

Invitation to Bid

Project: 2022 Visitors Center Roof Replacement

Release: June 21, 2022

Last day for Questions: July 1, 2022 by 2:00pm

Bids Due Date: July 12, 2022, no later than 2:00pm

Kenai City Hall

210 Fidalgo Avenue

Kenai, AK 99611

ATTN: Director of Public Works

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Appendix A - Plans

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Advertisement for Bid

Project Name: 2022 Visitors Center Roof Replacement

Release: June 21, 2022

Last Day for Questions: No later than 2:00pm July 1, 2022

Bid Due Date and Time: No later than 2:00pm July 12, 2022 at City Hall

Scope of Work: Complete Roofing Replacement of the Visitor Center located at 11471 Kenai Spur Highway, Kenai Alaska. Work includes selective demolition, installation of new waterproofing membrane, asphalt shingles, flashings, and other minor miscellaneous exterior building repairs as may be required.

Bidders should contact the Public Works Department at (907) 283-8236 to be placed on the plans holders list. Questions may be submitted to publicworks@kenai.city.

Bids must be delivered in a sealed envelope clearly marked with the project name to the Public Works Department at the address above. Bid documents can be obtained on City of Kenai website at www.kenai.city or at City Hall for a non-refundable fee of \$30.00 including sales tax for each set of documents.

This contract will be subject to the provisions of the State of Alaska Title 36 Wage and Hour Administration Pamphlet Statutes and Regulations and will require 100% performance and payment bonds.

Publish: Anchorage Daily News - June 21, 2022 or 1st date after

Peninsula Clarion – June 21, 2022 or 1st date after

CITY OF KENAI INSTRUCTIONS TO BIDDER

1. GENERAL

These instructions specify the form and procedures for the submission of a complete and acceptable bid. To obtain addenda in a timely manner, you should be on the City of Kenai's plan holder's list. Downloading project specifications and drawings from the City website or other online plans rooms does not place you on the City's plan holder's list. To be added to the plan holder's list, please contact the Public Works Department Administrative Assistant by phone (907) 283-8236 or by email at PublicWorks@kenai.city.

Project: 2022 Visitors Center Roof Replacement

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2. EVIDENCE OF QUALIFICATIONS

Upon request of the City, a Bidder whose bid is under consideration for the award of the Agreement, shall submit promptly to the City, satisfactory evidence of the Bidder's financial resources, their experience, their performance in completing other projects of a similar nature, and the organization and equipment they have available for the performance of the Agreement.

3. BIDDER QUALIFICATIONS

Before the bid is considered for award, the City reserves the right to determine whether or not a Bidder is responsible and to require the Bidder to complete a Bidder Qualification Form and/or provide a current financial statement prepared by a Certified Public Accountant. The City shall determine whether a Bidder is responsible on the basis of the following criteria:

- The skill and experience demonstrated by the Bidder in performing Agreements of a similar nature.
- The Bidder's record for honesty and integrity.
- The Bidder's capacity to perform in terms of facilities, personnel, and financing.
- The Bidder's past performance under City Agreements. If the Bidder has failed in any material way to perform its obligations under any Agreement with the City, the Bidder may be determined as a non-responsible Bidder.
- A Bidder's representations concerning their qualifications will be construed as a covenant under the Agreement. Should it appear that the Bidder has made a material misrepresentation, the City shall have the right to terminate the Agreement for the Contractor's breach, and the City may then pursue such remedies as provided in the Agreement Documents or as provided by state statute, City code, or as appropriate.

Any final determination that a Bidder is non-responsible will be made by the City Manager. Such determination will be made in writing to the Bidder setting forth the reasons for such determination.

4. CONDITIONS AFFECTING THE WORK

The Bidder shall examine carefully the site(s) of the proposed work and the bid documents before submitting a bid. The submission of a bid shall be an admission that the Bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements and accuracy of the bid documents.

The City assumes no responsibility for any understanding or representations concerning conditions made by any of its officers, agents, or employees prior to the execution of this Agreement, unless such understanding or representations are expressly stated in the bid documents or Addenda.

The Bidder shall include in their bid, sufficient sums to cover all items required by the Agreement and the conditions of the site(s), and shall rely entirely upon their own examination in making their bid. The submission of a bid shall be taken as prima facie evidence of compliance with this paragraph.

If information or documentation required for submitting an accurate and complete bid is absent from these documents, the Bidder is required to notify the Public Works Director by facsimile (907) 283-3014, or by e-mail to PublicWorks@kenai.city.

5. SECURITY TO BE FURNISHED BY BIDDER

If the bid exceeds \$100,000, a certified check, bank cashier's check, or bid bond, made payable to the City of Kenai amount equal to five (5%) percent of the total bid, shall accompany each bid as evidence of good faith, a guarantee that if awarded the agreement, the Bidder will execute the agreement and give bond as required. All Bidder's checks or bid bonds will be retained until the successful Bidder has entered into a satisfactory agreement and furnished bonds, as required. The successful Bidder shall furnish the City a Performance and Payment bond in the full amount of the Agreement and shall maintain the Bond in force during the continuance of the Agreement. The bonds must be furnished prior to the City's execution of the Agreement. The Bond shall be for the faithful performance of the Agreement in all respects including, but not limited to, payments for all materials and labor. All alterations, extensions of time, additional work, and other changes authorized by the Agreement Documents may be made without securing the consent of the Surety or Sureties. Power-of-Attorney for the person signing the Bond for the Surety must be submitted with the Bond. These bonds, in whatever amount required by the specific agreement, shall be administered and deemed governed by the provisions of Alaska Statutes Title 36, Chapter 25, and shall comply with all requirements for payment and submission of claims as provided by that chapter.

6. LICENSING

Alaska State Statutes requires that all businesses wishing to engage in business in Alaska obtain license(s). All Bidders are required to furnish with their bid, the applicable, current licenses required to perform the work. Applicable licenses may include the following: Contractor's License, Specialty Contractor License, and Alaska Business License. Failure to submit license(s) with the bid may result in rejection of the Contractor's bid.

7. TAX COMPLIANCE CERTIFICATE

No agreement will be awarded to any individual or entity that is in violation of the tax laws of the City of Kenai or the Kenai Peninsula Borough unless the violation is cured within ten business days of notice. The Tax Compliance Certificate must be signed by the Bidder only and submitted with the bid. The City will obtain verification of tax compliance from the Kenai Peninsula Borough for the successful bidder. Bids submitted without a completed Tax Compliance Certificate may be considered non-responsive.

8. INTERPRETATION OR CORRECTIONS OF BID DOCUMENTS

Bidders shall notify the Public Works Director promptly of any error, omission, or inconsistency that may be discovered during examination of the bid documents and the proposed work site(s). Requests from Bidders for interpretation or clarification of the bid documents shall be made in writing to the Public Works Director and shall arrive no later than the time and date specified in Section 1 of these Instructions to Bidders. Questions may be faxed to (907) 283-3014 or emailed to PublicWorks@kenai.city. The subject line of the email or fax must include the name of the project.

Oral questions may be presented at a pre-bid conference if one is provided for in Section 1 of these Instructions to Bidders. Interpretations, corrections, or changes, if any, to the bid documents shall be made by Addendum. Bidders shall not rely upon interpretations, corrections, and changes made in any other manner, including orally, at the pre-bid conference. Interpretations, corrections, and changes shall not be binding unless included in an Addendum. All Addenda issued during the time of bidding shall become part of the Agreement Documents. Questions or requests for clarifications shall be directed to the Public Works Director. Only written interpretations or corrections by Addendum shall be binding, and no other forms of interpretation or correction will be binding on the City of Kenai.

It is the Bidder's sole responsibility to ascertain that they have received all Addenda issued by the City of Kenai. Addenda will be issued electronically and/or by facsimile. All Addenda must be acknowledged in the space provided on the Bid Form. If no Addenda have been issued, write or type "zero" or "N/A" on the Bid Form in the space provided.

9. PREPARATION AND SUBMISSION OF BIDS

- Bids must be received at City Hall prior to the time and date specified in Section 1 of these Instructions to Bidders.
- Bids must be submitted on the Bid Form furnished. Bids must be completed in ink or by typewriter, and must be manually signed by an authorized person. If erasures or other changes appear on the forms, the person signing the bid must initial each erasure or change in ink.
- Bids shall specify a unit or lump sum price, typed or written in ink in figures, for each bid item called for. In case of error in the extension of prices, the unit price will govern. Bids may be rejected if they show any omissions, alteration of the forms, additions not called for, conditional or alternate bids not called for, qualified bids, or irregularities of any kind.

- It is expressly agreed that the quantities shown in the Bid Form, whether for a "Unit Price Bid" or in connection with a "Lump Sum Bid" on the Bid Form are approximate only for use as a basis for comparison of bids and are not to be taken to be either representations or warranties. The City does not expressly, nor by implication, agree that the actual amount of work will correspond therewith.
- The Bid Form invites bids on definite plans and specifications. Only the amounts and information asked for on the Bid Form will be considered as the bid. Each Bidder shall bid upon the work exactly as specified and as requested on the Bid Form, and Bidders shall bid upon all alternates as indicated. When bidding on an alternate for which there is no charge, Bidder shall write the words "No Charge" in the space provided.
- One (1) complete bid package shall be completely sealed in an envelope clearly marked with the Bidder's company name, and the "Project Name" and "Bid Due Date" specified in Section 1 of these Instructions to Bidders. A complete bid package shall include the following documents:
 - o Bid Form
 - o Tax Compliance Certificate
 - Applicable Licenses
 - Non-Collusion Affidavit
 - o Bid Bond with Power of Attorney (If bid exceeds \$100,000.00)
- Bids received without all the required documents may be considered non-responsive.
 Bids received after the bid due date and time will be considered non-responsive and will not be accepted.
- No responsibility shall be attached to the City for the premature opening of, or the failure to open a bid not properly addressed and identified.
- Please note that overnight delivery from the Lower 48 States is generally not available.
 Prospective Bidders should anticipate a minimum of two to three days delivery time for express, priority or expedited delivery services.

10. MODIFICATION OF BIDS

Bid modifications will be accepted by the City at publicworks@kenai.city and binding upon the Bidder where the modification:

- is received at City Hall prior to the time and date specified in Section 1 of these Instructions to Bidders.
- does <u>not</u> identify the adjusted Bid Total price. Only adjustments to the sealed bid will be accepted. For example:
 - CORRECT Decrease the Unit Bid Price of Item 20.22 Leveling Course by \$2.50 per ton and the Bid Total by \$2,500.
 - CORRECT Increase the Unit Bid Price of Item 90.16 Mobilization and Demobilization and the Bid Total by \$5,000.
 - o INCORRECT Decrease the Bid Total by \$5,000 for a new Total of \$95,000.
- is signed by the same individual who signed the original bid.

Should there be more than one bid modification from a Bidder, only the last modification received prior to the deadline shall be applied to the bid. All earlier modifications shall be disregarded.

Any modification which fails to meet any requirement of this section shall be rejected, and the bid shall be considered as if no modification had been attempted.

It is the Bidder's responsibility to confirm the City's receipt of any bid modification.

11. WITHDRAWAL OF BID

At any time prior to scheduled closing time for receipt of bids, any Bidder may withdraw their bid, either personally or by written request.

After the scheduled closing time for receipt of bids, no Bidder will be permitted to withdraw their bid unless Notice of Award is delayed for a period exceeding forty-five (45) days.

A bid may not be withdrawn after opening without the written consent of the City.

12. ACCEPTANCE – REJECTION OF BIDS

The City reserves the right to reject any or all bids, to waive minor irregularities in any bids or in the bidding procedure, and to accept any bid presented which meets or exceeds said specifications and which is deemed to be in the best interest of the City. However, the requirements for timeliness and manual signatures shall not be waived. The City is not obligated to accept the lowest bid and is not responsible for bid preparation costs.

13. EXECUTION OF AGREEMENTS

The successful Bidder shall be required to execute an Agreement for the work within ten (10) days after receiving the Notice of Award and Agreement documents from City; if Contractor does not return executed copies within this time, then, at the option of City, the bid may be rejected.

14. AWARD OF AGREEMENT

It is the intent of the City to award the bid to the lowest, qualified, responsive and responsible Bidder. Unless otherwise stated in the bid documents, the Agreement, if awarded, shall be awarded to the responsible Bidder who submits the lowest responsive bid. When bid documents contain a base bid and alternates, only the total of the base bid and the alternates to be awarded shall be used to determine the low Bidder.

The amount of the Agreement shall be the total sum of the amounts computed from the estimated quantities and unit prices and/or the lump sum awarded by the City and specified in the Agreement.

On all bids, Notice of Award or rejection will be given within forty-five (45) days of bid opening. The notice will be in writing and signed by the Public Works Director. A Notice of Intent to Award, and no other act of the City of Kenai or its representatives, constitutes an acceptance of a bid. The acceptance of a bid shall bind the successful Bidder to execute the Agreement.

15. AGREEMENT AND PERFORMANCE AND PAYMENT BOND SIGNATURE INSTRUCTIONS WHEN BONDS ARE REQUIRED

The successful Bidder shall insert the full name and business of the Contractor in the Agreement and on the Performance and Payment Bond, hereinafter the Bond.

If the Contractor is a partnership or joint venture, all partners or joint ventures shall sign the Agreement and the Bond except that one partner or one joint venturer may sign for the partnership or joint venture when all other partners or joint venturers have executed a Power-of-Attorney authorizing one partner or joint venturer to sign. The Power-of-Attorney shall accompany the executed Agreement and the Bond.

If the Contractor is a Limited Liability Company (LLC), a person with appropriate authority to bind the LLC shall execute the Agreement and Bond unless a Power-of-Attorney or Corporate Resolution accompanies the executed Agreement and Bond.

If the Contractor is a corporation, the President or Vice-President and Secretary or Treasurer of the corporation shall execute the Agreement and the Bond unless a Power-of-Attorney or Corporate Resolution accompanies the executed Agreement and Bond.

The Bond shall be returned undated as to Agreement Date. The Agreement Date shall be inserted on the Agreement when the City signs the Agreement and the Bond shall be dated the same as the Agreement Date.

16. SPECIAL PROVISIONS

If funded in part or in whole by a grant or grants, the contractor and their subcontractors will be required to comply with the requirements of these grants, including insurance and purchasing requirements, if any. If any permits are included with the bid documents, e.g. a U.S Corp of Engineers wetland permit, all conditions of this permit must be met by the Contractor and their Subcontractors.

17. APPEAL PROCEDURE

KMC 7.15.120 Appeal procedures.

- (a) Any party submitting a bid or proposal for a contract with the City and who believes that they are adversely affected by the City's relevant ordinances, regulations, procurement process, or by any acts of the City in connection with the award of a City contract, may file a protest appeal with the City Clerk. All protest appeals must be to the City within five (5) calendar days of the issuance of the City's notice of its intent to award the contract. The appeal must be hand delivered, delivered by mail, or by facsimile and must comply with all requirements of this section. If the fifth day is a City-recognized holiday or a weekend, the deadline for appeal shall be the next work day. It is up to the protester to choose a method of delivery to assure timely receipt by the City.
- (b) Rejection of Appeal. The Clerk shall reject an untimely or incomplete appeals. Such rejection shall be final and may be appealed to the Superior Court pursuant to the Court Rules of Appellate Procedure.
- (c) The protest appeal must be in writing and shall include the following information:
- (1) The name, address, e-mail, and telephone (and facsimile if available) numbers of the protester;
- (2) The signature of the protester or the protester's representative;
- (3) Identification of the contracting agency and the solicitation or contract at issue;
- (4) A statement of the legal and factual grounds of the protest, including copies of relevant documents; and
- (5) The form of relief requested.

- (d) Stay of Award. If a timely and complete protest appeal is filed, the award of the contract shall be stayed until all administrative remedies have been exhausted, unless the City Manager determines in writing that award of the contract pending resolution of the appeal is in the best interests of the City.
- (e) Notice and Response. Notice of the stay and protest appeal shall be delivered to any party who may be adversely affected by the City Manager's decision by facsimile, first class mail or in person within three (3) business days of receipt of a properly filed appeal.
- (f) City Manager Decision. The City Manager shall issue a written decision to the appellant within ten (10) business days of the date the appeal is filed. If multiple appeals have been filed, they may be consolidated for purposes of the decision. Copies of the appeal and decision shall be provided to any interested party requesting one. The decision may include any lawful action, including without limitation an amendment of all or any part of the recommended award. For good cause shown, the City Manager may extend the date for the decision for such additional period as may be necessary.
- (g) If the City Manager sustains a protest in whole or in part, the City Manager shall implement an appropriate remedy. In determining an appropriate remedy, the City Manager shall consider the circumstances surrounding the solicitation or procurement including the seriousness of the procurement deficiencies, the degree of prejudice to other interested parties or to the integrity of the procurement system, the good faith of the parties, the extent the procurement has been accomplished, costs to the agency and other impacts on the agency of a proposed remedy, and the urgency of the procurement to the welfare of the City.
- (h) Notwithstanding subsections (a) and (b) immediately above, if the City Manager sustains a bid protest appeal in whole or part, the protester's damages shall not exceed the reasonable bid or proposal preparation costs.
- (i) Appeal to Superior Court. Appeals may be taken from the written decision of the City Manager within thirty (30) days of the date of the decision pursuant to Part VI of the Alaska Rules of Appellate Procedure.

(Ord. 2852-2015)

18. COMPLIANCE OR ACCEPTED ALTERNATES TO SPECIFICATIONS

Bidder hereby agrees that the material offered will meet all the requirements of the specifications in this solicitation unless alternates have been deemed acceptable by the City. Manufacturer's names, trade names, brand names, model and catalog numbers used in these specifications are for the purpose of describing and establishing general quality levels. Such references are not intended to be restrictive. Alternates will be approved via addenda, and only via addenda. Request for alternates must be submitted no later than the Last Day for Questions in the Advertisement for Bid. An alternate must be requested via email sent to the addresses in section 1 with an explanation giving in detail the extent of the alternate, the reason for which it is requested, and why the City should approve the alternate. Provide as much detail as possible. If multiple models or options are provided with your submittal data clearly indicate which you are requesting. The City of Kenai will be the sole judge of whether an alternative is acceptable to the items specified.

19. Insurance Requirements

Please see Section 7.2 of the General Conditions for full detail of Insurance Requirements. Contractor will be required to provide an Insurance Certificate at time of contract in compliance of the requirements.

CITY OF KENAI BID FORM

Public Works Department 210 Fidalgo Avenue Kenai, Alaska 99611-7794

FROM:

Name of Bidder's Company or Business Entity

BIDDER'S DECLARATION & UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the Bidder has carefully examined the Bid Documents including but not limited to: the Agreement, Addenda, Supplemental General Conditions, General Conditions, Drawings and Specifications, Invitation to Bid, Instructions to Bidders, this Bid Form, Advertisement, Releases, Affidavits, and supplemental documentation (e.g. Grant documentation, Title 36 or other State Statues), and the location(s) where work is to be performed for the project, and that the Bidder has satisfied themselves as to the contractual requirements, and quantity and condition of work involved.

It is expressly agreed that the quantities shown in the Bid Form, whether for a "Unit Price Bid" or in connection with a "Lump Sum Bid" on the Bid Form are approximate only for use as a basis for comparison of Bids and are not to be taken to be either representations or warranties. The City does not expressly, nor by implication, agree that the actual amount of work will correspond therewith.

The Bidder further declares that the only person or parties interested in the Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the City of Kenai, and that the Bid is made without any connection or collusion with any person submitting another Bid.

The Bidder agrees not to withdraw this bid within forty-five (45) days after the actual date of the bid opening.

DOCUMENTS TO SUBMIT WITH THIS BID

- 1. Bid Form
- 2. Tax Compliance Certificate
- 3. Applicable Licenses
- 4. Non-Collusion Affidavit
- 5. Bid Bond with Power-of-Attorney (If Bid exceeds \$100,000.00)

DOCUMENTS THE CITY OF KENAI IS TO RECEIVE WITHIN 10 DAYS AFTER NOTICE OF AWARD

The Bidder agrees that if this Bid is accepted he will deliver to the City of Kenai, within ten (10) calendar days of Notice of Award, the following:

- 1. Executed Agreement
- Certificate(s) of Insurances*
- 3. Construction Schedule
- List of Subcontractors
- 5. Performance and Payment Bond
- Power of Attorney and/or Corporate Resolution (See Instructions to Bidders)

* Refer to the General Conditions for insurance requirements. Note the additional insured and waiver of subrogation requirements.

TIME OF COMPLETION AND LIQUIDATED DAMAGES

Bidder agrees to commence and complete work as follows: Owner anticipates a Notice to Proceed on August 5, 2022 with Substantial Completion within 90 Calendar days from NTP.

<u>Liquidated Damages</u>. Liquidated damages will be charged at Three Hundred (\$300.00) for each calendar day that expires after the contract time required for substantial completion to the actual date of substantial completion as provided for in the Agreement Documents.

BID TABULATION AND SUMMARY

Bidder agrees to perform all of the work described and per the conditions in the Bid Documents for the prices stated on this Bid Form.

Prices are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern. In case of error in the extension of prices, the unit price will govern. Bidder understands that the City reserves the right to reject any or all bids and to waive irregularities in the bidding.

BID GUARANTEE: The Undersigned further agrees that the check or bid bond accompanying the bid is left in escrow with the City, that the amount of the check or bond is the measure of damages which the City will sustain by failure of the Undersigned to deliver said documents within ten (10) days after written notice of the award of contract to him or her, and that check shall become the property of the City, or the bid bond shall remain in full effect, should he or she so fail. But if this bid is not accepted within ninety (90) days of the date set for the opening thereof, or if accepted and the Undersigned delivers said Agreement, and performance, and labor, and material payment bonds as required, the check shall be returned to him or her and the bid bond shall become void.

EXECUTION OF BID

Bidder shall complete and submit all pages of the Bid Form.

I have received the Bid Documents for the Project: 2022 Visitors Center Roof Replacement

I have received Addenda No(s). _____ and have included their provisions in my proposal.

I have examined both the Bid Documents and the work locations, and submit the following bid with the understanding that I agree:

- 1. To hold my bid open forty-five (45) consecutive calendar days.
- 2. To accept the provisions of the Bid Documents.
- 3. To enter into and execute an Agreement, if awarded, on the basis of my Bid.
- 4. To furnish all labor and materials and to accomplish the work in accordance with the Bid Documents.
- 5. To accomplish Substantial Completion as specified above in TIME OF COMPLETION.

BASE BID TOTAL: (All work as detailed within the state of	the plans)
	(Amount Written in Words)
In the event the Base Bid exceeds the Owner's to any combination of Base Bid and Deductive A	budget for the Work, Owner reserves the right to award alternate that provides the best value to the City.
	shall exist under the Agreement until the final Agreement commence work immediately upon full execution of the tice to Proceed.
If provided a Notice of Award, Bidder agrees t with the Bid Documents.	o execute and perform the Agreement in accordance
By executing this Bid I certify that I have a submitting this bid.	authority to bind the Company or Business Entity
Name of Company or Business Entity	Date
Signature	Title
Print Name	Phone
Address	Fax

Email address

Address

Tax Compliance Certification Kenai Peninsula Borough Finance Department

144 N. Binkley Street

Phone: (907) 714-2197

Soldofna, Alaska 99669-/599 www.kpb.us		76	
1.) Fill in all information requested.	2.) Sign and date. 3.) Submit v	vith solicitation, or oth	er. For Official Use Only
Reason for Certificate:		For Department	:
☐ Solicitation ☐ Other:		Dept. Contact:	
Business Name:			·
Business Type:	☐ Individual ☐ Corpora	ıtion 🗌 Partnershi	p Other:
Owner Name(s):			
Business Mailing Address:			
Business Telephone:		Business Fax:	
Email:			
contracting to do business with th	la Borough Code of Ordinan ne Kenai Peninsula Borough b	nces, Chapter 5.28.14 be in compliance with	elow. If no, please sign below.) 0, requires that businesses/individuals 1 Borough tax provisions. No contract Borough Code of Ordinances in the
REAL/PERSONAL/BUSINESS PROF	PERTY ACCOUNTS	TAX ACCOUNTS	S/STATUS (TO BE COMPLETED BY KPB)
ACCT. NO.	ACCT. NAME	YEAR LAST PAID	BALANCE DUE
			In Commission of Makin Commission
KPB Finance Department (signature	required)	Date	In Compliance 🗌 Not in Compliance
SALES TAX ACCOU	NTS	TAX ACCOUNTS	/STATUS (TO BE COMPLETED BY KPB)
	ACCT. NAME	FILED THRU	M/F'S BALANCE DUE
			In Compliance 🔲 Not in Compliance
KPB Sales Tax Division (signature rec	ųuired)	Date	
CERTIFICATION: I,(Name o	the		, hereby certify that, to the
(Name o best of my knowledge, the above i		(Title) (Date)	

Signature of Applicant (Required)

NON – COLLUSION AFFIDAVIT

(To be executed ar	nd submitted with Bid Proposal)
I ,	of
,	of, Firm Name
being duly sworn, do depose and state	e:
•	n of which I am a member, who bid on the Contract the construction of that certain construction project
2022 Visitors	Center Roof Replacement
	e of Alaska, have not, either directly or indirectly, ted in any collusion, or otherwise taken any action in connection with such Contract.
	Signature
	Name
	Title
	Date
ACKNOWI	LEDGMENT
STATE OF ALASKA	
)ss THIRD JUDICIAL DISTRICT)	
The foregoing instrument was acknow 2022, by	ledged before me this day of,
	NOTARY PUBLIC for State of Alaska My Commission Expires:

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,				
as Principal, and				
as Surety, are hereby held and firmly bound unto				
as the OWNER, in the penal sum of for the payment of which, well and truly made, we hereby jointly and severally bind ourselves, successors and assigns.				
Signed this day of, 2020. The Principal has submitted to				
, a certain BID, attached hereto and hereby made a part				
hereof, to enter into a contract in writing for the				
NOW, THEREFORE,				
(a) If said BID shall be rejected, or (b) If said BID shall be accepted and the principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID), and shall furnish a BOND for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.				
The Surety, for value received, hereby stipulates and agree that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.				
IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.				
L.S.) Principal				
Surety				
By:				
IMPORTANT Surety companies executing BONDS must appear on the Treasury				

business in the state where the project is located.

Department's most current list (Circular 570 as amended) and be authorized to transact

Bid Bond

CITY OF KENAI AGREEMENT BETWEEN OWNER AND CONTRACTOR

MADE AS OF THE	DAY OF 2022.	
BETWEEN the OWNER:	CITY OF KENAI 210 Fidalgo Avenue Kenai, Alaska 99611-7794	
AND the CONTRACTOR:		
FOR the PROJECT: 2022	Visitors Center Roof Replacement	
The Owner and Contractor agree as set forth below.		

