

# MELVIN PARK LIGHTING UPGRADE

**Contract No. BE23-022**

File No. 2156



ENGINEERING DEPARTMENT

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**END OF SECTION**

## SECTION 00030 NOTICE INVITING BIDS

**OBTAINING CONTRACT DOCUMENTS.** The Contract Documents are entitled:

**Melvin Park Lighting Upgrade  
Contract No. BE23-022**

The Contract Documents may be downloaded from the CBJ Public Purchase webpage at <https://www.publicpurchase.com/juneau,ak>. Instructions for the Public Purchase registration process can be found here <https://juneau.org/engineering-public-works/bids-rfips>.

**PRE-BID CONFERENCE.** Prospective Bidders are encouraged to attend a pre-Bid conference to discuss the proposed WORK, which will be conducted by the OWNER, at 2:00 p.m. on January 4, 2023, via teleconference. The object of the conference is to acquaint Bidders with the project and bid documents. Proposers intending to participate via teleconference shall notify the Contracts Department at [Contracts@Juneau.Org](mailto:Contracts@Juneau.Org) by 4:30 p.m., January 3, 2023.

**DESCRIPTION OF WORK.** The WORK covered in the contract documents generally includes a new lighting system at Melvin Park Field Number 1, and other miscellaneous work.

**ENGINEER'S ESTIMATE RANGE:** Between \$700,000 and \$800,000.

**COMPLETION OF WORK.** All work must be completed 60 days from beginning of on-site work or by May 31, 2024, whichever occurs first.

**DEADLINE FOR BIDDER QUESTIONS: 4:30pm Alaska Time on January 6, 2023.**

**DEADLINE FOR BIDS:** Electronic bids must be received by the Purchasing Division **prior to 2:00 p.m., Alaska Time on January 11, 2023,** or such later time as may be announced by addendum at any time prior to the deadline. Bids will be opened immediately thereafter via conference call, unless otherwise specified. Bidders may attend this bid opening on the conference call line 907-713-2140, with participant code 258358.

**SUBMISSION INSTRUCTIONS:** Timely responses are accepted via Electronic Submission at Public Purchase, [www.publicpurchase.com](http://www.publicpurchase.com), the CBJ's eProcurement Provider. Bidders must register online prior to submitting a bid, it may take up to 24 hours for registration to be complete.

**Late responses will not be accepted.**

To Respond, Bidders must complete an online registration.

- Registration is a two-step process, registering with Public Purchase, and then registering with CBJ within Public Purchase.
- Get help registering using the Public Purchase Help Menu Tab.
- Register early to avoid missing the deadline, as Registration may take up to 24 hours to complete.

**Registered Bidders may submit a Bid Schedule to Public Purchase** by downloading the provided PDF solicitation documents, filling out the fields indicated, and uploading the document to Public Purchase.

**SITE OF WORK.** The site of the WORK is Melvin Park, adjacent to Riverside Drive, in Juneau, Alaska.

**SECTION 00030 NOTICE INVITING BIDS**

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

Caleb Comas, Contract Administrator  
CBJ Engineering Department, 3<sup>rd</sup> Floor, Marine View Center  
Email: caleb.comas@juneau.org  
Telephone: (907) 586-0800 ext. 4196  
Fax: (907) 586-4530

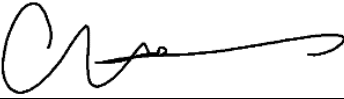
**BID SECURITY.** Each Bid shall be accompanied by a certified or cashier's check or Bid Bond, in the amount of 5% percent of the Bid, payable to the City and Borough of Juneau, Alaska, as a guarantee that the Bidder, if its Bid is accepted, will promptly execute the Agreement. A Bid shall not be considered unless one of the forms of Bidder's security is provided as prescribed in Section 00100, Article 12, at the time of bid.

**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 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:   
\_\_\_\_\_  
Caleb Comas, Contract Administrator

11/29/22  
Date

**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;

## SECTION 00100 - INSTRUCTIONS TO BIDDERS

- 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

## SECTION 00100 - INSTRUCTIONS TO BIDDERS

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

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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 by another acceptable submission method as specified in Section 00030, Notice Inviting Bids, and shall contain the following: Sections 00300, 00310 or other specified acceptable form of Bid Schedule,



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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. The procedure for the submittal of substitute or "or-equal" products is specified in Section 01300 – Contractor Submittals.

**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. Hand-delivered, mailed, courier-delivered, oral, telegraphic, emailed, or faxed Bids will not be considered.

**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.

## SECTION 00100 - INSTRUCTIONS TO BIDDERS

Bid Bonds shall be submitted by being scanned and uploaded to Public Purchase along with the other required Bid documents. When a Bid security check is used, it must be received by the Purchasing Division prior to the Deadline for Bids. Bid security checks will be time and date stamped by the Purchasing Division, which will establish the official time of receipt.

In addition to uploading a scanned file of the Bid Bond, the original hardcopy Bid Bond shall be submitted and received by the CBJ Contracts Office by 2:00 p.m. Alaska Time no more than seven calendar days after Bid Opening.

In lieu of the original hardcopy Bid Bond submittal requirement, bidders who have a Surety 2000 Bid Bond ID may validate their Bid Bond with Surety 2000 within the Bid Bond Response Information Form in the Public Purchase bid page.

Bid security checks shall be submitted in a sealed envelope that clearly indicates: that a bid security check is enclosed, the name of the bidding firm, and the project name and number. The envelope must not reveal the check amount so that the final Bid price will not be known until the sealed bids are opened.

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

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

**PHYSICAL LOCATION:**

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

**MAILING ADDRESS:**

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

**Mailing/delivery times to Alaska may take longer than other areas of the U.S.** Late bid security checks may cause a Bid to be deemed non-responsive

**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

## SECTION 00100 - INSTRUCTIONS TO BIDDERS

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 (907-586-5215) 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.

## SECTION 00100 - INSTRUCTIONS TO BIDDERS

- C. Award of a contract is subject to the adoption of an appropriation of funds by the City Assembly.

### 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) 586-5215 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

## **SECTION 00100 - INSTRUCTIONS TO BIDDERS**

Finance Department's Sales Tax Division at (907) 586-5215 for sales tax issues, Assessor's Office at (907)586-5215 for business personal property issues, or Collections Division at (907) 586-5215 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.

**SECTION 00100 - INSTRUCTIONS TO BIDDERS**

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

**BID MODIFICATION FORM**

Modification Number: \_\_\_\_\_

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.

<b>PAY ITEM NO.</b>	<b>PAY ITEM DESCRIPTION</b>	<b>MODIFICATIONS TO LUMP SUM (<i>indicate +/-</i>)</b>
	Total Bid	

**Bid 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

**Melvin Park Lighting Upgrade  
Contract No. BE23-022**

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.**

**SECTION 00300 - BID**

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: _____ Title: _____
Telephone No: _____	Address: _____ (Street or P.O. Box)
Fax No: _____	_____ (City, State, Zip)
E-mail: _____	

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, or other acceptable form of Bid Schedule as specified in Section 00030, Notice Inviting Bids
- 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**

Bid Schedule for construction of **BE23-022 Melvin Park Lighting Upgrade**, in accordance with the Contract Documents.

---

**BID** - Furnish all labor, equipment and materials for a new lighting system at Melvin Park Field Number 1, and other miscellaneous work and perform all WORK as described in these Contract Documents.

**TOTAL BID** \$ \_\_\_\_\_  
(Price in Figures)

---

**Date:** \_\_\_\_\_ **Bidder:** \_\_\_\_\_  
(Company Name)

**END OF SECTION**

**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.

**Melvin Park Lighting Upgrade  
Contract No. BE23-022**

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) \_\_\_\_\_  
(Principal)

(SEAL) \_\_\_\_\_  
(Surety)

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(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.*

<u>SUBCONTRACTOR</u>	<sup>1</sup> AK Contractor <u>License No.</u>	<sup>1</sup> <u>Contact Name</u>	<u>Type of</u>	<u>Contract</u>	✓ if <u>DBE</u>
<u>ADDRESS</u>	<sup>2</sup> AK Business <u>License No.</u>	<sup>2</sup> <u>Phone No.</u>	<u>Work</u>	<u>Amount</u>	
1. _____ _____ _____	1 _____ 2 _____	_____ _____	_____ _____	\$ _____	<input type="checkbox"/>
2. _____ _____ _____	1 _____ 2 _____	_____ _____	_____ _____	\$ _____	<input type="checkbox"/>
3. _____ _____ _____	1 _____ 2 _____	_____ _____	_____ _____	\$ _____	<input type="checkbox"/>
4. _____ _____ _____	1 _____ 2 _____	_____ _____	_____ _____	\$ _____	<input type="checkbox"/>

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: MELVIN PARK LIGHTING UPGRADE**

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:

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

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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:

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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.

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**SECTION 00370 - CONTRACTOR'S FINANCIAL RESPONSIBILITY**

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:

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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:

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**SECTION 00370 - CONTRACTOR'S FINANCIAL RESPONSIBILITY**

4. Is your bid based on firm offers for all materials necessary for this project?

Yes  No If NO, please explain:

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

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
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. BE23-022- Melvin Park Lighting Upgrade.**

The WORK covered in the contract documents generally includes a new lighting system at Melvin Park Field Number 1, and other miscellaneous work.

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

**ARTICLE 2. CONTRACT COMPLETION TIME.**

All work must be completed 60 days from beginning of on-site work or by May 31, 2024, whichever occurs first.

**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 **\$500** 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. BE23-022, Melvin Park Lighting Upgrade.** those Lump Sum 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.



## SECTION 00500 - AGREEMENT

### 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, inclusive)
- Notice Inviting Bids (pages 00030-1 to 00030-2, inclusive).
- Instructions to Bidders (pages 00100-1 to 00100-10, 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 00800-6, inclusive).
- Alaska Labor Standards, Reporting, and Prevailing Wage Determination (page 00830-1 to 00830-40, inclusive).
- Special Provisions (pages 1 to 50 inclusive)
- Drawings consisting of 13 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.

**SECTION 00500 - AGREEMENT**

**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. \_\_\_\_\_

SECTION 00500 - AGREEMENT

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)

SECTION 00500 - AGREEMENT

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)

SECTION 00500 - AGREEMENT

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:

**Melvin Park Lighting Upgrade  
CBJ Contract No. BE23-022**

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**

**Melvin Park Lighting Upgrade  
CBJ Contract No. BE23-022**

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: \_\_\_\_\_  
(Signature of Attorney-in-Fact)

Date Issued: \_\_\_\_\_

\_\_\_\_\_  
(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:

**Melvin Park Lighting Upgrade  
CBJ Contract No. BE23-022**

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.



**SECTION 00620 - PAYMENT BOND**

**Melvin Park Lighting Upgrade  
CBJ Contract No. BE23-022**

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: \_\_\_\_\_  
(Signature of Attorney-in-Fact)

Date Issued: \_\_\_\_\_

\_\_\_\_\_  
(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 00700 - GENERAL CONDITIONS**

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**(Revised 03-2003)**

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### 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.

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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.

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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.



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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.

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### 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.

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### 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

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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

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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

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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 Alec Venechuk, 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

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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

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- 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



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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

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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

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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 properly 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.

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- 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.

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- 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,

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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.

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### 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.

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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



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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

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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

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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

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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

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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.

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- 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.

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### 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

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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.



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### 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

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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

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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:

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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.

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### 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

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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.

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- 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.

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### 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



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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.

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- 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.

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### 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.

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- 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

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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

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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.

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### 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

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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



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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 electronic files of the documents in pdf format. 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 field measurements and visual inspection of the existing structures and surface conditions.

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

**The CBJ/State Lemon Creek Gravel Pit is not available for this Project.**

**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**

**SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS**

**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:	\$1,000,000.00	Each Accident
Bodily Injury by Disease:	\$1,000,000.00	Each Employee
Bodily Injury by Disease:	\$1,000,000.00	Policy Limit

- 1. CONTRACTOR agrees to waive all rights of subrogation against the OWNER for



## SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS

**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 16.12.

**SGC 16.12 EQUAL EMPLOYMENT OPPORTUNITY (EEO)**

The CONTRACTOR may not discriminate against any employee or applicant for employment because of

## **SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS**

race, religion, color, national origin, age, disability, sex, sexual orientation, gender identity, gender expression, marital status, changes in marital status, pregnancy or parenthood. The CONTRACTOR shall post a notice setting out the provisions of this paragraph in a conspicuous place available to employees and applicants for employment.

The CONTRACTOR and each Subcontractor shall state in all solicitations and advertisements for employees to work on this Project, that it is an Equal Opportunity Employer and that all qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, age, disability, sex, sexual orientation, gender identity, gender expression, marital status, changes in marital status, pregnancy or parenthood.

The CONTRACTOR shall include the provisions of this EEO article in every contract relating to this Project and shall require the inclusion of these provisions in every agreement entered into for this Project, so that those provisions will be binding upon the CONTRACTOR and each Subcontractor.



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, is provided in its entirety in SECTION 00830 – APPENDIX A.

The rates that are in effect 10 days prior to the final date for submission of bids are the rates that will apply to this project. These rates will apply for 24 calendar months from the date the project is awarded to a prime contractor. At the end of the initial 24-month period, the latest wage rates issued by the Alaska Department of Labor shall become effective for the next 24-month period. This process repeats itself until the project is completed.

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 to ADOL electronically or paper copies can be submitted by mail. To submit Title 36 documents and certified payrolls electronically, go to <https://myalaska.state.ak.us/home/app>.

The CONTRACTOR and each Subcontractor shall submit Certified Payrolls to the CBJ Contract Administrator upon request. If the requested Certified Payrolls are not received by the Contract Administrator within five (5) working days, the Contract Administrator will request the Certified Payrolls from ADOL. The CONTRACTOR shall be responsible for all costs charged by ADOL for delivery of the requested Certified Payrolls, including those costs for Subcontractors.

**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                      and  
Wage and Hour Administration  
P.O. Box 11149  
Juneau, AK 99811-1149  
907-465-4842  
<http://labor.state.ak.us/lss/home.htm>

*Caleb Comas, Contract Administrator*  
City and Borough of Juneau  
155 S. Seward Street  
Juneau, AK 99801  
(907) 586-0800 ext. 4196  
[caleb.comas@juneau.org](mailto:caleb.comas@juneau.org)



# SECTION 00830

## APPENDIX A

Laborers' & Mechanics'  
Minimum Rates of Pay

Pamphlet 600

Effective September 1, 2022



# MINIMUM RATES OF PAY For Laborers and Mechanics

Effective September 1, 2022

Issue 45

PAMPHLET No. 600

Title 36. Public Contracts  
AS 36.05

DEPARTMENT OF LABOR  
AND WORKFORCE DEVELOPMENT

Wage and Hour

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September 1, 2022

**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 September 1, 2022.

The prevailing wage rates contained in this pamphlet are applicable to public construction projects with a final bid date of September 11, 2022, 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,

A handwritten signature in black ink that reads "Tamika L. Ledbetter".

Dr. Tamika L. Ledbetter  
Commissioner

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**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**

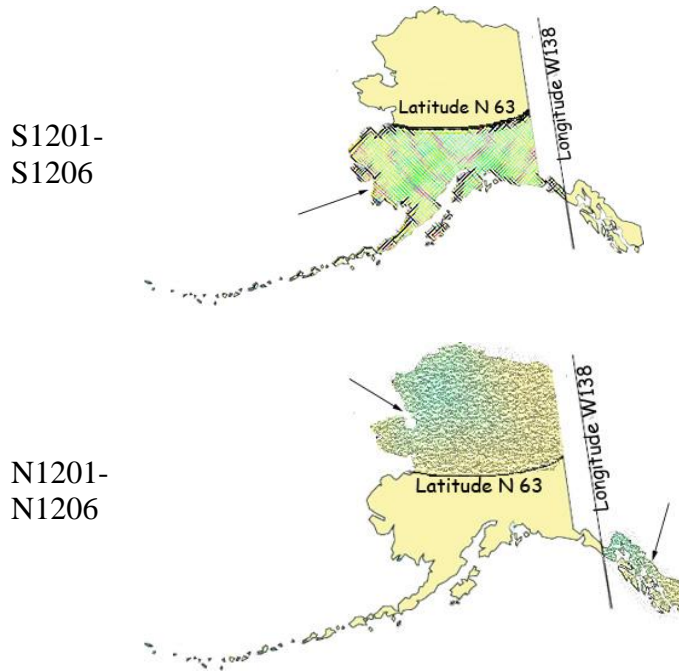
**Notice:** New regulations relating to board and lodging and per diem went into effect on November 25, 2018. The regulations provide a comprehensive set of requirements for the provision of board and lodging or per diem for workers on remote projects. Please refer to Alaska Administrative Code 8 AAC 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 1<sup>st</sup>, 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:



**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  
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](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**  
Web site: <http://labor.state.ak.us/lss/pamp600.htm>

**Anchorage**

1251 Muldoon Road, Suite 113  
Anchorage, Alaska 99504-2098  
Phone: (907) 269-4900

Email:  
statewide.wagehour@alaska.gov

**Juneau**

PO Box 111149  
Juneau, Alaska 99811  
Phone: (907) 465-4842

Email:  
statewide.wagehour@alaska.gov

**Fairbanks**

Regional State Office Building  
675 7<sup>th</sup> 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 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
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**Boilermakers**  
\*See per diem note on last page

<b>A0101</b>	Boilermaker (journeyman)	46.97	8.57	18.08	1.90	VAC 4.25 SAF 0.34	80.11
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**Bricklayers & Blocklayers**  
\*See per diem note on last page

<b>A0201</b>	Blocklayer	42.01	9.00	10.20	0.62	L&M 0.20	62.03
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Bricklayer  
Marble or Stone Mason  
Refractory Worker (Firebrick, Plastic, Castable, and Gunitite Refractory Applications)  
Terrazzo Worker  
Tile Setter

<b>A0202</b>	Tuck Pointer Caulker	42.01	9.00	10.20	0.62	L&M 0.20	62.03
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Cleaner (PCC)

<b>A0203</b>	Marble & Tile Finisher	35.84	9.00	10.20	0.62	L&M 0.20	55.86
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Terrazzo Finisher

<b>A0204</b>	Torginal Applicator	35.84	9.00	10.20	0.62	L&M 0.20	55.86
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**Carpenters, Region I (North of 63 latitude)**  
\*See per diem note on last page

<b>N0301</b>	Carpenter (journeyman)	43.34	10.35	15.82	1.75	L&M 0.20 SAF 0.20	71.66
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Lather/Drywall/Acoustical

**Carpenters, Region II (South of N63 latitude)**  
\*See per diem note on last page

<b>S0301</b>	Carpenter (journeyman)	43.34	10.35	16.36	1.75	L&M 0.20 SAF 0.20	72.20
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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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Cement Masons**  
 \*See per diem note on last page

<b>A0401</b>	Group I, including:	40.13	8.70	11.80	1.43		<b>L&amp;M</b> 0.10	62.16
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- 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

<b>A0402</b>	Group II, including:	40.13	8.70	11.80	1.43		<b>L&amp;M</b> 0.10	62.16
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- Form Setter

<b>A0403</b>	Group III, including:	40.13	8.70	11.80	1.43		<b>L&amp;M</b> 0.10	62.16
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- 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)

<b>A0404</b>	Group IV, including:	40.13	8.70	11.80	1.43		<b>L&amp;M</b> 0.10	62.16
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- 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
- Hand Powered Grinder

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
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**Cement Masons**  
 \*See per diem note on last page

<b>A0404</b>	Group IV, including:	40.13	8.70	11.80	1.43	<b>L&amp;M</b> 0.10	62.16
	Preparing, scratching and browsing of all ceilings and walls, finished with terrazo or tile						
	Tunnel Worker						

<b>A0405</b>	Group V, including:	40.13	8.70	11.80	1.43	<b>L&amp;M</b> 0.10	62.16
	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**

<b>A0501</b>	Baker/Cook	29.12	7.31	8.68		<b>LEG</b>	45.11
<b>A0503</b>	General Helper	25.82	7.31	8.68		<b>LEG</b>	41.81
	Housekeeper						
	Janitor						
	Kitchen Helper						
<b>A0504</b>	Head Cook	29.72	7.31	8.68		<b>LEG</b>	45.71
<b>A0505</b>	Head Housekeeper	26.20	7.31	8.68		<b>LEG</b>	42.19
	Head Kitchen Help						

**Dredgemen**  
 \*See per diem note on last page

<b>A0601</b>	Assistant Engineer	42.76	11.05	13.75	1.00	<b>L&amp;M</b> 0.10	0.05	68.71
	Craneman							

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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**Dredgemen**  
\*See per diem note on last page

<b>A0601</b>	Assistant Engineer	42.76	11.05	13.75	1.00	<b>L&amp;M</b>		68.71
	Electrical Generator Operator (primary pump/power barge/dredge)					0.10	0.05	
	Engineer							
	Welder							
<b>A0602</b>	Assistant Mate (deckhand)	41.60	11.05	13.75	1.00	<b>L&amp;M</b>		67.55
						0.10	0.05	
<b>A0603</b>	Fireman	42.04	11.05	13.75	1.00	<b>L&amp;M</b>		67.99
						0.10	0.05	
<b>A0605</b>	Leverman Clamshell	45.29	11.05	13.75	1.00	<b>L&amp;M</b>		71.24
						0.10	0.05	
<b>A0606</b>	Leverman Hydraulic	43.53	11.05	13.75	1.00	<b>L&amp;M</b>		69.48
						0.10	0.05	
<b>A0607</b>	Mate & Boatman	42.76	11.05	13.75	1.00	<b>L&amp;M</b>		68.71
						0.10	0.05	
<b>A0608</b>	Oiler (dredge)	42.04	11.05	13.75	1.00	<b>L&amp;M</b>		67.99
						0.10	0.05	

**Electricians**  
\*See per diem note on last page

<b>A0701</b>	Inside Cable Splicer	42.77	14.23	13.92	0.95	<b>L&amp;M</b>		<b>LEG</b>	72.22
						0.20	0.15		
<b>A0702</b>	Inside Journeyman Wireman, including:	42.44	14.23	14.16	0.95	<b>L&amp;M</b>		<b>LEG</b>	72.13
	Technicians (including use of drones in electrical construction)					0.20	0.15		
<b>A0703</b>	Power Cable Splicer	63.04	14.23	19.08	0.95	<b>L&amp;M</b>		<b>LEG</b>	97.70
						0.25	0.15		
<b>A0704</b>	Tele Com Cable Splicer	50.53	14.23	17.17	0.95	<b>L&amp;M</b>		<b>LEG</b>	83.23
						0.20	0.15		
<b>A0705</b>	Power Journeyman Lineman, including:	61.29	14.23	19.03	0.95	<b>L&amp;M</b>		<b>LEG</b>	95.90
	Power Equipment Operator					0.25	0.15		
	Technician (including use of drones in electrical construction)								
<b>A0706</b>	Tele Com Journeyman Lineman, including:	48.78	14.23	17.11	0.95	<b>L&amp;M</b>		<b>LEG</b>	81.42
	Technician (including use of drones in telecommunications construction)					0.20	0.15		
	Tele Com Equipment Operator								

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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**Electricians**  
\*See per diem note on last page

<b>A0707</b>	Straight Line Installer - Repairman	48.78	14.23	17.11	0.95	<b>L&amp;M</b>	<b>LEG</b>	81.42
<b>A0708</b>	Powderman	59.29	14.23	18.97	0.95	<b>L&amp;M</b>	<b>LEG</b>	93.84
<b>A0710</b>	Material Handler	26.57	13.92	5.80	0.15	<b>L&amp;M</b>	<b>LEG</b>	46.74
<b>A0712</b>	Tree Trimmer Groundman	29.12	14.23	13.35	0.15	<b>L&amp;M</b>	<b>LEG</b>	57.15
<b>A0713</b>	Journeyman Tree Trimmer	38.05	14.23	13.62	0.15	<b>L&amp;M</b>	<b>LEG</b>	66.35
<b>A0714</b>	Vegetation Control Sprayer	41.60	14.23	13.73	0.15	<b>L&amp;M</b>	<b>LEG</b>	70.01
<b>A0715</b>	Inside Journeyman Communications CO/PBX	41.02	14.23	13.87	0.95	<b>L&amp;M</b>	<b>LEG</b>	70.42

**Elevator Workers**  
\*See per diem note on last page

<b>A0802</b>	Elevator Constructor	44.21	16.02	20.21	0.65	<b>L&amp;M</b>	<b>VAC</b>	86.59
<b>A0803</b>	Elevator Constructor Mechanic	63.16	16.02	20.21	0.65	<b>L&amp;M</b>	<b>VAC</b>	107.65

**Heat & Frost Insulators/Asbestos Workers**  
\*See per diem note on last page

<b>A0902</b>	Asbestos Abatement-Mechanical Systems	40.32	9.24	11.12	1.20	<b>IAF</b>	<b>LML</b>	62.07
<b>A0903</b>	Asbestos Abatement/General Demolition All Systems	40.32	9.24	11.12	1.20	<b>IAF</b>	<b>LML</b>	62.07
<b>A0904</b>	Insulator, Group II	40.32	9.24	11.12	1.20	<b>IAF</b>	<b>LML</b>	62.07
<b>A0905</b>	Fire Stop	40.32	9.24	11.12	1.20	<b>IAF</b>	<b>LML</b>	62.07

**Ironworkers**  
\*See per diem note on last page

<b>A1101</b>	Ironworkers, including:	41.49	9.91	24.95	0.77	<b>L&amp;M</b>	<b>IAF</b>	77.56
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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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**IronWorkers**  
 \*See per diem note on last page

						L&M	IAF	
<b>A1101</b>	Ironworkers, including:	41.49	9.91	24.95	0.77	0.20	0.24	77.56
	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	
<b>A1102</b>	Helicopter	42.49	9.91	24.95	0.77	0.20	0.24	78.56
	Helicopter (used for rigging and setting)							
	Tower (energy producing windmill type towers to include nacelle and blades)							

						L&M	IAF	
<b>A1103</b>	Fence/Barrier Installer	37.99	9.91	24.95	0.77	0.20	0.24	74.06

						L&M	IAF	
<b>A1104</b>	Guard Rail Layout Man	38.73	9.91	24.95	0.77	0.20	0.24	74.80

						L&M	IAF	
<b>A1105</b>	Guard Rail Installer	38.99	9.91	24.95	0.77	0.20	0.24	75.06

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

						L&M	LEG	
<b>N1201</b>	Group I, including:	33.00	8.95	21.16	1.40	0.20	0.20	64.91
	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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

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

						<b>L&amp;M</b>	<b>LEG</b>	
<b>N1201</b> Group I, including:	33.00	8.95	21.16	1.40	0.20	0.20	64.91	
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								

						<b>L&amp;M</b>	<b>LEG</b>	
<b>N1202</b> Group II, including:	34.00	8.95	21.16	1.40	0.20	0.20	65.91	
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								

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)**

\*See per diem note on last page

					<b>L&amp;M</b>	<b>LEG</b>	
<b>N1202</b>	Group II, including:	34.00	8.95	21.16	1.40	0.20	0.20 65.91

- 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

					<b>L&amp;M</b>	<b>LEG</b>	
<b>N1203</b>	Group III, including:	34.90	8.95	21.16	1.40	0.20	0.20 66.81

- 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)

					<b>L&amp;M</b>	<b>LEG</b>	
<b>N1204</b>	Group IIIA	38.18	8.95	21.16	1.40	0.20	0.20 70.09

- Asphalt Raker, Asphalt Belly Dump Lay Down
- Drill Doctor (in the field)

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**Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)**

\*See per diem note on last page

						L&M	LEG	
<b>N1204</b>	Group IIIA	38.18	8.95	21.16	1.40	0.20	0.20	70.09

- 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

						L&M	LEG	
<b>N1205</b>	Group IV	22.57	8.95	21.16	1.40	0.20	0.20	54.48

- Final Building Cleanup
- Permanent Yard Worker

						L&M	LEG	
<b>N1206</b>	Group IIIB	41.97	6.24	21.16	1.40	0.20	0.20	71.17

- 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

						L&M	LEG	
<b>S1201</b>	Group I, including:	33.00	8.95	21.16	1.40	0.20	0.20	64.91

- 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
- Fire Watch Laborer
- Flagman

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Laborers (The area that is south of N63 latitude and west of W138 longitude)**

\*See per diem note on last page

						<b>L&amp;M</b>	<b>LEG</b>	
<b>S1201</b>	Group I, including:	33.00	8.95	21.16	1.40	0.20	0.20	64.91

- 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

						<b>L&amp;M</b>	<b>LEG</b>	
<b>S1202</b>	Group II, including:	34.00	8.95	21.16	1.40	0.20	0.20	65.91

- 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
- Green Cutter (dam work)
- Gunite Operator
- Hod Carrier

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

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

<b>S1202</b> Group II, including:	34.00	8.95	21.16	1.40	<b>L&amp;M</b> 0.20	<b>LEG</b> 0.20	65.91
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- 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

<b>S1203</b> Group III, including:	34.90	8.95	21.16	1.40	<b>L&amp;M</b> 0.20	<b>LEG</b> 0.20	66.81
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- 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)

<b>S1204</b> Group IIIA	38.18	8.95	21.16	1.40	<b>L&amp;M</b> 0.20	<b>LEG</b> 0.20	70.09
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- 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)
- Pipelayers
- Powderman (Employee Possessor)
- Storm Water Pollution Protection Plan Specialist (SWPPP Specialist)

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=pension 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
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**Laborers (The area that is south of N63 latitude and west of W138 longitude)**

\*See per diem note on last page

<b>S1204</b>	Group IIIA	38.18	8.95	21.16	1.40	<b>L&amp;M</b>	<b>LEG</b>	70.09
	Traffic Control Supervisor, DOT Qualified							
<b>S1205</b>	Group IV	22.57	8.95	21.16	1.40	<b>L&amp;M</b>	<b>LEG</b>	54.48
	Final Building Cleanup Permanent Yard Worker							
<b>S1206</b>	Group IIIB	41.97	6.24	21.16	1.40	<b>L&amp;M</b>	<b>LEG</b>	71.17
	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

