMP is active.

5. Maintenance & Fueling:
   Equipment Involved: excavators, loaders, haul trucks, crushers, screens, fuel trucks, mechanic's shop truck
   Activity: Minor maintenance, lubrication and fueling
   Location: Maintenance and fueling will be performed at varying locations throughout the site. Fuel vehicles will have spill kits. Portable Spill Containment (PSCs) devices are onsite for spill containment.

6. Drainage Maintenance:
   Equipment Involved: excavators, loaders, haul trucks
   Activity: Digging ditches, cleaning sedimentation traps/basins, grading/contouring the site, handling waste material, cleaning/repairing erosion controls.
   Location: At each stormwater control measure shown on the Site Map.

7. Restoration / Contour Grading:
   Equipment Involved: excavators, loaders, dozers, haul trucks, hydro seed sprayer
   Activity: Shaping the site for final restoration, vegetating, topsoiling, hydroseeding /mulch
   Location: Entire site.

1.5 General Location Map

See Attachment A.

1.6 Site Map(s)

See Attachment B.

SECTION 2: POTENTIAL POLLUTANT SOURCES

2.1 Industrial Activity and Associated Pollutants

Industrial Activity	Associated Pollutants
Preparation of New Mining Areas	Woody debris, dust, sediment (TSS), turbidity
Blasting (including drilling)	Dust, sediment (TSS), turbidity
Rock Extraction	Dust, sediment (TSS), turbidity
Crushing and Screening	Dust, sediment (TSS), turbidity
Equipment Maintenance and Fueling	Oil, antifreeze, lubricants, diesel fuel, hydraulic fluid, transmission fluid, cleaning solvents
Drainage Maintenance	Dust, sediment (TSS), turbidity
Restoration/Contour Grading	Dust, sediment (TSS), turbidity

2.2 Spills and Leaks

Areas of Site Where Potential Spills/Leaks Could Occur

Location	Outfalls
Maintenance & Refueling Locations – see above for pollutants	Outfall 001, Outfall 002

Description of Past Spills/Leaks

Date	Description	Outfalls
NA	None	NA

2.3 Non-Storm Water Discharges Documentation

- Date of evaluation: March 27, 2020
- Description of the evaluation criteria used: Visual inspection of storm water discharge. There are no buildings or other materials stored on site to produce non-storm water discharges.
- List of the outfalls or onsite drainage points that were directly observed during the evaluation: Outfall 001 located at the outlet to culvert under the access road at the intersection with Veteran's Memorial Highway (Glacier Hwy, AK-7). Outlet 002 located at the outlet to the CPP just north and east of the top of the paved access road.
- Different types of non-storm water discharge(s) and source locations: There are no non-storm water discharges from the site.

- Action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an APDES permit application was submitted for an unauthorized cooling water discharge: None.

2.4 Salt Storage

There are no salt storage piles on site.

2.5 Sampling Data Summary

Stabler Benchmark Monitoring Data for TSS

Date	Sampling Location	Test Lab Results TSS (mg/L)	Benchmark Limit TSS - 100mg/L Sample Above or Below?
04/29/2016	Outfall 001	94	Below
07/28/2016	Outfall 001*	150	Above - *(no action taken as discharge infiltrates into sump prior to outfall; No discharge. Sampled from ditch leading to sump.)
09/13/2016	Outfall 001	115	Above – Sediment ponds were cleaned and expansion began, expansion complete in late 2017.
11/26/2016	Outfall 001*	55	Below – *(Discharge infiltrates into sump prior to outfall; No discharge. Sampled from ditch leading to sump.)
04/01/2018-05/31/2018	Outfall 001	NA	No discharge for quarter
04/01/2018-05/31/2018	Outfall 002	NA	No discharge for quarter
06/01/2018-07/31/2018	Outfall 001	NA	No discharge for quarter
06/01/2018-07/31/2018	Outfall 002	NA	No discharge for quarter
08/01/2018-09/30/2018	Outfall 001	NA	No discharge for quarter
08/01/2018-09/30/2018	Outfall 002	NA	No discharge for quarter
10/01/2018-12/31/2018	Outfall 001	NA	No discharge for quarter
10/01/2018-12/31/2018	Outfall 002	158	Above – Quarterly average for benchmark monitoring is 40 mg/L

Summary of 2015 MSGP Visual Assessment inspections: In 2015 and 2016, discharge was noted to have a light straw to pale tan color, slightly cloudy to cloudy, with very fine suspended solid particles and blackish grit as settled solids. No foam or oil sheen was noted. Work began on a new settling pond in 2017 with new outfall and surface diversion ditches. After completion, few discharges occurred but of those samples, clarity was noted as clear to slightly cloudy, no color to a light gray color, and cloudy fines noted on one occasion as suspended solids. No settled solids, foam, or oil sheen was noted on any inspection.

SECTION 3: STORM WATER CONTROL MEASURES

3.1 Minimize Exposure

The following BMPs will be used to minimize exposure of uncontaminated flows to the mining operation:

1. Install diversion berm along the uphill perimeter of the site where possible to route runoff around the facility activities, as shown on the Site Map.

2. Portable Spill Containment (PSC) devices will be stored in the mobile service vehicles and in the on-site weigh station shed. The devices will be available for use at all maintenance and fueling activities.

3. Long Term Equipment Storage: Mining equipment is not owned by the CBJ. Contractors bring this equipment on site for individual projects / uses and remove the equipment when the project is complete. No long term equipment storage plans are required

3.2 Good Housekeeping

The following BMPs will be incorporated as Good Housekeeping BMPs:

1. Spill cleanup products are kept in mobile service vehicles and in the truck scale shack, located as shown on Attachment A.

2. Each facility user provides their own maintenance and service personnel. They are required to use PSCs, absorbent pads, drip pans, etc. as necessary to collect and contain all equipment leaks or spills.

3. No permanent tanks, drums or other containers containing pollutants are stored on site.

4. Blasting explosives are not stored on site. Only the quantity required for the impending blast are brought to the site a maximum of 24 hours in advance of the planned blast time. All unused explosives are removed from the facility following the blast.

5. All used service containers or products are disposed of at an approved off-site location by the facility users.

6. Fuel fill hoses have spill and overflow protection features.

7. Topping off of fuel tanks is discouraged.

8. Depressions in the mining floor and loading areas that pond runoff will be eliminated by grading to drain. This will help prevent the creation of muddy areas and transporting of sediment through or off site by tracking.

9. Main quarry access road is paved and scale approach ramps hardened to keep tracking on-site.

10. The scale approach features a shaker rack wheel cleaning device to shake loose and collect material from equipment tires and undercarriages prior to travel over the scale (BMP 57).

11. The facility gates will be closed and locked at the end of each day of operation to prevent unauthorized use within the site.

12. Haul trucks are required to have means by which to contain all materials within the vehicle. This is also a condition for the CBJ Conditional Use Permit.

13. All material source users are required to utilize street sweepers and/or vacuum trucks to clean their haul routes as necessary.

3.3 Maintenance

The following BMPs will be incorporated as Maintenance BMPs:

Mining Equipment:

1. Major maintenance and repair of equipment will be performed by quarry users at offsite user obtained maintenance facilities that are approved for such activities.

2. On-site equipment maintenance will be limited to re-fueling and minor servicing activities by user personnel, except when further repairs are required due to vehicle breakdown. These activities will be performed with Portable Spill Containment (PSC) devices at all locations.

3. Equipment will be inspected for leaks regularly. Operators will report problems to maintenance personnel.

Control Measures:

1. In the spring (March/April), the following maintenance steps will be taken (see Site Map for locations):

    a. The settling pond and outlet control structure will be cleaned if needed.

    b. Rock check dams and sumps will be inspected and cleaned.

    c. Roadside ditches will be inspected and cleared as needed.

    d. The wheel cleaning cattle guard device and pit will be inspected and cleaned if needed.

    e. Silt fencing, if installed, will be inspected and repaired.

    f. Areas that can be reclaimed will receive topsoil from the overburden stockpile and seeded as necessary when the weather permits. This will allow a full growing season.

    g. An overall inspection of the site will be performed to identify new problem areas and to repair any existing drainage features.

2. The items noted in #1 above will be maintained throughout the construction/mining season, as required:

    a. All sediment trapping devices will be cleaned when sediment has accumulated to 50% of the design storage capacity.

    b. All BMPs will be inspected for damage or failure to properly function between Routine Site Inspections. Repairs will be made per this SWPPP and MSGP.

    c. All waste soils produced by cleaning and maintenance activities will be hauled to the overburden and waste soils stockpile area within the facility limits.

3.4 Spill Prevention and Response

Activity: Maintenance and Fueling of Mining Equipment

Pollutants – Oil, fuel, grease, other equipment service products (see 2.1).

Structural Controls – The control measure implemented for this activity is within BMP 10, Portable Spill Containment (PSC) devices, i.e. the Portable Fuel Spill Containment Pop Up Pool. This BMP will be used to collect and contain any pollutants. Pollutants will be removed from the PSCs with absorbent pads, which will be removed from the site and disposed of by the users. The location of maintenance and fueling operations will vary continually depending on where equipment is located within the facility as mining progresses. All mining equipment will be serviced and/or fueled with these devices available. PSCs will be stored in the weight station shed (see Site Map) or in the site user mobile service vehicles. No pollutants will be stored at the site.

Non-Structural Control – Locations for performing maintenance and refueling will be selected by identifying areas where discharge of pollutants into waters of the United States will not be imminent.

Spill Response Procedures – See Attachment E (6) a. "Spill Response Procedure".

3.5 Erosion and Sediment Controls

Erosion Controls: (See Attachment E (1) "Selected BMPs" for details pertaining to each BMP.)

1. Graded Areas (BMP 2B – Staging Areas) - All active mining areas will be maintained at <5% to minimize runoff velocity, reducing erosion, and will be graded so that all surface runoff is routed through the settling basin.

2. Stabilization of Site Entrance / Exit (BMP 5a) – The entrance and exit to the site is paved for approximately 600 feet. This stabilized road surface minimizes tracking of material from the facility onto public roads and provides a cleanable surface

3. Stabilization of Other Site Roads (BMP 5b) – Haul roads within the facility are capped with crushed rock. Roads are elevated where possible and sloped toward the site controls to allow treatment of runoff before discharging from site.

4. Topsoiling (BMP 20) – Placement of topsoil or other growth medium to facilitate vegetative growth.

5. Seeding (BMP 21) – Establish vegetation on finalized benches, areas of facility that are at final grade, and on overburden stockpiled for future reclamation.

6. Outlet Protection (BMP 30) - Outlet protection consists of shot or crushed rock placed at outfalls to slow the storm water velocity which protect against erosion and help remove sediment. Outlet protection is placed at culvert outlets or drainage routes as shown on Site Map.

7. Fiber Rolls (BMP 35) – Placed at the toe or on the face of slopes to reduce runoff flow velocity. Can also be used as check dams in unlined ditches or for catch basin protection.

8. Vegetative Buffer Strip (BMP 37) – The settling basin discharges to an existing naturally vegetated hillside which will help with sediment trapping before reaching the receiving water body.

9. Overblasting (BMP 52) – Standard blasting activity results in a 2-3 foot minimum depth of fractured rock that is required to be left in place. This practice creates a ready means for infiltration and runoff storage throughout the site, which reduces surface flow and sediment transport.

Sediment Controls: (See Attachment E (1) "Selected BMPs" for details pertaining to each BMP.)

1. Berm (BMP 2A – Staging Areas) – Berm (BMP 2A – Staging Areas) – Used on the uphill sides of the site, generally at edge of clearing and/or areas with overburden removed, to divert uncontaminated runoff and prevent it from entering the site. Also used along some ditch and road edges to keep contaminated runoff from mixing with uncontaminated flow diverted around site.

2. Graded Area (BMP 2B – Staging Areas) – All active mining areas will be maintained at <5% to minimize runoff velocity and will be graded so that all surface runoff is routed through the settling basins. Any depressions on the quarry floor that pond runoff will be filled with shot rock or crushed rock. This will eliminate vehicle traffic through ponds and the creation of muddy areas, thus reducing vehicle tracking of sediment from the site.

3. Check Dams (BMP 32) – Install check dams in ditches, where shown on the Site Map.

4. Fiber Rolls (BMP 35) – Installed where shown on map to intercept runoff and trap sediment.

5. Silt Fence (BMP 36) – Installed at boundary areas where shown on map to prevent discharge of contaminated runoff and for areas requiring delineation, as shown on the Site Map.

6. Vegetative Buffer Strip (BMP 37) – Sheet flow runoff will be discharged into vegetated buffer strips where possible in order to infiltrate storm water and trap transported sediment.

7. Sedimentation Basin (BMP 38) – Sediment basins treat runoff from the site (see Site Map for locations).

8. Sedimentation Trap (BMP 38) – Constructed sump at the inlet to the culvert under the access road at the intersection with Veteran's Memorial Highway. Trap is lined with 12" minus crushed rock. This is a final measure of sediment control before discharge from the site.

9. Spray Bar (BMP 56) – Spray bars are installed on secondary crushers for dust abatement and to minimize sediment transport. Spray bars will be incorporated into primary crushing and/or screening operations if conditions warrant.

10. Wheel Cleaning Device (BMP 57) – Cattle guard installed over small pit prior to vehicles entering scale. Vehicles travel across the cattle guard causing vibration and material to fall from the vehicle into the below pit, reducing vehicle tracking of sediment from the site.

3.6 Management of Runoff

Storm Water Management BMPs:

1. Berms (BMP 2A – Staging Areas) – Used on the uphill sides of the site, generally at edge of clearing and/or areas with overburden removed, to divert uncontaminated runoff and prevent it from entering the site. Also used along some ditch and road edges to keep contaminated runoff from mixing with uncontaminated flow diverted around site

2. Graded Area (BMP 2B – Staging Areas) – All active mining floor areas will be maintained at <5% to minimize runoff velocity and will be graded so that all surface runoff is routed through the settling basin

3. Seeding (BMP 21) – Establish vegetation on finalized benches, areas of facility that are at final grade and on overburden stockpiled for future reclamation. Once established, seeded areas act as a vegetated buffer strip (BMP 37).

4. Outlet Protection (BMP 30) - Outlet protection consists of shot or crushed rock placed at outfalls to slow the storm water velocity which protect against erosion and help remove sediment. Outlet protection is placed at culvert outlets or drainage routes as shown on Site Map.

5. Check Dams (BMP 32) and Controlled Drop Check Dam (BMP 50) – Reduce gradient and/or runoff velocity in ditches and swales, reducing potential for erosion and damage to drainage structures.

6. Vegetative Buffer Strip (BMP 37) – Sheet flow runoff will be discharged into vegetated buffer strips where possible in order to infiltrate storm water and trap transported sediment.

7. Sedimentation Basin (BMP 38) – A sedimentation basin is utilized to buffer runoff discharge. This will reduce the amount of sediment discharged to the receiving waters.

8. Overblasting (BMP 52) – Overblasting creates a facility wide detention and filtration zone throughout the quarry floor.

9. Shot Rock Lined Sump (BMP 54) – Constructed sump at the inlet to the culvert under the access road at the intersection with Veteran's Memorial Highway. Sump is lined with 12" minus crushed rock. This is a final measure of sediment control before discharge from the site. When not frozen this sump infiltrates most storm water discharge flows.

3.7 Salt Storage Piles or Piles Containing Salt

Not Applicable.

3.8 MSGP Sector-Specific Non-Numeric Effluent Limits

Controls and procedures to be used for *Technology-Based Effluent Limits for Clearing, Grading, and Excavation Activities*: Refer to section 11, Subpart J Sector J – Non-Metallic Mineral mining and Dressing.

1. Erosion Control Measures. Used to minimize soil exposure on-site during construction.

    a. Delineation of Site. New areas to be cleared shall be delineated by flagging prior to clearing. Perimeter vegetation not flagged to be cleared shall be considered no-cut areas acting as temporary and /or permanent vegetated buffer strips.

    b. Construction activities shall be phased and sequenced to minimize the extent and duration of exposed soils to the extent possible.

    c. Maintain 25 ft. (min) wide natural vegetated buffer around the edge of any waters of the U.S. adjacent to construction activities associated with quarry development, to the extent possible.

    d. Control storm water discharges and flow rates by:

        i. Diverting storm water around site to the extent possible by use of perimeter diversion berms, and interception ditches or swales.

ii. Grade quarry floor to 5% or less to disperse and slow the velocity of storm water.

iii. Install rock check dams or rock as velocity dissipation devises in roadside ditches or where needed to armor slopes at ditch outlets.

e. Protect steep slopes:

i. Excavated overburden material moved to the overburden storage area shall be placed at angle of repose or less.

ii. Placed overburden shall be left with a roughened surface.

iii. Seed bare earth slopes.

2. Sediment Control Measures to be constructed as one of the first steps in grading and must be functional before other land disturbing activities take place.

a. *Storm Drain Inlet Protection Measures*. Ensure sedimentation traps are cleaned/maintained at inlet to storm drain system at Outfall 1

b. *Water Body Protection Measures*. Maintain vegetated buffer strips as water body protection measures around perimeter of quarry and between quarry and any water bodies (Auke Nu Creek).

c. *Down-Slope Sediment Controls*. Maintain vegetation buffer areas as down-slope sediment control measures below and to the side perimeter of disturbed slopes.

d. *Stabilized Site Entrance and Exit Points, and Other Site Roads.* The main quarry access road is paved from the Highway to near the main quarry floor level. Secondary access road for tracked equipment is rock surfaced. Lowboy off-loading pad beside highway is rock surfaced. Rock surfaced pad and roads require periodic grading to direct runoff to adjacent ditches. Paved road requires periodic sweeping to remove tracked material. The wheel cleaning device at the scale requires periodic cleanout of accumulated material.

e. *Dust Generation and Track-Out from Vehicles*. Dust generation shall be minimized by the use of water spray bars on crushers, dust collectors on drills, application of water by water truck or hose to truck scale, internal quarry access roads and main access road. Tracking shall be minimized by placing crushed rock on internal quarry roads to keep vehicles from driving through dirty standing water and mud, and by cleaning paved quarry access road and the wheel cleaning device at the scales to prevent accumulation of tracked material.

f. *Soil Stockpiles*. No soil shall be stockpiled on quarry floor. Excavated overburden material shall be placed in designated overburden storage area, perimeter berms, or removed from site. Soil placed in overburden storage area or as perimeter berms shall be placed at angle of repose or less, and roughened slopes seeded as soon as possible.

g. *Sediment Basins*. Small temporary sediment basins and sediment traps shall be installed where practicable in the quarry floor and at quarry perimeter prior to discharge of storm water to vegetated buffer strips. Basins and traps are temporary sediment control measures as locations will change as quarry floor is dropped. There are no suitable (flat) areas at quarry's lowest elevation to construct permanent sediment treatment basins. Maintain a sediment trap upstream of sump at Outfall #1 by retaining vegetation in ditch to act as bio-filter immediately upstream of outfall/sump.

3. Dewatering. Not applicable at this facility.

4. Soil Stabilization. Cut slopes in organic soils exposed during clearing and stripping and overburden placed in designated overburden storage area shall be seeded.

5. Treatment Chemicals. No treatment chemicals are currently used to reduce erosion or treat sediment in storm water discharges at this facility.

6. Prohibited Discharges. The following are prohibited from being discharged at the quarry:

    a. Wastewater from concrete washout unless managed by an appropriate control measure;

    b. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials;

    c. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and

    d. Soaps or solvents used in vehicle and equipment washing.

7. Good Housekeeping Measures. The following housekeeping measures shall be used to prevent and/or minimize the discharge of pollutants at the material source.

    a. *Washing of Equipment and Vehicles and Wheel Wash-Down*. Vehicle and equipment washing does not currently occur at the facility. However, should equipment or vehicle washing activities be needed, such activities should be located out on the main quarry floor levels as far away from the sediment basin as practical. No wheel wash-down equipment is currently installed at the quarry. The discharge of soaps and solvents used in equipment or vehicle washing is prohibited.

    b. *Fueling and Maintenance Areas*. All fueling and maintenance performed in the quarry shall comply with the following requirements:

        i. Fueling and maintenance of equipment occurs in varying locations throughout the site depending on location of equipment to be fueled.

        ii. Mobile equipment should be located as far as practical from water channels, and sediment basin during refueling operations.

        iii. Minimize the exposure to precipitation and storm water or use secondary containment structures designed to eliminate the potential for spills or leaked chemicals.

        iv. Facility users MUST:

            (1) Clean up spills or contaminated surfaces immediately.

            (2) Ensure adequate clean up supplies are available at all times to handle spills, leaks, and disposal of used liquids. These supplies shall be kept in the contractor's refueling vehicle or mechanic shop truck. An emergency pop-up pool containment device is kept in the scale house if needed.

            (3) Use drip pans or absorbents under or around leaky equipment and vehicles.

(4) Dispose of liquid wastes or materials used for fueling and maintenance in accordance with State regulations.

8. Staging and Material Storage Areas. Rock product stockpiles shall be located in areas designated by the material sources manager, away from water courses and storm drain channels.

9. Washout of Applicators/Containers used for Paint, Concrete, and Other Materials. Washout activities not permitted in quarry.

10. Fertilizer or Pesticide Use. Fertilizers or pesticides not used in quarry.

11. Storage, Handling, and Disposal of Construction Waste. No construction waste shall be stored, handled, or disposed of in the facility.

12. Winter Shutdown. The facility typically operates seasonally, shutting down mid-November to March 31, due to freezing conditions. Conveyance channels, and disturbed soil slopes shall be stabilized prior to winter shutdown. Erosion and sediment control measures shall be in place prior to winter shut down in anticipation of spring thaw.

13. Maintenance of Control Measures. All control measures, good housekeeping measures, and other protective measures shall be maintained in effective operating condition. If site inspections identify control measures, good housekeeping measures, or other protective measures that are not operating effectively, corrective actions must be implemented in accordance with Part 8 of the permit.

    If existing control measures need to be modified or if additional control measures are necessary for any reason, corrective action must be completed in accordance with Part 8.3 of the Permit.

    Sediment from silt fences, check dams, berms, or other control measures must be removed before the accumulated sediment reaches one-half (1/2) the distance up the above-ground height (or reaches a lower height based on manufacturer's specifications) of the control measure. For sediment traps or sediment ponds, accumulated sediment must be removed when the design capacity has been reduced by fifty (50%) percent.

14. Inspection of Clearing, Grading, and Excavation Activities, conducted as part of the exploration and construction phases... NOT MINING ACTIVITIES

    a. *Inspection Frequency.* Inspections must be conducted either at least once every 7 calendar days or at least once every 14 calendar days and within 24 hours of the end of a measurable storm event. If the entire site is temporarily stabilized, inspection frequency may be reduced to at least once every month and within two business days of the end of a measurable storm event at actively staffed sites which resulted in a discharge from the site. Once active mining has begun, those areas comply with inspections according to 11.J.7.

    b. *Winter Shutdown.* If the exploration and construction phase is undergoing winter shutdown, inspections may stop fourteen (14) calendar days after the anticipated fall freeze-up and must resume at least twenty one (21) calendar days prior to the anticipated spring thaw.

    c. *Location of Inspections.* Inspections must include all areas of the site disturbed by clearing, grading, and/or excavation activities and areas used for storage of materials that are exposed to precipitation. Sedimentation and erosion control measures must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing

significant impacts to waters of the United States. Locations where vehicles enter or exit the site must be inspected for evidence of significant off-site sediment tracking.

d. *Inspection Reports*. An inspection report must be completed for each inspection required above.

15. Requirements for Cessation of Clearing, Grading, and Excavation Activities.

a. *Inspections and Maintenance*. Inspections and maintenance of control measures associated with clearing, grading, and/or excavation activities being conducted as part of the exploration and construction phase of mining must continue until final stabilization has been achieved on all portions of the disturbed area or until commencement of the active mining phase for those areas that have been temporarily stabilized as a precursor to mining.

b. *Temporarily Stabilize Disturbed Areas*. Stabilization measures should be initiated immediately in portions of the site where clearing, grading, and/or excavation activities have temporarily ceased, but in no case more than 14 days after clearing, grading and/or excavation activities in that portion of the site have temporarily ceased. When initiating perennial vegetative stabilization measures within 14 days after exploration or construction activities has temporarily ceased is not possible due to freezing conditions or snow, temporary vegetative stabilization measures must be initiated as soon as practicable (following actual spring thaw).

Until temporary vegetative stabilization is achieved, interim measures e.g. surface roughening, or a surface cover, must be employed. In areas where exploration and/or construction has permanently ceased prior to active mining, temporary stabilization measures must be implemented to minimize mobilization of sediment or other pollutants until such time as the active mining phase commences.

c. Final Stabilization of Disturbed areas. Stabilization measures should be initiated immediately in portions of the site where mining, exploration, and/or construction activities have permanently ceased, but in no case more than 14 calendar days after the exploration and/or construction activity in that portion of the site has permanently ceased. When initiating perennial vegetative stabilization measures within 14 days after mining, exploration, and/ or construction activities has permanently ceased is not possible due to freezing conditions or snow, final vegetative stabilization measures must be initiated as soon as possible. Until final stabilization is achieved, temporary stabilization measures must be used.

3.9 Employee Training

Employee training will occur in the following manner:

1. Location:

a. *In office:* new SWPPP team members will read or review the SWPPP documents, including the MSGP. The content of office training is detailed below.

b. *In field at the facility:* the SWPPP team will make site visits. The content of the field training is detailed below.

2. Content:

a. *Office Training:*

i. New team members will read the entire SWPPP and MSGP document; existing team members will review these documents each year.

ii. Review the comprehensive site inspection annual report, noting any changes made to the SWPPP or Site Map.

iii. Review inspection and monitoring requirements and procedures.

iv. Develop or review plans for performing inspections, monitoring and sampling.

v. Review erosion and sediment control concepts.

vi. Review Good Housekeeping and Maintenance requirements (3.2 and 3.3).

vii. Review spill response procedures (3.4).

b. *Field Training at Facility:*

i. Review erosion and sediment control concepts.

ii. Review Good Housekeeping and Maintenance requirements (3.2 and 3.3).

iii. Review spill response procedures (3.4).

iv. Inspect all erosion and sediment control measures of the SWPPP (3.5 – 3.8).

v. Discuss maintenance evaluation methods and criteria with team members.

vi. Discuss control measure performance with team members.

vii. Material Source Manager will train and meet with material source users as necessary.

3. Frequency:

a. Regular training will occur annually in the spring prior to the commencement of operations in the material source.

b. New team members will be trained when they are added to the team.

c. Storm water pollution prevention courses will be taken by team members as ongoing training.

3.10 Non-Storm Water Discharges

There are no non-storm water discharges at this facility, as documented in Section 2.3 of this SWPPP. The only potential non-storm water discharge would be from fueling and maintenance activities. This potential discharge is addressed through the use of BMP 10 Spill Prevention and Control and section 3.4 of this SWPPP.

3.11 Waste, Garbage and Floatable Debris

There is no activity at the site that is expected to produce waste, garbage or floatable debris on the site. Any waste from maintenance and servicing of mining equipment will be removed by the quarry user service personnel. Users of

the facility will be notified to pick up and dispose of their own waste items. Members of the SWPPP Team will remove any such items found at the facility.

3.12 Dust Generation and Vehicle Tracking of Industrial Materials

1. Dust Generation – During extended periods of dry weather, dust can be generated on haul roads and at extraction, crushing or screening operations. The following steps have been taken by the CBJ to address dust generation:

    a. The CBJ installed a 2" water service line to the site for use by quarry users.

    b. Material source users are required to water haul routes and other related dust generating operations under the conditions specified in the quarry Conditional Use permit (USE2008-00007). This condition is mandated for any user of the material source.

    c. Spray bars are required on all secondary crushing equipment. They will be added to primary crushing and screening operations as warranted.

    d. Vegetative cover (BMP 37) is established on all overburden stockpiles and in areas where mining operations are complete to minimize wind generated dust and vehicle traffic.

    e. Rock drills use dust collection devices at the collar.

2. Vehicle Tracking – The following measures are implemented to minimize vehicle tracking.

    a. The entrance / exit road is paved (600 feet). This will help stabilize the access and reduces the amount of tracked material leaving the site. Haul road shall be watered and/or swept as needed as tracked material collects on its surface.

    b. All quarry users are required to clean their haul route as needed when hauling rock from the quarry. It is also a requirement of CBJ construction contracts that contractors maintain a clean haul route.

    c. A pressure washer is utilized to clean sediment from the deck and also from under the truck weigh station. The waste water is routed to the Sedimentation Basin. These actions reduce tracking and production of dust.

    d. The approaches to the truck weigh station are paved and provide an additional opportunity for tracked sediment to fall from vehicle prior to them exiting the quarry. A wheel cleaning device collects material that falls from truck wheels prior to entering the scale.

SECTION 4: SCHEDULES AND PROCEDURES FOR MONITORING

The following table summarizes the Benchmark Monitoring required for this facility. No other monitoring is required.

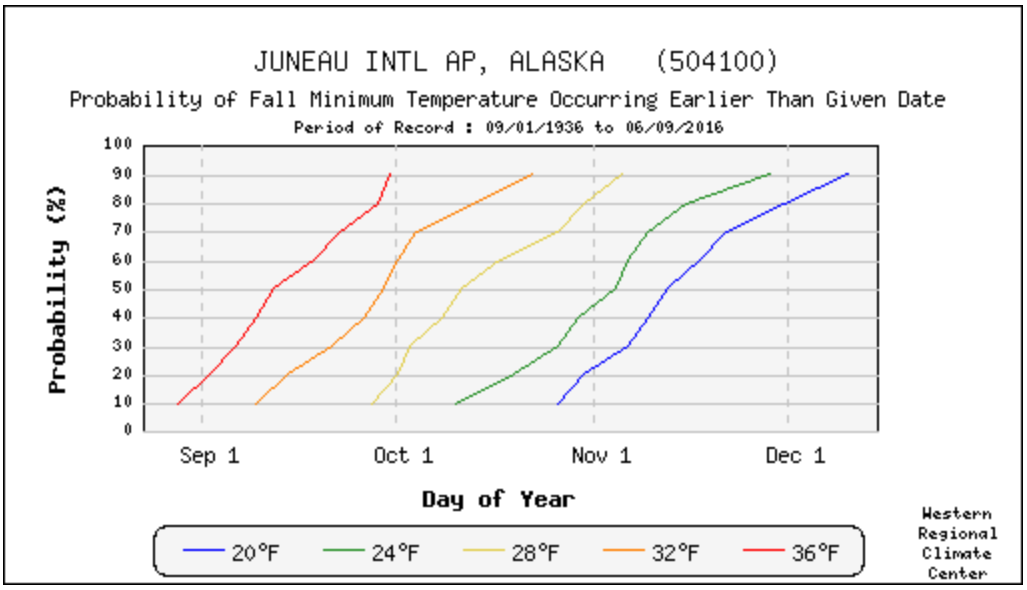
Sample Location	Schedule	Pollutant	Numeric Limit	Procedure
Outfall 001	4 / year: see 2020 MSGP, Part 7.1.6 and 7.1.7 weather modification below	TSS	100 mg/L	One grab sample from a measurable storm event (see MSGP 7.1.3) collected by the Material Sources Manager, or appointed personnel. Sample to be delivered to Admiralty Environmental (463-4415). Sample collection and handling will be in accordance with instructions from Admiralty Environmental.
Outfall 002	4 / year: see 2020 MSGP Part 7.1.6 and 7.1.7 weather modification below	TSS	100 mg/L	One grab sample from a measurable storm event (see MSGP 7.1.3) collected by the Material Sources Manager or appointed personnel. Sample to be delivered to Admiralty Environmental (463-4415). Sample collection and handling with be in accordance with instructions from Admiralty Environmental.