ARTICLE 1 THE WORK

The Contractor shall perform all the work required by the contract documents.

ARTICLE 2 ENUMERATION OF THE CONTRACT DOCUMENTS

The additional documents which are specifically incorporated into this Agreement by reference and which form the contract documents are:

- A. Any and all later modifications, change orders, and written interpretations of the contract documents issued by the Owner
- B. This Agreement
- C. Addenda
- D. Supplemental General Conditions (if any)
- E. General Conditions
- F. Drawings and Specifications Provided by Engineer. In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by addendum, the better quality or greater quantity of Work shall be provided.
- G. Drawings and Specifications in the latest edition of the Municipality of Anchorage Standard Specifications (M.A.S.S.) In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by addendum, the better quality or greater quantity of Work shall be provided. Contractor is responsible for obtaining the latest edition of the M.A.S.S
- H. The Request for Proposals / Invitation to Bid
- I. The Contractor's bid/proposal.

Any other attachments to this Agreement do not form a part of the Agreement but are for reference or proof of compliance with the requirements of the Agreement, except where the provisions of this Agreement provide such attachments will be or are a part of the Agreement.

These form the contract and what is required by any of the documents shall be as binding as if required by all. The intention of the contract documents is to require the furnishing of all labor, material, equipment, and other items necessary for the proper execution and completion of the work and to prescribe the terms and conditions of the contract and payment, so as to include work and materials which may be necessary to produce the intended results.

* M.A.S.S. is the Municipality of Anchorage Standard Specifications, and Divisions 20 through 80 are hereby incorporated into these Contract Documents. Division 10 is specifically excluded. The Contractor is responsible for checking to ensure they have the most current version. Specifications, drawings, and general provisions provided by the Owner (City of Kenai) or their Agents (Engineers, Architects, or others as appointed by the City) take precedence over the M.A.S.S.

ARTICLE 3 TIME OF COMMENCEMENT AND COMPLETION

Work shall commence upon receipt of the Notice to Proceed. All work must be substantially completed within __90__ days after the date of the Notice to Proceed. Liquidated damages will be charged against the Contractor as provided below.

ARTICLE 4 CONTRACT SUM

The Owner shall pay the Contractor as provided in this contract the total sum price of \$______ for the successful completion of the specified work.

ARTICLE 5 PROGRESS PAYMENT

Progress payments shall be made per the General Conditions.

ARTICLE 6 FINAL PAYMENT

Final payment shall be made per the General Conditions. The Contractor shall request the final inspection at least five (5) days in advance of the anticipated date of inspection. If all work has not been satisfactorily completed, the Contractor shall be liable for all costs incurred by the Owner in making such inspection.

ARTICLE 7 NOTICES

All legal notices relating to this contract, including changes of address, shall be mailed to the Owner and the Contractor at the following addresses:

CONTRACTOR

OWNER
CITY OF KENAI
Public Works Director
210 Fidalgo Avenue
Kenai, AK 99611

ARTICLE 8 INDEMNIFICATION

No provision in the contract documents lessens, alters, or makes inapplicable the requirement for indemnification stated in the General Conditions or other documents incorporated into the contract by this Agreement.

ARTICLE 9 JURISDICTION: CHOICE OF LAW

This contract shall be governed by the laws of the State of Alaska, and any lawsuit brought thereon shall be filed in the Third Judicial District at Kenai, Alaska.

ARTICLE 10 ATTACHMENTS

In the event there is any difference between an attachment to the original of this Agreement on file with the City of Kenai Public Works Department and any attachment to a copy of the Agreement, the attachments to the original filed with the Public Works Department shall control.

ARTICLE 11 LIQUIDATED DAMAGES

Owner and Contractor recognize that time is of the essence in performance of this contract and the Owner will suffer financial loss if the work is not substantially complete within the time specified above, plus any extensions thereof allowed in accordance with contract documents. They also recognize the delays, expense and difficulties involved in proving the actual loss suffered by Owner if the work is not substantially complete on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay Owner https://documents-org/linearing-the-the-delay-in-the-delay-

ARTICLE 12 NO THIRD-PARTY BENEFICIARY

This Agreement is intended solely for the benefit of each party hereto. Nothing contained herein shall be construed or deemed to confer any benefit or right upon any third party.

OWNER and CONTRACTOR each binds themselves, their partners, successors, assigns and legal representatives in respect to all covenants, Agreements and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed in their respective names or by their duly authorized representatives as of the date and year above written.

OWNER:		CONTRACTOR:
CITY OF KENAI By: Name: Title:		By: Name: Title:
STATE OF ALASKA))ss.	STATE OF ALASKA))ss.
THIRD JUDICIAL DISTRICT)	THIRD JUDICIAL DISTRICT)
THIS IS TO CERTIFY that on this day of, 2022 Paul Ostrander, City Manager, City of Kenai, Alaska, being personally known to me or having produced satisfactory evidence of identification, appeared before me and acknowledged the voluntary and authorized execution of the foregoing instrument on behalf of said City.		THIS IS TO CERTIFY that on this day of, 2022 (title) being personally known to me or having produced satisfactory evidence of identification, appeared before me and acknowledged the voluntary and authorized execution of the foregoing instrument on behalf of said corporation.
NOTARY PUBLIC FOR ALASKA My Commission Expires:		NOTARY PUBLIC FOR ALASKA My Commission Expires:
Approved by Legal: Approved by Finance:		

GENERAL CONDITIONS OF THE CONTRACT BETWEEN OWNER AND CONTRACTOR

ARTICLE 1 CONTRACT DOCUMENTS

- 1.1 The contract documents enumerated in the Agreement between Owner and Contractor form the final and completely integrated contract between the parties and supersede any prior statements, negotiations, agreements, documents or representations, written or oral. What is required by any one contract document is deemed to be required by all documents.
- 1.2 The contract documents consist of documents designated as contract documents and enumerated in the Agreement between Owner and Contractor.
- 1.3 The contract documents do not include any documents unless specifically enumerated in Agreement between Owner and Contractor.
- 1.4 Unless specifically provided otherwise in the contract documents the parties to this agreement intend that Contractor will obtain all permits, inspections, tests, bonds, and insurance required by state or federal law, rule, regulation or order, or local ordinance or rule or regulation or the contract documents, whichever requirement is greater, and provide all labor, equipment, transportation, water, heat, utilities, tools, scaffolding, materials, supplies, facilities, and services necessary for performance of the contract and that the cost of these requirements be included within the contract price. The parties further intend that the cost of all overhead, supervision, and other incidental expenses required or occasioned by the contract is included in the contract price. The parties also intend that minor items required to produce complete functional system(s) and sub-system(s) are deemed to be required by the contract documents at the contract price whether or not specifically expressed. The requirements stated in this provision apply whether or not the execution or completion of the work is temporary or permanent and whether or not it is incorporated or to be incorporated in the work or final product.
- 1.5 The requirements of the contract documents and the duties and rights of each party may be amended subsequent to execution of this contract only by:
 - 1. A written amendment to the contract signed by both parties; or,
 - A change order issued pursuant to ARTICLE 9.1
- 1.6 The term "Work" includes all procurement, labor, materials, products, equipment, erection, installation, and alterations necessary to complete the construction envisioned by this contract. The term "Project" refers to the overall construction, of which the work required by the contract may be the whole or may be a part. The term "Architect" also refers to Registered Engineers as appropriate.
- 1.7 The contract between Owner and Contractor shall be executed and returned by Contractor within the time required in the instructions to bidders. A written Notice to Proceed with the work will be issued to Contractor within five (5) days after Owner has executed the contract, except as provided in ARTICLE 4.1.3.
- 1.8 Should any provision or requirement of one portion of the contract documents conflict with any other portion of the contract documents, unless otherwise provided herein, the conflict will be resolved by reference to the contract documents in the following order of priority:
 - A. Any and all later modifications, Change Orders, and written interpretations of the Contract Documents issued by the Owner
 - B. The Agreement
 - C. Addenda
 - D. Supplemental General Conditions (if any)
 - E. General Conditions

¹ Unless otherwise stated, all references to an ARTICLE refer to the articles of these general conditions.

- F. Drawings and Specifications Provided by Engineer. In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by addendum, the better quality or greater quantity of Work shall be provided.
- G. Drawings and Specifications in the latest edition of the Municipality of Anchorage Standard Specifications (M.A.S.S.) In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by addendum, the better quality or greater quantity of Work shall be provided. Contractor is responsible for obtaining the latest edition of the M.A.S.S.
- H. The Request for Proposals / Invitation to Bid
- I. The contractor's bid/proposal.
- 1.9 In case of difference between small and large scale drawings, the large scale drawings shall govern. Schedules on any contract drawing shall take precedence over conflicting information on that or any other contract drawing. On any of the drawings where a portion of the work is detailed or drawn out and the remainder is shown in outline, the parts detailed or drawn out shall apply also to all other like portions of the work.
- 1.10 In the event Contractor believes a discrepancy exists in the contract documents, Contractor shall submit the issue to the Project Representative together with Contractor's proposed course of action for performance of the work. Project Representative shall respond within seven (7) working days or advise Contractor that a response cannot be given within that time. If response will take more than seven (7) working days, Project Representative shall take steps to provide a response within a reasonable time. Any action taken by Contractor prior to or without Owner's response shall be at Contractor's own risk and expense.
- 1.11 Words and abbreviations which are not defined in the contract documents, but which have well known technical or trade meanings, shall be construed in accordance with the common meaning established by sound architectural or engineering practice in the State of Alaska.
- 1.12 Drawings, Specifications, other documents prepared for this project, and copies of them that are furnished by Owner and/or Architect or Consultant for this project, whether or not the documents or project are completed, shall be the property of Owner. All rights of use are reserved to Owner for this project and any subsequent project in which Owner participates in construction. Owner specifically relieves Architect or Consultant of any responsibility or liability pertaining to any subsequent use of the documents, in whole or in part, where those documents bear the stamp of a subsequent Architect or Consultant and are used for a subsequent project.
- 1.13 An electronic version of contract documents, typically in pdf format on a disc, will be furnished to the Contractor without charge. Contractor shall check all documents furnished immediately upon receipt and shall promptly notify Owner of any discrepancies.
- 1.14 The contract documents shall not be construed in any way as limiting Contractor's responsibility to perform the work completely, nor shall any prior customs or trade practices be held to constitute a waiver of the requirements of the contract documents or any portion of them.
- 1.15 The individual(s) executing the contract represent that they have the legal authority to execute the contract as or on behalf of Contractor in accordance with the bid instructions and the contract documents.
- 1.16 Execution of the contract by Contractor is a representation that Contractor has visited the site, become familiar with the local conditions under which the work is to be performed, has correlated personal observations with the requirements of the contract documents and enters this contract with knowledge of those conditions.

ARTICLE 2 ADMINISTRATION OF THE CONTRACT

2.1 The term "Project Representative" shall mean a person or entity employed by or under contract to Owner to be Owner's on-site designated representative. The term Project Representative shall include the Project Representative's employees.

- 2.2 The terms "Architect" or "Engineer" (hereinafter used interchangeably) shall mean the person or entity contracted by the City of Kenai to provide design services for the project. Architect or Engineer also includes employees of the Architect or Engineer. Architect shall provide professional services during construction as described herein below or as authorized by Owner.
- 2.3 Project Representative will provide administration of this contract and all communication made to Owner, Architect or Engineer by Contractor shall be made through Project Representative.
- 2.4 Project Representative will be Owner's primary representative during construction until final payment has been made and the project has been closed out. Owner's instructions to Contractor shall be made through Project Representative, who shall have authority to act on behalf of Owner to the extent set forth in this contract.
- 2.5 Project Representative shall not have the authority to require additional work, changes in the work, modifications or waivers of the rights, work or duties required by the contract documents or the right to bind Owner to any change in specifications or drawings without the written consent of Owner except as provided herein.
- 2.6 Project Representative shall have authority to allow minor deviation in the requirements of the contract documents by Field Order to a maximum cumulative amount of \$5,000.00 per each additional work item, change in work, modification or waiver in the work. Field Orders are to be incorporated into a subsequent Change Order.
- 2.7 Project Representative will render interpretations of the contract documents necessary for the proper execution or progress of the project. All interpretations and decisions of Project Representative shall be consistent with the intent of the contract documents and shall be in writing.
- 2.8 Matters relating to design intent will be referred to the design Architect whose decisions will be final, consistent with the intent of the contract documents.
- 2.9 Project Representative, Architect, and authorized representatives of Owner shall have access to the project site and to the work at all times and shall be afforded every reasonable facility for ascertaining whether or not the work is in accordance with the requirements and intent of the contract documents.
- 2.10 All claims, disputes and other matters in question between Contractor and Owner relating to the execution or progress of the work shall be resolved pursuant to ARTICLE 12.
- 2.11 Project Representative shall have the authority: 1) to reject work which does not conform to the contract documents; 2) to require additional inspections or testing of any work during, prior to, or after fabrication, installation, or completion; 3) to specify both remedial work necessary to correct defective work and the time within which such work must be performed.
- 2.12 On the basis of on-site observations and inspections Project Representative will keep Owner informed of the progress of the work, and will endeavor to guard Owner against defects and deficiencies in the work. If Project Representative determines that any construction method, sequence, material, technique, safety precaution, act or omission of Contractor, Contractor's subcontractors, suppliers, or any of their agents, is detrimental to the progress, quality or safety of the work or to Owner's interest, then Project Representative shall inform Owner promptly, and Owner may, among other things, stop the work and order remedial measures. This provision shall not eliminate or reduce the responsibilities or requirements placed upon contractor and/or subcontractors by the contract documents and shall not place any liability upon the owner for action or omission in regard to this provision.
- 2.13 In accordance with the requirements of ARTICLE 8.5, Project Representative will determine amounts owing to Contractor and will recommend that Owner issue payment in the amount determined due.
- 2.14 Project Representative, with the concurrence of Owner, will determine the dates of Substantial Completion and Final Completion. The Architect will receive and forward to Owner for Owner's review, written warranties and related documents required by the contract and assembled by Contractor.

2.15 Project Representative's duties, responsibilities, and limitations of authority will not be modified without written consent of Owner and Project Representative.

ARTICLE 3 OWNER GENERAL RIGHTS AND DUTIES

- 3.1 At Owner's option, Owner may undertake any or all tasks of Project Representative described in ARTICLE 2.
- 3.2 Owner's directions to Contractor will be made in writing either directly or through Project Representative in accordance with ARTICLE 2. No verbal representation shall be binding upon any party unless confirmed in writing.
- 3.3 Owner shall have the right to perform work related to the project under separate contract(s) in accordance with the provisions of ARTICLE 6.
- Owner shall have the right to issue change orders from time to time which may alter the scope of work required by the contract documents. All change orders will be subject to provisions of ARTICLE 9.
- 3.5 Owner will have the authority to reject work which does not conform to the requirements of the contract documents and to require such remedial work at no charge to Owner as is necessary to correct the defective work. Where defective work is being performed by Contractor and Contractor fails to correct the defective work within a reasonable period of time as set out in ARTICLE 10, or repeatedly fails to carry out the work in accordance with the contract documents, Owner shall have the authority to order an immediate halt to all defective work. Any losses suffered by Contractor as a result of the halt shall be borne by Contractor without recourse to Owner. Issuance of a stop-work order shall not be construed as constituting a breach of the agreement nor authorize Contractor to refuse to perform other portions of the work which Owner has not halted.
- 3.6 Owner shall have the right to terminate the contract or suspend performance of the contract as set out in these general conditions or other contract documents.
- 3.7 Owner shall promptly pay Contractor all sums properly due as provided by ARTICLE 8. If Owner fails to issue payment for a period of forty-five (45) days after the certificate of payment has been approved by Project Representative, without a written statement indicating why payment is being withheld, then Contractor may terminate the contract upon seven (7) days written notice to Owner and may recover from Owner payment for all work executed and for any proven losses sustained upon any materials, equipment and tools, including a reasonable profit and overhead.
- 3.8 Owner and Contractor warrant that neither party will maintain an action against the other for punitive or exemplary damages.

ARTICLE 4 CONTRACTOR'S GENERAL RIGHTS AND DUTIES

4.1 EXAMINATION OF SITE AND CONTRACT DOCUMENTS

- 4.1.1 The term "Contractor" means the person or entity identified in the Agreement which has contracted with Owner to perform the work of the contract. This definition includes a responsible officer of Contractor's organization or its authorized representative who shall be made known to Owner.
- 4.1.2 Contractor represents by execution of the Agreement that Contractor has carefully examined the contract documents and the site upon which the work is to be performed and has developed familiarity with the nature, extent, site access, and risks involved in the work and with all local conditions and applicable statutes, ordinances and regulations that may affect the performance of the work. Contractor assumes full responsibility for having correlated Contractor's study of the contract documents and observation of the site. Contractor represents that Contractor has studied all available surveys and investigation reports of subsoil and latent physical conditions of the site and has made such additional surveys and investigations as Contractor deemed necessary for the performance of the work at the contract price, within the time specified and in accordance with the requirements of the contract documents.

- 4.1.3 Contractor shall not begin work until given a Notice to Proceed, which will be issued as promptly as possible after the Agreement has been executed by all parties. If Owner is required to delay issuance of a Notice to Proceed for more than five (5) working days because of fault of Contractor or other reasons which Owner deems sufficient, then Contractor shall be notified in writing of the delay and when issuance of the Notice to Proceed is anticipated.
- 4.1.4 Before commencing any part of the work, and prior to undertaking each subsequent phase of the work, Contractor shall carefully study the plans and specifications and check and verify all previous work and pertinent dimensions, figures and amounts shown in them and shall make all applicable field measurements. Contractor shall at once report in writing to Owner any apparent conflict, ambiguity, discrepancy, error or other omissions which Contractor may discover. Contractor shall be liable to Owner for failure to notify Owner of any conflict, ambiguity, discrepancy, error or other omissions which Contractor discovered, but failed to report to Owner and shall be responsible for providing a remedy.
- 4.1.5 Contractor shall lay out the work from established base lines and bench marks indicated on the drawings and shall be responsible for all measurements in connection therewith. Contractor will be held responsible for the execution of the work to such lines and grades. It shall be the responsibility of Contractor to maintain, preserve, or replace all stakes and other marks.
- 4.1.6 Drawings showing location of equipment, piping, etc., are diagrammatic and job conditions will not always permit installation in the location shown. If a situation occurs which may require relocation of an item or system which substantially differs from the location called for in the contract documents, it shall be brought to Owner's attention immediately and the relocation determined with the concurrence of Architect or Engineer. If Contractor relocates such items without approval, Contractor will be responsible for any cost or expense for removal or further relocation necessitated by installation without approval.

4.2 SUBMITTALS

- 4.2.1 Within 10 days after the effective date of the notice to proceed and prior to commencement of work, Contractor shall submit to Owner the construction progress schedule and schedule of values required in Articles 4.2.2, 4.2.3 and 4.2.4. The schedule of values and progress schedule must be acceptable to owner and provide reasonable divisions of contract work with corresponding payment. No payment will be made under this contract prior to completion of this requirement. In cases of a unit bid project, the bid schedule on the bid form will be the schedule of values.
- 4.2.2 In accordance with the requirements governing submittals as provided in the contract documents, Contractor shall prepare and submit to Owner a detailed progress schedule for the work which reveals and identifies the critical path of progress, which is consistent with the work and time required by the contract, and which shall provide for the most expeditious and practicable execution of the work. Float time between work items is part of the project and not property of the Contractor. Float time is defined as the amount of time that spans from completion of one previously scheduled activity and extends to the point at which the next scheduled activity is set to begin.
- 4.2.3 Contractor shall also provide Owner with a proposed schedule of values upon submittal of a detailed progress schedule for the work. The schedule of values shall be allocated to various portions of the work and be prepared in such a form and supported by such data to substantiate its accuracy as reasonably required by Owner. Each item of work shall include all applicable profit and overhead. This schedule of values, unless objected to by owner shall be the basis for progress payments made to Contractor and shall include specific lump sum amounts for "Final Payment." This line item shall be in conformance with guidelines specified in ARTICLE 8. Contractor, at the request of Owner, shall amend the progress schedule and the schedule of values as the work progresses.
- 4.2.4 The schedule of values must show a complete breakdown of all phases of the work required by the contract documents. Payment will be in accordance with ARTICLE 8. Pay requests, schedules of value and progress schedules must correspond.
- 4.2.5 Contractor shall submit for Architect's and Owner's approval all product data required by the contract documents in conformance with the dates specified in the detailed progress schedule. Such data include illustrations, standards, schedules, performance charts, instructions, brochures, diagrams, or other

- information necessary to assist Architect in determining whether a proposed product meets the intent of the contract documents.
- 4.2.6 Contractor shall also submit physical samples of materials, equipment or workmanship where required by the contract documents. After approval by Owner and Architect, the sample shall be established as the minimum standard of work, material, equipment or other quality which will be acceptable for work of which the sample is representative.
- 4.2.7 Submittal of shop drawings by contractor constitutes a representation by contractor that the submittal and work, or products required or to be used in accordance with that submittal, will meet or exceed the criteria and conditions of the contract documents and that performance of the work identified in those submittals will meet the progress schedule.
- 4.2.8 Before initiating any work for which shop drawings are required, Contractor shall obtain Architect's approval of the shop drawings, which include drawings, diagrams, schedules and other data specially prepared by Contractor, a subcontractor, a manufacturer, a supplier or distributor to illustrate in detail that portion of the work. Contractor shall review, approve, and submit all shop drawings, whether prepared by himself/herself or subcontractor or supplier. It shall be the duty of Contractor to provide a whole or complete system and to coordinate all work depicted by a particular shop drawing with the work required by other shop drawings for that portion of the work or for related or adjacent work.
- 4.2.9 Contractor shall provide a copy of all transmittal letters to Project Representative at the time the submittal is made to Architect. Architect will review Contractor's submittals only for conformance with the design concept of the work and the information given in the contract documents. Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component. Architect will return reviewed submittals to Contractor with written comments and forward one set to Project Representative with reasonable promptness so as to cause no delay. A minimum of five (5) sets of submittals shall be required.
- 4.2.10 Should Architect reject any proposed shop drawings, product data or sample, Contractor shall resubmit revised drawings, samples or product data and draw Architect's attention to any deviation or revisions other than those requested by Architect.
- 4.2.11 All of Contractor's submittals shall be made in conformance with the dates specified in the detailed progress schedule with reasonable promptness and in such sequence as to cause no delay in the work of Owner or any separate contractor.
- 4.2.12 The Contractor shall provide two (2) hard copies and an electronic .PDF file of the operation and maintenance manuals for equipment and systems incorporated in the work.

4.3 SAFETY AND CONTROL OF SITE

- 4.3.1 Contractor is deemed to be in physical control of the work site. Contractor shall confine Contractor's operations at the site to those areas described in the contract documents or permitted by applicable statutes, ordinances or permits.
- 4.3.2 Contractor shall not unreasonably encumber the site with materials, equipment or ancillary construction. Contractor shall be responsible for eliminating or minimizing to the extent reasonably possible, public hazards and inconveniences which might result from this work.
- 4.3.3 Contractor shall at all times keep the premises free from accumulation of excess snow, waste materials or rubbish and shall keep adjacent public road clear of mud and dust caused by Contractor's activities. At the completion of the work, Contractor shall remove all waste materials and rubbish from the project as well as Contractor's tools, equipment and surplus materials. The removal and disposal of waste materials, rubbish, or other material, shall be accomplished in accordance with all local, state and federal requirements.
- 4.3.4 Contractor shall be responsible for initiating, maintaining and supervising all necessary safety precautions in connection with this work and shall be responsible for ascertaining and adhering to all applicable federal, state, and local standards, laws, ordinances, regulations, requirements and any lawful order of any public authority bearing on the safety of persons or property or their protection from damage, injury, or loss.

- 4.3.5 Contractor's duty to maintain a safe and secure project site shall include all precautions necessary to assure the safety and protection against injury and damage, of all employees engaged in the work and any other person who may be affected by the work including Owner's agents and employees; Contractor's agents and employees; and members of the general public. Contractor shall assure the safety and protection of all work, materials and equipment which may be upon the site; utilities and other property of Owner including portions of structures and utilities not designated for removal or relocation, trees, shrubs, lawns, walks, pavements and roadways. Contractor duties include but are not limited to protection of project site from vandalism. Such precautions shall further include but not be limited to protection from dangers from hazardous materials.
- 4.3.6 Contractor shall take all necessary measures to prevent members of the general public from entering upon the site without the permission of Owner or Contractor.
- 4.3.7 Contractor shall comply with all OSHA requirements, give all safety notices, erect and maintain all reasonable safeguard notices and barriers, including danger signs and fences which may be required to protect the site and limit access to it.
- 4.3.8 In the event of an emergency, the Contractor will take all means necessary to minimize all damage to or exposure from effects of a catastrophic event. In such case, the Contractor may consult with Owner or seek Owner's assistance. The responsibility for protection of the site, work, and all material remains with the Contractor.
- 4.3.9 Contractor shall designate a person in Contractor's employ at the site to be primarily responsible for the prevention of accidents, identification of all applicable safety standards, statutes and regulations, including but not limited to those addressing hazardous material, and full compliance therewith. This person shall be Contractor's Superintendent unless otherwise designated by Contractor in writing to Owner.
- 4.3.10 Should Project Representative or other representative of Owner ascertain that a safety danger exists, Project Representative or Owner may order an immediate cessation of all dangerous activity and a correction of any safety hazard. Written notice of the order to stop work or to correct the safety hazard shall be made to Contractor as soon as practicable. Contractor shall have no recourse against Owner for any alleged losses or delays arising from this section unless the order to stop work or correct safety deficiency is wholly without basis.
- 4.3.11 Should Contractor elect to utilize explosives or other hazardous materials or equipment, or should Contractor be required to do so for the execution of the work, Contractor shall first give jurisdictional authorities and Owner notice of the intention to utilize hazardous materials, explosives or equipment at a particular time and date. Contractor shall use the utmost care in utilizing such materials and shall use only properly qualified and licensed personnel.
- 4.3.12 Contractor shall correct any damage to the property of Owner or other parties which arises out of the activities or omissions of Contractor, Contractor's agents, subcontractors, employees, personnel or suppliers. Contractor shall commence remedial activities within seven (7) days from the date of the damage. If Contractor fails to do so, Owner or the affected party may utilize his own forces to correct or replace the damaged property and Contractor shall promptly reimburse Owner or the affected party for all losses and costs thereupon. In the event Contractor fails to reimburse Owner as set forth herein, Owner may set off the amount due Owner from any amount due Contractor.