<b>A1251</b>	Millwright (journeyman)	46.48	10.35	12.87	1.10	<b>L&amp;M</b>		71.25
<b>A1252</b>	Millwright Welder	47.48	10.35	12.87	1.10	<b>L&amp;M</b>		72.25

**Painters, Region I (North of N63 latitude)**

\*See per diem note on last page

<b>N1301</b>	Group I, including:	36.08	9.27	15.10	1.08	<b>L&amp;M</b>		61.60
	Brush General Painter Hand Taping Hazardous Material Handler Lead-Based Paint Abatement Roll							
<b>N1302</b>	Group II, including:	36.60	9.27	15.10	1.08	<b>L&amp;M</b>		62.12
	Bridge Painter Epoxy Applicator General Drywall Finisher Hand/Spray Texturing Industrial Coatings Specialist							

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Painters, Region I (North of N63 latitude)**  
 \*See per diem note on last page

						L&M	
<b>N1302</b>	Group II, including:	36.60	9.27	15.10	1.08	0.07	62.12
	Machine/Automatic Taping						
	Pot Tender						
	Sandblasting						
	Specialty Painter						
	Spray						
	Structural Steel Painter						
	Wallpaper/Vinyl Hanger						

<b>N1304</b>	Group IV, including:	40.74	9.27	18.21	1.05	0.05	69.32
	Glazier						
	Storefront/Automatic Door Mechanic						

<b>N1305</b>	Group V, including:	39.44	9.27	5.00	1.10	0.10	54.91
	Carpet Installer						
	Floor Coverer						
	Heat Weld/Cove Base						
	Linoleum/Soft Tile Installer						

<b>N1306</b>	Group VI, including:	50.44	10.23	5.00	1.10	0.10	66.87
	Traffic Control Striper						

**Painters, Region II (South of N63 latitude)**  
 \*See per diem note on last page

						L&M	
<b>S1301</b>	Group I, including :	33.22	9.27	15.95	1.08	0.07	59.59
	Brush						
	General Painter						
	Hand Taping						
	Hazardous Material Handler						
	Lead-Based Paint Abatement						
	Roll						
	Spray						

						L&M	
<b>S1302</b>	Group II, including :	34.47	9.27	15.95	1.08	0.07	60.84
	General Drywall Finisher						
	Hand/Spray Texturing						
	Machine/Automatic Taping						
	Wallpaper/Vinyl Hanger						

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Painters, Region II (South of N63 latitude)**

\*See per diem note on last page

						L&M	
<b>S1303</b>	Group III, including :	34.57	9.27	15.95	1.08	0.07	60.94
	Bridge Painter						
	Epoxy Applicator						
	Industrial Coatings Specialist						
	Pot Tender						
	Sandblasting						
	Specialty Painter						
	Structural Steel Painter						
<b>S1304</b>	Group IV, including:	40.95	9.27	17.25	1.08	0.07	68.62
	Glazier						
	Storefront/Automatic Door Mechanic						
<b>S1305</b>	Group V, including:	39.44	9.27	5.00	1.10	0.10	54.91
	Carpet Installer						
	Floor Coverer						
	Heat Weld/Cove Base						
	Linoleum/Soft Tile Installer						
<b>S1306</b>	Group VI, including:	50.44	10.23	5.00	1.10	0.10	66.87
	Traffic Control Striper						

**Piledrivers**

\*See per diem note on last page

						L&M	IAF	
<b>A1401</b>	Piledriver	43.34	10.35	15.82	1.75	0.20	0.20	71.66
	Assistant Dive Tender							
	Carpenter/Piledriver							
	Rigger							
	Sheet Stabber							
	Skiff Operator							
<b>A1402</b>	Piledriver-Welder/Toxic Worker	44.34	10.35	15.82	1.75	0.20	0.20	72.66
<b>A1403</b>	Remotely Operated Vehicle Pilot/Technician	47.65	10.35	15.82	1.75	0.20	0.20	75.97
	Single Atmosphere Suit, Bell or Submersible Pilot							
<b>A1404</b>	Diver (working) **See note on last page	87.45	10.35	15.82	1.75	0.20	0.20	115.77

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=pension 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
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**Piledrivers**  
\*See per diem note on last page

<b>A1405</b>	Diver (standby) **See note on last page	47.65	10.35	15.82	1.75	L&M	IAF	75.97
<b>A1406</b>	Dive Tender **See note on last page	46.65	10.35	15.82	1.75	L&M	IAF	74.97
<b>A1407</b>	Welder (American Welding Society, Certified Welding Inspector)	48.90	10.35	15.82	1.75	L&M	IAF	77.22

**Plumbers, Region I (North of N63 latitude)**  
\*See per diem note on last page

<b>N1501</b>	Journeyman Pipefitter	45.41	11.75	17.45	1.50	L&M	S&L	76.76
	Plumber							
	Welder							

**Plumbers, Region II (South of N63 latitude)**  
\*See per diem note on last page

<b>S1501</b>	Journeyman Pipefitter	41.00	11.88	15.27	1.55	L&M		69.90
	Plumber							
	Welder							

**Plumbers, Region IIA (1st Judicial District)**  
\*See per diem note on last page

<b>X1501</b>	Journeyman Pipefitter	41.32	13.37	11.75	2.50	L&M		69.18
	Plumber							
	Welder							

**Power Equipment Operators**  
\*See per diem note on last page

<b>A1601</b>	Group I, including:	43.53	11.05	13.75	1.00	L&M		69.48
	Asphalt Roller: Breakdown, Intermediate, and Finish							
	Back Filler							
	Barrier Machine (Zipper)							
	Belcrete 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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Power Equipment Operators**

\*See per diem note on last page

							<b>L&amp;M</b>		
<b>A1601</b>	Group I, including:	43.53	11.05	13.75	1.00	0.10	0.05	69.48	
	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.)								
	Remote Controlled Equipment								
	Scraper (through 40 yards)								

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Power Equipment Operators**  
 \*See per diem note on last page

						L&M		
<b>A1601</b>	Group I, including:	43.53	11.05	13.75	1.00	0.10	0.05	69.48
	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		
<b>A1602</b>	Group IA, including:	45.29	11.05	13.75	1.00	0.10	0.05	71.24
	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		
<b>A1603</b>	Group II, including:	42.76	11.05	13.75	1.00	0.10	0.05	68.71
	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							
	Mixers							
	Screening, Washing Plant							

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Power Equipment Operators**  
 \*See per diem note on last page

						L&M		
<b>A1603</b>	Group II, including:	42.76	11.05	13.75	1.00	0.10	0.05	68.71
	Sideboom (cradling rock drill, regardless of size)							
	Skidder							
	Trenching Machines (under 16 inches)							
	Water/Waste Water Treatment Operator							

						L&M		
<b>A1604</b>	Group III, including:	42.04	11.05	13.75	1.00	0.10	0.05	67.99
	"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 2-1/2 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		
<b>A1605</b>	Group IV, including:	35.83	11.05	13.75	1.00	0.10	0.05	61.78
	Crane Assistant Engineer/Rig Oiler							
	Drill Helper							
	Parts & Equipment Coordinator							

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Power Equipment Operators**  
 \*See per diem note on last page

		L&M						
<b>A1605</b>	Group IV, including:	35.83	11.05	13.75	1.00	0.10	0.05	61.78
	Spotter							
	Steam Cleaner							
	Swamper (on trenching machines or shovel type equipment)							

**Roofers**  
 \*See per diem note on last page

		L&M						
<b>A1701</b>	Roofer & Waterproofer	44.62	13.75	3.91	0.81	0.10	0.06	63.25

		L&M						
<b>A1702</b>	Roofer Material Handler	31.23	13.75	3.91	0.81	0.10	0.06	49.86

**Sheet Metal Workers, Region I (North of N63 latitude)**  
 \*See per diem note on last page

		L&M						
<b>N1801</b>	Sheet Metal Journeyman	49.04	11.85	14.61	1.80	0.12		77.42

- 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
- HVAC-R Service Mechanic, servicing and maintaining HVAC-R Systems
- 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

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation



**Sheet Metal Workers, Region II (South of N63 latitude)**

\*See per diem note on last page

						L&M	
<b>S1801</b>	Sheet Metal Journeyman	45.35	12.23	14.70	1.83	0.43	74.54
	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						
	HVAC-R Service Mechanic, servicing and maintaining HVAC-R Systems						
	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

						L&M	
<b>A1901</b>	Sprinkler Fitter	51.51	10.55	18.15	0.52	0.25	80.98

**Surveyors**

\*See per diem note on last page

						L&M	
<b>A2001</b>	Chief of Parties	46.16	12.23	13.64	1.15	0.10	73.28
<b>A2002</b>	Party Chief	44.57	12.23	13.64	1.15	0.10	71.69
<b>A2003</b>	Line & Grade Technician/Office Technician/GPS, Drones	43.97	12.23	13.64	1.15	0.10	71.09
<b>A2004</b>	Associate Party Chief (including Instrument Person & Head Chain Person)/Stake Hop/Grademan	41.85	12.23	13.64	1.15	0.10	68.97

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Surveyors**  
\*See per diem note on last page

<b>A2006</b>	Chain Person (for crews with more than 2 people)	37.51	12.23	13.64	1.15	0.10	<b>L&amp;M</b>	64.63
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**Truck Drivers**  
\*See per diem note on last page

<b>A2101</b>	Group I, including:	42.94	12.23	13.64	1.15	0.10	<b>L&amp;M</b>	70.06
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- 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)

<b>A2102</b>	Group 1A including:	44.21	12.23	13.64	1.15	0.10	<b>L&amp;M</b>	71.33
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- 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)

<b>A2103</b>	Group II, including:	41.68	12.23	13.64	1.15	0.10	<b>L&amp;M</b>	68.80
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- 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)

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation



**Truck Drivers**  
 \*See per diem note on last page

						L&M	
<b>A2105</b>	Group IV, including:	40.28	12.23	13.64	1.15	0.10	67.40
	Loadmaster (air & water operations)						
	Lumber Carrier						
	Ready-mix, (up to & including 7 yards)						
	Rigger (air/water/oilfield)						
	Tireman, Light Duty						
	Track Truck Equipment						
	Truck Vacuum Sweeper						
	Warehouseperson						
	Water Truck (Below 250 Bbls)						
	Water Truck (straight)						
	Water Wagon, Semi						

						L&M	
<b>A2106</b>	Group V, including:	39.52	12.23	13.64	1.15	0.10	66.64
	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	
<b>N2201</b>	Group I, including:	36.30	8.95	21.16	1.40	0.20	0.20	68.21
	Brakeman							
	Mucker							
	Nipper							
	Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer)							
	Topman & Bull Gang							

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

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

<b>N2201</b>	Group I, including:	36.30	8.95	21.16	1.40	0.20	0.20	68.21
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Tunnel Track Laborer

<b>N2202</b>	Group II, including:	37.40	8.95	21.16	1.40	0.20	0.20	69.31
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- 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

<b>N2203</b>	Group III, including:	38.39	8.95	21.16	1.40	0.20	0.20	70.30
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- Miner
- Retimberman

<b>N2204</b>	Group IIIA, including:	42.00	8.95	21.16	1.40	0.20	0.20	73.91
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- 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

<b>N2206</b>	Group IIIB, including:	46.17	6.24	21.16	1.40	0.20	0.20	75.37
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- 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

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

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

<b>S2201</b>	Group I, including:	36.30	8.95	21.16	1.40	<b>L&amp;M</b>	<b>LEG</b>	68.21
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- Brakeman
- Mucker
- Nipper
- Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer)
- Topman & Bull Gang
- Tunnel Track Laborer

<b>S2202</b>	Group II, including:	37.40	8.95	21.16	1.40	<b>L&amp;M</b>	<b>LEG</b>	69.31
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- 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
- Nozzlelemen, Pumpcrete or Shotcrete
- Pipelayer Helper

<b>S2203</b>	Group III, including:	38.39	8.95	21.16	1.40	<b>L&amp;M</b>	<b>LEG</b>	70.30
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- Miner
- Retimberman

<b>S2204</b>	Group IIIA, including:	42.00	8.95	21.16	1.40	<b>L&amp;M</b>	<b>LEG</b>	73.91
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- 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

<b>S2206</b>	Group IIIB, including:	46.17	6.24	21.16	1.40	<b>L&amp;M</b>	<b>LEG</b>	75.37
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- 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)

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

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

<b>S2206</b>	Group IIIB, including:	46.17	6.24	21.16	1.40		<b>L&amp;M</b> 0.20	<b>LEG</b> 0.20	75.37
	Stake Hopper								

**Tunnel Workers, Power Equipment Operators**  
 \*See per diem note on last page

<b>A2207</b>	Group I	47.88	11.05	13.75	1.00		<b>L&amp;M</b> 0.10	0.05	73.83
<b>A2208</b>	Group IA	49.82	11.05	13.75	1.00		<b>L&amp;M</b> 0.10	0.05	75.77
<b>A2209</b>	Group II	47.04	11.05	13.75	1.00		<b>L&amp;M</b> 0.10	0.05	72.99
<b>A2210</b>	Group III	46.24	11.05	13.75	1.00		<b>L&amp;M</b> 0.10	0.05	72.19
<b>A2211</b>	Group IV	39.41	11.05	13.75	1.00		<b>L&amp;M</b> 0.10	0.05	65.36

\* 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.

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

### Shipyard Rates Addendum

This Addendum was developed to address the specialized industry of shipbuilding/repair in Alaska, as it relates to public works. For the purposes of providing rates for shipyard work the Department is adopting Shipyard rates from the state of Washington ( King County ). These rates only apply to work done in shipbuilding/repair in Alaska, under a public contract. This addendum will be updated two times a year to coincide with the corresponding Issue of *Laborers and Mechanics MINIMUM RATES OF PAY*.

Class Code	BHR H&W PEN TRN Other Benefits	THR
<b>Shipyard Workers</b> *See total hourly(THR) note below		
A2300	Ship Building/Repair Boilermaker	47.45
A2305	Ship Building/Repair Carpenter	47.35
A2310	Ship Building/Repair Crane Operator	45.06
A2315	Ship Building/Repair Electrician	48.92
A2320	Ship Building/Repair Heat & Frost Insulator	82.02
A2325	Ship Building/Repair Laborer	47.35
A2330	Ship Building/Repair Mechanist	47.35
A2335	Ship Building/Repair Operating Engineer	45.06
A2340	Ship Building/Repair Painter	47.35
A2345	Ship Building/Repair Pipefitter	47.35
A2350	Ship Building/Repair Rigger	47.45
A2355	Ship Building/Repair Sheet Metal	47.35
A2360	Ship Building/Repair Shipwright	47.35
A2365	Ship Building/Repair Warehouse	45.06

\*The THR includes the base hourly rate (BHR) and fringe benefits. Employers must pay a BHR and fringe benefit package that adds up to the THR. Fringe benefits included in the THR can be paid to employees in three ways; paid into a union trust fund, into an approved benefit plan, or paid directly on the paycheck as gross wages.

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=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation



## 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) 586-0800, or you may view them online at: [www.juneau.org/engineering](http://www.juneau.org/engineering).

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## 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, and manufactured articles and furnishing all labor, transportation and services, including 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 to be completed includes all associated work to remove the existing field lighting system and provide a complete, fully operational new LED field lighting system for field #2 at Melvin Park and miscellaneous other related work as specified in the contract documents.

## SPECIAL PROVISIONS

### 1.3 SITE OF WORK

- A. The site of the WORK is located at Melvin Park in the Mendenhall Valley, Juneau, Alaska.

### 1.4 BEGINNING AND COMPLETION OF THE WORK

- A. Time is the essence of the Contract. In accordance with the provisions of Article 2 of SECTION 00500 - AGREEMENT, the CONTRACTOR shall begin the WORK on the date specified in the written Notice to Proceed from the OWNER, and shall complete all the WORK by **May 31, 2024, or 60 days from beginning on site work.**

### 1.5 CONTRACT METHOD

- A. The WORK, hereunder will be constructed under a Lump Sum Contract.

### 1.6 WORK BY OTHERS

- A. The CONTRACTOR's attention is directed to the fact that work may be conducted at the site by other contractors 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 forces of other public 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.

### 1.6 CONTRACTOR USE OF PROJECT SITE

- A. The CONTRACTOR's use of the project site shall be limited to its construction operations, including on-site storage of materials, on-site fabrication facilities, and field offices.

### 1.7 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 operations at the same time. In any event, the OWNER shall be allowed access to the project site during the period of construction.

### 1.8 PARTIAL UTILIZATION OF THE WORK BY OWNER

- A. No portion of this project will be accepted for partial utilization.

### 1.9 PROJECT MEETINGS

## SPECIAL PROVISIONS

### A. Preconstruction Conference

1. Prior to the commencement of WORK at the site, a preconstruction 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 attendees will be:
  - a. ENGINEER and the Inspector.
  - 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 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. Shop Drawing/Sample/Substitute or "Or Equal" submittal schedule.
  - e. Name and the telephone number of CONTRACTORS project supervisor.
3. The purpose of the conference is to designate responsible personnel and establish a working relationship. Matters requiring coordination will be discussed and procedures for handling such matters established. The complete agenda will be furnished to the CONTRACTOR prior to the meeting date. However, 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 preconstruction 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 less than 4 hours. The first day will cover the items listed in paragraph 3, and the following day(s) will be spent on reviewing the plans and specifications, in extensive detail, with the ENGINEER and the OWNER.

### B. Progress Meetings

## SPECIAL PROVISIONS

1. The CONTRACTOR shall schedule and hold regular on-site progress meetings at least weekly and at other times as requested by ENGINEER or as required by 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 preside at the meetings and will arrange for keeping 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 his work, with a view to resolve these issues expeditiously.

### 1.10 DEFINITIONS APPLICABLE TO TECHNICAL SPECIFICATIONS

- A. The following words have the meaning defined in the Technical Portions of the WORK:

**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.

**Furnish** - means to supply and deliver to the site, to unload and unpack ready for assembly, installation, testing, and startup.

**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.

**Provide** - is defined as furnish and install, ready for the intended use.

**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.

**PART 2 -- PRODUCTS** (Not Used)

**PART 3 -- EXECUTION** (Not Used)

## END OF 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,

## **SPECIAL PROVISIONS**

and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of 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 the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA).

- B. No separate payment will be made for any item that is not specifically set forth in the Bid Schedule, and all costs therefor shall be included in the prices named in the Bid Schedule for the various appurtenant items of WORK.
  
- C. In addition to other incidental items of WORK listed elsewhere in the contract, the following items shall also be considered as incidental to other Items of WORK under this contract:
  - 1. Maintenance of access at all times to the residents on the stairways and coordination with the impacted residents and stairway users, including notification, alternate routes, temporary walkways, signage etc.
  - 2. All erosion and pollution control work required.
  - 3. Removal, disposal, or resetting of all rock, boulders and other obstructions, however large, as necessary for installation of stairways, landings and other improvements to the lines and grades, as shown on the Plans.
  - 4. Removal and replacement of survey monuments and markers disturbed during construction, whether shown on the Plans or not.
  - 5. Removal and replanting of existing landscaping items including trees, shrubs, plants flowers, gardens, as necessary for installation and other improvements.
  - 6. Maintenance of all services through the project area, including water, sewer, storm, garbage pickup, mail delivery, other deliveries and emergency vehicles.
  - 7. All traffic and pedestrian control, including flaggers, cones, barricades, and signage.

### 1.2 PRICE BASED ON LUMP SUM PAY UNIT

- A. Measurement for payment for the Lump Sum Pay Unit 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 will be made at the amount shown on the Bid Schedule, which payment will constitute full compensation for all WORK

## **END OF SECTION**

### **SECTION 01045 – CUTTING AND PATCHING**

#### **PART 1 -- GENERAL**

##### 1.1 DEFINITION

## SPECIAL PROVISIONS

- A. "Cutting-and-Patching" is defined to include the cutting and patching of nominally completed and previously existing concrete, steel, wood and miscellaneous metal structures; piping and pavement, in order to accommodate the coordination of WORK, or the installation of other facilities or structures or to uncover other facilities and structures for access or inspection, or to obtain samples for testing, or for similar purposes.

### 1.2 REQUIREMENTS OF STRUCTURAL WORK

- A. Structural WORK shall not be cut and patched in a manner resulting in a reduction of load-carrying capacity or load/deflection ratio.
- B. Prior to cutting-and-patching the following categories of WORK, the CONTRACTOR shall obtain the ENGINEER/ARCHITECT'S approval to proceed:
  - 1. Structural steel.
  - 2. Miscellaneous structural metals, including equipment supports, stair systems and similar categories of work.
  - 3. Structural concrete.
  - 4. Foundation construction.
  - 5. Timber and primary wood framing.
  - 6. Bearing and retaining walls.
  - 7. Structural decking.
  - 8. Exterior curtain wall construction.
  - 9. Pressurized piping, vessels and equipment.
  - 10. Removing existing CBJ stairways and landings attached to private property.

### 1.3 OPERATIONAL AND SAFETY LIMITATIONS

- A. The CONTRACTOR shall not cut-and-patch operational elements and safety-related components in a manner resulting in a reduction of capacities to perform in the manner intended or resulting in decreased operational life, increased maintenance, or decreased safety.
- B. Prior to cutting-and-patching the following categories of WORK, the CONTRACTOR shall obtain the ENGINEER/ARCHITECT'S approval to proceed:
  - 1. Sheeting, shoring and cross bracing.
  - 2. Operating systems and equipment.
  - 3. Water, moisture, vapor, air, smoke barriers, membranes and flashings.
  - 4. Noise and vibration control elements and systems.
  - 5. Control, communication, conveying and electrical wiring systems.

### 1.4 VISUAL REQUIREMENTS

- A. The CONTRACTOR shall not cut-and-patch WORK which is exposed on the exterior or exposed in occupied spaces, in a manner resulting in a reduction of visual qualities or resulting in substantial evidence of the cut-and-patch work, both as judged solely by the ENGINEER/ARCHITECT. The CONTRACTOR shall remove and replace work judged by the ENGINEER/ARCHITECT to have been cut-and-patched in a visually unsatisfactory manner.

## **SPECIAL PROVISIONS**

### **1.5 APPROVALS**

- A. Where prior approval of cutting-and-patching is required, the CONTRACTOR shall submit the request well in advance of time WORK will be performed. The request should include a description of why cutting-and-patching cannot reasonably be avoided, how it will be performed, how structural elements (if any) will be reinforced, products to be used, firms and tradesmen to perform the WORK, approximate dates of the WORK, and anticipated results in terms of structural, operational, and visual variations from the original WORK.
- B. The CONTRACTOR shall also request approval to proceed prior to starting WORK of this Section.

### **PART 2 -- PRODUCTS**

#### **2.1 MATERIALS USED IN CUTTING-AND-PATCHING**

- A. Except as otherwise indicated, the CONTRACTOR shall provide materials for cutting-and-patching which will result in equal-or-better WORK than the WORK being cut-and-patched, in terms of performance characteristics and including visual effects where applicable. The CONTRACTOR shall use material identical with the original materials where feasible.
- B. Materials shall comply with the requirements of the technical specifications wherever applicable.

### **PART 3 -- EXECUTION**

#### **3.1 PREPARATION**

- A. The CONTRACTOR shall provide adequate temporary support for WORK to be cut to prevent failure.
- B. The CONTRACTOR shall provide adequate protection of other WORK during cutting-and-patching.

#### **3.2 INSTALLATION**

- A. The CONTRACTOR shall employ skilled tradesmen to perform cutting-and-patching. Except as otherwise indicated, the CONTRACTOR shall proceed with cutting-and-patching at the earliest feasible time and perform the WORK promptly.
- B. The CONTRACTOR shall use methods least likely to damage WORK to be retained and WORK adjoining.
  - 1. In general, where physical cutting action is required, the CONTRACTOR shall cut WORK with sawing and grinding tools, not with hammering and chopping tools. Openings through concrete work shall be core drilled.
  - 2. Comply with the requirements of technical specifications wherever applicable.
  - 3. Comply with the requirements of applicable sections of Division 2 where cutting- and-patching requires excavating and backfilling.

## SPECIAL PROVISIONS

- C. The CONTRACTOR shall patch with seams, which are as invisible as possible and comply with specified tolerances for the WORK.
- D. The CONTRACTOR shall restore exposed seams of patched area; and, where necessary, extend finish restoration onto retained WORK adjoining, in a manner, which will eliminate evidence of patching.

### END OF SECTION

## SECTION 01070 ABBREVIATIONS OF INSTITUTIONS

### PART 1 – GENERAL

#### 1.1 GENERAL

- A. Wherever in these Specifications references are made to the standards, specifications, or other published data of the various international, national, regional, or local organizations, such organizations may be referred to by their acronym or abbreviation only. As a guide to the user of these Specifications, the following acronyms or abbreviations, which may appear in these Specifications shall have the meanings indicated herein.

#### 1.2 ABBREVIATIONS

AAMA	Architectural Aluminum Manufacturer's Association
AAR	Association of American Railroads
AASHTO	American Association of State Highway and Transportation Officials
AATCC	American Association of Textile Chemists and Colorists
ACI	American Concrete Institute
AFBMA	Anti-Friction Bearing Manufacturer's Association, Inc.
AGA	American Gas Association
AGMA	American Gear Manufacturer's Association
AHAM	Association of Home Appliance Manufacturers
AI	The Asphalt Institute
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
AMCA	Air Moving and Conditioning Association
ANS	American Nuclear Society
ANSI	American National Standards Institute, Inc.
APA	American Plywood Association
API	American Petroleum Institute APWA American Public Works Association
ASA	Acoustical Society of America
ASAE	American Society of Agricultural Engineers
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers
ASLE	American Society of Lubricating Engineers
ASME	American Society of Mechanical Engineers
ASQC	American Society for Quality Control ASSE



## SPECIAL PROVISIONS

ASTM	American Society of Sanitary Engineers
AWPA	American Society for Testing and Materials
AWPI	American Wood Preservers Association
AWPI	American Wood Preservers Institute
AWS	American Welding Society AWWA
	American Water Works Association
BBC	Basic Building Code, Building Officials and Code Administrators International
BHMA	Builders Hardware Manufacturer's Association
CBM	Certified Ballast Manufacturers
CEMA	Conveyors Equipment Manufacturer's Association
CGA	Compressed Gas Association
CLFMI	Chain Link Fence Manufacturer's Institute
CMA	Concrete Masonry Association
CRSI	Concrete Reinforcing Steel Institute
DCDMA	Diamond Core Drill Manufacturer's Association
EIA	Electronic Industries Association
ETL	Electrical Test Laboratories
FPL	Forest Products Laboratory
HI	Hydronics Institute
ICBO	International Conference of Building Officials
IEEE	Institute of Electrical and Electronics Engineers
IES	Illuminating Engineering Society
IME	Institute of Makers of Explosives
IOS	International Organization for Standardization
IP	Institute of Petroleum (London)
IPC	Institute of Printed Circuits
IPCEA	Insulated Power Cable Engineers Association
ISA	Instrument Society of America
ITE	Institute of Traffic Engineers
MBMA	Metal Building Manufacturer's Association
MPTA	Mechanical Power Transmission Association
MTI	Marine Testing Institute
NAAMM	National Association of Architectural Metal Manufacturer's
NACE	National Association of Corrosion Engineers
NBS	National Bureau of Standards
NCCLS	National Committee for Clinical Laboratory Standards
NEC	National Electrical Code
NEMA	National Electrical Manufacturer's Association
NFPA	National Fire Protection Association
NFPA	National Forest Products Association
NLGI	National Lubricating Grease Institute
NMA	National Microfilm Association
NWMA	National Woodwork Manufacturers Association
OSHA	Occupational Safety and Health Administration
PCA	Portland Cement Association
RIS	Redwood Inspection Service
RVIA	Recreational Vehicle Industry Association
RWMA	Resistance Welder Manufacturer's Association
SAE	Society of Automotive Engineers

## SPECIAL PROVISIONS

SAMA	Scientific Apparatus Makers Association
SMA	Screen Manufacturers Association
SMACCNA	Sheet Metal and Air Conditioning Contractors National Association
SPIB	Southern Pine Inspection Bureau
SPR	Simplified Practice Recommendation
SSA	Swedish Standards Association
SSBC	Southern Standard Building Code, Southern Building Code Congress
SSPC	Steel Structures Painting Council
SSPWC	Standard Specifications for Public Works Construction
TAPPI	Technical Association of the Pulp and Paper Industry
TFI	The Fertilizer Institute
UBC	Uniform Building Code
UL	Underwriters Laboratories, Inc. WCLIB West Coast Lumber Inspection Bureau
WCRSI	Western Concrete Reinforcing Steel Institute
WIC	Woodwork Institute of California
WRI	Wire Reinforcement Institute, Inc.
WWPA	Western Wood Products Association

### **PART 2 -- PRODUCTS (not used)**

### **PART 3 -- EXECUTION (not used)**

## END OF SECTION

### **SECTION 01090 -- REFERENCE STANDARDS**

#### **PART 1 -- GENERAL**

##### **1.1 GENERAL**

- A. Titles of Sections and Paragraphs: Captions accompanying specification sections and paragraphs are for convenience of reference only, and do not form a part of the Specifications.
- B. Applicable Publications: Whenever in these Specifications references are made to published specifications, codes, standards, or other requirements, it shall be understood that wherever no date is specified, only the latest specifications, standards, or requirements of the respective issuing agencies which have been published as of the date that the WORK is advertised for bids, shall apply; except to the extent that said standards or requirements may be in conflict with applicable laws, ordinances, or governing codes. No requirements set forth herein or shown on the Drawings shall be waived because of any provision of, or omission from, said standards or requirements.
- C. Specialists, Assignments: In certain instances, specification text requires (or implies) that specific work is to be assigned to specialists or expert entities, who must be engaged for the performance of that work. Such assignments shall be recognized as special requirements over which the CONTRACTOR has no choice or option. These requirements shall not be interpreted so as to conflict with the enforcement of building codes and similar regulations governing the WORK; also, they are not intended to interfere with local union jurisdiction settlements and similar conventions. Such assignments are intended to establish which party or entity involved in a specific unit of work is recognized as "expert" for the indicated construction processes or

## SPECIAL PROVISIONS

operations. Nevertheless, the final responsibility for fulfillment of the entire set of contract requirements remains with the CONTRACTOR.