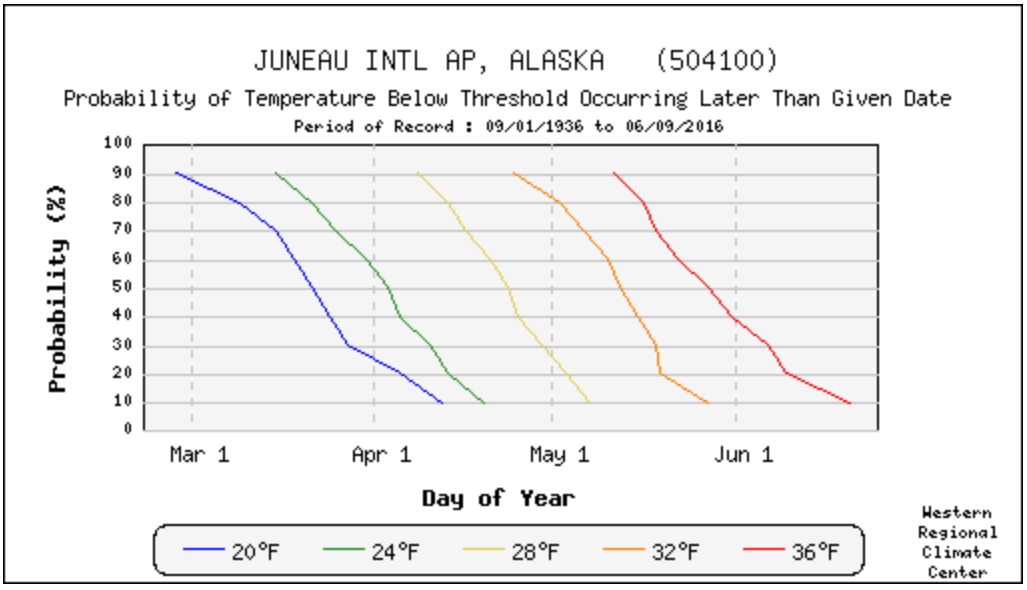
Freezing Weather Schedule Modification (MSGP 7.1.6):

This facility will follow the traditional quarterly monitoring schedule for benchmark samples. This change differs from the original SWPPP submittal and was made on 03/01/2021. The change occurred after repeated attempts to contact Alaska DEC to request an adjusted schedule for netDMR reporting were met with no response. Samples will be obtained during each of the following calendar quarters:

- January 1 – March 31
- April 1 – June 30
- July 1 - September 30
- October 1 – December 31

Anticipated winter shutdown is November 30th, spring start up April 1st.


JUNEAU INTL AP, ALASKA (504100)
Probability of Fall Minimum Temperature Occurring Earlier Than Given Date
Period of Record : 09/01/1936 to 06/09/2016
Probability (%)
100
90
80
70
60
50
40
30
20
10
0
Sep 1
Oct 1
Nov 1
Dec 1
Day of Year
20°F
24°F
28°F
32°F
36°F
Western Regional Climate Center


JUNEAU INTL AP, ALASKA (504100)
Probability of Temperature Below Threshold Occurring Later Than Given Date
Period of Record : 09/01/1936 to 06/09/2016
Probability (%)
100
90
80
70
60
50
40
30
20
10
0
Mar 1
Apr 1
May 1
Jun 1
Day of Year
20°F
24°F
28°F
32°F
36°F
Western Regional Climate Center

SECTION 5: INSPECTIONS

Routine Facility Inspections (2020 MSGP 6.1)

- Positions of the person(s), responsible for inspection: Material Sources Manager, Engineering Associate, or a contractor with appropriate SWPPP inspection certification and/or training.

- Schedule (modified for freezing winter weather):
  - April 1 – October 31: Monthly
  - November 1 – March 31: once in December and once in February.
  - Note: All inspections will be completed during operational hours and at least one inspection will be made when a discharge is occurring.

- Locations to be inspected and issues to watch for:
  - Berms: failure to divert runoff
  - Ditches: Eroded banks; Flowing freely
  - Culverts: Inlet/outlet open and free flowing; Outlet protection adequate
  - All vegetation areas: disturbed or eroded areas
  - Overall site: new drainages or areas of erosion; dust
  - Sedimentation Basin(s) and outlet control: any signs of failure
  - Stockpiles and Surge Piles: runoff encountering the piles and eroding
  - Crushing & Screening Operations: contaminated runoff leaving activity
  - Entrance / Exit Approaches: excessive sediment
  - Outfalls 001, 002: presence of sediment or turbidity
  - Equipment: Leaks or fuel spill
  - Identification of new control measures needed
  - All other BMPs as noted in the SWPPP

Quarterly Visual Assessments (2020 MSGP 6.2)

- Positions of the persons responsible for inspection: Material Sources Manager; Engineering Associate, or a contractor with appropriate SWPPP training or certification.

- Schedule: Visual Assessment inspections will be performed on the quarterly schedule as follows:
  - January 1 – March 31
  - April 1 – June 30
  - July 1 - September 30
  - October 1 – December 31

- Assessment Location: Outfall 001, Outfall 002.

Comprehensive Site Inspections (2020 MSGP 6.3)

- Positions of the person(s) responsible for inspection: Material Sources Manager or Engineering Associate, or a contractor with appropriate SWPPP training or certification.
- Schedule: Annually in September or October, or November (before winter shutdown).

- Areas to be inspected: All areas of the facility as delineated on the Annual Comprehensive Site Inspection form.

SECTION 6: SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Michael Eich Title: Material Sources Manager

Signature: _____ Date: 05/15/2020

SECTION 7: SWPPP MODIFICATIONS

See Attachment D (12) – SWPPP Amendment Log.

SWPPP ATTACHMENTS

As necessary, the documentation listed here is incorporated to this SWPPP.

Attachment A – General Location Map

Attachment B – Site Map

Attachment C – 2020 MSGP

Attachment D – Additional MSGP Documentation – Inspection, Monitoring, and Certification Records

(1) Significant Spills, Leaks or Other Releases
(2) Employee Training Log
(3) Maintenance Records
    a. Control Measure Maintenance Records
    b. Industrial Equipment and Systems Maintenance Records
(4) Inspections
    a. Routine Facility Inspection Reports
    b. Construction Activities Inspection Reports
(5) Quarterly Visual Assessments
(6) Comprehensive Site Inspection Reports (Annual Inspection Reports)
(7) Discharge Monitoring Results – Benchmark Monitoring
(8) Deviations from Assessment Monitoring Schedule
(9) Benchmark Exceedances
(10) Impaired Waters – Documentation of Natural Background Sources – NOT APPLICABLE
(11) Active-Inactive State Change Records
(12) SWPPP Amendment Log
(13) Corrective Action Submittals
(14) Non-compliance Records

Attachment E – Supporting Documentation

(1) Selected BMP Information
(2) Spill Response
    a. Spill Response Procedure
    b. Spill Reporting Placard
    c. Monthly Spill Log
    d. Spill Reporting Form
(3) Notice of Intent
    a. Original Submittal
    b. NOI Modifications
    c. Delegation of Signatory Authority

UNNAMED TRIBUTARY TO AUKE NU CREEK

AUKE NU CREEK

WAYDELICH CREEK

MENDENHALL LOOP RD

AUKE LAKE

STABLER POINT QUARRY

GLACIER HWY (AK 7)

GLACIER HWY (AK 7)

ALASKA MARINE HWY
AUKE BAY FERRY TERMINAL

AUKE NU COVE

AUKE CREEK

AUKE BAY

AUKE CAPE

800 0 800 1600

SCALE IN FEET

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
ENGINEERING & PUBLIC WORKS

STABLER POINT QUARRY
MATERIAL SOURCE SWPPP
GENERAL LOCATION MAP

Revision:	2020-04
Revised by:	MCE
Date	04-01-2020
Original by:	STAFF
Proj. No.	

ATTACHMENT A

SITE DESCRIPTION:

Total Facility Area = 32 acres
Area w/ Soils Exposed to Stormwater = 27 acres
Impervious Surface Area = 0.3 acres (Pavement)

POLLUTANT SUMMARY

ACTIVITY	ASSOCIATED POLLUTANTS
PREPARATION OF NEW MINING AREAS	WOODY DEBRIS, DUST, SEDIMENT (TSS), TURBIDITY
BLASTING (INCLUDING DRILLING)	DUST, SEDIMENT (TSS), TURBIDITY
ROCK EXTRACTION	DUST, SEDIMENT (TSS), TURBIDITY
CRUSHING & SCREENING	DUST, SEDIMENT (TSS), TURBIDITY
EQUIPMENT MAINTENANCE & FUELING	OIL, ANTIFREEZE, LUBRICANTS, DIESEL FUEL, HYDRAULIC FLUID, TRANSMISSION FLUID, CLEANING SOLVENTS
DRAINAGE MAINTENANCE	DUST, SEDIMENT (TSS), TURBIDITY
RESTORATION/CONTOUR GRADING	DUST, SEDIMENT (TSS), TURBIDITY

BMP SUMMARY

BMP	DESCRIPTION
2A	BERMS OR DIKES (SEE BMP 2, STAGING AREA)
2B	GRADED AREA (SEE BMP 2, STAGING AREA)
2C	STORMWATER CONVEYANCE (SEE BMP 2, STAGING AREA)
5a	STABILIZATION OF SITE ENTRANCE/EXIT
5b	STABILIZATION OF OTHER SITE ROADS
6	EROSION PREVENTION OF TEMPORARY ROADS
9	STOCKPILE MANAGEMENT
10	SPILL PREVENTION AND CONTROL
16	MULCHING, INCLUDING HYDROMULCHING
17	ROCK SLOPE ARMOR
18	MATTING
20	TOPSOILING
21	SEEDING
24	PIPE SLOPE DRAIN
30	OUTLET PROTECTION
32	CHECK DAMS
35	FIBER ROLLS
36	SILT FENCE
37	VEGETATIVE BUFFER STRIP
38	SEDIMENTATION TRAP (BASIN)
50	CONTROLLED DROP CHECK DAM
52	OVERBLASTING
56	SPRAY BARS
57	SHAKER RACK (CATTLE GUARD)

OTHER NON-STRUCTURAL BMPs

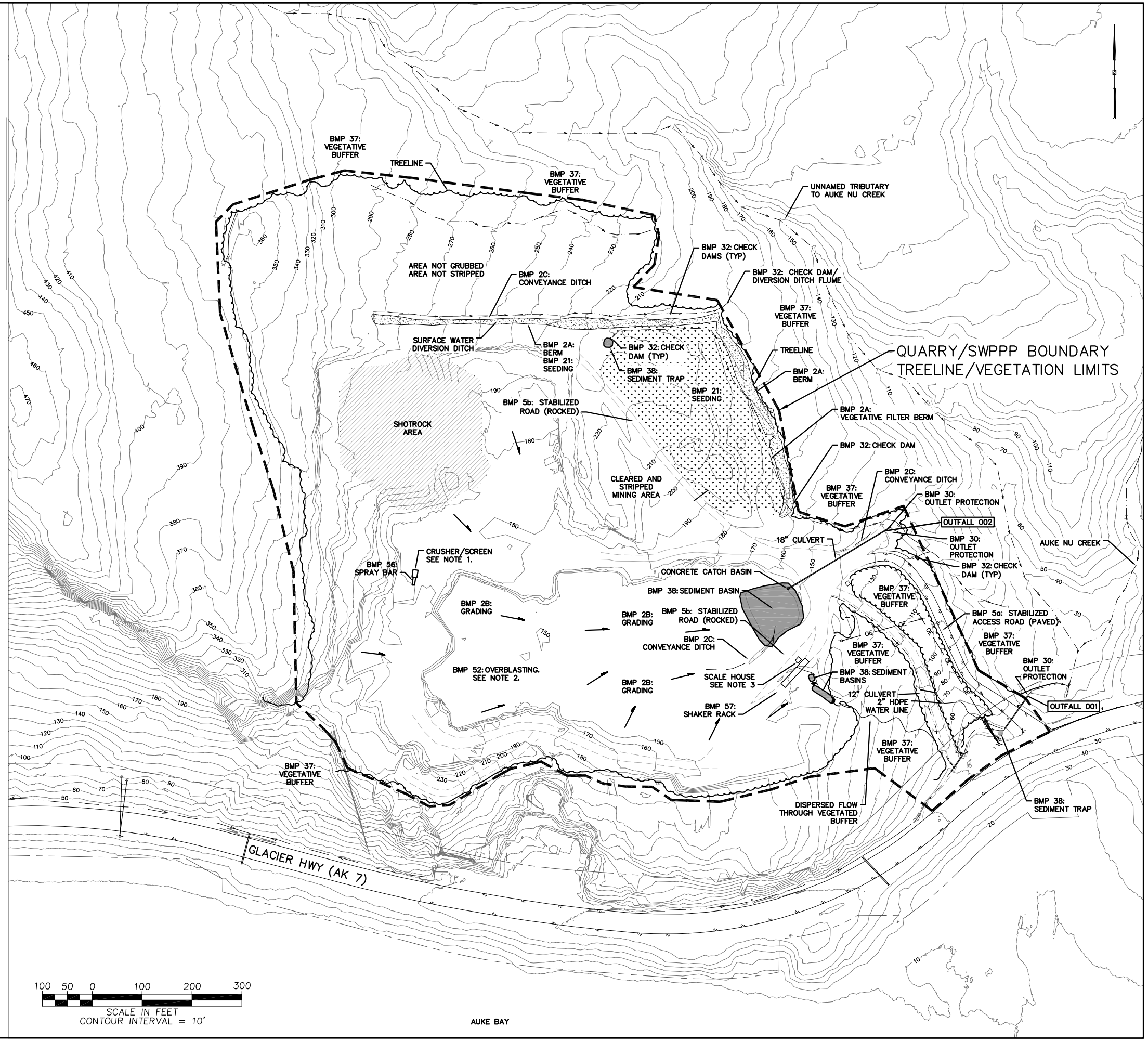
- SEDIMENT TRACKING CONTROL: STREET SWEEPER AS NEEDED.
- SEDIMENT TRACKING CONTROL: HAUL TRUCK MATERIAL CONTAINMENT
- SEDIMENT TRACKING CONTROL: PRESSURE WASHING AND STREET SWEEPING OF SCALE TO REMOVE FINE SEDIMENT
- CLEANING AND SEDIMENT CONTROL: WATER SOURCE SUPPLY PROVIDED

NOTES:

1. CRUSHING AND SCREENING OPERATIONS VARY CONTINUALLY. REFER TO THE ACTIVE INDIVIDUAL MINING PLANS (IMP'S) FOR CURRENTLY SPECIFIED LOCATIONS.
2. OVERBLASTING OCCURS IN ALL BLASTED AREAS. SEE SWPPP FOR DESCRIPTION OF BMP.
3. FRESH WATER SUPPLY AND PORTABLE SPILL CONTAINMENT DEVICE AVAILABLE AT SCALE HOUSE.

LEGEND

- Drainage Channel
- Paved Road
- Other Road
- Treeline
- Facility Boundary
- Berm
- Stormwater Flow Direction
- BMP 38 – Sedimentation Trap (Basin)
- BMP 37 – Vegetated Buffer Strip



CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
ENGINEERING & PUBLIC WORKS

STABLER POINT QUARRY MATERIAL SOURCE SWPPP

EXISTING CONDITIONS SITE MAP

Revision:	2020-08
Revised by:	MCE
Date	04-01-2020
Original by:	STAFF
Proj. No.	

ATTACHMENT B

Attachment C – 2020 MSGP

A copy of the 2020 MSGP, incorporated by reference, is available in the CIP Engineering Office, 3rd Floor Marine View Building 230 S Franklin St Juneau, AK 99801. The 2020 MSGP can also be accessed online at https://dec.alaska.gov/media/19833/akr060000-f-pmt-20200220.pdf.

Attachment D – Additional MSGP Documentation – Inspection, Monitoring, and Certification Records

Attachment D documentation shall be incorporated in this SWPPP as it is produced throughout the permit period.

(1) Significant Spills, Leaks or Other Releases
(2) Employee Training Log
(3) Maintenance Records
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    b. Industrial Equipment and Systems Maintenance Records
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    a. Routine Facility Inspection Reports
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    d. Spill Reporting Form
(3) Notice of Intent – To be included after submittal and upon any modifications to the NOI during the permit period.
    a. Original Submittal
    b. NOI Modifications
    c. Delegation of Signatory Authority

Attachment E – Supporting Documentation

(1) Selected BMP Information.

Structural BMP List (Further information on each structural BMP on the following pages)

Table of Contents

Non-Structural BMPs

See SWPPP Narrative Section 3: Storm Water Control Measures

BMP 2 - Staging Areas (BMPs 2A, 2B, and 2C)

Description

This BMP includes measures for collecting runoff from a staging area, materials storage site, or industrial activity area or for diverting water flow away from such areas so that pollutants do not mix with clean stormwater runoff. Various flow diversion structures, called stormwater conveyances, can be used to contain runoff on site, to channel it around the industrial area, or to carry pollutant-laden water directly to a treatment device or facility. Several options are available:

BMP 2A - Dikes or Berms: Diversion dikes or berms are ridges built to block runoff from passing beyond a certain point. Temporary dikes are usually made with compacted soil or compost. More permanent ones are constructed out of concrete, asphalt, or other durable materials. Diversion dikes are used to prevent the flow of stormwater runoff onto construction or staging/storage areas. Limiting the flow across these areas reduces the volume of stormwater that may carry pollutants from the area and may, therefore, require treatment. This method is suitable for sites where significant volumes of stormwater runoff tend to flow onto active materials handling or equipment staging sites and other construction areas.

BMP 2B - Graded Areas and Pavement: Site surfaces can be graded, or graded and paved, so that stormwater runoff is directed away from operations' activity areas. The slope of the grade allows the runoff to flow, but keeps it from washing over areas that may be contaminated with pollutants. Like conveyances and dikes, grading can prevent runoff from entering operations' areas and becoming contaminated with pollutants from these areas. Grading can be utilized to fill in depressions that would otherwise contain stormwater in a trafficked areas. Grading can be a permanent or temporary control measure.

BMP 2C - Stormwater Conveyances: This term includes many kinds of channels, gutters, drains, and sewers. Stormwater conveyances can be either temporary or permanent. They are constructed or lined with many different materials, including concrete, clay tiles, asphalt, plastics, metals, riprap, compacted soils, and vegetation. The type of material used depends on the use of the conveyance.

Applications

BMP 2A - Dikes or Berms: Typically, dikes are built on slopes just uphill from an active construction area together with some sort of a conveyance, such as a swale. The conveyance is necessary to keep the water away from the dike so that the water will not pool and seep through the dike.

Some advantages of diversion dikes are that they:

- Effectively limit stormwater flows over industrial site areas.
- Can be installed at any time.
- Are economical, temporary structures when built from soil on site.
- Can be converted from temporary to permanent at any time.

BMP 2B - Graded Areas and Pavement: Grading is appropriate for any site where outdoor activities may pollute stormwater runoff--parking lots or outdoor storage areas, for example. Grading is often used in conjunction with coverings, buffer zones, and other practices to reduce the runoff velocity, increase infiltration of uncontaminated runoff, prevent pooling of stormwater, or direct pollutant-laden runoff to stormwater treatment facilities. Grading and paving are relatively inexpensive and easy to implement.

BMP 2C - Stormwater Conveyances: Stormwater conveyances can be used for two different purposes. The first is to keep uncontaminated stormwater from getting into areas of a site where it may become contaminated. This can be accomplished by collecting the stormwater in a conveyance and directing the flow away from those areas. Secondly, conveyances can be used to collect stormwater downhill from activity areas and keep it separate from runoff that has

not been in contact with those areas. When potentially contaminated stormwater is collected in a conveyance like this, it can be directed to a treatment device or another facility on the site if desired.

Other beneficial aspects of stormwater conveyances include:

- Prevention of temporary flooding at industrial sites.
- Low maintenance.
- Erosion-resistant conveyance of stormwater runoff.
- Long-term control of stormwater flows.

Limitations

BMP 2A - Dikes and Berms

- Are not suitable for large drainage areas unless there is a gentle slope.
- May require maintenance after heavy rains.

BMP 2B - Graded Areas and Pavement

- May be uneconomical to re-grade and resurface large areas.
- May not be effective during heavy precipitation.

BMP 2C - Stormwater Conveyances:

Once the stormwater is concentrated in conveyances, it should be routed through stabilized structures all the way to its discharge to a receiving water or other stormwater BMP.

- May increase flow rates.
- May be impractical if there are space limitations.
- May be expensive to install, especially for small facilities or after a site has already been constructed.

Targeted Pollutants

Sediment

Design Parameters

BMP 2A - Dikes and Berms: In planning for the installation of dikes, consider the slope of the drainage area, the height of the dike, the amount of runoff it will need to divert, and the type of conveyance that will be used with the dike. Steeper slopes result in higher volumes of runoff and higher velocities, which the dike should be capable of handling. Remember that dikes are limited in their ability to manage large volumes of runoff.

BMP 2B - Graded Areas and Pavement: When designing graded and paved areas, be sure to consider both control and containment of runoff flows. The grading should control the uncontaminated flow by diverting it around areas that may have pollutants. The grading should also contain the contaminated flows or divert them to treatment facilities.

BMP 2C - Stormwater Conveyances: In planning for stormwater conveyances, consider the amount and speed of the typical stormwater runoff. Also, consider the stormwater drainage patterns, so that channels may be located to collect the most flow and can be built to handle the amount of water they will receive. When deciding on the type of material for the conveyance, consider the resistance of the material, its durability, and its compatibility with any pollutants it may carry.

Conveyance systems are most easily installed when a facility is first being constructed. Where possible, use existing grades to decrease costs. Grades should be positive to allow for the continued movement of the runoff through the conveyance system; however, grades should not create an increase in velocity that causes an increase in erosion. Consider the materials used for lining the conveyance and the types of outlet controls provided.

Construction Guidelines

BMP 2A - Dikes and Berms: Ideally, dikes are installed before site activity begins. However, dikes can be easily constructed at any time. Temporary dikes (usually made of dirt) generally only last for 18 months or less, but they can be made into permanent structures by stabilizing them with vegetation. Slope protection such as vegetation is crucial for preventing the erosion of the dike.

BMP 2B - Graded Areas and Pavement: Staging/storage areas should be designated for each user. Graded areas of the exposed pit floor and mining benches will be maintained throughout the life of the operation.

BMP 2C - Stormwater Conveyances: Specific construction methods apply to the type of conveyance being used.

Maintenance

Dikes should be inspected regularly for damage. This is especially important after storm events since a heavy rain may wash parts of a temporary dike away. Any necessary repairs should be made immediately to make sure the structure continues to function effectively.

Inspect unpaved, graded areas to check for gullies and other signs of erosion. Inspect paving regularly for cracks that may allow contaminants to seep into the ground. Also, check to make sure that the drains receiving the discharge from the paved area remain free of clogged sediment or other debris so that the water does not back up into areas where pollutants may be.

It is best to inspect stormwater conveyances within 24 hours of a rainstorm and remove debris promptly. Make daily inspections during periods of prolonged rainfall, since heavy storms may clog or damage the conveyances. It is important to repair damage to these structures as soon as possible.

BMP 5a - Stabilization of Site Entrance/Exit

Description
A long term sediment control device—often compacted recycled asphalt or asphalt pavement --can be installed at the approach from a material site to a public roadway to stabilize the road. This BMP creates a cleanable surface and is used to limit sediment tracking from vehicles and equipment leaving the material site onto public rights of-way and streets.

Applications
A stabilized site entrance is appropriate in the following locations:
- Wherever vehicles are entering or leaving a materials site to or from a public right-of-way.
- At any entrance/exit location where there is risk of transporting mud or sediment onto paved roads.

Targeted Pollutants
- Sediment

Design Parameters
Width: The width should be at least 10 ft. but not less than the full width of points where ingress or egress occurs. At sites where traffic volume is high, the entrance should be wide enough for two vehicles to pass safely. Flare the entrance where it meets the existing road to provide a sufficient turning radius.

Length: The length of the stabilized entrance will vary according to site layout.

Materials: Total depth of rock should be at least 24 in. or as recommended by a soils engineer. Aggregate materials should be fractured stone 2 to 8 in. diameter (for the base layer) and crushed stone 2 in. diameter or reclaimed or recycled concrete equivalent (for asphalt pavement applications).

Drainage: Runoff from a stabilized material entrance should drain to a sediment trap or a sediment basin. Piping of surface water under the entrance should be provided as needed. If piping is impossible, install a mountable berm with 5:1 slopes.

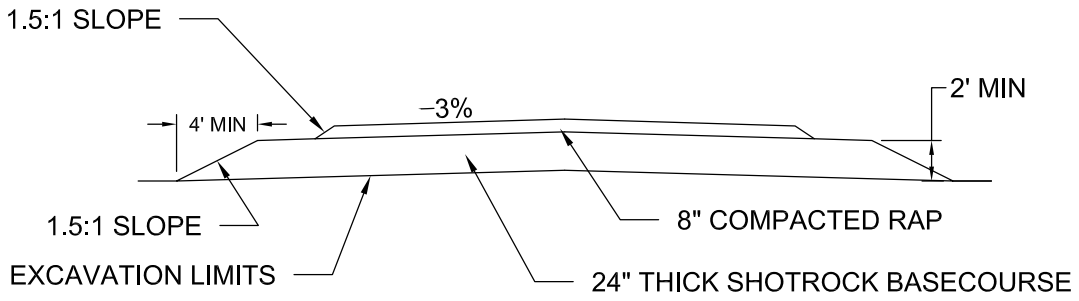
Dust Control: Dust control should be provided at all times.

Construction Guidelines
- Clear all vegetation, roots, and all other obstructions in preparation for grading.
- Place a 2 ft. layer of fractured stone (shot rock) over the entire width and length of the entrance.
- For asphalt capped application:
  - Place an 8 in. layer of 2 in. minus crushed stone over the base layer.
  - Place a minimum asphalt thickness of 4 in. over the 2 in. minus crushed stone layer.
- For recycled asphalt capped applications:
  - Place a minimum recycled asphalt thickness of 8 in. over the base layer.

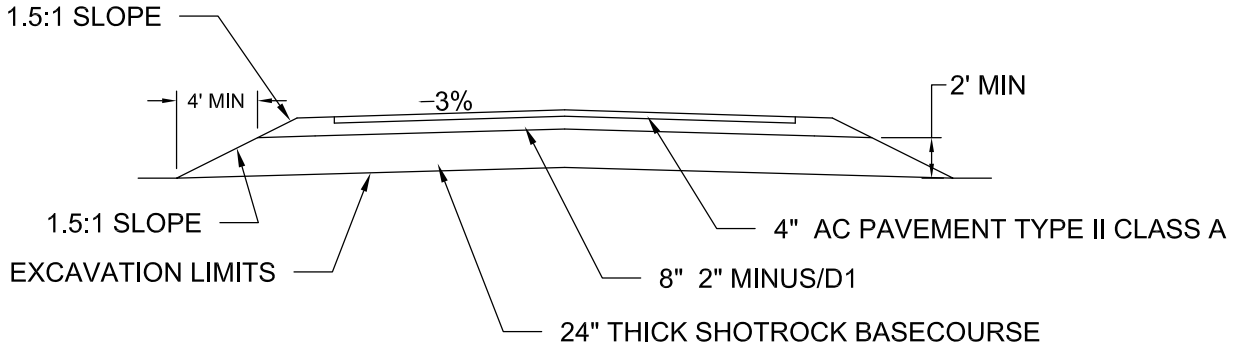
Maintenance
- The entrance should be maintained in a condition that will prevent tracking or flow of mud onto public rights-of-way.
- Fill potholes as needed.
- All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains should be removed immediately.
- Trapped sediment should be removed from the site or stabilized on site and prevented from entering storm drains, ditches, or waterways. Disturbed soil areas resulting from removal should be permanently stabilized.

- Conduct street sweeping as needed on stabilized site entrance surfaces.

TYPICAL ROAD SECTION
COMPACTED RECYCLED ASPHALT SURFACE



TYPICAL ROAD SECTION
ASPHALT PAVEMENT SURFACE



NOT TO SCALE

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	–	–	–

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
ENGINEERING & PUBLIC WORKS

BMP 5
STABILIZATION OF ENTRANCE/EXIT

DATE 04/14/2020
DRAWN BY STAFF

SHEET
1 OF 1

BMP 5b - Stabilization of Other Site Roads

Description
A long term or short term sediment control device—often shot rock --can be installed for roadways or access paths within the material site. This BMP creates a level hardened surface designated for travel by equipment that often enter or leave the material site (over-the-road trucks and passenger vehicles are most common).

Applications
A stabilized site road is appropriate wherever vehicles that regularly enter or leave the site may travel within the site boundaries.

Targeted Pollutants
- Sediment

Design Parameters
Width: The width should be at least 10 ft. At sites where traffic volume is high, roads should be wide enough to allow two vehicles to pass safely where possible. Consider one-way or circuitous traffic patterns if possible.

Length: The length of stabilization will vary as needed.

Elevation: Elevate site roads where possible to prevent ponding or running water on roadways.

Materials: Total depth of rock should be at least 12 in or as recommended by a soils engineer. Longer term roads may require a greater thickness. Aggregate materials should be fractured stone 2 to 8 in. diameter (for the base layer). Crushed stone 2 in. diameter or less may be utilized in a cap layer where desired for longer term routes.

Drainage: Runoff from stabilized site roads should drain to a sediment trap or a sediment basin. Piping of surface water under the roads should be provided as needed. If piping is impossible, install a mountable berm with 5:1 slopes.

Dust Control: Dust control should be provided as necessary.

Construction Guidelines
- Clear all vegetation, roots, and all other obstructions in preparation for grading.
- Place a minimum 1 ft. layer of shot rock over the entire length and width of the road or place roadways on quarry surfaces (exposed pit floors and benches).
- Consider capping shot rock or pit floor roadways with a 2-4 in. thick layer of 2 in. minus crushed rock for longer term applications.

Maintenance
- Periodic grading and material replacement may be needed.
- All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains should be removed immediately.
- Trapped sediment should be removed from the site or stabilized on site and prevented from entering storm drains, ditches, or waterways. Disturbed soil areas resulting from removal should be permanently stabilized.

BMP 6 - Erosion Prevention on Temporary Roads

Description

Any of several measures can be used to control erosion and sedimentation originating with haul roads, access roads, and other unpaved or temporary roadbeds associated with the material site and its working areas. Possible measures include:

Road Placement: Place temporary roads as far as possible away from streams, surface waters or wetlands.

Open-Top Box Culvert: A wooden culvert installed across the road grade to convey surface runoff and roadside ditch flows to the downslope side. Open top box culverts are useful for collecting surface runoff and ditch flows and channeling this water across the road without eroding the drainage system or road surface.

Waterbar (or Cross Ditch): A cut and berm built at a downward angle across the roadway, extending from the cut bank to the opposite fill shoulder. Waterbars reduce erosion by diverting stormwater runoff from the road surface and directing it to a safe discharge area.

Road Elevation: Elevate roadways above surrounding terrain where possible to prevent standing or running water across travel surfaces. Utilize with other BMPs to direct water around or under elevated roadways.

Road Sloping: Constructing the road with an outward slope of 1 to 2% from the cut slope to the fill slope. Sloped roads are designed to divert surface water off the entire road surface so that water does not concentrate in any specific location.

Rolling Dip: Constructing the road with shallow, outward-sloping dips or undulations to collect surface runoff and con roads where erosion of the roadbed and fill slope is unlikely due to low runoff volume or intensity.

Rolling Dip: Used as a runoff diversion measure to prevent erosion of the road surface. Rolling dips are effective on long inclines to keep stormwater from flowing directly down the road, where it may cause gullying and other damage to the road surface and grade.

Level Spreader: Useful where concentrated runoff from bare ground or other unstabilized areas can be diverted onto stabilized areas under sheet flow conditions. Level spreaders are often placed at the outlets of diversion dikes or runoff interception trenches to control runoff, dissipate water velocity, and disperse the water over a broad surface area. Level spreaders are relatively inexpensive to install. They may be used on slopes of 3:1 or flatter.

Limitations

Open-Top Box Culvert: Generally, box culverts are not required on grades of 6% or less and are ineffective under continuous or recurrent use where cleaning is sporadic.

Waterbar: Suitable only for light-use, low-maintenance, unpaved roads.

Road Sloping: Suitable only for low-traffic haul roads where runoff volume and intensity are low.

Rolling Dip: Not suitable on road grades steeper than 5%.

Level Spreader: Level spreaders are not recommended for use in most situations. They are not suitable on slopes steeper than 3:1 or where the soils are easily erodible. They should be constructed only on natural soils, not on fill material. Level spreaders cannot handle large quantities of sediment-laden stormwater. If altered by erosion or other

disturbance, they may "short circuit" and actually concentrate flows into small streams instead of spreading the flows into sheet flow.

Targeted Pollutants

- Sediment
- Phosphorus
- Trace Metal
- Hydrocarbons

Design Parameters

Open-Top Box Culvert: Box culverts can be built from logs lumber discarded guardrail or corrugated steel. They are installed at a skewed angle downgrade across the roadway, with the discharge end extending 6 to 12 in beyond the surface of the roadbed. Spacing between culverts should be in accordance with recommended cross drainage spacing in Table 6-1. Where recommended spacing is less than 33 ft., the road should be paved with gravel or crushed rock.