4.4 SUPERVISION AND QUALITY OF THE WORK

4.4.1 Contractor shall supervise and direct the work using the best skill and attention. Contractor is responsible for, and agrees to comply with all applicable local, state and federal ordinances, laws, regulations and statutes. Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures, and for the schedule and coordination of all portions of the work to be performed under the contract. Contractor shall also be required to coordinate the work with that of any other contractor working on the project so as to minimize delay, inconvenience, and expense to both. Where identified in writing by Owner at any time, Contractor shall be required to coordinate the work with any partial use of the site that Owner deems necessary.

- 4.4.2 All materials and equipment shall be applied, installed, connected, erected, used, cleaned, prepared or conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processor except as otherwise provided in the plans and specifications.
- 4.4.3 Contractor shall keep on the job site at all times during work progress, a competent resident superintendent capable of reading and thoroughly understanding the plans and specifications. The superintendent will be Contractor's representative at the site and all communications given to the superintendent shall be as binding as if given to Contractor directly. In the event Contractor decides to replace the superintendent, Contractor shall submit to Owner a written notice including the proposed new superintendent's qualifications. The superintendent shall not be replaced without this written notice and a statement of non-objection by the Owner.
- 4.4.4 Contractor shall provide sufficient, competent, and suitable qualified personnel to survey and lay out the work and to perform all construction required by the contract documents. Contractor is responsible for maintaining good discipline and order at the job site at all times and shall not employ any unfit person or anyone not skilled in the task assigned to that person.
- 4.4.5 Contractor shall be fully responsible to Owner for the acts and omissions of Contractor's employees and agents, Contractor's subcontractors and their employees and agents, and any other persons performing any of the work for the benefit of Contractor.
- 4.4.6 Contractor shall not permit the possession or use of alcohol or controlled substances on the site, and shall remove from the site any person who possesses, uses, or is under the influence of alcohol or controlled substances. Contractor shall require all Contractor's agents, subcontractors, employees or suppliers who perform work on site to sign a statement that they have been informed and will abide by the above policy. A copy of all such statements shall be kept at the job site throughout the duration of Contractor's work.
- 4.4.7 Contractor warrants to Owner that all work will be free from faults and defects and meeting or exceeding the requirements of the contract documents and all local, state, and federal legal requirements. All work not so conforming to these standards will be considered defective, and Owner may require its correction.

4.5 DIVISION OF THE WORK

4.5.1 The division of the work into various specialties and divisions in the contract specifications and drawings shall not bind Contractor in apportioning the work among various subcontractors, specialty contractors or workers, and Contractor's own employees.

4.6 TITLE 36 AND OTHER STATUTORY REQUIREMENTS

- 4.6.1 Contractor shall give and post all notices and comply with all federal, state, and local laws, ordinances, regulations, requirements and any lawful order of any public authority bearing on the performance of the work, and shall notify Owner in writing if the drawings and specifications or the contract documents are at variance therewith. If Contractor knows or should know that Contractor is performing work contrary to such legal requirements without giving written notice to Owner in time for Owner to give a stop work order, the Contractor shall bear all costs to remedy that work and to bring it into conformance with the applicable requirements. In the event Contractor fails to reimburse Owner as set forth herein, Owner may set off the amount due Owner from any amount due Contractor. This requirement does not lessen or alter the requirement for indemnification stated in ARTICLE 4.13.
- 4.6.2 Contractor and subcontractors shall strictly comply with all requirements of Title 8, Chapter 30 of the Alaska Administrative Code and Title 36 of the Alaska Statutes as applicable to this contract.
- 4.6.3 Contractor or subcontractors of the contractor shall pay all employees unconditionally as required by AS 36.05.040 and any other applicable laws or regulations. 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. The wages are determined for the region in which the work is done and the rates are issued by the Alaska State Department of Labor (see attached Title 36 wage schedule). The scale of wages to be paid shall be posted by Contractor in a prominent and easily accessible place at the site of the work. 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 this contract, Owner may, on written notice to Contractor hold Contractor in immediate default and terminate Contractor's right to proceed with the work or that part of the work for which there is a failure to pay the required wages, and Owner may prosecute the remaining work to completion by contract or otherwise, holding Contractor and Contractor's sureties liable for any costs in excess of the contract price. In the event Owner permits Contractor to pursue further work under the contract, Owner 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 the rates of wages required by the contract to be paid laborers, mechanics, or field surveyors on the work and the rates of wages in fact received by laborers, mechanics, or field surveyors.

4.6.4 A copy of certified payrolls shall be provided to the Project Representative with each Progress Payment Request.

4.7 PROJECT RECORDS

- 4.7.1 Contractor shall maintain at the project site copies of plans and technical specifications, approved shop drawings and manufacturers' information sheets, and other contractor documents which are necessary for the expeditious and correct execution of the work.
- 4.7.2 Contractor shall maintain at the project site a complete daily job report showing job conditions, work activities started, in progress, interrupted and completed; work force, including identification and number of Contractor's employees and subcontractors by craft; receipt and disposition of materials and equipment; tests performed, visiting personnel and any accidents on a particular day. Owner shall have access to the daily report at all times. A copy of each daily report shall be provided to Project Representative at the end of each week.
- 4.7.3 Contractor shall keep one record copy of all specifications, drawings, addenda, modifications, and shop drawings at the job site in good order and annotated to show all changes made during the construction process. These shall be available to Owner during construction and turned over to Owner prior to final completion of the work.

4.8 ALLOWANCES

4.8.1 Contractor shall include in the contract sum all allowances stated in the specifications or plans, and all items covered by these allowances shall be supplied in such amounts, or by such a person, as Owner may direct. The allowance shall include the cost to Contractor, less applicable trade discounts, of materials and equipment required by the allowance; delivery at the site, applicable taxes; Contractor's cost for unloading and handling on the site, for labor, installation, overhead, profit and other expenses incurred by Contractor. Whenever the cost of the allowed item exceeds or is less than the allowance, the contract sum shall be adjusted equitably by change order.

4.9 NONDISCRIMINATION

- 4.9.1 Contractor must comply with all federal and state laws, rules, regulations and orders, and all local ordinances, regulations and rules concerning wages, taxes, social security, workers' compensation, nondiscrimination, licenses, registration requirements, and similar provisions governing employment of individuals.
- 4.9.2 Contractor will not discriminate against any employee or applicant for employment or refuse employment to a person, or bar a person from employment, or discriminate against a person in compensation or in a term, condition, or privilege of employment because of the person's race, religion, color, or national origin, or because of the person's age, physical or mental disability, sex, marital status, changes in marital status, pregnancy, or parenthood when the reasonable demands of the position do not require distinction on the basis of age, physical or mental disability, sex, marital status, changes in marital status, pregnancy, parenthood, or political affiliation. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause. Contractor further agrees to insert this provision in all subcontracts hereunder and to require the subcontractors to insert this provision in their subcontracts.

Notwithstanding the prohibition against employment discrimination on the basis of marital status or parenthood stated above, an employer may, without violating this provision, provide greater health and retirement benefits to employees who have a spouse or dependent children than are provided to other employees.

- 4.9.3 Contractor shall state, in all solicitations or advertisements for employees to work on contract jobs, that all qualified applicants will receive consideration for employment in accordance with the above referenced nondiscrimination clause.
- 4.9.4 Contractor shall comply with the reporting requirements which the State of Alaska may establish by regulation.
- 4.9.5 Contractor shall include the provisions of these paragraphs in this section in every subcontract or purchase order under this contract so as to be binding upon every such subcontractor or vendor of Contractor under this contract.

4.10 TAXES

- 4.10.1 Contractor shall pay all sales, consumer, use and other taxes for the work or portions thereof provided by Contractor which are legally enacted at the time bids are received, whether or not yet effective.
- 4.10.2 Contractor shall comply with Owner's requirements for payment of taxes. This contract is specifically subject to the provisions of City of Kenai Code, as it now stands or as it may be amended, including but not limited to termination of the contract for non-compliance. If the violation arises from failure to file or remit sales taxes, no payment will be made to Contractor until all filings have been made and all amounts due are paid.

4.11 PERMITS, FEES, AND NOTICES

- 4.11.1 Contractor shall secure the building permit from the City of Kenai at no cost. Unless otherwise provided in contract documents, Contractor shall secure and pay for all other legally required permits and government fees, licenses and inspections necessary for the proper execution and completion of the work. These are customarily secured after execution of the contract. These costs are part of the contract price. This provision does not lessen the requirements set out in ARTICLE 1.4.
- 4.11.2 Contractor is required to comply with all permits obtained by Owner for project, if any. Contractor is responsible for requesting information from Owner regarding any applicable permits obtained by Owner.

4.12 ROYALTIES AND PATENTS

4.12.1 Contractor shall pay for all royalties and license fees. Contractor shall defend all suits or claims for infringement of any patent rights and shall save Owner harmless from loss on account thereof.

4.13 INDEMNIFICATION

4.13.1 The contractor shall indemnify, hold harmless, and defend the City at its own expense from and against any and all claims, losses, damages or expenses, including reasonable attorney's fees, of, or liability for, any wrongful or negligent acts, errors, or omissions of the contractor, its officers, agents or employees, or any subcontractor under this contract. The contractor shall not be required to defend or indemnify the City for any claims of, or liability for, any wrongful or negligent act, error, or omission solely due to the independent negligence of the City. If there is a claim of, or liability for, the joint negligence of the contractor and the independent negligence of the City, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. Apportionment shall be determined upon final determination of percentage of fault. If any such determination is by settlement, the percentage of fault attributed to each party for purposes of this indemnification provision shall only be binding upon the parties included in the settlement agreement. "Contractor" and "City" as used in this article include the employees, agents, officers, directors, and other contractors who are directly responsible, respectively, to each. The term "independent negligence of the City" is negligence other than in the City's selection, administration, monitoring, or controlling of the contractor and in approving or accepting the contractor's work.

ARTICLE 5 SUBCONTRACTORS AND SUPPLIERS

5.1 DEFINITIONS AND RESPONSIBILITIES

- 5.1.1 A subcontractor is a person or entity having a direct contractual relationship with Contractor, or with one of Contractor's subcontractors, to perform any of the work at the site. A supplier is any manufacturer or person or firm providing materials, equipment or assemblies to Contractor or to one of the subcontractors for inclusion in this project.
- 5.1.2 All contracts between Contractor, subcontractors and suppliers (whether or not in privity with Contractor) shall be in accordance with the terms of this contract and shall incorporate the General Conditions of this contract. Contractor shall include in such contracts, and require its inclusion in any subcontracts, a provision holding any subcontractor or supplier (whether or not in privity with Contractor) directly accountable to Owner for work which fails to meet the requirements of the contract documents, or which prevents Contractor or any subcontractor from performing work. This direct accountability to the Owner shall be in addition to Contractor's liability for any such failure.
- 5.1.3 The provisions in this ARTICLE shall not be construed as creating a right of recourse, or any direct contractual relationship, between Owner or Owner's agents and any subcontractor, supplier, or manufacturer (whether or not in privity with Contractor).
- 5.1.4 Contractor shall make all necessary copies of these contract documents available to Owner and to each subcontractor and shall require each subcontractor to make copies of these contract documents available to each of Contractor's subcontractors, if any.
- 5.1.5 Contractor shall be fully responsible for enforcing discipline among subcontractors, their employees and their subcontractors, and for insuring that each subcontractor performs the work in accordance with the contract documents and all safety regulations.
- 5.1.6 Contractor shall have the discretion to require subcontractor(s) to provide payment or performance bonds for work of the subcontractor(s).

5.2 AWARDS TO SUBCONTRACTORS AND SUPPLIERS

- 5.2.1 At Owner's request Contractor shall submit to Owner a list of all principal subcontractors and material suppliers and shall not contract with any proposed person or organization to whom Owner voices a reasonable objection. This provision applies to substitution of subcontractors or suppliers subsequent to Owner's initial objection to a proposed person or entity. Such list shall be submitted in accordance with Division 1 requirements as provided in the contract specifications.
- 5.2.2 Rejection of a proposed subcontractor or material supplier shall not entitle Contractor to any increase in the contract sum or time.
- 5.2.3 At Owner's request Contractor shall submit to Owner a copy of any subcontract and any purchase orders for materials and equipment prior to purchase of such items.

5.3 CONTRACTOR PAYMENTS TO SUBCONTRACTORS AND SUPPLIERS

- 5.3.1 Recognizing the importance of maintaining the integrity of a public contract, Contractor warrants that Contractor will pay all subcontractors and material suppliers at least monthly on or about the 20th day of each month upon approval of the subcontractors' and materials suppliers' billing, for all apparently acceptable work performed on the site during the preceding month and for all apparently acceptable material incorporated into the project or delivered and properly stored at the site during any month for which Contractor has received payment from Owner. If Owner retains a percentage of sums due, Contractor may retain a like percentage, but when retainage is paid, Contractor must pay to the subcontractor or supplier interest on retainage equal to interest rate paid to Contractor by Owner.
- 5.3.2 In furtherance of Contractor's warranty under this ARTICLE and ARTICLE 8, Owner, may require Contractor to declare Contractor's status of accounts with any or all the subcontractors and suppliers. A proof of payment to subcontractors and suppliers shall be made in a form acceptable to Owner. If Contractor

breaches this warranty and fails to pay each subcontractor and materials supplier within 45 days after a monthly billing has been presented, then Owner reserves the right to withhold sufficient sums from Progress Payments due to Contractor and to issue payment to the subcontractors or material suppliers directly. This ARTICLE shall not be construed as creating a right in the subcontractors or material suppliers to have direct recourse against Owner for payment. Contractor expressly agrees that Owner will not be liable for any exercise of Owner's discretionary right under this section, and Contractor agrees to release and indemnify Owner for any claims arising therefrom, either by Contractor directly or by any subcontractor or material supplier. Likewise, this ARTICLE shall not be construed as creating a right in Contractor's surety or any other subrogated party to have direct recourse against Owner for failure to withhold sums pursuant to this section.

ARTICLE 6 SEPARATE CONTRACTS

- 6.1 Owner has the right to award separate contracts for work on the project that is not included in this contract.
- When separate contracts are awarded for different portions of the Project or other work on the site, the term Contractor in the contract documents in each case shall mean the Contractor who executes each separate contract.
- 6.3 Contractor shall afford other contractors and Owner's own forces reasonable opportunity for the introduction and storage of materials and equipment and for the execution of their work and shall properly connect and coordinate Contractor's work with theirs as required by the contract documents.
- Any costs caused by defective or ill-timed work under separate contracts shall be borne by the party responsible thereof and shall be paid promptly.
- When separate contracts are let within the limits of any one project, each Contractor shall conduct the work so as not to interfere with or hinder the progress of completion of the work being performed by other Contractors. Contractors working on the same project shall cooperate with each other as directed.
 - Each Contractor involved shall assume all liability, financial or otherwise, in connection with his or her contract and shall protect and save harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced because of the presence and operations of other Contractors working within the limits of the same project.
- If any part of Contractor's work depends upon work performed by Owner or any separate contractor, prior to proceeding with the work, Contractor is required to report to Owner any apparent discrepancies, defects or delays in the other work which impede proper execution of the work required by this contract. If Contractor fails to report such unsuitable work by another contractor to Owner, then Contractor shall be deemed to have accepted the unsuitable work and any liability for all deficiencies, damages and costs which arise as a result of the defective work or of Contractor's use or covering of the unsuitable work.
- 6.7 Should Contractor or any subcontractor delay or cause damage to the work or property of any other contractor or person, Contractor shall repair the damage or settle the claim and shall further, to the extent allowed by law, indemnify, defend, and hold Owner harmless from any and all claims, costs, expenses, injury, damages, or loss of any kind, including attorneys' fees, court costs, or arbitration costs, which arise out of such delay or damage.
- 6.8 Should a dispute arise between Contractor and separate contractors as to the responsibility for completing, finishing or cleaning up particular work or a portion of the work, Owner may complete, finish or clean up the disputed portion and apportion the cost among Contractors responsible as Owner shall determine to be equitable.

ARTICLE 7 BONDS AND INSURANCE

7.1 PERFORMANCE AND PAYMENT BONDS

7.1.1 For contracts with a contract sum of one hundred thousand dollars (\$100,000) or greater, or as otherwise specified in the request for bid, Contractor shall provide as part of the basic contract sum, a performance bond and a payment bond, each in the amount of 100% of the contract amount, prior to Owner's execution

of the contract. Contractor shall have no recourse of any kind against Owner, if Owner declines to award a contract due to Contractor's failure to provide the required bonds. These bonds, in whatever amount required by the specific contract, shall be administered and deemed governed by the provisions of Alaska Statutes Title 36, Chapter 25 and shall comply with all requirements for payment and submission of claims as provided by that chapter.

- 7.1.2 All bonds shall name Owner as the beneficial party and shall protect Owner for a period of at least one year subsequent to the date of final payment upon this contract. All bonds shall be executed upon a form acceptable to Owner and by a surety company licensed to do business within the State of Alaska and acceptable to Owner. The form of the bond shall provide that Owner shall have at least thirty (30) days prior notice of any lapse in bond coverage. The bond payment shall be applicable to all subcontractors or material suppliers (whether or not in privity with Contractor) who might attempt to assert a claim against Owner.
- 7.1.3 Owner may inform the surety as to the general progress and status of the work. A copy of all communications with the surety company shall be provided promptly to Contractor upon request.
- 7.1.4 In the event Contractor refuses, or is unable to make payments to laborers, subcontractors or material suppliers, or to complete the work, or to correct defective work, within the times provided by this contract, Owner may elect to call upon Contractor's surety to rectify Contractor's default. Contractor shall first be given seven (7) calendar days written notice (effective when mailed) of Owner's intentions to call upon the surety company and Owner shall specify to Contractor the basis for the proposed course of action. If Contractor fails to correct the default within the time provided, Owner shall promptly call upon the surety.
- 7.1.5 Prior to final payment or reduction in retainage, Contractor shall provide written consent of each affected surety releasing Owner from any further claims arising from payment to Contractor and obligating the surety company to rectify any default, nonpayment, defective work, error, omission or deficiency of Contractor.
- 7.1.6 Contractor and Owner expressly agree that Owner shall be entitled to retain from payments to Contractor amounts in excess of normal retainage if these additional amounts may be necessary to indemnify Contractor's surety for any payment or corrective work which the surety might be required to undertake. This additional retainage will be made only upon written directive by Contractor's surety specifying the reason for retaining extra amounts, the amounts to be retained and agreement of the surety to reimburse Owner for any interest which may be due Contractor under the provisions of the Alaska Statutes.

7.2 CONTRACTOR'S INSURANCE

- 7.2.1 The services to be rendered under this contract are those of an independent Contractor.
- 7.2.2 Contractor and all subcontractors, if any, shall be responsible for the purchase and maintenance of all insurance required by law and at a minimum purchase the insurance coverage as specified in ARTICLE 7.2.5 and 7.2.6 below, and any other insurance coverage as may be specified in ARTICLE 7.2.11 SUPPLEMENTARY GENERAL CONDITIONS OF INSURANCE, if attached and forming a part of this contract. Such insurance shall be by a company/corporation currently rated "A-" or better by A.M. Best.
- 7.2.3 This insurance coverage required by ARTICLE 7.2.5 and 7.2.6, and ARTICLE 7.2.11 if attached, shall be in acceptable form, and for the amounts specified by the City of Kenai, or as required by law, whichever is greater.
- 7.2.4 The insurance policies shall remain in force for the life of the contract and shall be a part of the contract price.
- 7.2.5 Commercial general liability with minimum coverage of \$1,000,000 and automobile liability insurance with minimum coverage of \$1,000,000 combined single limit bodily injury and property damage per occurrence. This insurance shall be primary and exclusive of any other insurance carried by the City of Kenai. The commercial general liability insurance shall be without limitation on the time within which the resulting loss, damage, or injury is actually sustained.
- 7.2.6 Per Alaska State Statutes, Worker's Compensation and Employers Liability Insurance shall be provided for all employees who are performing work under this contract.

- 7.2.7 Certificate(s) of Insurance shall be provided by Contractor and all subcontractors, or their Insurance Companies and/or their Agents, naming the City of Kenai as an additional insured for the work specified in this contract with a waiver of subrogation for commercial general liability insurance and automobile liability insurance. The certificates of insurance must reference the specific contract by name. Workers compensation insurance must be endorsed for waiver of subrogation against the City. Certificates of Insurance, acceptable in form and content, will be delivered to Owner at the address designated for legal service in the agreement, at or prior to presentation of the contract for execution by owner.
- 7.2.8 There shall be no cancellation or material change of the insurance coverage, or intent not to renew the insurance coverages as specified in this contract, without thirty (30) days prior written notice to the City of Kenai. Notice of cancellation, material change in coverage, or intent not to renew will be delivered to the address designated for legal notice in the agreement.
- 7.2.9 Upon renewal or change in policies during the contract, Certificates of Insurance shall be delivered to the address designated for legal notice in the agreement.
- 7.2.10 Owner shall have the option to purchase and maintain such insurance as will protect Owner against property losses or liability claims, which may arise from operations under the contract. Insurance providing coverage against fire and extended coverage perils, may, at Owner option, provide coverage to the full insurable value of the project and insure the interests of Contractor and all subcontractors as their interests may appear. Any recovery for loss insured pursuant to this General Condition is to be adjusted to Owner and made payable to Owner as trustee for the insured, as their interests may appear. This section does not modify the contractor or subcontractors' responsibility to provide insurance as required in ARTICLE 7.
- 7.2.11 May be added in supplementals as Supplementary General Conditions of Insurance.

ARTICLE 8 MEASUREMENT, PAYMENT AND COMPLETION

8.1 SCOPE OF PAYMENT

8.1.1 Unless altered by change order, Contractor shall be paid only that sum set forth in the agreement between Owner and Contractor as Contractor's compensation for performance of all work required by the contract documents.

8.2 LUMP SUM PAY ITEMS

- 8.2.1 Each bid item is characterized as either a lump sum item or a unit price item in the bid documents. Where the item is bid at a lump sum price, no additional compensation shall be paid to Contractor for additional work required because Contractor failed to include items or quantities in Contractor's estimate or a subcontractor's estimate, or failed to utilize proper construction means, methods, procedures or sequence or by virtue of any decision of Contractor.
- 8.2.2 Contractor is required to provide and pay for all requirements necessary for the proper execution and completion of the contract unless specifically excluded by the contract documents. The costs are part of the contract price. The requirements include but are not limited to the requirements stated in ARTICLE 1.4.
- 8.2.3 All materials and equipment incorporated in the work shall be new except as otherwise provided in the contract documents. All materials and equipment shall meet or exceed the requirements of the plans and specifications and Contractor shall furnish, if requested, satisfactory evidence as to the source, kind and quality of any materials and equipment.

8.3 UNIT COST ITEMS

8.3.1 Quantities appearing in the bid schedule are approximate and are prepared for comparison of bids. Payment to Contractor will be for actual quantities of work performed and materials furnished in accordance with the contract documents. Scheduled quantities of work and materials may be increased, decreased or eliminated as provided herein.

8.4 APPLICATION FOR PAYMENT

- 8.4.1 Applications for payment shall be based on Contractor's submitted schedule of values, as approved by Owner per Section 4.2. Schedule of values shall be prepared in such form and supported by such data as may be required by Owner to substantiate its accuracy prior to Contractor's first application for payment.
- 8.4.2 The schedule of values shall include quantities of work, unit prices and other items comprising the contract price. It shall subdivide the work into each component part in sufficient detail to serve as the basis for progress payments during construction.
- 8.4.3 With each subsequent application for progress payment, Contractor shall provide a schedule of values to Owner showing all work which has been performed to date together with the value thereof, and the percentage of work completed.

8.5 PROGRESS PAYMENTS

- 8.5.1 Progress Payments shall be made monthly, based upon the amount of apparently acceptable work performed at the site and apparently acceptable materials purchased for the project and properly stored at the site during the previous month. Disbursement of progress payments will not effect a transfer of the risk of loss from the Contractor to the Owner for invoiced equipment or material. The risk of loss of the work and all material and equipment not yet incorporated in the work is the liability of the Contractor until substantial or final completion, whichever is earlier.
- 8.5.2 The value of work performed and materials stored shall be set forth in Contractor's revised schedule of values. If requested by Owner, Contractor shall promptly provide Owner any additional information necessary to ascertain the value of the work performed or the cost of materials stored at the site during the previous month. Each updated Schedule of Values shall be in the form of a notarized affidavit. Proof of certified payroll shall be provided per ARTICLE 4.
- 8.5.3 By application for payment, Contractor warrants and guarantees to Owner that title to all work, materials, and equipment for which payment is requested will pass to Owner either by incorporation in the construction and after substantial completion or upon receipt of payment, whichever occurs later, that such title will be clear of all liens, claims, security interests, and other encumbrances, except for liens to be released later prior to final payment and specifically identified on the application for payment, and that all such work, materials, and equipment are of acceptable quality.
- 8.5.4 Each application for payment shall be made no later than the tenth day of each month for work performed during the preceding month. Progress Payment requests shall be submitted to Project Representative for analysis and recommendation to Owner.
- 8.5.5 Project Representative will review Contractor's application for payment within seven (7) working days after receipt and if Project Representative ascertains that the amounts set forth therein are properly due and owing to Contractor, then Project Representative shall issue a Certificate of Payment to Owner. If Project Representative determines that only a portion of the sum requested is then properly due and owing to Contractor, then Project Representative may issue a Certificate of Payment in a lesser amount or may reject the application altogether. Project Representative will notify in writing both Contractor and Owner of the reasons for reduction or rejection of any application for Progress Payment.
- 8.5.6 Project Representative's issuance of a Certificate of Payment constitutes a representation that the work has progressed to the point indicated and that to the best of Project Representative's professional knowledge and information, Contractor is entitled to payment in the amounts certified.

8.6 RETAINAGE

8.6.1 After receipt from Project Representative of the Certificate for Payment, Owner shall make payment to Contractor within thirty (30) days. Owner shall have the option to retain up to 10% of the full amount of the Certificate for Payment plus lump sum amounts for material and equipment not properly stored, or subject to damage prior to use. Amounts retained by Owner may be held by Owner until project completion. If the project involves grant money or the City has entered into a written contract with the state to provide state funds, payment will be made in accordance with AS 36.90.200-270.

8.6.2 Owner may withhold additional sums of money from progress payments in an amount sufficient to safeguard and protect Owner against any apparently meritorious claims against Contractor by any party other than Owner, and for any work which Owner ascertains to be defective or not meeting the requirements of the contract documents.