### 1.2 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

- A. Without limiting the generality of other requirements of the Specifications, all WORK specified herein shall conform to or exceed the requirements of applicable codes and the applicable requirements of the following documents.
- B. References herein to "Building Code" or "Uniform Building Code" shall mean Uniform Building Code of the International Conference of Building Officials (ICBO).
- C. Similarly, references to "Mechanical Code" or "Uniform Mechanical Code," "Plumbing Code" or "Uniform Plumbing Code," "Fire Code" or "Uniform Fire Code," shall mean Uniform Mechanical Code, Uniform Plumbing Code and Uniform Fire Code of the International Conference of the Building Officials (ICBO). "Electric Code" or "National Electric Code (NEC)" shall mean the National Electric Code of the National Fire Protection Association (NFPA). The latest edition of the codes as approved by the Municipal Code and used by the local agency as of the date that the WORK is advertised for bids, as adopted by the agency having jurisdiction, shall apply to the WORK herein, including all addenda, modifications, amendments, or other lawful changes thereto.
- D. In case of conflict between codes, reference standards, drawings and the other Contract Documents, the most stringent requirements shall govern. All conflicts shall be brought to the attention of the ENGINEER for clarification and directions prior to ordering or providing any materials or furnishing labor. The CONTRACTOR shall bid for the most stringent requirements.
- E. The CONTRACTOR shall construct the WORK specified herein in accordance with the requirements of the Contract Documents and the referenced portions of those referenced codes, standards, and specifications listed herein.
- F. Applicable Standard Specifications: References in the Contract Sections 02801 - ASPHALT CONCRETE PAVEMENT to Standard Specifications shall mean the Alaska Department of Transportation and Public Facilities "STANDARD SPECIFICATIONS for Highway Construction - 1988" and any supplements or amendments thereto.
- G. References herein to "OSHA Regulations for Construction" shall mean Title 29, Part 1926, Construction Safety and Health Regulations, Code of Federal Regulations (OSHA), including all changes and amendments thereto.
- H. References herein to "OSHA Standards" shall mean Title 29, Part 1910, Occupational Safety and Health Standards, Code of Federal Regulations (OSHA), including all changes and amendments thereto.

**PART 2 -- PRODUCTS (not used)**

**PART 3 -- EXECUTION (not used)**

**END OF SECTION**

## SPECIAL PROVISIONS

### SECTION 01300 – CONTRACTOR SUBMITTALS

#### PART 1 – GENERAL

##### 1.1 GENERAL

- A. Wherever submittals are required hereunder, all such submittals by the CONTRACTOR shall be submitted to the ENGINEER.
- B. Within 14 days after the date of commencement as stated in the Notice to Proceed, and prior to the Preconstruction Meeting, the CONTRACTOR shall submit the following items to the ENGINEER for review:
  - 1. A preliminary schedule of Shop Drawing, Sample, and proposed Substitutes or "Or-Equal" submittals.
  - 2. A list of all permits and licenses the CONTRACTOR shall obtain indicating the agency required to grant the permit and the expected date of submittal for the permit and required date for receipt of the permit.
  - 3. A complete progress schedule for all phases of the project.
  - 4. All required Material Safety Data Sheets.
  - 5. A traffic maintenance plan, as required and identification of the CONTRACTOR's certified Traffic Control Supervisor responsible for traffic control
  - 6. Certification documents for the CONTRACTOR's Traffic Control Supervisor and flaggers.
  - 7. A plan for temporary erosion control and pollution control, as required.
  - 8. A letter designating the CONTRACTOR's Superintendent, defining that person's responsibility and authority, and providing a specimen of his signature.
  - 9. A letter designating the CONTRACTOR's safety representative and the EEO Officer and the person's responsibility and authority.

##### 1.2 SHOP DRAWING SUBMITTAL

- A. Wherever called for in the Contract Documents, or where required by the ENGINEER, the CONTRACTOR shall furnish to the ENGINEER for review, 8 copies of each shop drawing submittal. The term "Shop Drawings" as used herein shall be understood to include detail design calculations, shop drawings, fabrication, and installation drawings, erection drawings, lists, graphs, operating instructions, catalog sheets, data sheets, and similar items.
- B. All Shop Drawing submittals shall be accompanied by the ENGINEER's standard submittal transmittal form. The form may be obtained in quantity from the ENGINEER. Any submittal not accompanied by such a form, or where all applicable items on the form are not completed, will be returned for resubmittal.
- C. Normally, a separate transmittal form shall be used for each specific item or class of material or equipment for which a submittal is required. Transmittal of a submittal of various items using a single transmittal form will be permitted only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency indicates review of the group or package as a whole. A multiple-page submittal shall be collated

## SPECIAL PROVISIONS

into sets, and each set shall be stapled or bound, as appropriate, prior to transmittal to the ENGINEER.

- D. Except as may otherwise be provided herein, the ENGINEER will return prints of each submittal to the CONTRACTOR with its comments noted thereon, within 30 calendar days following their receipt by the ENGINEER. It is considered reasonable that the CONTRACTOR shall make a complete and acceptable submittal to the ENGINEER by the second submission of a submittal item. The OWNER reserves the right to withhold monies due the CONTRACTOR to cover additional costs of the ENGINEER's review beyond the second submittal. The ENGINEER's maximum review period for each submittal including all resubmittals will be 30 days per submission. In other words, for a submittal that requires 2 resubmittals before it is complete, the maximum review period for that submittal could be 90 days.
- E. If 3 copies of a submittal are returned to the CONTRACTOR marked "NO EXCEPTIONS TAKEN," formal revision and resubmission of said submittal will not be required.
- F. If 3 copies of a submittal are returned to the CONTRACTOR marked "MAKE CORRECTIONS NOTED," formal revision and resubmission of said submittal will not be required.
- G. If one copy of the submittal is returned to the CONTRACTOR marked "AMEND-RESUBMIT," the CONTRACTOR shall revise said submittal and shall resubmit the required number of copies of said revised submittal to the ENGINEER.
- H. If one copy of the submittal is returned to the CONTRACTOR marked "REJECTED-RESUBMIT," the CONTRACTOR shall revise said submittal and shall resubmit the required number of copies of said revised submittal to the ENGINEER.
- I. Fabrication of an item may be commenced only after the ENGINEER has reviewed the pertinent submittal and returned copies to the CONTRACTOR marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED." Corrections indicated on submittal shall be considered as changes necessary to meet the requirements of the Contract Documents and shall not be taken as the basis for changes to the Contract requirements. Only a change order can alter the contract price, time, or requirements.
- J. All CONTRACTOR shop drawing submittals shall be carefully reviewed by an authorized representative of the CONTRACTOR, prior to submission to the ENGINEER. Each submittal shall be dated, signed, and certified by the CONTRACTOR, as being correct and in strict conformance with the Contract Documents. In the case of shop drawings, each sheet shall be so dated, signed, and certified. No consideration for review by the ENGINEER of any CONTRACTOR submittal will be made for any items which have not been so certified by the CONTRACTOR. All non-certified submittals will be returned to the CONTRACTOR without action taken by the ENGINEER, and any delays caused thereby shall be the total responsibility of the CONTRACTOR.
- K. The ENGINEER's review of CONTRACTOR shop drawing submittals shall not relieve the CONTRACTOR of the entire responsibility for the correctness of details and dimensions. The CONTRACTOR shall assume all responsibility and risk for any misfits due to any errors in CONTRACTOR submittals. The CONTRACTOR shall be responsible for the dimensions and the design of adequate connections and details.

## **SPECIAL PROVISIONS**

### **1.3 SAMPLES SUBMITTAL**

- A. Whenever in the Specifications samples are required, the CONTRACTOR shall submit not less than 3 samples of each such item or material to the ENGINEER for acceptance at no additional cost to the OWNER.
- B. Samples, as required herein, shall be submitted for acceptance a minimum of 21 days prior to ordering such material for delivery to the job site, and shall be submitted in an orderly sequence so that dependent materials or equipment can be assembled and reviewed without causing delays in the WORK.
- C. All samples shall be individually and indelibly labeled or tagged, indicating thereon all specified physical characteristics and Supplier's names for identification and submitted to the ENGINEER for acceptance. Upon receiving acceptance of the ENGINEER, one set of the samples will be stamped and dated by the ENGINEER and returned to the CONTRACTOR, and one set of samples will be retained by the ENGINEER, and one set of samples shall remain at the job site until completion of the WORK.
- D. Unless clearly stated otherwise, it is assumed that all colors and textures of specified items presented in sample submittal are from the manufacturer's standard colors and standard materials, products, or equipment lines. If the samples represent non-standard colors, materials, products or equipment lines, and their selection will require an increase in contract time or price, the CONTRACTOR will clearly indicate this on the transmittal page of the submittal.

### **1.4 RECORD DRAWINGS SUBMITTAL**

- A. The CONTRACTOR shall keep and maintain, at the job site, one record set of Drawings. On these, it shall mark all project conditions, locations, configurations, and any other changes or deviations which may vary from the details represented on the original Contract Drawings, including buried or concealed construction and utility features which are revealed during the course of construction. Special attention shall be given to recording the horizontal and vertical location of all buried utilities that differ from the locations indicated, or which were not indicated on the Contract Drawings. Said record drawings shall be supplemented by any detailed sketches as necessary or directed to indicate, fully, the WORK as actually constructed. These master record drawings of the CONTRACTOR's representation of as-built conditions, including all revisions made necessary by addenda, change orders, and the like shall be maintained up-to-date during the progress of the WORK.
- B. In the case of those drawings which depict the detail requirement for equipment to be assembled and wired in the factory, such as motor control centers and the like, the record drawings shall be updated by indicating those portions which are superseded by change order drawings or final shop drawings, and by including appropriate reference information describing the change orders by number and the shop drawings by manufacturer, drawing, and revision numbers.
- C. Record drawings shall be accessible to the ENGINEER at all times during the construction period and shall be delivered to the ENGINEER on the 20th working day of every third month after the month in which the Notice to Proceed is given as well as upon completion of the WORK.

## SPECIAL PROVISIONS

- D. Final payment will not be acted upon until the CONTRACTOR-prepared record drawings have been delivered to the ENGINEER.

### 1.5 PROGRESS SCHEDULE

- A. The progress schedule shall be in Bar Chart of Critical Path Method (CPM) form, as required by the ENGINEER.
- B. The progress schedule shall show the order in which the CONTRACTOR proposed to carry out the work and the contemplated dates on which the CONTRACTOR and their subcontractors will start and finish each of the salient features of the work, including any scheduled periods of shutdown. The schedule shall also indicate any anticipated periods of multiple-shift work.
- C. Upon substantial changes to the CONTRACTOR'S progress schedule of work or upon request of the ENGINEER, the contractor shall submit a revised progress schedule(s) in the form required. Such revised schedule(s) shall conform with the contract time and take into account delays which may have been encountered in the performance of the Work. In submitting a revised schedule, the CONTRACTOR shall state specifically the reason for the revision and the adjustments made in his schedule or methods of operation to ensure the completion of all the work within the contract time.

### 1.6 PROPOSED SUBSTITUTES OR "OR-EQUAL" ITEM SUBMITTAL

- A. Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular supplier, the naming of the item is intended to establish the type, function, and quality required. If the name is followed by the words "or-equal" indicating that a substitution is permitted, materials or equipment of other Suppliers may be accepted by the ENGINEER if sufficient information is submitted by the CONTRACTOR to allow the ENGINEER to determine that the material or equipment proposed is equivalent or equal to that named, subject to the following requirements:
  - 1. The burden of proof as to the type, function, and quality of any such substitute material or equipment shall be upon the CONTRACTOR.
  - 2. The ENGINEER will be the sole judge as to the type, function, and quality of any such substitute material or equipment and the ENGINEER's decision shall be final.
  - 3. The ENGINEER may require the CONTRACTOR, to furnish at the CONTRACTOR's expense, additional data about the proposed substitute.
  - 4. The OWNER may require the CONTRACTOR to furnish at the CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.
  - 5. Acceptance by the ENGINEER of a substitute item proposed by the CONTRACTOR shall not relieve the CONTRACTOR of the responsibility for full compliance with the Contract Documents and for adequacy of the substitute item.
  - 6. The CONTRACTOR shall be responsible for resultant changes and all additional costs which the accepted substitution requires in the CONTRACTOR's work, the work of its subcontractors and of other contractors, and shall effect such changes without cost to the OWNER. This shall include the cost for redesign and claims of other contractor affected by the resulting change.
- B. The procedure for review by the ENGINEER will include the following:

## **SPECIAL PROVISIONS**

1. If the CONTRACTOR wishes to furnish or use a substitute item of material or equipment, the CONTRACTOR shall make written application to the ENGINEER on the "Substitution Request Form" for acceptance thereof.
  2. Unless otherwise provided by law or authorized in writing by the ENGINEER, the "Substitution Request Form(s)" shall be submitted within the 21-day period after Notice of Award.
  3. Wherever a proposed substitute material or equipment has not been submitted within said 21-day period, or wherever the submission of a proposed substitute material or equipment has been judged to be unacceptable by the ENGINEER, the CONTRACTOR shall provide material or equipment named in the Contract Documents.
  4. The CONTRACTOR shall certify that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified, and be suited to the same use as that specified.
  5. The ENGINEER will be allowed a reasonable time within which to evaluate each proposed substitute. In no case will this reasonable time period be less than 30 days.
  6. As applicable, no shop drawing submittals will be made for a substitute item nor will any substitute item be ordered, installed, or utilized without the ENGINEER's prior written acceptance of the CONTRACTOR's "Substitution Request Form" which will be evidenced by a ChangeOrder.
  7. The ENGINEER will record the time required by the ENGINEER in evaluating substitutions proposed by the CONTRACTOR and in making changes in the Contract Documents occasioned thereby. Whether or not the ENGINEER accepts a proposed substitute, the CONTRACTOR shall reimburse the OWNER for the charges of the ENGINEER for evaluating each proposed substitute.
- C. The CONTRACTOR's application using the "Substitution Request Forms" shall contain the following statements and/or information which shall be considered by the ENGINEER in evaluating the proposed substitution:
1. The evaluation and acceptance of the proposed substitute will not prejudice the CONTRACTOR's achievement of substantial completion on time.
  2. Whether or not acceptance of the substitute for use in the WORK will require a change in any of the Contract Documents to adopt the design to the proposed substitute.
  3. Whether or not incorporation or use of the substitute in connection with the WORK is subject to payment of any license fee or royalty.
  4. All variations of the proposed substitute for that specified will be identified.
  5. Available maintenance, repair, and replacement service and its estimated cost will be indicated.
  6. Itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including cost of redesign and claims of other contractors affected by the resulting change.

**PART 2 -- PRODUCTS** (Not Used)

**PART 3 -- EXECUTION** (Not Used)

**(SUBSTITUTION REQUEST FORM – NEXT PAGE)**



**SPECIAL PROVISIONS**

**CBJ Engineering Department  
SUBSTITUTION REQUEST FORM**

TO: \_\_\_\_\_ PROJECT: \_\_\_\_\_

Contract No. \_\_\_\_\_

OWNER: \_\_\_\_\_

SPECIFIED ITEM:

Section	Page	Paragraph	Description
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The undersigned requests consideration of the following:

PROPOSED SUBSTITUTION: \_\_\_\_\_

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of the request. Applicable portions of the data are clearly identified.

The undersigned states that the following paragraphs, unless modified on the attachments, are correct:

1. The proposed substitution does not affect dimensions shown on Drawings and will not require a change in any of the Contract Documents.
2. The undersigned will pay for changes to the design, including engineering design, detailing, and construction costs caused by the requested substitution, which is estimated to be approximately \$\_\_\_\_\_.
3. The proposed substitution will have no adverse effect on other contractors, the construction schedule (specifically the date of substantial completion), or specified warranty requirements.
4. Maintenance and service parts will be locally available for the proposed substitution.
5. The incorporation or use of the substitute in connection with the work is not subject to payment of any license fee or royalty.

The undersigned further states that the function, appearance, and quality of the Proposed Substitution are equivalent or superior to the Specified item.

Submitted by Contractor: \_\_\_\_\_

Signature: \_\_\_\_\_

Firm: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Attachments: \_\_\_\_\_

Reviewed by Architect/Engineer:

Accepted:

Accepted as Noted:

Not Accepted:

Received Too Late:

Date:

Telephone:

**END OF SECTION**

## SPECIAL PROVISIONS

### SECTION 01600 – MATERIALS AND EQUIPMENT

#### PART 1 – GENERAL

##### 1.1 GENERAL

- A. The word "Products," as used herein, is defined to include purchased items for incorporation into the WORK, regardless of whether specifically purchased for project or taken from CONTRACTOR's stock of previously purchased products. The word "Materials," is defined as products which must be substantially cut, shaped, worked, mixed, finished, refined, or otherwise fabricated, processed, installed, or applied to form units of work. The word "Equipment" is defined as products with operational parts, regardless of whether motorized or manually operated, and particularly including products with service connections (wiring, piping, and other like items). Definitions in this paragraph are not intended to negate the meaning of other terms used in Contract Documents, including "specialties," "systems," "structure," "finishes," "accessories," "furnishings," special construction," and similar terms, which are self-explanatory and have recognized meanings in the construction industry.
- B. Neither "Products" nor "Materials" nor "Equipment" includes machinery and equipment used for preparation, fabrication, conveying and erection of the WORK.

##### 1.2 QUALITY ASSURANCE

- A. **Source Limitations:** To the greatest extent possible for each unit of work, the CONTRACTOR shall provide products, materials, or equipment of a singular generic kind from a single source.
- B. **Compatibility of Options:** Where more than one choice is available as options for CONTRACTOR's selection of a product, material, or equipment, the CONTRACTOR shall select an option which is compatible with other products, materials, or equipment already selected. Compatibility is a basic general requirement of product/material selections.

##### 1.3 PRODUCT DELIVERY/STORAGE/HANDLING

- A. The CONTRACTOR shall deliver, handle, and store products in accordance with manufacturer's written recommendations and by methods and means which will prevent damage, deterioration, and loss including theft. Delivery schedules shall be controlled to minimize long-term storage of products at site and overcrowding of construction spaces. In particular, the CONTRACTOR shall ensure minimum holding or storage times for products recognized to be flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other sources of loss.

##### 1.4 TRANSPORTATION AND HANDLING

- A. Products shall be transported by methods to avoid product damage and shall be delivered in undamaged condition in manufacturer's unopened containers or packaging.
- B. The CONTRACTOR shall provide equipment and personnel to handle products, materials, and equipment by methods to prevent soiling and damage.

## SPECIAL PROVISIONS

- C. The CONTRACTOR shall provide additional protection during handling to prevent marring and otherwise damaging products, packaging, and surrounding surfaces.

### 1.5 STORAGE AND PROTECTION

- A. Products shall be stored in accordance with manufacturer's written instructions, with seals and labels intact and legible. Sensitive products shall be stored in weather-tight climate- controlled enclosures and temperature and humidity ranges shall be maintained within tolerances required by manufacturer's written instructions.
- B. For exterior storage of fabricated products, they shall be placed on sloped supports above ground. Products subject to deterioration shall be covered with impervious sheet covering; ventilation shall be provided to avoid condensation.
- C. Loose granular materials shall be stored on solid surfaces in a well-drained area and shall be prevented from mixing with foreign matter.
- D. Storage shall be arranged to provide access for inspection. The CONTRACTOR shall periodically inspect to assure products are undamaged and are maintained under required conditions.

### 1.6 MAINTENANCE OF STORAGE

- A. Stored products shall be periodically inspected on a scheduled basis. The CONTRACTOR shall maintain a log of inspections and shall make said log available onrequest.
- B. The CONTRACTOR shall verify that storage facilities comply with manufacturer's product storage requirements.
- C. The CONTRACTOR shall verify that manufacturer-required environmental conditions are maintained continually.
- D. The CONTRACTOR shall verify that surfaces of products exposed to the elements are not adversely affected and that any weathering of finishes does not occur.
- E. For mechanical and electrical equipment, the CONTRACTOR shall provide a copy of the manufacturer's service instructions with each item and the exterior of the package shall contain notice that instructions are included.
- F. Products shall be serviced on a regularly scheduled basis, and a log of services shall be maintained and submitted as a record document prior to acceptance by the OWNER in accordance with the Contract Documents.

**PART 2 – PRODUCTS (not used)**

**PART 3 – EXECUTION (not used)**

**END OF SECTION**

## **SPECIAL PROVISIONS**

### **SECTION 01704 – FINAL CLEANUP AND SITE RESTORATION**

#### **PART 1 – GENERAL**

##### 1.1 DESCRIPTION

- A. The WORK under this Section includes providing all supervision, labor, materials, tools and equipment necessary for final clean-up and restoration of all areas disturbed by construction activities, to a condition equal to, or better than, before construction started. This does not include clean-up or restoration incidental to, or directly provided for by, other construction items.

#### **PART 2 – PRODUCTS**

##### 2.1 MATERIALS

- A. Any materials required shall conform to the appropriate Section of these specifications.

#### **PART 3 – EXECUTION**

##### 3.1 CONSTRUCTION

- A. The CONTRACTOR shall clean-up all sites disturbed during construction of the project. This includes removal of all construction equipment, disposal of all excess materials, disposal of all rubbish and debris, removal of all temporary structures, and grading of the sites so that no standing water is evident.

**END OF SECTION**

### **SECTION 16060 - GROUNDING AND BONDING**

#### **PART 1 - GENERAL**

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

##### 1.2 SUMMARY

- A. Section includes grounding and bonding systems and equipment.

##### 1.3 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Comply with UL 467 for grounding and bonding materials and equipment.

## SPECIAL PROVISIONS

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. Burndy; Part of Hubbell Electrical Systems.
  2. Dossert; AFL Telecommunications LLC.
  3. ERICO International Corporation.
  4. Fushi Copperweld Inc.
  5. Galvan Industries, Inc.; Electrical Products Division, LLC.
  6. Harger Lightning and Grounding.
  7. ILSCO.
  8. O-Z/Gedney; A Brand of the EGS Electrical Group.
  9. Robbins Lightning, Inc.
  10. Siemens Power Transmission & Distribution, Inc.

#### 2.2 SYSTEM DESCRIPTION

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Comply with UL 467 for grounding and bonding materials and equipment.

#### 2.3 CONDUCTORS

- A. Insulated Conductors: Copper or tinned-copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.
- B. Bare Copper Conductors:
1. Stranded Conductors: ASTM B 8.
  2. Tinned Conductors: ASTM B 33.
  3. Bonding Cable: 28 kcmil, 14 strands of No. 17 AWG conductor, 1/4 inch (6 mm) in diameter.
  4. Bonding Conductor: No. 4 or No. 6 stranded conductor.
  5. Bonding Jumper: Copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches (41 mm) wide and 1/16 inch (1.6 mm) thick.
  6. Tinned Bonding Jumper: Tinned-copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches (41 mm) wide and 1/16 inch (1.6 mm) thick.

#### 2.4 CONNECTORS

- A. Listed and labeled by an NRTL acceptable to authorities having jurisdiction for applications in which used and for specific types, sizes, and combinations of conductors

## **SPECIAL PROVISIONS**

and other items connected.

- B. Bolted Connectors for Conductors: Copper or copper alloy.

### **2.5 GROUNDING ELECTRODES**

- A. Ground Rods: Copper-clad; 5/8 by 96 inches (16 by 2400 mm).

## **PART 3 - EXECUTION**

### **3.1 APPLICATIONS**

- A. Conductors: Install stranded conductors and larger unless otherwise indicated.
- B. Underground Grounding Conductors: Install bare copper conductor, No. 2/0 AWG minimum.
  - 1. Bury at least 24 inches (600 mm) below grade.
  - 2. Duct-Bank Grounding Conductor: Bury 12 inches (300 mm) above duct bank when indicated as part of duct-bank installation.
- C. Conductor Terminations and Connections:
  - 1. Equipment Grounding Conductor Terminations: Bolted connectors.
  - 2. Underground Connections: Hi compression connectors except as otherwise indicated.
  - 3. Connections to Ground Rods: Bolted connectors.

### **3.2 GROUNDING UNDERGROUND DISTRIBUTION SYSTEM COMPONENTS**

- A. Comply with IEEE C2 grounding requirements.
- B. Grounding Handholes: Install a driven ground rod through handhole floor, close to wall, and set rod depth so 4 inches (100 mm) will extend above floor. Bond with all metallic conduits and lid.

### **3.3 EQUIPMENT GROUNDING**

- A. Install insulated equipment grounding conductors with all circuits.

**END OF SECTION**

## **SECTION 16073 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

## **SPECIAL PROVISIONS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Hangers and supports for electrical equipment and systems.
  - 2. Construction requirements for concrete bases.

### 1.3 DEFINITIONS

- A. EMT: Electrical metallic tubing.
- B. IMC: Intermediate metal conduit.
- C. RMC: Rigid metal conduit.

### 1.4 PERFORMANCE REQUIREMENTS

- A. Rated Strength: Adequate in tension, shear, and pullout force to resist maximum loads calculated or imposed for this Project, with a minimum structural safety factor of five times the applied force.

### 1.5 ACTION SUBMITTALS

- A. Product Data: For the following:
  - 1. Steel slotted support systems.

### 1.6 QUALITY ASSURANCE

- A. Welding: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
- B. Comply with NFPA 70.

### 1.7 COORDINATION

- A. Coordinate size and location of concrete bases. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified together with concrete Specifications.

## **PART 2 - PRODUCTS**

## SPECIAL PROVISIONS

### 2.1 SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS

- A. Steel Slotted Support Systems: Comply with MFMA-4, factory-fabricated components for field assembly.
  - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Allied Tube & Conduit.
    - b. Cooper B-Line, Inc.
    - c. ERICO International Corporation.
    - d. GS Metals Corp.
    - e. Thomas & Betts Corporation.
    - f. Unistrut; Atkore International.
    - g. Wesanco, Inc.
  - 2. Metallic Coatings: Hot-dip galvanized after fabrication and applied according to MFMA-4.
  - 3. Channel Dimensions: Selected for applicable load criteria.
- B. Raceway and Cable Supports: As described in NECA 1 and NECA 101.
- C. Conduit and Cable Support Devices: Steel and malleable-iron clamps, and associated fittings, designed for types and sizes of raceway or cable to be supported.
- D. Structural Steel for Fabricated Supports and Restraints: ASTM A 36/A 36M, steel plates, shapes, and bars; black and galvanized.
- E. Mounting, Anchoring, and Attachment Components: Items for fastening electrical items or their supports to building surfaces include the following:
  - 1. Powder-Actuated Fasteners: Threaded-steel stud, for use in hardened Portland cement concrete, steel, or wood, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.
    - A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
      - 1) Hilti, Inc.
      - 2) ITW Ramset/Red Head; Illinois Tool Works, Inc.
      - 3) MKT Fastening, LLC.
      - 4) Simpson Strong-Tie Co., Inc.
  - 2. Mechanical-Expansion Anchors: Insert-wedge-type, stainless steel, for use in hardened Portland cement concrete with tension, shear, and pullout capacities appropriate for supported loads and building materials in which used.
    - A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
      - 1) Cooper B-Line, Inc.
      - 2) Empire Tool and Manufacturing Co., Inc.
      - 3) Hilti, Inc.



## SPECIAL PROVISIONS

- 4) ITW Ramset/Red Head; Illinois Tool Works, Inc.
- 5) MKT Fastening, LLC.
3. Concrete Inserts: Steel or malleable-iron, slotted support system units similar to MSS Type 18; complying with MFMA-4 or MSS SP-58.
4. Clamps for Attachment to Steel Structural Elements: MSS SP-58, type suitable for attached structural element.
5. Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.
6. Toggle Bolts: All-steel springhead type.
7. Hanger Rods: Threaded steel.

### 2.2 FABRICATED METAL EQUIPMENT SUPPORT ASSEMBLIES

- A. Description: Welded or bolted, structural-steel shapes, shop or field fabricated to fit dimensions of supported equipment.

## PART 3 - EXECUTION

### 3.1 APPLICATION

- A. Comply with NECA 1 and NECA 101 for application of hangers and supports for electrical equipment and systems except if requirements in this Section are stricter.
- B. Maximum Support Spacing for Raceway: Space supports for IMC and RMC as required by NFPA 70.

### 3.2 SUPPORT INSTALLATION

- A. Comply with NECA 1 and NECA 101 for installation requirements except as specified in this Article.
- B. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits. Minimum static design load used for strength determination shall be weight of supported components plus 200 lb (90 kg).
- C. Mounting and Anchorage of Surface-Mounted Equipment and Components: Anchor and fasten electrical items and their supports to building structural elements by the following methods unless otherwise indicated by code:
  1. To Wood: Fasten with lag screws or through bolts.
  2. To New Concrete: Bolt to concrete inserts.
  3. To Masonry: Approved toggle-type bolts on hollow masonry units and expansion anchor fasteners on solid masonry units.
  4. To Existing Concrete: Expansion anchor fasteners.
  5. Instead of expansion anchors, powder-actuated driven threaded studs provided with lock washers and nuts may be used in existing standard-weight concrete 4 inches (100 mm) thick or greater. Do not use for anchorage to lightweight-aggregate concrete or for slabs less than 4 inches (100 mm) thick.

## **SPECIAL PROVISIONS**

6. To Light Steel: Sheet metal screws.
7. Items Mounted on Hollow Walls and Nonstructural Building Surfaces: Mount cabinets, panelboards, disconnect switches, control enclosures, pull and junction boxes, transformers, and other devices on slotted- channel racks attached to substrate.

- D. Drill holes for expansion anchors in concrete at locations and to depths that avoid reinforcing bars.

### **3.3 INSTALLATION OF FABRICATED METAL SUPPORTS**

- A. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor electrical materials and equipment.
- B. Field Welding: Comply with AWS D1.1/D1.1M.

### **3.4 CONCRETE BASES**

- A. Construct concrete bases of dimensions indicated but not less than 4 inches (100 mm) larger in both directions than supported unit, and so anchors will be a minimum of 10 bolt diameters from edge of the base.
- B. Use 3000-psi (20.7-MPa), 28-day compressive-strength concrete.
- C. Anchor equipment to concrete base.
  1. Place and secure anchorage devices. Use supported equipment manufacturer's setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
  2. Install anchor bolts to elevations required for proper attachment to supported equipment.
  3. Install anchor bolts according to anchor-bolt manufacturer's written instructions.