Waterbar: Waterbars are generally constructed using a blade-equipped tractor or by hand. The size of the waterbar depends on the amount of precipitation in the area, the soil erodibility, and anticipated traffic.

- The waterbar should extend from the cut bank side of the road completely across to the fill slope side.
- Cut dimensions: Up to 16 in deep across road, 8 to 16 in deep at outlet, 3 to 4 ft. wide.
- Berm dimensions and orientation: 1 to 2 ft. high 5 in minimum height, skewed at angle of 30 to 40 degrees across road.
- Spacing between bars: Use Table 6-1 for recommended cross drain spacing on low to moderately steep topography.
- Discharge: Runoff should not be directed onto fill material without proper energy dissipation and drainage away from the fill.

Geotextile (filter fabric): Some installations may include geotextile (filter fabric) with the properties listed in Table 6-2, placed over the entire area to be covered with aggregate. The geotextile should be a woven or nonwoven fabric consisting only of continuous chain polymeric filaments or yarns of polyester. The geotextile should be rot resistant and inert to commonly encountered chemicals, hydrocarbons, mildew.

Road Sloping: The slope should be approximately 1 to 2% from the cut slope outward to the fill slope. Berms on the outside of the road should be limited or removed to allow water to flow off the road surface. Provide sediment collection or erosion-control measures at the toe of the fill slope to prevent excessive erosion and sediment transport.

Rolling Dip: (applies to roads greater than 150 ft. long only) The dip should be approximately 1 ft. below the surface plane of the road. The upgrade approach to the bottom of the dip should be approximately 66 ft. long. The downgrade approach to the bottom of the dip should be approximately 23 ft. long. Align the dip across the road at nearly a 90^{o} angle, and slope it outward approximately 5%.

Construction Guidelines

Open-Top Box Culvert: Construct a box-like frame (three-sided, open topped) of logs, lumber, discarded guardrail, or corrugated steel. Install it flush with the road surface, skewed at an angle downgrade across the roadway. Set the inflow end at the same grade as the side ditches on the road and extend it into the cut bank. The discharge end should extend 6 to 12 in. beyond the surface of the roadbed and should be directed onto vegetated ground or riprap or into another erosion-control structure such as a sediment trap or catch basin.

Waterbar: Cut each waterbar into solid soil to a minimum depth of 6 in. next to the cut bank and 8 in. at the road shoulder, with an adverse grade on the down road or downgrade side of the waterbar. Build a continuous, firm berm of soil, at least 6 in. above normal grade, parallel to the waterbar cut on its downhill side. Include a bank tie-in point,

cut 6 to 12 in. into the roadbed. For added stability, the bar may be compacted with a non-erosive fill material. The completed waterbar should extend across the full roadway width, aligned at an angle of 30^{o} to 40^{o} relative to the roadway. A dissipation or filter device (such as riprap or silt fence) may be needed below the waterbar to control erosion and trap sediment.

Road Sloping: Road sloping is built into the road during construction. Install erosion- and sediment-control measures downslope before completing the finish grade of the sloped road. Then construct the outward slope of 1 to 2%.

Rolling Dip: Rolling dips are built into the road, during construction, following the natural contours of the land. Install erosion and sediment measures at the low point of the dip (drainage outfall to fill slope) before final grading to direct stormwater discharge from the dip. Construct the dip according to the specifications shown in the contract plans. If not specified, make the dip 1 ft. deep, with a 23 ft.-long approach on the downgrade side and a 66 ft.-long approach on the upgrade side.

Maintenance

Inspect all devices regularly. Make repairs promptly to avoid progressive damage. Remove accumulated sediments as necessary to ensure proper functioning.

Open-Top Box Culvert: Clean and repair the culverts on a regular basis. Remove sediments and other debris that may block drainage flow or decrease structural efficiency.

Waterbar: Properly constructed bars should require little or no maintenance. However, all waterbars need to be open at the lower end so water can easily flow away from the roadway. Hand shovel work may be necessary following high runoff periods or severe storms to ensure unrestricted flow.

Road Sloping: Minor regrading may be required to maintain slope angle.

Rolling Dip: Outflows should be kept free of debris to prevent ponding.

Table 6-1. Recommended Cross Drain Spacing (Source: ITD, 1994)

Road Grade (percent)	Spacing Between Open-Top Culverts, feet (meters)
2 to 5	300 to 500 (90 to 150)
6 to 10	200 to 300 (60 to 90)
11 to 15	100 to 200 (30 to 60)
16 to 20	<100 (<30)

Table 6-2. Geotextile Properties by Road Type

Geotextile Properties	Light Duty[1] Roads Grade Subgrade	Heavy Duty[2] Haul Roads Rough Graded	Test Method
Grab Tensile Strength (lbs.)	200	220	ASTM D1682
Elongation at Failure (%)	50	60	ASTM D1682
Mullen Burst Strength (lbs.)	190	430	ASEM D3786
Puncture Strength (lbs.)	40	125	ASTM D751 modified
Equivalent Opening Size	40-80	40-80	US Std Sieve CW-02215
Aggregate Depth (in.)	6	10	--

[1]Light Duty Road: Are sites that have been graded to subgrade and where most travel would be single axle vehicles and an occasional multi-axle truck. Trevira Spunbond 1115, Mirafi 100X, Typar 3401, or equivalent.
[2]Heavy Duty Road: Are sites with only rough grading, and where most ravel would be multi-axle vehicles. Trevira Spunbond 1135, Miraft 600X, or equivalent.
[3]Geotextiles not meeting these specifications may be used only when design procedure and supporting documentation are supplied to determine aggregate depth and fabric strength.

BMP 9 - Stockpile Management

Description
Stockpile management procedures and practices are designed to reduce or eliminate air and stormwater pollution from stockpiles of soil, paving materials such as, asphalt concrete (AC), asphalt concrete rubble, aggregate base, and aggregate sub base or pre-mixed aggregate.

Applications
May be implemented on all sites that stockpile soil and other materials.

Targeted Pollutants
Sediment

Construction Guidelines
General

- Locate stockpiles a minimum of 50 ft. away from concentrated flows of stormwater, drainage courses, and inlets.
- Protect all stockpiles from stormwater run-on using a temporary perimeter sediment barrier such as berms, dikes, fiber rolls, silt fences, sandbags, or gravel bags.
- Implement wind erosion control practices as appropriate on all stockpiled material.
- Place bagged materials on pallets and under cover.

Protection of Stockpiles

- Soil stockpiles: Soil stockpiles should be covered or protected with soil stabilization measures and a temporary perimeter sediment barrier or other site BMPs at all times.
- Stockpiles of AC, asphalt concrete rubble, aggregate base, or aggregate sub base: The stockpiles should be covered or protected with a temporary sediment perimeter barrier or other site BMPs at all times.

Protection of Active Stockpiles

- All stockpiles should be protected with a temporary linear sediment barrier prior or other site BMPs prior to the onset of precipitation.

Maintenance

- Inspect and verify that BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are underway, inspect regularly to verify continued BMP implementation.
- Repair and/or replace perimeter controls, covers, and associated BMPs as needed to keep them functioning properly.

BMP 10 - Spill Prevention and Control

Description

This BMP describes methods of minimizing exposure of pollutants to stormwater runoff by enclosing any drips, overflows, leaks, and other liquid material releases or by isolating pollutant spills from stormwater runoff. There are numerous spill containment methods, ranging from large structural barriers to simple, small drip pans. The benefits vary based on cost, maintenance requirements, and the size of spill control. Three possible options are discussed below:

Containment Diking: Temporary or permanent polyurethane or plastic berms, concrete berms, or retaining walls designed to hold spills. Diking is one of the best protective measures against stormwater pollution because it surrounds the area of concern and holds the spill, keeping spill materials separated from the stormwater outside of the diked area. Diking is one of the most common types of spill containment, and is available as portable containment berm (duck pond, pop up pool, etc.).

Drip Pans or Absorbent Pads: Pans and pads used to contain very small volumes of leaks, drips, and spills. Drip pans can be depressions in concrete, asphalt, or other impenetrable materials, or they can be made of metals, plastic, or any material that does not react with the dripped chemicals. Empty or discarded containers may be used as drip pans. Catch drips so that the materials or chemicals can be cleaned up easily or recycled before they can contact stormwater. Drip pans can be a temporary or permanent measure. Pads can be specialized for hydrocarbons and resistant to water absorption. Pads can be easily replaced and disposed of.

Applications

Containment Diking: Diking can be used at any material site. Proper diking contains spills, leaks, and other releases and prevents them from flowing into runoff conveyances, nearby streams, or infiltration into groundwater. It also allows for proper disposal and/or recycling of materials captured within the dike.

Drip Pans or Absorbent Pads: Drip pans or absorbent pads can be used at any site where valves and piping are present and the potential for small-volume leakage and dripping exist. Although leaks and drips should be repaired and eliminated as part of preventive maintenance programs, drip pans or absorbent pads can provide a temporary solution where repair or replacement should be delayed. In addition, pans and pads can be an added safeguard when they are positioned beneath areas where leaks and drips may occur. Pans and pads are inexpensive, easy to install, and simple to operate. Pans allow for reuse or recycling of the collected material.

Limitations

Containment Diking:

- Requires maintenance.
- Could collect polluted stormwater, with possible infiltration to groundwater.

Drip Pans or Absorbent Pads:

- Suitable only for small volumes.
- Should be inspected and cleaned or replaced frequently.
- Should be secured during poor weather conditions.
- Requires that personnel be trained in proper disposal methods so that pan contents and saturated pads are not disposed of improperly.

Targeted Pollutants

Trace Metals
Hydrocarbons

Design Parameters

Containment Diking:

Materials: Materials used to construct the dike should be strong enough to safely hold spilled materials. The materials used usually depend on what is available on-site and the substance to be contained. Dikes may be made of earth (i.e., soil or clay), concrete, synthetic materials (liners), metal, or other impervious materials. Containment dikes may need to be designed with impervious materials to prevent leaking or pollution of stormwater, surface water, and ground water supplies.

In general, strong acids and bases may react with metal containers, concrete, and some plastics. So where spills may consist of these substances, other alternatives should be considered. Some of the more reactive organic chemicals may also need to be contained with special liners. If uncertain about the suitability of certain dike construction materials, refer to the *Material Safety Data Sheet* (MSDS) for the chemical being contained.

Drip Pans: When using drip pans or absorbent pads, consider local weather conditions, the location of the pans and pads, materials used for the drip pans and pads, and how the pans will be cleaned or pads disposed of. The location of the pan or pad is important. Because pans and pads should be inspected and cleaned or replaced frequently, they should be easy to reach and remove. Take special care to avoid placing pans in precarious positions such as next to walkways or on an uneven surface. Drip pans in these locations are easily overturned and may present a safety or environmental hazard. Weather is also an important factor. Heavy winds and rainfall can move or damage drip pans or absorbent pads because both are small and lightweight.

Maintenance

Cleaning guidelines should be included in the maintenance plan for all methods of spill prevention and control.

Containment Diking: Inspect containment dikes during or after significant storms or spills to check for washouts or overflows. In addition, regular testing to ensure that dikes are capable of holding spills is recommended. Soil dikes may need to be inspected on a more frequent basis.

Changes in vegetation, inability of the structure to retain stormwater, dike erosion, or soggy areas indicate problems with the dike's structure. Damaged areas should be patched and stabilized immediately, where necessary. Earthen dikes may require special maintenance of vegetation, such as mowing and irrigation.

When evaluating the performance of the containment system, pay special attention to the overflow system, since it is often the source of uncontrolled leaks. If overflow systems do not exist, accumulated stormwater should be released periodically. Polluted stormwater should be treated prior to release.
Mechanical parts (such as pumps) or manual systems (slide gates, stopcock valves) may require regular cleaning and maintenance.

Drip Pans and Absorbent Pads: For drip pans and absorbent pads to be effective, site operators should pay attention to the pans and empty them when they are nearly full, and replace absorbent pads when they become saturated. Recycling efforts can be affected if stormwater accumulates in drip pans and dilutes the spilled material. It is important to have clearly specified and easily followed practices of reuse, recycle and/or disposal, especially the disposal of hazardous materials. Consider dumping the drip pan contents into a nearby larger-volume storage container and periodically recycling the contents of the storage container.

Frequent inspection of the drip pans is necessary due to the possibility of leaks in the pan itself. Also check for random leaking of piping or valves and for irregular, slow drips that may increase in volume. Conduct inspections before forecasted rainfall events to remove accumulated materials. Empty accumulations in pans and saturated absorbents immediately after each storm event.

BMP 16 – Mulching, Including Hydromulching

Description

Mulching is the application of a uniform protective layer of straw, wood fiber, wood chips, or other acceptable material on or incorporated into the soil surface of a seeded area to allow for the immediate protection of the seed bed. The purpose of mulching is to protect the soil surface from the forces of raindrop impact and overland flow, foster the growth of vegetation, increase infiltration, reduce evaporation, insulate the soil, and suppress weed growth. Mulching also helps hold fertilizer, seed, and topsoil in place in the presence of wind, rain, and runoff, and reduces the need for watering. Mulching may be utilized in areas that have been seeded either for temporary or permanent cover.

Applications

Mulches include straw, hay, wood fiber, paper fiber, wood/ paper fiber blends, peat moss, wood chips, bark chips, shredded bark, manure, compost and corn stalks. This type of mulch is usually spread by hand or by machine (mulch blower) after seed, water, and fertilizer have been applied. Soil binders or tackifiers, composed of a variety of synthetic and organic materials, including emulsions or dispersions of vinyl compounds, rubber, asphalt, or plastics mixed with water are often added to commercial mulch products. Tackifiers aid in the stabilization process, and are not used as a mulch alone, except in cases where temporary dust and erosion control is required. Hydroseeding, sometimes referred to as hydromulching, consists of mixing a tackifier, specified organic mulch, seed, water, and fertilizer together in a hydroslurry and spraying a layer of the mixture onto a surface or slope with hydraulic application equipment. The choice of materials for mulching should be based on soil conditions, season, type of vegetation, and the size of the area.

Targeted Pollutants

Sediment

Construction Guidelines

- If mulches are not properly watered after application, they may dry out and possibly blow or wash away.
- Mulch to correct depth - depth of mulching material is either insufficient or excessive, resulting in low seed germination rates.
- Apply hydroseeding uniformly. Failure to apply hydroseeding uniformly may result in spotty germination and inadequate ground cover.
- Mulch should be applied immediately after seeding to improve seed germination.
- Hydroseeding can be performed in one step, and is effective provided that materials are properly mixed and equipment is in good working order.
- Depth of the applied mulch should be not less than 1 in. and not more than 2 in.
- Chemical soil stabilizers or soil binders, when used alone, are less effective than other types of mulches. These products are primarily useful for tacking organic mulches.
- A tackifier should be used in conjunction with seeding, fertilizing, and mulching or hydroseeding on any slopes steeper than 3:1.
- Check labels on chemical mulches and binders for environmental concerns. Take precautions to avoid damage to fish, wildlife, and water resources.
- Some materials such as wood chips may absorb nutrients necessary for plant growth.

Mulching may be performed in conjunction with seeding, fertilizing, surface roughening, and grading practices. Concentrated flows of runoff should be directed away from mulched areas.

Materials and application rates should follow manufacturer's directions where applicable.

Materials:

Most Commonly Specified Mulches – Wood Fiber, Paper Fiber, Wood/Paper Fiber Combination Blends, and Peat Moss.

Other Mulches – Straw, Hay, Wood Chips, Bark Chips, Shredded Bark, Corn Stalks, Compost, Manure.

Tackifiers – Vinyl Compounds, Rubber, Asphalt, or Plastics mixed with water.

Complete the required grading as shown on the plans and ensure that erosion control measures intended to minimize runoff over the area to be mulched are in place. Apply mulch at the rates specified in the special provisions either by hand or by machinery immediately after the seed and fertilizer have been applied (two step method), or as part of the hydroslurry incorporating seed, fertilizer, mulch, and water (one step method). Apply specified tackifier if not already incorporated into the mulch matrix or hydroslurry. Provide additional watering as specified to ensure optimal seed germination conditions.

Maintenance

Mulching is generally effective for 1 season (6 months) or less.

Inspect all mulches weekly, and after each rainstorm to check for rill erosion, dislocation, or failure. Inspection

Replace mulch that has been loosened or dislodged. In addition, reseed areas if necessary. Water mulched areas periodically to ensure that moisture content will be maintained and seed germination and grass growth will continue. Maintenance

Mulching is usually left in place to naturally decompose and become part of the soil structure.

BMP 17 - Rock Slope Armor

Description
Rock Slope Armor is a layer of riprap, which is hand or mechanically placed on an erodible soil slope. Riprap dissipates the energy or runoff or surface flow water.

Applications
The primary purpose of Rock Slope Armor is to protect slopes with erodible soils from wind and water erosion, including rainfall, sheet flow run-on, or seepage. Rock Slope Armor may temporarily stabilize slopes until final stabilization is achieved, or may serve as final non-vegetative permanent stabilization on slopes.

Rock Slope Armor is applicable to:

- Slopes where unanticipated flows are encountered. On a cut slope, this could be due to run-on. A temporary diversion should be installed to allow construction of the cut slope, but the rock slope armor provides permanent stabilization.
- Fill slopes around the inlet and outlet of culverts.
- On slopes where groundwater seeps or springs occur.
- Slopes where establishing vegetation is otherwise problematic.

Limitations
Rock Slope Armor is not suited for significant concentrated flows.

Targeted Pollutants
Sediment

Design Parameters
Rock utilized should be durable with minimal friable particles. Rock size generally is larger for steeper slopes. A single layer of rock is typically sufficient. Choose a size gradation that will allow complete coverage of the slope.

Construction Guidelines
Rock may be placed mechanically or by hand. Material should be placed in a manner that it is reasonably homogeneous with the smaller spalls and stones filling the voids between larger stones.

Maintenance
Maintenance of properly sized and place rock on slopes is minimal. Rock slope armor can be considered a permanent stabilization method.

BMP 18 - Matting

Description

Matting is a porous net or fibrous sheet that is laid over the ground surface for slope stabilization and erosion control or to hold mulch in place and protect it against wind or water damage. Matting is considered to be materials made from biodegradable materials including straw, coconut (coir), jute, wood fiber (excelsior), paper, and cotton. Some of these organic materials may be held in place by plastic netting.

Applications

A wide variety of matting materials may be used for erosion control. Most are of two main types: woven, such as jute, and bonded to plastic, such as excelsior. Application examples for these two types are listed below.

Jute matting: Jute matting or netting is available as a heavy fiber net that is generally purchased in rolls and is stapled/anchored to slopes to provide a uniform covering. This covering protects mulches, provides additional water holding capacity, and aids in moderating environmental fluctuations near the ground surface (as does a mulch).

Jute matting can be applied over straw, grass hay, wood fiber, or manure mulches when wind or water damage would occur without a protective net. Matting is the best single method for protecting the integrity of a mulched area. It may be applied alone as an alternative to straw or wood fiber mulches on flat sites for dust control and seed germination enhancement, but should not be applied alone where runoff quantities are significant.

Wood fiber (Excelsior) matting: Wood fiber matting is made by bonding wood excelsior fibers to a paper or plastic reinforcing net. The matting is generally purchased in rolls and stapled to slopes to provide a uniform covering which can protect mulches, provide enhanced water-holding capacity, and aid in moderating environmental fluctuations near the ground surface.

Plastic netting: Plastic netting (photo/biodegradable) is a monolithic plastic cloth-like material. It is used primarily to hold straw and other materials in place. Plastic netting is more durable than jute or wood fiber matting. It is much easier to handle and requires less labor, but it has no mulch capabilities itself. Plastic netting alone provides no soil stabilization or erosion control. It is best used to hold down mulches until vegetation becomes established.

Matting can be useful in the following circumstances:

- Construction sites becoming temporarily inactive (inactive period greater than 2 weeks and less than 1 year).
- Graded areas receiving permanent revegetation treatment by seeding.
- Bare areas receiving permanent revegetation treatment by seeding.

Limitations

- Should not be used where overland water flow will exceed 6.5 ft. /s. Because of the following characteristics of plastic netting and wood fiber matting, jute matting, straw or straw coconut matting are preferred.
- Plastic netting does not function as mulch (as does jute matting) since it does not absorb water. When plastic netting is used to anchor straw mulch, it increases the effectiveness of the mulch, but it does not provide direct control of erosion and sedimentation or nutrient generation. Straw mulch rates should be increased 25% when plastic netting is used instead of jute or straw.
- Wood fiber matting is more difficult to put in place than jute, and it is less predictable in controlling erosion. Properly applied, it can be as effective as jute matting at sediment and nutrient reduction. However, it is often 10 to 20% less effective.

Targeted Pollutants

Sediment

Design Parameters

- Jute matting should be fiber cloth of a uniform plain weave, undyed and unbleached single jute yarn, 3 to 4 ft. wide and weighing an average 0.4 lb. per linear foot of cloth with a tolerance of plus or minus 5%. It should have approximately 78 warp ends per width of cloth and 45 weft ends per linear meter of cloth. The yarn should be of a loosely twisted construction having an average twist of not less than 6.3 turns per 4 in. and should not vary in thickness by more than half of its normal diameter.
- Wood fiber matting should consist of machine-produced mats of curled wood excelsior, of which 80% have an 8 in. or longer fiber length. It should be of consistent thickness with the fiber evenly distributed over the entire area of the blanket (backing). The topside of each blanket should be covered with a 1 x 3 in. weave of twisted Kraft paper or biodegradable plastic mesh that has a high wet strength. Blankets should be fire and smolder resistant and contain no chemical additives. Blankets should be in rolls 3 to 4 ft. wide and 130 to 200 ft. long.
- Plastic netting with mesh opening from 1/10 x 1/10 in. to 1/5 x 1/5 in. should be applied over straw mulch similarly to the method specified below for jute matting.

Effectiveness: Jute matting acts similarly to straw mulch or hydromulch. Sediment reduction is typically 70 to 90% for up to 6 months, 40 to 60% for up to 2 years, and 10 to 30% beyond 2 years. Nutrient reduction is estimated at 50 to 70% for 6 months, 20 to 50% for up to 2 years, and 0 to 10% beyond 2 years. Due to the difficulty of proper application, wood excelsior matting has a more variable effectiveness than straw, jute, or hydromulch. Properly applied, it can be as effective. Sediment reduction should range from 50 to 90%, 20 to 60%, and 0 to 30% in 6 months, 2 years, and beyond 2 years, respectively. Nutrient reductions for the same time periods are estimated to be 30 to 70%, 10 to 50%, and 0 to 10%.

Construction Guidelines

The following guidelines apply to all matting and netting installations:

- The soil should be reasonably smooth. Fill and compact any gullies and rills. Rocks, vegetation or other obstructions that rise above the level of the soil should be removed.
- After site preparation and seeding (if any), the rolls of netting or matting should be rolled onto the surface from the top of the slope to the bottom of the slope. It is preferred that rolls are not constructed in a horizontal direction across the slope face. The rolling should follow water flow direction.
- At the top of the area, bury the end of each roll in a trench at least 8 in. deep. The trench should then be backfilled and tamped.
- Overlap the sides of rolls at least 4 in., and make sure that there is at least a 3 ft. overlap when an uphill roll joins to a downhill roll. The uphill roll should overlie the downhill roll.
- Extend the matting beyond the edge of the mulched or seeded area at least 1 ft. at the sides and 3 ft. at the top and bottom of the area. If existing vegetation or structures mark the boundaries of the area, the matting should continue into the stable vegetated area or to the edge of the structure.
- Staples should be driven perpendicularly into the slope face. Place them approximately 3 ft. apart down the sides and center of the roll, and not more than 1 ft. apart at the upper end of a roll or at the end overlap of two rolls.
- Staples should be of heavy gauge wire (7/100 in. diameter or greater), bent into a "U" shape, with legs at least 6 in. long, and a 1 in. crown. Use longer staples and greater frequency in loose or sandy soil.
- Be sure the matting makes uniform contact with the slope face underneath. No “bridging” of rills or gullies should be allowed.
- If wood fiber matting is to be applied without other mulches, the minimum thickness of mat should be 1.5in. If the mat is to be applied over other mulches, the minimum mat thickness should be 0.5in.

Maintenance

Inspect at regular intervals and after each runoff-producing storm event. Make repairs as necessary to restore complete coverage and full effectiveness of the matting or netting.

BMP 20 - Topsoiling

Description
Topsoiling is the placement of topsoil or other suitable plant growth material over disturbed lands to provide a suitable soil medium for vegetative growth and a supply of native or locally occurring seeds and propagules. Topsoiling may involve bringing in soils from off site or merely replacing fertile topsoil that was stripped and stockpiled during earlier site development activities.

Applications
Topsoiling is recommended on slopes 2:1 or flatter where the native soil is unsuitable for vegetative growth. It is an effective way of improving plant establishment on sites where moisture, nutrients, or pH levels are low, or where the remaining soil is too shallow to support root systems.

Limitations
Be careful not to apply topsoil over a subsoil of contrasting texture. For instance, clay-like topsoil placed over a sandy soil may cause the topsoil to slough as water flows between the two soil layers of different permeability. Also, topsoil should not be applied when the subsoil is frozen or extremely wet.

Targeted Pollutants
Sediment

Design Parameters
Plan to maintain the existing or established grade of the subsoil. The topsoil should be uniformly distributed at a minimum compacted depth of 2 in. on slopes 3:1 or steeper, and 4 in. deep on flatter slopes. The soil should be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or other mixture approved by an agronomist. It should be free of subsoil, refuse, sticks, noxious weed seeds, other extraneous materials, and stones larger than 1.5 in. diameter.

Topsoil can either be obtained commercially or stripped, stockpiled, and replaced on the construction site. Stockpiled topsoil should undergo a laboratory analysis to determine organic content, pH, and soluble salts. A pH of 6.0 to 7.5 and organic content of not less than 1.5% by weight is recommended. Where soil pH is less than 6.0, lime may be applied to adjust pH to 6.5 or higher. Any soils having soluble salt content greater than 500 parts per million should not be used.

If desired, it is possible to place a thin layer of topsoil 1.2 to 2 in. thick on benched slopes. In such applications, it is important not to apply so much topsoil that the value of the benches is destroyed. This method is especially valuable on rocky benches, especially on south- or west-facing slopes, however, proper placement of the soil is often a problem. In some cases, soil has been bucketed onto slopes. This produces an uneven spread and the quantity is hard to control. Soil can also be blown onto the slope using a snow blower. In that case, organic matter can be mixed with the soil, but the soil should be screened to remove any rocks larger than 2 in. The advantage is that the amount of soil needed is much less and it can be spread very rapidly on the horizontal surfaces. The soil may need some form of stabilization before the next rain event. Consider whether mulch, matting, geotextiles or seeding is required and when.

Construction Guidelines
The following guidelines apply to the placement of topsoil:

- The existing or established grade of subsoil should be maintained.
- Lime may be uniformly applied over designated areas where subsoil is highly acidic or heavy in clay content.

- Prior to spreading topsoil, loosen the subgrade by discing (or other method) to a depth of 2 in. to permit bonding of subsoil to topsoil. Tracking a bulldozer vertically over the slope will pack the soil and create horizontal erosion check slots to prevent topsoil from sliding down the slope.
- Spread the topsoil uniformly at a minimum compacted depth of 2 in. on 1:3 or steeper slopes and 4 in. on flatter slopes. A depth of 6 to 12 in. is preferred. Any surface irregularities should be corrected in an effort to prevent formation of water-holding depressions.
- Where quantities of stockpiled topsoil on site are limited, it is more desirable to cover all areas of exposed subsoil to a lesser depth than to cover partial areas to the suggested minimum depth of 3.1 in.
- Topsoil should not be placed when the subgrade is frozen, excessively wet, or in a condition that may otherwise be detrimental to proper grading or proposed sodding or vegetation establishment.

Maintenance

Periodically and after major storm events, inspect, repair, and reseed as necessary to control slope erosion and subsequent topsoil losses.

BMP 21 – Seeding

Description

Permanent Seeding means growing a long-term or permanent vegetative cover (plants) on disturbed areas or areas that need assistance in revegetation. The purpose of permanent seeding is to reduce erosion and sedimentation and to establish desirable competitive ground cover for wildlife habitat and ease of maintenance. This practice uses prescribed perennial grasses, legumes and native shrubs or wild flowers that will hold the soils, reduce stormwater runoff and act as a bio-filtering system on long-term basis.

The guidelines given in this fact sheet for design, construction and maintenance can also be used to install temporary seeding on construction sites.

Applications

Temporary seeding should be considered as slope protection and erosion control practice for material sites. Permanent seeding should be considered for any disturbed area where all extraction or maintenance activities have ceased or been finalized and is now ready for permanent vegetative cover. Typical areas subject to permanent vegetative cover are all areas disturbed by new construction, reconstruction and maintenance, and any materials source site areas in need of revegetation.

The primary advantages of seeding are:

- It establishes good soil stabilization.
- It prevents soil erosion and sedimentation.
- It contains and filters stormwater runoff.

Additional advantages specific to permanent seeding are:

- It provides wildlife ground cover and habitat.
- It competes with undesirable vegetation and noxious weeds.
- It provides aesthetic qualities.
- It reduces the cost of maintenance.

Limitations

Permanent vegetative ground cover will take several years before sufficient establishment takes place. Establishment will occur quicker in high precipitation areas as opposed to the arid or semi-arid regions. Permanent seeding should be conducted in conjunction with various forms of mulching, matting, and annual grass (cereal grain) as a nurse crop.

Other factors that contribute to the success or failure of permanent seeding are:

- Seeding should be done at the proper time of year.
- Proper application of fertilizers as prescribed will contribute to the success of the seeding.
- Once seeded, the site should not be disturbed.
- Irrigation may have to be used in low precipitation area (arid/semi-arid) for establishment.

Targeted Pollutants

Sediment
Phosphorus
Trace metals

Design Parameters

Conduct all permanent seeding and fertilizing in accordance with local requirements.

Construction Guidelines

Permanent seeding is the last phase of reclaiming any disturbed soils.

Maintenance

- Inspect all seeded areas on a regular basis and after each major storm event to check for areas where corrective measures may have to be made.
- Indicate which areas need to be reseeded or where other remedial actions are necessary to assure establishment of permanent seeding.
- Continue monitoring of the site/area until permanent vegetation is established.

BMP 24 - Pipe Slope Drain

Description

A pipe slope drain is a device used to carry concentrated runoff from the top to the bottom of a slope that has already been damaged by erosion or is at high risk for erosion. It may be used to convey runoff from off-site around a disturbed portion of the site. It may also be used to drain saturated slopes that have the potential for soil slides. Pipe slope drains can be either temporary or permanent, depending on the method of installation and the material used.

Pipe slope drains are made of flexible tubing or rigid pipe with a prefabricated entrance section. Other temporary slope drains may use plastic sheeting, stone gutters, fiber mats, riprap, concrete or asphalt ditches, or half-round pipe. Outlet protection such as riprap should be provided for velocity dissipation at the drain outlet.

Applications

Pipe slope drains are used whenever it is necessary to convey water down a slope without causing erosion. They are especially effective before a slope has been stabilized or before permanent drainage structures are ready for use. Pipe slope drains may be used with other devices, including sediment traps (BMP 38), and vegetative buffer strips (BMP 37).

Temporary pipe slope drains, usually flexible tubing or conduit, may be installed prior to the construction of permanent drainage structures. Permanent slope drains may be placed on or beneath the ground surface; pipes, sectional down drains, paved chutes, or clay tiles may be used.

Pipe slope drains are appropriate in the following general locations:

- On cut or fill slopes before permanent stormwater drainage structures have been installed.
- Where earth dikes or other diversion measures have been used to concentrate flows.
- On any slope where concentrated runoff crossing the face of the slope may cause gullies, channel erosion, or saturation of slide-prone soils.
- As an outlet for a natural drainage way.

Targeted Pollutants

Sediment
Hydrocarbons

Design Parameters

Pipe sizing: Typical relationships between area and pipe diameter are shown in Table 24-1 below.

Spacing: For a two-lane highway construction project, experience has shown that temporary slope drains should be spaced at a longitudinal interval of 500 ft. on a 2% grade, 200 ft. on a 4% grade, and as may be dictated by field conditions on a grade of 5% or greater.