8.7 CONDITIONS OF PAYMENT

- 8.7.1 Project Representative may refuse to approve all or any part of any request for progress payment if, in Project Representative's opinion, it would be incorrect to make the representation to Owner set out in ARTICLE 8. Project Representative may also refuse to approve all or any part of any request for progress payment, if subsequently discovered evidence or the results of subsequent inspections or tests nullify any payment previously approved.
- 8.7.2 Owner may withhold payment to the extent necessary to protect Owner from loss resulting from:
 - Defective or damaged work;
 - B. Claims or liens which have been filed or may be reasonably expected;
 - C. Contract price reduction by modifications or change orders;
 - D. Owner cost to correct or complete defective work;
 - E. Unsatisfactory prosecution of the work by Contractor, including but not limited to failure to furnish adequate submittals or to clean up the work or site;
 - F. Reasonable evidence that the work cannot be completed for the unpaid balance of the contract sum;
 - G. Failure of Contractor to make payment properly due to subcontractors, employees, suppliers or utilities:
 - H. Reasonable evidence to believe the work cannot be completed within the contract time.
 - I. Damage to Owner's property not replaced or repaired in timely manner.

When the grounds for withholding payment are removed, payment shall be made for amounts withheld.

8.7.3 Neither the issuance of a Certificate of Payment, nor the making of any progress payment, nor the partial or entire use of the project by Owner shall constitute an acceptance of any work not in accordance with the contract documents nor shall it constitute a waiver of any right accruing to Owner or of any duty of Contractor.

8.8 SUBSTANTIAL COMPLETION

- 8.8.1 Substantial Completion is defined as the state of construction at which the work is sufficiently complete and in accordance with the contract documents, so that Owner could occupy and utilize the work or a specific portion of it, for its intended use.
- 8.8.2 When Contractor considers the work substantially complete Contractor shall notify Project Representative in writing and request a Substantial Completion inspection. The request shall be made a minimum of three business days in advance. The notice shall include a comprehensive list of items to be completed, reasons they are not completed and a date of anticipated completion. The notice shall also include copies of all code compliance inspections, the Certificate of Occupancy, if applicable, and any other documents required by the contract.
- 8.8.3 Project Representative shall schedule the Substantial Completion inspection and notify Contractor. The inspection will be performed by Project Representative, Architect, Design Engineers, and Owner personnel in the presence of Contractor. Should this inspection find the work not substantially complete, Owner may terminate the inspection and promptly notify Contractor in writing of the conditions for reinspection. Any deficiencies identified by this inspection will be listed and promptly furnished to Contractor for remedial action.
- 8.8.4 If Contractor has requested that Project Representative and Owner make an inspection to ascertain Substantial Completion, and if the work is not then substantially complete, Contractor shall be liable for all costs Owner, Architect, and Project Representative have incurred in making the inspection.

- 8.8.5 If it is determined on the basis of inspection that the work is substantially complete, Project Representative will issue a Certificate of Substantial Completion. Included in the certificate shall be a list of items which must be completed or corrected before final payment and the time within which such items shall be complete and corrected. Failure to include an item on this list does not alter the responsibility of Contractor to complete all work in accordance with contract requirements.
- 8.8.6 Certificate of Substantial Completion shall state the date of Substantial Completion and the respective responsibilities of Owner and Contractor for the maintenance, insurance and security of the work. Certificate of Substantial Completion shall specifically authorize Owner to take possession of the premises and utilize them for their intended purpose. Owner's beneficial occupancy of the premises shall make reasonable allowance for the performance of the work which Contractor must complete prior to final completion.
- 8.8.7 If Contractor fails to complete or correct work required by the Certificate of Substantial Completion within the time allowed, then the Certificate of Substantial Completion shall be voided and the contract time expended by Contractor shall be counted, and the acceptability of the work shall be inspected as if a Certificate of Substantial Completion had not been issued.
- 8.8.8 Upon Substantial Completion of the work and upon application by Contractor and certification by Project Representative, Owner shall make payment, reflecting adjustment in retainage, if any, for such work as provided in the contract documents.

8.9 FINAL COMPLETION AND WARRANTY PERIOD

- 8.9.1 The terms Final Completion and Warranty Period refer to, respectively, the finalization of the construction phase and a one-year warranty period following the Substantial Completion. Final Completion shall be represented by a lump sum dollar amount identified on the schedule of values. Final Payment represents a sum of money to perform all tasks necessary from Substantial Completion to Final Completion, including completion of final punch list, completion of as-built data, turnover of all warranty information, notarized acknowledgments of payments, and relinquishment of claims against Owner.
- 8.9.2 When Contractor considers the work ready for Final Completion, Contractor shall forward to Project Representative an application for final payment including (1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the work have been paid or otherwise satisfied, (2) consent of surety, if any, to payment, (3) irrevocable, notarized proof of payment and relinquishment of claim against Owner, issued by every subcontractor (whether or not in privity with Contractor), material supplier and other party who might assert a claim against Owner, and (4) all other documentation required by the contract documents. Project Representative and Owner shall promptly inspect the work to see that it is fully performed and complete, that all portions of the work are acceptable and that the contract is fully performed aside from completion of the Warranty Period. After Project Representative has made a determination that these requirements have been met, Project Representative shall prepare and recommend that Owner issue a Certificate of Final Completion and Final Payment.
- 8.9.3 Project Representative's approval of Final Payment constitutes an additional representation by Project Representative to Owner that to the best of Project Representative's knowledge and information, all conditions which Contractor must fulfill prior to being entitled to Final Payment have in fact been fulfilled in accordance with the contract documents.
- 8.9.4 If any party refuses to relinquish its claim, or if Owner considers that any item or portion of the work: (1) is of doubtful acceptability under the contract documents; or (2) may diminish the value of the work; or (3) may prove to be ultimately unreliable; or (4) may prove to be less functional than required by the intent of the contract, then Owner, in lieu of refusing Final Payment to Contractor, may allow Contractor to furnish a bond in a form and in an amount satisfactory to indemnify Owner against losses occasioned thereby. If any additional costs to settle the claim or to correct work of doubtful quality accrue to Owner in excess of the indemnity available to Owner, Contractor shall refund to Owner all differences and costs which Owner might be compelled to pay, including all litigation costs and reasonable attorney fees.
- 8.9.5 Acceptance of final payment by Contractor constitutes an explicit waiver of all claims which Contractor might assert against Owner except those previously made in writing and identified by Contractor as unsettled at the time of the Application for Final Payment.

- 8.9.6 Final Payment to Contractor shall constitute a waiver of all claims which Owner might assert except those arising from: (1) unsettled claims; (2) faulty or defective work (3) failure of the work to comply with the requirements of the contract documents; (4) warranties required by this contract or that by their terms do not expire upon completion of the contract.
- 8.9.7 If, after Substantial Completion, Warranty Completion is delayed through no fault of Contractor, or by the issuance of change orders affecting Final Completion, Owner may, upon recommendation of the Project Representative, extend the contract time by a reasonable period and accept certified applications for further Progress Payments.
- 8.9.8 Upon completion of all requirements identified in ARTICLE 8 as "Final" the funds representing Final Payment shall be released to Contractor along with the Certificate of Final Completion. Upon issuance of Certificate of Final Completion all contract sums shall be accounted for to Contractor and shall be paid to Contractor. However, any and all applicable bonds shall not be released until after the Warranty Period.

8.10 TIME AND LIQUIDATED DAMAGES

- 8.10.1 The time permitted for construction of the work will run from issuance of Notice to Proceed through the dates for Substantial Completion as specified in Agreement between Owner and Contractor, unless a specific completion date is specified.
- 8.10.2 The term "day" as used in this contract shall mean "calendar day" unless specifically stated otherwise.
- 8.10.3 All warranty periods and obligations accruing to Contractor through completion of the work shall be considered to begin on the date of Substantial Completion, unless otherwise agreed to separately in writing by Owner and Contractor.
- 8.10.4 Contractor shall begin the work as soon as possible after the date identified in Notice to Proceed and shall prosecute the work expeditiously and with adequate labor and materials.
- 8.10.5 Liquidated damages will be applied in the amount set out in the Agreement.
- 8.10.6 Claims for extension of time will be considered only if they affect "critical path" items specifically identified in the detailed progress schedule or in any applicable Supplementary Conditions. Claims for extension of the contract time must be made in writing to Owner not more than twenty (20) days after the reason for requested extension appears.

ARTICLE 9 CHANGES IN THE WORK, CONTRACT PRICE, AND TIME

9.1 CHANGE ORDERS

- 9.1.1 Without invalidating this contract, Owner may, at any time, order additions, deletions, or revisions in the work. All such changes must be authorized by written change order. Upon receipt of a change order, Contractor shall proceed with the work in accordance with applicable requirements of the contract documents. If any change order entails an increase or decrease in the contract price or an extension or curtailment of the contract time, adjustment will be made as provided herein.
- 9.1.2 Extra work will be paid for either at a fixed price specified in the change order (using unit prices or a lump sum amount) or on a time and materials basis.
- 9.1.3 Project Representative may authorize minor changes, alterations or deviations in the work in accordance with ARTICLE 2. These changes shall be authorized by written Field Order to be included in a subsequent Change Order.
- 9.1.4 Any additional work performed by Contractor without a properly executed change order will not entitle Contractor to an increase in the contract amount or to an extension of the contract time, except in the case of emergency threatening life, safety or property.

9.2 ISSUANCE OF CHANGE ORDER

- 9.2.1 The contract sum constitutes the total compensation to Contractor for the work required by this contract. The contract price may be changed only by a properly executed change order. Any request for increase in the contract price shall be based upon written notice delivered to Project Representative within ten (10) days after the reason for the proposed increase appears. Change order proposals must be accompanied by all pertinent data and documentation, including a detailed estimate showing costs, quantities, unit prices and markups for overhead and profit.
- 9.2.2 Project Representative shall analyze Contractor's change order proposal and shall make a recommendation to Owner within a reasonable period of time. If Owner accepts the proposal, Project Representative shall prepare the change order for execution by Contractor and Owner.
- 9.2.3 The value of any work added or deleted by change order shall be determined by one of the following methods:
 - A. Application of unit prices set forth in the bid: unit prices shall include all direct and indirect costs of the work, including labor, equipment (whether owned or rented), materials, home office expense, all overhead and profit.
 - B. Application of mutually accepted unit prices for work not covered by bid unit prices: unit prices shall include all direct and indirect costs of the work, including labor, equipment (whether owned or rented), materials, home office expense, all overhead and profit.
 - C. Mutual acceptance of a lump sum: Contractor's lump sum proposal must include an itemized breakdown of all costs of Contractor, subcontractors and suppliers. Breakdowns shall show quantities and prices of labor, materials, equipment and other direct costs. To direct costs shall be added the allowable combined overhead and profit as provided in ARTICLE 9.4.
 - D. At Owner's option, Contractor may be directed to proceed with additional work on a "time and materials" basis which may also stipulate a maximum "not to exceed" amount. Contractor will be required to maintain and submit detailed records showing all quantities and prices of labor, materials, equipment and other direct costs. To direct costs shall be added the allowable combined overhead and profit as provided in ARTICLE 9.4.
- 9.2.4 When both additions and credits for related work or substitutions are involved in any one change, the allowance for overhead and profit shall be based on the net change. All related items within a proposal shall be considered as a single item for purposes of computing overhead and profit.
- 9.2.5 When Contractor is directed to proceed on a time and materials basis, costs of the work shall be submitted daily for approval by Project Representative and may only include:
 - Actual payroll costs for employees, as substantiated by certified payroll, in the direct employ of Contractor for the times actually utilized in prosecution of the additional work, including allowance for benefits which Contractor customarily provides its employees;
 - B. The actual substantiated cost to Contractor for all material and equipment incorporated into the work, including transportation and storage expenses;
 - C. The actual substantiated amounts of payments by Contractor to subcontractors for work performed by the subcontractors;
 - D. Any costs of special consultants to the extent authorized by Owner:
 - E. Substantiated equipment rental costs at reasonable market rates;
 - F. Additional supervision and travel costs reasonably related to the work performed;
 - G. Increased bond premiums:
 - H. Additional license fees, permits, or applicable taxes;

I. Minor incidental expenses such as telegrams and long distance telephone charges.

To these direct costs shall be added the allowable combined overhead and profit as provided in ARTICLE 9.4.

- 9.2.6 Unless specifically agreed to by Owner in writing, the cost of additional work shall not include any portion of Contractor's general overhead, nor any sum attributable to Contractor's prosecution and supervision of the principal work at the site, nor any overtime expense, unless specifically agreed to by Owner in writing. Contractor shall not be compensated for any casualty or other losses or expenses attributable to negligence of Contractor or any person in its employ or any subcontractor or supplier.
- 9.2.7 Payment to Contractor shall be made only for the actual quantities of work performed and accepted or materials furnished, in conformance with the contract or applicable change order. When the accepted quantities of work or materials vary from the quantities stated in the bid schedule, Contractor shall accept as payment in full, payment at the original contract unit prices for the quantities of work and materials furnished, completed and accepted; except as provided in the contract documents.

9.3 UNIT PRICES

- 9.3.1 When unit prices are used, and where the final quantity of a major contract item varies more than 25% above or below the bid quantity, either party to the contract may request an equitable adjustment in the contract unit price of that item. A major contract item is an item equal to 10% or more of the total contract.
- 9.3.2 When the final quantity of work is less than 75% of the bid quantity, the equitable adjustment shall be made for those units of work done and accepted, except that the total payment for the item shall not exceed 75% of the total amount bid for the item.
- 9.3.3 To determine unit prices for authorized changes or additions in the work that alter the quantity of work under a lump sum pay item, adjustment to the pay item will be determined by multiplying the added or deleted quantity by the quotient of the contract lump sum price and the estimated quantity shown on the original plans. Payment will be made under a new contract item established for that purpose. Adjustments will be made as a change order to the contract.
- 9.3.4 No allowance shall be made for any increased expenses, loss of expected reimbursement or loss of anticipated profits suffered or claimed, either directly from such alterations in quantities or indirectly from unbalanced allocations among the contract items by Contractor, or any other causes.

9.4 ALLOWABLE OVERHEAD AND PROFIT

- 9.4.1 When the value of change order work is determined by the lump sum method or by the time and materials method, the following definitions and percentages shall apply.
- 9.4.2 Direct costs are defined as the net cost to Contractor to accomplish a given change. Costs of bonds and insurance associated with the change shall be applied after addition of indirect costs.
- 9.4.3 Indirect costs are defined as general operational charges relating to the accomplishment of a given change, including but not limited to small tools, incidental job burdens and general office expense.
- 9.4.4 Overhead and Profit: Allowances for all indirect costs shall be identified as combined overhead and profit and shall not exceed the percentages in the following schedule:

A. Additive work:

- (1) Prime Contractor:
 - (a) 15% of the direct costs of own work in excess of \$1,000.00; 20% when the total value of own work is equal to or less than \$1,000.00.
 - (b) 8% of the direct costs of work performed by subcontractors not including subcontractor's overhead and profit.
 - (c) 8% of the direct costs of equipment.
- (2) Subcontractors: percentages represented in subsections (a) and (b) are a maximum percentage

- allowed regardless of the tier or number of subcontractor(s) performing the work:
- (a) 15% total of the work performed by subcontractors in excess of \$1,000.00; 20% total of the work performed by subcontractor equal to or less than \$1,000.00.
- (b) 8% of the direct costs of equipment.
- (3) In no case shall overhead and profit exceed 23% of the direct costs of work or 16% of the direct costs of equipment when the cost of the work exceeds \$1,000.00. In no case shall overhead and profit exceed 28% of the direct costs of work or 16% of the direct costs of equipment when the cost of the work is equal to or less than \$1,000.00.

B. Deductive work:

(1) Prime Contractor: 4% of the direct cost of deleted own work.

9.5 CONCEALED CONDITIONS

- 9.5.1 This ARTICLE applies only when concealed conditions substantially at variance with the conditions set forth in the contract documents are encountered and these conditions were not foreseeable by Contractor or reasonably inferable from information provided by Architect or Owner in the bidding documents.
- 9.5.2 If it is determined the Contractor could not predict the concealed conditions as set forth under ARTICLE 9.5.1, Owner may issue a change order for the performance of additional work required with an equitable adjustment in the contract sum. Contractor shall not begin work upon any concealed condition until Owner has approved a written change order

ARTICLE 10 TESTING AND CORRECTION OF WORK

10.1 TESTS AND INSPECTIONS

- 10.1.1 Contractor shall be responsible for securing permits and approvals from entities having jurisdiction over the work. Contractor will provide any special testing or inspections required by the contract documents. Contractor shall notify Owner 48 hours prior to performing testing. Contractor shall not cover work that requires testing, inspection or approval until such testing, inspection, or approval has been completed. Owner reserves the right to approve the testing agency.
- 10.1.2 Neither observation by Owner nor inspections, tests, or approvals by Owner or Owner's testing agency shall relieve Contractor from Contractor's obligation to perform the work in accordance with the contract documents.

10.2 UNCOVERING OF WORK

- 10.2.1 If any work is covered or buried contrary to contract requirements or Owner's written request, such work shall be uncovered at Owner's request for inspections, tests or approvals. Uncovering and recovering shall be at Contractor's expense, unless Contractor has given notice of intent to cover the work and Owner has not acted with reasonable promptness to provide any necessary tests, inspections or approvals.
- 10.2.2 If any work has been covered which Owner has not specifically requested to observe prior to covering, or if Owner considers it necessary or advisable that covered work be inspected or tested by others, then Contractor shall, at Owner's request, uncover, expose or otherwise make available for observation, inspection, or testing, that portion of the work as Owner may require. Contractor shall furnish all necessary labor, materials and equipment. If such work is found to be defective, Contractor shall bear all expenses, including compensation for any additional professional services and testing. If, however, the uncovered work is found not to be defective, Contractor shall be allowed an equitable adjustment in the contract price or the contract time. Only Contractor's direct costs attributable to the uncovering of work and its recovering shall be allowed.

10.3 DEFECTIVE WORK

- 10.3.1 All work not meeting the requirements of the contract documents shall be considered defective.
- 10.3.2 Contractor shall promptly correct or replace any defective work. Any and all costs associated with correction or replacement shall be borne by Contractor. Contractor shall also bear the expense of making good all

- work of others destroyed or damaged or required to be redone because of the correction or replacement of defective work.
- 10.3.3 If, after seven (7) days written notice to Contractor, Contractor fails to correct deficiencies or to provide Owner with an approved schedule for correcting defective work, Owner may, without prejudice to any other remedy it may have, make good deficiencies and deduct the cost thereof from the payment then or thereafter due Contractor. No extensions of time shall be allowed for correction of work that is defective.

ARTICLE 11 WARRANTIES

- 11.1 Contractor unconditionally warrants for a period of one year from issuance of the Certificate of Substantial Completion the usability and quality of all work, labor and materials incorporated into the project, unless otherwise provided in the contract documents. After the approval of Final Payment and prior to the expiration of one year after the date of Final Completion, any work found to be defective shall be remedied promptly by Contractor within fourteen (14) days of written notice without cost to Owner and in accordance with Owner's written instructions. Contractor shall either correct such defective work, or, if it has been rejected by Owner, remove it from the site and replace it with acceptable work. If Contractor does not promptly comply with the terms of Owner's instructions, Owner may have the defective work corrected or the rejected work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, shall be deducted from Warranty Period Payment, unless the surety elects to remedy deficiency.
- 11.2 In addition to other warranties set forth in this contract and in accordance with requirements stated in the contract documents, Contractor shall obtain and transmit to Architect all warranties on material and equipment incorporated into the work and either provided by the supplier or otherwise required by the contract documents. Transmittal of warranties to Owner shall be a prerequisite of the Certificate of Final Completion.
- 11.3 All material and equipment installed by Contractor shall have a manufacturer's warranty for a period of one year, except as otherwise provided by the contract documents. The period of warranty shall begin on the date of Substantial Completion unless otherwise noted on the Certificate of Substantial Completion. This article does not limit any manufacturer's warranty which extends for a period of time longer than that specified as minimum in the contract documents.
- 11.4 If a warranty period in excess of one year on a particular item or part of the work is required by the contract documents, the longer warranty period shall govern warranty obligations of Contractor.
- 11.5 Owner may accept defective work or materials found during the warranty period instead of requiring correction or removal and replacement. If acceptance occurs prior to approval of final payment, a change order shall be issued to reduce the contract price. If acceptance occurs after approval of final payment, an appropriate amount shall be paid by Contractor to Owner.
- 11.6 The provisions of this ARTICLE shall not be construed as limiting the right of Owner to make a claim against Contractor for work not constructed in accordance with the contract documents. Where a defect attributable to Contractor's or subcontractor's materials or workmanship appears after expiration of the one-year warranty period, Owner shall notify Contractor of the appearance of damages due to defective work or materials and shall offer Contractor the right to replace or repair all defective work and other work using Contractor's forces. If Contractor fails to correct the work and any consequentially damaged work within a reasonable time, or if Contractor refuses to correct the work, Owner may correct the work utilizing Owner's own forces. Contractor shall pay Owner all costs attributable to correction of the defective work and any consequential damages occasioned by the defective work.
- 11.7 Should Owner and Contractor agree to delay completion of any items, the one-year warranty period for those items shall commence upon written acceptance of each item by Owner.

ARTICLE 12 CLAIMS AND LITIGATION

12.1 This contract shall be governed by the laws of the State of Alaska, and any lawsuit brought thereon shall be filed in the Third Judicial District at Kenai, Alaska.

- 12.2 No controversy or claim arising out of this contract shall be subject to binding arbitration unless both Owner and Contractor agree in writing to submit the question to arbitration at the time when the controversy arises.
- 12.3 All claims, disputes and other matters in question between Contractor and Owner relating to the execution or progress of the work shall be referred initially to Project Representative, who shall render a recommendation in writing to Owner within a reasonable time.
- During pendency of any claim arising out of this contract, Contractor shall carry on the work and maintain the Progress Schedule approved by Owner unless otherwise agreed by Contractor and Owner in writing. Should Contractor cease work, Contractor shall be in breach of this contract and Owner shall have the right to terminate the contract and to prosecute the work to completion with Owner's own forces or with a replacement Contractor. Contractor shall be responsible for any increase in costs to Owner above the contract price.
- 12.5 Contractor may make claims for additional costs only if the additional cost involved has occurred because of:
 - A. A change order issued by Owner, where the additional sum due Contractor set forth in the change order is in dispute.
 - B. An order by Owner to stop the work where Contractor was not at fault.
 - C. Concealed conditions as set out in ARTICLE 9.
 - D. Failure of payment by Owner pursuant to ARTICLE 3.
 - E. Additional costs or delays caused by separate contractors' or Owner's forces in accordance with ARTICLE 6.
- 12.6 Contractor shall not make a claim for additional costs where the basis of the claim lies in an oversight or mistake made by Contractor during the bidding process or by reason of negligent acts or omissions of Contractor or any mistake in judgment or improper selection of construction means, methods, sequences and materials during the course of construction.
- 12.7 If Contractor is entitled to make claim for an increase in the contract sum, Contractor shall deliver to Owner written notice of Contractor's intention to assert each claim within twenty (20) days after occurrence of each event giving rise to the claim. Contractor must give this notice of claim and specify the full extent and nature of the claim(s) to Owner before proceeding to execute the work upon which a claim might be asserted. No claim for additional costs or compensation shall be valid unless the prior twenty (20) day notice has been given. Adherence to this provision shall be strict. Any adjustment in the contract sum resulting from settlement of claims shall be authorized by change order.

ARTICLE 13 TERMINATION OF THE CONTRACT OR SUSPENSION OF THE WORK

13.1 TERMINATION BY OWNER

- 13.1.1 Owner shall have the right to terminate the contract if Contractor should file for bankruptcy, reorganization, otherwise be declared insolvent, or if Contractor makes a general assignment for the benefit of creditors. Exercise of these rights, where required by law, is contingent upon relief from the automatic stay provisions of the United States Bankruptcy Court or through other appropriate court order. This right of termination is in addition to the right of Owner to terminate for cause outlined below and other rights of termination as stated in the contract documents.
- 13.1.2 Termination for cause: If Contractor: (1) repeatedly refuses or fails to supply enough proper skilled workmen; or (2) fails to pay promptly all subcontractors, suppliers, or other parties as set out in the contract documents; or (3) fails to adhere in all respects to the provisions of Title 8, Chapter 30, of the Alaska Administrative Code and Title 36 of the Alaska Statutes as applicable to this contract and all other pertinent statutes, ordinances or regulations or orders of any local, state, or federal authority concerning payment; or (4) allows insurance to lapse; or (5) if after seven (7) days written notice, without prejudice to any other remedy of Owner, Contractor fails to correct to Owner's satisfaction deficiencies in work that does not conform to the contract documents; or (6) allows a situation that creates a danger to person or property to arise. Where an emergency situation creating a danger to person or property arises, Owner may at its option terminate the contract and take possession of the site and any of Contractor's equipment and material necessary to complete an emergency response or hire a separate contractor to complete the

emergency response. Contractor shall be paid the contract rate for the material used and shall be paid for the use of Contractor's equipment at the price shown in the contract documents or at the rate for such equipment listed in <u>RENTAL RATE BLUE BOOK FOR CONSTRUCTION EQUIPMENT</u>, published by Machinery Information Division of K-III Directory Corporation, 1735 Technology Drive, Suite 410, San Jose, California 95110. If the rate for such equipment is not so listed, reliable sources will be used to determine a reasonable rate.