### **3.5 PAINTING**

- A. Touchup: Clean field welds and abraded areas of shop paint. Paint exposed areas immediately after erecting hangers and supports. Use same materials as used for shop painting. Comply with SSPC-PA 1 requirements for touching up field- painted surfaces.
  2. Apply paint by brush or spray to provide minimum dry film thickness of 2.0 mils (0.05 mm).
- B. Galvanized Surfaces: Clean welds, bolted connections, and abraded areas and apply galvanizing-repair paint to comply with ASTM A 780.

## **END OF SECTION**

## **SECTION 16075 - ELECTRICAL IDENTIFICATION**

## **SPECIAL PROVISIONS**

### **PART 1 - GENERAL**

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Identification for conductors.
  - 2. Underground-line warning tape.
  - 3. Miscellaneous identification products.

#### 1.3 QUALITY ASSURANCE

- A. Comply with ANSI A13.1 and IEEE C2.
- B. Comply with NFPA 70.
- C. Comply with 29 CFR 1910.144 and 29 CFR 191.145
- D. Comply with ANSI Z535.4 for safety signs and labels.
- E. Adhesive-attached labeling materials, including label stocks, laminating adhesives, and inks used by label printers, shall comply with UL 969.

### **PART 2 - PRODUCTS**

#### 2.1 CONDUCTOR IDENTIFICATION MATERIALS

- A. Color-Coding Conductor Tape: Colored, self-adhesive vinyl tape not less than 3 mils (0.08 mm) thick by 1 to 2 inches (25 to 50 mm) wide.
- B. Self-Adhesive, Self-Laminating Polyester Labels: Preprinted, 3-mil- (0.08-mm-) thick flexible label with acrylic pressure-sensitive adhesive that provides a clear, weather- and chemical-resistant, self-laminating, protective shield over the legend. Labels sized to fit the conductor diameter such that the clear shield overlaps the entire printed legend.
- C. Marker Tapes: Vinyl or vinyl-cloth, self-adhesive wraparound type, with circuit identification legend machine printed by thermal transfer or equivalent process.
- D. Write-On Tags: Polyester tag, 0.015 inch (0.38 mm) thick, with corrosion-resistant grommet and cable tie for attachment to conductor or cable.
- E. Labels for Tags: Self-adhesive label, machine-printed with permanent, waterproof, black ink recommended by printer manufacturer, sized for attachment to tag.

## SPECIAL PROVISIONS

### 2.2 UNDERGROUND-LINE WARNING TAPE

- A. Tape:
  - 1. Recommended by manufacturer for the method of installation and suitable to identify and locate underground electrical utility lines.
  - 2. Printing on tape shall be permanent and shall not be damaged by burial operations.
  - 3. Tape material and ink shall be chemically inert, and not subject to degrading when exposed to acids, alkalis, and other destructive substances commonly found in soils.

### 2.3 CABLE TIES

- A. UV-Stabilized Cable Ties: Fungus inert, designed for continuous exposure to exterior sunlight, self-extinguishing, one piece, self-locking, Type 6/6 nylon.
  - 1. Minimum Width: 3/16 inch (5 mm)
  - 2. Tensile Strength at 73 deg F (23 deg C), According to ASTM D 638: 12,000 psi (82.7 MPa).
  - 3. Temperature Range: Minus 40 to plus 185 deg F (Minus 40 to plus 85 deg)
  - 4. Color: Black.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Verify identity of each item before installing identification products.
- B. Apply identification devices to surfaces that require finish after completing finish work.
- C. Self-Adhesive Identification Products: Clean surfaces before application, using materials and methods recommended by manufacturer of identification device.
- D. Cable Ties: For attaching tags. Use UV-stabilized nylon.
- E. Underground-Line Warning Tape: During backfilling of trenches install continuous underground-line warning tape directly above line at 6 to 8 inches (150 to 200 mm) below finished grade. Use multiple tapes where width of multiple lines installed in a common trench or concrete envelope exceeds 16 inches (400 mm) overall.

### 3.2 IDENTIFICATION SCHEDULE

- A. Power-Circuit Conductor Identification, 600 V or Less: For conductors in vaults, pull and junction boxes, and handholes, use color-coding conductor tape to identify the phase.

## **SPECIAL PROVISIONS**

- B. Color-Coding for Phase and Voltage Level Identification, 600 V or Less: Use colors listed below for ungrounded conductors.
  - a. Color shall be factory applied or field applied for sizes larger than No. 8 AWG, if authorities having jurisdiction permit.
  - b. Colors for 208/120-V Circuits:
    - 1) Phase A: Black.
    - 2) Phase B: Red.
    - 3) Phase C: Blue.
  - c. Colors for 480/120-V Circuits:
    - 1) Phase A: Brown.
    - 2) Phase B: Orange.
    - 3) Phase C: Yellow.
  
- C. Locations of Underground Lines: Identify with underground-line warning tape for lighting wiring.

### **END OF SECTION**

## **SECTION 16120 - CONDUCTORS AND CABLES**

### **PART 1 – GENERAL**

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Building wires and cables rated 600 V and less.
  - 2. Connectors, splices, and terminations rated 600 V and less.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.

### **PART 2 - PRODUCTS**

## SPECIAL PROVISIONS

### 2.1 CONDUCTORS AND CABLES

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. Alcan Products Corporation; Alcan Cable Division.
  2. Alpha Wire.
  3. Belden Inc.
  4. Encore Wire Corporation.
  5. General Cable Technologies Corporation.
  6. Southwire Incorporated.
- B. Copper Conductors: Comply with NEMA WC 70/ICEA S-95-658.
- C. Conductor Insulation: Comply with NEMA WC 70/ICEA S-95-658 for Type XHHW-2.

### 2.2 CONNECTORS AND SPLICES

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. AFC Cable Systems, Inc.
  2. Gardner Bender.
  3. Hubbell Power Systems, Inc.
  4. Ideal Industries, Inc.
  5. IlSCO; a branch of Bardes Corporation.
  6. NSi Industries LLC.
  7. O-Z/Gedney; a brand of the EGS Electrical Group.
  8. 3M; Electrical Markets Division.
  9. Tyco Electronics.
- B. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.

### 2.3 SYSTEM DESCRIPTION

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Comply with NFPA 70.

## PART 3 - EXECUTION

### 3.1 CONDUCTOR MATERIAL APPLICATIONS

## **SPECIAL PROVISIONS**

A. Branch Circuits: Stranded copper.

### **3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS**

A. Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and Underground: Type XHHW-2, single conductors in raceway.

### **3.3 INSTALLATION OF CONDUCTORS AND CABLES**

A. Complete raceway installation between conductor termination points according to Section 16130 "Raceways and Boxes" prior to pulling conductors and cables.

B. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.

C. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.

### **3.4 CONNECTIONS**

A. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.

B. Make splices, terminations, and taps that are compatible with conductor material.

1. Use oxide inhibitor in each splice, termination, and tap.

C. Wiring at Outlets: Install conductor at each outlet, with at least 12 inches (300 mm) of slack.

### **3.5 IDENTIFICATION**

A. Identify and color-code conductors and cables according to Section 16075 "Electrical Identification."

B. Identify each spare conductor at each end with identity number and location of other end of conductor, and identify as spare conductor.

**END OF SECTION**

## **SECTION 16130 - RACEWAYS AND BOXES**

## SPECIAL PROVISIONS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Metal wireways.
  - 2. Nonmetal wireways.
  - 3. Boxes, enclosures, and cabinets.
  - 4. Handholes and boxes for exterior underground cabling.

#### 1.3 DEFINITIONS

- A. GRC: Galvanized rigid steel conduit.
- B. IMC: Intermediate metal conduit.
- C. RNC: Rigid Nonmetallic Conduit.

### PART 2 - PRODUCTS

#### 2.1 METAL CONDUITS, TUBING, AND FITTINGS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. AFC Cable Systems, Inc.
  - 2. Allied Tube & Conduit.
  - 3. Anamet Electrical, Inc.
  - 4. Electri-Flex Company.
  - 5. O-Z/Gedney.
  - 6. Picoma Industries.
  - 7. Republic Conduit.
  - 8. Robroy Industries.
  - 9. Southwire Company.
  - 10. Thomas & Betts Corporation.
  - 11. Western Tube and Conduit Corporation.
  - 12. Wheatland Tube Company.
- B. Listing and Labeling: Metal conduits, tubing, and fittings shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.



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- C. GRC: Comply with ANSI C80.1 and UL 6.
- D. IMC: Comply with ANSI C80.6 and UL 1242.
- E. RNC: Type EPC-40-PVC, complying with NEMA TC 2 and UL 651.
- F. Fittings for Metal Conduit: Comply with NEMA FB 1 and UL 514B.
- G. Joint Compound for IMC or GRC: Approved, as defined in NFPA 70, by authorities having jurisdiction for use in conduit assemblies, and compounded for use to lubricate and protect threaded conduit joints from corrosion and to enhance their conductivity.

### 2.2 NONMETALLIC CONDUITS, TUBING, AND FITTINGS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. AFC Cable Systems, Inc.
  - 2. Anamet Electrical, Inc.
  - 3. Arnco Corporation.
  - 4. CANTEX Inc.
  - 5. CertainTeed Corporation.
  - 6. Condux International, Inc.
  - 7. Electri-Flex Company.
  - 8. Kraloy.
  - 9. Lamson & Sessions; Carlon Electrical Products.
  - 10. Niedax-Kleinhuis USA, Inc.
  - 11. RACO; Hubbell.
  - 12. Thomas & Betts Corporation.
- B. Listing and Labeling: Nonmetallic conduits, tubing, and fittings shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. RNC: Type EPC-40-PVC, complying with NEMA TC 2 and UL 651 unless otherwise indicated.
- D. Fittings for RNC: Comply with NEMA TC 3; match to conduit and material.
- E. Solvent cements and adhesive primers shall have a VOC content of 510 and 550 g/L or less, respectively, when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

### 2.3 BOXES, ENCLOSURES, AND CABINETS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. Adalet.
  - 2. Cooper Technologies Company; Cooper Crouse-Hinds.

## SPECIAL PROVISIONS

3. EGS/Appleton Electric.
4. Erickson Electrical Equipment Company.
5. FSR Inc.
6. Hoffman.
7. Hubbell Incorporated.
8. Kraloy.
9. Milbank Manufacturing Co.
10. Mono-Systems, Inc.
11. O-Z/Gedney.
12. RACO; Hubbell.
13. Robroy Industries.
14. Spring City Electrical Manufacturing Company.
15. Stahlin Non-Metallic Enclosures.
16. Thomas & Betts Corporation.
17. Wiremold / Legrand.

- B. General Requirements for Boxes, Enclosures, and Cabinets: Boxes, enclosures, and cabinets installed in wet locations shall be listed for use in wet locations.
- C. Cast-Metal Outlet and Device Boxes: Comply with NEMA FB 1, aluminum, Type FD, with gasketed cover.
- D. Device Box Dimensions: 4 inches square by 2-1/8 inches deep (100 mm square by 60 mm deep).

### 2.4 HANDHOLES AND BOXES FOR EXTERIOR UNDERGROUND WIRING

- A. General Requirements for Handholes and Boxes:
1. Boxes and handholes for use in underground systems shall be designed and identified as defined in NFPA 70, for intended location and application.
  2. Boxes installed in wet areas shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Polymer-Concrete Handholes and Boxes: Molded of sand and aggregate, bound together with polymer resin, and reinforced with steel, fiberglass, or a combination of the two.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Armorcast Products Company.
    - b. Carson Industries LLC.
    - c. NewBasis.
    - d. Oldcastle Precast, Inc.
    - e. Quazite: Hubbell Power System, Inc.
    - f. Synertech Moulded Products.
  2. Standard: Comply with SCTE 77.
  3. Configuration: Designed for flush burial with open bottom unless otherwise

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- indicated.
- 4. Cover: Weatherproof, cast steel, secured by tamper-resistant locking devices and having structural load rating consistent with enclosure and handhole location.
- 5. Cover Finish: Nonskid finish shall have a minimum coefficient of friction of 0.50.
- 6. Cover Legend: Molded lettering, "LIGHTING."
- 7. Conduit Entrance Provisions: Conduit-terminating fittings shall mate with entering ducts for secure, fixed installation in enclosure wall.

### 2.5 SOURCE QUALITY CONTROL FOR UNDERGROUND ENCLOSURES

- A. Handhole and Pull-Box Prototype Test: Test prototypes of handholes and boxes for compliance with SCTE 77. Strength tests shall be for specified tier ratings of products supplied.
  - 1. Tests of materials shall be performed by an independent testing agency.
  - 2. Strength tests of complete boxes and covers shall be by either an independent testing agency or manufacturer. A qualified registered professional engineer shall certify tests by manufacturer.
  - 3. Testing machine pressure gages shall have current calibration certification complying with ISO 9000 and ISO 10012 and traceable to NIST standards.

## PART 3 - EXECUTION

### 3.1 RACEWAY APPLICATION

- A. Outdoors: Apply raceway products as specified below unless otherwise indicated:
  - 1. Exposed Conduit: GRC or IMC.
  - 2. Underground Conduit: RNC, Type EPC-40-PVC, direct buried.
- B. Minimum Raceway Size: 3/4-inch (21-mm) trade size.
- C. Raceway Fittings: Compatible with raceways and suitable for use and location.
  - 1. Rigid and Intermediate Steel Conduit: Use threaded rigid steel conduit fittings unless otherwise indicated. Comply with NEMA FB 2.10.

### 3.2 INSTALLATION

- A. Comply with NECA 1 and NECA 101 for installation requirements except where requirements on Drawings or in this article are stricter. Comply with NFPA 70 limitations for types of raceways allowed in specific occupancies and number of floors.
- B. Complete raceway installation before starting conductor installation.
- C. Comply with requirements in Section 16073 "Hangers and Supports for

## SPECIAL PROVISIONS

Electrical Systems" for hangers and supports.

- D. Arrange stub-ups so curved portions of bends are not visible above finished slab.
- E. Install no more than the equivalent of three 90-degree bends in any conduit run for which fewer bends are allowed. Support within 12 inches (300 mm) of changes in direction.
- F. Support conduit within 12 inches (300 mm) of enclosures to which attached.
- G. Threaded Conduit Joints, Exposed to Wet, Damp, Corrosive, or Outdoor Conditions: Apply listed compound to threads of raceway and fittings before making up joints. Follow compound manufacturer's written instructions.
- H. Terminate threaded conduits into threaded hubs or with locknuts on inside and outside of boxes or cabinets. Install bushings on conduits up to 1-1/4-inch (35mm) trade size and insulated throat metal bushings on 1-1/2-inch (41-mm) trade size and larger conduits terminated with locknuts. Install insulated throat metal grounding bushings on service conduits.
- I. Install raceways square to the enclosure and terminate at enclosures with locknuts. Install locknuts hand tight plus 1/4 turn more.
- J. Do not rely on locknuts to penetrate nonconductive coatings on enclosures. Remove coatings in the locknut area prior to assembling conduit to enclosure to assure a continuous ground path.
- K. Cut conduit perpendicular to the length. For conduits 2-inch (53-mm) trade size and larger, use roll cutter or a guide to make cut straight and perpendicular to the length.
- L. Install pull wires in empty raceways. Use polypropylene or monofilament plastic line with not less than 200-lb (90-kg) tensile strength. Leave at least 12 inches (300 mm) of slack at each end of pull wire. Cap underground raceways designated as spare above grade alongside raceways in use.
- M. Comply with manufacturer's written instructions for solvent welding RNC and fittings.
- N. Fasten junction and pull boxes to or support from building structure. Do not support boxes by conduits.

### 3.3 INSTALLATION OF UNDERGROUND CONDUIT

- A. Direct-Buried Conduit:
  - 1. Excavate trench bottom to provide firm and uniform support for conduit. Prepare trench bottom as specified in Section 02203 "Trenching" for pipe less than 6 inches (150 mm) in nominal diameter.
  - 2. Install backfill as specified in 02203 "Trenching."
  - 3. After installing conduit, backfill and compact. Start at tie-in point, and work toward end of conduit run, leaving conduit at end of run free to move with expansion and contraction as temperature changes during this process. Firmly

## SPECIAL PROVISIONS

hand tamp backfill around conduit to provide maximum supporting strength. After placing controlled backfill to within 12 inches (300 mm) of finished grade, make final conduit connection at end of run and complete backfilling with normal compaction as specified in 02203 "Trenching."

4. Install manufactured rigid steel conduit elbows for stub-ups at poles and equipment and at building entrances through floor.
  - a. Couple steel conduits to ducts with adapters designed for this purpose.
  - b. For stub-ups at equipment mounted on outdoor concrete bases and where conduits penetrate building foundations, extend steel conduit horizontally a minimum of 60 inches (1500 mm) from edge of foundation or equipment base. Install insulated grounding bushings on terminations at equipment.
  - c. Underground Warning Tape: Comply with requirements in Section 16075 "Electrical Identification."

### 3.4 INSTALLATION OF UNDERGROUND HANDHOLES AND BOXES

- A. Install handholes and boxes level and plumb and with orientation and depth coordinated with connecting conduits to minimize bends and deflections required for proper entrances.
- B. Unless otherwise indicated, support units on a level bed of crushed stone or gravel, graded from 1/2-inch (12.5-mm) sieve to No. 4 (4.75-mm) sieve and compacted to same density as adjacent undisturbed earth.
- C. Elevation: In paved areas, set so cover surface will be flush with finished grade. Set covers of other enclosures 1 inch (25 mm) above finished grade.
- D. Field-cut openings for conduits according to enclosure manufacturer's written instructions. Cut wall of enclosure with a tool designed for material to be cut. Size holes for terminating fittings to be used, and seal around penetrations after fittings are installed.

### 3.5 PROTECTION

- A. Protect coatings, finishes, and cabinets from damage and deterioration.
  1. Repair damage to galvanized finishes with zinc-rich paint recommended by manufacturer.

**END OF SECTION**

## SPECIAL PROVISIONS

### SECTION 16521 – EXTERIOR LIGHTING

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

##### 1.2 SUMMARY

- A. Section Includes:
  - 1. Exterior luminaires with light engines and drivers.
  - 2. Poles and accessories.

##### 1.3 DEFINITIONS

- A. CCT: Correlated color temperature.
- B. CRI: Color-rendering index.
- C. LER: Luminaire efficacy rating.
- D. Luminaire: Complete lighting fixture, including ballast housing if provided.
- E. Pole: Luminaire support structure, including tower used for large area illumination.
- F. Standard: Same definition as "Pole" above.

##### 1.4 STRUCTURAL ANALYSIS CRITERIA FOR POLE SELECTION

- A. Dead Load: Weight of luminaire and its horizontal and vertical supports, lowering devices, and supporting structure, applied as stated in AASHTO LTS-4- M.
- B. Live Load: Single load of 500 lbf (2224 N), distributed as stated in AASHTO LTS-4-M.
- C. Ice Load: Load of 3 lbf/sq. ft. (145 Pa), applied as stated in AASHTO LTS-4-M Ice Load Map.
- D. Wind Load: Pressure of wind on pole and luminaire and banners and banner arms, calculated and applied as stated in AASHTO LTS-4-M.
  - 1. Basic wind speed for calculating wind load for poles 50 feet (15 m) high or less is 100 mph (45 m/s).
    - a. Wind Importance Factor: 1.0.
    - b. Minimum Design Life: 25 years.

## SPECIAL PROVISIONS

- c. Velocity Conversion Factors: 1.0.

### 1.5 ACTION SUBMITTALS

- A. Product Data: For each luminaire, pole, and support component, arranged in order of lighting unit designation. Include data on features, accessories, finishes, and the following:
  - 1. Physical description of luminaire, including materials, dimensions, effective projected area, and verification of indicated parameters.
  - 2. Details of attaching luminaires and accessories.
  - 3. Details of installation and construction.
  - 4. Luminaire materials.
  - 5. Photometric data based on laboratory tests of each luminaire type, complete with indicated light engines, drivers, and accessories.
    - a. Manufacturer Certified Data: Photometric data shall be certified by manufacturer's laboratory with a current accreditation under the National Voluntary Laboratory Accreditation Program for Energy Efficient Lighting Products.
  - 6. Drivers, including energy-efficiency data.
  - 7. Light engines, including life, output, CCT, CRI, lumens, and energy- efficiency data.
  - 8. Materials, dimensions, and finishes of poles.
  - 9. Means of attaching luminaires to supports, and indication that attachment is suitable for components involved.
  - 10. Anchor bolts for poles.
  - 11. Manufactured pole foundations.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
  - 1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
  - 2. Anchor-bolt templates keyed to specific poles and certified by manufacturer.

### 1.6 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.
- B. Warranty: Sample of special warranty.

### 1.7 QUALITY ASSURANCE

- A. Luminaire Photometric Data Testing Laboratory Qualifications: Provided by manufacturers' laboratories that are accredited under the National Volunteer Laboratory Accreditation Program for Energy Efficient Lighting Products.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and

## SPECIAL PROVISIONS

application.

- C. Comply with IEEE C2, "National Electrical Safety Code."
- D. Comply with NFPA 70.

### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store poles on decay-resistant-treated skids at least 12 inches (300 mm) above grade and vegetation. Support poles to prevent distortion and arrange to provide free air circulation.
- B. Retain factory-applied pole wrappings on metal poles until right before pole installation. For poles with nonmetallic finishes, handle with web fabric straps.

### 1.9 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace products that fail in materials or workmanship; that corrode; or that fade, stain, perforate, erode, or chalk due to effects of weather or solar radiation within specified warranty period. Manufacturer may exclude lightning damage, hail damage, vandalism, abuse, or unauthorized repairs or alterations from special warranty coverage.
  - 1. Warranty Period for Luminaires: All mechanical components (other than LED drivers) and LED components in the product as well as the fixture housing will be free of defects in material and workmanship for a period of ten (10) years from the date of original purchase.
  - 2. All LED drivers in the Product will be free of defects in material and workmanship for a period equal to the shorter of ten (10) years from the date of original purchase, or fifty thousand (50,000) hours of operation.
  - 3. Warranty Period for Poles: Repair or replace lighting poles and standards that fail in finish, materials, and workmanship within manufacturer's standard warranty period, but not less than three years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide product indicated on Drawings.

### 2.2 GENERAL REQUIREMENTS FOR LUMINAIRES

- A. Luminaires shall comply with UL 1598 and be listed and labeled for installation in wet locations by an NRTL acceptable to authorities having jurisdiction.
  - 1. LER Tests Fixtures: Where LER is specified, test according to NEMA LE 5 and NEMA LE 5A as applicable.



## SPECIAL PROVISIONS

- B. Lateral Light Distribution Patterns: Comply with IESNA RP-8 for parameters of lateral light distribution patterns indicated for luminaires.
- C. Metal Parts: Free of burrs and sharp corners and edges.
- D. Housings: Rigidly formed, weather- and light-tight enclosures that will not warp, sag, or deform in use. Provide filter/breather for enclosed luminaires.
- E. Doors, Frames, and Other Internal Access: Smooth operating, free of light leakage under operating conditions, and designed to permit servicing without use of tools. Designed to prevent doors, frames, lenses, diffusers, and other components from falling accidentally during servicing and when secured in operating position. Doors shall be removable for cleaning or replacing lenses.
- F. Exposed Hardware Material: Stainless steel.
- G. Plastic Parts: High resistance to yellowing and other changes due to aging, exposure to heat, and UV radiation.
- H. Lenses and Refractors Gaskets: Use heat- and aging-resistant resilient gaskets to seal and cushion lenses and refractors in luminaire doors.
- I. Luminaire Finish: Manufacturer's standard paint applied to factory-assembled and -tested luminaire before shipping. Where indicated, match finish process and color of pole or support materials.
  - 1. Exterior Surfaces: Manufacturer's standard finish for corrosion protection.
    - a. Color: As indicated by the specifications in the drawings.
- J. Factory-Applied Labels: Comply with UL 1598. Labels shall be located where they will be readily visible to service personnel, but not seen from normal viewing angles when lamps are in place.

### 2.3 DRIVERS FOR LED'S

- A. General Requirements for Electronic Drivers
  - 1. Comply with UL and ANSI C82.11
  - 2. Designed for type and quantity of lamps served.
  - 3. Drivers shall be designed for full light output.
  - 4. Drivers shall operate at 60 Hz.
  - 5. Sound Rating: Class A.
  - 6. Total Harmonic Distortion Rating: Less than 20 percent.
  - 7. Transient Voltage Protection: IEEE C62.41.1 and IEEE C62.41.2, Category A or better.
  - 8. BF: 0.90, or higher.
  - 9. Power Factor: 0.95, or higher.

### 2.4 GENERAL REQUIREMENTS FOR POLES AND SUPPORT COMPONENTS

## SPECIAL PROVISIONS

- A. Structural Characteristics: Comply with AASHTO LTS-4-M.
  - 1. Wind-Load Strength of Poles: Adequate at indicated heights above grade without failure, permanent deflection, or whipping in steady winds of speed indicated in "Structural Analysis Criteria for Pole Selection" Article.
  - 2. Strength Analysis: For each pole, multiply the actual equivalent projected area of luminaires and brackets by a factor of 1.1 to obtain the equivalent projected area to be used in pole selection strength analysis.
- B. Luminaire Attachment Provisions: Comply with luminaire manufacturers' mounting requirements. Use stainless-steel fasteners and mounting bolts unless otherwise indicated.
- C. Mountings, Fasteners, and Appurtenances: Corrosion-resistant items compatible with support components.
  - 1. Materials: Shall not cause galvanic action at contact points.
  - 2. Anchor Bolts, Leveling Nuts, Bolt Caps, and Washers: Hot-dip galvanized after fabrication unless otherwise indicated.
  - 3. Anchor-Bolt Template: Plywood or steel.
- D. Handhole: Rectangular-shaped, with minimum clear opening of 2-1/2 by 5 inches (65 by 130 mm), with cover secured by stainless-steel captive screws.
- E. Concrete Pole Foundations: Precast, with anchor bolts to match pole-base flange.

### 2.5 STEEL POLES

- A. Poles: Comply with ASTM A 500, Grade B, carbon steel with a minimum yield of 42 ksi (290 MPa); one-piece construction up to 40 feet (12 m) in height with access handhole in pole wall.
  - 1. Shape: Per Drawings.
  - 2. Mounting Provisions: Butt flange for bolted mounting on foundation or breakaway support.
- B. Steel Mast Arms: Per Drawings. Material and finish same as pole.
- C. Grounding and Bonding: Grounding provision is provided at handhole, complying with requirements in Section 16060 "Grounding and Bonding," listed for attaching grounding and bonding conductors of type and size listed in that Section, and accessible through handhole.
- D. Cable Support Grip: Wire-mesh type with rotating attachment eye, sized for diameter of cable and rated for a minimum load equal to weight of supported cable times a 5.0 safety factor.
- E. Factory-Painted Finish: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating

## SPECIAL PROVISIONS

finishes.

1. Interior Surfaces of Pole: One coat of bituminous paint, or otherwise treat for equal corrosion protection.
2. Exterior Surfaces: Per manufacturer's standard for corrosion protection.
  - a. Color: As indicated by the specifications in the drawings.

### PART 3 - EXECUTION

#### 3.1 LUMINAIRE INSTALLATION

- A. Fasten luminaire to indicated structural supports.

#### 3.2 POLE INSTALLATION

- A. Alignment: Align pole foundations and poles for optimum directional alignment of luminaires and their mounting provisions on the pole.
- B. Clearances: Maintain the following minimum horizontal distances of poles from surface and underground features unless otherwise indicated on Drawings:
  1. Fire Hydrants and Storm Drainage Piping: 60 inches (1520 mm).
- C. Concrete Pole Foundations: Anchor bolts in precast arranged according to anchor-bolt templates furnished by pole manufacturer. Concrete materials, installation, and finishing requirements are specified in Section 03302 "Concrete Structures".
- D. Foundation-Mounted Poles: Mount pole with leveling nuts, and tighten top nuts to torque level recommended by pole manufacturer.
  1. Use anchor bolts and nuts defined for the application and approved by manufacturer.
- E. Raise and set poles using web fabric slings (not chain or cable).

#### 3.3 CORROSION PREVENTION

- A. Steel Conduits: Comply with Section 16130 "Raceways and Boxes." In concrete foundations, wrap conduit with 0.010-inch- (0.254-mm-) thick, pipe-wrapping plastic tape applied with a 50 percent overlap.

#### 3.4 GROUNDING

- A. Ground metal poles and support structures according to Section 16060 "Grounding and Bonding."
  1. Install grounding conductor pigtail in the base for connecting luminaire to grounding system.

## **SPECIAL PROVISIONS**

### 3.5 FIELD QUALITY CONTROL

- A. Inspect each installed fixture for damage. Replace damaged fixtures and components.
- B. Illumination Observations: Verify normal operation of lighting units after installing luminaires and energizing circuits with normal power source.

### **END OF SECTION**

## **SECTION 16521 – SPORTS FIELD LIGHTING**

### **PART 1 - GENERAL**

#### RELATED DOCUMENTS

Drawings and general provisions of the bid documents, including general and supplementary conditions apply to this section.

#### SUMMARY

The Sports Lighting section includes:

Galvanized steel pole and luminaire mounting crossarm  
Luminaire, with appropriate glare/spill light control  
LED Lighting  
Pole Foundations  
Control System

The purpose of this specification is to define the performance standards, product values and features required manufacturer's service responsibilities, and design standards for Melvin Park Baseball.

#### DEFINITIONS

CCT: Correlated color temperature.

CRI: Color-rendering index.

LER: Luminaire efficacy rating.

Luminaire: Complete lighting fixture, including ballast housing if provided.

Pole: Luminaire support structure, including tower used for large area illumination.

Standard: Same definition as "Pole" above.

**SPECIAL PROVISIONS**

Sports Lighting Performance

The manufacturer shall supply lighting equipment and computer-generated point-by-point analysis to meet the following:

The performance criteria require lighting equipment which will provide measured average illumination level of the predicted mean in accordance with IESNA - LM 5 and measured within the first 100 hours of operation. Light Levels shall meet or exceed the following for the entire duration of the warranty.