Materials: Pipe may be any heavy-duty, flexible tubing designed for this purpose, including non-perforated, corrugated plastic pipe; corrugated metal pipe; bituminous fiber pipe; or specially designed flexible tubing. A standard flared end section secured with a watertight fitting should be used for the inlet. A standard T-section fitting may also be used. Extension collars should be 1 ft. long segments of corrugated pipe. All fittings should be watertight.

Slope of drain: Try for a 3% minimum.

Construction Guidelines

- Temporary slope drains should be installed with inlets at points where water is discharged from ditches, berms, or other points of concentrated flow. All drains should be anchored to the slope to prevent disruption

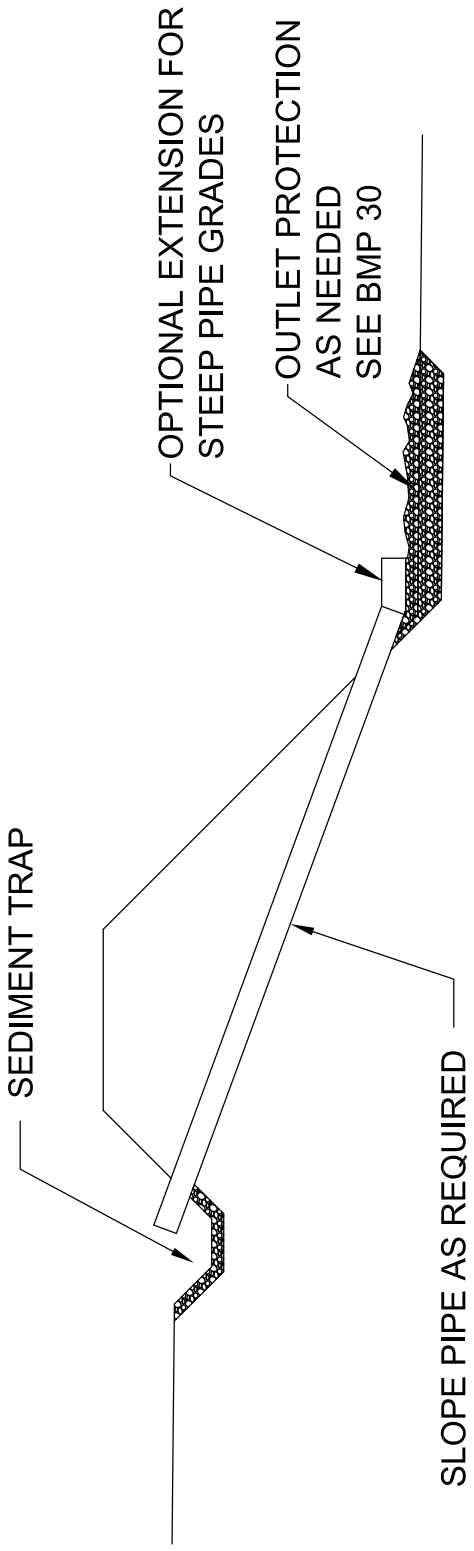
by water or other forces. The inlet section of the drain should be properly installed to funnel the flow into the drain. It is often necessary to construct cross berms to direct flow into the inlet.

- Place the pipe slope drain on undisturbed or well-compacted soil.
- Soil around and under the entrance section should be hand tamped in 4 to 8 in. lifts to the top of the dike to prevent piping failure around the inlet.
- Place filter cloth under the inlet, extend it 3 to 5 ft. in front of the inlet.
- Securely stake the pipe slope drain to the slope at intervals of 10 ft. or less, using grommets provided for this purpose.
- Make sure that all slope drain sections are securely fastened together and have watertight fittings.
- Extend the pipe beyond the toe of the slope and discharge at a non-erosive velocity into a stabilized area or to a sedimentation trap or pond for steeper pipe grades. Use rock outlet protection if necessary.
- The pipe slope drain should have a slope of 3% or steeper.
- At no point along the dike will the elevation of the top of the dike be less than 6 in. higher than the top of the pipe.
- Immediately stabilize all areas disturbed by installation or removal of the pipe slope drain.

Maintenance

- Inspect the slope drain regularly. Make any necessary repairs within 7 days or before the next storm (whichever comes first).
- Check to see that water is not bypassing the inlet or undercutting the inlet or pipe. If necessary, install headwalls or sandbags to prevent bypass flow.
- Check for erosion at the outlet point and check the pipe for breaks or clogs. Install additional outlet protection if needed and immediately repair the breaks and clean any clogs.
- Do not allow construction traffic to cross the pipe slope drain and do not place any material on it.
- If a sediment trap has been provided, clean it out when the sediment level reaches one-third to one-half the design volume.
- A temporary slope drain should remain in place up to 30 days after slopes have been completely stabilized.

Table 24-1. Relationship Between Area and Pipe Diameter	
Maximum Drainage Area (Acres)	Pipe Diameter (in.)
0.5	12
1.5	18
2.5	21
3.5	24
5.0	30



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BMP 24
PIPE SLOPE DRAIN

DATE 04/16/2020
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BMP 30 - Outlet Protection

Description
Outlet protection is created by an arranged layer or pile of rock placed over the soil surface on slopes and at or below storm drain outfalls or temporary dikes. Outlet protection reduces the speed of concentrated stormwater flows, thereby reducing erosion or scouring at stormwater outlets. In addition, outlet protection lowers the potential for downstream erosion. This type of protection can be achieved through a variety of techniques, including stone or riprap outlet structures and armored scour holes installed below the storm drain outlet.

Applications
Outlet protection should be installed at the outlets of all pipes, culverts, catch basins, sediment basins, ponds, interceptor dikes, and swales or channel sections where the velocity of flow may cause erosion in the receiving channel. Outlet protection should also be used at outlets where the velocity of flow at the design capacity may result in plunge pools (small, permanent pools located at an inlet or outfall). Outlet protection should be installed early during construction activities, but may be added at any time, as necessary.

Limitations
The minimum particle size of the rock should be sized for the maximum expected velocity of flow out of the outlet and the soil conditions where the outlet will be located.

Targeted Pollutants
Sediment

Design Parameters
Thickness: The minimum thickness of the riprap layer should be 1.5 times the diameter of culvert.

Stone Quality: Stone for riprap should consist of field stone or rough unhewn quarry stone. The stone should be hard and angular and of a quality that will not disintegrate on exposure to water or weathering.

Filter: A filter is a layer of material placed between the riprap and the underlying soil surface to prevent soil movement into and through the riprap. Riprap should have a filter placed under it in all cases. A filter can be of two general forms: A gravel layer or a plastic filter cloth. The plastic filter cloth can be woven or non-woven monofilament yarns and should meet these base requirements: thickness 10-60 mils, grab strength 90-120 lbs.; and should conform to ASTM D-1777 and ASTM D-1682.

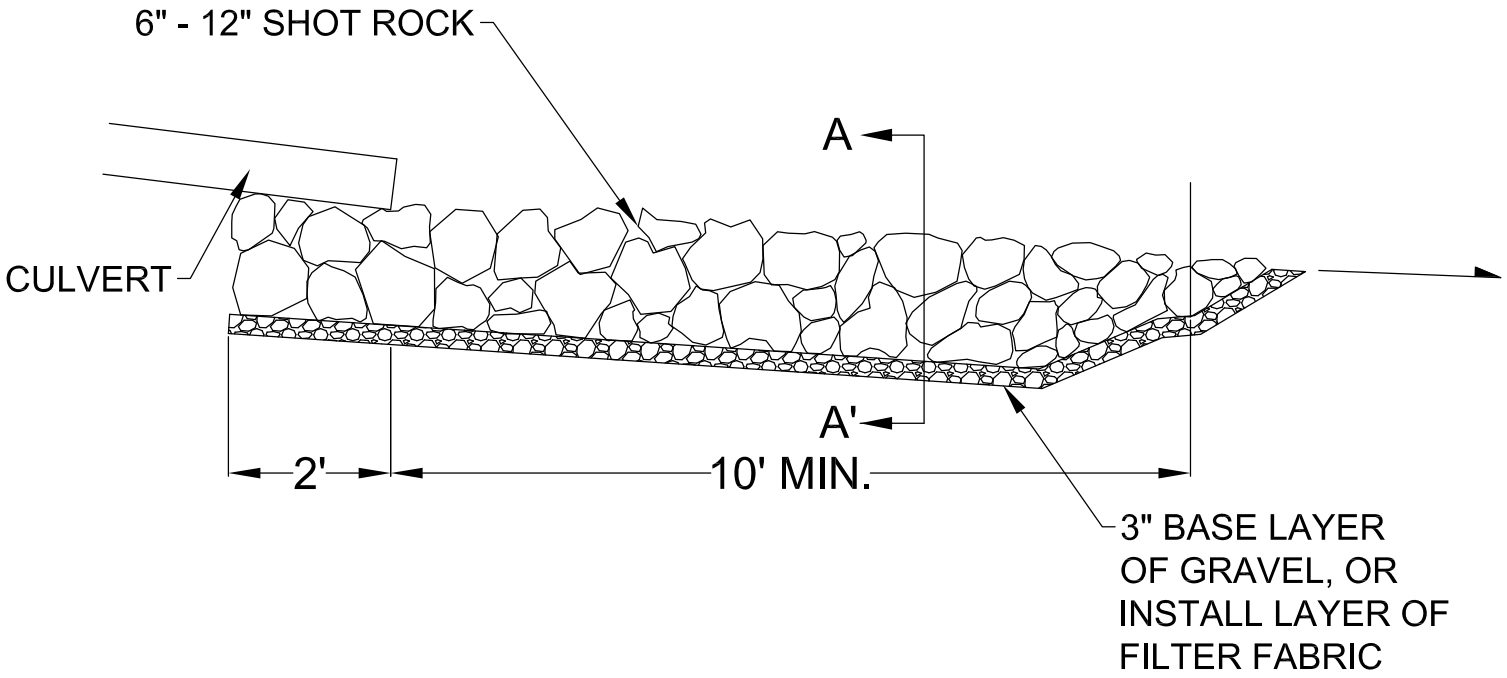
Construction Guidelines
- The subgrade for the filter and riprap should be prepared to the required lines and grades. Any fill required in the subgrade should be compacted to a density of approximately that of the surrounding undisturbed material.
- The rock or gravel should conform to the specified grading limits when installed respectively in the riprap or filter.
- Filter cloth should be protected from punching, cutting, or tearing. Any damage other than an occasional small hole should be repaired by placing another piece of cloth over the damaged part or by completely replacing the cloth. All overlaps whether for repairs or for joining two pieces of cloth should be a minimum of 1 ft.
- Stone for the riprap outlets may be placed by equipment. Both should be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for riprap outlets should be delivered and placed in a manner that will insure that it is reasonably homogenous with the smaller stones and spalls filling the voids between the larger stones. Riprap should be

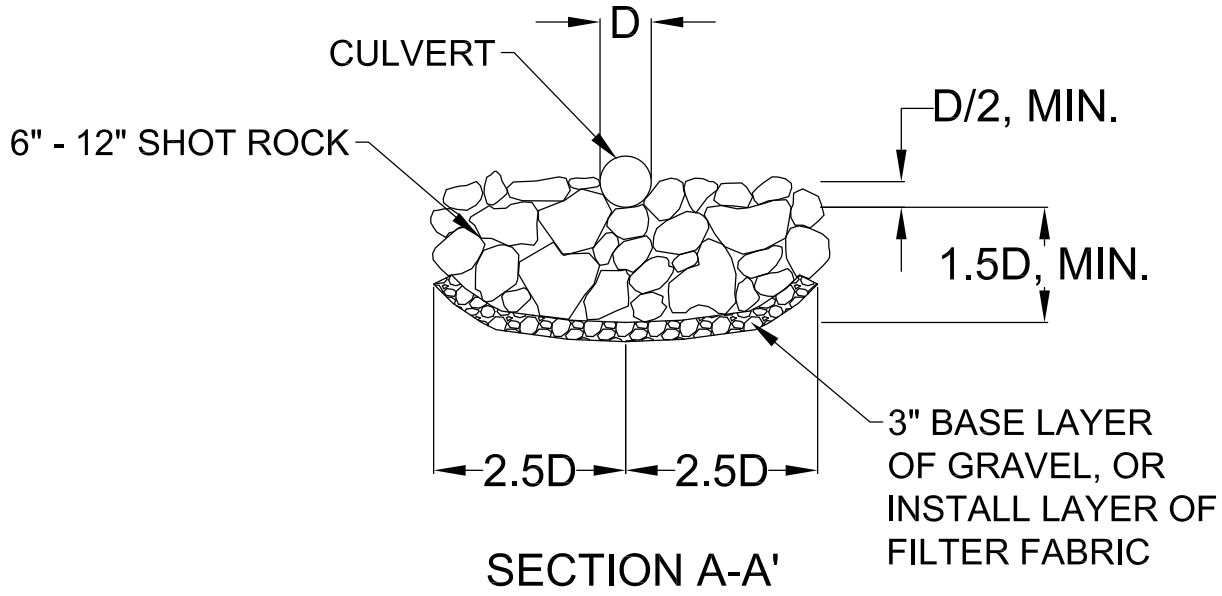
placed in a manner to prevent damage to the filter blanket or filter cloth. Hand placement will be required to the extent necessary to prevent damage to the permanent works.

- Complete construction of the outlet protection before allowing erosive flows to pass through the outlet.

Maintenance

Once a riprap outlet has been installed, the maintenance needs are relatively low. Inspect after heavy storms and high flows for scouring under the outlet and dislodged stones, and repair damage promptly.





SECTION A-A'

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BMP 30
OUTLET PROTECTION

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BMP 32 - Check Dams

Description
Check dams are small dams constructed in open channels, swales, or drainage ways. Check dams may be temporary or permanent barriers made of logs and brush, straw bales, stone, or other materials. A triangular silt dike is a geotextile-encased check dam that consists of a urethane foam core encased in geotextile material. Check dams are used to reduce or prevent excessive bank and bottom erosion by reducing the gradient or runoff velocity.

Applications
Check dams are often used in natural or constructed channels or swales where adequate vegetation cannot be established promptly. They are used below small drainage structures (smaller than 36 in. pipe culverts) but may be used below large structures if a diversion ditch cannot be used. Log and brush check dams should be placed where they will not cause flooding and where they can be left in place.

An array of three-dimensional manufactured barriers is also available: triangular and burrito-shaped, prefilled and fillable on-site, reusable and disposable, and temporary and more-or-less permanent. Triangular silt dikes are temporary, reusable barriers consisting of a triangular urethane foam core covered by permeable, woven geotextile fabric. From 16 to 20 in. wide at the base and usually 8 to 10 in. high, the silt dike is typically used at the toe of a slope to contain sediment from runoff or perpendicular to the flow of water in a drainage ditch.

Limitations
Check dams should never be placed in live streams unless approved by appropriate local, state and/or federal authorities.

Targeted Pollutants
Sediment

Design Parameters
- The drainage area above the check dam should be between 1 and 4 acres.
- The dams should be spaced so that the toe of the upstream dam is never any higher than the top of the downstream dam. Excavating a sump immediately upstream from the check dam improves its effectiveness.
- Maximum height should be 3 ft. The center of the dam should be 2 - 6 in. lower than either edge, to form a weir for the outfall.
- The check dam should be as much as 20 in. wider than the banks of the channel to prevent undercutting as overflow water re-enters the channel.
- Provide outlet stabilization below the lowest check dam (where the risk of erosion is greatest) and consider the use of channel linings or protection such as plastic sheeting or riprap where there may be significant erosion or prolonged submergence.

- Materials:
    - Stone 2 to 12 in. in diameter
    - Logs 6 to 8 in. in diameter
    - Sandbags filled with pea gravel
    - Filter fabric meeting the standard specifications (see BMP 36-Silt Fence)
- The logs should be driven into the ground a minimum of 28 in.

Construction Guidelines
Rock check dams: Place the stones on filter fabric either by hand or using appropriate machinery; do not simply dump them in place. Keep the side slopes 1:2 or flatter. Lining the upstream side of the dam with a layer of 0.8 to 1.1 in. gravel and 12 in. deep is a suggested option for additional channel protection.

Log check dams: Logs should be firmly embedded in the ground. Intermingled brush and logs or filter cloth may be attached to the upstream side of the dam to retard the flow and trap additional sediment. If a filter cloth is used, it should be securely stapled to the top of the dam and adequately anchored in the streambed.

Sandbag check dams: Be sure that all bags are securely sealed. Place the bags by hand or use appropriate machinery to place them in an interlocking pattern.

Gravel-filled burlap bags: Gravel-filled burlap bags may be used for temporary check dams in areas of concentrated flow. Fold the burlap bag flaps under the bags in a direction away from the water flow. Construct gravel bag check dams such that the crest of the downstream check dam is approximately level with the toe of the upstream check dam. Install check dams so the side end points are higher than the centerline crest. Erosion caused by high flows around the edges should be corrected immediately.

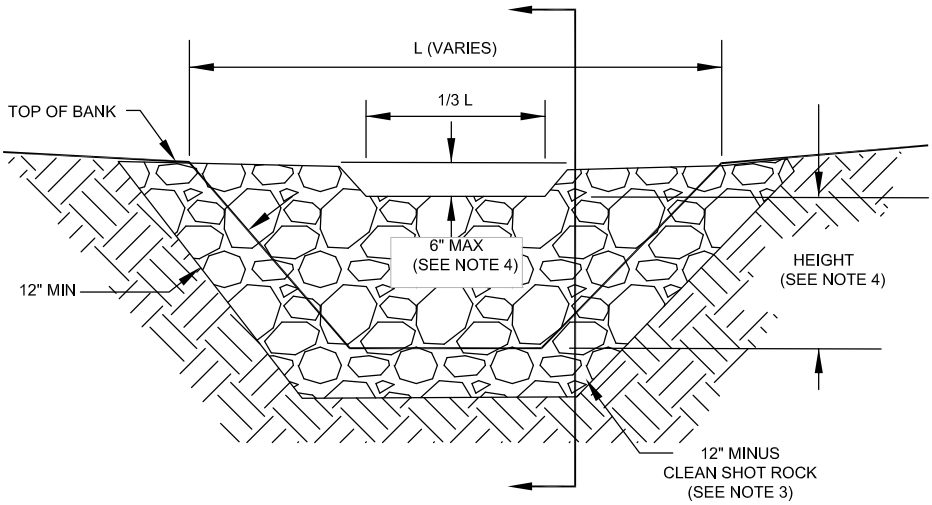
Triangular silt dike: The flexibility of the materials in triangular silt dikes allows them to conform to all channel configurations.

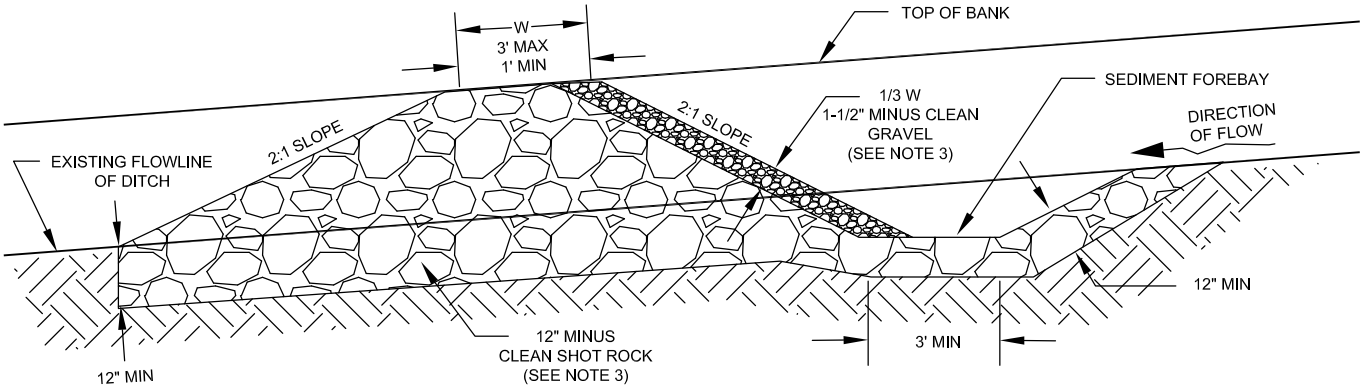
- They can be fastened to soil with staples or rock and pavement with adhesives.
- They have been used to build temporary sediment ponds, diversion ditches, concrete wash out facilities, curbing, water bars, level spreaders, and berms.

Riprap may be necessary on the downstream side of the dam to protect the streambed from scour.

Maintenance

- Inspect the check dams regularly and after every runoff-producing storm. Make any repairs necessary to ensure the measure is in good working order.
- Remove accumulated leaves and sediments from behind the dam when they reach a depth of one-half the original height of the dam. Dispose of all materials properly so they do not contribute to pollution problems at the disposal site.
- Restore stone as necessary for the dams to maintain their correct height.
- On sandbag dams, inspect the sandbag fabric for signs of deterioration.





ROCK SIZE TABLE

AMOUNT	ROCK SIZE
100%	< 12"
100%	> 2"

UPSTREAM FACE OF STORMWATER MANAGEMENT ROCK CHECK DAM TO BE CLEAN 1-1/2" MINUS GRAVEL

ROCK CHECK DAM SPACING TABLE

DITCH GRADE	SPACING
1 %	200 FT
2 %	100 FT
4 %	50 FT
6 %	33 FT
8 %	25 FT

DITCH SLOPES GREATER THAN 8% SPACING MUST BE APPROVED BY THE ENGINEER

NOTES:

1. ROCK CHECK DAMS ARE NOT ALLOWED IN ANDRONOMUS FISH STREAMS WITHOUT PERMISSION OF THE APPLICABLE STATE & FEDERAL AGENCIES AND THE CBJ DEPARTMENT OF ENGINEERING.
2. ROCK CHECK DAMS DESIGNATED AS STORMWATER MANAGEMENT ITEMS ARE TO REMAIN IN PLACE. TEMPORARY ROCK CHECK DAMS INSTALLED FOR SEDIMENT CONTROL DURING CONSTRUCTION MUST REMAIN IN PLACE UNTIL SOILS ARE STABILIZED AND REVEGATION IS COMPLETE AS APPROVED BY THE ENGINEER.
3. STORMWATER MANAGEMENT ROCK CHECK DAMS SHALL BE CONSTRUCTED WITH CLEAN, WELL-GRADED MATERIAL (NO FINES), PER ROCK SIZE TABLE AND FACED ON THE UPSTREAM SIDE WITH CLEAN 1-1/2" MINUS GRAVEL. TEMPORARY ROCK CHECK DAMS MAY OMIT THE 1-1/2 GRAVEL FACE.
4. THE HEIGHT OF THE ROCK CHECK DAM SPILLWAY SHALL BE NO GREATER THAN 3'. THE TOP OF DAM SHALL BE NO MORE THAN 3'-6". THE HEIGHT OF THE SPILLWAY SHALL BE PROPORTIONATE TO THE HEIGHT OF THE DAM BUT NO LESS THAN 2".
5. ALL ROCK CHECK DAMS SHALL BE SPACED PER TABLE ABOVE AT A MINIMUM OR AS DIRECTED BY THE ENGINEER.

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BMP 32 CHECK DAMS

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BMP 35 - Fiber Rolls

Description

A fiber roll (wattle/compost-filled socks) consists of straw, flax, or other similar materials bound into a biodegradable tubular plastic or similar encasing material. When fiber rolls are placed at the toe and on the face of slopes, they intercept runoff, reduce its flow velocity, release the runoff as sheet flow, and provide removal of sediment from the runoff. By interrupting the length of a slope, fiber rolls can also reduce erosion.

Applications

- Along the toe, top, face, and at grade breaks of exposed and erodible slopes to shorten slope length and spread runoff as sheet flow
- At the end of a downward slope where it transitions to a steeper slope
- Along the perimeter of a project
- As check dams in unlined ditches
- Down-slope of exposed soil areas
- Around temporary stockpiles
- As temporary curbs for conveying water to catch basins and pipe slope drains
- For catch basin protection

Limitations

- Fiber rolls are not effective unless trenched.
- Fiber rolls at the toe of slopes greater than 5:1 (H:V) should be a minimum of 20 in. diameter or installations achieving the same protection (i.e., stacked smaller diameter fiber rolls, etc.).
- Difficult to move once saturated.
- If not properly staked and trenched in, fiber rolls can be transported by high flows.
- Fiber rolls have a very limited sediment capture zone.
- Fiber rolls should not be used on slopes subject to creep, slumping, or landslide.

Targeted Pollutants

Sediment

Design Parameters

Locate fiber rolls on level contours spaced as follows:

- Slope inclination of 4:1 or flatter: Fiber rolls should be placed at a maximum interval of 20 ft.
- Slope inclination between 4:1 and 2:1: Fiber rolls should be placed at a maximum interval of 15 ft. (A closer spacing is more effective.).
- Slope inclination 2:1 or greater: Fiber rolls should be placed at a maximum interval of 10 ft. (A closer spacing is more effective.).

Construction Guidelines

- Fiber rolls should be either prefabricated rolls or rolled tubes of erosion control blanket. Field rolled fiber roll is assembled by rolling the length of erosion control blanket into a tube of minimum 8 in. diameter and binding the roll at each end and every 4 ft. along the length of the roll with jute-type twine.
- Turn the ends of the fiber roll up slope to prevent runoff from going around the roll.
- Stake fiber rolls into a 2 to 4 in.-deep trench with a width equal to the diameter of the fiber roll. Drive stakes at the end of each fiber roll and spaced 4 ft. maximum on center. Use wood stakes with a nominal classification of 0.75 x 0.75 in. and minimum length of 24 in.
- If more than one fiber roll is placed in a row, the rolls should be overlapped, not abutted.

Maintenance

- Inspect prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at 2-week intervals during the non-rainy season.
- Repair or replace split, torn, unraveling, or slumping fiber rolls.
- If the fiber roll is used as a sediment capture device, or as an erosion control device to maintain sheet flows, sediment that accumulates in the BMP should be periodically removed in order to maintain BMP effectiveness. Sediment should be removed when sediment accumulation reaches one-half the designated sediment storage depth, usually one-half the distance between the top of the fiber roll and the adjacent ground surface.
- Sediment removed during maintenance may be incorporated into earthwork on the site or disposed at an appropriate location.
- If fiber rolls are used for erosion control, such as in a mini-check dam, sediment removal should not be required as long as the system continues to control the grade. Sediment control BMPs will likely be required in conjunction with this type of application.

BMP 36 - Silt Fence

Description

A silt fence is a temporary sediment barrier consisting of a filter fabric stretched and attached to supporting posts. Wire fence backing is necessary with several types of filter fabric commonly used. Silt fences assist in sediment control by retaining some of the eroded soil particles and slowing the runoff velocity to allow particle settling.

Applications

- Silt fences can be used near the perimeter of a disturbed area to intercept sediment while allowing water to percolate through. The fences should remain in place until the disturbed area is permanently stabilized.
- Silt fences can also be used along the toe of fills, on the downhill side of large through-cut areas, along streams, and at natural drainage areas to reduce the quantity of sediment and to dissipate flow velocities to downstream areas.
- Also use at grade breaks on cut/fill slopes and above interceptor dikes.
- The silt fence should be constructed after the cutting and slashing of trees and before excavating haul roads, fill benches, or any soil disturbing construction activity in the drainage areas.

Limitations

Silt fences should not be used where there is a concentration of water in a channel or drainage way or where soil conditions prevent the minimum fabric toe-in depth or minimum depth for installation of support posts. If concentrated flow occurs after installation, take corrective action by placing rock berms or other corrective measures in the areas of concentrated flow.

Targeted Pollutants

Sediment

Design Parameters

- Maximum allowable slope lengths contributing runoff to a silt fence are listed in Table 36-1 below.
- Maximum drainage area for overland flow to a silt fence should not exceed 0.5 ac. per 100 ft. of fence.
- Design computations are not required. All silt fences should be placed as close to the contour as possible, and the area below the fence should be undisturbed or stabilized.
- A detail of the silt fence should be shown on the plan, and contain the following minimum requirements:
    - The type, size, and spacing of fence posts
    - The size of woven wire support fences
    - The type of filter cloth used
    - The method of anchoring the filter cloth
    - The method of fastening the filter cloth to the fencing support
- Where ends of filter fabric come together, they should be overlapped, folded and stapled to prevent sediment bypass.
- Materials:
    - Silt Fence Fabric: The fabric should meet the specifications in Table 36-2 below, unless otherwise approved by the appropriate erosion and sediment control plan approval authority. Such approval does not constitute statewide acceptance. Statewide acceptability depends on in-field and/or laboratory observations and evaluations.
    - Fence Posts (for fabricated units): The length should be a minimum of 36 in. long. Wood posts will be of sound quality hardwood with a minimum cross sectional area of 3.0 square in. Steel posts will be standard “T” and “U” section weighing not less than 1 pound per linear ft.
    - Wire Fence (for fabricated units): Wire fencing should be a minimum 14.25 gage with a maximum 6 in. mesh opening, or as approved.

- Prefabricated Units: Envirofence or approved equal may be used in lieu of the above method providing the unit is installed per manufacturer's instructions.

Construction Guidelines

- Posts should be spaced 10 ft. apart when a wire mesh support fence is used and no more than 6 ft. apart when using extra-strength filter fabric (without a wire fence). The posts should extend at least 30 in. into the ground.
- If standard strength filter fabric is to be used, fasten the optional wire mesh support fence to the upslope side of the posts using heavy duty wire staples, tie wires, or hog rings. Extend the wire mesh support to the bottom of the trench. The filter fabric should then be stapled or wired to the fence.
- Extra strength filter fabric does not require a wire mesh support fence. Staple or wire the filter fabric directly to the posts.
- Do not attach filter fabric to trees.
- Where joints in the fabric are required, splice it together only at a support post, with a minimum 6 in. overlap, and securely seal the joint.
- Embedded filter fabric should extend in a flap that is anchored by backfill, to prevent fabric from pulling out of ground.

Maintenance

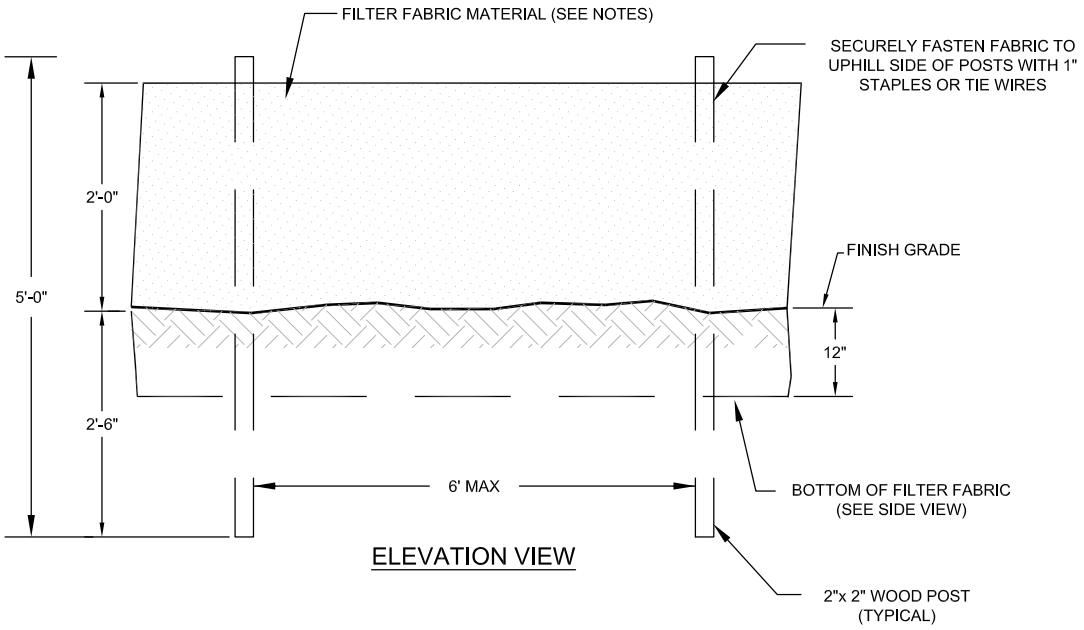
Silt fences should be inspected periodically for damage (such as tearing by wind, animals, or equipment) and for the amount of sediment that has accumulated. Remove the sediment when it reaches one-half the height of the silt fence. In situations where access is available, machinery can be used.