- 13.1.3 In the event of termination for cause, Owner shall have the right of set-off, from any payment due Contractor, of all expenses, costs, and damages including but not limited to all professional and legal expenses and attorneys' fees and costs or other additional expenditures necessary to complete the projects that are occasioned by the termination. In the event such amounts exceed the amount of payment withheld, Contractor shall be liable to Owner for such amounts. No payment shall be made to Contractor prior to determination that a balance is due Contractor after the amount of set-off is determined.
- 13.1.4 Owner may terminate this contract at any time for the convenience of Owner for any reason deemed by Owner to be in the best interest of Owner.
- 13.1.5 If this contract is terminated for convenience, Contractor will be directed to make all necessary preparations for closing out the project and for safeguarding Owner's materials and the work already completed. Contractor will be paid for all conforming work done to date and for all materials delivered to the site and already paid for by Contractor, together with all reasonable costs directly attributed to termination, including fixed overhead. Contractor shall be responsible for minimizing the extent of such expenses and shall not be paid for expenses which could have been reasonably avoided. On the date that notice of termination or suspension for convenience is issued, Contractor shall immediately take all actions necessary to stop orders of material, rental of equipment or premises, employment of persons on the project, and shipment of materials not yet delivered to the site. The notice of termination or suspension for convenience shall specify a date by which all steps necessary for termination shall be completed and by which Contractor shall have removed any unused material and all Contractor's equipment and forces. Contractor shall leave the premises in a clean and safe condition on or prior to the date specified in the notice. Owner shall certify that all termination procedures have been completed and that the premises have been turned over to the possession of Owner. Within fifteen (15) days after that certification by Owner, Contractor shall render to Owner a bill for all expenses incurred in termination and for all work done subsequent to the last progress payment. Owner shall pay Contractor all sums properly due, together with any retainage not necessary to cover apparently nonconforming work or other changes, within fifteen (15) working days after the bill has been received by Owner, provided that Owner has received releases for all liens.
- 13.1.6 If Contractor is terminated for cause or default on this contract, the performance bond surety shall commence performance within fourteen (14) days of the termination or default. If the surety does not arrange for or commence performance by that date, Owner shall have the option to complete or arrange for performance and the surety shall not be relieved of any responsibility for payment of costs of performance.
- 13.1.7 Should Owner elect to terminate Contractor's services prior to final completion of the work, such termination shall not affect any rights Owner might assert against Contractor at time of termination or thereafter. Any retention or payment of monies by Owner to Contractor shall not release Contractor from that liability.

13.2 SUSPENSION OF THE WORK

13.2.1 Owner may, at any time and for any reason, suspend the work or any portion of it for a period not to exceed ninety (90) days, by written notice delivered to Contractor thirty (30) days prior to the date fixed for suspension. The notice of suspension shall fix the date on which the work is to be resumed and Contractor shall resume the work on the date so fixed. Equitable adjustment in the contract price, the contract time, or both shall be made for cost or delay directly attributable to suspension of the work.

13.3 TERMINATION BY CONTRACTOR

13.3.1 If through no act or fault of Contractor, Owner orders a suspension of work for a period of more than ninety (90) days, Contractor may, upon thirty (30) days written notice to Owner, terminate this contract and recover from Owner payment for work accepted to date plus purported overhead and profit in the manner provided in ARTICLE 9.4. Contractor shall also have the right to terminate this contract if Owner fails within forty-

five (45) days to pay amounts properly due Contractor for satisfactorily accomplished work, so certified by Project Representative, as due and payable. The provisions of this section do not include amounts ordinarily retained from Contractor's Application for Payment or amounts retained because of unsatisfactory, defective, or incomplete work, or for any other reason provided in the contract documents.

ARTICLE 14 MISCELLANEOUS PROVISIONS

- 14.1 Whenever any provision of the contract documents requires written notice, such notice shall be deemed to have been given and binding when given by certified mail to the respective party at the address provided in the Legal Notice provision of the agreement section of the contract documents.
- 14.2 Neither party may assign this contract without the written consent of the other party and Contractor may not delegate duties under this contract other than as provided in the contract documents without the prior written consent of Owner.
- In the event a provision of the contract documents is found to be unenforceable or void for any reason, it shall be considered as severed from the contract documents, and the remaining portions of the contract documents shall stand as if that provision had never been included in the contract documents. In the event the unenforceable or void provision is legally essential to the continuing existence of the contract, the parties shall attempt to substitute a reasonable replacement provision.
- 14.4 No general condition stated in these provisions or other provision in the contract documents lessens, alters, or makes inapplicable the requirement for indemnification stated in ARTICLE 4.13. In the event of conflict between any contract provisions, the requirements set out in ARTICLE 4.13 control.

END GENERAL CONDITIONS

PERFORMANCE BOND

(Name o	of Contractor)
(Address	of Contractor)
a(Corporation, Partnership, or Individual)	, hereinafter called Principal, and
(Name	e of Surety)
(Addres	ss of Surety)
hereinafter called Surety, are held and firmly bound un	nto
(Name	e of Owner)
(Addres	ss of Owner)
(\$) in lawful money of the	Dollars, e United States, for the payment of which sum well and truly administrators and successors, jointly and severally, firmly
	at whereas, the Principal entered into a certain contract with 202_, a copy of which is hereto attached and made a part
2022 Visitors Center Roof Replacement	

NOW, THEREFORE, if the Principal shall well, 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 he 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 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 ways affects 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 Contractor shall abridge the right of any beneficiary hereunder, who claims may be unsatisfied.

		executed in three (3) counterparts, each o	one of which shall be deemed
an original, this	the day of	, 202	
		(Principal)	(SEAL)
		(Fillicipal)	(SEAL)
		(Principal Secretary)	
ATTEST:			
ATTEST.		BY	
(Witness as to	Princinal)	(Address)	
(Withest do to	Πιοιραί	(/1001000)	
(Addross)			
(Address)			
		.,	
		(Surety)	(SEAL)
ATTEST:		BY(Attorney-in-Fact)	
		(Attorney-in-Fact)	
			
(Witness as to	Surety)	(Address)	
(Address)			
NOTE: If Contr	ractor is Partnership, all partn	ers should execute bond.	
IMPORTANT:	Surety companies executing bond	ds must appear on the Treasury Department's insact business in the State where the project is loc	most current list (Circular 570 as
	amonucuj anu pe authonizeu to tid	moder pasiness in the state where the project is 100	balba.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that
(Name of Contractor)
(Address of Contractor)
a, hereinafter called Principal, and (Corporation, Partnership, or Individual)
(Name of Surety)
(Address of Surety) hereinafter called Surety, are held and firmly bound unto
(Name of Owner)
(Address of Owner)
hereinafter called Owner, in 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 CONDITIONS OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the Owner, dated the day of, 202_, a copy of which is hereto attached and made a part hereof for the construction of:
2022 Visitors Center Roof Replacement

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 said work, and all insurance premiums on said work, and for all labor, performed in such work whether by subcontractor or other-wise, 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 ways affects 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 Contractor shall abridge the right of any beneficiary hereunder, who claims may be unsatisfied.

IN WITNESS WHEREOF, this instrument is execu		ach one of which shall be deemed
an original, this the day of	, 202	
	(Principal)	(SEAL)
	(Principal Secretary)	
ATTEST:	BY	
(Witness as to Principal)	(Address)	
(Address)		
	(Surety)	(SEAL)
ATTEST:	BY(Attorney-in-Fa	act)
(Witness as to Surety)	(Address)	
(Address)		
NOTE: If Contractor is Partnership, all partners s	should execute bond.	
IMPORTANT: Surety companies executing bonds mu	ust appear on the Treasury Departme	ent's most current list (Circular 570 a

CONTRACTOR'S RELEASE AND AFFIDAVIT OF PAYMENTS OF DEBTS AND CLAIMS ("Release")

PROJECT NAME: 2022 Visitors Center Roof Replacement

The undersigned, being first duly sworn, deposes and says:
1. That pursuant to this contract for project
2. The Contractor further certifies he did not extend any loan, gratuity, or gift of money of any form whatsoever to any employee or agent of the City, that he did not rent or purchase any equipment or materials from any employee of the City, nor to the best of his knowledge, from any agent of any employee of the City, and that he has not made any promise to an employee o agent of the City to do or undertake any such action after completion of the subject contract.
3. Pursuant to the above-described contract and in consideration of the final payment in the amount of \$, the undersigned Contractor hereby releases and discharges the City of Kenai, its officers, agents and employees of and from any and all further claim, debt charge, demand, liability, or other obligation whatsoever under or arising from said contract whether known or unknown and whether or not ascertainable at the time of the execution of this instrument. This release is complete, final, binding and irrevocable.
4. The Contractor shall indemnify, defend, save and hold the City, its elected and appointed officers, agents and employees, harmless from any and all claims, demands, suits, or liability or any nature, kind or character including costs, expenses, and attorneys fees resulting from Contractor or Contractor's officers, agents, employees, partners, attorneys, suppliers, and subcontractors' performance or failure to perform this Agreement in any way whatsoever. This defense and indemnification responsibility includes claims alleging acts or omissions by the City or its agents which are said to have contributed to the losses, failure, violations, or damage However, Contractor shall not be responsible for any damages or claim arising from the sole negligence or willful misconduct of the City, its agents, or employees. Contractor and subcontractors shall also not be required to defend or indemnify the City for damage or loss that has been found to be attributed to an independent contractor directly responsible to the City undesenante written contract

CONTRACTOR'S RELEASE AND AFFIDAVIT OF PAYMENTS OF DEBTS AND CLAIMS ("Release")

If any portion of this Release is voided by law or court of competent jurisdiction, the remainder of this Release shall remain in full force and effect. IN WITNESS WHEREOF, this Release has been executed this __day of ______, 2022. (Contractor's signature) Title **ACKNOWLEDGMENT** STATE OF ALASKA SS THIRD JUDICIAL DISTRICT THIS IS TO CERTIFY that on this _____ day of _____, 2022, before the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared ______, who, having produced satisfactory evidence of identification, and having acknowledged the voluntary and authorized execution of the foregoing instrument for the purposes therein mentioned, executed the above and foregoing instrument. Notary Public for Alaska My Commission Expires: _____

(NOTE: In case of a corporation, the attached Certificate of Authority must be completed by a corporate officer other than the one who signs above.)



CONSENT OF SURETY COMPANY TO FINAL PAYMENT

PRO	JECT:	
CON	TRACT DATE:	·
CON	TRACTOR:	
TO:	CITY OF KENAI 210 Fidalgo Avenu Kenai, AK 99611 Attn: Public Works	e
		Surety (insert name and address of Surety),
	, and in th	d approve of the final payment to Contractor in the amount of e case of Surety, it is further agrees as follows: ent, Surety has made its own investigation to determine
whetl repre	ner said payment sho	uld be made to Contractor and Surety has not relied on any of Kenai or its employees or agents which has induced it to
2.	Surety agrees that t	his payment shall not relieve Surety of any of its obligations to

the City of Kenai as set forth in its Labor and Material Payment and Performance Bonds

and Surety waives any and all claims against Coto Contractor.	ity of Kenai for wrongful release of funds
IN WITNESS WHEREOF, said Surety Comparation, 20	ny has set its hand this day of
	(Surety)
	(Signature of authorized representative)
	(Printed name and title)
ACKNOWI	LEDGMENT
STATE OF	
	day of, 20
(Surety), being personally known to me or identification, appeared before me and acknowled of the foregoing instrument.	having produced satisfactory evidence of
	Notary Public for
	My Commission Expires:

NOTE TO SURETY: ATTACH PROOF OF POWER OF ATTORNEY OR OTHER DOCUMENTATION DEMOSTRATING SIGNATORY MAY BIND SURETY.

SAMPLE

Alaska Department of Commerce, Community, and Economic Development P.O. Box 110806, Juneau, Alaska 99811-0806

ALASKA BUSINESS LICENSE

The licensee named below holds Alaska Business License Number Covering the period of: through Line of Business:
COMPANY NAME ADDRESS

This license shall not be taken as permission to do business in the state without having complied with The other requirements of the laws of the State of Alaska or of the United States.

Owner: NAME OF OWNER

Alaska Department of Commerce, Community, and Economic Development Commissioner:

This license must be posted in a conspicuous place at the business location. It is not transferable or assignable.

		SAMPLE
No Effective: Expires:	STATE OF ALASKA DEPARTMENT OF COMMERCE, COMMUNITY & ECONOMIC DEVELOPMENT Division of Occupational Licensing	
	Division of Occupational Licensing	
	Certifies that	
	COMPANY NAME	
	Is a Registered	
	Specialty Commissioner: _	



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(les) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy certain policies may require an endorsement. A statement on this certificate does not confer rights to the

PRODUCER		CONTACT NAME:					
		PHONE (A/C, No. Ext):	FAX (A/C, No):	ic			
		E-MAIL ADDRESS:					
		INSURER(S) AFFORDING COVERAGE					
		INSURER A					
INSURED		INSURER B:					
		INSURER C:					
		INSURER D :					
		INSURER E :					
		INSURER F:					
COVERAGES	CERTIFICATE NUMBER:		REVISION NUMBER:				
INDICATED, NOTWITH	HAT THE POLICIES OF INSURANCE LISTED BELOW STANDING ANY REQUIREMENT, TERM OR CONDITI ISSUED OR MAY PERTAIN, THE INSURANCE AFFO	ON OF ANY CONTRACT OR OTHE	ER DOCUMENT WITH RESPECT TO	WHICH THIS			

EXCLUSIONS AND CONDITIONS OF SUCH POLICIES, LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSF	TYPE OF INSURANCE	ADD	SUBR		POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s	
(GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY							EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	1,000,000
A	SHAME MADE K OCCUR	х	Х	7				MED EXP (Any one person)	\$	5,000
			+-					PERSONAL & ADV INJURY	\$	1,000,000
								GENERAL AGGREGATE	\$	2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:							PRODUCTS - COMP/OP AGG	\$	2,000,000
	X POLICY PRO-								5	
	AUTOMOBILE LIABILITY							COMBINED SINGLE LIMIT (Ea accident)	\$	1,000,000
A	X ANY AUTO		-					BODILY INJURY (Per person)	\$	<u> </u>
12	ALL OWNED SCHEDULED AUTOS	X	X				a a	BODILY INJURY (Per accident)	\$	
	HIRED AUTOS NON-OWNED AUTOS	-	-				PROPERTY DAMAGE (Per accident)	\$		
								Underinsured motorist	\$	1,000,000
	X UMBRELLA LIAB OCCUR							EACH OCCURRENCE	\$	
A	EXCESS LIAB CLAIMS-MADE							AGGREGATE	\$	4,000,000
	DED TRETENTIONS 10,000				1704-170 July 190 - 190 - 190 - 190 - 190 - 190 - 190 - 190 - 190 - 190 - 190 - 190 - 190 - 190 - 190 - 190 -				\$	
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			1000000				X WC STATU- OTH-		
	ANY PROPRIETOR PARTNER/EXECUTIVE	N/A						E.L. EACH ACCIDENT	\$	1,000,000
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	1	_			pa		E.L. DISEASE - EA EMPLOYEE	\$	1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below		X					E.L. DISEASE - POLICY LIMIT	\$	1,000,000

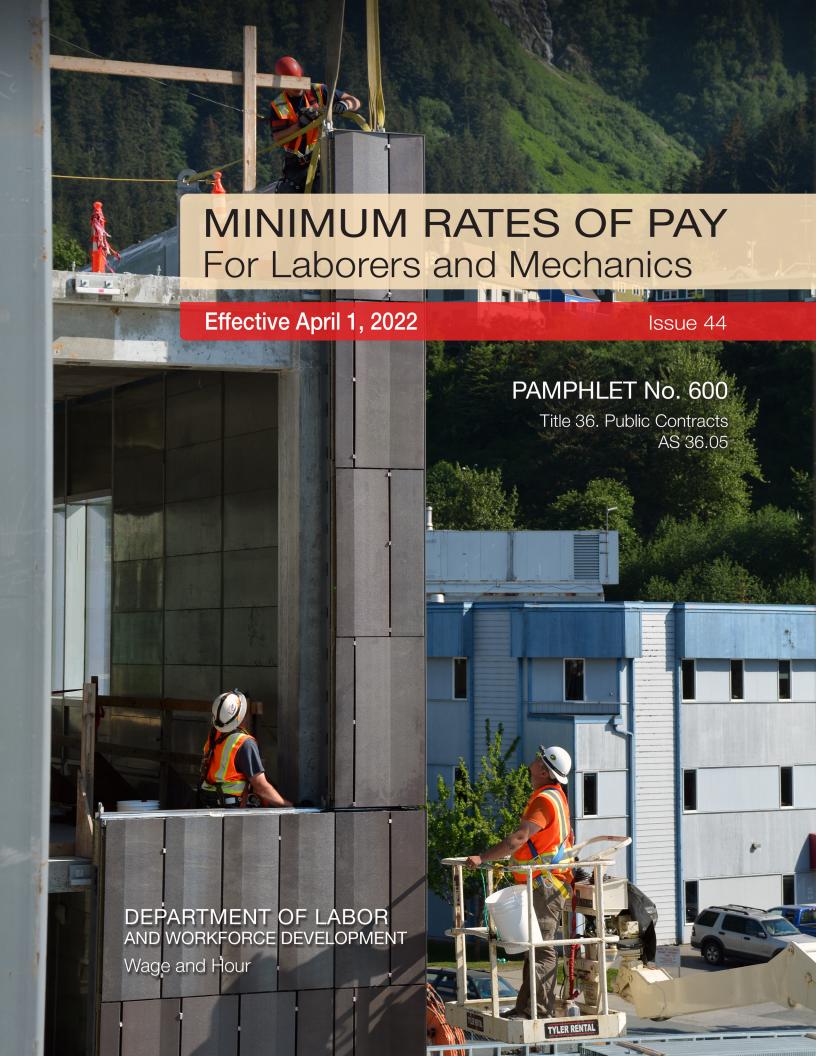
DESCRIPTION OF OPERATIONS (LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Re: PROJECT NAME

Certificate Holder is an Additional Insured on General Liability & Automobile policies, but only with respect to work done by or on behalf or the named insured for the project referenced. The Certificate Holder is granted Waiver of Subrogation on the General Liability, Automobile and Workers' Compensation policies as respects the referenced project

CERTIFICATE HOLDER	CANCELLATION
City of Kenai	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
210 Fidalgo Ave Kenai, AK 99611	AUTHORIZED REPRESENTATIVE

ACORD 25 (2010/05)







Department of Labor and Workforce Development

Office of the Commissioner

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

April 1, 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 April 1, 2022.

The prevailing wage rates contained in this pamphlet are applicable to public construction projects with a final bid date of April 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 <u>latest</u> wage rates issued by the department shall become effective for a subsequent 24-month period or until the original contract is completed, whichever occurs first. This process shall be repeated until the original contract is completed.

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

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

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

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

Sincerely,

Dr. Tamika L. Ledbetter

Commissioner

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Table of Contents

Excerpts	from	Alaska	Law
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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

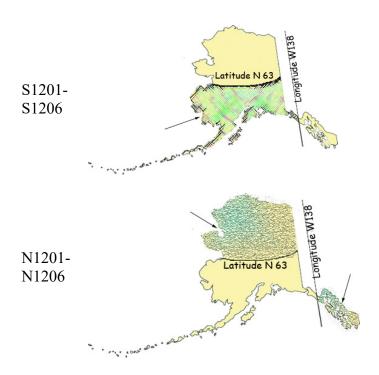
Notice: New regulations relating to board and lodging and per diem went into effect on November 25, 2018. The regulations provide a comprehensive set of requirements for the provision of board and lodging or per diem for workers on remote projects. Please refer to Alaska Administrative Code 8 AAC Chapter 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 1st, 2019, the minimum per diem rate is \$100.00 per day, or part thereof, the worker is employed on the project. In the event that a contractor provides lodging facilities, but no meals, the department will accept a payment of \$48 per day for meals to meet the per diem requirements.

LABORER CLASSIFICATION CLARIFICATION

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



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 <u>8 AAC 30.050(a)</u> of this section. Requests for special wage rate determinations must be in writing and filed with the Commissioner <u>at least 30 days before the award of the contract</u>. 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

Email: statewide.wagehour@alaska.gov

EMPLOYMENT PREFERENCE INFORMATION

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

http://law.alaska.gov/pdf/opinions/opinions 2019/19-005 AK-hire.pdf

Alaska Department of Labor and Workforce Development Labor Standards and Safety Division Wage and Hour

Web site: http://labor.state.ak.us/lss/pamp600.htm

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

<u>AS 36.05.090(b)</u> 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.

<u>Company Name</u> <u>Debarment Expires</u>

No companies are currently debarred.

Laborers' & Mechanics' Minimum Rates of Pay

Class Code Classification of Laborers & Mechanics	BHR H&W	PEN	TRN	Other I	Benefits	THR
Boilermakers						
*See per diem note on last page						
A0101 Boilermaker (journeyman)	46.97 8.57 1	18.08	1.90	VAC 4.25	SAF 0.34	80.11
Bricklayers & Blocklayers						
*See per diem note on last page						
A0201 Blocklayer	42.01 9.00 1	10.20	0.62	L&M 0.20		62.03
Bricklayer Marble or Stone Mason Refractory Worker (Firebrick, Plastic, Castable, and Gunite Refractory Applications) Terrazzo Worker Tile Setter						
A0202 Tuck Pointer Caulker	42.01 9.00 1	10.20	0.62	L&M 0.20		62.03
Cleaner (PCC) A0203 Marble & Tile Finisher	35.84 9.00	10.20	0.62	L&M 0.20		55.86
Terrazzo Finisher A0204 Torginal Applicator	35.84 9.00	10.20	0.62	L&M 0.20		55.86
Carpenters, Region I (North of 63 latitude)						
*See per diem note on last page						
N0301 Carpenter (journeyman)	42.34 10.08 1	15.23	1.75	L&M 0.20		69.80
Lather/Drywall/Acoustical						
Carpenters, Region II (South of N63 latitude) *See per diem note on last page						
S0301 Carpenter (journeyman)	42.34 10.08 1	15.77	1.75	L&M 0.20	SAF 0.20	70.34
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

Class Code	Classification of Laborers & Mechanics	BHR H&	W PEN	TRN	Other Ben	efits THR
<mark>Cemer</mark>	nt Masons					
k	See per diem note on last page					
		40.12.0.5	0 11 00	. 1 10	L&M	62.1 4
<u> 10401</u>	Group I, including:	40.13 8.7	0 11.80	1.43	0.10	62.16
	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					
		40.12.0.5	0 11 00	. 1 42	L&M	60.14
<u> 10402</u>	Group II, including:	40.13 8.7	0 11.80	1.43	0.10	62.16
	Form Setter					
					L&M	
10403	Group III, including:	40.13 8.7	0 11.80	1.43	0.10	62.16
	Concrete Saw Cutter Operator (All Control Joints and Self-powered)					
	Curb & Gutter Machine					
	Floor Grinder					
	Pneumatic Power Tools					
	Power Chipping & Bushing					
	Sand Blasting Architectural Finish					
	Screed & Rodding Machine Operator					
	Troweling Machine Operator (all concrete surfaces)					
					L&M	
10404	Group IV, including:	40.13 8.7	0 11.80	1.43	0.10	62.16
	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

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
<mark>Ceme</mark> i	nt Masons						
;	See per diem note on last page						
						L&M	
A0404	Group IV, including:	40.13 8	.70	11.80	1.43	0.10	62.16
	Preparing, scratching and browsing of all ceilings and walls, finished with terrazo or tile						
	Tunnel Worker						
<u>A0405</u>	Group V, including:	40.13 8	.70	11.80	1.43	L&M 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						
Culina	ary Workers						
	7.1. (2.1.					LEG	
A0501	Baker/Cook	28.37 7	.31	7.56			43.24
						LEG	
A0503	General Helper	25.07 7	.31	7.56			39.94
	Housekeeper						
	Janitor						
	Kitchen Helper						
						LEG	
A0504	Head Cook	28.97 7	.31	7.56			43.84
						LEG	
A0505	Head Housekeeper	25.45 7	.31	7.56			40.32
	Head Kitchen Help						
Dredg	emen						
_	See per diem note on last page						
	2 to P to a solid more on more page						

A0601 Assistant Engineer Craneman

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

68.71

L&M

0.10

0.05

42.76 11.05 13.75 1.00

Class Code	Classification of Laborers & Mechanics	BHR H&W PEN	TRN	Other I	Benefits	THR
Dredg						
k	See per diem note on last page					
<u>A0601</u>	Assistant Engineer	42.76 11.05 13.75	1.00	L&M 0.10	0.05	68.71
	Electrical Generator Operator (primary pump/power barge/dredge) Engineer Welder					
<u>A0602</u>	Assistant Mate (deckhand)	41.60 11.05 13.75	1.00	L&M 0.10	0.05	67.55
A0603	Fireman	42.04 11.05 13.75	1.00	L&M 0.10	0.05	67.99
<u>A0605</u>	Leverman Clamshell	45.29 11.05 13.75	1.00	L&M 0.10	0.05	71.24
<u>A0606</u>	Leverman Hydraulic	43.53 11.05 13.75	1.00	L&M 0.10	0.05	69.48
<u>A0607</u>	Mate & Boatman	42.76 11.05 13.75	1.00	L&M 0.10	0.05	68.71
<u>A0608</u>	Oiler (dredge)	42.04 11.05 13.75	1.00	L&M 0.10	0.05	67.99
Electri	icians 'See per diem note on last page					
	Inside Cable Splicer	42.77 14.23 13.92	0.95	L&M 0.20	LEG 0.15	72.22
<u>A0702</u>	Inside Journeyman Wireman, including:	42.44 14.23 14.16	0.95	L&M 0.20	LEG 0.15	72.13
	Technicians (including use of drones in electrical construction)					
A0703	Power Cable Splicer	63.04 14.23 19.08	0.95	L&M 0.25	LEG 0.15	97.70
<u>A0704</u>	Tele Com Cable Splicer	50.53 14.23 17.17	0.95	L&M 0.20	LEG 0.15	83.23
<u>A0705</u>	Power Journeyman Lineman, including:	61.29 14.23 19.03	0.95	L&M 0.25	LEG 0.15	95.90
	Power Equipment Operator Technician (including use of drones in electrical construction)					
<u>A0706</u>	Tele Com Journeyman Lineman, including:	48.78 14.23 17.11	0.95	L&M 0.20		81.42

Technician (including use of drones in telecommunications construction)

Tele Com Equipment Operator

Class Code	Classification of Laborers & Mechanics	BHR H&W PEN	TRN	Other I	Benefits TH	IR
Electri	See per diem note on last page					
A0707	Straight Line Installer - Repairman	48.78 14.23 17.1	1 0.95	L&M 0.20	LEG 0.15 81.4	.42
A0708	Powderman	59.29 14.23 18.9	7 0.95	L&M 0.25	LEG 0.15 93.8	.84
A0710	Material Handler	26.57 13.92 5.80	0.15	L&M 0.15	LEG 0.15 46.	.74
A0712	Tree Trimmer Groundman	29.12 14.23 13.33	5 0.15	L&M 0.15	LEG 0.15 57.	.15
A0713	Journeyman Tree Trimmer	38.05 14.23 13.63	2 0.15	L&M 0.15	LEG 0.15 66.3	.35
A0714	Vegetation Control Sprayer	41.60 14.23 13.73	3 0.15	L&M 0.15	LEG 0.15 70.0	.01
A0715	Inside Journeyman Communications CO/PBX	41.02 14.23 13.8	7 0.95	L&M 0.20	LEG 0.15 70.4	.42
	or Workers					
	See per diem note on last page			L&M	VAC	
A0802	Elevator Constructor	44.21 16.02 20.2	1 0.65	0.60	VAC 4.90 86.:	.59
A0803	Elevator Constructor Mechanic	63.16 16.02 20.2	1 0.65	L&M 0.60	VAC 7.01 107.	'.6 <u>5</u>
Heat &	k Frost Insulators/Asbestos Workers					
*	See per diem note on last page					
A0902	Asbestos Abatement-Mechanical Systems	39.50 9.24 11.12	2 1.20	IAF 0.14	LML 0.05 61.2	.25
A0903	Asbestos Abatement/General Demolition All Systems	39.50 9.24 11.12	2 1.20	IAF 0.14	LML 0.05 61.2	.25
A0904	Insulator, Group II	39.50 9.24 11.12	2 1.20	IAF 0.14	LML 0.05 61.2	.25
<u>A0905</u>	Fire Stop	39.50 9.24 11.12	2 1.20	IAF 0.14	LML 0.05 61.2	.25
IronW	Torkers Torkers					
	See per diem note on last page					
<u>A1101</u>	Ironworkers, including:	40.82 9.51 24.23	8 0.76	L&M 0.20	IAF 0.24 75.8	.81