<b>Area of Lighting</b>	<b>Entire Area</b>
Baseball Infield	50.0 footcandles
Baseball Outfield	30.0 footcandles

Uniformity Ratio: The footcandle level shall have a uniformity ratio of maximum to minimum ratio of not greater than the following:

<b>Area of Lighting</b>	<b>Entire Area</b>
Baseball Infield	2.0:1
Baseball Outfield	3.0:1

The manufacturer guarantees field light intensity levels and uniformity ratios at initial start-up and throughout entire duration of the warranty. Light level readings shall be completed as detailed in the point-by-point analysis specification.

Point by Point Analysis

Submitted computer models shall depict the Measurements of light shall be demonstrated on a computer-generated model which consists of a grid of a specified number of points covering a stated area on an equally spaced grid. See the below chart for the exact specifications of points, areas, and grid spacing for the field.

Computer Models - Test Stations

<b>Area of Lighting</b>	<b># Of Points</b>	<b>Size of Area to be Covered</b>	<b>Grid Spacing</b>
Baseball Infield	25	Entire Infield	20' x 20'
Baseball Outfield	78	Entire Field	30' x 30'

Spill/Glare analysis

Submitted spill/glare computer models shall depict the field test stations 150' from the field boundaries @ 3' above grade. Bidder shall submit as described below:

Spill Light Values: No single point along the line shall exceed the levels shown below. "Horizontal Footcandles" is measured with the light meter facing directly skyward, 90 degrees from true vertical. The test stations shall be shown every 30' along the line with the field lights on. These levels shall be shown as initial footcandles.

## SPECIAL PROVISIONS

Along the Property Line	Horizontal Footcandles
30' Spacing	0.10

Spill Light Values: No single point along the line shall exceed the levels shown below. "Maximum Footcandles" is measured with the light meter facing directly toward the brightest bank of lights. The test stations shall be shown every 30' along the line with the field lights on. These levels shall be shown as initial footcandles.

Along the Property Line	Maximum Footcandles
30' Spacing	.20

Candela Values: Candela values shall represent individual fixtures. No single fixture shall exceed the values shown below at any location along the line. These values shall be shown as initial readings.

Along the Property Line	Maximum Candela
30' Spacing	6,000

### PART II – MATERIALS

#### Lighting Structure

##### General Description

The lighting structure system shall consist of a steel pole and steel crossarm assembly, wire harness, and electrical component enclosure (ECE). The pole shall be supported by a pre-stressed concrete base section embedded in concrete backfill or a concrete foundation supported by an anchor bolt and base plate assembly with a concrete foundation.

##### Pole Structural Steel

The wind loading on the pole and all attachments shall be based upon 2012 IBC130 mph, exposure C.

The pole manufacturer shall provide complete pole and foundation calculations, prepared and sealed by a Structural Engineer, licensed in the State of Alaska.

The poles shall be designed to provide a mounting height above the surface at its foundation of no more than 80' and to be of sufficient strength to supports the effective projected area (EPA) of the pole and all of the attached devices including, as applicable, light fixtures, crossarms, mounting brackets, ballast boxes and any other devices which are to be attached to the pole.

The pole shafts shall be high strength low alloy tapered tubular steel that is equal to current ASTM A595 standards, with galvanized coating inside and out. All connections of pole

## SPECIAL PROVISIONS

sections shall be by slip fitting the top section over the lower section by a length of at least 1.5 times the diameters.

Steel components of the poles shall be hot dip galvanized to current ASTM A-123. Steel portions of the pole shall be constructed such that all segments of the pole can be readily heated to like temperatures in commercially available galvanizing methods.

To avoid problems of galvanize adherence to differing steel alloys, all steel components used for the pole must be of the same type steel.

All exposed steel components of the pole shall be at least 18" above the surface of the ground to avoid exposure of the steel to the heavily moisture and oxygen laden air, both above and below the surface. There shall be a cap at the top of the pole so that rain will not enter the interior of the pole.

### Foundation Design

Concrete foundations shall be utilized and shall be of the manufacturers standard design. Pre-cast concrete foundations are acceptable, direct bury steel poles are not permitted. Once the concrete backfill has cured the poles shall be set.

Any concrete portions of the pole in which steel components that provide tension strength are contained, shall be allowed to harden for a minimum of 28 days before stress loads of pole attachment are applied. The Manufacturer shall provide a stamped foundation design, prepared by a Structural Engineer, licensed in the State of Alaska.

The foundation design shall be based upon recommendations contained in the Geotechnical Report furnished by the Owner. If there are no soils report available, assume standard soils (Class 5). If the encountered soils differ from standard soils. It shall be the contractor's responsibility to notify the owner of soil conditions other than the design criteria.

Lightning Protection: Manufacturer shall provide integrated lightning grounding via concrete encased electrode grounding system as defined by NFPA 780 and be UL Listed per UL 96 and UL 96A. If grounding is not integrated into the structure, the Manufacturer shall supply grounding electrodes; copper down conductors and exothermic weld kits. Electrodes and conductors shall be sized as required by NFPA 780. The grounding electrode shall be not less than 5/8-inch diameter and 8 feet long, with a minimum of 10 feet embedment. Grounding electrode shall be connected to the structure by a grounding electrode conductor with a minimum size of 2 AWG.

### Luminaire Assembly

The LED luminaires shall be separate from the drivers and fusing. Drivers to be mounted remote from the Luminaire in the Electrical Components Enclosure (ECE). The ECE shall be located on the pole approximately 10' above grade and shall be accessible from a step ladder. The ECE shall be aluminum to ensure maximum heat dissipation. The luminaire shall be powder coated gray to match the ECE.

Each luminaire shall arrive completely assembled and be ready to attach to the crossarm in such a way that its aiming position has been determined relative to all other fixtures on the

## SPECIAL PROVISIONS

pole, so that in the factory all luminaires on the assembly are oriented to form a single photometric unit.

The luminaires shall be designed in such a way that the light source shall not be visible from any location beyond 200' of the field boundary lines of the track.

The luminaires shall be fully shielded to reduce offsite spill light and glare. The visors shall be powder coated gray to match the Luminaires.

The crossarm mounting plate shall be attached to the crossarm assembly at the factory and be constructed in such a way that the pre-assembled luminaire shall attach using 2 stainless steel threaded bolts.

The LED Luminaires shall be no more than 1500 watt.

Minimum of 5,700 Color Temp and 75+ CRI.

Fixture Operating Temperature Range of -30 Degrees C to 55 Degrees C. Maximum Junction Temperature for the diodes of 80 degrees C.

Electronic Driver with an efficiency of 95% or greater. Maximum starting inrush of 7 amps at 25 degrees C.

Secondary Wiring: Manufacturer shall supply all necessary wiring to connect the fixture to the driver enclosure. Wiring shall be protected with either a jacketed cord or conduit and shall be internal to the pole.

Electrical Components Enclosure (ECE)

The ECE shall be a NEMA 3R rated gasketed enclosure to house the drivers, fuses, circuit disconnect, and distribution lugs. The ECE shall be divided into two compartments. The upper compartment shall house the drivers, and fuses. The lower compartment shall provide for the circuit disconnect, distribution lugs, and connection of all circuits coming into and out of the ECE.

The access door to the ECE shall be attached by a full-length stainless steel or powder coated aluminum hinge and shall be secured when closed by lockable stainless-steel latches. All latches, hinges, and non-current carrying fasteners, either outside or inside the enclosure, shall be stainless steel of at least an 18-8 standard.

There shall be provided within the ECE a UL listed circuit disconnect, utilized as a local electrical disconnecting device such that electrical power to all equipment on the pole served by the feeder circuit shall be disengaged by the operation of one switch. The breaker shall be located in a compartment separated from the drivers.

There shall be provided by the manufacturer a set of distribution terminal blocks, which shall be factory wired from the breaker to the blocks. These blocks shall provide for termination of all driver connection wiring.

The ECE shall be attached to the pole with the lower end approximately 10' above grade at the pole foundation and shall accessible from a step ladder.



## **SPECIAL PROVISIONS**

The ECE shall be listed by UL both for use with 90 degrees C rated conductors and as suitable for use in wet locations.

### **Control and Monitoring System**

Factory assembled lighting control cabinet (LCC) – The LCC shall be assembled and wired by a UL listed panel builder. The LCC shall contain Contactors, Monitoring and Control System and door mounted Manual off-on-auto selector switches. The LCC shall arrive at the job site ready to attach to an existing wall, switchgear, or a freestanding enclosure.

Control Wire Terminations - The Control Wire Terminations shall include UL listed terminal blocks mounted on a DIN rail and 250-volt, 16-amp, touch safe type fuse holders  
The ECE shall be constructed of aluminum and shall be powder coated gray. The cabinet door shall utilize a lockable, 3-point latching assembly that provides a NEMA 4 rated seal.

Contactors Modules – Contactors shall be UL listed for lighting applications. They shall be rated at full capacity, be electrically held, utilize a 120-volt coil and be rated for operation in an ambient temperature range from -40 degrees C to +70 degrees C.

Manual off-on-auto Selector Switches – For on site manual control, three position selector switches shall be factory mounted to the ECE door. The switches shall be keyed and maintain position, with make before break contacts. The switches shall be factory wired to control terminal blocks

Warranty – The LCC shall be covered under the standard warranty for the accompanying lighting equipment (3.01).

Remote Monitoring System: System shall monitor lighting performance and notify manufacturer if individual luminaire outage is detected so that appropriate maintenance can be scheduled. The manufacturer shall notify the owner of outages within 24 hours, or the next business day. The controller shall determine switch position (manual or auto) and contactor status (open or closed). The Monitoring System shall be factory wired to control terminal blocks

Remote Lighting Control System: The Lighting Control System shall allow owners and users with a security code to schedule on/off system operation via a web site, phone, fax or email up to ten years in advance. Manufacturer shall provide and maintain a two-way TCP/IP communication link. Trained staff shall be available 24/7 to provide scheduling support and assist with reporting needs. The Light Control System shall be factory wired to control terminal blocks.

### **Part III - Warranty and Accountability**

#### **Warranty**

The manufacturer shall warrant the system does not fall below the designed lighting levels throughout the entire warranty period (25 years). The manufacturer shall provide all labor and materials and equipment to all Maintenance.

Preventative and spot maintenance: Manufacturer shall provide all preventative and spot maintenance, including parts and labor for 25 years from the date of equipment delivery. Individual luminaire outages shall be repaired when the outages occur, there shall be no

## **SPECIAL PROVISIONS**

minimum outages required before action is taken. Owner agrees to check fuses in the event of an outage.

Inspection and Verification – The lighting manufacturer shall guarantee illumination light levels do not drop below the criteria detailed in section 1.04. Field measurements shall be done per IESNA RP-6-15 recommendations. Failure to achieve the required results will require individual fixture re-aiming and re-measurements at the expense of the manufacturer.

Field Technician - Manufacturer shall have available a local factory trained technician to provide project support including but not limited to: Luminaire replacement, confirm luminaire aiming points, troubleshoot, and educate customer maintenance personnel.

**END OF SECTION**

# CITY AND BOROUGH OF JUNEAU

## MELVIN PARK LIGHTING UPGRADE

JUNEAU, ALASKA

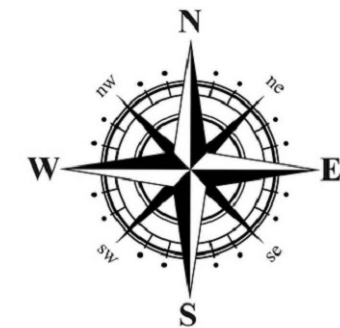
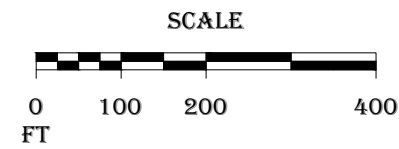
CBJ CONTRACT NO. BE23-022



- E-01 TITLE PAGE
- E-02 SITE PLAN - DEMOLISH
- E-03 SITE PLAN - NEW
- E-04 ONE LINE
- E-05 FIXTURE AND POLE DETAIL A1
- E-06 FIXTURE AND POLE DETAIL A2
- E-07 FIXTURE AND POLE DETAIL B1
- E-08 FIXTURE AND POLE DETAIL B2
- E-09 FIXTURE AND POLE DETAIL C1
- E-10 FIXTURE AND POLE DETAIL C2
- E-11 FIXTURE AND POLE DETAIL D1
- E-12 FIXTURE AND POLE DETAIL D2
- E-13 PRECAST CONCRETE FOOTING DETIAL



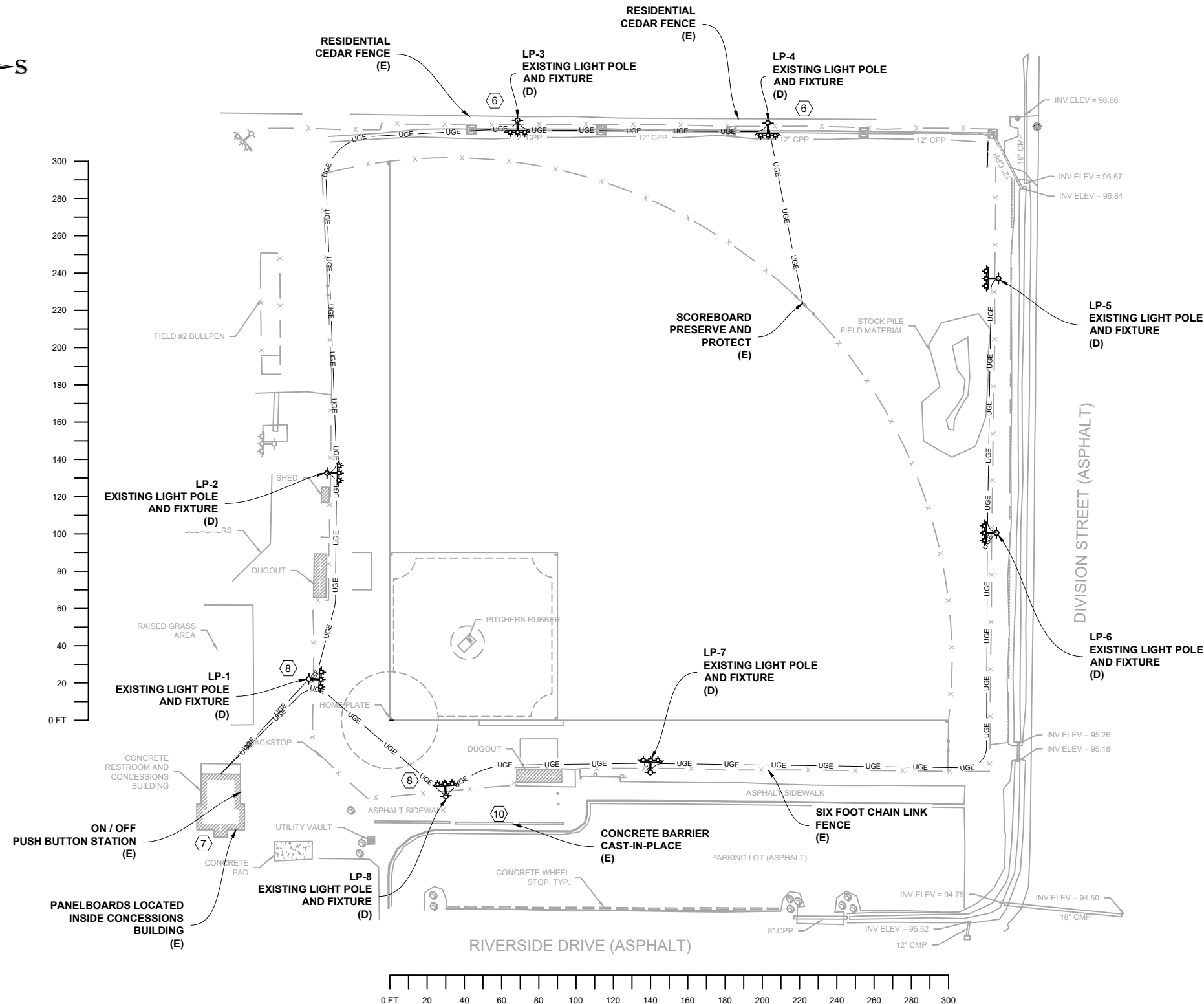
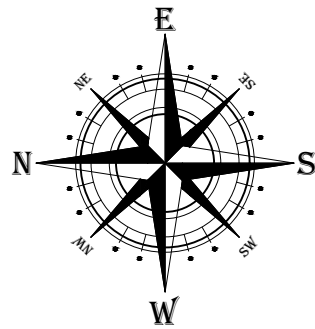
PROJECT LOCATION



**MELVIN PARK LIGHTING UPGRADE**  
 CBJ CONTRACT No. BE23-022  
 JUNEAU, AK  
**TITLE PAGE**

1			
2			
3			
4			
5			
6			
NO	DATE	REVISION	NO

ENGINEER:	VAM	CHECKED BY:	BR
JOB #:	J000777	DRAWN BY:	PP
SCALE:	N/A	DATE:	03/07/2022
DRAWING #:			
E-01			
SHEET			
01		OF 13	



**LEGEND:**

(E) - LIGHT FIXTURES OUT OF SCOPE. NO WORK IN THIS AREA.  
 (D) - LIGHTING FIXTURES TO BE DEMOLISHED.

**LINE TYPE LEGEND:**

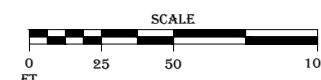
— UGE — UNDERGROUND ELECTRICAL  
 - X - CHAIN-LINK FENCE

**SCOPE:**

- REMOVE AND DISPOSE OF EIGHT (8) LIGHT POLES AND FIXTURES AT LOCATIONS SHOWN ON DEMOLITION PLAN.
- EXISTING LIGHT POLES ARE 16 INCH DIAMETER, CREOSOTE- TREATED POLES, APPROXIMATELY 70FT TALL MEASURED FROM GRADE. EACH POLE IS ENCASED IN 3FT DIAMETER CONCRETE BASE. BURIAL DEPTH IS UNKNOWN.
- DETACH UNDERGROUND CONDUIT FROM POLE PRIOR TO REMOVAL.
- EXISTING UNDERGROUND CONDUITS TO BE REUSED, TAKE CARE NOT TO DAMAGE UNDERGROUND CONDUIT WHILE REMOVING BASES.
- REMOVE EXISTING CHAIN-LINK FENCE AS NEEDED FOR CONSTRUCTION. ANY CHAIN-LINK OR WOOD FENCE REMOVED OR DISTURBED FROM CONSTRUCTION ACTIVITIES SHALL BE RESET TO EXISTING OR BETTER CONDITION. THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE LIGHTING SYSTEM INSTALLATION. COORDINATE WITH OWNER AND PRIVATE PROPERTY OWNER TO REMOVE PORTIONS OF EXISTING RESIDENTIAL CEDAR FENCE FOR POLE DEMOLITION AND INSTALLATION OF LIGHT POLES. REPLACE REMOVED SECTION OF CEDAR FENCE WITH NEW, MATCH EXISTING CONSTRUCTION. LIGHT POLE LOCATIONS LP-3 AND LP-4.
- REMOVE EXISTING LIGHTING CONTROLS LOCATED IN CONCESSION STAND ELECTRICAL ROOM.
- CUT ASPHALT AS NEEDED TO INTERCEPT AND REROUTE EXISTING CONDUIT.
- PATCH ASPHALT TO NEW CONDITION.
- REMOVE PRE-CAST BARRIER AS NEEDED FOR CONSTRUCTION.
- REPLACE CONCRETE BARRIER TO NEW CONDITION.

**1 MELVIN PARK DEMOLITION PLAN**

**\*\* DIAL BEFORE YOU DIG \*\***  
**LINE LOCATES (ALL UTILITIES)**  
 586-1333  
 &  
 811 ALASKA DIGLINE

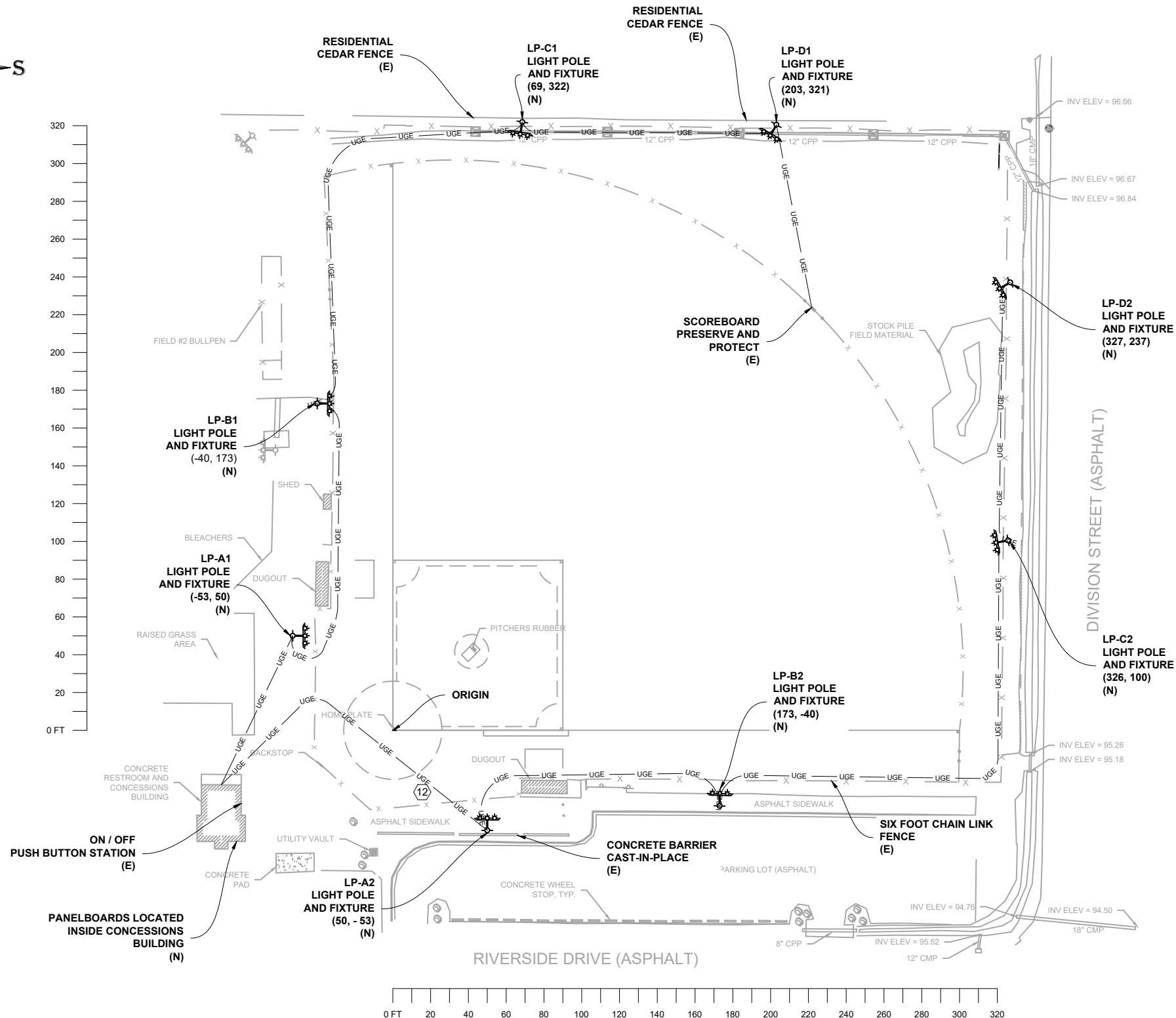
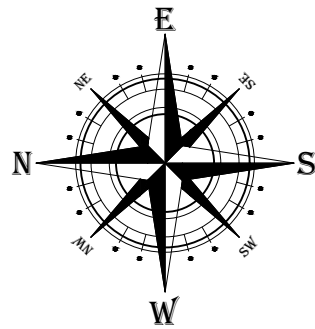


**DEMOLITION**



**MELVIN PARK LIGHTING UPGRADE**  
 CBJ CONTRACT No. BE23-022  
**DEMOLITION PLAN**  
 JUNEAU, AK

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NO DATE		REVISION	NO
ENGINEER:	VAM	CHECKED BY:	BR
JOB #:	J000777	DRAWN BY:	PP
SCALE:	N/A	DATE:	03/07/2022
DRAWING #:			
E-02			
SHEET			
02		OF 13	



**LEGEND:**

- (E) - LIGHT FIXTURES OUT OF SCOPE. NO WORK IN THIS AREA.
- (D) - LIGHTING FIXTURES TO BE DEMOLISHED.
- (N) - NEW PRECAST CONCRETE BASE, LIGHT POLE, AND LIGHT FIXTURE.

**LINE TYPE LEGEND:**

- UGE — UNDERGROUND ELECTRICAL
- X - CHAINLINK FENCE

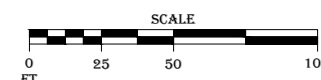
**SCOPE:**

1. PROVIDE AND INSTALL EIGHT (8) NEW PRECAST CONCRETE BASES, LIGHT POLES, AND LIGHT FIXTURES AT THE LOCATIONS SHOWN ON THE SITE PLAN.
2. ROUTE EXISTING CONDUITS INTO TO NEW PRECAST CONCRETE BASES. PROVIDE CONDUIT AND FITTINGS AS NEEDED TO COMPLETE UNDERGROUND ELECTRICAL RACEWAY.
3. PROVIDE AND INSTALL NEW UNDERGROUND ELECTRICAL CONDUCTORS AS SHOWN ON SHEET E-04 ONE LINE. PROVIDE NEW UNDERGROUND CONDUCTORS FOR NEVCO MODEL 1600 SCOREBOARD. ROUTE CONDUCTORS THROUGH LIGHTING JUNCTION BOXES.
4. CONDUCTORS SHALL BE FREE OF SPLICING, EXCEPT AT EACH LIGHT LOCATION. SPLICING IS ALLOWED IN HAND HOLE ONLY.
5. TERMINATE LIGHTING CONDUCTORS TO LIGHTING CONTACTOR AS SHOWN ON SHEET E-04.
6. ENSURE NEW LIGHTS ARE FULLY OPERATIONAL AND FUNCTION AS INTENDED PER DESIGN.
7. BACKFILL IN ACCORDANCE WITH PRECAST FOOTING DETAIL, OUTLINED ON SHEET E-06.
8. ANY CHAIN-LINK OR WOOD FENCE REMOVED OR DISTURBED FROM CONSTRUCTION ACTIVITIES SHALL BE RESET TO EXISTING OR BETTER CONDITION. THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE LIGHTING SYSTEM INSTALLATION.
9. COORDINATE WITH OWNER AND PRIVATE PROPERTY OWNER TO REMOVE PORTIONS OF EXISTING RESIDENTIAL CEDAR FENCE FOR POLE DEMOLITION AND INSTALLATION OF LIGHT POLES. REPLACE REMOVED SECTION OF CEDAR FENCE WITH NEW, MATCH EXISTING CONSTRUCTION. LIGHT POLE LOCATIONS LP-3 AND LP-4
10. LANDSCAPE AREAS DISTURBED BY CONSTRUCTION, GRADE SOIL TO SMOOTH CONDITION. RETURN AREA AFFECTED BY CONSTRUCTION TO PREVIOUS CONDITION OR BETTER.
11. CUT AND PATCH ASPHALT AS NEEDED TO INSTALL UNDERGROUND CONDUCTORS.