Otherwise, the silt should be removed manually. The following are key elements to remember:

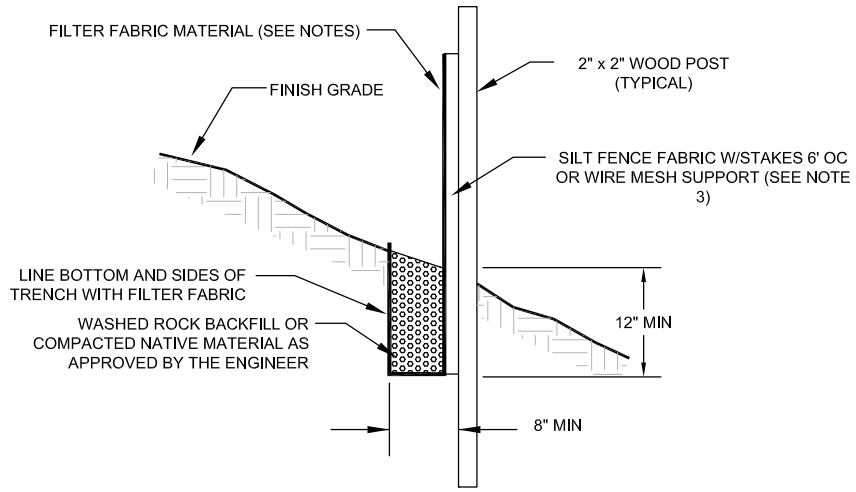
- The sediment deposits should be removed when heavy rain or high water is anticipated.
- The sediment deposits should be placed in an area where there is little danger of erosion
- The silt fence should not be removed until adequate vegetative growth ensures no further erosion of the slopes. Generally, the fabric is cut at ground level, the wire and posts are removed, then the sediment is spread, seeded, and protected (mulched) immediately.

Table 36-1. Maximum Allowable Slope Lengths	
Slope Steepness	Maximum Slope Length (Feet)
2:1	50
3:1	75
4:1	125
5:1	175
Flatter than 5:1	200

Table 36-2. Filter Fabric Specifications		
Fabric Properties	Value	Minimum Acceptable Test Method
Grab Tensile Strength (lbs.)	90	ASTM D1682
Elongation at Failure (%)	50	ASTM D1682
Mullen Burst Strength (PSI)	190	ASTM D3786
Puncture Strength (lbs.)	40	ASTM D751 (modified)
Equivalent Opening Size	40-80	US Std Sieve CW-02215
Ultraviolet Radiation Stability %	90	ASTM-G-26



ELEVATION VIEW



SIDE VIEW

NOTES:

1. INSTALL FENCE AT THE APPROPRIATE LOCATION BY CONSIDERING TERRAIN, SLOPE, WATER FLOW AND DISTURBANCE AREA. PLACE THE FENCE AWAY FROM THE TOE OF SLOPE LEAVING ROOM TO ACCUMULATE SEDIMENT AND PERFORM WORK.
2. SILT FENCE FABRIC SHALL BE UV RESISTANT POLYPROPYLENE WITH OPENINGS LESS THAN A NO. 30 SIEVE. OR APPROVED BY THE ENGINEER.
3. SILT FENCE FABRIC SHALL BE CUT FROM A CONTINUOUS ROLL WITH JOINTS KEPT TO A MINIMUM. JOINTS SHALL BE SECURED AT SUPPORT POSTS WITH A MINIMUM OF 6" OF OVERLAP. LESS POSTS MAY BE INSTALLED WHEN WIRE MESH IS USED TO SUPPORT THE SILT FENCE FABRIC AS APPROVED BY THE ENGINEER.
4. AN 8" WIDE BY 12" DEEP TRENCH SHALL BE CONSTRUCTED ALONG THE ENTIRE LENGTH OF THE UPHILL SIDE OF THE SILT FENCE. THE TRENCH SHALL BE BACKFILLED WITH WASHED ROCK OR COMPACTED NATIVE MATERIAL.
5. THE SILT FENCE SHALL BE MAINTAINED UNTIL THE ENTIRE DISTURBANCE AREA HAS BEEN STABILIZED. THE SILT FENCE MAY BE REMOVED ONLY AFTER THE RETAINED MATERIALS HAVE BEEN PROPERLY DISPOSED OF.

NOT TO SCALE

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	–	–	–

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
ENGINEERING & PUBLIC WORKS

BMP 36
SILT FENCE

DATE 04/16/2020
DRAWN BY STAFF

SHEET
1 OF 1

BMP 37 - Vegetative Buffer Strip

Description

A vegetative buffer strip is a gently sloping area of vegetative cover that runoff water flows through before entering a stream, storm sewer, or other conveyance. The buffer strip may be an undisturbed strip of natural vegetation or it can be a graded and planted area.

Vegetative buffer strips act as living sediment filters that intercept and detain stormwater runoff. They reduce the flow and velocity of surface runoff, promote infiltration, and reduce pollutant discharge by capturing and holding sediments and other pollutants carried in the runoff water. Vegetative buffer strips function much like vegetated or grassed swales. Buffer strips, however, are fairly level and treat sheet flow across them, whereas grassed swales are indentations that treat concentrated flows running along.

Applications

- Used for temporary or permanent control, usually in conjunction with other sediment collection and slope protection practices. Silt fences (BMP 36) installed upgradient can prevent overloading of the buffer strip.
- May be placed at many locations between the source of sediment (road surface, side slopes) and a natural or constructed waterway. They are inexpensive and easily constructed, and can be put into place at any time if climatic conditions allow for planting.
- May be used at almost any site that can support vegetation, but is best suited for areas where the soils are well drained or moderately well drained and where the bedrock and the water table are well below the surface.
- Provides low to moderate treatment of pollutants in stormwater while providing a natural look to a site.
- Can provide habitat for wildlife.
- Can screen noise and views if trees or high shrubs are planted on the filter strips.

Limitations

- Not effective for filtering high velocity flows from large paved areas, steep slopes, or hilly areas. Consider other measures if slopes exceed 15%.
- Requires significant land space.
- May have a short useful life due to clogging by sediments and oil and grease.
- Do not use planted or seeded ground as a buffer strip for sediment trapping until the vegetation is well established.

Targeted Pollutants

Sediment

Design Parameters

- A buffer strip should be at least 20 ft. wide to function well. Along live streams or above wetlands, the minimum width should be 100 ft.
- Tall, dense stands of grass form good sediment traps, as do willows and alder. The willows and alder can be native or planted. A combination of grasses with willows or alder is also effective. Any planted species should be deep rooted and able to adjust to low oxygen levels. Vegetative cover should be at least 75% to assure adequate removal of sediments. Forested strips are always preferred to vegetated strips, and existing vegetation is preferred to planted vegetation. In planning for vegetated strips, consider climatic conditions, since vegetation may not take hold in especially dry and/or cold regions.
- In many cases, a vegetative buffer strip will not effectively control runoff and retain sediments unless employed in conjunction with other control measures. Where heavy runoff or large volumes of sediment are expected, provide diversion measures or other filtering measures above or below the buffer strip.

Construction Guidelines

- Try to direct sediment-laden water onto naturally vegetated or stabilized planted ground.
- Fertilizing seeded or planted ground may enhance growth (and improve its effectiveness as a buffer strip).
- Do not place any equipment, construction debris, or extra soil in the buffer strip (or the strip will be damaged).

Maintenance

- Inspect the buffer strip at regular intervals to ensure proper functioning. Check for damage by equipment and vehicles. In newly planted areas, check the progress of germination and plant growth, and arrange for fertilizing, if needed, to enhance growth and establishment. (Planted ground should not be used for a sediment trap until the vegetation is well established.) Make sure that water flowing through the buffer strip is not causing additional erosion nearby and not forming ponds due to erosion within the buffer strip.
- Buffer strips in natural vegetation do not generally require maintenance; however, on some sites it may be necessary to remove sediments and replant on a regular basis. Promptly repair any damage from equipment, vehicles, or erosion.

BMP 38 - Sedimentation Trap (Basin)

Description

A sedimentation trap is a temporary or permanent dam or basin used to collect, trap, and store sediment produced by construction activities, or as a flow detention facility for reducing peak runoff rates. Sediment basins can be designed to maintain a permanent pool or to drain completely dry. Either way, the basin detains sediment-laden runoff long enough to allow most of the sediment to settle out.

A sediment basin can be constructed by excavation or by placing an earthen embankment across a low area or drainage swale. The pond typically has a riser and pipe outlet with a gravel outlet or spillway to slow the release of runoff and provide some sediment filtration.

Applications

Sediment traps are appropriate where physical site conditions or land ownership restrictions preclude the effective use of barrier-type erosion control measures. It may be used below construction operations which expose critical areas to soil erosion.

A temporary sediment basin used in combination with other control measures, such as seeding or mulching, is especially effective for removing sediments.

Limitations

- May not be feasible downstream of narrow right-of-way due to lack of space.
- May not be practical in highly erodible soil types (0.01in. and smaller, very fine sand, silt and clay) due to extremely large basin size requirements.
- May not remove enough of the fine silts. Additional control measures such as filter cloth around riser should be used to minimize release of fine silts. If filter cloth is used, regular inspection and replacement is required to deal with clogging.
- Should not be located in any active stream channel.

Targeted Pollutants

Sediment

Design Parameters

- Design of the basin should be based upon the total drainage area lying upstream and (if permanent) on the future use of such lands. A professional engineer should approve the design.
- The volume of the sediment basin should be at least 1800 ft^3 /ac. of total drainage area (about 0.5 in. over the watershed). Disturbed areas greater than 10 acres within the same drainage basin should be provided a basin with a capacity of 3600 ft^3 of total drainage area (1 in. over the watershed) to meet the NPDES regulations.
- The basin should be designed with baffles or other deflectors to spread the flow throughout the basin. It should also include an emergency spillway and riser pipe(s). These structures should be designed on a site-specific basis using standard engineering practices. Calculating the settling zone volume and adding the necessary sediment storage volume should size the basin pond.
- The settling zone volume is determined by the pond surface area calculated using the following equation $S_A = 1.2Qx / V_{sed}$, Where:
    - S_A = the pond surface area in square meters
    - Q_x = the design inflow (in cubic meters per second) based on the runoff from the design storm event for the drainage area.
    - V_{sed} = the settling velocity for the design soil particle in meters per second. Table 38 lists theoretical settling velocities for different particle sizes (#200 sieve).

- For particle sizes of 0.01 in. and smaller, the V_{seds} are so low that the SA becomes extremely large, often making the overall basin size requirement too large to be practical. In this case, extra protection measures should be taken to negate the need for the basin.
- The settling volume requirement is then calculated by multiplying the surface area by the settling depth. The settling depth should be a minimum of 1 ft. and a maximum of 4 ft. and is governed by a relationship with the basin length (distance from the inlet to the outlet). The ratio of length to settling depth should be greater than 200. For example, if the length was 394 ft., the settling depth should be less than 2 ft. to achieve the ratio of greater than 200.
- Typically, a sediment storage depth of 3 ft. is appropriate unless large volumes of soil are expected from highly erodible site conditions. In this case, use the universal soil loss equation or other applicable estimating methods to design the storage depth on a site-specific basis.

Determine the final pond dimensions and volume as follows:

- Determine the pond geometry for the sediment settling volume calculated above by adding a sediment storage depth of 3 ft. and 3:1 side slopes from the bottom of the basin. The bottom should be level.
- Extend the side slopes (at 3:1) as necessary to obtain the settling zone volume at the settling zone depth determined above.
- Adjust the geometry of the basin to effectively combine the settling zone volume and sediment storage volume while preserving the depth and side slope criteria listed above.

Sediment basins covered by this standard should be limited to the following category:

- The water surface at the crest elevation of the pipe spillway should not exceed 10 ft. measured upward from the original streambed to the crest elevation of the pipe spillway; and the drainage area should not exceed 150 acres.
- Because finer silts may not settle out completely, additional erosion control measures should be used to minimize release of the fine silt. Runoff should enter the basin as far from the outlet as possible to provide maximum retention time.

Construction Guidelines

- The temporary sediment basin should be installed before clearing and grading is undertaken. It should not be built within an active stream channel. Putting a dam in such a site could destroy aquatic habitat, and failure of the dam could result in flooding. A temporary sediment basin should be constructed only if there is sufficient space and appropriate topography. The basin should be made large enough to handle the maximum expected amount of site drainage. Fencing around the basin may be necessary for safety reasons or to discourage vandalism.
- The following general construction criteria are critical to successful installation and operation of sediment basins.
    - Locate the dam to provide maximum volume capacity for silt behind the structure.
    - Prepare the dam site by clearing vegetation and removing topsoil before beginning dam construction. Areas under the embankment and any structural works should be cleared and grubbed, and the topsoil stripped to remove all trees, vegetation, roots and other objectionable material. To facilitate cleanout and restoration, the pool area (measured at the top of the pipe spillway) should be cleaned of all brush, trees or other debris.
    - Level the bed for the pipe spillway to provide uniform support through its entire length under the dam.
    - Construct an emergency spillway (as per design) on undisturbed soil--not on fill. The design width and entrance/exit channel slopes are critical to the spillway's ability to successfully protect the dam with a minimum of erosion hazard in the spillway channel. The spillway should be lined with 4 in. of concrete, reinforced with 6 x 6 in. 10/10 wire mesh extending to a minimum of 36 in. down each face of the embankment. The spillway should be at least 20 in. deep with 1:1.5 slide slopes.

- All pipe joints should be securely fastened and watertight. The riser should be rigidly and securely fastened to the barrel and the bottom of the riser should be sealed (watertight). The barrel should be placed on a firm foundation according to the lines and grades shown on the plans.
- Place at least 1 ft. of hand-compacted backfill (maximum 6 in. lifts) over the pipe spillway before crossing it with construction equipment. The movement of the hauling and spreading equipment over the fill should be controlled so that the entire surface of each lift will be traversed by not less than one tread tract of the equipment.
- The pipe spillway should discharge at ground elevation below the dam, and not more than 12 in. above any streambed.
- Fill material should be taken from approved designated borrow areas, and should be of the type and quality conforming to that specified for the adjoining fill material. It should be free of roots, woody vegetation, oversize stones, rocks exceeding 6 in. diameter, or other objectionable materials. Do not use frozen material.
- Areas on which fill is to be placed should be scarified prior to placement of fill. Fill materials should be placed in 6 in. maximum lifts, compacted by construction equipment. The embankment should be raised and compacted to an elevation that provides for anticipated settlement to design elevation (allow at least 10% for settlement). Lifts should be continuous over the entire length of the fill and approximately horizontal.
- Stabilize the embankment and emergency spillway with revegetation or other stabilization measures.

Maintenance

- Sediment basins should be readily accessible for maintenance and sediment removal. The sediment maintenance volume should be determined and marked before the basin is used. They should be inspected after each rainfall and be cleaned out when about half the volume has been filled with sediment. Poorly draining basins require maintenance to clean clogged riser or filter cloth. Removed sediment should be disposed of and stabilized in an approved location such that spoils do not re-enter waters of the state. Sediment may not be dumped into any water of the U.S. without appropriate permitting.
- The sediment basin should remain in operation and be properly maintained until vegetation or other measures permanently stabilize the drainage area. A well-built temporary sediment basin that is large enough to handle the post-construction runoff volume may later be converted to use as a permanent stormwater management structure.
- If the pond is located near a residential area, it is recommended for safety reasons that a sign be posted and that the area be secured by a fence.

Table 38-1. Theoretical settling velocities for different particle sizes (#200 sieve).

Size (in.)	V_{sed} (in./sec)
0.02	0.0023
0.008	0.00079
0.004	0.00028
0.002	0.000079
0.0008	0.000012
0.0004	0.0000028
0.0002	0.00000079

BMP 50 - Controlled Drop Check Dam

Description
A series of sumps are located along a varied slope. Each sump outlets through a culvert to a typically short conveyance ditch and the next downgrade sump. Outlet protection is established at each culvert outlet within the conveyance ditch. The flow achieves the majority of its downward movement through the culvert, and the conveyance ditches allow for much slowed velocity and opportunity for settling of any suspended materials.

Applications
The controlled drop check dam can be used on varied terrain as needed to concentrate and direct flows.

Targeted Pollutants
Sediment

Design Parameters
- Culvert lengths and slopes will vary as needed to maintain an approximate 1% slope on conveyance ditches between.
- The outlet of each culvert should remain approximately at or slightly below the elevation of the inlet of the next culvert.
- Provide outlet stabilization below each culvert outlet (where the risk of erosion is greatest) and consider the use of channel linings or protection such as plastic sheeting or riprap where there may be significant erosion or prolonged submergence.

Construction Guidelines
Culvert Slope: Culverts should be sloped to facilitate an approximate 1% slope on the conveyance ditch between.

Outlet Protection: Outlet protection should follow the general guidelines contained in BMP 30, Outlet Protection. Consider a horizontal extension for culvert with significant slopes.

Sump Depth: Sumps at culvert inlets should be at least 18 in. deep.

Maintenance
- Inspect the controlled drop check dam system regularly. Make any repairs necessary to ensure the measure is in good working order.
- Remove accumulated leaves and sediments from each sump when they reach a depth of one-half the original depth of the sump. Dispose of all materials properly so they do not contribute to pollution problems at the disposal site.

NOTES:

1) THE PIPE SHALL BE SLOPED AS REQUIRED TO MAINTAIN THE APPROXIMATELY 1% SLOPE OF THE CONVEYANCE DITCH.
1) EXTEND THE INLET OF THE PIPE 4" - 6" BEYOND THE FACE OF SOILS TO MINIMIZE SEDIMENT TRANSPORT.
2) CLEAN SUMP WHEN SEDIMENT IS WITHIN 9" OF THE PIPE INLET.

NOT TO SCALE

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	–	–	–

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
ENGINEERING & PUBLIC WORKS

BMP 50
CONTROLLED DROP CHECK DAM

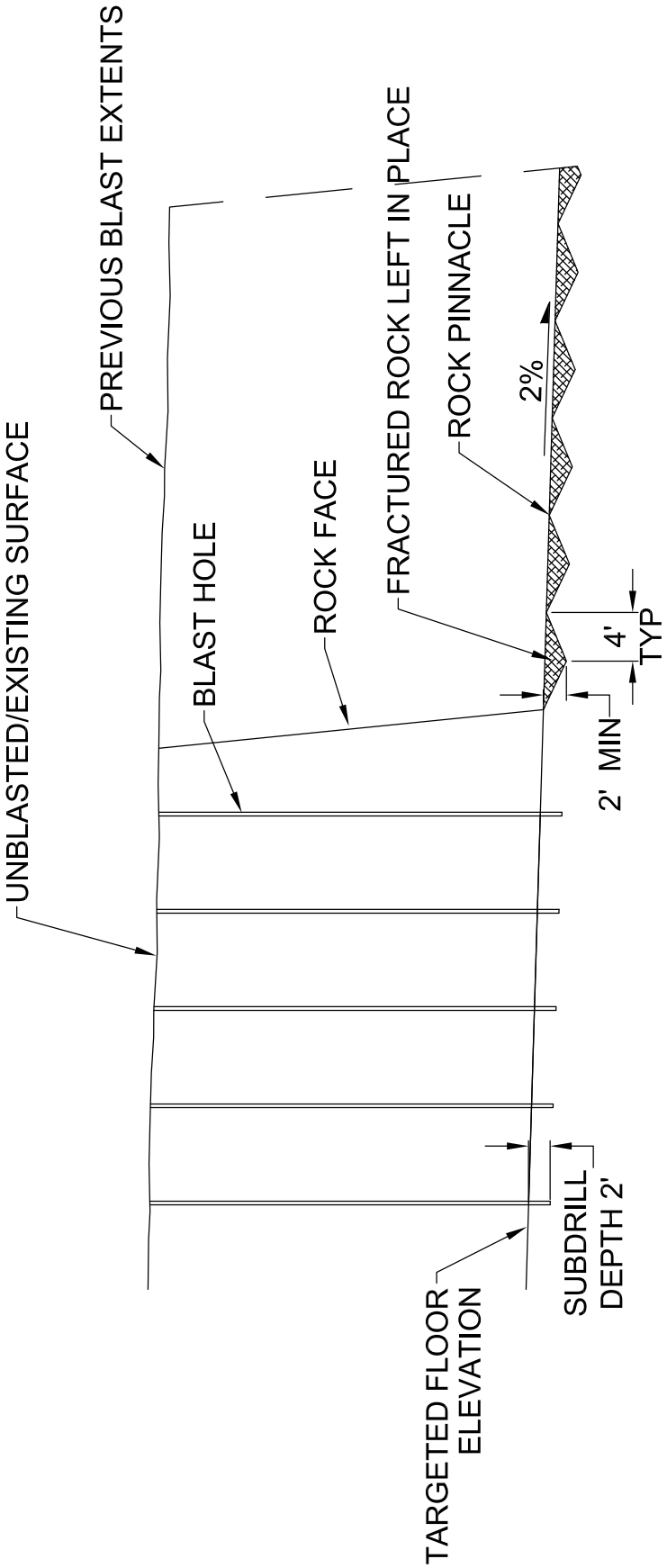
DATE 04/17/2020
DRAWN BY STAFF

SHEET
1 OF 1

BMP 52 - Overblasting

Description

When drilling and blasting, drilling extends below the intended floor elevation. The overdrill will fracture rock below the intended elevation, providing a path of infiltration and temporary storage of stormwater. This mechanism can also limit ponding or stormwater in low areas that would otherwise provide a source of sediment tracking for vehicles traveling through the area.



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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
ENGINEERING & PUBLIC WORKS

BMP 52
OVERBLASTING

DATE 04/16/2020
DRAWN BY STAFF

SHEET
1 OF 1

BMP 56 - Spray Bars

Description
Spray bars are typically piping above or adjacent to processing equipment. This piping is equipped with spray nozzles at regular intervals and plumbed to a water source to wet material being processed.

Applications
Spray bars are utilized when dry conditions can cause processing to liberate dust. This dust may travel offsite or affect the health of workers.

Targeted Pollutants
Dust

Design Parameters
- Consider cleanliness of the water source and size nozzle openings to limit clogs.
- Some processing equipment comes from the manufacturer equipped with spray nozzles.
- Provide enough coverage to adequately suppress dust generated.
- Locate processing operations so that runoff from spray bars is directed to a sediment trap or other appropriate bmp.
- Consider ease of access and maintenance when locating spray bars.

Maintenance
- Nozzles can become clogged and require regular inspection and cleanout or replacement.

BMP 57 - Shaker Rack (Wheel Cleaning Device)

Description
The shaker rack is installed to assist in removing material from vehicle undercarriages and tires through bouncing and shaking action.

Applications
The shaker rack is appropriate where site conditions cause mud, soil, and rock to stick to the underside and wheels of vehicles that frequently exit a material site (typically over-the-road haul trucks and passenger vehicles).

Targeted Pollutants
Sediment

Design Parameters
- Shaker racks can be fabricated from concrete and metal (cattle guards).
- The length of the shaker rack should be sufficient to allow enough rumble to shake or dislodge materials.
- The cleanout depth should allow for a reasonable time frame between cleanouts based on the amount of use.
- Ensure adequate width for the equipment that normally exits the site.

Construction Guidelines
- Utilize durable materials as the components will be subjected to vibration and significant weight in the case of loaded over-the-road trucks.
- The shaker rack should be located so that drainage is directed to a sediment trap or other appropriate BMP.
- Install the shaker rack in a convenient location that will promote its use and allow for ease of cleanout.

Maintenance
- The pit below the shaker rack will require regular cleanout to remain effective.
- The traveled surface components should be regularly inspected for damage and may require replacement over time.

Attachment E – Supporting Documentation

(2) Spill Response
   a. Spill Response Procedures
   b. Spill Reporting Placard
   c. Monthly Spill Log
   d. Spill Reporting Form

Spill Response Procedure

No fuel or lubricants are stored on the site. All petroleum products are trucked onto the site on a mobile service vehicle when needed. If during fueling or other routine maintenance there is a discharge of petroleum fuels, oils or other substances, which may be hazardous to the land or water, it will be contained, cleaned up and disposed of in accordance with the Alaska Administrative Code and Title 46 of the Alaska Statutes. Spill response information placards are included in the SWPPP and are posted in the Weigh Station Shed with the SWPPP.

In the event of a spill in excess of a reportable quantity as established by 40 CFR, the CBJ will utilize the professional services of qualified personnel to develop a cleanup plan.

Qualified Personnel:

Cox Environmental Services	(907) 723-9946
Nortech Environmental & Engineering Consultants	(907) 586-6813

State of Alaska Oil Release Reporting Requirements

- **TO WATER:** *Any* release of oil to water *must be reported* as soon as the person has knowledge of the discharge.
- **TO LAND:**
  - Any release of oil in *excess of 55 gallons* must be reported as soon as the person has knowledge of the discharge.
  - Any release of oil in *excess of 10 gallons but less than 55 gallons* must be reported within 48 hours after the person has knowledge of the discharge.
  - A person in charge of a facility or operation shall maintain, and provide to the Department on a monthly basis, a written record of any discharges any discharge of oil *from 1 to 10 gallons*.
- **TO IMPERMEABLE SECONDARY CONTAINMENT AREAS:** Any release of oil *in excess of 55 gallons* must be reported within 48 hours after the person has knowledge of the discharge.

The spill response form is contained within this tab. For an electronic copy and for further information, visit: https://dec.alaska.gov/spar/ppr/spill-information/reporting.

Hazardous Spill Response Procedure:

1. Notify ADEC in accordance with the above requirements at (907) 465-5340; fax (907) 465-2237.
2. Notify the National Response Center (NRC): 800-424-8802 (https://nrc.uscg.mil/).
3. As required, contact qualified professional personnel to develop a cleanup plan.
4. Proceed with cleanup in coordination with ADEC and the spill response plan.

IT'S THE LAW!

AS 46.03.755, 18 AAC 75.300, 75.325 and 18 AAC 78.200

REPORT
OIL AND HAZARDOUS SUBSTANCE SPILLS

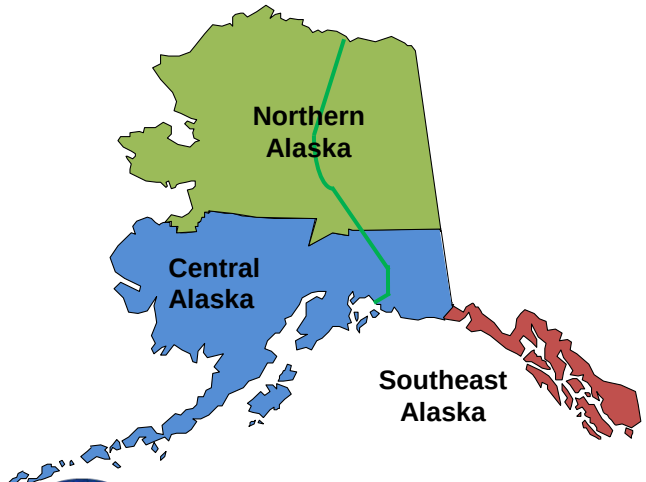
During Normal Business Hours

call the nearest response team office:

Central Alaska: Anchorage	**(907) 269-3063** Fax: (907) 269-7648
Northern Alaska: Fairbanks	**(907) 451-2121** Fax: (907) 451-2362
Southeast Alaska: Juneau	**(907) 465-5340** Fax: (907) 465-5245
Alaska Pipeline: Fairbanks	**(907) 451-2121** Fax: (907) 451-2362

Outside Normal Business Hours

Toll Free	**1-800-478-9300**
International	**1-907-269-0667**



Alaska Department of Environmental Conservation
Division of Spill Prevention and Response
www.dec.alaska.gov/spar/ppr/spill-information/reporting

Hazardous Substance

Any hazardous substance spill, other than oil, must be reported immediately.

Oil – Petroleum Products

To Water

- Any amount spilled to water must be reported immediately.

To Land

- Spills in ***excess of 55 gallons*** must be reported immediately.
- Spills in ***excess of 10 gallons, but 55 gallons or less***, must be reported within 48 hours after the person has knowledge of the spill.
- Spills of ***1 to 10 gallons*** must be recorded in a spill reporting log submitted to ADEC each month.

To Impermeable Secondary Containment Areas

- Any spills in ***excess of 55 gallons*** must be reported within 48 hours.

Additional Requirements for Underground Storage Tank Spill Reporting

Regulated Underground Storage Tank (UST) systems are defined at 18 AAC 78.005. Releases at heating oil tanks must be reported.

- You must report a *suspected* belowground release from a UST system, in any amount, within 24 hours *(18 AAC 78.220(c))*.
- You must report if your release detection system indicates two consecutive months of invalid or inconclusive results.
- If you observe unusual operating conditions, sudden loss, erratic dispensing (slow flow/no flow) or discharge to soil or water, **report it to the UST Unit:**

907-269-3055 or 269-7679

rev. July/2018

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

MONTHLY OIL SPILL REPORTING LOG

Only for spills less than 10 gallons, solely to land, not to creeks, sewers or storm drains.
(see Discharge Reporting requirements, 18 AAC 75.300)

SPILLS GREATER THAN 55 GALLONS SOLELY TO LAND OUTSIDE SECONDARY CONTAINMENT, HAZARDOUS SUBSTANCE SPILLS OR SPILLS TO WATER MUST BE REPORTED IMMEDIATELY.

Call the nearest ADEC office for more information: **Anchorage:** 269-3063 **Fairbanks**: 451-2121 **Juneau**: 465-5340

Please submit the completed monthly spill reporting log to the nearest ADEC office:

Anchorage: dec.carspillreport@alaska.gov
Fairbanks: dec.narspillreport@alaska.gov
Juneau: dec.spar.seregion.spills@alaska.gov

FACILITY NAME AND ADDRESS:	
REPORT MONTH/YEAR:	
REPORTED BY:	**PHONE #:**
EMAIL:	

DATE / TIME OF SPILL	LOCATION	PRODUCT SPILLED	QTY SPILLED (GALLONS)	CAUSE OF SPILL & AREA AFFECTED	WHO RESPONDED	CLEANUP & METHOD / PLACE OF DISPOSAL

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

OIL & HAZARDOUS SUBSTANCES SPILL NOTIFICATION FORM

ADEC USE ONLY

ADEC SPILL #:	ADEC FILE #:	ADEC LC:

PERSON REPORTING:	PHONE NUMBER:	REPORTED HOW? (ADEC USE ONLY) ☐ Phone ☐ Fax ☐ PERS ☐ E-mail
DATE/TIME OF SPILL:	DATE/TIME DISCOVERED:	DATE/TIME REPORTED TO ADEC:
INCIDENT LOCATION/ADDRESS:	DATUM: ☐ NAD27 ☐ NAD83 ☐ WGS84 ☐ Other _____ LAT. LONG.	PRODUCT SPILLED:

QUANTITY SPILLED: ☐ gallons ☐ pounds	QUANTITY CONTAINED: ☐ gallons ☐ pounds	QUANTITY RECOVERED: ☐ gallons ☐ pounds	QUANTITY DISPOSED: ☐ gallons ☐ pounds

	POTENTIAL RESPONSIBLE PARTY:	OTHER PRP, IF ANY:	VESSEL NAME:
Name/Business:			
Mailing Address:			VESSEL NUMBER:
Contact Name:			> 400 GROSS TON VESSEL: ☐ Yes ☐ No
Contact Number:			

SOURCE OF SPILL:	CAUSE CLASSIFICATION:
CAUSE OF SPILL: ☐ Under Investigation	☐ Accident ☐ Human Factors ☐ Structural/Mechanical ☐ Other

CLEANUP ACTIONS:

DISPOSAL METHODS AND LOCATION:

AFFECTED AREA SIZE:	SURFACE TYPE: *(gravel, asphalt, name of river etc.)*	RESOURCES AFFECTED/THREATENED: *(Water sources, wildlife, wells, etc.)*

COMMENTS:

ADEC USE ONLY

SPILL NAME:	NAME OF DEC STAFF RESPONDING:	C-PLAN MGR NOTIFIED? ☐ Yes ☐ No

DEC RESPONSE: ☐ Phone follow-up ☐ Field visit ☐ Took Report	CASELOAD CODE: ☐ First and Final ☐ Open/No LC ☐ LC Assigned	CLEANUP CLOSURE ACTION: ☐ NFA ☐ Monitoring ☐ Transferred to CS or STP

COMMENTS:

Status of Case: ☐ Open ☐ Closed **DATE CASE CLOSED:**

REPORT PREPARED BY:	DATE:

Attachment E – Supporting Documentation

(3) Notice of Intent – To be included after submittal and upon any modifications during the permit period.
   a. Original Submittal
   b. NOI Modifications
   c. Delegation of Signatory Authority
   d. NOI Reply Letter
   e. Discharge Authorization

For Agency Use

Permit #: _____

Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity under the APDES Multi-Sector General Permit (MSGP)

Facility Information

Facility Name: Stabler Point Rock Quarry

Have storm water discharges from your site been covered previously under an APDES Permit? ☑ Yes ☐ No

If Yes, provide the permit authorization number: AKR06AC70

Street Location

Street:	Borough or similar government subdivision
Mile 13 Veteran's Memorial Hwy	City & Borough of Juneau

City:	State:	Zip:
Juneau	Alaska	99801

Latitude:	Longitude:	Determined By:
58.3835 N	134.6729 W	☐ GPS ☑ Internet Map Service ☐ Other:

Estimated area of industrial activity at your site exposed to storm water: 27 (acres)

Briefly describe the nature of the industrial activities at the facility:

Hard rock materials are drilled, blasted, crushed, screened, and stockpiled on site. The hard rock materials are hauled off site for use in area construction projects.