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
	/orkers							
>	See per diem note on last page							
<u>A1101</u>	Ironworkers, including:	40.82	9.51	24.28	0.76	L&M 0.20	IAF 0.24	75.81
	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							
4 1 1 0 2	TI II	41.02	0.51	24.20	0.76	L&M		76.01
A1102	Helicopter	41.82	9.51	24.28	0.76	0.20	0.24	76.81
	Helicopter (used for rigging and setting)							
	Tower (energy producing windmill type towers to include nacelle and blades)							
A1103	Fence/Barrier Installer	37.32	9.51	24.28	0.76	L&M 0.20	IAF 0.24	72.31
						L&M	IAF	
A1104	Guard Rail Layout Man	38.06	9.51	24.28	0.76	0.20	0.24	73.05
	•					T 0 N/I	TAE	
A 1105	Guard Rail Installer	38 32	9 51	24.28	0.76	L&M 0.20		73.31
111105	Outro Pull Installer	30.32	7.51	24.20	0.70	0.20	0.24	73.31
Labor	ers (The Alaska areas north of N63 latitude and east of W138 lo	ngitude	e)					
	See per diem note on last page	Ü						
						L&M	LEG	
N1201	Group I, including:	33.00	8.95	21.16	1.40	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							

Classification of Laborers & Mechanics

BHR H&W PEN TRN Other Benefits THR

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

*See per diem note on last page

L&M LEG

N1201 Group I, including:

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

Burning & Cutting Torch

Watchman (construction projects)

Window Cleaner

L&M LEG

34.00 8.95 21.16 1.40 0.20 0.20 65.91

N1202 Group II, including:

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

Classification of Laborers & Mechanics

BHR H&W PEN TRN Other Benefits THR

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

*See per diem note on last page

L&M LEG

N1202 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

L&M LEG

0.20

66.81

0.20

34.90 8.95 21.16 1.40

38.18 8.95 21.16 1.40 0.20

N1203 Group III, including: Bit Grinder

Camera/Tool/Video Operator

Guardrail Machine Operator

High Rigger & Tree Topper

High Scaler

Multiplate

N1204 Group IIIA

Plastic Welding

Slurry Seal Squeegee Man

Traffic Control Supervisor

Welding Certified (in connection with laborer's work)

L&M LEG

0.20

70.09

Asphalt Raker, Asphalt Belly Dump Lay Down

Drill Doctor (in the field)

Classification of Laborers & Mechanics

BHR H&W PEN TRN Other Benefits THR

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

*See per diem note on last page

L&M LEG

N1204 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

N1205 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

N1206 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

S1201 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

Classification of Laborers & Mechanics

BHR H&W PEN TRN Other Benefits THR

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

*See per diem note on last page

L&M LEG

S1201 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

Burning & Cutting Torch

Watchman (construction projects)

Window Cleaner

L&M LEG

34.00 8.95 21.16 1.40 0.20 0.20 65.91

S1202 Group II, including:

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, pumperete 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

Classification of Laborers & Mechanics

BHR H&W PEN TRN Other Benefits THR

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

*See per diem note on last page

L&M LEG

S1202 Group II, including:

34.00 8.95 21.16 1.40 0.20 0.20 65.91

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

L&M LEG

S1203 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)

L&M LEG

S1204 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)

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)

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other l	Benefits	THR
Labor	ers (The area that is south of N63 latitude and west of W138 long	g <mark>itude)</mark>						
;	*See per diem note on last page							
S1204	Group IIIA	38.18	8.95	21.16	1.40	L&M 0.20	LEG 0.20	70.09
	Traffic Control Supervisor, DOT Qualified							
S1205	Group IV	22.57	8.95	21.16	1.40	L&M 0.20	LEG 0.20	54.48
	Final Building Cleanup Permanent Yard Worker							
<u>S1206</u>	Group IIIB	41.97	6.24	21.16	1.40	L&M 0.20	LEG 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							
Millw	· ·							
,	*See per diem note on last page							
A1251	Millwright (journeyman)	44.00	10.08	12.28	1.10	L&M 0.40	0.05	67.91
A1252	Millwright Welder	45.00	10.08	12.28	1.10	L&M 0.40	0.05	68.91
Painte	rs, Region I (North of N63 latitude)							
;	*See per diem note on last page							
N1301	Group I, including:	34.25	8.85	15.10	1.08	L&M 0.07		59.35
	Brush General Painter Hand Taping Hazardous Material Handler Lead-Based Paint Abatement							
N1302	Roll Group II, including:	34.77	8.85	15.10	1.08	L&M 0.07		59.87
	Bridge Painter Epoxy Applicator General Drywall Finisher Hand/Spray Texturing Industrial Coatings Specialist							

Class Code	Classification of Laborers & Mechanics	BHR H&W PEN TRN Other Benefits THR
	rs, Region I (North of N63 latitude)	
	*See per diem note on last page	
	200 per diem neue en impe page	L&M
N1302	Group II, including:	34.77 8.85 15.10 1.08 0.07 59.87
	Machine/Automatic Taping Pot Tender Sandblasting Specialty Painter Spray Structural Steel Painter Wallpaper/Vinyl Hanger	
N1304	Group IV, including:	41.16 8.85 18.21 1.05 0.05 69.32
111001	Glazier Storefront/Automatic Door Mechanic	7777 OGG 75727 1702 OGG 07702
N1305	Group V, including:	39.86 8.85 5.00 1.10 0.10 54.91
	Carpet Installer Floor Coverer Heat Weld/Cove Base Linoleum/Soft Tile Installer	
N1306	Group VI, including:	48.17 9.90 5.00 1.10 0.10 64.27
	Traffic Control Striper	
	ers, Region II (South of N63 latitude) *See per diem note on last page	
S1301	Group I, including:	L&M 31.39 8.85 15.95 1.08 0.07 57.34
	Brush General Painter Hand Taping Hazardous Material Handler Lead-Based Paint Abatement Roll Spray	
S1302	Group II, including:	L&M 32.64 8.85 15.95 1.08 0.07 58.59
	General Drywall Finisher Hand/Spray Texturing	

Wallpaper/Vinyl Hanger

Machine/Automatic Taping

Class Code	Classification of Laborers & Mechanics	BHR H&W PEN TRN Other Benefits	THR
	ers, Region II (South of N63 latitude)		
,	*See per diem note on last page		
<u>S1303</u>	Group III, including:	L&M 32.74 8.85 15.95 1.08 0.07	58.69
	Bridge Painter		
	Epoxy Applicator		
	Industrial Coatings Specialist		
	Pot Tender		
	Sandblasting		
	Specialty Painter		
	Structural Steel Painter		
		L&M	
<u>S1304</u>	Group IV, including:	41.37 8.85 17.25 1.08 0.07	68.62
	Glazier		
	Storefront/Automatic Door Mechanic		
		L&M	
<u>S1305</u>	Group V, including:	39.86 8.85 5.00 1.10 0.10	54.91
	Carpet Installer		
	Floor Coverer		
	Heat Weld/Cove Base		
	Linoleum/Soft Tile Installer		
S1306	Group VI, including:	48.17 9.90 5.00 1.10 0.10	64.27
	Traffic Control Striper		
<mark>Piledr</mark>	ivers		
;	See per diem note on last page		
		L&M IAF	
A1401	Piledriver	42.34 10.08 15.23 1.75 0.20 0.20	69.80
	Assistant Dive Tender		
	Carpenter/Piledriver		
	Rigger		
	Sheet Stabber		
	Skiff Operator		
	1	L&M IAF	
A1402	Piledriver-Welder/Toxic Worker	43.34 10.08 15.23 1.75 0.20 0.20	70.80
		L&M IAF	
A1403	Remotely Operated Vehicle Pilot/Technician	46.65 10.08 15.23 1.75 0.20 0.20	74.11
	Single Atmosphere Suit, Bell or Submersible Pilot		
		L&M IAF	
A1404	Diver (working) **See note on last page	86.45 10.08 15.23 1.75 0.20 0.20	113.91

Class Code	Classification of Laborers & Mechanics	BHR H&W PEN	TRN	Other B	Benefits	THR
Piledr i	ivers					
k	See per diem note on last page					
<u>A1405</u>	Diver (standby) **See note on last page	46.65 10.08 15.23	1.75	L&M 0.20	IAF 0.20	74.11
A1406	Dive Tender **See note on last page	45.65 10.08 15.23	1.75	L&M 0.20	IAF 0.20	73.11
<u>A1407</u>	Welder (American Welding Society, Certified Welding Inspector)	47.90 10.08 15.23	1.75	L&M 0.20	IAF 0.20	75.36
	pers, Region I (North of N63 latitude) *See per diem note on last page					
	Journeyman Pipefitter	42.91 11.75 17.45	1.50	L&M 0.65	S&L	74.26
	Plumber Welder					
Plumb	pers, Region II (South of N63 latitude)					
k	See per diem note on last page					
<u>S1501</u>	Journeyman Pipefitter	41.00 11.38 15.27	1.55	L&M 0.20		69.40
	Plumber Welder					
	vers, Region IIA (1st Judicial District) See per diem note on last page					
X1501	Journeyman Pipefitter	40.82 13.37 11.75	2.50	L&M 0.24		68.68
	Plumber Welder					
Power	Equipment Operators					
	See per diem note on last page					
A1601	Group I, including:	43.53 11.05 13.75	1.00	L&M 0.10	0.05	69.48
	Asphalt Roller: Breakdown, Intermediate, and Finish Back Filler					

Back Filler

Barrier Machine (Zipper)

Beltcrete with Power Pack & similar conveyors

Bending Machine Boat Coxswain

Bulldozer

Cableways, Highlines & Cablecars

Power Equipment Operators

*See per diem note on last page

L&M

A1601 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)

Classification of Laborers & Mechanics

BHR H&W PEN TRN Other Benefits THR

Power Equipment Operators

*See per diem note on last page

L&M

A1601 Group I, including:

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

A1602 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

A1603 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

Class
Code

BHR H&W PEN TRN Other Benefits THR

Power Equipment Operators

*See per diem note on last page

L&M

A1603 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

A1604 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

A1605 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

Class Code	Classification of Laborers & Mechanics	BHR H&W PEN	TRN	Other Ben	efits THR
Power	Equipment Operators				
*	See per diem note on last page				
				L&M	
A1605	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)				
Roofer	rs				
*	See per diem note on last page				
				L&M	
A1701	Roofer & Waterproofer	44.62 13.75 3.91	0.81		06 63.25
				L&M	
A1702	Roofer Material Handler	31.23 13.75 3.91	0.81		06 49.86
	Metal Workers, Region I (North of N63 latitude)				
,	See per diem note on last page				
N14 004		40.04.11.05.14.61	1.00	L&M	77.40
N1801	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				
	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				
Shoot	Metal Workers, Region II (South of N63 latitude)				
	See per diem note on last page				
	but per diem now on last page				

L&M 0.43 S1801 Sheet Metal Journeyman 43.75 11.85 14.39 1.68 72.10

Air Balancing and duct cleaning of HVAC systems

Class	
Code	

BHR H&W PEN TRN Other Benefits THR

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

*See per diem note on last page

L&M

L&M

72.10

S1801 Sheet Metal Journeyman

43.75 11.85 14.39 1.68 0.43

Brazing, soldering or welding of metals

Demolition of sheet metal HVAC systems

Fabrication and installation of exterior wall sheathing, siding, metal

roofing, flashing, decking and architectural sheet metal work

Fabrication and installation of heating, ventilation and air conditioning

ducts and equipment

Fabrication and installation of louvers and hoods

Fabrication and installation of sheet metal lagging

Fabrication and installation of stainless steel commercial or industrial

food service equipment

Manufacture, fabrication assembly, installation and alteration of all

ferrous and nonferrous metal work

Metal lavatory partitions

Preparation of drawings taken from architectural and engineering plans

required for fabrication and erection of sheet metal work

Sheet Metal shelving

Sheet Metal venting, chimneys and breaching

Skylight installation

Sprinkler Fitters

*See per diem note on last page

A1901 Sprinkler Fitter	49.10 10.55 18.15 0.52 0.25 78.5
Survoyors	

Surv	eyors			
	*See per	diem	note on	last page

*See per diem note on last page		
A2001 Chief of Parties	L&M 46.16 12.23 13.64 1.15 0.10	73.28
A2002 Party Chief	L&M 44.57 12.23 13.64 1.15 0.10	71.69
A2003 Line & Grade Technician/Office Technician/GPS, Drones	L&M 43.97 12.23 13.64 1.15 0.10	71.09
A2004 Associate Party Chief (including Instrument Person & Head Chain	L&M 41.85 12.23 13.64 1.15 0.10	68.97
Person)/Stake Hop/Grademan	L&M	
A2006 Chain Person (for crews with more than 2 people)		64.63

Class
Code

BHR H&W PEN TRN Other Benefits THR

Truck Drivers

*See per diem note on last page

L&M

A2101 Group I, including:

42.94 12.23 13.64 1.15 0.10

70.06

Air/Sea Traffic Controllers

Ambulance/Fire Truck Driver (EMT certified)

Boat Coxswain

Captains & Pilots (air & water)

Deltas, Commanders, Rollagons, & similar equipment (when pulling

sleds, trailers or similar equipment)

Dump Trucks (including rockbuggy, side dump, belly dump, & trucks

with pups) over 40 yards up to & including 60 yards

Helicopter Transporter

Liquid Vac Truck/Super Vac Truck

Material Coordinator or Purchasing Agent

Ready-mix (over 12 yards up to & including 15 yards) (over 15 yards to

be negotiated)

Semi with Double Box Mixer

Tireman, Heavy Duty/Fueler

Water Wagon (250 Bbls and above)

L&M

A2102 Group 1A including:

44.21 12.23 13.64 1.15 0.10 71.33

Dump Trucks (including rockbuggy, side dump, belly dump & trucks with pups) over 60 yards up to & including 100 yards (over 100 yards to be negotiated)

Jeeps (driver under load)

Lowboys, including tractor attached trailers & jeeps, up to & including

12 axles (over 12 axles or 150 tons to be negotiated)

L&M

A2103 Group II, including:

41.68 12.23 13.64 1.15 0.10 68.80

All Deltas, Commanders, Rollagons, & similar equipment

Batch Trucks (8 yards & up)

Batch Trucks (up to & including 7 yards)

Boom Truck/Knuckle Truck (over 5 tons)

Cacasco Truck/Heat Stress Truck

Construction and Material Safety Technician

Dump Trucks (including rockbuggy, side dump, belly dump, & trucks

with pups) over 20 yards up to & including 40 yards

Gin Pole Truck, Winch Truck, Wrecker (truck mounted "A" frame

manufactured rating over 5 tons)

Mechanics

Oil Distributor Driver

Partsman

Ready-mix (up to & including 12 yards)

Stringing Truck

Class	
Code	\mathbf{C}

BHR H&W PEN TRN Other Benefits THR

Truck Drivers

*See per diem note on last page

L&M

A2103 Group II, including: 41.68 12.23 13.64 1.15 0.10 68.80

Turn-O-Wagon or DW-10 (not self loading)

L&M

A2104 Group III, including: 40.86 12.23 13.64 1.15 0.10 67.98

Boom Truck/Knuckle Truck (up to & including 5 tons)

Dump Trucks (including rockbuggy, side dump, belly dump, & trucks

with pups) over 10 yards up to & including 20 yards

Expeditor (electrical & pipefitting materials)

Gin Pole Truck, Winch Truck, Wrecker (truck mounted "A" frame

manufactured rating 5 tons & under)

Greaser - Shop

Semi or Truck & Trailer

Thermal Plastic Layout Technician

Traffic Control Technician

Trucks/Jeeps (push or pull)

L&M

A2105 Group IV, including: 40.28 12.23 13.64 1.15 0.10 67.40

Air Cushion or similar type vehicle

All Terrain Vehicle

Buggymobile

Bull Lift & Fork Lift, Fork Lift with Power Boom & Swing Attachment

(over 5 tons)

Bus Operator (over 30 passengers)

Cement Spreader, Dry

Combination Truck-Fuel & Grease

Compactor (when pulled by rubber tired equipment)

Dump Trucks (including rockbuggy, side dump, belly dump, & trucks

with pups) up to & including 10 yards

Dumpster

Expeditor (general)

Fire Truck/Ambulance Driver

Flat Beds, Dual Rear Axle

Foam Distributor Truck Dual Axle

Front End Loader with Fork

Grease Truck

Hydro Seeder, Dual Axle

Hyster Operators (handling bulk aggregate)

Loadmaster (air & water operations)

Lumber Carrier

Ready-mix, (up to & including 7 yards)

Rigger (air/water/oilfield)

Tireman, Light Duty

Classification of Laborers & Mechanics

BHR H&W PEN TRN Other Benefits THR

Truck Drivers

*See per diem note on last page

L&M

A2105 Group IV, including:

40.28 12.23 13.64 1.15 0.10

67.40

Track Truck Equipment

Truck Vacuum Sweeper

Warehouseperson

Water Truck (Below 250 Bbls)

Water Truck (straight)

Water Wagon, Semi

L&M

A2106 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

36.30 8.95 21.16 1.40 0.20 0.20

Brakeman

N2201 Group I, including:

Mucker

Nipper

Storm Water Pollution Protection Plan Worker (SWPPP Worker -

erosion and sediment control Laborer)

Topman & Bull Gang

Tunnel Track Laborer

Burning & Cutting Torch

L&M LEG

37.40 8.95 21.16 1.40 0.20 0.20 69.31

N2202 Group II, including:

Certified Erosion Sediment Control Lead (CESCL 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

68.21

Classification of Laborers & Mechanics

BHR H&W PEN TRN Other Benefits THR

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

N2202 Group II, including: 37.40 8.95 21.16 1.40 0.20 0.20 69.31

Concrete Laborer

Floor Preparation, Core Drilling

Jackhammer/Chipping Gun or Pavement Breaker

Laser Instrument Operator

Nozzlemen, Pumpcrete or Shotcrete

Pipelayer Helper

L&M LEG

L&M LEG

N2203 Group III, including: 38.39 8.95 21.16 1.40 0.20 0.20 70.30

Miner

Retimberman

N2204 Group IIIA, including:

42.00 8.95 21.16 1.40 0.20 0.20 73.91

Asphalt Raker, Asphalt Belly Dump Lay Down

Drill Doctor (in the field)

Driller (including, but not limited to wagon drills, air-track drills,

hydraulic drills)

Pioneer Drilling & Drilling Off Tugger (all type drills)

Pipelayer

Powderman (Employee Possessor)

Storm Water Pollution Protection Plan Specialist (SWPPP Specialist)

Traffic Control Supervisor, DOT Qualified

L&M LEG 46.17 6.24 21.16 1.40 0.20 0.20

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)

N2206 Group IIIB, including:

Pioneer Drilling & Drilling Off Tugger (all type drills)(over 5,000 hours)

Stake Hopper

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

*See per diem note on last page

L&M LEG

75.37

S2201 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)

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

L&M LEG S2201 Group I, including: 36.30 8.95 21.16 1.40 0.20 0.20 68.21

Topman & Bull Gang Tunnel Track Laborer

S2202 Group II, including:

L&M LEG 37.40 8.95 21.16 1.40 0.20 0.20 69.31

Burning & Cutting Torch

Certified Erosion Sediment Control Lead (CESCL Laborer)

Concrete Laborer

Floor Preparation, Core Drilling

Jackhammer/Chipping Gun or Pavement Breaker

Laser Instrument Operator

Nozzlemen, Pumpcrete or Shotcrete

Pipelayer Helper

L&M LEG S2203 Group III, including: 38.39 8.95 21.16 1.40 0.20 0.20 70.30

Miner

Retimberman

L&M LEG S2204 Group IIIA, including: 42.00 8.95 21.16 1.40 0.20 0.20 73.91

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

S2206 Group IIIB, including: L&M LEG 46.17 6.24 21.16 1.40 0.20 0.20 75.37

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, Power Equipment Operators

*See per diem note on last page

Class Code Classification of Laborers & Mechanic	S BHR H&W PEN TRN Other Benefits THR
Tunnel Workers, Power Equipment Operators *See per diem note on last page	
A2207 Group I	L&M 47.88 11.05 13.75 1.00 0.10 0.05 73.83
A2208 Group IA	L&M 49.82 11.05 13.75 1.00 0.10 0.05 75.77
A2209 Group II	L&M 47.04 11.05 13.75 1.00 0.10 0.05 72.99
•	L&M
A2210 Group III	46.24 11.05 13.75 1.00 0.10 0.05 72.19 L&M

39.41 11.05 13.75 1.00

0.05 65.36

0.10

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

A2211 Group IV

^{*} 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.



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
	d Workers ee 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.

Appendix A

Project Plans and Specifications

Revisions:

ate: JUNE 10, 2022

МСМ

of 1

rawn:

hecked: CMP

Sheet Title:

COVER SHEET

Project: 2022.DWG File Name: 2022.DWG

CONSTRUCTION DOCUMENTS KENAI, ALASKA

KENAI VISITOR'S CENTER **RE-ROOF**

KENAI, ALASKA

CONSTRUCTION DOCUMENTS

ANCHORAGE

Project

Location

STATE MAP

DIL)LINGHAM

VICINITY MAP

KΕΝΔΙ

 \mathcal{D}

ABV Above AFF Above Finished Floor AC Acoustical Acoustical Tile ADAAG Americans w/ Disabilities Act Accessible Guidelines

ABBREVIATIONS LIST

ADD Addendum ADH Adhesive ADJ Adjacent AGG Aggregate A/C Air Conditioning ALT Alternate

AL Aluminum ANC Anchorage AB Anchor Bol ANOD Anodized ARCH Architectural ASPH Asphalt

ASS'Y Assembly A.W.W. All Weather Wood BCS Baby Changing Station

BRG Bearing BM Bench Mark BLK Block BLKG Blocking BO Board BOT Bottom

BRNZ Dark Bronze
BLDG Building
BUR Built-Up Roofing CAB Cabinet CFMU Conc. Form Masonry

CI Cast Iron CK Caulk

CLG Ceiling CEM Cement CI Center Line CI Center Li CER Ceramic CT Ceramic Tile CIR Circle

CJ Control Joint Ceiling Clear CLS Closure COL Column COMB Combination

CONC Concrete COTF Clean Out Thru Floor CMU Concrete Masonry Unit CONST Construction

CONT Continuous CONTR Contract CORR Corrugated CFL Counterflushing CRS Course

DFM Demolish DIAG Diagonal DIM Dimension DIV Division DH Double Huna DWG Drawing
DF Drinking Fountain

DW Dumb Waiter

JT Joint KIT Kitchen KPL Kickplate Laminate

Include

INS Insulate

LAM Laminate LAV Lavatory LT Light LTL Lintel

Finish System

ELEC Electrical

FLFV Flevator

FST Estimate

EXH Exhaust

EXP Exposed EXT Exterior

EXTING Extinguisher

FBRK Fire Brick

FCO Floor Clean Out

FE Fire Extinguishe

F Factory Finish

FG Finish Grade FIXT Fixture

FLG Flashing

FLUR Fluorescent

FND Foundation

FP Fireproof

FPL Fireplace

FTG Footing

GALV Galvanized

GI Galvanized Iron

GLB Glu-Lam Beam

GP Galvanized Pipe

GB Grab Bar GD Grade

GVL Gravel

HR Hose Ribb

HDR Header

HT Height

HDW Hardware

HOR Horizontal HPL High Pressure HR Hour

HVAC Heating/Ventil./Air Cond.

IB Infiltration Barrier INCL

FOC Face Of Concrete FOF Face Of Finish

FOM Face Of Masonry

FOS Face Of Structur

FR Frame FRP Fiberglass Reinforcing

FLR Floor

FFL Finished Floor Line

FFW Finish Face of Wall

FEC Fire Extinguisher Cabin

EQ Equal

MB Machine Bolt MAS Masonry M.O. Masonry Opening MTL Material MAX Maximum MECH Mechanical MC Medicine Cabinet MED Medium ML Measuring Line MMB Membrane

MIN Minimum MIR Mirror MISC Miscellaneous MOD Modular MNAP Manifold Access Pane MR Moisture Resistant MULL Mullion

NAT Natural ND Napkin Disposal NOM Nominal North NIC Not In Contract NES Non-Frost Susceptible NTS Not To Scale

OBS Obscure

OC On Center

OPG Opening

OA Outside Air

OH Over Head

PB Panic Bar

PAR Parallel

PK Parking

PED Pedestal

Pl Plate

PF Pre-Finished

PLAM Plastic Laminate

PTD. Painted. Paner

PSF Pounds Per

Square Foot PSI Pounds Per

PVMT Pavement

Square Inch

Property Line

R&S Rod And Shelf

REC. Recommendation

RFL Reflective

REFR Refrigerator RES Resilient

RA Return Air RVS Reverse Side

ROW Right Of Way

RO Rough Opening

RET Return

RFV Revised

PVB Poly Vapor Barrier

O.F.D. Overflow Drain

T.O. Top Of TOL Tolerance T&G Tongue & Groove TPD Toilet Paper Disper TSL Top Of Slab OPCI Owner Provided Contractor Installed TYP Typical OPP Opposite
OD Outside Diameter

UNF Unfinished UON Unless Otherwise Noted UPS Uninterrupted Powe Supply

RB Rubber Base

RI Rain Leader

SAT Satellite

SCH Schedule

SEC Section SHTH Sheathing

SHT Sheet SH Soap Holder SIM Similar

SKL Skyliaht

SPK Speaker

SQ Sauare

STO Storage STR Structural

TEL Telephone

TV Television THK Thick

SUSP Suspended

TPTN Toilet Partition

SPL Special SPEC Specification

SST Stainless Steel STD Standard

RM Radiant Manifold

SC Specimen Cabinet SCD Seat Cover Dispen

VB Vapor Barrier VG Vertical Grain VIF Verify in Field VIN Vinyl VINB Vinyl Base VCT Vinyl Composition VF Vinyl Fabric VTR Vent Thru Roof

WSCT Wainscot WH Wall Hung WC Water Closet WP Waterproofing WR Water Resistan WS Waterstop WWF Welded Wire Eabrid WD Wood WB Wood Base

GENERAL NOTES

1.) DIMENSIONAL HIERARCHY

AS SPECIFICALLY NOTED
GRID LINES
FACE OR TOP OF CONCRETE
FACE OR TOP OF CMU

FACE OF FRAMING
FACE OF HOLLOW METAL FRAMES 2.) CONTRACTOR SHALL NOTIFY ARCHITECT OF

ANY AMBIGUITIES OR CONTRADICTIONS IN THESE DOCUMENTS PRIOR TO PROCEEDING IN EACH AREA. 3.) ARCHITECTURAL DRAWINGS REFERENCE ALL

100'-0". SEE CIVIL FOR SITE LAYOUT DATUM. 4.) SOME DETAILS ARE DIAGRAMMATIC IN NATURE. • 2012 INTERNATIONAL BUILDING CODE IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE A COMPLETE AND FUNCTIONING

BUILDING IN ACCORDANCE WITH INDUSTRY

5.) SCALE NOTE: DO NOT SCALE DRAWINGS.