**NOTES:**

1. EXISTING ASPHALT CUTTING, REMOVAL AND DISPOSAL, AND NEW D1 GRADING COLLAR AROUND NEW POLE WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW LIGHT POLE.
2. REFERENCE STANDARDS.
  - 2.1. NEC (NFPA 70) NATIONAL ELECTRICAL CODE.
  - 2.2. NETA INTERNATIONAL ELECTRICAL TESTING ASSOCIATION.
  - 2.3. NEMA 250 ENCLOSURE FOR ELECTRICAL EQUIPMENT (1000 VOLTS MAXIMUM).
  - 2.4. ELECTRICAL EQUIPMENT SHALL BE LISTED BY AND SHALL BEAR THE LABEL OF UNDERWRITER LABORATORIES, INC. (UL) OR AN INDEPENDENT TESTING LABORATORY ACCEPTABLE TO THE LOCAL CODE ENFORCEMENT AGENCY HAVING JURISDICTION.
  - 2.5. INSTALLATION OF ELECTRICAL EQUIPMENT AND MATERIALS SHALL COMPLY WITH OSHA SAFETY AND HEALTH STANDARDS (29 CFR 1910 AND 29 CFR 1926, AS APPLICABLE), STATE BUILDING STANDARDS, AND APPLICABLE LOCAL CODES AND REGULATIONS.
  - 2.6. WHERE THE REQUIREMENTS OF THE SPECIFICATIONS

**\*\* DIAL BEFORE YOU DIG \*\***  
**LINE LOCATES (ALL UTILITIES)**  
 586-1333  
 &  
 811 ALASKA DIGLINE



**1 MELVIN PARK LIGHTING PLAN**

**NEW**

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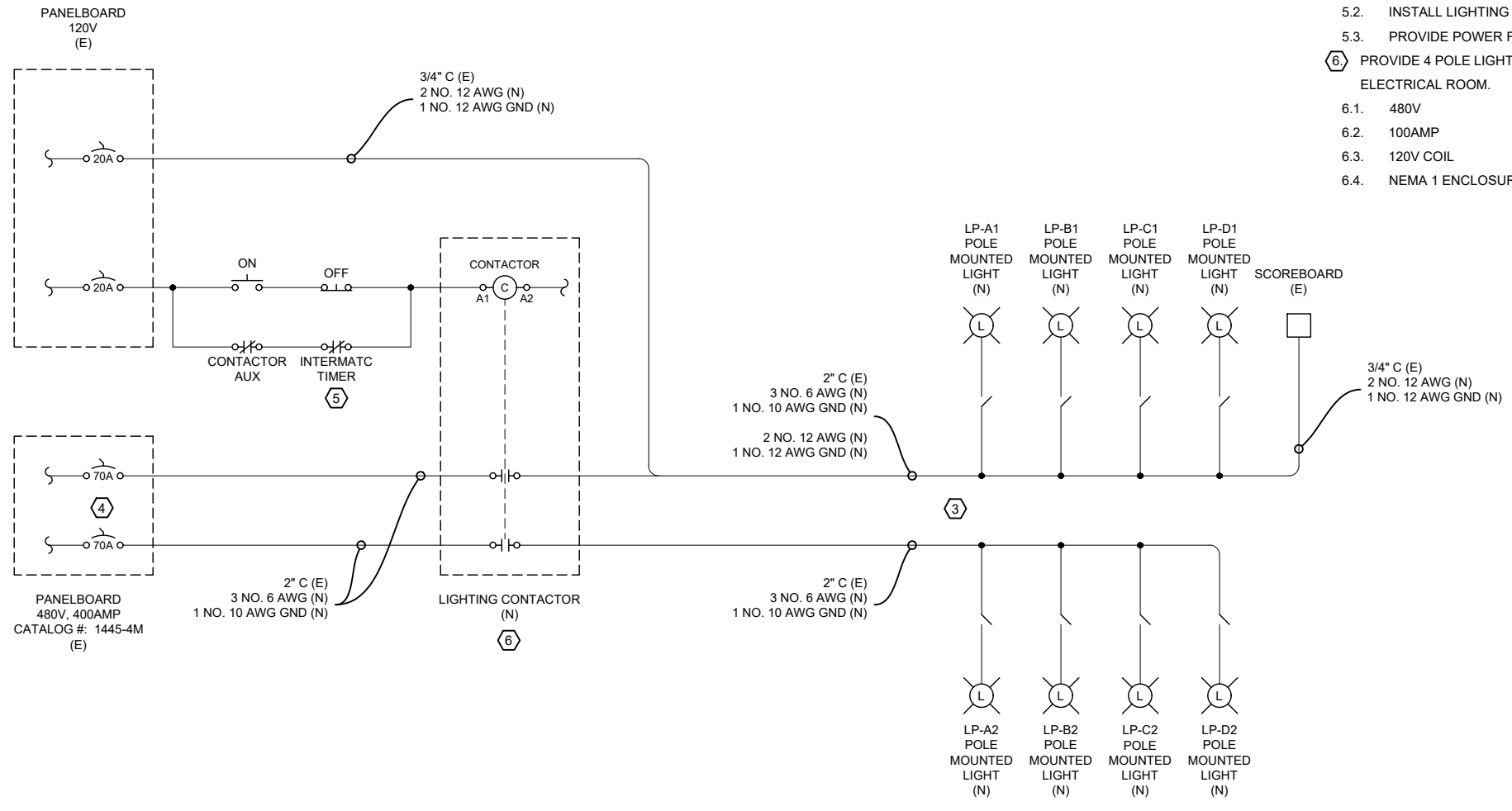
**MELVIN PARK LIGHTING UPGRADE**  
 CBJ CONTRACT No. BE23-022  
**SITE PLAN**  
 JUNEAU, AK

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NO DATE		REVISION	NO



ENGINEER: VAM	CHECKED BY: BR
JOB #: J000777	DRAWN BY: PP
SCALE: N/A	DATE: 03/07/2022

DRAWING #:  
**E-03**  
 SHEET  
**03 OF 13**



- NOTES:**
- REPLACE LIGHTING CIRCUIT CONDUCTORS.
  - CONDUCTORS SHALL BE FREE OF SPLICING, EXCEPT AT EACH LIGHT LOCATION, SPLICING IS ALLOWED IN THE HAND HOLE ONLY.
  - INTERCEPT EXISTING CONDUIT REROUTE TO NEW LIGHT POLE LOCATIONS AS SHOWN ON SITE PLAN. PROVIDE CONDUIT AND FITTINGS TO PROVIDE COMPLETE ELECTRICAL RACEWAY.
  - PROVIDE 70A, TWO POLE CIRCUIT BREAKERS, 2EA.
  - PROVIDE ADJUSTABLE TIMER CONTROLLER.
    - INTERMATIC, MODEL ET101C
    - INSTALL LIGHTING TIMER IN ELECTRICAL ROOM.
    - PROVIDE POWER FROM 120V LIGHTING CONTROL CIRCUIT.
  - PROVIDE 4 POLE LIGHTING CONTACTOR. INSTALL LIGHTING CONTACTOR IN ELECTRICAL ROOM.
    - 480V
    - 100AMP
    - 120V COIL
    - NEMA 1 ENCLOSURE

1 ONE LINE

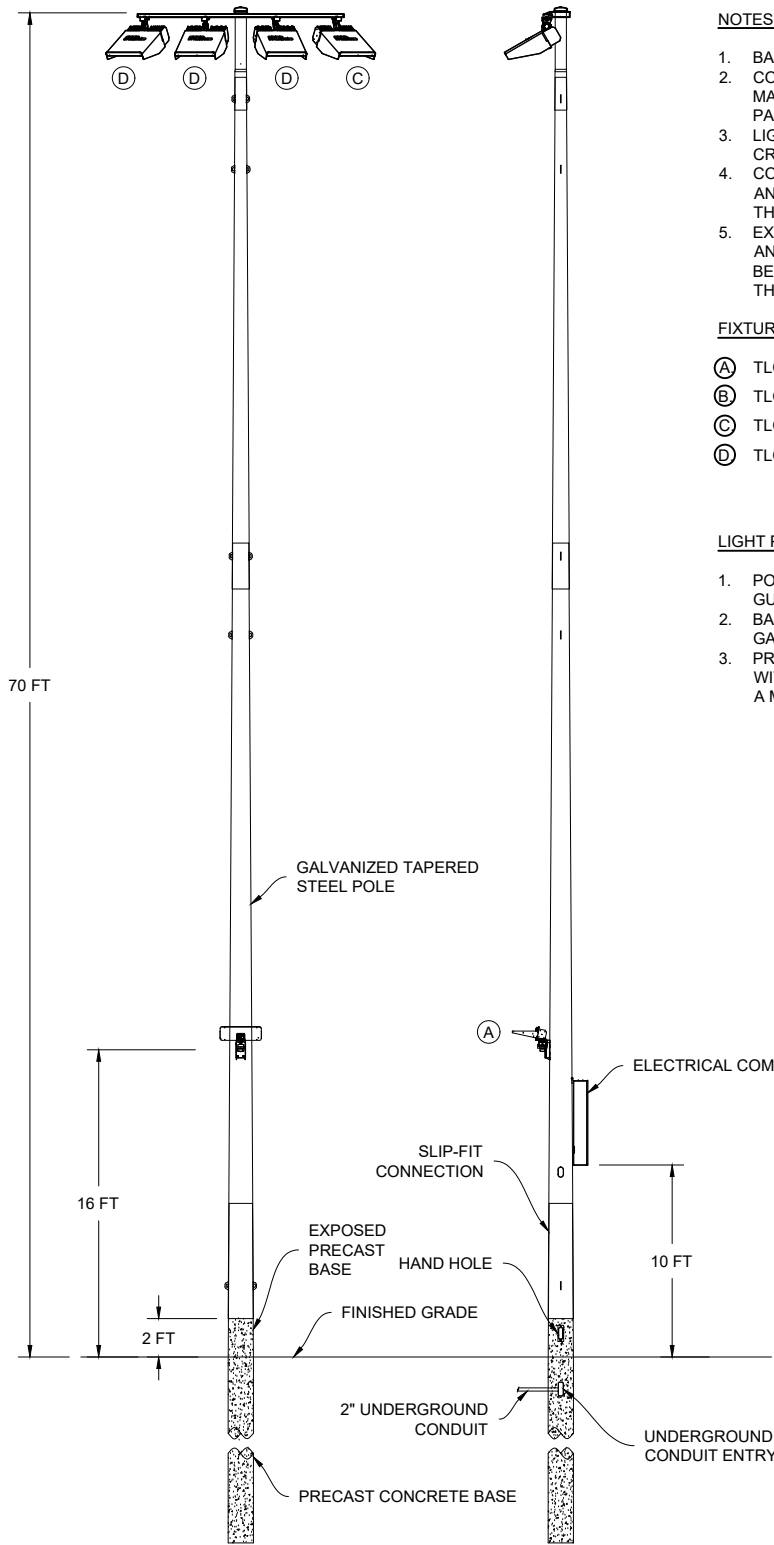
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ENGINEER: VAM  
JOB #: J000777  
SCALE: N/A

CHECKED BY: BR  
DRAWN BY: PP  
DATE: 03/07/2022

DRAWING #:  
**E-04**  
SHEET  
**04 OF 07**



**NOTES**

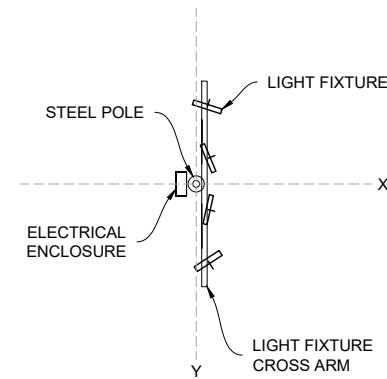
1. BASIS OF DESIGN IS MUSCO LIGHTING TLC SERIES.
2. CONTRACTOR SHALL COORDINATE WITH OWNER AND MANUFACTURER TO PROVIDE COMPLETE LIGHT FIXTURE PART NUMBER.
3. LIGHT FIXTURES SHALL BE FACTORY MOUNTED TO CROSS ARM AND AIMED PRIOR TO SHIPMENT.
4. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ENGINEER TO ADJUST THE ANGLE OF ROTATION OF THE CROSS ARM.
5. EXISTING ASPHALT CUTTING, REMOVAL AND DISPOSAL, AND NEW D1 GRADING COLLAR AROUND NEW POLE WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW LIGHT POLE.

**FIXTURE SCHEDULE**

- (A) TLC - BT - 575 (480V, 575W, 1.45A)
- (B) TLC - LED - 900 (480V, 890W, 1.85A)
- (C) TLC - LED - 1200 (480V, 1170W, 3.03A)
- (D) TLC - LED - 1500 (480V, 1430W, 3.7A)

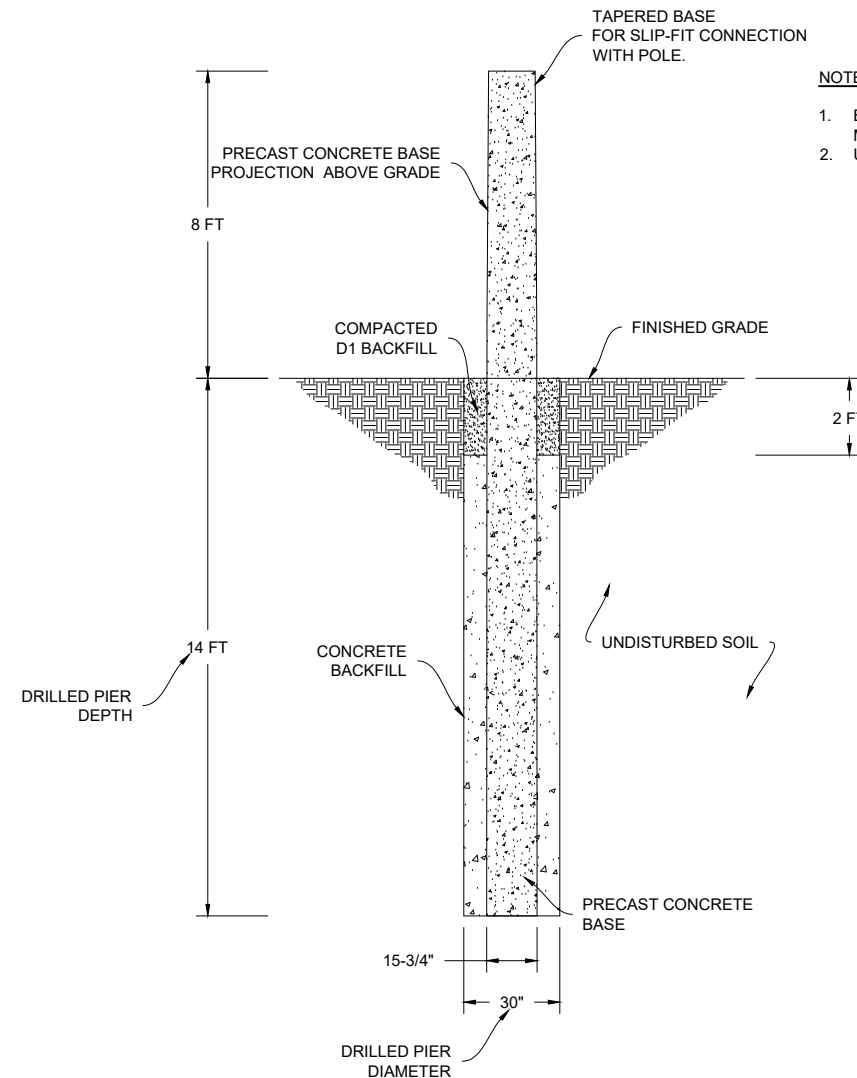
**LIGHT POLE SPECIFICATIONS**

1. POLES SIZED FOR 100 MPH SUSTAINED WINDS WITH GUSTS TO 130 MPH.
2. BASIS OF DESIGN IS MUSCO LIGHTING TAPERED GALVANIZED STEEL POLE.
3. PRECAST CONCRETE BASES AND POLES ARE PROVIDED WITH SLIP-FIT CONNECTION AND MUST BE PROVIDED AS A MATCHED SET.



**2 LIGHT FIXTURE ANGLE TO ORIGIN, FIXTURE A1**

NOT TO SCALE



**NOTES**

1. BACKFILL TOP TWO FEET WITH D1. COMPACT TO MATCH EXISTING GRADE.
2. USE MECHANICAL MEANS TO COMPACT SOIL.

**3 FOUNDATION DETAIL, POLE A1**

SCALE AS SHOWN

**1 POLE AND FIXTURE DETAIL, POLES A1**

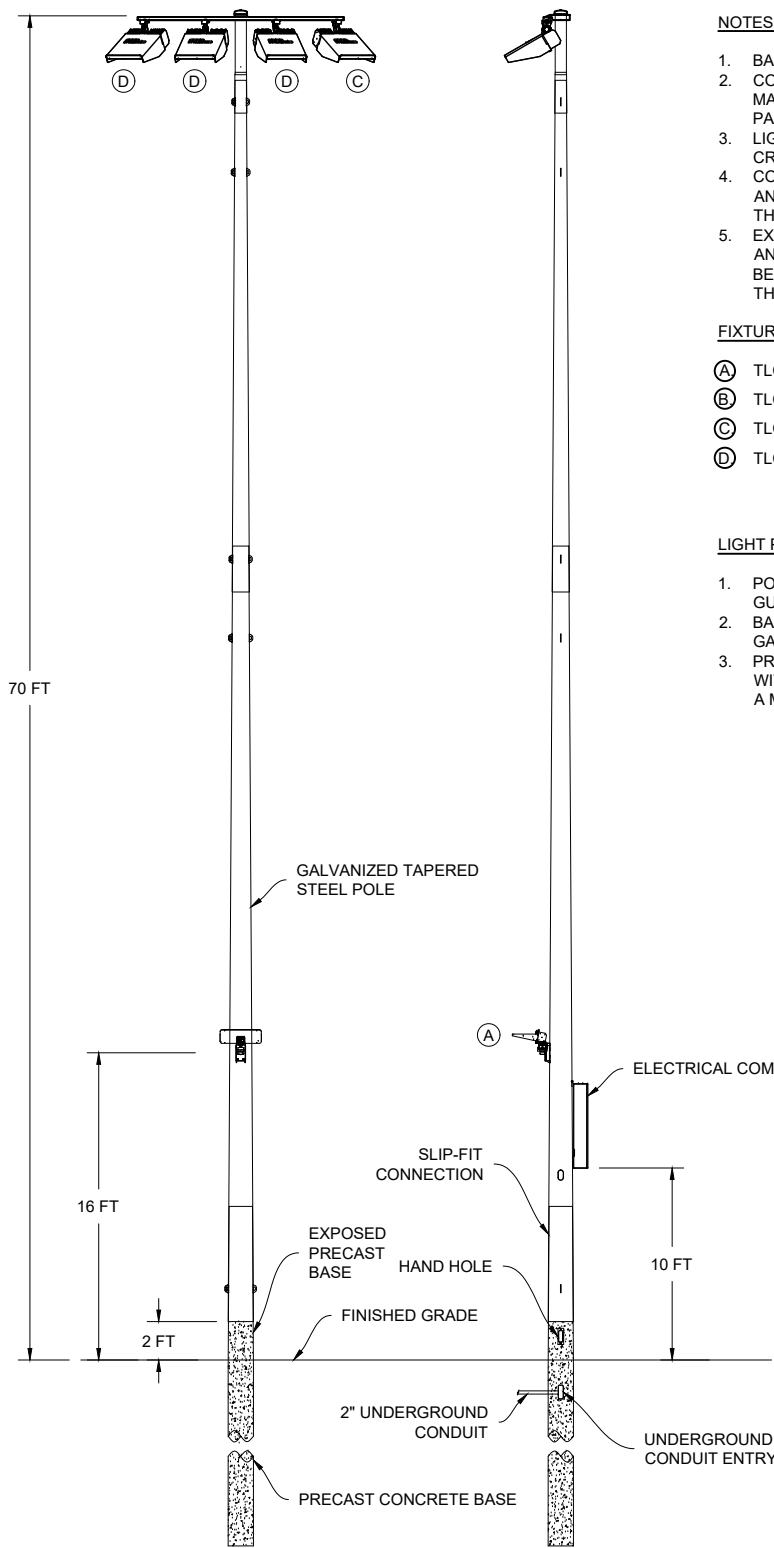
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ENGINEER: VAM	CHECKED BY: BR
JOB #: J000777	DRAWN BY: PP
SCALE: N/A	DATE: 03/07/2022

DRAWING #:  
**E-05**  
SHEET  
**05** OF **13**



**NOTES**

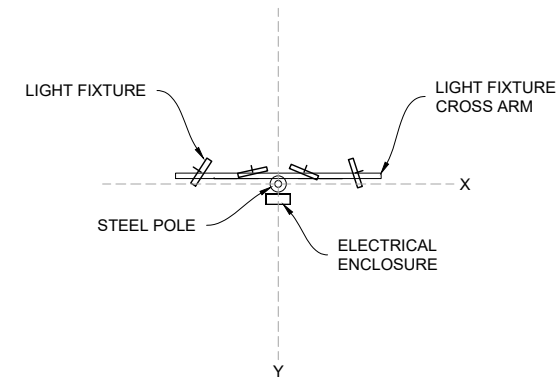
1. BASIS OF DESIGN IS MUSCO LIGHTING TLC SERIES.
2. CONTRACTOR SHALL COORDINATE WITH OWNER AND MANUFACTURER TO PROVIDE COMPLETE LIGHT FIXTURE PART NUMBER.
3. LIGHT FIXTURES SHALL BE FACTORY MOUNTED TO CROSS ARM AND AIMED PRIOR TO SHIPMENT.
4. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ENGINEER TO ADJUST THE ANGLE OF ROTATION OF THE CROSS ARM.
5. EXISTING ASPHALT CUTTING, REMOVAL AND DISPOSAL, AND NEW D1 GRADING COLLAR AROUND NEW POLE WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW LIGHT POLE.

**FIXTURE SCHEDULE**

- (A) TLC - BT - 575 (480V, 575W, 1.45A)
- (B) TLC - LED - 900 (480V, 890W, 1.85A)
- (C) TLC - LED - 1200 (480V, 1170W, 3.03A)
- (D) TLC - LED - 1500 (480V, 1430W, 3.7A)

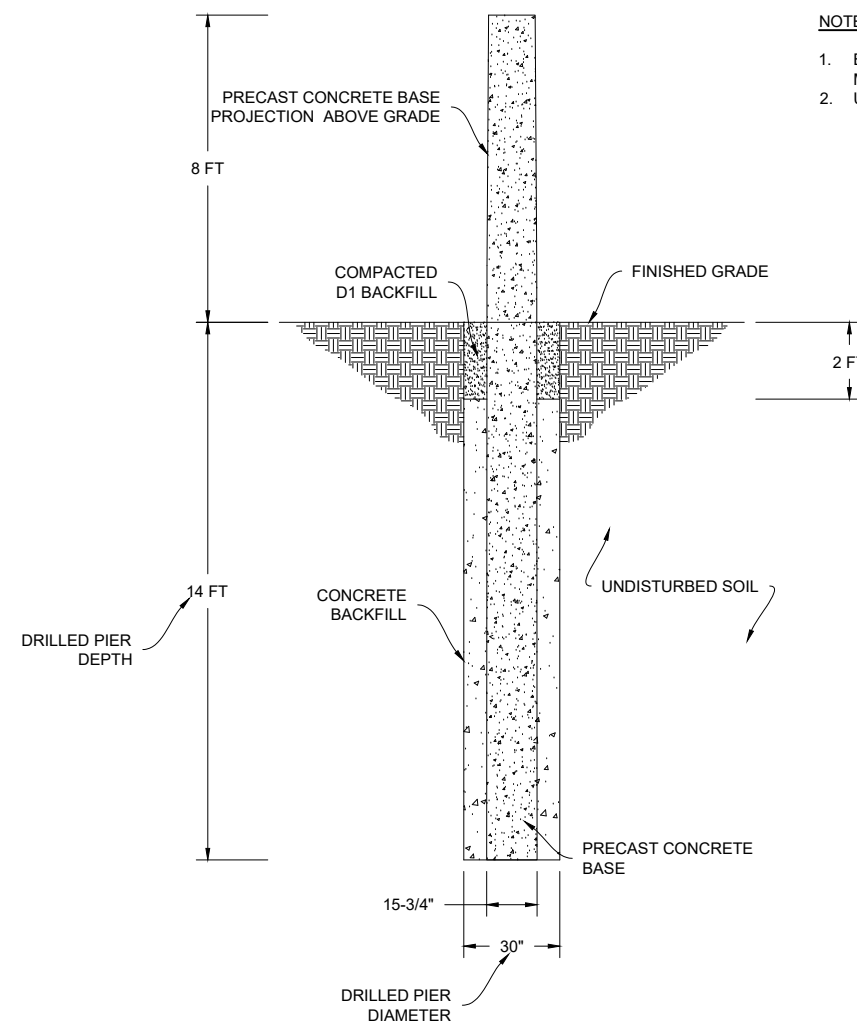
**LIGHT POLE SPECIFICATIONS**

1. POLES SIZED FOR 100 MPH SUSTAINED WINDS WITH GUSTS TO 130 MPH.
2. BASIS OF DESIGN IS MUSCO LIGHTING TAPERED GALVANIZED STEEL POLE.
3. PRECAST CONCRETE BASES AND POLES ARE PROVIDED WITH SLIP-FIT CONNECTION AND MUST BE PROVIDED AS A MATCHED SET.



**2 LIGHT FIXTURE ANGLE TO ORIGIN, FIXTURE A2**

NOT TO SCALE



**NOTES**

1. BACKFILL TOP TWO FEET WITH D1. COMPACT TO MATCH EXISTING GRADE.
2. USE MECHANICAL MEANS TO COMPACT SOIL.

**3 FOUNDATION DETAIL, POLE A2**

SCALE AS SHOWN

**1 POLE AND FIXTURE DETAIL, POLES A2**

SCALE AS SHOWN

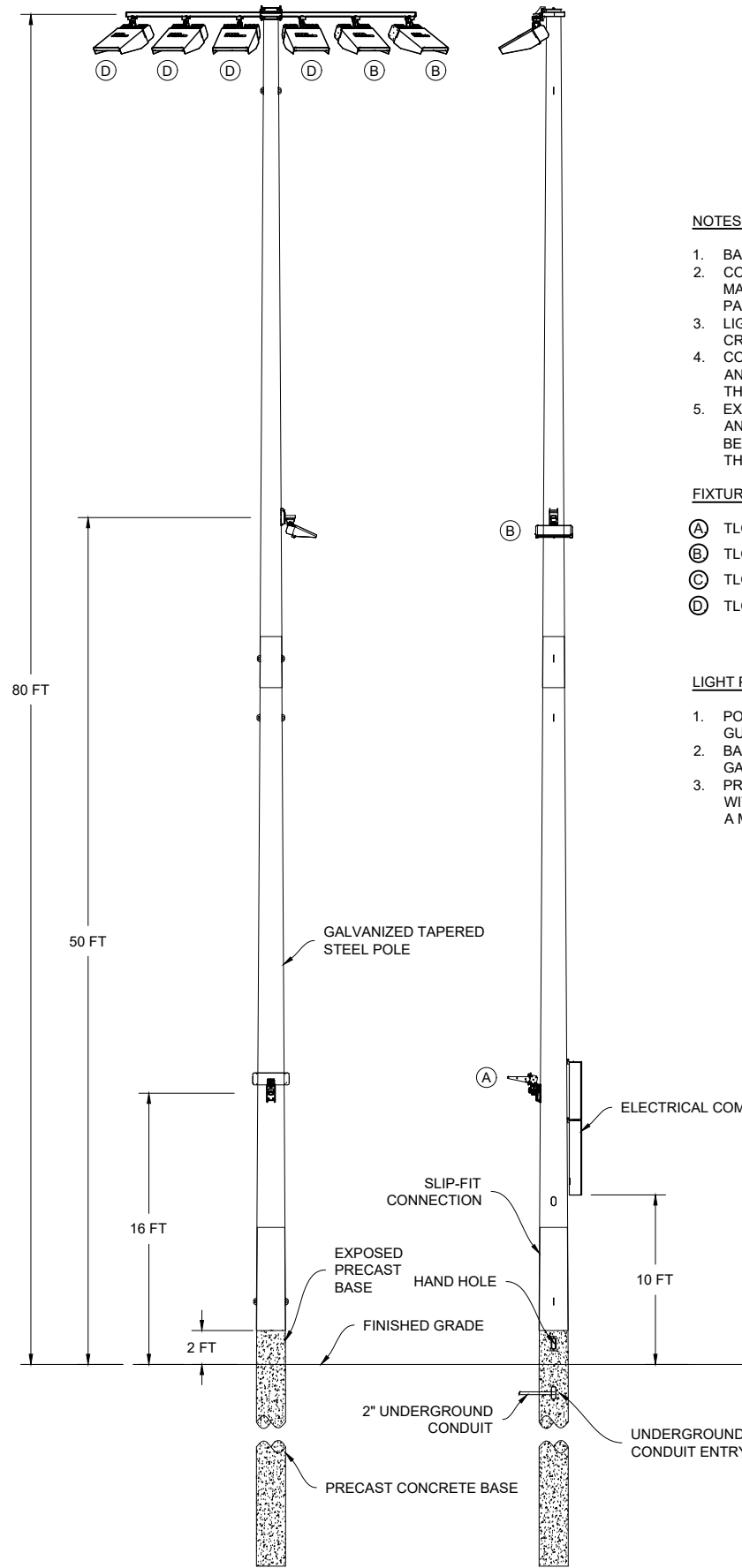
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ENGINEER: VAM	CHECKED BY: BR
JOB #: J000777	DRAWN BY: PP
SCALE: N/A	DATE: 03/07/2022

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**E-06**  
SHEET





1 POLE AND FIXTURE DETAIL, POLES B1

SCALE AS SHOWN

**NOTES**

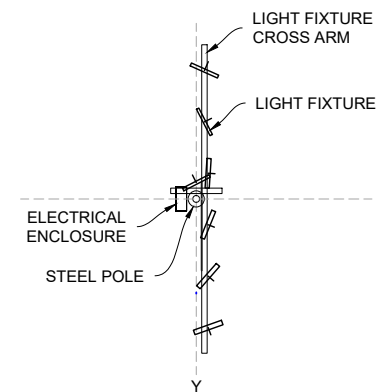
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2. CONTRACTOR SHALL COORDINATE WITH OWNER AND MANUFACTURER TO PROVIDE COMPLETE LIGHT FIXTURE PART NUMBER.
3. LIGHT FIXTURES SHALL BE FACTORY MOUNTED TO CROSS ARM AND AIMED PRIOR TO SHIPMENT.
4. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ENGINEER TO ADJUST THE ANGLE OF ROTATION OF THE CROSS ARM.
5. EXISTING ASPHALT CUTTING, REMOVAL AND DISPOSAL, AND NEW D1 GRADING COLLAR AROUND NEW POLE WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW LIGHT POLE.