Identify the 4-digit Standard Industrial Classification (SIC) code or 2-letter Activity Code that best represents the products produced or services rendered for which your facility is primarily engaged, as defined in the MSGP.

Primary SIC Code: 1422-1429 or Primary Activity Code: _____

Is your site presently inactive or unstaffed?* ☐ Yes ☑ No

** Note that if your facility becomes inactive and unstaffed during the permit term, you must submit an NOI modification to reflect the change.*

If Yes, is your site expected to be inactive and unstaffed for the entire permit term? ☐ Yes ☐ No

If No, indicate the length of time that you expect your facility to be inactive and unstaffed. _____

Federal Effluent Limitation Guidelines and Sector-Specific Requirements

Are you requesting permit coverage for storm water discharges subject to effluent limitation guidelines? ☐ Yes ☑ No

If yes, which effluent limitation guidelines apply to your storm water discharge?

40 CFR Part/Subpart	Eligible Discharges	Affected MSGP Sector	Check if applicable
Part 411, Subpart C	Runoff from material storage piles at cement manufacturing facilities.	E	☐
Part 418, Subpart A	Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished products, by-products, or waste products (SIC 2874).	C	☐
Part 423	Coal pile runoff at steam electric generating facilities.	O	☐
Part 429, Subpart I	Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas.	A	☐
Part 436, Subpart B, C, or D	Mine dewatering discharges at crushed stone mines, construction sand and gravel mines, or industrial sand mines.	J	☐
Part 443, Subpart A	Runoff from asphalt emulsion facilities.	D	☐
Part 445, Subparts A & B	Runoff from hazardous waste and non-hazardous waste landfills.	K, L	☐
Part 449, Subpart A	Runoff from Air Transportation	S	☐

If you are a Sector S (Air Transportation facility, do you anticipate using more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis? ☐ Yes ☐ No

Identify the applicable sector(s) and subsector(s) of industrial activity, including co-located industrial activity, for which you are requesting coverage:

Sector	Subsector	Sector	Subsector	Sector	Subsector	Sector	Subsector	Sector	Subsector	Sector	Subsector
J	.J2										

Discharge Information

Does your facility discharge into a Municipal Separate Storm Sewer System (MS4)? ☐ Yes ☑ No

If Yes, provide the name of the MS4 Operator: _____

If you are subject to benchmark monitoring requirements for a hardness-dependent metal:

- What is the hardness of your receiving water(s) (See Appendix E)? _____
- Does your facility discharge into any saltwater receiving waters? ☐ Yes ☐ No

Outfalls: *(Attach a separate list if necessary)*

List all of the storm water outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002). Also provide the latitude and longitude in decimal degrees for each outfall.	**For each outfall, provide the following receiving water information:** Provide the name of the first water of the U.S. that receives storm water directly from the outfall and/or from the MS4 that the outfall discharges to:	If the receiving water is impaired (on the CWA 303(d) list), list the pollutants that are causing the impairment:	Are the pollutant(s) causing the impairment present in your discharge? Yes	No	If a TMDL has been completed for this receiving waterbody, provide the following information:
Outfall ID 001 Latitude 58.3832 Longitude 134.6681	Auke Nu Creek		☐	☐	TMDL ID#: TMDL Name: Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: _____					
Outfall ID 002 Latitude 58.3841 Longitude 134.6696	Auke Nu Creek		☐	☐	TMDL ID#: TMDL Name: Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: _____					
Outfall ID Latitude Longitude			☐	☐	TMDL ID#: TMDL Name: Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: _____					
Outfall ID Latitude Longitude			☐	☐	TMDL ID#: TMDL Name: Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: _____					
Outfall ID Latitude Longitude			☐	☐	TMDL ID#: TMDL Name: Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: _____					

Operator Information

Contact Name:	Organization:	Title:
Michael Eich	City & Borough of Juneau	Material Sources Manager
Phone:	**Fax (optional):**	**Email:**
907.586.0874		michael.eich@juneau.org

Mailing Address ☐ Check if same as Operator Information	Street (PO Box)		
	City	State	Zip

Storm Water Pollution Prevention Plan (SWPPP) Contact / Location Information

Contact Name:	Organization:	Title:
Phone:	**Fax (optional):**	**Email:**

Mailing Address ☑ Check if same as Operator Information	Street (PO Box)		
	City	State	Zip

Universal Resource Locator or URL:

Billing Contact / Location Information

Contact Name:	Organization:	Title:
Phone:	**Fax (optional):**	**Email:**

Mailing Address ☑ Check if same as Operator Information	Street (PO Box)		
	City	State	Zip

NOI Preparer Contact / Location Information *(Complete if NOI was prepared by someone other than the Certifier)*

Contact Name:	Organization:	Title:
Phone:	**Fax (optional):**	**Email:**

Mailing Address ☑ Check if same as Operator Information	Street (PO Box)		
	City	State	Zip

Document Attachments

Documents attached with this application:

☑ Storm Water Pollution Prevention Plan (SWPPP)

☐ Other:

Certification Information

An Alaska Pollutant Discharge Elimination System (APDES) permit application or report must be signed by an individual with the appropriate authority per 18 AAC 83.385. For additional information, please refer to 18 AAC 83.385 at the following link: http://www.legis.state.ak.us/basis/aac.asp#18.83.385.

Corporate Executive Officer 18 AAC 83.385 (a)(1)(A)	For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation.
Corporate Operations Manager 18 AAC 83.385 (a)(1)(B)	For a corporation, the manager of one or more manufacturing, production, or operating facilities, if (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations; (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
Sole Proprietor or General Partner 18 AAC 83.385 (a)(2)	For a partnership or sole proprietorship, the general partner or the proprietor respectively.
Public Agency, Chief Executive Officer 18 AAC 83.385 (a)(3)(A)	For a municipality, state, or other public agency, the chief executive officer of the agency.
Public Agency, Senior Executive Officer 18 AAC 83.385 (a)(3)(B)	For a municipality, state, or other public agency, a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

Any report required by an APDES permit, and a submittal with any other information requested by the department, must be signed by a person described in above, or by a duly authorized representative of that person.
**For Delegated Authority: the delegation must be made in writing and submitted to the DEC.*
Your signature will not be approved until DEC receives the written delegation.
An Example of written authorization delegating authority can be found on the Division of Water website:
http://dec.alaska.gov/media/13316/delegation-of-signatory-authority.pdf

Operations Manager *(Delegated Authority)** 18 AAC 83.385 (b)(2)(A)	For a duly authorized representative, an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent or position of equivalent responsibility.
Environmental Manager *(Delegated Authority)** 18 AAC 83.385 (b)(2)(B)	For a duly authorized representative, an individual or position having overall responsibility for environmental matters for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Organization:	Name:	Title:
City & Borough of Juneau	Katie Koester	Director of Engineering & Public Works

Phone:	Fax (optional):	Email:
907.586.0800		katie.koester@juneau.org

Mailing Address: ☐ Check if same as Operator Information	Street (PO Box):		
	155 South Seward Street		
	City:	State:	Zip:
	Juneau	AK	99801

Katie Koester — Signature/Responsible Official

5.18.20 — Date

Instructions for Completing the Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity under the Multi-Sector General Permit (MSGP)

Who must file a NOI?

Under section 402(p) of the Clean Water Act (CWA) and regulations at 40 CFR Part 122.26, adopted by reference at 18 AAC 83.010 (3) storm water discharges associated with industrial activity are prohibited to waters of the United States unless authorized under an Alaska Pollutant Discharge Elimination System (APDES) permit. You can obtain coverage under the MSGP by submitting a completed NOI if you operate a facility that:

- is located in a jurisdiction where DEC is the permitting authority, listed in Part 1.1 of the MSGP;
- discharges storm water associated with industrial activities, identified in Appendix D of the MSGP;
- meet the eligibility requirements in Part 1.2 of the permit;
- develop a storm water pollution prevention plan (SWPPP) in accordance with Part 5 of the MSGP; and
- install and implement control measures in accordance with Part 4 to meet numeric and non-numeric effluent limits.

If you are unsure if you need an APDES storm water permit, contact your APDES storm water permit program. Contacts are listed at:

http://dec.alaska.gov/water/wastewater/stormwater/

One NOI must be submitted for each facility or site for which you are seeking permit coverage. You do not need to submit separate NOIs for each type of industrial activity present at your facility, provided your SWPPP covers all activities.

When to File the NOI Form

Do not file your NOI until you have obtained and thoroughly read a copy of the MSGP. A copy of the MSGP is located on the DEC website (http://dec.alaska.gov/water/wastewater/stormwater/multisector/). The MSGP describes procedures to ensure your eligibility, prepare your SWPPP, install and implement appropriate storm water control measures, and complete the NOI form questions – all of which must be done before you sign the NOI certification statement attesting to the accuracy and completeness of your NOI. You will also need a copy of the MSGP once you have obtained coverage so that you can comply with the implementation requirements of the permit.

Completing the NOI Form

To complete this form, type or print in the appropriate areas only. Please make sure you complete all questions. Make sure you make a photocopy for your records before you send the completed form to the address below. You may also use this paper form as a checklist for the information you will need when filing an NOI electronically via DEC's OASys system. http://dec.alaska.gov/water/oasys.aspx.

Facility Information

Enter the facility's official or legal name. Unless the name of your facility has changed, please use the same name provided on prior NOIs or permit applications.

Indicate if industrial storm water discharges from your facility were previously covered by an APDES permit.

If your facility was previously covered by the MSGP, please include the tracking number that you received in your confirmation letter or email from DEC's Storm water Program. You can find the tracking number assigned to your previous NOI on DEC's Online Permit Search: http://dec.alaska.gov/Applications/Water/WaterPermitSearch/search.

Enter the street address, including city, state, zip code, borough or similar government subdivision of the actual physical location of the facility. Do NOT use a P.O. Box.

Provide the facility latitude and longitude in decimal degrees format. You can obtain your facility's latitude and longitude though Global Positioning System (GPS) receivers, internet map service, U.S. Geological Survey (USGS) quadrangle or topographic maps, or EPA's web-based siting-tools, among other methods. For consistency, DEC requests that measurements be taken from the approximate center of the facility. Specify which method you used to determine latitude and longitude.

Identify the data source that you used to determine the facility latitude and longitude. If you did not use a USGS quadrangle or topographic map or GPS receivers, then select "Other" and write the method used on the line provided. If you used a USGS quadrangle or topographic map, write the map scale on the line provided. Scale should be identified on the map.

Enter the estimated area of industrial activity at your site exposed to storm water, in acres.

Briefly describe the nature of the industrial activities present at your facility.

Indicate whether your facility is currently inactive and unstaffed. If so then indicate whether your facility will be inactive and unstaffed for the entire permit term; or, if not, specify the specific length of time in units of days, weeks, months, or years (e.g. 3 months) that you expect the facility to be inactive and unstaffed.

Federal Effluent Limitation Guidelines and Sector-Specific Requirements

Depending on your industrial activities, your facility may be subject to effluent limitation guidelines which include additional effluent limits and monitoring requirements for your facility. Please review these requirements, described in Part 4.3 of the MSGP and check any appropriate boxes on the NOI form.

For Sector S facilities (Air Transportation), indicate whether you anticipate that the entire airport facility will use more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis. If so, additional effluent limits and monitoring conditions apply to your discharge (see Part 11 Sector S of the MSGP).

List the four-digit Standard Industrial Classification (SIC) code and/or two character activity code that best describes the primary industrial activities performed by your facility under which you are required to obtain permit coverage. Your primary industrial activity includes any activities performed on-site which are (1) identified by the facility's one SIC code for which the facility is primarily engaged; and (2) included in the narrative descriptions of 40 CFR 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). See Appendix D of the MSGP for a complete list of SIC codes and activities codes.

If your site has co-located industrial activities that are not identified as your primary industrial activity, identify the sector and subsector codes that describe these other industrial activities. For a complete list of sector and subsector codes, see Appendix D of the MSGP.

Discharge Information

Receiving Waters and Wetlands

You must identify all the outfalls from your facility that discharge storm water. Each outfall must be assigned a unique 3-digit ID (e.g., 001, 002, 003). You must also provide the latitude and longitude for each outfall from your facility. Indicate whether any outfalls are substantially identical to an outfall already listed, and identify the outfall it is identical to. For each unique outfall you list, you must specify the name of the first water of the U.S. that receives storm water directly from the outfall and/or the Municipal Separate Storm Sewer System (MS4) that the outfall discharges to.

Your receiving water may be a lake, stream, river, ocean, wetland, or other waterbody, and may or may not be located adjacent to your facility. Your storm water may discharge directly to the receiving water or indirectly via a storm sewer system, an open drain or ditch, or other conveyance structure. Do NOT list a man-made conveyance, such as a storm sewer system, as your receiving water. Indicate the first receiving water your storm water discharge enters. For example, if your discharge enters a storm sewer system that empties into Trout Creek, which flows into Pine River, your receiving water is Trout Creek, because it is the first waterbody your discharge will reach. Similarly, a discharge into a ditch that feeds Spring Creek should be identified as "Spring Creek" since the ditch is a manmade conveyance. If you discharge into a MS4, you must identify the waterbody into which that portion of the storm sewer discharges and also provide the name of the MS4 operator. That information should be readily available from the operator of the MS4. If you are uncertain of the MS4 operator, contact DEC Division of Water for that information.

You must specify whether any receiving waters that you discharge to are listed as "impaired" as defined in Appendix C, and the pollutants for which the water is impaired. You must also check/identify any Total Maximum Daily Loads (TMDL) that have been completed for any of the waters of the U.S. that you discharge to. You must also provide information about the outfall latitude/ longitude. Further information regarding impaired waters and TMDLs can be found at http://dec.alaska.gov/water/water-quality/impaired-waters.

If you are subject to any benchmark monitoring requirements for metals (see the requirements applicable to your Sector(s) in Part 11 of the permit), indicate the hardness for your receiving water(s). See Appendix E of the permit for information about determining waterbody hardness.

If you are subject to benchmark monitoring requirements for hardness-dependent metals, you must also answer whether your facility discharges into any saltwater receiving waters.

Operator Information

Provide the name of the contact person and the legal name of the firm, public organization, or any other public entity that operates the facility described in this application. An operator of a facility is a legal entity that controls the operation of the facility.

Provide the operator's mailing address, telephone number, fax number (optional), and email address. Correspondence will be sent to this address.

Storm Water Pollution Prevention Plan (SWPPP) Contact Information

Identify the name, telephone number, and email address of the person who will serve as a contact for DEC on issues related to storm water management at your facility. This person should be able to answer questions related to storm water discharges, the SWPPP, and other issues related to storm water permit coverage or have immediate access to individuals with that knowledge. This person does not have to be the facility operator but should have intimate knowledge of storm water management activities at the facility.

If you are making your SWPPP publicly available on a website, provide the appropriate Internet URL address.

Billing Contact Information

Provide the name of the contact person and the legal name of the firm, public organization, or any other public entity that is responsible for accounts payable for this facility.

Provide the billing contact's mailing address, telephone number, fax number (optional), and email address. Correspondence for billing purposes will be sent to this address. If the billing contact address is the same as the operator, check the box and continue to Section III Facility Information. See 18 AAC 72.956 for applicable authorization fee to be paid with the submittal of the NOI.

Certification Information

The NOIs, must be signed as follows:

(1) For a corporation, a responsible corporate officer shall sign the NOI, a responsible corporate officer means:

  (A) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or

  (B) the manager of one or more manufacturing, production, or operating facilities, if

    (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;

    (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and

    (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship, the general partner or the proprietor, respectively; or

(3) for a municipality, state, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means

  (A) the chief executive officer of the agency; or

  (B) a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

Include the name, title, organization, and email address of the person signing the form and the date of signing. An unsigned or undated NOI form will not be considered valid application for permit coverage.

If the NOI was prepared by someone other than the certifier (for example, if the NOI was prepared by the facility SWPPP contact or a consultant for the certifier's signature), include the name, organization, telephone number, and email address of the NOI preparer.

Where to File the NOI Form

DEC encourages you to complete the NOI form and SWPPP electronically via the Internet. DEC's Online Application System (OASys) can be found at http://dec.alaska.gov/water/oasys.aspx. Filing electronically is the fastest way to obtain permit coverage and help ensure that your NOI is complete. If you choose not to file electronically, you must send the NOI to the address listed below.

If you file by mail, remember to retain a copy for your records.

NOIs sent by mail:

Alaska Dept. of Environmental Conservation
Wastewater Discharge Authorization Program
Storm Water NOI
555 Cordova Street
Anchorage, AK 99501
Phone: (907) 269-6285
dec.water.wqpermit@alaska.gov

Your SWPPP needs to be submitted with the NOI as required in Part 5 of the MSGP. You must keep a copy of your SWPPP on-site or otherwise make it available to facility personnel responsible for implementing provisions of the permit.

Alaska Department of Environmental Conservation

Division of Water, Compliance and Enforcement Program

555 Cordova Street, Anchorage, AK 99501

Toll Free: 1-877-569-4114 Anchorage/International: 907-269-4114 Fax: 907-269-4604 E-mail: dec-wqreporting@alaska.gov

DELEGATION OF SIGNATORY AUTHORITY

for APDES Permit Applications and Reports

Select the delegation below (A) or (B) that applies and enter name(s) of duly authorized representative(s).

☑ **Delegated Authority – 18 AAC 83.385(b)(2)(A)** In accordance with 18 AAC 83.385, I certify that the following individual(s) has responsibility for the overall operation of the regulated facility or activity and authorize him/her to act as signatory official for purposes of signing Alaska Pollutant Discharge Elimination System (APDES) permits and reports.

Or

☐ **Delegated Authority – 18 AAC 83.385(b)(2)(B)** In accordance with 18 AAC 83.385, I certify that the following individual(s) has overall responsibility for the company and authorize him/her to act as signatory official for purposes of signing Alaska Pollutant Discharge Elimination System (APDES) permits and reports.

Duly Authorized Representative(s):

Name	Title	Phone	Email
Michael Eich	Material Sources Manager	907.586.0874	michael.eich@juneau.org

Delegator/Certifying Official:

An Alaska Pollutant Discharge Elimination System (APDES) permit application or report must be signed by an individual with the appropriate authority per 18 AAC 83.385. For additional information, please refer to 18 AAC 83.385 at the following link: http://www.legis.state.ak.us/basis/aac.asp#18.83.385.

Corporate Executive Officer 18 AAC 83.385(a)(1)(A)	For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation.
Corporate Operations Manager 18 AAC 83.385 (a)(1)(B)	For a corporation, the manager of one or more manufacturing, production, or operating facilities, if (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations; (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
Sole Proprietor or General Partner 18 AAC 83.385 (a)(2)	For a partnership or sole proprietorship, the general partner or the proprietor respectively.
Public Agency, Chief Executive Officer 18 AAC 83.385 (a)(3)(A)	For a municipality, state, or other public agency, the chief executive officer of the agency.
Public Agency, Senior Executive Officer 18 AAC 83.385 (a)(3)(A)	For a municipality, state, or other public agency, a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Organization:	Name:	Title:
City and Borough of Juneau	Katie Koester	Director of Engineering & Public Works

Phone:	Fax (optional)	Email:
907.586.0800		katie.koester@juneau.org

Mailing Address: Street (PO Box):	City:	State:	Zip:
155 South Seward Street	Juneau	AK	99801

Katie Koester
Signature / Delegator-Certifying Official

5.18.20
Date

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Environmental Conservation
DIVISION OF WATER
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, Alaska 99501-2617
Main: 907.269.6285
Fax: 907.334.2415
www.alaska.gov/dec/water/wastewater/

May 22, 2020

File Number: 1513.44.020

City and Borough of Juneau
Attn: Katie Koester
155 South Seward Street
Juneau, AK, 99801

Re: MSGP Authorization Stabler Point Rock Quarry – AKR06AC70

Dear Ms. Koester:

The Alaska Department of Environmental Conservation (DEC) has completed its review of your Notice of Intent (NOI) requesting coverage for the Stabler Point Rock Quarry under the 2020 Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activities (MSGP). DEC has determined that storm water discharges are appropriately covered by the MSGP, **Sector J - Non-Metallic Mineral Mining and Dressing** and is hereby issuing wastewater discharge authorization **AKR06AC70**. Discharges from the facility are authorized under the MSGP effective as of the date of this letter and expires March 31, 2025. Attached is your authorization to discharge.

The permittee is reminded Sector **J** requires quarterly benchmark monitoring and annual effluent limitation monitoring as detailed in MSGP Part 7.0 (Monitoring) and Part 11 (Sector Specific Requirements). Benchmark monitoring and effluent limit monitoring must be conducted in accordance with MSGP Part 7.1 (Monitoring Procedures) and reported to DEC as required in MSGP Part 9.1 (Reporting Monitoring Data to DEC).

The permittee must submit DMR data electronically through NetDMR per Phase I of the E-Reporting Rule (40 CFR 127) upon the effective date of the Permit. Authorized persons may access permit information by logging into NetDMR Portal (https://cdxnodengn.epa.gov/oeca-netdmr-web/action/login).

DMRs submitted in compliance with the E-Reporting Rule are not required to be submitted as described in Appendix A – Standard Conditions unless requested or approved by the Department. Any DMR data required by the Permit that cannot be reported in a NetDMR field shall be included as an attachment to the NetDMR submittal.

DEC has established an e-Reporting Information website at http://dec.alaska.gov/water/compliance/electronic-reporting-rule that contains general information about this new reporting format. Training materials and webinars for NetDMR can be found at http://netdmr.zendesk.com/home.

An electronic copy of the Permit and additional guidance materials can be viewed and downloaded at http://dec.alaska.gov/water/wastewater/stormwater/multisector/.

Please reference your permit number (AKR06AC70) in all future correspondence. Prior to discharge, please review your authorization and general permit AKR060000 to ensure that you understand the requirements contained within them. Should you have questions regarding this authorization or general permit, please contact the appropriate DEC staff contact located in Section 7 of this authorization.

Sincerely,

James Rypkema
Program Manager, Storm Water and Wetlands
Wastewater Discharge Authorization Program

Enclosure: Authorization to Discharge

Alaska Department of Environmental Conservation
Division of Water
Authorization to Discharge

AUTHORIZATION TO DISCHARGE UNDER THE ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM (APDES) UNDER THE

MULTI-SECTOR GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY (MSGP)

AUTHORIZATION NUMBER: AKR06AC70

The following facility is authorized to discharge in accordance with the terms of the State of Alaska APDES General Permit AKR060000 and any site specific requirements listed in this authorization.

The authorization effective date is 5/22/2020.

The authorization to discharge shall expire at midnight, **March 31, 2025.**

SECTION 1 - Responsible Party/Operator

Issued to: City and Borough of Juneau, Attn: Katie Koester

SECTION 2 - Facility Information

Facility Name: Stabler Point Rock Quarry
Facility Physical Location / Description: Mile 13 Veteran's Memorial Highway, Juneau, AK, 99801

Primary SIC or Activity Code: 1422-1429

Sector(s): **Sector J - Non-Metallic Mineral Mining and Dressing**
Subsector(s): **J2**

SECTION 3 - Discharge Information

Outfall	Latitude	Longitude	Receiving Water
Outfall 001	58.3832	-134.6681	Auke Nu Creek
Outfall 002	58.3841	-134.6696	Auke Nu Creek

SECTION 4 - Monitoring Requirements

Sector-Specific Monitoring: Note the following requirements are associated with your authorization:

☒ Quarterly Benchmark Monitoring
☒ Annual Effluent Limitation Monitoring

For further details and sector specific requirements, see: Permit Part 7 (Monitoring) and Permit Part 11 – (Sector Specific Requirements).

Benchmark and Annual Effluent Limitation Monitoring is summarized as follows:

Table 11.J.8-1: Sector – Specific Benchmarks – Sector J

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector J2. Dimension and Crushed Stone and Nonmetallic Minerals (except fuels) (SIC 1411, 1422-1429, 1481, 1499)	Total Suspended Solids (TSS)	100 mg/L

Table 11.J.9-1: Effluent Limitations Based on Effluent Limitations Guidelines

Industrial Activity	Parameter	Effluent Limit[1]
Mine dewatering discharges at crushed stone mining facilities (SIC 1422 - 1429)	pH	6.5 – 8.5[2]

Note:
1. Monitor annually.
2. pH shall be within the limits specified above.

SECTION 5 - Electronic Reporting (E-Reporting) Rule for Discharge Monitoring Reports (DMR)

The permittee must submit DMR data electronically through NetDMR per Phase I of the E-Reporting Rule (40 CFR 127) upon the effective date of the Permit. Authorized persons may access permit information by logging into NetDMR Portal (cdxnodengn.epa.gov/oeca-netdmr-web/action/login).

DMRs submitted in compliance with the E-Reporting Rule are not required to be submitted as described in Appendix A – Standard Conditions unless requested or approved by the Department. Any DMR data required by the Permit that cannot be reported in a NetDMR field shall be included as an attachment to the NetDMR submittal.

DEC has established an e-Reporting Information website at dec.alaska.gov/water/compliance/electronic-reporting-rule that contains general information about this new reporting format. Training materials and webinars for NetDMR can be found at netdmr.zendesk.com/home.

SECTION 6 - Annual Reporting

By February 15th of the year following the reporting year, DEC requires the permittee to submit the Annual Report as provided in Appendix F. The permittee must submit the Annual Report to the Compliance and Enforcement Program address identified in Appendix A, Part 1.1.2 (dec-wqreporting@alaska.gov) or via the DEC Online Application System (OASys) located at www.dec.alaska.gov/water/oasys/index.html. See Permit Part 9.2 for further details.

SECTION 7 - DEC Staff Contact

Permit: If you have any technical questions regarding this authorization or the requirements of the general permit, please contact William Ashton at William.Ashton@alaska.gov or 907-269-6283 or 907-269-6285.

NetDMR: If you have questions regarding NetDMR, please contact Amber Bennett at Amber.Bennett@alaska.gov or 907-451-2130.

Compliance: If you have questions regarding compliance with any permit or authorization requirement, please contact the compliance program office in:
Anchorage 907-269-7550, Fairbanks: 907-451-2298, or Juneau: 907-465-5367.

A permittee shall orally report any noncompliance event that may endanger health or the environment within 24 hours after the permittee becomes aware of the circumstances and in writing within five days after the permittee becomes aware of the circumstances. Please use the phone numbers and addresses below to report noncompliance events. Additional information regarding twenty-four hour reporting may be found in Appendix A of General Permit AKR06000. The required written follow-up notification can be sent via fax, email, or U.S. Postal Service.

Alaska Department of Environmental Conservation
Attn: Compliance and Enforcement Program
555 Cordova Street
Anchorage, Alaska 99501

Toll Free Nationwide: 1-800-569-4114
Anchorage or International: 1-907-269-4114
Fax: 1-907-269-4604
Email: dec-wqreporting@alaska.gov

SECTION 8 - Certification / Signature

Signature	May 22, 2020 (Date)
James Rypkema (Printed Name)	Section Manager Storm Water & Wetlands (Title)

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Environmental Conservation
DIVISION OF WATER
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, Alaska 99501-2617
Main: 907.269.6285
Fax: 907.334.2415
www.alaska.gov/dec/water/wastewater/

June 8, 2020

File Number: 1513.44.020

City and Borough of Juneau
Attn: Katie Koester
155 South Seward Street
Juneau, AK, 99801

Re: MSGP Authorization Stabler Point Rock Quarry – AKR06AC70 - Revised

Dear Ms. Koester:

The Alaska Department of Environmental Conservation (DEC) has completed its review of your Notice of Intent (NOI) requesting coverage for the Stabler Point Rock Quarry under the 2020 Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activities (MSGP). DEC has determined that storm water discharges are appropriately covered by the MSGP, **Sector J - Non-Metallic Mineral Mining and Dressing** and is hereby issuing wastewater discharge authorization **AKR06AC70**. Discharges from the facility are authorized under the MSGP effective as of the date of this letter and expires March 31, 2025. Attached is your authorization to discharge.

The permittee is reminded Sector **J** requires quarterly benchmark monitoring as detailed in MSGP Part 7.0 (Monitoring) and Part 11 (Sector Specific Requirements). Benchmark monitoring must be conducted in accordance with MSGP Part 7.1 (Monitoring Procedures) and reported to DEC as required in MSGP Part 9.1 (Reporting Monitoring Data to DEC). The Authorization to Discharge was revised to delete the effluent limitation monitoring requirement. Please replace the previous authorization with the revised one.

The permittee must submit DMR data electronically through NetDMR per Phase I of the E-Reporting Rule (40 CFR 127) upon the effective date of the Permit. Authorized persons may access permit information by logging into NetDMR Portal (https://cdxnodengn.epa.gov/oeca-netdmr-web/action/login).

DMRs submitted in compliance with the E-Reporting Rule are not required to be submitted as described in Appendix A – Standard Conditions unless requested or approved by the Department. Any DMR data required by the Permit that cannot be reported in a NetDMR field shall be included as an attachment to the NetDMR submittal.

DEC has established an e-Reporting Information website at http://dec.alaska.gov/water/compliance/electronic-reporting-rule that contains general information about this new reporting format. Training materials and webinars for NetDMR can be found at http://netdmr.zendesk.com/home.

An electronic copy of the Permit and additional guidance materials can be viewed and downloaded at http://dec.alaska.gov/water/wastewater/stormwater/multisector/.

Please reference your permit number (AKR06AC70) in all future correspondence. Prior to discharge, please review your authorization and general permit AKR060000 to ensure that you understand the requirements contained within them. Should you have questions regarding this authorization or general permit, please contact the appropriate DEC staff contact located in Section 7 of this authorization.

Sincerely,

William Ashton for

James Rypkema
Program Manager, Storm Water and Wetlands
Wastewater Discharge Authorization Program

Enclosure: Authorization to Discharge

Alaska Department of Environmental Conservation
Division of Water
Authorization to Discharge

AUTHORIZATION TO DISCHARGE UNDER THE ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM (APDES) UNDER THE

MULTI-SECTOR GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY (MSGP)

AUTHORIZATION NUMBER: AKR06AC70

The following facility is authorized to discharge in accordance with the terms of the State of Alaska APDES General Permit AKR060000 and any site specific requirements listed in this authorization.

The authorization effective date is 6/8/2020 – revised.

The authorization to discharge shall expire at midnight, **March 31, 2025.**

SECTION 1 - Responsible Party/Operator

Issued to: City and Borough of Juneau, Attn: Katie Koester

SECTION 2 - Facility Information

Facility Name: Stabler Point Rock Quarry
Facility Physical Location / Description: Mile 13 Veteran's Memorial Highway, Juneau, AK, 99801

Primary SIC or Activity Code: 1422-1429

Sector(s): **Sector J - Non-Metallic Mineral Mining and Dressing**
Subsector(s): **J2**

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☒ Quarterly Benchmark Monitoring

For further details and sector specific requirements, see: Permit Part 7 (Monitoring) and Permit Part 11 – (Sector Specific Requirements).

Benchmark Monitoring is summarized as follows:

Table 11.J.8-1: Sector – Specific Benchmarks – Sector J

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector J2. Dimension and Crushed Stone and Nonmetallic Minerals (except fuels) (SIC 1411, 1422-1429, 1481, 1499)	Total Suspended Solids (TSS)	100 mg/L

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The permittee must submit DMR data electronically through NetDMR per Phase I of the E-Reporting Rule (40 CFR 127) upon the effective date of the Permit. Authorized persons may access permit information by logging into NetDMR Portal (cdxnodengn.epa.gov/oeca-netdmr-web/action/login).

DMRs submitted in compliance with the E-Reporting Rule are not required to be submitted as described in Appendix A – Standard Conditions unless requested or approved by the Department. Any DMR data required by the Permit that cannot be reported in a NetDMR field shall be included as an attachment to the NetDMR submittal.