6.) WHERE INDICATED, COMPLY WITH REQUIREMENTS AND RECOMMENDATIONS OF REFERENCED STANDARDS AND OTHER PUBLICATIONS, EXCEPT WHERE MORE DETAILED OR MORE STRINGENT PROVISIONS ARE REQUIRED BY CURRENT APPLICABLE CODES AND GOVERNING REGULATIONS

7.) WHERE TWO OR MORE STANDARDS OR RECOMMENDATIONS OF TRADE ASSOCIATIONS APPLY TO SAME QUALITY CONTROL REQUIREMENTS FOR WORK COMPLY WITH THE MOST STRINGENT. REFER UNCERTAIN INSTANCES TO THE OWNER'S REPRESENTATIVE.

8.) CONSTRUCTION WHICH IS NOT GOVERNED BY A LOCAL BUILDING CODE OR THE CONTRACT DOCUMENTS WILL BE GOVERNED BY THE MORE STRINGENT PROVISIONS OF THE LATEST PUBLISHED, STATUTE ADOPTED EDITION, OF THE FOLLOWING APPLICABLE CODES.

AMERICANS WITH DISABILITIES ACT

ACCESSIBILITY GUIDELINES FOR BUILDING FACILITIES

ASHRAF 90.1-2016

■ 2018 NATIONAL ELECTRICAL CODE

 2012 INTERNATIONAL MECHANICAL CODE 2015 UNIFORM PLUMBING CODE 2012 INTERNATIONAL FIRE CODE

ARCHITECTURAL: K+A designstudios Kenai, Alaska PHONE: 907.283.3698 FAX: 907.283.9083 EMAIL: admin@ka-designstudios.com

PROJECT TEAM

JUNE 10, 2022

DESIGN DATA

LEGAL DESCRIPTION:

T 5N R 11W SEC 5 SEWARD MERIDIAN KN 0910009 GUSTY SUB NO 8 LOT 1

(A3.2) BUILDING SECTION

SHEET

ELEVATION

REVISION NOTE

KENAI, AK 99611

T1 1 COVER SHEET

NEW OVERALL ROOF PLAN

SYMBOLS







103 DOOR NUMBER

A1 OPENING TYPE

104 ROOM NUMBER (B) GRID

MATERIALS





15













DRAWING INDEX

ARCHITECTURAL

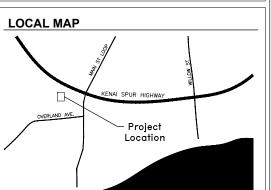
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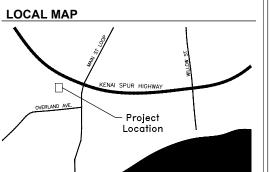
11471 KENAI SPUR HWY

REFERENCE PLAN AND NOTES EXISTING/DEMO OVERALL ROOF PLAN

LOCAL MAP Project Location

NOTE: These maps identify project location. They are not to scale.





roject: 2022.DWG File Name: 2022.DWG Sheet Title:

REFERENCE PLAN AND NOTES

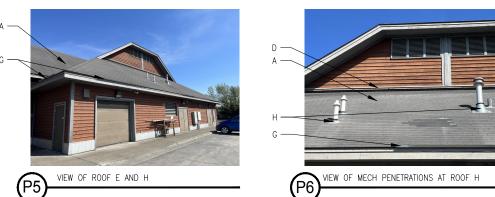
A1.0

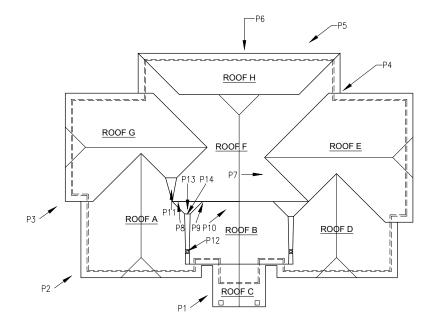












KEY NOTES:

DEMO EXISTING SHINGLES PER DRAWINGS. INSTALL NEW SHINGLES, UNDERLAYMENT AND FLASHING PER DRAWINGS AND

B. DEMO AND REPLACE EXISTING ROOF DRAIN, TIE INTO EXISTING RAIN LEADER.

C. DEMO AND REPLACE ROOFING MEMBRANE PER DRAWINGS AND SPEC.

F. DEMO AND REPLACE FLASHING, TYP. G. DEMO METAL RAIN DIVERTER, TYP.

DETAIL 2/A2.2.

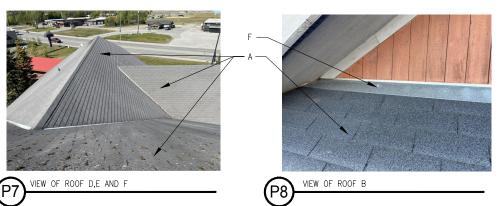
D. DEMO AND REPLACE HIGH ROOF VENT PER DRAWINGS AND SPEC. E. DEMO AND REPLACE ROOF VALLEY PER DETAIL 3/A2.2, TYP.

H. DEMO AND REPLACE FLASHING AT MECH PENETRATIONS, TYP. SEE

REFERENCE PLAN

SCALE: NTS





VIEW OF ROOF C AT ENTRY

VIEW OF ROOF E AND F

VIEW OF CRICKET BETWEEN ROOF A, G AND F

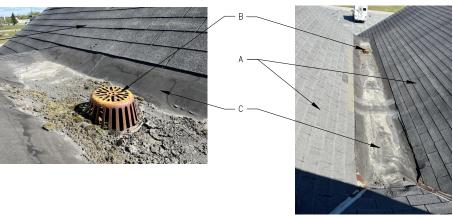












VIEW OF ROOF DRAIN BETWEEN ROOF A AND B





GENERAL NOTES:

- AFTER DEMOLITION OF THE EXISTING ROOFING, IF ANY DETERIORATED DECKING IS DISCOVERED, EITHER THE ARCHITECT OR PROJECT MANAGER SHALL BE CONTACTED TO VERIFY THE EXTENT OF DAMAGE PRIOR TO REPLACEMENT OR COVERING.
- FIELD VERIFY ALL EXISTING ROOF SLOPES, ELEVATIONS, SQUARE FOOTAGE'S, AND DIMENSIONS.
- VERIFY USE, QUANTITY, TYPE, AND SIZE OF ROOF PENETRATIONS PRIOR TO EXTENDING OR REMOVAL. COORDINATE WITH THE OWNER ON PENETRATIONS THAT ARE ABANDONED.

EXISTING CONDITIONS/ DEMO ROOF PLAN

- AFTER DEMOLITION OF EXISTING ROOFING, NOTIFY ARCHITECT TO VERIFY SLOPE OF ORIGINAL ROOF
- EXISTING VENTS, CONDUIT, ETC. TO BE CLEANED OF ALL EXISTING ASPHALTIC COATINGS PRIOR TO APPLYING NEW ROOF MEMBRANE PER MANUFACTURER'S RECOMMENDATIONS.
- VTR'S WHICH CONTAIN LEAD CAPS SHALL BE REMOVED BY WORKERS WHO ARE TRAINED IN LEAD AWARENESS. MATERIALS SHALL BE RECYCLED.
- CONTRACTOR SHALL REPAIR ALL INTERIOR FINISHES THAT ARE DAMAGED DUE TO ROOF DRAIN REMOVAL, LEADER REPAIR, OR OTHER ADJACENCIES AS REQUIRED TO
- CONTRACTOR SHALL REPAIR ALL DAMAGES TO LAWNS AND ANY OTHER DAMAGED SITE ELEMENTS DURING CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE CONSTRUCTION SCHEDULE WITH OWNER TO MAINTAIN BUILDING HOURS OF OPERATION.

DEMO PLAN KEY NOTES

- 1) DEMO EXISTING ROOFING AND UNDERLAYMENT DOWN TO SHEATHING.
- 2 DEMO ROOF DRAIN ASSEMBLY AND ASSOCIATED HARDWARE AND FLASHING. WOOD FRAMING TO REMAIN.
- (3) WALL BELOW, TYP.



KENAI VISITORS CENTER RE-ROOF

CONSTRUCTION DOCUMENTS KENAI, ALASKA Revisions:



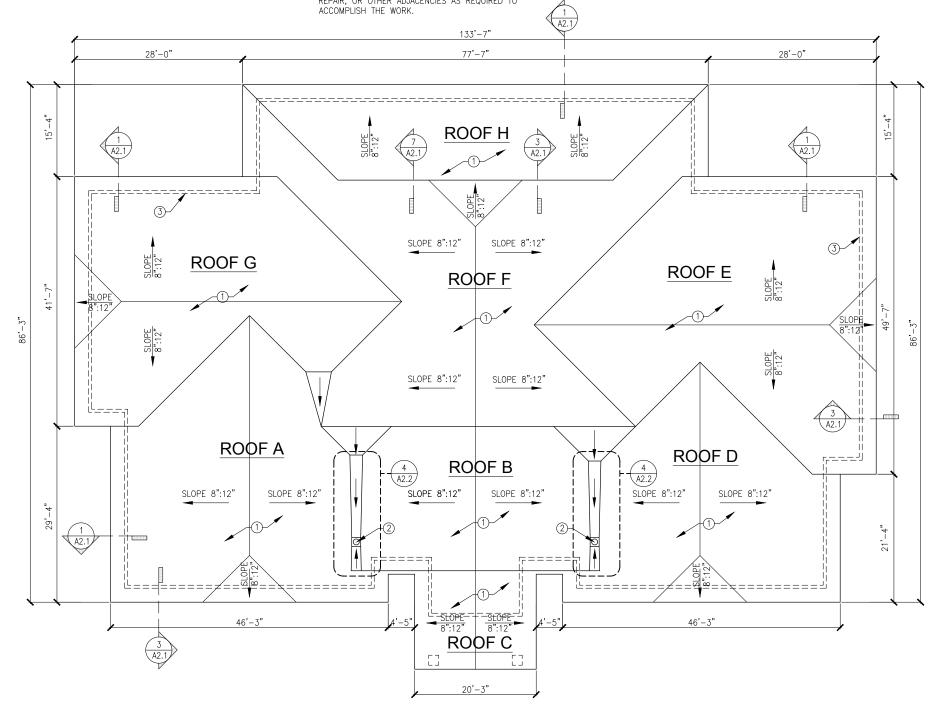
Date: JUNE 10, 2022 Drawn: MCM Checked: CMP

roject: 2022.DWG File Name: 2022.DWG

Sheet Title:

EXISTING CONDITIONS/ DEMO ROOF PLAN

A1.1

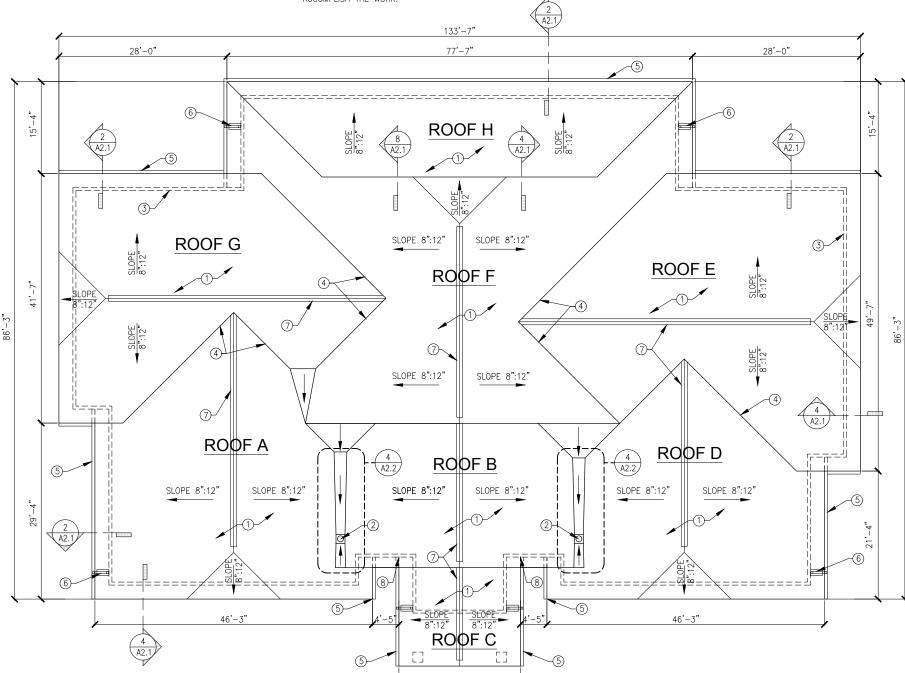


GENERAL NOTES:

- AFTER DEMOLITION OF THE EXISTING ROOFING, IF ANY DETERIORATED DECKING IS DISCOVERED, EITHER THE ARCHITECT OR PROJECT MANAGER SHALL BE CONTACTED TO VERIFY THE EXTENT OF DAMAGE PRIOR TO REPLACEMENT OR COVERING.
- 2. FIELD VERIFY ALL EXISTING ROOF SLOPES, ELEVATIONS, SQUARE FOOTAGE'S, AND DIMENSIONS.
- VERIFY USE, QUANTITY, TYPE, AND SIZE OF ROOF PENETRATIONS PRIOR TO EXTENDING OR REMOVAL. COORDINATE WITH THE OWNER ON PENETRATIONS THAT ARE ABANDONED.

RE-ROOF PLAN

- AFTER DEMOLITION OF EXISTING ROOFING, NOTIFY ARCHITECT TO VERIFY SLOPE OF ORIGINAL ROOF CONSTRUCTION
- EXISTING VENTS, CONDUIT, ETC. TO BE CLEANED OF ALL EXISTING ASPHALTIC COATINGS PRIOR TO APPLYING NEW ROOF MEMBRANE PER MANUFACTURER'S RECOMMENDATIONS.
- S. VTR'S WHICH CONTAIN LEAD CAPS SHALL BE REMOVED BY WORKERS WHO ARE TRAINED IN LEAD AWARENESS. MATERIALS SHALL BE RECYCLED.
- CONTRACTOR SHALL REPAIR ALL INTERIOR FINISHES THAT ARE DAMAGED DUE TO ROOF DRAIN REMOVAL, LEADER REPAIR, OR OTHER ADJACENCIES AS REQUIRED TO ACCOMPLISH THE WORK.
- 8. CONTRACTOR SHALL REPAIR ALL DAMAGES TO LAWNS AND ANY OTHER DAMAGED SITE ELEMENTS DURING CONSTRUCTION.
 - CONTRACTOR SHALL COORDINATE CONSTRUCTION SCHEDULE WITH OWNER TO MAINTAIN BUILDING HOURS OF OPERATION.



20'-3"



- NEW ASPHALT COMPOSITION SHINGLES OVER CONTINUOUS UNDERLAYMENT TO BE INSTALLED PER SPECIFICATIONS AND MANUFACTURER PROJUREMENTS
- (2) NEW ROOF DRAIN PER 1/A2.2, CONNECT TO EXISTING RAIN LEADERS.
- (3) WALL BELOW, TYP.
- 4) SEE 3/A2.2 FOR METAL VALLEY DETAIL, TYP.
- (5) NEW SEAMLESS ALUMINUM GUTTER PER SPEC, TYP.
- (6) NEW DOWNSPOUT AND SPLASHBLOCK, COORDINATE EXACT LOCATION WITH ARCHITECT
- (7) PROVIDE RIDGE VENT PER SPEC, TYP.
- (8) AT END WALL TRANSITION REPLACE 1X4 T&G CEDAR SIDING & STAIN TO MATCH.



KENAI VISITORS CENTER RE-ROOF

DOCUMENT

CONSTRUCTION KENAI, ALASKA

Revisions:



Date: JUNE 10, 2022

Drawn: MCM
Checked: CMP

Project: 2022.DWG File Name: 2022.DWG

Sheet Title: ROOF PLAN

heet:



RE CENTER

-ROOF **KENAI VISITORS**

NEW ROOFING

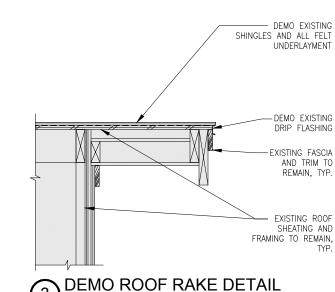
SYSTEM PER ROOF TYPES AND SPEC

EXISTING ROOF SHEATING AND FRAMING TO REMAIN, NEW ROOF RAKE DETAIL

EXISTING SIDING TO REMAIN REMOVE AND REPLACE 2X4 CEDAR TRIM AS NEEDED - NEW ROOF TO WALL VENT PER SPEC



A2.2





R1 A2.2

NEW ROOFING SYSTEM

PER ROOF TYPES AND

ROOF SHEATHING AND

11 A2.1

FRAMING TO REMAIN,

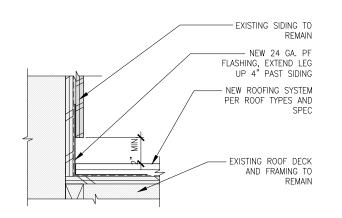
TYP.

D MOLD SHINGI F FLASHING

NEW SEAMLESS

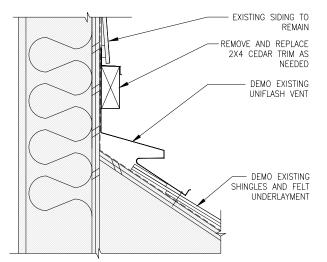
- NEW 24 GA

PRE-FINISHED

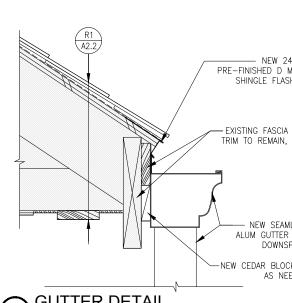


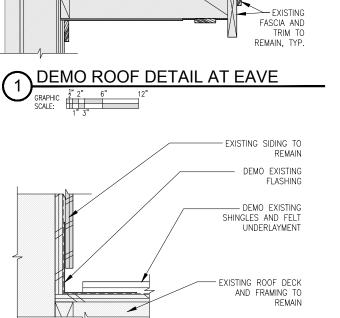
NEW ROOF DETAIL

6









- DEMO EXISTING

UNDERLAYMENT

TYP.

SHINGLES AND ALL FELT

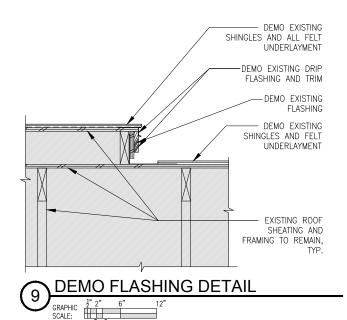
ROOF SHEATHING AND

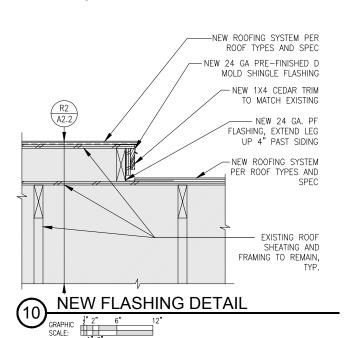
FRAMING TO REMAIN,

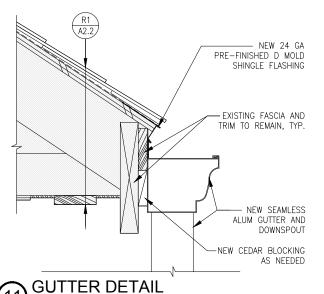
-DEMO EXISTING

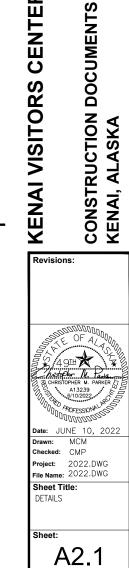
DRIP FLASHING

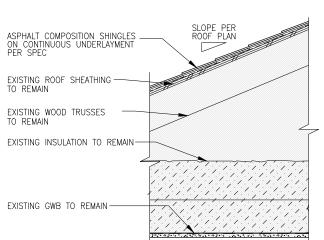












MFR NOTES:

- VALLEY METAL FLASHING USED WITH SHINGLES

SECURE VALLEY METAL WITH FASTENERS NO

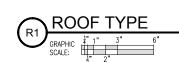
MORE THAN 1" FROM THE OUTSIDE EDGES

ADDITIONAL SEALING ON PROJECT WITH

SHINGLE MANUFACTURER WARRANTY.

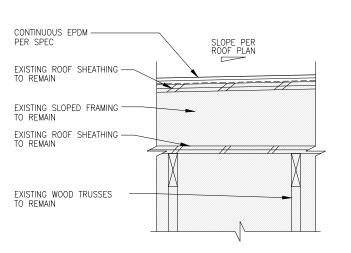
AND SPACED 10"-12" ON CENTER.
SET OVERLAPPING ENDS OF VALLEY METAL IN A UNIFORM LAYER OF SEALANT WITH A MIN. 4" LAP. DO NOT FASTEN TO THE LAP. NAIL SHINGLES NO CLOSER THAN 6"-WIDE STRIP OF ARCTIC SEAL SHALL BE APPLIED TO BOTH EDGES OF THE VALLEY METAL FOR

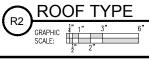
MUST BE MIN. 24" WIDE AND 24 GA.



PLY OF ARCTIC

VALLEY METAL





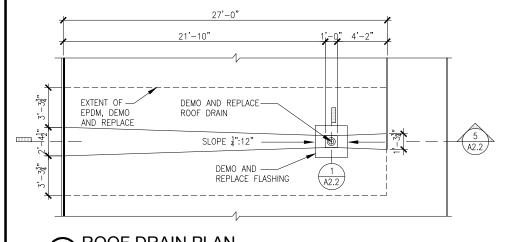


designstudio

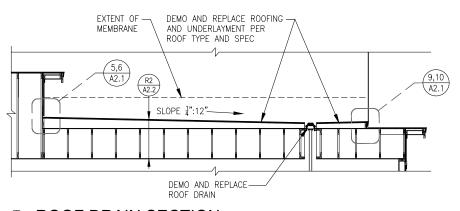


CONSTRUCTION DOCUMENTS KENAI, ALASKA

Revisions: histophir M. Yana A13239 6/10/2022 ate: JUNE 10, 2022 МСМ Drawn: hecked: CMP Project: 2022.DWG File Name: 2022.DWG Sheet Title: DETAILS Sheet: A2.2









PROJECT MANUAL

Kenai Visitors Center Re-Roof Project

SUBSTITUTION REQUESTS, FOR MANUFACTURES NOT SPECIFICALLY LISTED, SHALL BE SUBMITTED TO ARCHITECT, NO LATER THAN 10 DAYS PRIOR TO BID DATE, PER SECTION 01 63 00.

CITY OF KENAI

210 FIDALGO AVE. KENAI, ALASKA 99611



KENAI VISITORS CENTER RE-ROOF PROJECT

SECTION 01 00 00

TABLE OF CONTENTS - TECHNICAL SPECIFICATIONS

DIVISION 01 - GENERAL REQUIREMENTS 01 01 00 SUMMARY OF WORK 01 02 70 APPLICATIONS FOR PAYMENT 01 03 00 **ALTERNATES** 01 04 50 **CUTTING AND PATCHING** GRADES, LINES AND LEVELS 01 05 20 01 06 00 REGULATORY REQUIREMENTS 01 09 00 REFERENCE STANDARDS 01 20 00 PROJECT MEETINGS 01 25 00 **DEFINITIONS AND EXPLANATIONS** 01 31 00 SCHEDULING 01 34 00 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES 01 37 00 SCHEDULE OF VALUES 01 40 00 QUALITY CONTROL 01 50 00 TEMPORARY FACILITIES AND CONTROLS CONSTRUCTION CLEANING 01 56 90 01 60 00 MATERIAL AND EQUIPMENT 01 61 00 TRANSPORTATION AND HANDLING 01 62 00 STORAGE AND PROTECTION 01 63 00 PRODUCT OPTIONS AND SUBSTITUTIONS 01 67 00 SYSTEM DEMONSTRATION 01 70 00 CONTRACT CLOSE-OUT PROCEDURES 01 71 00 FINAL CLEANING 01 72 00 RECORD DOCUMENTS 01 73 00 OPERATION AND MAINTENANCE DATA 01 74 00 WARRANTIES AND BONDS

DIVISION 02 - EXISTING CONDITIONS

02 05 00 DEMOLITION

DIVISION 03 - CONCRETE

NOT APPLICABLE

DIVISION 04 - MASONRY

NOT APPLICABLE

DIVISION 05 - METALS

NOT APPLICABLE

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITIES

06 01 00 LUMBER

06 10 00 ROUGH CARPENTRY

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07 21 30	BATT INSULATION
07 31 13	ASPHALT SCHINGLES
07 55 00	EPDM ROOFING
07 62 00	METAL FLASHING, TRIM AND GUTTERS
07 90 00	JOINT SEALANTS

DIVISION 08 – OPENINGS

NOT APPLICABLE

DIVISIONS 09 - 21

NOT APPLICABLE

DIVISION 22 - PLUMBING

NOT APPLICABLE

DIVISION 26 - ELECTRICAL

NOT APPLICABLE

END OF TABLE OF CONTENTS

SECTION 01 01 00 - SUMMARY OF WORK

PART 1 GENERAL

1.01 DESCRIPTION

A. Work Included:

- Work required under this contract is described in the subsequent sections and is more
 particularly delineated in the Drawings, and includes the providing of all labor, equipment,
 tools, and materials required for the KENAI VISITORS CENTER RE-ROOF PROJECT FOR
 THE CITY OF KENAI as described in this and subsequent sections and in other Contract
 Documents.
- 2. The Contract Documents do not purport to describe in detail, absolute and complete construction information. In some instances, drawings will be diagrammatic and not necessarily to exact scale or portray exact conditions at any particular location or situation.
- 3. It shall be the responsibility of the Contractor to determine conditions and requirements at each particular situation and provide all items necessary for the completion of the Work, according to the parameters established by the Contract Documents.