**FIXTURE SCHEDULE**

- (A) TLC - BT - 575 (480V, 575W, 1.45A)
- (B) TLC - LED - 900 (480V, 890W, 1.85A)
- (C) TLC - LED - 1200 (480V, 1170W, 3.03A)
- (D) TLC - LED - 1500 (480V, 1430W, 3.7A)

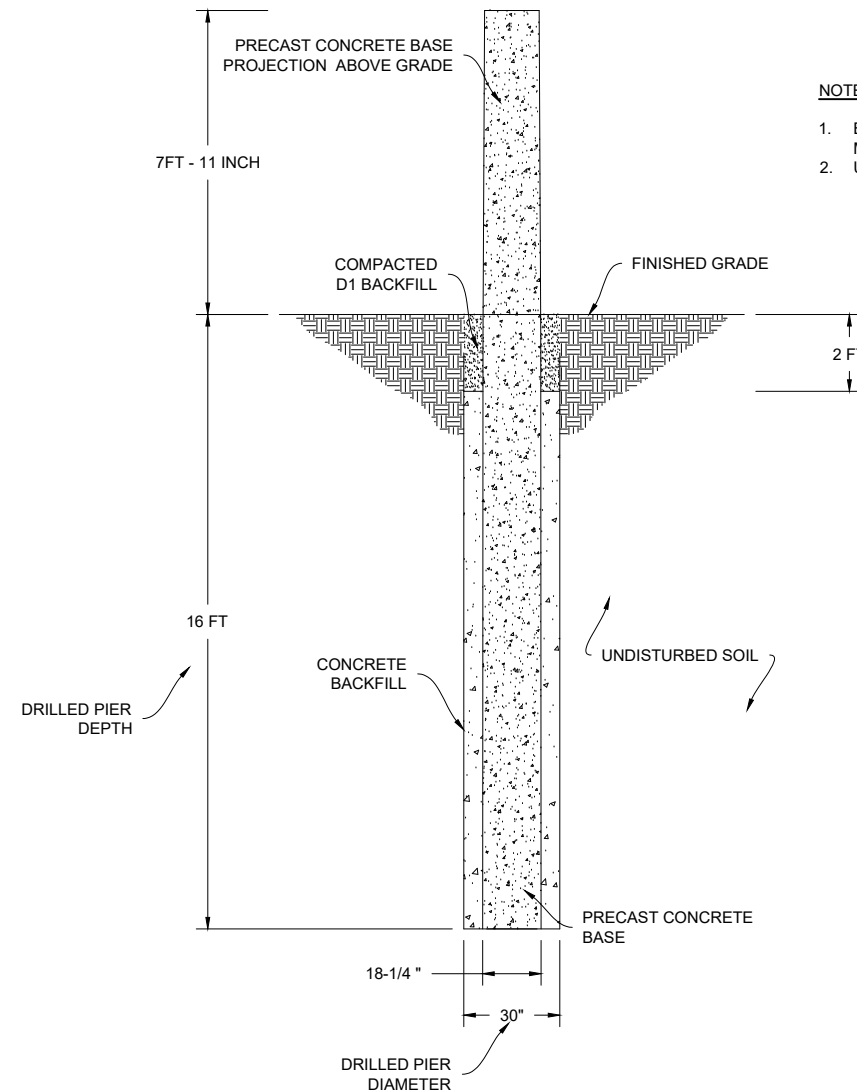
**LIGHT POLE SPECIFICATIONS**

1. POLES SIZED FOR 100 MPH SUSTAINED WINDS WITH GUSTS TO 130 MPH.
2. BASIS OF DESIGN IS MUSCO LIGHTING TAPERED GALVANIZED STEEL POLE.
3. PRECAST CONCRETE BASES AND POLES ARE PROVIDED WITH SLIP-FIT CONNECTION AND MUST BE PROVIDED AS A MATCHED SET.



2 LIGHT FIXTURE ANGLE TO ORIGIN, FIXTURE B1

NOT TO SCALE



3 FOUNDATION DETAIL, POLE B1

SCALE AS SHOWN

**NOTES**

1. BACKFILL TOP TWO FEET WITH D1. COMPACT TO MATCH EXISTING GRADE.
2. USE MECHANICAL MEANS TO COMPACT SOIL.



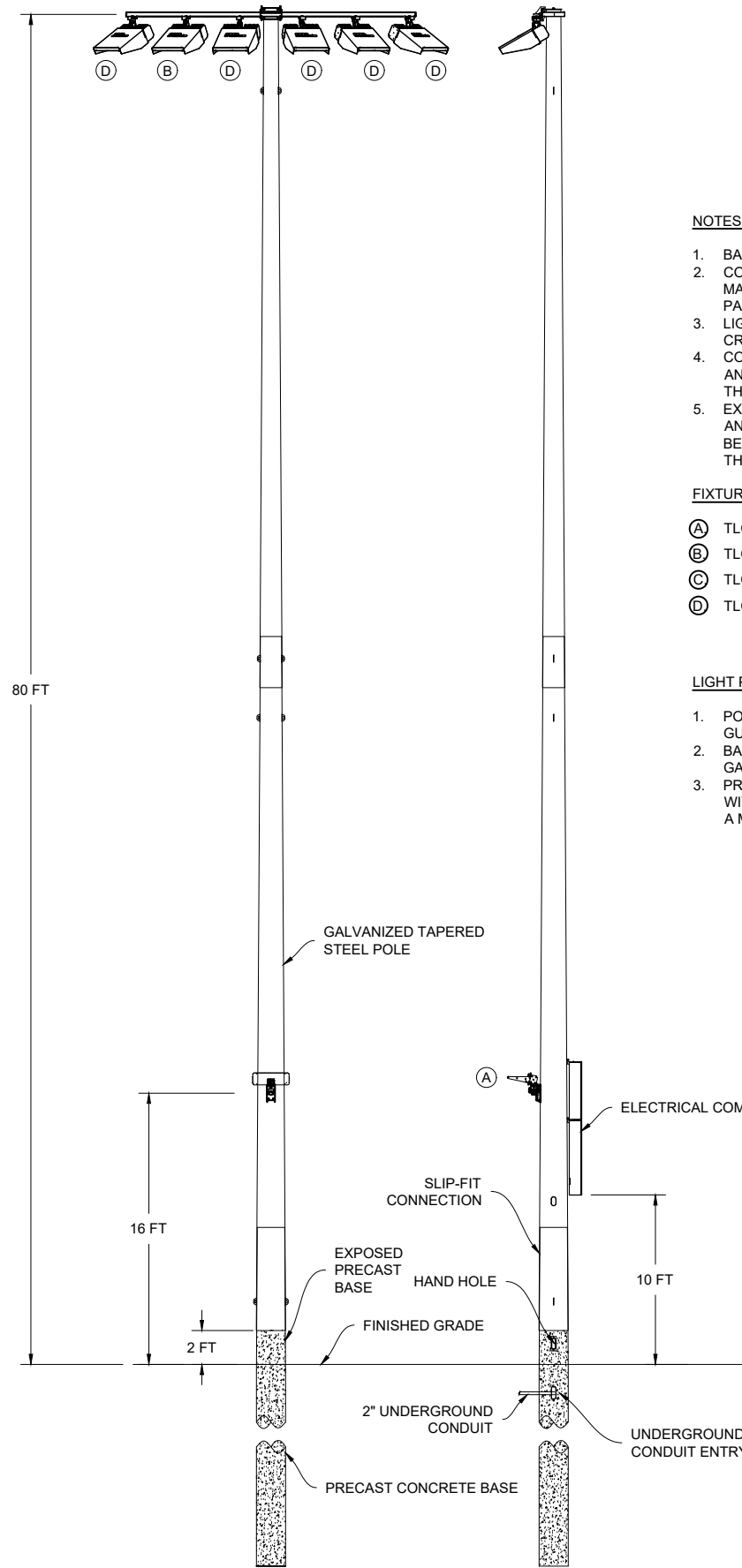
MELVIN PARK LIGHTING UPGRADE  
 CBJ CONTRACT No. BE23-022  
 FIXTURE AND POLE DETAIL (B1)  
 JUNEAU, AK

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ENGINEER:	VAM	CHECKED BY:	BR
JOB #:	J000777	DRAWN BY:	PP
SCALE:	N/A	DATE:	03/07/2022

DRAWING #:  
 E-07  
 SHEET



1 POLE AND FIXTURE DETAIL, POLES B2

SCALE AS SHOWN

**NOTES**

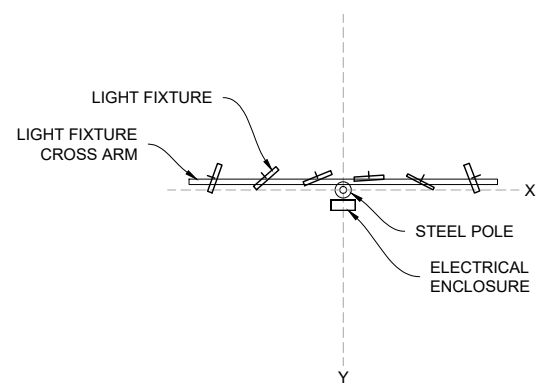
1. BASIS OF DESIGN IS MUSCO LIGHTING TLC SERIES.
2. CONTRACTOR SHALL COORDINATE WITH OWNER AND MANUFACTURER TO PROVIDE COMPLETE LIGHT FIXTURE PART NUMBER.
3. LIGHT FIXTURES SHALL BE FACTORY MOUNTED TO CROSS ARM AND AIMED PRIOR TO SHIPMENT.
4. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ENGINEER TO ADJUST THE ANGLE OF ROTATION OF THE CROSS ARM.
5. EXISTING ASPHALT CUTTING, REMOVAL AND DISPOSAL, AND NEW D1 GRADING COLLAR AROUND NEW POLE WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW LIGHT POLE.

**FIXTURE SCHEDULE**

- (A) TLC - BT - 575 (480V, 575W, 1.45A)
- (B) TLC - LED - 900 (480V, 890W, 1.85A)
- (C) TLC - LED - 1200 (480V, 1170W, 3.03A)
- (D) TLC - LED - 1500 (480V, 1430W, 3.7A)

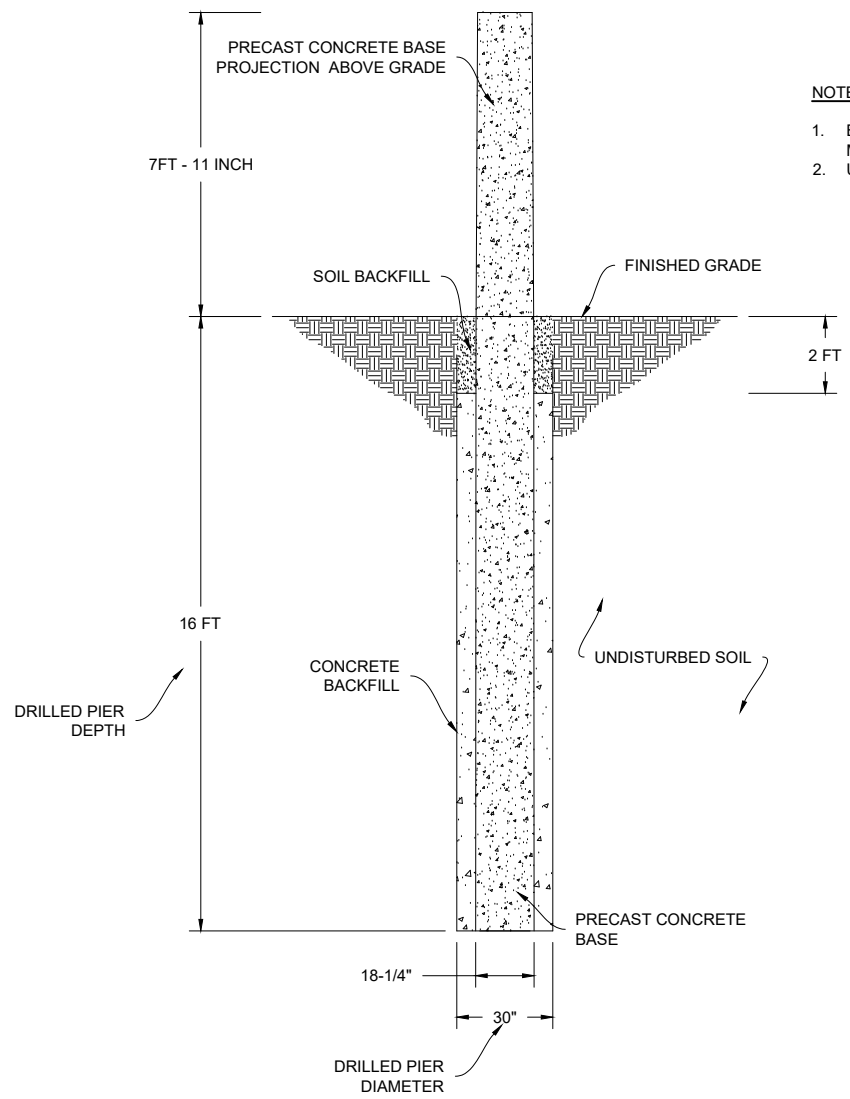
**LIGHT POLE SPECIFICATIONS**

1. POLES SIZED FOR 100 MPH SUSTAINED WINDS WITH GUSTS TO 130 MPH.
2. BASIS OF DESIGN IS MUSCO LIGHTING TAPERED GALVANIZED STEEL POLE.
3. PRECAST CONCRETE BASES AND POLES ARE PROVIDED WITH SLIP-FIT CONNECTION AND MUST BE PROVIDED AS A MATCHED SET.



2 LIGHT FIXTURE ANGLE TO ORIGIN, FIXTURE B2

NOT TO SCALE



3 FOUNDATION DETAIL, POLE B2

SCALE AS SHOWN

**NOTES**

1. BACKFILL TOP TWO FEET WITH D1. COMPACT TO MATCH EXISTING GRADE.
2. USE MECHANICAL MEANS TO COMPACT SOIL.



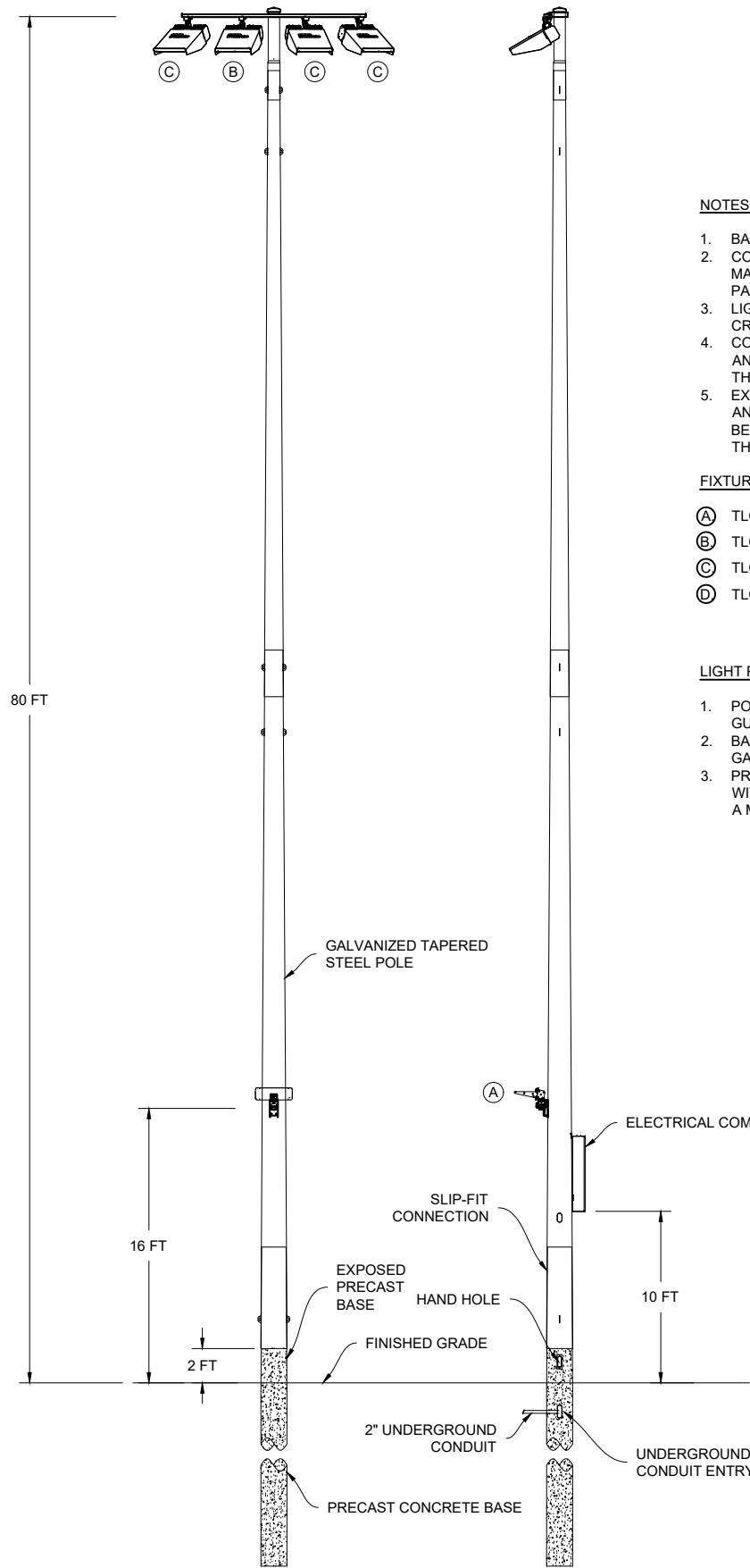
**MELVIN PARK LIGHTING UPGRADE**  
 CBJ CONTRACT No. BE22-23  
**FIXTURE AND POLE DETAIL (B2)**  
 JUNEAU, AK

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NO	DATE	REVISION	NO



ENGINEER: VAM	CHECKED BY: BR
JOB #: J000777	DRAWN BY: PP
SCALE: N/A	DATE: 03/07/2022

DRAWING #:  
**E-08**  
 SHEET  
**08** OF **13**



1 POLE AND FIXTURE DETAIL, POLES C1

SCALE AS SHOWN

**NOTES**

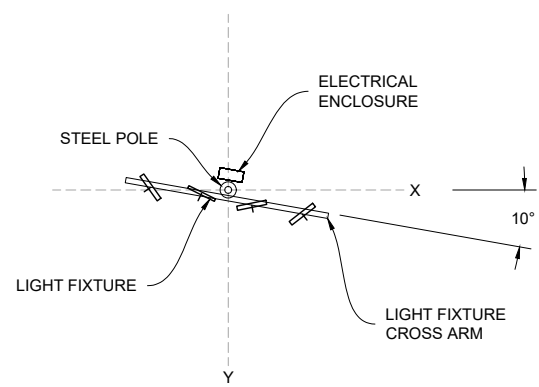
1. BASIS OF DESIGN IS MUSCO LIGHTING TLC SERIES.
2. CONTRACTOR SHALL COORDINATE WITH OWNER AND MANUFACTURER TO PROVIDE COMPLETE LIGHT FIXTURE PART NUMBER.
3. LIGHT FIXTURES SHALL BE FACTORY MOUNTED TO CROSS ARM AND AIMED PRIOR TO SHIPMENT.
4. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ENGINEER TO ADJUST THE ANGLE OF ROTATION OF THE CROSS ARM.
5. EXISTING ASPHALT CUTTING, REMOVAL AND DISPOSAL, AND NEW D1 GRADING COLLAR AROUND NEW POLE WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW LIGHT POLE.

**FIXTURE SCHEDULE**

- (A) TLC - BT - 575 (480V, 575W, 1.45A)
- (B) TLC - LED - 900 (480V, 890W, 1.85A)
- (C) TLC - LED - 1200 (480V, 1170W, 3.03A)
- (D) TLC - LED - 1500 (480V, 1430W, 3.7A)

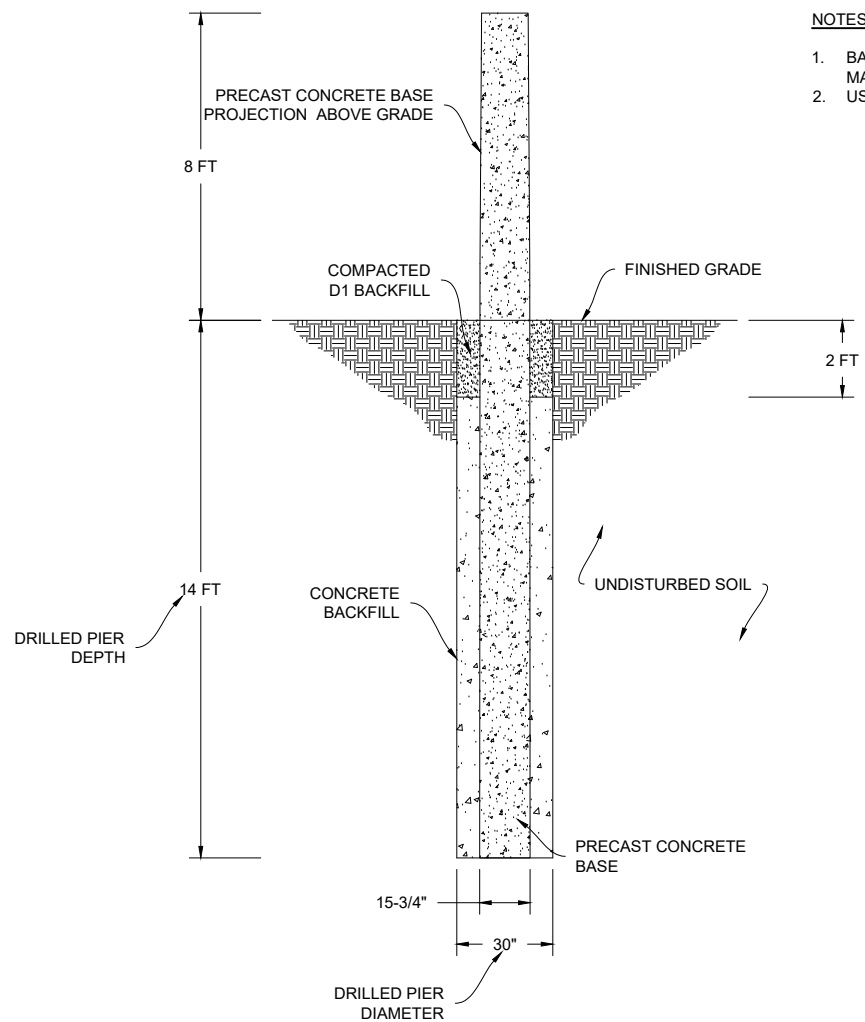
**LIGHT POLE SPECIFICATIONS**

1. POLES SIZED FOR 100 MPH SUSTAINED WINDS WITH GUSTS TO 130 MPH.
2. BASIS OF DESIGN IS MUSCO LIGHTING TAPERED GALVANIZED STEEL POLE.
3. PRECAST CONCRETE BASES AND POLES ARE PROVIDED WITH SLIP-FIT CONNECTION AND MUST BE PROVIDED AS A MATCHED SET.



2 LIGHT FIXTURE ANGLE TO ORIGIN, FIXTURE C1

NOT TO SCALE



3 FOUNDATION DETAIL, POLE C1

SCALE AS SHOWN

**NOTES**

1. BACKFILL TOP TWO FEET WITH D1. COMPACT TO MATCH EXISTING GRADE.
2. USE MECHANICAL MEANS TO COMPACT SOIL.



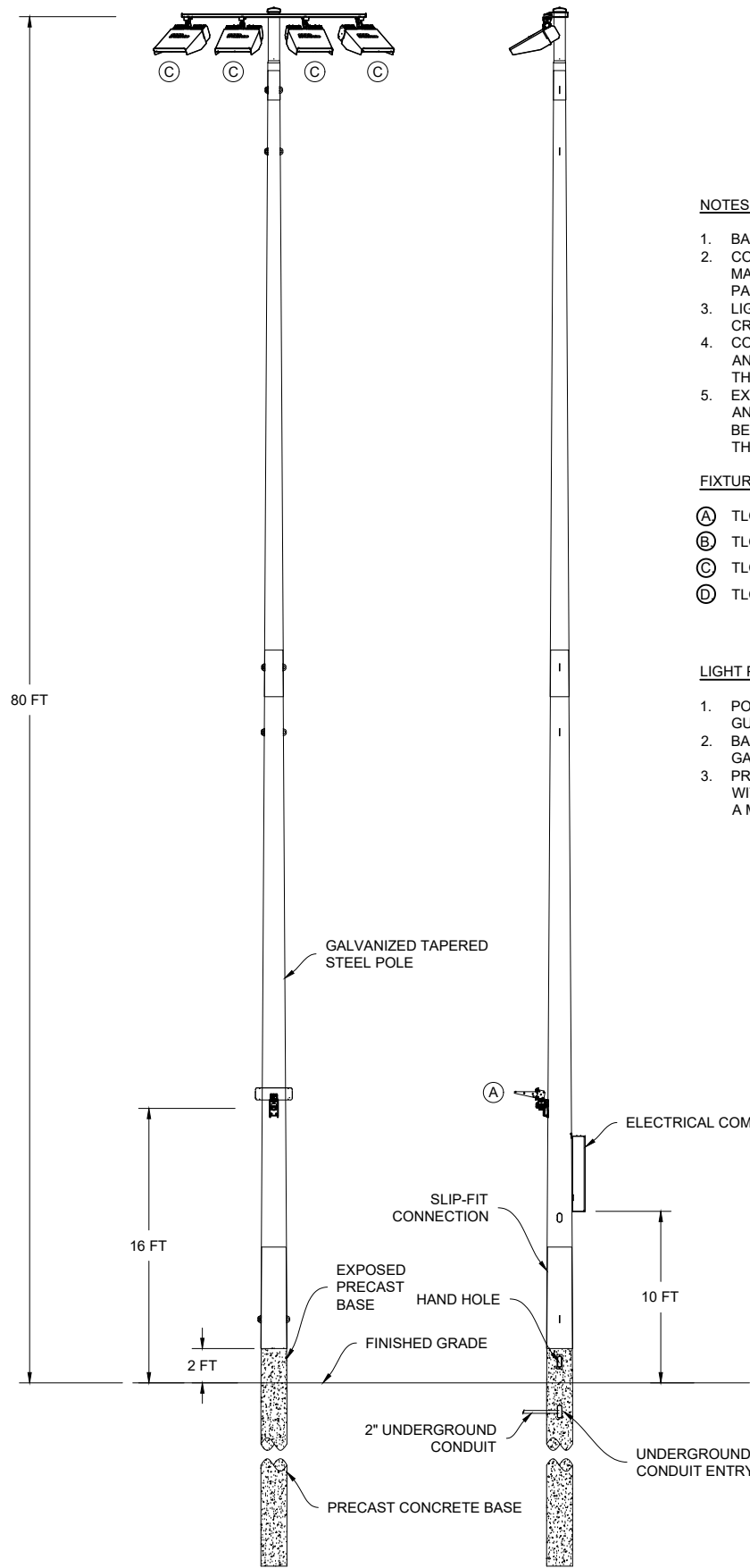
**MELVIN PARK LIGHTING UPGRADE**  
 CBJ CONTRACT No. BE23-022  
**FIXTURE AND POLE DETAIL (C1)**  
 JUNEAU, AK

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NO	DATE	REVISION	NO



ENGINEER: VAM	CHECKED BY: BR
JOB #: J000777	DRAWN BY: PP
SCALE: N/A	DATE: 03/07/2022

DRAWING #:  
**E-09**  
 SHEET  
**09** OF **13**



1 POLE AND FIXTURE DETAIL, POLES C2

SCALE AS SHOWN

**NOTES**

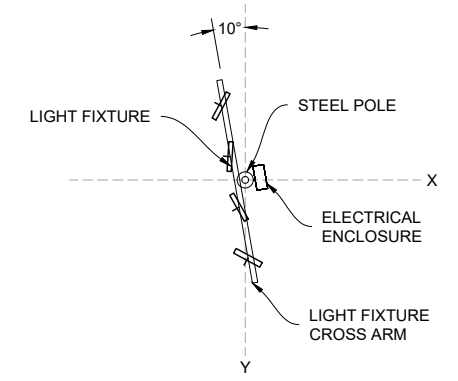
1. BASIS OF DESIGN IS MUSCO LIGHTING TLC SERIES.
2. CONTRACTOR SHALL COORDINATE WITH OWNER AND MANUFACTURER TO PROVIDE COMPLETE LIGHT FIXTURE PART NUMBER.
3. LIGHT FIXTURES SHALL BE FACTORY MOUNTED TO CROSS ARM AND AIMED PRIOR TO SHIPMENT.
4. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ENGINEER TO ADJUST THE ANGLE OF ROTATION OF THE CROSS ARM.
5. EXISTING ASPHALT CUTTING, REMOVAL AND DISPOSAL, AND NEW D1 GRADING COLLAR AROUND NEW POLE WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW LIGHT POLE.

**FIXTURE SCHEDULE**

- (A) TLC - BT - 575 (480V, 575W, 1.45A)
- (B) TLC - LED - 900 (480V, 890W, 1.85A)
- (C) TLC - LED - 1200 (480V, 1170W, 3.03A)
- (D) TLC - LED - 1500 (480V, 1430W, 3.7A)

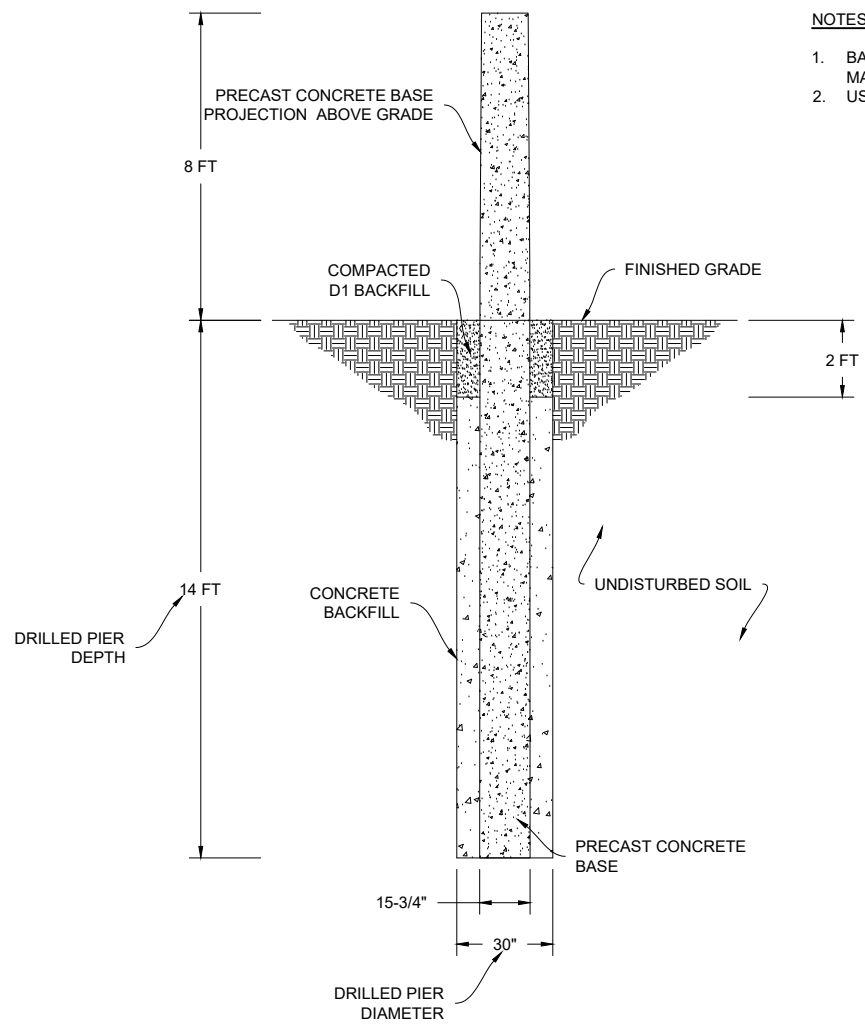
**LIGHT POLE SPECIFICATIONS**

1. POLES SIZED FOR 100 MPH SUSTAINED WINDS WITH GUSTS TO 130 MPH.
2. BASIS OF DESIGN IS MUSCO LIGHTING TAPERED GALVANIZED STEEL POLE.
3. PRECAST CONCRETE BASES AND POLES ARE PROVIDED WITH SLIP-FIT CONNECTION AND MUST BE PROVIDED AS A MATCHED SET.