DEC has established an e-Reporting Information website at dec.alaska.gov/water/compliance/electronic-reporting-rule that contains general information about this new reporting format. Training materials and webinars for NetDMR can be found at netdmr.zendesk.com/home.

SECTION 6 - Annual Reporting

By February 15th of the year following the reporting year, DEC requires the permittee to submit the Annual Report as provided in Appendix F. The permittee must submit the Annual Report to the Compliance and Enforcement Program address identified in Appendix A, Part 1.1.2 (dec-wqreporting@alaska.gov) or via the DEC Online Application System (OASys) located at www.dec.alaska.gov/water/oasys/index.html. See Permit Part 9.2 for further details.

SECTION 7 - DEC Staff Contact

Permit: If you have any technical questions regarding this authorization or the requirements of the general permit, please contact William Ashton at William.Ashton@alaska.gov or 907-269-6283 or 907-269-6285.

NetDMR: If you have questions regarding NetDMR, please contact Amber Bennett at Amber.Bennett@alaska.gov or 907-451-2130.

Compliance: If you have questions regarding compliance with any permit or authorization requirement, please contact the compliance program office in:
Anchorage 907-269-7550, Fairbanks: 907-451-2298, or Juneau: 907-465-5367.

A permittee shall orally report any noncompliance event that may endanger health or the environment within 24 hours after the permittee becomes aware of the circumstances and in writing within five days after the permittee becomes aware of the circumstances. Please use the phone numbers and addresses below to report noncompliance events. Additional information regarding twenty-four hour reporting may be found in Appendix A of General Permit AKR06000. The required written follow-up notification can be sent via fax, email, or U.S. Postal Service.

Alaska Department of Environmental Conservation
Attn: Compliance and Enforcement Program
555 Cordova Street
Anchorage, Alaska 99501

Toll Free Nationwide: 1-800-569-4114
Anchorage or International: 1-907-269-4114
Fax: 1-907-269-4604
Email: dec-wqreporting@alaska.gov

SECTION 8 - Certification / Signature

William Ashton for

Signature

June 8, 2020

Date

James Rypkema

Printed Name

Section Manager Storm Water & Wetlands

Title

Community Development

City & Borough of Juneau • Community Development
155 S. Seward Street • Juneau, AK 99801
(907) 586-0715 Phone • (907) 586-4529 Fax

PLANNING COMMISSION
NOTICE OF DECISION
Date: August 24, 2016
File No.: SGE2016 0001

City & Borough of Juneau
Lands Division
155 S. Seward Street
Juneau, AK 99801

Proposal:	A Conditional Use Permit for an extension to year 2026 and expansion of blast size and area of rock quarry operations for Stabler Point Quarry.
Property Address:	13010 Glacier Highway
Legal Description:	USS 3810 LT 1 FR
Parcel Code No.:	4-B30-0-102-002-0
Hearing Date:	August 23, 2016

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated August 11, 2016, and approved the Conditional Use Permit for Stabler Point Quarry to be conducted as described in the project description and project drawings submitted with the application and with the following conditions. The Commission modified conditions 2, 21, and 26 – 28 as described below.

1. All vehicle loads shall be contained. Vehicles hauling from the site shall be operated with tailgates, covers or other similarly effective methods. The use of exhaust brakes on trucks entering or leaving the quarry shall not be used, unless required for safety reasons.

2. Public notification warning signs shall be erected a minimum of 24 hours prior to blasting. Written notification shall be given to Juneau Flight Services, Juneau Police Department and Capital City Fire / Rescue a minimum of 24 hours prior to blasting. The applicant shall issue email notification 24 hours prior to blasting to all those who request it.

3. The hours, days and dates of operation shall be 8am – 4:30pm, Monday through Friday, all year except State holidays.

4. Blasting operation shall be scheduled to occur between 10am-12pm and 1pm-3pm, Monday through Friday.

5. This quarry permit shall expire 10-years after the date of approval.

6. Each quarry operator shall submit an individual mining plan that is in conformance with this Conditional Use permit and is approved by the quarry manager prior to performing any work in the quarry. Each mining plan shall be prepared by a civil engineer or other authorized professional.

7. The operator is required to comply with the requirements of CBJ Standard Specifications 02090 Blasting Controls. A quarry operator shall submit a blast plan, reviewed by an independent blast consultant, to the CBJ Engineering Department/Quarry Manager for approval prior to each blast.

8. Quarry operators shall comply with the existing ADOT/PF approved Stabler Traffic Control Plan(s) for blasting operations, quarry access, and work within the ADOT/PF ROW.

9. Explosives shall not be stored on site, except for that which is immediately necessary for the next blast.

10. The applicant shall comply with ADEC regulations governing stormwater discharges from the quarry site, with particular attention paid to protecting Auke Nu Creek.

11. The applicant shall (or shall cause to) reclaim the quarry site with finished faces and established benches, and remove loose rock during the period between projects, even if the entire quantity of rock has not been removed.

12. The applicant shall (or cause to) control dust caused by excavation, truck hauling, rock crushing, or other aspects of the operation.

13. The applicant shall (or cause to) repair any damage to Glacier Highway as a result of the quarry operation. If there is visible damage to the roadway due to hauling or mining operations, the roadway shall be repaired in cooperation with ADOT/PF.

14. The applicant shall require the posting of a bond (or equivalent if project based) from all quarry operators to ensure spilled or tracked material are removed from public roads. The applicant shall (or cause to) remove all spilled materials immediately from public roadway and ensure that mud and debris tracked onto roads be cleaned daily with the City having the ability to allow less frequency on a case by case basis as warranted. ADOT/PF reserves the right to request sweeping at any time it sees a problem or complaint.

15. The applicant shall ensure that lighting (if any) does not glare onto adjacent roadways.

16. The applicant shall (or cause to) operate the quarry according to the application proposal, including attachments and drawings, except that all conditions contained herein shall take precedence.

17. The applicant shall ensure that the rock extraction is consistent with the recommendations of the US Fish & Wildlife Service for the protection of nesting eagles according to the past approved variances (VAR96-52, VAR2000-37, VAR2001-17, & VAR2008-6).

18. The applicant shall maintain a lockable security gate at the quarry entrance.

19. The applicant shall (or cause to) retain a natural buffer at the western end of the quarry similar to that at the eastern end for a visual and noise barrier. This buffer may be pierced to create the new western entrance roadway (Attachment A). Additionally, and when feasible, the buffer shall be retained during all quarry operations throughout the site for noise and visual buffering.

20. Prior to extracting the southwestern cliff face of the quarry, a qualified expert in geophysical hazard shall evaluate the site and recommend guidelines for its development. Further, these guidelines shall be made part of any approved mining plans for these areas and written notification given to all operators.

21. The noise levels (excluding blasting) as measured at the nearest property lines shall not exceed 65 dBA.

22. Rock crushers shall be operated on the lower quarry levels. Stockpiles shall be located in a way to provide additional noise screening barriers whenever possible.

23. The applicant shall have all operators of the quarry conduct their activities in accordance with all requirements of the noise management plan, blasting and noise controls, and temporary environmental controls.

24. The site clearing shall be consistent with needs to retain sound and visual barriers for the quarry operation. Prior to removal of substantial vegetation, the clearing limits shall be flagged and reviewed for approval by the Community Development Department.

25. Individual blasts shall be limited to a maximum of 25,000 cubic yards.

26. The pull out area adjacent to the quarry entrance drive near Glacier Highway is to be used for equipment transfer only. There shall not be temporary or long term parking on the pull out area. Transfer operations shall occur outside of the roadway clear zone. Access into the pull out area shall be limited to right in and right out turns.

27. A strip of land at the existing topographic level not less than 15 feet in width shall be retained at the periphery of the site wherever the site abuts a public way. This periphery strip shall not be altered except as authorized for access points. This section does not alter the applicant's duty to maintain subjacent support.

28. If the bank of any extraction area within the permit area is above the high water line or water table, it shall be left upon termination of associated extraction operations with a slope no greater than the angle of repose for unconsolidated material of the kind

composing it, or such other angle as the Commission may prescribe. If extraction operations cause ponding or retained water in the excavated area, the slope of the submerged working face shall not exceed a slope of 3:1 from the edge of the usual water line to a water depth of seven feet. This slope ratio may not be exceeded during extraction operations unless casual or easy access to the site is prevented by a fence, natural barriers, or both.

Attachments: August 11, 2016, memorandum from Jonathan Lange, Community Development, to the CBJ Planning Commission regarding SGE2016 0001.

This Notice of Decision does not authorize construction activity. Prior to starting any project, it is the applicant's responsibility to obtain the required building permits.

This Notice of Decision constitutes a final decision of the CBJ Planning Commission. Appeals must be brought to the CBJ Assembly in accordance with CBJ §01.50.030. Appeals must be filed by 4:30 P.M. on the day twenty days from the date the decision is filed with the City Clerk, pursuant to CBJ §01.50.030 (c). Any action by the applicant in reliance on the decision of the Planning Commission shall be at the risk that the decision may be reversed on appeal (CBJ §49.20.120).

Effective Date: The permit is effective upon approval by the Commission, August 23, 2016.

Expiration Date: The permit will expire 18 months after the effective date, or February 23, 2018, if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the development permit was authorized. Application for permit extension must be submitted thirty days prior to the expiration date.

Project Planner:

Jonathan Lange, Planner Community Development Department

Ben Haight, Chair
Planning Commission

Filed With City Clerk

8/30/16
Date

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ-adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center (800) 949-4232, or fax (360) 438-3208.

Community Development

City & Borough of Juneau • Community Development
155 S. Seward Street • Juneau, AK 99801
(907) 586-0715 Phone • (907) 586-4529 Fax

DATE: August 11, 2016

TO: Planning Commission

FROM: Jonathan Lange, Planner
Community Development Department

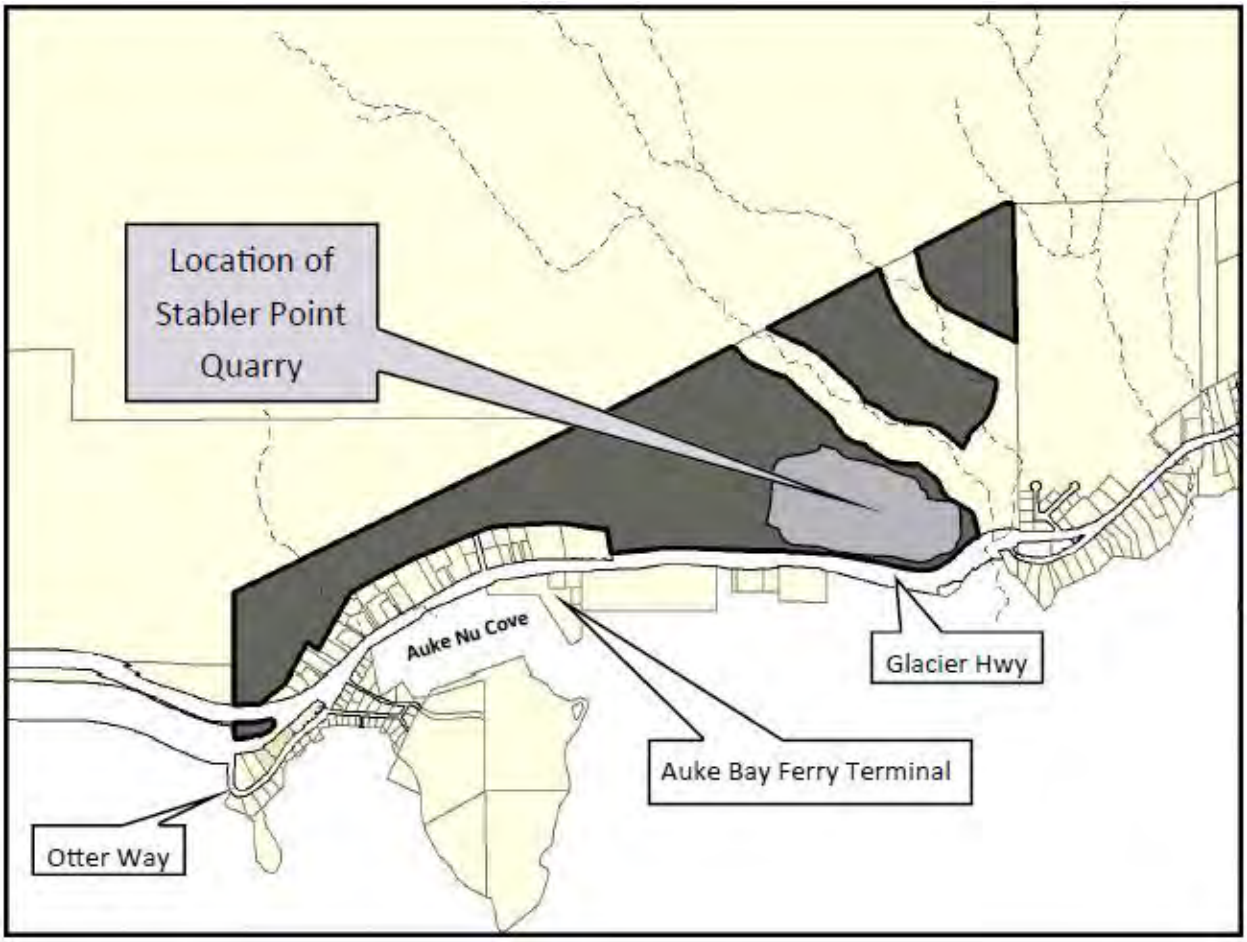
FILE NO.: SGE2016 0001

PROPOSAL: A Conditional Use Permit for an extension to year 2026 and expansion of blast size and area of rock quarry operations for Stabler Point Quarry.

GENERAL INFORMATION

Applicant:	City & Borough of Juneau, Lands Division
Property Owner:	City & Borough of Juneau, Lands Division
Property Address:	13010 Glacier Highway
Legal Description:	USS 3810 Lot 1 FR
Parcel Code Number:	4-B30-0-102-002-0
Site Size:	(Parcel size: 13,503,600 Square Feet or 310 Acres) Quarry size: 16 Acres
Zoning:	RR – Rural Reserve
Utilities:	Public Sewer and Water
Access:	Glacier Highway
Existing Land Use:	Rock Quarry
Surrounding Land Use:	North – RR, Vacant and Auke Nu Creek South – D-3, Single-Family Residence; WI, Auke Bay Ferry Terminal East – D-1 (T) D-3, Single-Family Residences West – RR, Vacant; D-3, Single-Family Residences

VICINITY MAP



ATTACHMENTS

Attachment A – Application and Narrative
- Attachment A 1 – Site Map
- Attachment A 2 – Photo of Site
- Attachment A 3 – 3D View of Intermediate Contours
- Attachment A 4 – Proposed Expanded Quarry Limits Plan
- Attachment A 5 – Possible Initial Development for Expanded Stabler Quarry
- Attachment A 6 – USE2011 0017 Notice of Decision
- Attachment A 7 – Vibration Monitoring Summary Report
- Attachment A 8 – Stabler Quarry Noise Study 2011

Attachment B – Public Notices and Neighborhood Meeting Handouts and Sign-in Sheet
Attachment C – Agency Comments
Attachment D – Public Comments

PROJECT DESCRIPTION

The applicant, City and Borough of Juneau (CBJ), Lands Division (Lands), requests a Conditional Use Permit for Stabler Point Quarry to expand the area of rock quarry operations, to extend the operational life to the year 2026, and to increase the maximum blast size to 25,000 cubic yards. Please see the attached applicant's narrative (Attachment A) and below, in Analysis, for further description of the Conditional Use Permit request.

Stabler Point Rock Quarry's current Conditional Use Permit allows for operations until the year 2021; but, because the applicant is requesting to expand the area of operations and increase the blast size, they are requesting to extend the operational life, to 2026, at the same time.

BACKGROUND

Stabler Point Quarry is located on Glacier Highway, west of Auke Bay, and just east of the Auke Bay ferry terminal. The quarry has been in operation since 2001. In 2011 the rock quarry operations Conditional Use Permit was renewed to allow for ten more years of operation. Currently the hours of operation are 8am – 4:30pm, Monday through Friday. Blasting is allowed from 10am - 12pm and 1pm – 3pm, Monday through Friday. These hours are proposed to stay the same.

The CBJ owns and manages the rock quarry, while private contractors conduct mining activities within the quarry. Recently, extraction has increased due to large projects within the Borough. The current quarry pit has expanded to its permitted perimeter and further extraction would require either lateral expansion, as requested in this application, or for the pit to be excavated deeper. A deeper pit would reduce the available space for extraction, processing and hauling activities. Thus, the applicant is asking to expand the area of rock quarry operations laterally away from Glacier Highway (see Attachment A 1).

The Alaska Department of Transportation and Public Facilities (DOT&PF) considers the existing curve of Glacier Highway at Stabler Point as dangerous because of the sharpness of the curve. At the end of the life of the quarry the DOT&PF want to straighten out the alignment of Glacier Highway at Stabler Point and establish a new road that would run from the existing entrance of the quarry on a straight line through the hill side to the west and then to continue on Glacier Highway.

NEIGHBORHOOD MEETING

CBJ Community Development (CDD), Engineering, and Lands Division staff held a neighborhood meeting at the University of Alaska Southeast on July 21, 2016 to discuss the proposed changes to the Stabler Point Quarry Conditional Use Permit. Three members of the public were in attendance. CDD staff gave an overview of the Conditional Use Permit process, and Engineering and Lands

Division gave background and information about the proposed expansion to the quarry operations. One member of the public requested more exact times of when blasting will occur.

AGENCY COMMENT

The CBJ Building, General Engineering, Fire, and Police Departments did not have any issues or comments with the proposal.

DOT&PF Southcoast Region offered the following comments on this proposal:

"Traffic and Safety has no comment or objection provided current traffic control provisions are kept in place.

"Right of Way and Utilities - Would like to see all the trees on the remaining slope above the highway high stumped. Leaving high stumps would slow escaping rock from rolling down slope too fast. Removing the tall trees will keep trees from damaging the utilities on the pole line across from the pit. When alders are high stumped they still grow and get more like a hedge shrub. That too would slow escaping rock."

The applicants responded to DOT&PF's comments (see Attachment C) and stated that their concern is possibly for the area that was previously mined near Glacier Highway. Engineering stated that "At this time the area is relatively clean and stable", and that this concern would be more of an issue when they "start lowering the top of the cliff prior to mine closure."

PUBLIC COMMENT

Staff received the following comments and questions from the public at the time of preparation of the staff report. Public Comments are Attachment D to the staff report.

Rich Brenner of 13650 Glacier Highway submitted, via email, questions to staff. His main concerns were of noise, especially in relation to hours of operation, and the location of the proposed expansion for the quarry operations. Quarry operation times are not proposed to change. The extent of the proposed lateral expansion of quarry operations will be approximately a half mile from Mr. Brenner's property (see Attachment D for comments and staff's response).

Staff received an email and phone call from Vivian Hegg of 2950 Fritz Cove Road. Ms. Hegg's concerns are the visual and noise impacts of quarry operations. She also was wondering if the operation hours were proposed to change. Ms. Hegg asked staff to explain the size of expansion and the long term plan for realignment of Glacier Highway.

Karol Kriens of 12175 Glacier Highway, Unit A403 of Spaulding Beach Condos, provided written comments about the proposal. Ms. Kriens is concerned about: rocks that may fall from trucks onto

Glacier Highway; the speed of the trucks traveling along Glacier Highway; the effects of blasts to wildlife; and ensuring conditions of approval are followed.

Staff communicated with Suzanne Dvorak by telephone and via email. Ms. Dvorak and Mr. Robert L. Eastaugh own a home at 12555 Auke Nu Drive. They currently live in Anchorage, Alaska, and rent their home on Auke Nu Drive. In their written comments, Ms. Dvorak and Mr. Eastaugh provided five suggested requirements that they state would be "critical" to their willingness to accept the proposal. The requirements are as follows:

> "(1) The permit requires that vibration and blast effects observed and reported to date not be exceeded;
> (2) The permit requires adoption and implementation of recommendations contained in the ASE Blast Monitoring Report of December 31, 2015 (pages 8-11);
> (3) The permit includes a requirement identical to paragraph 7 of the Commission's 2011 Decision, which required that the quarry operator "submit a blast plan, reviewed by an independent blast consultant, to the CBJ Engineering Department/Quarry Manager for approval prior to each blast.";
> (4) The permit allows shot frequency not exceeding that experienced in 2015; and
> (5) The permit requires a "stepped" increase to the maximum proposed; i.e., require a 15,000 cubic yard blast to determine effects (conducted under similar conditions for any 25,000 cubic yard shots) before allowing shots at the requested 25,000 cubic yard level."

Staff finds that Ms. Dvorak's and Mr. Eastaugh's suggested requirements 1-4 are meet by the proposed conditions of approval. The applicant has shown in their Vibration Monitoring Summary Report (Attachment A 7) that controlled blasts up to 15,000 and 23,000 cubic yards of material are recorded to be far below the required limits of peak particle velocity allowed, as explained further in the below analysis, section 7(L).

Staff received a letter from Alison Browne. Ms. Browne owns an undeveloped lot at 12545 Auke Nu Drive. Her concerns are with the expansion of the blast size and how it might negatively impact her lot and any future structures she would like to place on her lot.

ANALYSIS

This permit has been reviewed and processed according to CBJ Land Use Code Title 49.65.210(a) Extraction permit.

49.65.200 Extraction permit required.

> (a) The use of property for the excavation, removal or other extraction of stone, sand, gravel, clay or other natural deposits and formations, including the processing of the materials, may be authorized in any district only under a conditional use permit issued by

> the Commission under the procedures set forth in chapter 49.15, article III, as modified by this article. (Emphasis Added)

49.65.210 Contents of application.

> Each person who requires a permit under this article [Article II Sand & Gravel] shall file an application with the department. The application shall contain a plan for the excavation operation, storage, on-site processing if permitted in the district, and site restoration. The plan shall include (see items 1-7 below):

The applicant has provided a detailed application and narrative responding to the following criteria listed in "Contents of application 1-7" below; see Attachment A.

(1) A graphic and legal description of the property;

Attachment A 1 shows an aerial photo of the subject parcels location. The Stabler Point rock quarry is located in U.S. Survey 3810, Lot 1 in the Auke Bay area at approximately 13 mile, Glacier Highway. The lot is zoned Rural Reserve and is 310 acres in size. The quarry is currently 16 acres in size; 24 additional acres are proposed for rock quarry operations.

(2) A topographic map showing the existing topography, vegetation, drainage features, ground water level, structures, significant natural and artificial conditions of the land, on-site and off- site geophysical hazards which may affect or be affected by the proposed operation, proposed structures, roads, stockpiling and operation;

Site topography is shown in Attachment A 1. Attachment A 2 is a photo of the quarry. Attachment A 3 shows a 3D rendering of the site contours. Existing topography is described in the applicant's narrative. The main floor of the quarry is at approximately 140 feet elevation; around 90 feet above Glacier Highway. Drainage will continue to settle in the existing areas and will drain toward Glacier Highway. A description of the drainage plan will be discussed further in this analysis under 7 (A).

(3) A topographic map and a typical cross section showing the proposed finished contour on the land, vegetation, drainage features, limits of overburden clearing, structures, and significant natural and artificial conditions of the property which will exist upon completion of the site restoration plan;

Proposed finished contours of the expansion of quarry operation area is included in the applicant's narrative and Attachment A 3.

(4) Topographic mapping required in subsections (2) and (3) of this section for areas having a slope of less than five percent shall show spot elevations at all breaks in grade, drainage

channels or swales and at selected points not more than 100 feet apart in all directions. For areas having a slope of greater than five percent, contours shall be shown at an interval of not more than five feet where the ground slope is regular: however, contour intervals of not more than two feet may be required where necessary to adequately show irregular land features or drainage details;

As mentioned in the applicant's narrative the walls of the quarry will be benched down toward the floor of the quarry at a series of benches 20 feet wide horizontally with 30 foot tall vertical walls between benches.

(5) The plan shall include a map showing ingress and egress points for trucks and other equipment;

The two existing access roads will continue to be used for ingress and egress to the quarry. The eastern most access road will continue to be used as the main entrance for quarry operations.

(6) The plan shall include a map showing all buildings and structures to be located on the site; and

The truck scale and associated buildings are shown in the aerial photo of Attachment 1 and were installed in the quarry in 2007. A small plastic garden storage shed and a portable restroom are the only other buildings on-site. All buildings are not permanent and will be relocated to lower levels of the quarry floor as the mining progresses downward.

(7) A narrative statement describing the operation, on-site processing, stockpiling, and site restoration shall be included showing:

The applicant describes the operations of the quarry as follows:

- "CBJ owns and manages the quarry, provides infrastructure (roads, truck scale, water), permitting, environmental monitoring and compliance oversight.
- Contractors are required to submit a mining plan for approval prior to mining. The contractor must operate under conditions imposed by the quarry usage plan. The mining plan and usage plan address the contractor's responsibilities while operating in the quarry.
- When space is available, mining areas may be allocated to contractors needing rock for other projects (e.g. State, Federal, and private).
- All actual mining work is done by contractors, not by CBJ.
- CBJ charges the contractor a management fee for each ton of rock mined. The fees are used to pay for CBJ's material sources operational expenses and to fund past and future material source development and reclamation expenses."

(A) A site drainage plan;

Site drainage and stormwater on-site management is regulated by the Alaska Department of Environmental Conservation (ADEC) through their Multi Sector General Permit. This requires the quarry to comply with and follow a Storm Water Pollution Prevention Plan or SWPPP. Most quarry runoff water is collected and settles in a pond located at the east end of the quarry. Here the pond discharges the water into a vegetated buffer zone and finally flows to an existing drainage ditch along Glacier Highway. The quarry also has a culvert that is used as the SWPPP designated stormwater outfall that flows under the access road towards Auke Nu Creek. This culvert is used at times of frozen ground or excessive rainfall.

The applicant's narrative describes that as the quarry expands the surface storm water runoff is expected to increase as well.

(B) A method of securing the area, including installation of gates at access points, posting, and fencing;

Both access roads are equipped with permanent locking gates within 100 feet of Glacier Highway. These gates are locked at the end of daily operations.

(C) Methods to be used to minimize noise pollution and visual blight;

A Noise Study was prepared in 2011 and is included as Attachment A 8 to the application. The study was prepared by Michael Minor and Associates, Inc. and models the existing and future noise impacts of the quarry operations. The study concludes that the current methods of noise mitigation are sufficient to meet code requirements. The mitigation measures are as follows:

- Restrict the use of exhaust brakes on trucks entering or leaving the quarry, unless required for safety reasons.
- A constructed earthen berm at the "open" east end of quarry serves as a noise barrier.
- Maintain a rock wall around south and western perimeter. Height of the wall is generally one bench height (30 ft) or taller above the lower quarry floor levels.
- Minimize the clearing of trees and other vegetation from around the perimeter of the quarry and encourage the regeneration of vegetation in order to diffuse noise and soften sound reflective surfaces.
- Limit crushing activities to the lower quarry levels, locating crushers behind stockpiled material if at all possible.

The applicant states that visual blight is minimized by allowing trees to grow and stay in place as long as possible around the quarry perimeter. These can act as a visual shield between Glacier Highway and the current quarry operations.

(D) The proposed hours and days of operation during the year;

Hours of operation are proposed to stay the same. The current hours of operation are Monday through Friday 8am to 4:30pm, all year except State holidays. Blasting is allowed Monday through Friday 10am - 12pm and 1pm - 3pm.

(E) The estimated amount and general type of material present and to be removed from the site;

Under the current quarry footprint approximately 1.8 million cubic yards of rock is potentially available. With the proposed expansion, the applicant is estimating that 2.3 million cubic yards of rock could potentially be extracted.

Generally the material that is extracted from the quarry is solid rock that requires blasting, crushing, and screening prior to loading and hauling of materials from the site. The applicant's narrative contains figures showing the mining operations foot print of current mining, continued to the elevation of Glacier Highway; and the proposed mining expansion away from Glacier Highway (see Attachment A under 7(E)).

(F) The results of test holes which show the water table level, if any, and the general type and location of materials to be removed;

The applicant states that there is no visible water table in the highway cut face and none has been found in the quarry. The quarry will eventually be mined down to the elevation of Glacier Highway.

(G) The date by which it is anticipated the extraction and processing operation will be completed;

The rate of extraction and the demand for rock from Stabler Point Quarry greatly affects the anticipated completion date of extraction and processing operations at the quarry. The applicant's narrative states that with the expansion of the quarry, rock supply could potentially continue into the foreseeable future.

(H) A schedule for completion of necessary site restoration work;

Site restoration work will follow the restoration plan and will leave clean rock faces interspersed with stable benches at the perimeter of the quarry. The restoration schedule will depend on actual extraction rate but will include grading and sloping of floor areas for proper drainage.

(I) Operating procedures for control of airborne particulates and other pollutant emissions from the site and equipment used at the site that may affect areas beyond the site boundaries;

When dust occurs within the quarry operations from drilling, blasting, and crushing/screening, water will be used by contractors to settle the dust. Drills used in the quarry are required to be

fitted with collection and separation devices. Spray bars are required during crushing and screening of rock. Water trucks are also used to spray down the quarry floor and roads.

(J) The identification of any geophysical hazards which may affect or be affected by the proposed operation. A statement of the possible impact of the hazard on the operation and of the operation on the hazard including methods of reducing the impact shall be included;

Prior to starting quarry operations near the southwest portion of the quarry a geotechnical evaluation of the large cliff face will need to be completed. This area contains several large overhanging sections of cliff, above Glacier Highway, that contain some large boulders.

(K) The date of establishment of the operation and history of adjacent land development; and

The applicant has outlined the date of establishment of the operation and history of adjacent land development in the application narrative under 7 (K), Attachment A.

(L) Such additional relevant information as the Commission or Department may request.

Eagles nests – Adjacent to the quarry are several historically designated eagle nest trees that have consistently had occupied nesting eagles. These eagles have become habituated to the quarry activities and have continued to use the nests in the area year after year.

Variances were received for allowing development within 330 feet of actively nesting eagles.

- VAR20008-00006 – A Variance request for the proposed expansion of the existing Stablers quarry pit within an eagle's nest habitat setback.
- VAR2001-00017 – A Variance to allow excavation of rock within the required 330 foot setback for an eagle nest located on public lands. The proposed Stabler Point rock quarry will be within 330' of eagles nest tress at various stages of operation.
- VAR2000-00037 – A Variance to allow excavation of rock within the required 330 foot setback for an eagle nest located on public lands, and
- VAR-VR96-52) – A Variance to reduce required setback from eagle nest tree.

Maximum Blast Limits – Conditional Use Permit USE2011 0017 Condition 25 limited the maximum blast limit to 6,000 cubic yards (see Attachment A 6). This limit was set by the Planning Commission and was taken from the CBJ Standard Specification for Civil Engineering Projects and Subdivision Improvement Section 02090 – Blasting Controls. The standards set a maximum limit of peak particle velocity at the nearest structure or facility. The blasting at Stabler Point Quarry conforms to the limits in the above mentioned standard. The CBJ Engineering Department has collected blast vibration data in Stabler Point Quarry. All shots ranging from 4,000 cubic yards to 24,000 cubic yards have been well under the peak particle velocity limit (see Attachment A, applicant's narrative).

The applicant has asked for the blast limit to be increased to 25,000 cubic yards. This will allow for fewer shots to be taken, while also staying below the peak particle velocity that is allowed. The applicant has shown vibration data that concludes that the bigger shots are below the allowed limit.

49.65.230 Commission action on Application.

The Commission may grant the permit but shall first consider each of the following areas (as listed below) and may impose restrictions as may be necessary to protect the public health, safety and welfare. Staff indicates that the following areas listed below were addressed in the 2001 and 2011 Conditional Use permits and listed as permit conditions under Attachment A 6. Some of these conditions are still relevant and, where still warranted, staff continues to recommend them as permit conditions for the current permit.

(1) The hours, days, and times of year of operation;

Staff recommends that the hours of operation continue as currently operated: Monday through Friday 8am - 4:30pm, year-round, except for State holidays; and that blasting is allowed Monday through Friday 10am - 12pm and 1pm - 3pm.

(2) Screening, whether natural or artificial, to reduce or eliminate adverse visual, audible or other impacts of the operation;

The applicant has provided a Noise Study (see Attachment A 8) that documents that the measured noise levels of the quarry operations were below the regulation of 65 dBA.