2 LIGHT FIXTURE ANGLE TO ORIGIN, FIXTURE C2

NOT TO SCALE



3 FOUNDATION DETAIL, POLE C2

SCALE AS SHOWN

**NOTES**

1. BACKFILL TOP TWO FEET WITH D1. COMPACT TO MATCH EXISTING GRADE.
2. USE MECHANICAL MEANS TO COMPACT SOIL.



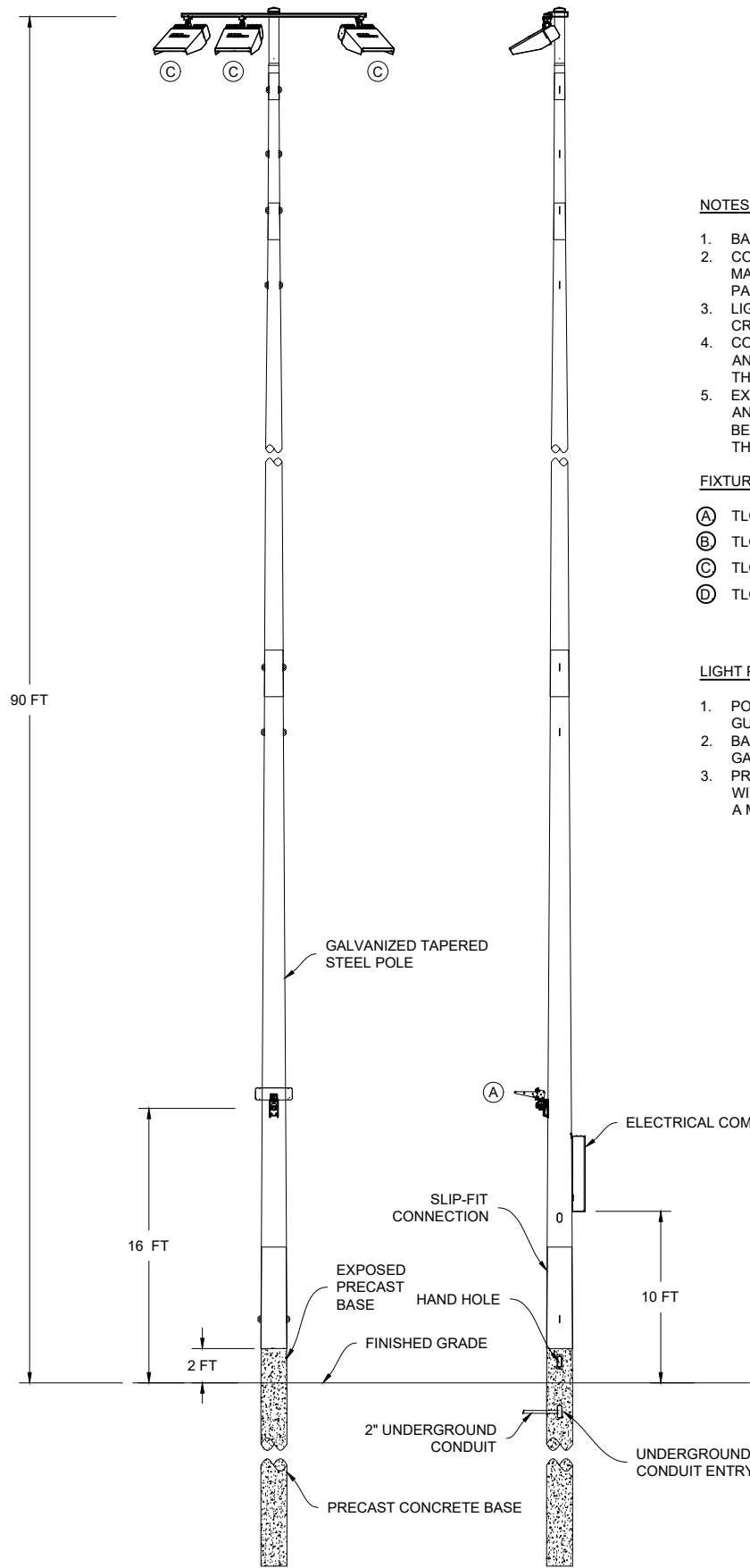
**MELVIN PARK LIGHTING UPGRADE**  
 CBJ CONTRACT No. BE23-022  
**FIXTURE AND POLE DETAIL (C2)**  
 JUNEAU, AK

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NO	DATE	REVISION	NO



ENGINEER: VAM	CHECKED BY: BR
JOB #: J000777	DRAWN BY: PP
SCALE: N/A	DATE: 03/07/2022

DRAWING #:  
**E-10**  
 SHEET  
**10** OF **13**



1 POLE AND FIXTURE DETAIL, POLES D1

SCALE AS SHOWN

**NOTES**

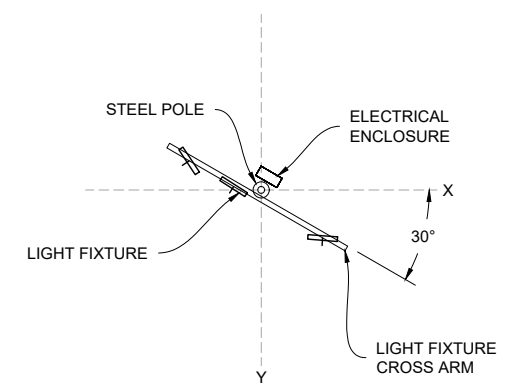
1. BASIS OF DESIGN IS MUSCO LIGHTING TLC SERIES.
2. CONTRACTOR SHALL COORDINATE WITH OWNER AND MANUFACTURER TO PROVIDE COMPLETE LIGHT FIXTURE PART NUMBER.
3. LIGHT FIXTURES SHALL BE FACTORY MOUNTED TO CROSS ARM AND AIMED PRIOR TO SHIPMENT.
4. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ENGINEER TO ADJUST THE ANGLE OF ROTATION OF THE CROSS ARM.
5. EXISTING ASPHALT CUTTING, REMOVAL AND DISPOSAL, AND NEW D1 GRADING COLLAR AROUND NEW POLE WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW LIGHT POLE.

**FIXTURE SCHEDULE**

- (A) TLC - BT - 575 (480V, 575W, 1.45A)
- (B) TLC - LED - 900 (480V, 890W, 1.85A)
- (C) TLC - LED - 1200 (480V, 1170W, 3.03A)
- (D) TLC - LED - 1500 (480V, 1430W, 3.7A)

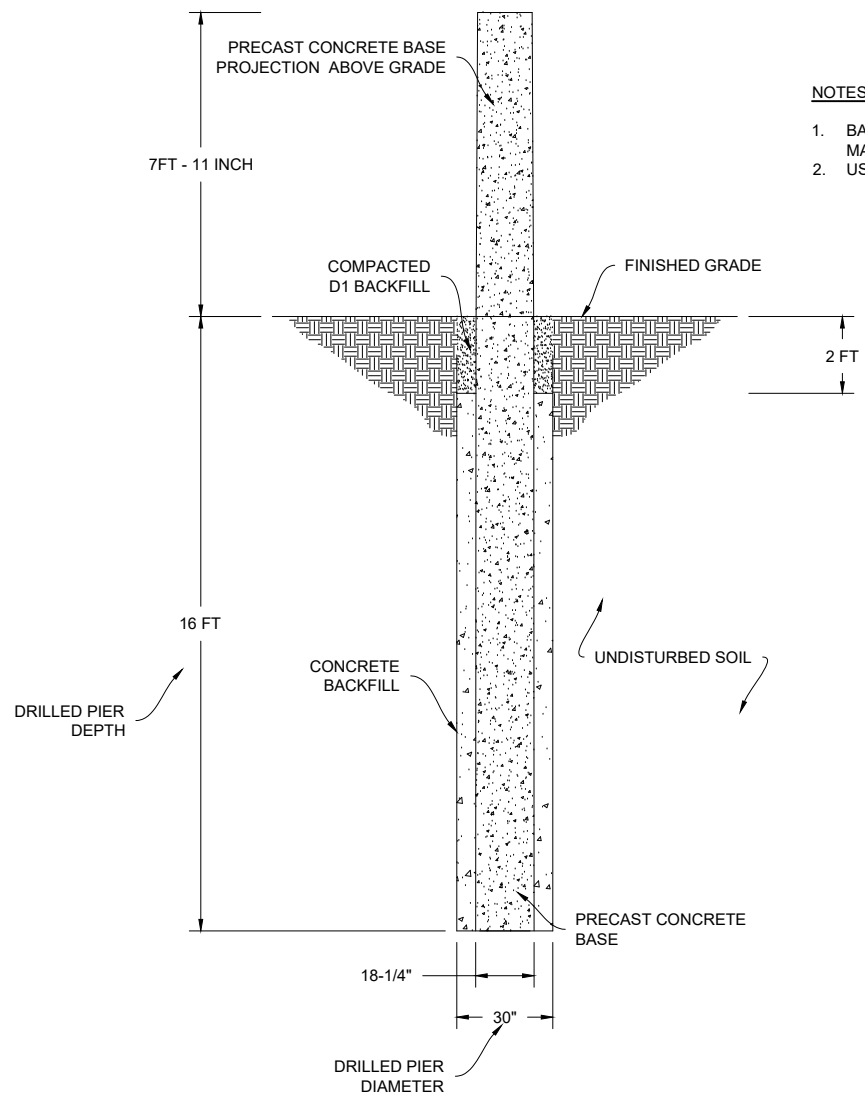
**LIGHT POLE SPECIFICATIONS**

1. POLES SIZED FOR 100 MPH SUSTAINED WINDS WITH GUSTS TO 130 MPH.
2. BASIS OF DESIGN IS MUSCO LIGHTING TAPERED GALVANIZED STEEL POLE.
3. PRECAST CONCRETE BASES AND POLES ARE PROVIDED WITH SLIP-FIT CONNECTION AND MUST BE PROVIDED AS A MATCHED SET.



2 LIGHT FIXTURE ANGLE TO ORIGIN, FIXTURE D1

NOT TO SCALE



3 FOUNDATION DETAIL, POLE D1

SCALE AS SHOWN

**NOTES**

1. BACKFILL TOP TWO FEET WITH D1. COMPACT TO MATCH EXISTING GRADE.
2. USE MECHANICAL MEANS TO COMPACT SOIL.



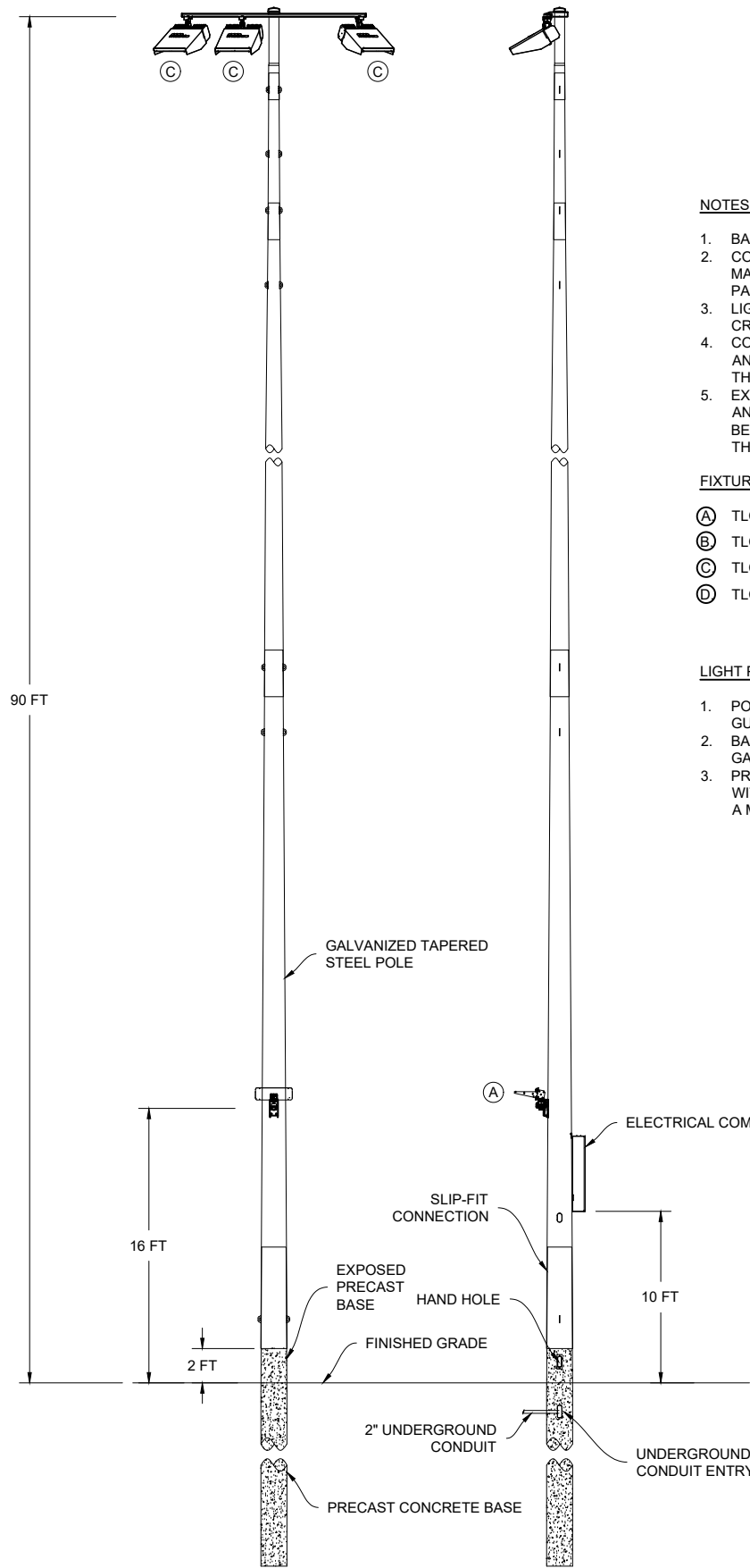
**MELVIN PARK LIGHTING UPGRADE**  
 CBJ CONTRACT No. BE23-022  
**FIXTURE AND POLE DETAIL (D1)**  
 JUNEAU, AK

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NO	DATE	REVISION	NO



ENGINEER: VAM	CHECKED BY: BR
JOB #: J000777	DRAWN BY: PP
SCALE: N/A	DATE: 03/07/2022

DRAWING #:  
 E-11  
 SHEET  
 11 OF 13



**NOTES**

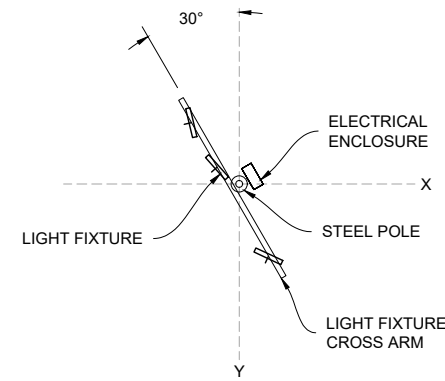
1. BASIS OF DESIGN IS MUSCO LIGHTING TLC SERIES.
2. CONTRACTOR SHALL COORDINATE WITH OWNER AND MANUFACTURER TO PROVIDE COMPLETE LIGHT FIXTURE PART NUMBER.
3. LIGHT FIXTURES SHALL BE FACTORY MOUNTED TO CROSS ARM AND AIMED PRIOR TO SHIPMENT.
4. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ENGINEER TO ADJUST THE ANGLE OF ROTATION OF THE CROSS ARM.
5. EXISTING ASPHALT CUTTING, REMOVAL AND DISPOSAL, AND NEW D1 GRADING COLLAR AROUND NEW POLE WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW LIGHT POLE.

**FIXTURE SCHEDULE**

- (A) TLC - BT - 575 (480V, 575W, 1.45A)
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- (C) TLC - LED - 1200 (480V, 1170W, 3.03A)
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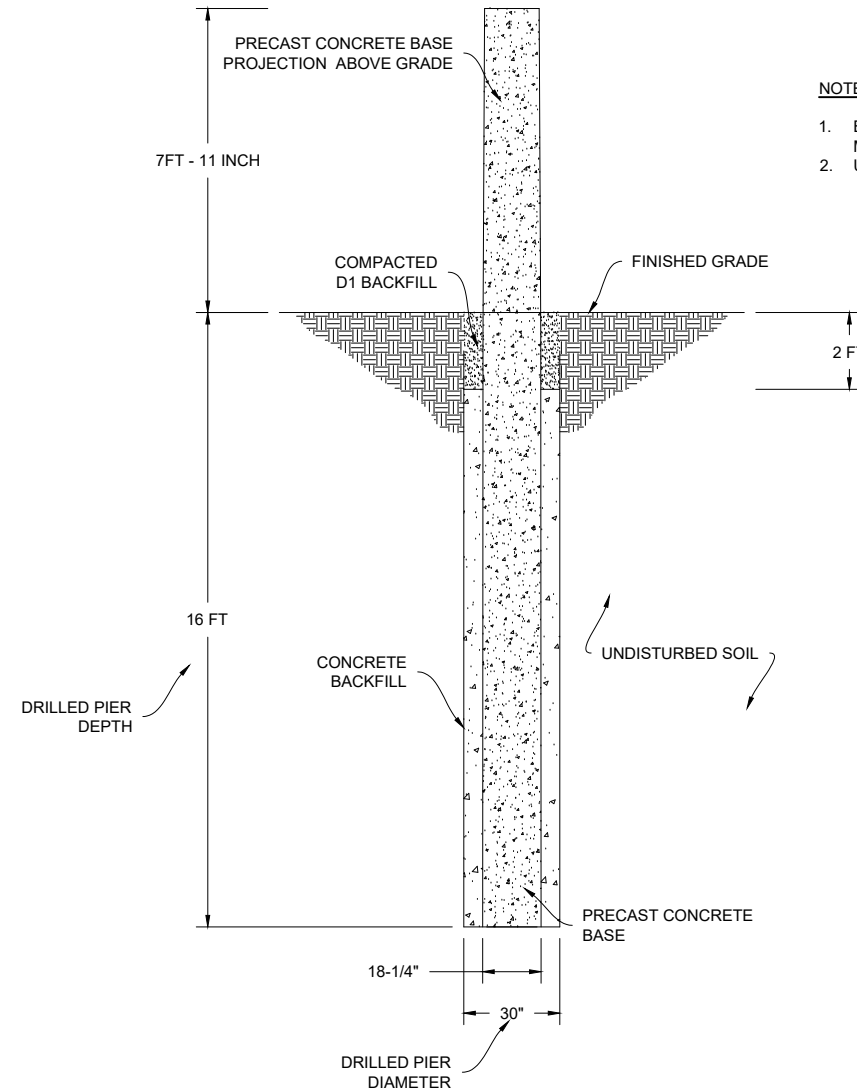
**LIGHT POLE SPECIFICATIONS**

1. POLES SIZED FOR 100 MPH SUSTAINED WINDS WITH GUSTS TO 130 MPH.
2. BASIS OF DESIGN IS MUSCO LIGHTING TAPERED GALVANIZED STEEL POLE.
3. PRECAST CONCRETE BASES AND POLES ARE PROVIDED WITH SLIP-FIT CONNECTION AND MUST BE PROVIDED AS A MATCHED SET.



**2 LIGHT FIXTURE ANGLE TO ORIGIN, FIXTURE D2**

NOT TO SCALE



**NOTES**

1. BACKFILL TOP TWO FEET WITH D1. COMPACT TO MATCH EXISTING GRADE.
2. USE MECHANICAL MEANS TO COMPACT SOIL.

**3 FOUNDATION DETAIL, POLE D2**

SCALE AS SHOWN

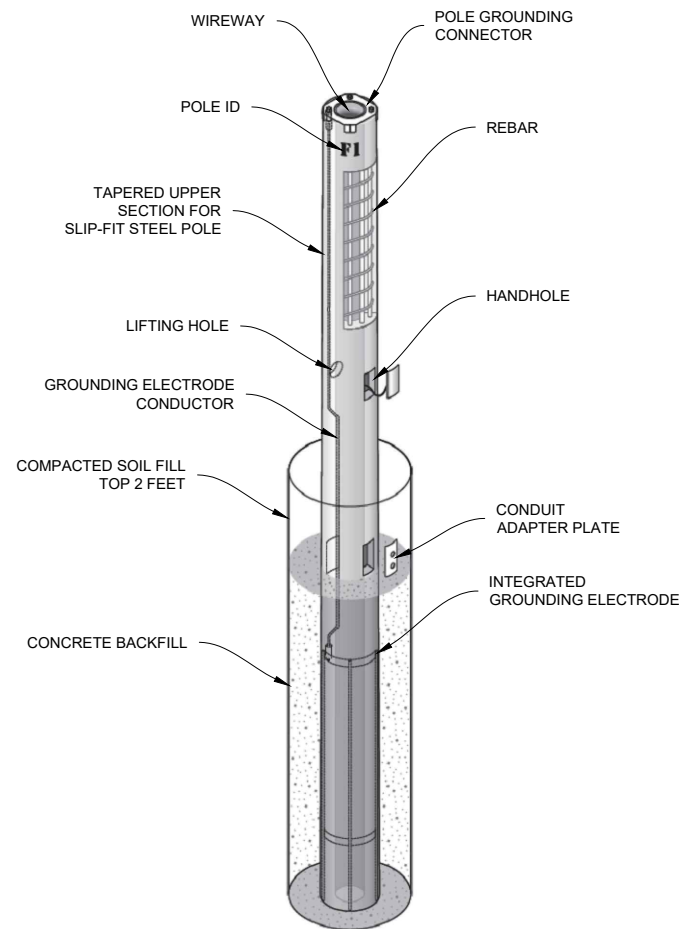
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NO	DATE	REVISION	NO



ENGINEER: VAM	CHECKED BY: BR
JOB #: J000777	DRAWN BY: PP
SCALE: N/A	DATE: 03/07/2022

**PRECAST CONCRETE FOOTING DETAIL:**

1. BACKFILL WITH CONCRETE AROUND FOOTING.
2. GROUNDING CONDUCTOR INTEGRAL TO PRECAST CONCRETE BASE.
3. CONCRETE SHALL BE PER CITY AND BOROUGH OF JUNEAU SPEC SECTION 03302.
4. PRECAST CONCRETE BASES AND POLES ARE A MATCHED SET THAT JOIN TOGETHER WITH A SLIP-FIT. PROVIDE PRECAST BASES FROM POLE MANUFACTURER.



**1 PRECAST CONCRETE FOOTING DETAIL**

POLE FOUNDATION SCHEDULE						
POLE DESIGNATION	FORCES (1)			DRILLED PIER		
	MOMENT (M) FT-LBS	SHEAR (V) LBS	VERTICAL (P) LBS	DIAMETER INCHES	EMBEDMENT DEPTH	CONCRETE BACKFILL YD <sup>3</sup> (2)
A1, A2	74,417	1,769	1,991	30	14'-0"	1.6
B1	127,317	2,567	3,248	30	16'-0"	1.7
B2	125,919	2,529	3,188	30	16'-0"	1.7
C1, C2	87,657	1,902	2,015	30	14'-0"	1.6
D1, D2	111,710	2,263	2,954	30	16'-0"	1.7

1. ASD LOAD COMBINATION D + 0.6W.  
VERTICAL FORCE IS WEIGHT OF DRESSED POLE (DOES NOT INCLUDE PRECAST BASE WEIGHT).
2. MINIMUM CONCRETE BACKFILL VOLUME, SITE CONDITIONS MAY REQUIRE ADDITIONAL BACKFILL.

PRECAST BASE IDENTIFICATION					
PRECAST BASE TYPE	PRECAST BASE WEIGHT	PRECAST BASE LENGTH	PROJECTION ABOVE GRADE	STANDARD EMBEDMENT	OUTSIDE DIAMETER
4B	3,490 LBS	22'-0"	8'-0"	14'-0"	15.75"
5B	4,580 LBS	23'-11"	7'-11"	16'-0"	18.25"

POLE IDENTIFICATION				
POLE DESIGNATION	POLE TYPE	PRECAST BASE TYPE	FIXTURE CONFIGURATION (FIX. PER XARM)	FIXTURE AND ACCESSORIES EPA (FT <sup>2</sup> )
A1, A2	LSS70C	4B	5 (4)	12.3
B1	LSS80B	5B	8 (6)	20.5
B2	LSS80B	5B	7 (6)	19.2
C1, C2	LSS80A	4B	5 (4)	10.7
D1, D2	LSS90A	5B	4 (3)	9.0

- POLE B1 HAS (1) MUSCO LED FIXTURE AT 50'-0" AGL INCLUDED ABOVE.
- EACH POLE HAS (1) MUSCO LED FIXTURES AT 15'-6" AGL INCLUDED ABOVE.

**DESIGN PARAMETERS:**

WIND:  $V_{dir} = 130$  MPH,  $V_{avg} = 101$  MPH ( EXPOSURE C, RISK CATEGORY II ) PER INTERNATIONAL BUILDING CODE, 2012 EDITION (ASCE 7-10). DESIGN WIND PARAMETERS ARE AS NOTED, ACTUAL EXPOSURE MUST BE VERIFIED FOR THE SITE BY THE PROPER GOVERNING OFFICIAL.

**GEOTECHNICAL PARAMETERS:**

ALLOWABLE END BEARING SOIL PRESSURE: 1,500 PSF OR SKIN FRICTION: 250 PSF  
ALLOWABLE LATERAL SOIL BEARING PRESSURE:  
100 PSF/FT (GRADE TO -2'-0"); 200 PSF/FT (BELOW -2'-0")  
IN ACCORDANCE WITH THE 2012 EDITION OF THE INTERNATIONAL BUILDING CODE, CHAPTER 18. SEE TABLE 1806.2, SOIL MATERIAL CLASS 5 & SECTION 1806.3.4.

DESIGN SOIL PARAMETERS ARE AS NOTED. ACTUAL ALLOWABLE SOIL PARAMETERS MUST BE VERIFIED ON SITE.

A GEOTECHNICAL ENGINEER OR REPRESENTATIVE OF IS RECOMMENDED (NOT REQUIRED) TO BE AVAILABLE AT THE TIME OF THE FOUNDATION INSTALLATION TO VERIFY THE SOIL DESIGN PARAMETERS AND TO PROVIDE ASSISTANCE IF ANY PROBLEMS ARISE IN FOUNDATION INSTALLATION.

ENCOUNTERING SOIL FORMATIONS THAT WILL REQUIRE SPECIAL DESIGN CONSIDERATIONS OR EXCAVATION PROCEDURES MAY OCCUR. POLE FOUNDATIONS WILL NEED TO BE ANALYZED ACCORDING TO THE SOIL CONDITIONS THAT EXIST. IF ANY DISCREPANCIES OR INCONSISTENCIES ARISE, NOTIFY THE ENGINEER OF SUCH DISCREPANCIES. FOUNDATIONS WILL THEN BE REVISED ACCORDINGLY. REVISIONS WILL BE ANALYZED PER RECOMMENDATIONS DIRECTED BY A REGISTERED ENGINEER.

ALL EXCAVATIONS MUST BE FREE OF LOOSE SOIL AND DEBRIS PRIOR TO FOUNDATION INSTALLATION AND CONCRETE BACKFILL PLACEMENT. TEMPORARY CASINGS OR DRILLERS SLURRY MAY BE USED TO STABILIZE THE EXCAVATION DURING INSTALLATION. CASINGS MUST BE REMOVED DURING CONCRETE BACKFILL PLACEMENT. CONCRETE BACKFILL MUST BE PLACED WITH A TREMIE WHEN SLURRY OR WATER IS PRESENT WITHIN THE EXCAVATION OR WHEN THE FREE DROP EXCEEDS 6'-0".

CONTRACTOR MUST BE FAMILIAR WITH THE COMPLETE SOIL INVESTIGATION REPORT AND BORINGS, AND CONTACT THE GEOTECHNICAL FIRM (IF NECESSARY) TO UNDERSTAND THE SOIL CONDITIONS AND THE POSSIBILITY OF GROUND WATER PUMPING AND EXCAVATION STABILIZATION OR BRACING DURING PRECAST BASE INSTALLATION AND PLACEMENT OF CONCRETE BACKFILL.

**CONCRETE:**

CONCRETE SHALL BE AIR-ENTRAINED AND HAVE A MINIMUM COMPRESSIVE DESIGN STRENGTH AT 28 DAYS OF 3,000 PSI. 3,000 PSI CONCRETE SPECIFIED FOR EARLY POLE ERECTION, ACTUAL REQUIRED MINIMUM ALLOWABLE CONCRETE STRENGTH IS 1,000 PSI. ALL PIERS AND CONCRETE BACKFILL MUST BEAR ON AND AGAINST FIRM UNDISTURBED SOIL.

**GENERAL NOTES:**

FIXTURES MUST BE LOCATED TO MAINTAIN 10'-0" MINIMUM HORIZONTAL CLEARANCE FROM ANY OBSTRUCTION. ENGINEER MUST BE NOTIFIED IF FOUNDATIONS ARE NEAR ANY RETAINING WALLS OR WITHIN / NEAR ANY SLOPES STEEPER THAN 3H : 1V. POLES, FIXTURES, PRECAST BASES, ELECTRICAL ITEMS AND INSTALLATION PER MUSCO LIGHTING.

**MELVIN PARK LIGHTING UPGRADE**  
CBJ CONTRACT No. BE23-022  
**FOOTING & JUNCTION BOX**  
JUNEAU, AK

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NO DATE REVISION NO

ENGINEER: VAM CHECKED BY: BR  
JOB #: J000777 DRAWN BY: PP  
SCALE: N/A DATE: 03/07/2022

DRAWING #:  
**E-13**  
SHEET  
**13** OF **13**