Staff recommends the following Conditions of Approval to mitigate adverse visual, audible or other impacts of the operation:

- The applicant shall (or cause to) retain a natural buffer at the western end of the quarry similar to that at the eastern end for a visual and noise barrier. This buffer may be pierced to create the new western entrance roadway for the realignment of Glacier Highway. Additionally, and when feasible, the buffer shall be retained during all quarry operations throughout the site for noise and visual buffering.
- Rock crushers shall be operated on the lower quarry levels. Stockpiles shall be located to provide additional noise screening barriers whenever possible.
- The applicant shall have all operators of the quarry conduct their activities in accordance with all requirements of the noise management plan, blasting and noise controls, and temporary environmental controls.
- The site clearing shall be consistent with needs to retain sound and visual barriers

for the quarry operation.

(3) Measures to protect the public from the dangers of the operation or site, to prevent casual or easy access to the area, or to prevent the operation or area from being an unprotected attractive nuisance;

The site will continue to use the security gates at each access road to the quarry. During blasting Glacier Highway is temporarily closed and public notice is given for each blast occurrence.

(4) Final and working slope ratios of the face of any extraction area to the extent necessary to protect abutting public and private property, and to protect the future beneficial uses of the property as described in the applicant's plan for development and restoration;

Staff recommends that the applicant reclaim the quarry site with finished faces and established benches, and removes loose rock during periods between projects, see Conditions of Approval.

(5) Measures to protect private and public property adjoining the operation and to guarantee orderly and safe traffic circulation both on the public streets and within the permit application area;

The applicant has addressed these measures in their application. Safe traffic circulation shall be guaranteed through blasting notice signs and closure of Glacier Highway during blasting.

(6) Measures which will ensure adequate drainage or collection and storage of surface waters to protect surrounding property, eliminate dangers to the public, or to protect the future beneficial use of the property as described in the applicant's plan for development and restoration;

Staff recommends Conditions of Approval for this application to ensure adequate drainage and stormwater management. Staff finds that the application adequately explains drainage, protection and restoration plans of the project.

(7) Measures to protect the water level and water quality;

This criterion has been discussed under subsection 7(A) above. No water level has been observed in the quarry or at the Glacier Highway road elevation.

(8) Measures to minimize or eliminate airborne particulates, visual blight, noise and other adverse environmental effects;

Measures have been implemented and will continue as Conditions of Approval for the Conditional Use Permit that minimize and eliminate airborne particles, visual blight, noise and other adverse environmental effects. Dust control devices shall continue to be used.

(9) Restoration measures and schedule;

Trees and buffers shall be retained, as feasible, and the exposed rock will be reclaimed with finished faces and established benches as discussed above.

(10) Other measures designed to protect the public health, safety and welfare, including preservation of neighboring property; and

The applicant's narrative addresses the measures that are taken to protect the public health, safety and welfare, including preserving neighborhood property.

(11) Present development and past history of the neighboring property.

The applicant has outlined the date of establishment of the operation and history of adjacent land development in the application narrative under 7 (K), Attachment A.

49.65.235 - Mandatory conditions of permit.

Unless specifically waived by the Commission, the requirements of this article shall be a condition of all permits issued. The Commission may not waive or modify any of the following requirements except upon a finding that the requirement would serve no useful purpose. Such finding must be supported by substantial evidence in the record of the hearing before the Commission:

(1) A strip of land at the existing topographic level, and not less than 15 feet in width, shall be retained at the periphery of the site wherever the site abuts a public way. This periphery strip shall not be altered except as authorized for access points. This section does not alter the applicant's duty to maintain subjacent support.

The project plan and applicant's narrative plan for a strip of land to remain between the quarry and Glacier Highway, the public way, until the time that DOT&PF realign Glacier Highway through Stabler Point.

(2) If the bank of any extraction area within the permit area is above the high water line or water table, it shall be left upon termination of associated extraction operations with a slope no greater than the angle of repose for unconsolidated material of the kind composing it, or such other angle as the Commission may prescribe. If extraction operations cause ponding or retained water in the excavated area, the slope of the submerged working face shall not exceed a slope of 3:1 from the edge of the usual water line to a water depth of seven feet. This slope ratio may not be exceeded during extraction operations unless casual or easy access to the site is prevented by a fence, natural barriers, or both.

As explained above the water table and high water line are both below the quarry's lowest level. The quarry walls will be stepped down in benches toward the quarry floor. The drainage plan addresses water run-off.

Conformity with Adopted Plans

The following sections of adopted plans relate to the proposal:

CBJ Comprehensive Plan (2013)

POLICY 5.9 IT IS THE POLICY OF THE CBJ TO SUPPORT THE EXTRACTION AND PROCESSING OF MINERAL RESOURCES IN AN ENVIRONMENTALLY-SOUND MANNER, GIVING PROPER RECOGNITION TO THE UNIQUE VALUES OF THIS COMMUNITY.

Conditions of Approval for the proposed expansion of Stabler Point Rock Quarry will minimize negative affects to the environment and adjacent properties while providing extraction and processing of rock for projects throughout the community.

The Comprehensive Plan designates this land as Resource Development, which is defined as:

> "*Land to be managed primarily to identify and conserve natural resources until specific land uses are identified and developed. The area outside the study area of this Comprehensive Plan is considered to be designated Resource Development. As resources are identified or extracted from these lands, they should be re-designated and re-zoned appropriately."*

CBJ Land Use Code Title 49

In general, the purpose of the Land Use Code is to ensure that development is:

- In accord with the values of the community;
- Achieving goals and policies with adopted plans;
- An appropriate use of economically valuable land;
- Appropriate in type, design, location, and
- Served by adequate utilities.

Stabler Point Rock Quarry provides rock for the community's needs. The Conditions of Approval recommended below will help the proposed expansion meet the intent of the Land Use Code.

Habitat

As discussed above, there are mapped eagles nests near the quarry. The quarry has received Variances to the no development buffer to eagles' nests and they have not expired. The eagles

return to their nests year after year and have become habituated to the quarry activities.

The subject parcel contains two stream corridors. The applicant has maintained a 50 foot setback for development from Auke Nu Creek (see Attachment A 1).

FINDINGS

CBJ §49.15.330 (e)(1), Review of Director's Determinations, states that the Planning Commission shall review the Director's report to consider:

1. Whether the application is complete;
2. Whether the proposed use is appropriate according to the Table of Permissible Uses; and,
3. Whether the development as proposed will comply with the other requirements of this chapter.

The Commission shall adopt the Director's determination on the three items above unless it finds, by a preponderance of the evidence, that the Director's determination was in error, and states its reasoning for each finding with particularity.

CBJ §49.15.330 (f), Commission Determinations, states that even if the Commission adopts the Director's determination, it may nonetheless deny or condition the permit if it concludes, based upon its own independent review of the information submitted at the public hearing, that the development will more probably than not:

1. Materially endanger the public health or safety;
2. Substantially decrease the value of or be out of harmony with property in the neighboring area; or,
3. Not be in general conformity with the comprehensive plan, thoroughfare plan, or other officially adopted plans.

Per CBJ §49.15.330 (e) & (f), Review of Director's & Commission's Determinations, the Director makes the following findings on the proposed development:

1. Is the application for the requested conditional use permit complete?

Yes. We find the application contains the information necessary to conduct full review of the proposed operations. The application submittal by the applicant, including the appropriate fees, substantially conforms to the requirements of CBJ Chapter 49.15.

2. Is the proposed use appropriate according to the Table of Permissible Uses?

Yes. The requested permit is appropriate according to the Table of Permissible Uses. The permit is listed at CBJ §49.25.300, Section 14.500 for the RR – Rural Reserve zoning district.

3. Will the proposed development comply with the other requirements of this chapter?

Yes. The proposed development complies with the other requirements of this chapter. Public notice of this project was provided in the August 9, 2016 and August 19, 2016 issues of the Juneau Empire's "Your Municipality" section, and a Notice of Public Hearing was mailed to all property owners within 1,000 feet of the subject parcel. Staff extended public notice to include parcels around Auke Bay Harbor and along Fritz Cove Road. Moreover, a Public Notice Sign was posted on the subject parcel, and on Fritz Cove Road, visible from the public Right of Way.

4. Will the proposed development materially endanger the public health or safety?

No. As the quarry operation continues to follow the Conditions of Approval, safety plan, noise mitigating measures, and environmental control plan, it will continue to operate in a way as to not endanger the public health and safety.

5. Will the proposed development substantially decrease the value of or be out of harmony with property in the neighboring area?

No. Though noise, vibrations, and dust have been a concern of property owners in the neighboring area, the operations and Conditions of Approval to the proposed expansion of the quarry operations have mitigated and will continue to mitigate these concerns. The proposed expansion to the quarry operations is found to not decrease the value of or be out of harmony with property in the neighboring area.

6. Will the proposed development be in general conformity with the land use plan, thoroughfare plan, or other officially adopted plans?

Yes. The proposed development is in general conformity with the Land Use Code Title 49 and the CBJ Comprehensive Plan.

Per CBJ §49.70.900 (b)(3), General Provisions, the Director makes the following Juneau Coastal Management Program consistency determination:

7. Will the proposed development comply with the Juneau Coastal Management Program?

N/A

RECOMMENDATION

It is recommended that the Planning Commission adopt the Director's analysis and findings and grant the requested Conditional Use Permit. The permit would allow the extension to year 2026

and expansion of blast size and area of rock quarry operations for Stabler Point Quarry. The approval is subject to the following conditions:

1. All vehicle loads shall be contained. Vehicles hauling from the site shall be operated with tailgates, covers or other similarly effective methods. The use of exhaust brakes on trucks entering or leaving the quarry shall not be used, unless required for safety reasons.

2. Public notification warning signs shall be erected a minimum of 24 hours prior to blasting. Written notification shall be given to Juneau Flight Services, Juneau Police Department and Capital City Fire / Rescue a minimum of 24 hours prior to blasting.
3. The hours, days, and dates of operation shall be 8am - 4:30pm, Monday through Friday, all year except State holidays.

4. Blasting operation shall be scheduled to occur between 10am - 12pm and 1pm - 3pm, Monday through Friday.

5. This quarry permit shall expire 10-years after the date of approval.

6. Each quarry operator shall submit an individual mining plan that is in conformance with this Conditional Use permit and is approved by the quarry manager prior to performing any work in the quarry. Each mining plan shall be prepared by a civil engineer or other authorized professional.

7. The operator is required to comply with the requirements of CBJ Standard Specifications 02090 Blasting Controls. A quarry operator shall submit a blast plan, reviewed by an independent blast consultant, to the CBJ Engineering Department/Quarry Manager for approval prior to each blast.

8. Quarry operators shall comply with the existing DOT/ PF approved Stabler Traffic Control Plan(s) for blasting operations, quarry access, and work within the DOT/ PF ROW.

9. Explosives shall not be stored on site, except for that which is immediately necessary for the next blast.

10. The applicant shall comply with DEC regulations governing stormwater discharges from the quarry site, with particular attention paid to protecting Auke Nu Creek

11. The applicant shall (or shall cause to) reclaim the quarry site with finished faces and established benches, and remove loose rock during the period between projects, even if the entire quantity of rock has not been removed.

12. The applicant shall (or cause to) control dust caused by excavation, truck hauling, rock crushing, or other aspects of the operation.

13. The applicant shall (or cause to) repair any damage to Glacier Highway as a result of the quarry operation. If there is visible damage to the roadway due to hauling or mining operations, the roadway shall be repaired in cooperation with DOT/ PF.

14. The applicant shall require the posting of a bond (or equivalent if project based) from all quarry operators to ensure spilled or tracked material are removed from public roads. The applicant shall (or cause to) remove all spilled materials immediately from public roadway and ensure that mud and debris tracked onto roads be cleaned daily, with the City having the ability to allow less frequency on a case by case basis as warranted. DOT/ PF reserves the right to request sweeping at any time it sees a problem or complaint.

15. The applicant shall ensure that lighting (if any) does not glare onto adjacent roadways.

16. The applicant shall (or cause to) operate the quarry according to the application proposal, including attachments and drawings, except that all conditions contained herein shall take precedence.

17. The applicant shall ensure that the rock extraction is consistent with the recommendations of the US Fish & Wildlife Service for the protection of nesting eagles according to the past approved variances (VAR96-52, VAR2000-37, VAR2001-17, & VAR2008-6).

18. The applicant shall maintain a lockable security gate at the quarry entrance.

19. The applicant shall (or cause to) retain a natural buffer at the western end of the quarry similar to that at the eastern end for a visual and noise barrier. This buffer may be pierced to create the new western entrance roadway (Attachment C). Additionally, and when feasible, the buffer shall be retained during all quarry operations throughout the site for noise and visual buffering.

20. Prior to extracting the southwestern cliff face of the quarry, a qualified expert in geophysical hazard shall evaluate the site and recommend guidelines for its development. Further, these guidelines shall be made part of any approved mining plans for these areas and written notification given to all operators.

21. The recommended noise levels (excluding blasting) as measured at the nearest property lines shall not exceed 65 dBA.

22. Rock crushers shall be operated on the lower quarry levels. Stockpiles shall be located in a

way to provide additional noise screening barriers whenever possible.

23. The applicant shall have all operators of the quarry conduct their activities in accordance with all requirements of the noise management plan, blasting and noise controls, and temporary environmental controls.

24. The site clearing shall be consistent with needs to retain sound and visual barriers for the quarry operation. Prior to removal of substantial vegetation, the clearing limits shall be flagged and reviewed for approval by the Community Development Department.

25. Individual blasts shall be limited to a maximum of 25,000 cubic yards.

Advisory Condition

26. The pull out area adjacent to the quarry entrance drive near Glacier Highway is to be used for equipment transfer only. There shall not be temporary or long term parking on the pull out area. Transfer operations shall occur outside of the roadway clear zone. Access into the pull out area shall be limited to right in and right out turns.

27. A strip of land at the existing topographic level not less than 15 feet in width shall be retained at the periphery of the site wherever the site abuts a public way. This periphery strip shall not be altered except as authorized for access points. This section does not alter the applicant's duty to maintain subjacent support.

28. If the bank of any extraction area within the permit area is above the high water line or water table, it shall be left upon termination of associated extraction operations, with a slope no greater than the angle of repose for unconsolidated material of the kind composing it, or such other angle as the Commission may prescribe. If extraction operations cause ponding or retained water in the excavated area, the slope of the submerged working face shall not exceed a slope of 3:1 from the edge of the usual water line to a water depth of seven feet. This slope ratio may not be exceeded during extraction operations unless casual or easy access to the site is prevented by a fence, natural barriers, or both.

SPECIAL PROVISIONS

The Standard Specifications for Civil Engineering Projects and Subdivision Improvements December 2003 Edition, with current Errata Sheets, as published by the City and Borough of Juneau, is part of these Contract Documents and shall pertain to all phases of the contract. The Standard Specifications for Civil Engineering Projects and Subdivision Improvements December 2003 Edition is available for a fee from the City and Borough of Juneau Engineering Contracts Office, (907) 586-0490, or you may view them online at: www.juneau.org/engineering.

Special Provisions - Table of Contents

Add the following Section:

SECTION 01010 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 GENERAL

A. The WORK to be performed under this contract shall consist of furnishing all plant, tools, equipment, materials, supplies, manufactured articles and furnishing all labor, transportation and services, including all fuel, power, water and essential communications and performing all WORK, or other operations required for the fulfillment of the contract in strict accordance with the Contract Documents. The WORK shall be complete, and all WORK, materials, and services, not expressly indicated or called for in the Contract Documents which may be necessary for the complete and proper construction of the WORK in good faith shall be provided by the CONTRACTOR as though originally so indicated, at no increase in cost to the OWNER.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

A. The WORK of the Base Bid generally includes removal and offsite disposal of organic materials and mineral soils to the top of bedrock from approximately 2.1 acres of land adjacent to the northern extent of the existing open pit. This area of land has been previously cleared and grubbed.

The WORK of Additive Alternate No. 1 generally includes removal and offsite disposal of organic and mineral soils to the top of bedrock from approximately 0.9 acres of land adjacent to the northwest perimeter of the base bid area. This area of land has been previously cleared and grubbed.

The WORK of Additive Alternate No. 2 generally includes removal and offsite disposal of organic and mineral soils to the top of bedrock from approximately 0.9 acres of land adjacent to the northeast perimeter of the base bid area. This area of land has been previously cleared and grubbed.

B. SITE OF WORK. The site of the WORK is in Stabler Point Rock Quarry, near milepost 13.2 of Veterans Memorial Highway, Auke Bay area, Juneau, Alaska.

1.3 WORK BY OTHERS

A. The CONTRACTOR's attention is directed to the fact that work will be conducted at the site by other contractors or Agency personnel during the performance of the WORK under this contract. The CONTRACTOR shall conduct its operations so as to cause a minimum of interference with the WORK of such other contractors, and shall cooperate fully with such contractors to provide continued safe access to their respective portions of the site, as required to perform work under their respective contracts.

B. Interference with Work on Utilities. The CONTRACTOR shall cooperate fully with all utility forces of the OWNER or private agencies engaged in the relocation, altering, or otherwise rearranging of any facilities which interfere with the progress

of the WORK, and shall schedule the WORK so as to minimize interference with said relocation, altering, or other rearranging of facilities.

C. During blasting events by others, the CONTRACTOR will be required to stop work and locate all equipment, personnel, and activity outside of the blast zone. Determination of the extents of the blast zone will be made solely by the licensed and qualified blaster in charge of the blast.

1.4 CONTRACTOR USE OF PROJECT SITE

A. The CONTRACTOR's use of the Project site shall include construction operations and storage of materials. Use of the highway pullout within the State of Alaska DOT&PF's Right of Way shall be limited to loading and unloading of heavy equipment that requires use of the gravel access road to enter the quarry.

1.5 OWNER USE OF THE PROJECT SITE

A. The OWNER may utilize all or part of the existing site during the entire period of construction for the conduct of the OWNER's normal operations. The CONTRACTOR shall cooperate and coordinate with the ENGINEER to facilitate the OWNER's operations and to minimize interference with the CONTRACTOR's operation at the same time. In any event, the OWNER shall be allowed access to the Project site during the period of construction.

1.6 PROJECT MEETINGS

A. Pre-Construction Conference

1. Prior to the commencement of WORK at the site, a Pre-Construction Conference will be held at a mutually agreed time and place which shall be attended by the CONTRACTOR's Project Manager, its superintendent, and its Subcontractors as the CONTRACTOR deems appropriate. Other attendants will be:

    a. ENGINEER.
    b. Representatives of OWNER.
    c. Governmental representatives as appropriate.
    d. Others as requested by CONTRACTOR, OWNER, or ENGINEER.

2. Unless previously submitted to the ENGINEER, the CONTRACTOR shall bring to the Pre-Construction Conference one copy each of the following:

    a. Plan of Operation.
    b. Project Overview Bar Chart Schedule.
    c. Procurement schedule of major equipment and materials and items requiring long lead time.
    d. Name and telephone number of CONTRACTOR's Project Supervisor.

e. Employee MSHA training records
f. MSHA Mine ID Number

3. The purpose of the Pre-Construction Conference is to designate responsible personnel and establish a working relationship. Matters requiring coordination will be discussed and procedure for handling such matters established. The complete agenda will be furnished to the CONTRACTOR prior to the meeting date. The CONTRACTOR should be prepared to discuss all of the items listed below:

   a. Status of CONTRACTOR's insurance and bonds.
   b. CONTRACTOR's tentative schedules.
   c. Transmittal, review, and distribution of CONTRACTOR's submittals.
   d. Processing applications for payment.
   e. Maintaining record documents.
   f. Critical WORK sequencing.
   g. Field decisions and Change Orders.
   h. Use of Project site, office and storage areas, security, housekeeping, and OWNER's needs.
   i. Major equipment deliveries and priorities.
   j. CONTRACTOR's assignments for safety and first aid.

4. The OWNER will preside at the Pre-Construction Conference and will arrange for keeping and distributing the minutes to all persons in attendance.

5. The CONTRACTOR and its Subcontractors should plan on the conference taking no longer than two hours. Items listed in paragraphs 2 and 3 will be covered as well as a review of the Drawings and Specifications with the ENGINEER and OWNER.

B. Progress Meetings

1. The CONTRACTOR shall schedule and hold regular on-site progress meetings at least weekly and at other times as requested by the ENGINEER, or as required by the progress of the WORK. The CONTRACTOR, ENGINEER, and all Subcontractors active on the site must attend each meeting. CONTRACTOR may at its discretion request attendance by representatives of its Suppliers, manufacturers, and other Subcontractors.

2. The ENGINEER shall conduct the meeting and will arrange for recording and distributing the minutes. The purpose of the meetings will be to review the progress of the WORK, maintain coordination of efforts, discuss changes in scheduling, and resolve other problems which may develop. During each meeting, the CONTRACTOR is required to present any issues which may impact the WORK, with a view toward resolving these issues expeditiously.

1.7 DEFINITIONS APPLICABLE TO TECHNICAL SPECIFICATIONS

A. The following words have the meaning defined in the Technical Portions of the WORK:

1. Furnish - means to supply and deliver to the site, to unload and unpack ready for assembly, installation, testing, and start-up.
2. Indicated - is a word used to direct the CONTRACTOR to information contained on the drawings or in the Specifications. Terms such as "shown", "noted"," "scheduled", and "specified" also may be used to assist in locating information but no limitation of location is implied or intended.
3. Install - defines operations at the site including assembly, erection, placing, anchoring, applying, shaping to dimension, finishing, curing, protecting, and cleaning, ready for the OWNER's use.
4. Installer - a person or firm engaged by the CONTRACTOR or its subcontract, or any Subcontractor, for the performance of installation, erection, or application WORK at the site. Installers must be expert in the operations they are engaged to perform.
5. Provide- is defined as furnish and install, ready for the intended use.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

Add *the following Section*:

SECTION 01025 – MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 SCOPE

A. Payment for the various items of the Bid Schedule, as further specified herein, shall include all compensation to be received by the CONTRACTOR for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items for WORK being described, as necessary to complete the various items of the WORK all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of permits and cost of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of Mine Safety and Health Administration of the U.S. Department of Labor (MSHA) and Occupational Safety and Health Standards of the Alaska Department of Labor, Division of Labor Standards and Safety.

B. No separate payment will be made for any Pay Item that is not specifically set forth in the Bid Schedule, and all costs therefore shall be included in the prices named in the Bid Schedule for the various appurtenant items of WORK.

C. In addition to the other incidental items of WORK listed elsewhere in the contract, the following items shall also be considered as incidental to the WORK:

1. Maintenance of all services through the Project area including power, water, storm and sanitary sewers, garbage pickup, mail delivery, accommodating quarry users, and emergency vehicles.
3. Traffic control, including flaggers, and installation and maintenance of traffic control devices in accordance with the Manual of Uniform Traffic Control Devices – 2009 MUTCD Edition with current revisions and the current AKDOT&PF supplements.
3. Repair or replacement of existing adjacent facilities including piping, landscaping, steel, timber, concrete and asphalt items, and overhead utilities, if damaged by the CONTRACTOR.
5. Final clean-up and site restoration.
6. All WORK necessary for the coordination of work to be accomplished by private utility companies and property owners within the project limits.
7. Removal and replacement of survey monuments and markers disturbed during construction, whether shown on the Drawings or not.
8. Watering of roadways as necessary for dust control.
9. Containment of all vehicle loads, including the use of tailgates, covers, or similarly effective methods.
10. Prohibition of the use of exhaust brakes on trucks entering or leaving the Quarry, unless required for safety reasons.

1.2 MOBILIZATION (Pay Item No. 1505.1) PRICE BASED ON LUMP SUM PAY UNIT

A. Measurement for payment for Mobilization will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.

B. Payment for Mobilization will be made at the amount shown on the Bid Schedule under Pay Item No. 1505.1, which payment will constitute full compensation for all WORK described in Section 01505 - Mobilization, as shown on the Drawings and as directed by the ENGINEER.

C. Partial payments will be made as the WORK progresses as follows:

1. When 5% of the total original contract amount is earned from other Pay Items, 50% of the amount bid for Mobilization, or 5% of the original contract amount, whichever is lesser, will be paid.
2. When 10% of the total original contract amount is earned from other Pay Items, 100% of the amount bid for Mobilization, or 10% of the original contract amount, whichever is lesser, will be paid.
3. Upon completion of all WORK on the Project, payment of any amount bid for Mobilization in excess of 10% of the total contract amount will be paid.

1.3 EROSION AND SEDIMENT CONTROL (Pay Item No. 1570.1) PRICE BASED ON LUMP SUM PAY UNIT

A. Measurement for payment for Erosion and Sediment Control will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.

B. WORK under this Pay Item includes all requirements described in Section 01570, with the omission of obtaining a construction SWPPP. WORK within Stabler Point Rock Quarry shall be completed in accordance with the Alaska Department of Environmental Conservation's (ADEC) 2020 Multi-Sector General Permit (MSGP) and the Stabler Point Rock Quarry's permit authorization #AKR06AC70 and corresponding Stabler Point Rock Quarry SWPPP.

C. Payment for Erosion and Sediment Control will be made at the amount shown on the Bid Schedule under Pay Item No. 1570.1, which payment will constitute full compensation for all WORK described in Section 01570 – Erosion and Sediment Control, as shown on the Drawings and as directed by the ENGINEER.

2.1 NEW MINING AREA OVERBURDEN EXCAVATION (Pay Item No. 2202.1, 2202.1A, 2202.1B) PRICE BASED ON QUANTITY, CUBIC YARD

A. Measurement for payment for New Mining Area Overburden Excavation will be by excavated cubic yard (CY) in the new mining area, as determined by the difference of pre and post excavation topographical surveys. The pre and post topographical surveys will be performed by a third party licensed surveyor hired by the OWNER. The OWNER will provide the surveys to the CONTRACTOR for this pay item. The CONTRACTOR may perform its own volumetric surveys at no cost to the PROJECT or OWNER.

B. This Pay Item includes all WORK required to excavate overburden within the defined limits to an average depth of 5' (estimated) and to transport and dispose of the overburden at an offsite facility approved for such purpose. WORK under the pay item also includes constructing surface water diversion channels, diversion berms and associated check dams in and around the new mining area as described in the PLANS.

C. Excavation will be complete when the overburden, including but not limited to organic and mineral overburden, tree roots, root wads, and any leftover woody material, etc. has been completely removed to expose bedrock, rock talus, or hardpan rock till, or as determined by the ENGINEER.

D. Some minor clearing, grubbing, and tree cutting may be necessary within the overburden removal area. Perimeter areas may require removal of tree fall, tree cutting, and grubbing to facilitate drainage routing. These activities will be considered incidental to the work included in this pay item.

E. Construction of access routes into and through the overburden stripping area will be considered incidental to the work included in this pay item. Constructed access routes remaining after project completion shall be safely navigable by on-road vehicles, with adequate drainage and MSHA compliant berms or their equivalent, no less than 36-inches in height where necessary.

F. Changes to existing access routes may be allowed with ENGINEER's written approval. Any material excavated as a result of changes to existing access routes shall be removed from the site and disposed of at an offsite location approved for such purpose. Modified access routes will maintain a minimum lane width of 22 feet and shall remain safely navigable by on-road vehicles at the conclusion of the project. Modified routes shall be left with adequate drainage and MSHA compliant berms no less than 3 feet in height or their equivalent where necessary. Costs associated with any changes to existing access routes shall result in no additional costs to the PROJECT or OWNER.

G. Payment for New Mining Area Overburden Excavation will be made at the unit price named in the Bid Schedule under Pay Item No. 2202.1, 2202.1A, 2202.1B which payment will constitute full compensation for all WORK described in Section 02202 – Excavation and Embankment as shown on the Drawings and as directed by the ENGINEER.

2.5 ROAD CLEANING GUARANTEE (Pay Item No. 2202.2) PRICE BASED ON CONTINGENT SUM PAY UNIT

A. Measurement for this Item will be made as a Contingent Sum Pay Unit for satisfactory execution of Road Cleaning.

B. The CONTRACTOR shall be responsible for removal of dirt, mud, rocks and other debris from Quarry site roads and CBJ and State Right-of-Ways accumulated from the hauling operations between the Quarry and the chosen site of disposal. It is the intent that the traveled route be kept clean (including dust) and to avoid unsafe traffic conditions. If the CONTRACTOR fails to perform necessary road cleaning in a timely manner, no later than the end of each day, the CBJ may hire outside forces to perform the WORK and deduct the cost from this contract, beginning with the funds remaining within this contingent sum pay item.

C. Release of final payment for Road Cleaning Guarantee will be made upon determination of completeness by the ENGINEER after deduction of OWNER incurred costs for necessary road cleaning and/or new mining area restoration not completed in a timely manner by the CONTRACTOR.

D. Payment for Road Cleaning Restoration Guarantee will be made at the amount named in the Bid Schedule under Pay Item No. 2202.2, which payment will constitute full compensation for all WORK described in Section 2202 – Excavation and Embankment, as shown on the Drawings and as directed by the ENGINEER.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01550 – SITE ACCESS AND STORAGE, PART 1 – GENERAL, Article 1.4, CONTRACTOR'S WORK AND STORAGE AREA, ***add*** *the following paragraphs:*

D. The CONTRACTOR is responsible for securing the work site in cooperation with any other contractors performing general mining work near the project area. The CONTRACTOR shall provide means to keep unauthorized vehicular traffic from the project area during construction.

E. The CONTRACTOR shall coordinate with other operators in the quarry to ensure their operations are not disrupted and provided reasonable access and proper notifications for disruptions to their operations.

SECTION 01570 – EROSION AND SEDIMENT CONTROL, PART 1 – GENERAL, Article 1.1, THE REQUIREMENT, ***revise*** *paragraph* B. *to read:*

B. Erosion Control includes following and adhering to the existing Stormwater Pollution Prevention Plan (SWPPP) for: Stabler Point Rock Quarry, Permit Authorization #AKR06AC70, in accordance with the 2020 ADEC MSGP Permit #AKR060000.

SECTION 01570 – EROSION AND SEDIMENT CONTROL, PART 3 – EXECUTION, Article 3.1, GENERAL, ***delete*** *paragraphs* A.*,* B. *and* F. *and revise paragraph* C. *to read:*

C. The CONTRACTOR shall install temporary erosion control structures and devices as required by the existing Stabler Point Rock Quarry SWPPP, Permit Authorization #AKR06AC70, in accordance with the 2020 ADEC MSGP Permit #AKR060000. They shall be maintained in operating condition at all times. Prior to completion of the work, the CONTRACTOR shall clean and remove all silt and debris from the sedimentation basin, sediment trap, check dams, and the wheel cleaning device.

SECTION 02202 – EXCAVATION AND EMBANKMENT, PART 3 – EXECUTION ***add*** *the following Articles:*

3.9 New Mining Area Overburden Excavation

A. New Mining Area Overburden Excavation shall include the removal of all organic materials and mineral soil from the New Mining Area, or as directed by the ENGINEER.

B. Excavation will be complete when the organic material and mineral soil has been removed to expose bedrock, rock talus, or hardpan rock till, or as determined by the ENGINEER.

C. Water diversion channels shall be excavated into the finished surface of the New Mining Area where practicable to direct runoff as shown on the plans and at the discretion of the ENGINEER. Where excavation is not practicable, diversion structures shall be constructed as necessary to direct runoff as shown on the plans

and at the discretion of the ENGINEER. Channels and structures shall allow for drainages 6”-12” deep and 24” wide and shall include check dams at no more than 75-foot intervals, and more frequently as necessary to reduced channelized water velocity and prevent erosion. Locations of check dams shall be verified by Engineer prior to installation.

D. Some minor clearing, grubbing, and tree cutting may be necessary and will be considered part of excavation.

E. Overburden shall not be excavated until a perimeter stormwater diversion channel and associated berm is constructed. The diversion channel and berm shall prevent uncontaminated stormwater from entering the overburden excavation area. The channel shall be 6”-12” deep and 24” wide and shall include check dams at no more than 75-foot intervals, and more frequently as necessary to reduced channelized water velocity and prevent erosion. Locations of check dams shall be verified by Engineer prior to installation.

F. The CONTRACTOR shall not conduct overburden extraction or truck haulage outside of the Stabler Point Rock Quarry’s permitted operating hours as described in this part. The Quarry’s permitted operating hours are limited to Monday – Friday, from 8AM till 4:30PM. In addition to this restriction, the Quarry’s permit does not allow overburden extraction and truck haulage on holiday observances recognized by the CBJ and the State of Alaska that occur during the Monday-Friday period.

END OF SPECIAL PROVISIONS