B. Language:

The language employed in these specifications is addressed directly to the Contractor. Imperative or indicative language is generally employed throughout and requirements so expressed are the mandatory responsibility of the Contractor even though the work specified actually may be accomplished by specialty subcontractors hired, retained, or otherwise engaged by the Contractor. References to third parties in this regard shall not be interpreted in any way as to relieve the Contractor of any of his responsibilities under the Contract.

1.02 QUALITY ASSURANCE

A. Qualifications of workers:

For all the operations under this Contract:

- 1. Employ a thoroughly qualified and experienced superintendent who shall be completely familiar with the requirements of the Contract Documents, who shall direct all work, and who shall be present at the job site at all reasonable times while work is in progress.
- 2. Employ only qualified journeymen mechanics, tradesmen, or installers who are thoroughly skilled and experienced in their respective trades or specialties.
- 3. Apprentices and helpers, when employed, shall be under the supervision of qualified journeymen mechanics or tradesmen at all times.

B. Referenced Standards:

Standards referenced in this and succeeding sections of the specifications shall become a part of the Contract Documents to the extent of their applicability to the particular item, process, method or operation involved.

1.03 CONTRACTOR'S DUTIES

- A. Except as otherwise specifically required, provide and pay for labor, materials, tools, machinery, equipment, and all transportation.
- B. Comply with codes, ordinances, rules, regulations, orders, and other legal requirements of public authorities which bear on performance of the work.
- C. In the event of any observed variation between the Contract Documents and legal requirements, or any discrepancy or ambiguity in or among any of the requirements of the Contract Documents or any referenced standards, promptly notify the Owner's Representative in writing in which eventuality, appropriate changes and modifications to the Contract Documents will be initiated by the Owner and furnished to the Contractor. Contractor shall assume responsibility for work performed without proper notice to Owner, when such work was known by Contractor to be contrary to such requirements. Do not proceed in questioned areas until resolution or clarification has been obtained.

1.04 PREMISES

A. Contractor's Access:

The Owner will make available at the indicated locations, exterior space, as reasonable, for the storage and staging of the Contractor's materials and equipment, subject to the following controls.

- 1. Use of such areas shall be covered by the insurance required by the General Conditions (Provisions).
- 2. Storage shall be maintained in a neat and orderly condition at all times conforming to all fire and safety regulations.
- 3. Fire lanes and required exit pathways shall be kept free and unobstructed at all times.
- 4. Do not unreasonably encumber site with materials and equipment.
- 5. Do not impose loads which might impair the structural integrity of any work already in place.
- 6. Use of the space shall be coordinated with and subject to the requirements of the Owner.
- 7. Upon completion of the contract, restore all areas to original conditions which prevailed prior to onset of the work, or as otherwise provided in the Contract Documents.

B. Environmental Requirements:

1. Restrict all operations to the areas assigned for storage, staging, and other necessary operations, and do not permit the disturbance of any areas not assigned for approved operations shown as limits of construction under this Contract.

2. The areas indicated on the drawings where existing natural vegetation remains is to be protected by the Contractor. The Contractor shall cordon-off these areas. They are not to be used by the Contractor for storage of materials, access of any other purpose. Damage to the natural ground cover in these areas will be restored to the satisfaction of the Architect.

Employ all means necessary to avoid the accumulation of debris and construction residue, avoiding the spread of dust and noxious odors.

PART 2 PRODUCTS

2.01 STORAGE AND PROTECTION

Do not deliver any of the materials or equipment for this Contract to the job site until adequate facilities are available for their proper storage and protection. Comply with the detailed requirements in subsequent sections for the storage and protection of the particular products of those sections.

Take all measures necessary to protect the installed work and materials of all trades at all times before, during, and after installation.

2.02 MATERIALS AND EQUIPMENT

A. Design:

Design is based upon the method system, or product described, and the Drawings reflect the desired location and configuration. In some instances, the recommended installation details of the named manufacturer, comparable methods systems or products of alternate manufacturers will be considered (unless otherwise noted as "No Substitution") upon submittal per Sections 01 34 00 of these specifications.

B. Materials:

All materials proposed for incorporation into this project shall be new and as specified or as shown in the Drawings, or if not specifically called out, shall be of first quality of their respective kinds, as selected by the Contractor, subject to the approval of the Owner's Representative.

C. Minimum Quality:

In every instance the quality level shown or specified is intended as the minimum acceptable for the work to be performed or provided.

D. Conflicting or Overlapping Requirements:

In the event of conflict in or among any of the requirements of this specification or any referenced standards, or where two or more referenced standards or sets of requirements are specified, and establishes differing minimums of levels of quality, the most stringent requirement shall prevail and shall be so enforced, unless specific language in the text (not in the referenced standards) clearly indicates that the less stringent requirement is intended to prevail.

E. Submittals:

Make all submittals of materials and equipment proposed for incorporation into the Work in accordance with Section 01 34 00 and the specific requirements of other individual sections of these specifications.

PART 3 EXECUTION

3.01 JOB CONDITIONS

A. Inspection:

Do not commence any phase of the Work until all previous work has been examined and it has been determined that subsequent operations may be executed in a timely and orderly manner and in complete accordance with the original design, the approved submittals, and all applicable codes and regulations.

B. Installer's Certification:

Where directed in subsequent sections, obtain written certification from subcontractors or installers that substrates affecting their operations have been examined and found satisfactory for further work. Submittal of such certification, countersigned by the Contractor, shall be a condition for acceptance of that particular installation or phase of work.

C. Discrepancies:

In the event of discrepancy, ambiguity, conflict, interference, or any other unanticipated condition or situation which might impede timely execution of the Work, immediately notify the Owner's Representative and do not proceed in questioned areas until resolution or clarification has been obtained.

D. Repairs and Replacements:

In the event of damage to any part of any installed material, equipment, assembly, or system, make all repairs or replacements necessary to restore the original undamaged condition. Do not allow damaged material to be incorporated into the Work. Repairs and replacements shall be subject to the approval of the Owner's Representative and shall be accomplished at no additional expense to the Owner.

3.02 INSTALLATION

Install all work in complete accordance with the original design, the approved submittals, and all applicable codes and regulations. Perform all work under the direction of qualified supervisors, foremen, or leadmen, and do not permit any phase of the work to be commenced by subcontractors or subcontractors without qualified supervisors present to direct their operations.

3.03 GUARANTEES AND WARRANTIES

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In addition to the requirements in the General Provisions, the Contractor shall extend to the Owner such other bond, warranty, or manufacturer's guarantee offered by any vendor, manufacturer, or other supplier on any material, goods, equipment, or workmanship included in the Work.

END OF SECTION 01 01 00

01 01 00 - 5

SECTION 01 02 70 -

APPLICATIONS FOR PAYMENT

PART 1 GENERAL

1.01 DESCRIPTION

A. Work Included:

- 1. Application for Payment Procedures: Submit Application for Payment to the Owner's Representative in accordance with the schedule established by the General Conditions of the Contract and Agreement Between Owner and Contractor.
- B. Related Documents and Sections Described Elsewhere:
 - 1. Agreement Between Owner and Contractor.
 - 2. General Conditions, "Measurement, Payment and Completion."
 - 3. Section 01 37 00 Schedule of Values
 - 4. Section 01 70 00 Contract Close-out Procedures

1.02 FORMAT AND DATA REQUIRED

- A. Submit applications using AIA Document G702 or in a form acceptable to the Owner.
- B. Provide itemized data on continuation sheet using AIA Document G703 or in a form acceptable to the Owner using the Schedule of Values accepted by the Owner's Representative.

1.03 PREPARATION OF APPLICATION FOR EACH PROGRESS PAYMENT

- A. Application Form:
 - 1. Fill in required information, including that for change orders executed prior to date of submittal of application.
 - 2. Fill in summary of dollar values to agree with respective totals indicated on continuation sheets.
- B. Continuation Sheets:
 - 1. Fill in total list of scheduled component items of work with item number and scheduled dollar value for each item.
 - 2. Fill in dollar value in each column for each scheduled line when work has been performed or products stored.
 - a. Round off values to nearest dollar, or as specified for Schedule of Values.
 - 3. List each change order executed prior to date of submission at the end of the continuation sheets.
 - a. List by change order number and description, as for an original component item of work.

1.04 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS

- A. Contractor shall submit suitable information, with a cover letter identifying:
 - 1. Project Name

- 2. Application number and date
- 3. Detailed list of enclosures
- 4. For stored products:
 - a. Submit separate recap for all stored materials included in Application for Payment.
 - b. All stored materials listed in recap shall be substantiated by invoices for the material and copies of the invoices shall be attached to the recap. If any stored materials are being claimed which are not stored in the construction site, itemized listing shall show location where materials are stored and such location shall be available for inspection of the materials. Contractor shall show proof of adequate insurance for material stored off-site. The Contractor shall request approval of any location for stored material, other than the construction site, prior to submittal of Application for Payment.
 - c. Stored material prices shall include cost of material, related freight costs, and applicable taxes; all of which must be substantiated by invoice.
- 5. Provide completed forms for Payment Request and Proof of Payment for subcontractors and suppliers.
- B. Submit one copy of data and cover letter with each copy of application.
- C. A copy of each of the subcontractor and supplier request form and a stored materials form.

1.05 PREPARATION OF APPLICATION FOR FINAL PAYMENT

- A. Fill in application form as specified for progress payments.
- B. Use continuation sheet for presenting the final statement of accounting as specified in Section 01 70 00 Contract Close-out Procedures.

1.06 SUBMITTAL PROCEDURE

- A. Submit Applications for Payment to Project Representative at the times stipulated in the General Condition.
- B. Number: Three copies of each application.
- C. When Owner's Representative finds application properly completed and correct, the Certificate for Payment will be transmitted to the Owner with copy of the transmittal letter.

PART 2 PRODUCTS (not used)
PART 3 EXECUTION (not used)

END OF SECTION 01 02 70

SECTION 01 04 50 - CUTTING AND PATCHING

PART 1 GENERAL

1.01 DESCRIPTION

A. Work Included:

- 1. Cutting, fitting and patching required to complete the work and to:
 - a. Accommodate coordination of the Work.
 - b. Provide for installation of other work.
 - c. Remove and replace defective work.
 - d. Remove and replace work not conforming to requirements of Contract Documents.
 - e. Uncover other work for access or inspection.
 - f. Obtain samples for testing or similar purposes.
 - g. Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.
 - h. Uncover portions of the work to provide for installation of ill-timed work.
- Cutting and patching also includes, but is not limited to, cutting and patching of nominally completed and previously existing work, and is defined to exclude integral cutting and patching during manufacturing, fabricating, erecting, and installation process for individual units of work.

B. Related Sections:

1. Refer to other section of specifications for specific cutting and patching requirements and limitations applicable to individual units of work.

1.02 SUBMITTALS

- A. Submit written request to Owner's Representative well in advance of executing cutting or alteration which affects:
 - 1. Work of Owner or separate contractor.
 - 2. Structural value or integrity of element of Project.
 - 3. Integrity of effectiveness of weather exposed or moisture resistant elements or systems.
 - 4. Efficiency, operating life, maintenance or safety of operating elements.
 - 5. Visual qualities of sight exposed elements.

B. Request shall include:

- 1. Project identification.
- 2. Description of affected work.
- 3. Necessity for cutting.
- 4. Effect on other work, or structural integrity of project.
- 5. Description of proposed work. Designate:
 - a. Scope of cutting and patching
 - b. Contractor and trades to execute work

- c. Products proposed for use
- d. Extent of refinishing
- 6. Alternatives to cutting and patching
- 7. Designation of party responsible for cost of cutting and patching.
- C. Should conditions of work or schedule indicate change of materials or methods, submit written recommendation to Owner's Representative including:
 - 1. Conditions indicating change.
 - 2. Recommendations for alternative materials or methods.
 - 3. Submittals as required for substitutions.
 - 4. Time involved and impact to other on-going activities.
 - Cost involved.
 - 6. Time work will be accomplished to provide for Owner's Representative's observations.

PART 2 PRODUCTS (not used)

PART 3 EXECUTION

3.01 JOB CONDITIONS

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by cutting and patching operations, to such acceptable or approved condition. Return adjacent areas to condition existing prior to start of work.

3.02 VISUAL REQUIREMENTS

- A. Do not cut and patch work exposed on exterior of building in manner resulting in reduction of visual qualities or resulting in evidence of cut and patch work. Remove and replace cut and patched work judged by Owner's Representative to be visually unacceptable.
- B. Work includes, but is not limited to, items of woodwork, paneling, drywall, wall finishing, finished flooring, and ceilings.

3.03 MATERIALS

- A. For replacement of work removed, comply with Specifications for type of work to be done, unless otherwise noted.
- B. Provide materials for cutting and patching which will result in equal to or better work being cut and patched in terms of performance characteristics and visual effect where applicable.

3.04 INSPECTION

- A. Inspect existing conditions of work including elements subject to movement or damage during cutting and patching.
- After uncovering work, inspect conditions affecting installation of new products.

3.05 PREPARATION PRIOR TO CUTTING

A. Provide shoring, bracing, and support as required to maintain structural integrity of Project.

B. Provide protection for other work during cutting and patching to prevent damage. Provide protection from adverse weather conditions for that part of the project that may be exposed during cutting and patching operations.

C. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

3.06 PERFORMANCE

- A. Before the start of cutting work, meet at the work site with all parties involved in cutting and patching, including (if necessary) mechanical and electrical trades. Review areas of potential interference and conflict between the various trades. Coordinate layout of the work and resolve potential conflicts before proceeding with the work.
- B. Execute fitting and adjustment of products to provide finished installation to comply with specified products, functions, tolerances and finishes.
- C. Execute cutting and demolition by methods which will prevent damage to other work and provide proper surfaces to receive installation of repairs and new work.
- D. Restore work which has been cut or removed. Install new products to provide completed work in accord with requirements of Contract Documents.
- E. Do not cut and patch structural work in manner resulting in reduction of:
 - 1. Load carrying capacity.
 - 2. Load/deflection ratio.
- F. Refinish entire surface as necessary to provide even finish.
 - 1. Refinish continuous surfaces to nearest intersection.
 - 2. Refinish entire unit of an assembly.
- G. Cut the work using methods that are least likely to damage work to be retained or adjoining work. Where possible review proposed procedures with original installer; comply with original installer's recommendations.
- H. Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the work. Where feasible, inspect and test patched areas to demonstrate integrity of work.
- I. Restore exposed finishes of patched area and where necessary extend finish restoration into retained adjoining work in a manner which will eliminate evidence of patching and refinishing.

END OF SECTION 01 04 50

SECTION 01 05 20 - GRADES, LINES AND LEVELS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Property lines, bench marks, existing and proposed grades, and improvements are indicated on Drawings.
- B. Lay out Work and provide lines and measurements for the Work.
 - 1. Verify adjustments required due to existing improvements, adjoining property rights, good appearance, and proper drainage.
- C. Take necessary measurements as far in advance of required installation as practical. Verify measurements given on Drawings.
 - 1. Report promptly variations and discrepancies to Owner's Representative.
 - 2. Verify incomplete or non-closing dimensions with Owner's Representative.
- D. Dimensions on Drawings take precedence over scaled dimension. Where dimensions are not given, scaled dimensions to nearest point of reference may be used subject to verification of Owner's Representative.

1.02 SURVEYS, LINES AND LEVELS

- A. Provide services of a registered civil engineer or registered land surveyor with a minimum of 5 years' experience in Alaska, acceptable to Owner's Representative and licensed in the State of Alaska, to lay out work.
 - 1. Establish interior and exterior construction and control lines.
 - 2. Set grades using:
 - a. Grade stakes
 - b. Slope stakes
 - c. Finish grade stakes
- B. Provide all layout and construction lines and grade staking required for type of work being performed according to normal engineering procedures.
- C. Maintain construction lines and grade staking in condition to assure accurate and proper control of work and to verify final grades and construction lines.
 - 1. Establish and safeguard additional bench marks in at least two widely separated places.
 - 2. Establish axis lines showing exact floor elevations and other lines, dimensions and reference points as required for information and guidance of all trades.

1.03 SUBMITTALS

A. Take settlement readings of work, unless waived by owner.

- 1. At predetermined number of points selected by Owner's Representative.
- 2. Weekly until work is completed or until such time as directed.
- B. Record all survey data and make available to Owner's Representative.
- C. Submit certificate signed by registered engineer or surveyor certifying elevations and improvements are in conformance with requirements of Contract Documents.
 - Describe in detail and indicate on Project Record Documents all variation from Contract Documents.
 - 2. Include field survey notes starting date, name of surveyor or foremen, and adequate description of temporary bench marks when used.
 - Orient sketches with north arrow and show relationship and ties to stationing control.
 - b) Reduce notes to show actual elevations at design datum.
 - 3. Base horizontal control, for Project Record Documents information, on stationing system shown. Use design datum for all elevations.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF SECTION 01 05 20

SECTION 01 06 00 - REGULATORY REQUIREMENTS

PART 1 GENERAL

1.01 BUILDING CODES

A. Construction which is not governed by a local building code or the Contract Documents will be governed by the more stringent provisions of the latest published, Statute adopted edition, of the following applicable codes:

2012 International Building Code

2014 National Electrical Code

2012 International Plumbing Code

2012 International Mechanical Code

2012 International Fire Code

2012 International Energy Conservation Code

2012 International Fuel Gas Code Chapters 6 & 7

Americans with Disabilities Act (ADA)

Accessibility Guidelines for Buildings and Facilities

NFPA 13, 70, 72, 101, 110, 415 and 780

B. Construction Type: VB

C. Occupancy Type: B

1.02 APPLICABLE STANDARDS

- A. Where indicated, comply with requirements and recommendations of referenced standards and other publications, except to extent more detailed or more stringent provisions are required by applicable codes and governing regulations.
- B. Where two or more standards or recommendations of trade associations apply to same quality control requirement for work, comply with most stringent. Refer uncertain instances to Owner's Representative.

1.03 FEES AND PERMITS

A. Comply with requirements of Contract General Conditions and Supplementary Conditions.

PART 2 PRODUCTS (not used)

PART 3 EXECUTION (not used)

END OF SECTION 01 06 00

SECTION 01 09 00 - REFERENCE STANDARDS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Quality assurance
- B. Schedule of references

1.02 RELATED SECTIONS

A. General Conditions

1.03 QUALITY ASSURANCE

- A. For products or workmanship specified by association, trade, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. The date of the standard is that in effect as of the Bid date, except when a specific date is specified.
- C. Obtain copies of standards when required by Contract Documents.
- D. Maintain copy at jobsite during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Owner's Representative before proceeding.
- F. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.04 SCHEDULE OF REFERENCES

AA Aluminum Association

818 Connecticut Avenue, NW Washington, DC 20006

AABC Associated Air Balance Council

1000 Vermont Avenue, NW Washington, DC 20005

AASHTO American Association of State Highway and Transportation Officials

444 North Capitol Street, NW Washington, DC 20001

ACI American Concrete Institute

Box 19150

DIVISION 1 SECTIONS 01 09 00 REFERENCE STANDARDS

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Reford Station Detroit, MI 48219

ADC Air Diffusion Council

230 North Michigan Avenue

Chicago, IL 60601

AGC Associated General Contractors of America

1957 E Street, N.W. Washington, DC 20006

Al Asphalt Institute

Asphalt Institute Building College Park, MD 20740

AIA American Institute of Architects

1735 New York Avenue, N.W. Washington, DC 20006

AISC American Institute of Steel Construction

400 North Michigan Avenue

Eighth Floor

Chicago, IL 60611

AISI American Iron and Steel Institute

1101 17 Street, N.W Washington, DC 20036

AITC American Institute of Timber Construction

333 W. Hampden Avenue Englewood, CO 80110

AMCO Air Movement and Control Association

30 West University Drive Arlington Heights, IL 60004

ANSI American National Standards Institute

11 W. 42st

New York, NY 10036

APA American Plywood Association

Box 11700

Tacoma, WA 98411

ARI Air-Conditioning and Refrigeration Institute

1501 Wilson Boulevard Arlington, VA 22209

ASHRAE American Society of Heating, Refrigerating and Air Conditioning Engineers

1791 Tullie Circle, N.E. Atlanta, GA 30329

DIVISION 1 SECTIONS 01 09 00 REFERENCE STANDARDS

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ASME American Society of Mechanical Engineers

345 East 47th Street New York, NY 10017

ASTM American Society for Testing and Materials

1916 Race Street Philadelphia, PA 19103

AWI Architectural Woodwork Institute

2310 South Walter Reed Drive

Arlington, VA 22206

AWPA American Wood-Preservers' Association

7735 Old Georgetown Road Bethesda, MD 20014

AWS American Welding Society

550 LeJune Road, NW Miami, FL 33135

AWWA American Water Works Association

6666 West Quincy Avenue

Denver, CO 80235

CRSI Concrete Reinforcing Steel Institute

933 Plum Grove Road Schaumburg, IL 60195

DHI Door and Hardware Institute

7711 Old Springhouse Road

McLean, VA 22102

FGMA Flat Glass Marketing Association

3310 Harrison

White Lakes Professional Building

Topeka, KS 66611

FM Factory Mutual System

1151 Boston-Providence Turnpike

PO Box 688

Norwood, MA 02062

FS Federal Specification General Services Administration

Specifications and Consumer Information Distribution Section

Washington Navy Yard, Bldg. 197

Washington, DC 20407

GA Gypsum Association

810 First St. N.E. Suite 510 Washington D.C. 20002

IAS International Accreditation Service

DIVISION 1 SECTIONS 01 09 00 REFERENCE STANDARDS

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3060 Saturn Street, Suite 100

Brea, California 92821

ICBO International Conference of Building Officials

5360 S. Workman Mill Road

Whittier, CA 90601

IEEE Institute of Electrical and Electronics Engineers

345 East 47th Street New York, NY 10017

IMIAC International Masonry Industry All-Weather Council

International Masonry Institute

815 15 th Street, NW Washington, DC 20005

MBMA Metal Building Manufacturers Association

1300 Sumner Avenue Cleveland, Ohio 44115

MIL Military Specification

Navel Publications and Forms Center

5801 Tabor Avenue Philadelphia, PA 19120

NAAMM National Association of Architectural Metal Manufacturers

221 North LaSalle Street Chicago, IL 60601

NCMA National Concrete Masonry Association

2302 Horse Pen Road Herndon, VA 22071

NEBB National Environmental Balancing Bureau

8224 Old Courthouse Road

Vienna, VA 22180

NEMA National Electrical Manufacturers' Association

2101 L Street, NW Washington, DC 20037

NFPA National Fire Protection Association

1 Battery March Park Quincy, MA 02269

NFPA National Forest Products Association

1250 Connecticut Ave. N.W. #200

Washington, DC 20036

PCA Portland Cement Association

5420 Old Orchard Road

Skokie, IL 60077

PS Product Standard

US Department of Commerce

Washington, DC 20203

SDI Steel Deck Institute

PO Box 9506 Canton, OH 44711

SDI Steel Door Institute

712 Lakewood Center North 14600 Detroit Avenue Cleveland, OH 44107

SIGMA Sealed Insulating Glass Manufacturers Association

111 East Wacker Driver Chicago, IL 60601

SMACNA Sheet Metal and Air Conditioning Contractors' National Assoc.

8224 Old Court House Road

Vienna, VA 22180

SSPC Steel Structures Painting Council

4400 Fifth Avenue Pittsburgh, PA 15213

TCA Tile Council of America, Inc.

Box 326

Princeton, NJ 08540

UL Underwriters' Laboratories, Inc.

333 Pfingston Road Northbrook, IL 60062

WCLB West Coast Lumber Inspection Bureau

6980 SW Varns Road

Box 23145

Portland, OR 97223

WWPA Western Wood Products Association

1500 Yeon Building Portland, OR 97204

PART 2 PRODUCTS (not used)

PART 3 EXECUTION (not used)

END OF SECTION 01 09 00

SECTION 01 20 00 - PROJECT MEETINGS

PART 1 GENERAL

1.01 DESCRIPTION

- A. Owner's Representative shall conduct Preconstruction Conference and close out review meetings. Contractor is to assure orderly review during progress of work and to assure systematic discussion of problems and will conduct all project meetings throughout the construction period. These will include:
 - 1. Weekly progress review meeting which will include Owner's Representative, and Superintendent, and any necessary Subcontractors.
 - First of Month meetings which will include Architect, responsible sub-consultants for respective agenda items Superintendent, and Owner's Representative. At this meeting the request for payment shall be submitted for approval. Also, at this meeting the Contractor shall show current as-built drawings for approval prior to the pay period payment.
- B. Owner's Representative, Architect and consultants, project inspectors, and testing personnel will attend as needed.
- C. Related Sections:
 - 1. Section 01 31 10 Scheduling
 - 2. Section 01 34 00 Shop Drawings, Product Data, and Samples
 - 3. Section 01 70 00 Contract Close-out Procedures
 - 4. Individual Specification Sections
- D. Contractor's discussions with subcontractors and materials suppliers are Contractor's responsibility and normally are not part of project meetings content.

1.02 QUALITY ASSURANCE

A. For those persons designated by the Contractor to attend and participate in project meetings, provide required authority to commit Contractor to solutions agreed upon in project meetings.

1.03 SUBMITTALS

- A. Agenda Items: To the maximum extent practicable, advise Owner's Representative at least 24 hours in advance of project meetings regarding items to be on agenda.
- B. Contractor shall compile minutes of each project meeting, furnishing copies to Owner's Representative and Architect within seven days of each meeting.

PART 2 PRODUCTS (not used)

PART 3 EXECUTION

3.01 MEETING SCHEDULE

- A. Except as noted below for Preconstruction meeting, project meetings will be held weekly.
- B. Coordinate as necessary to establish mutually acceptable schedule for meetings.

3.02 MEETING LOCATION

A. Owner's Representative will establish meeting location.

3.03 PRECONSTRUCTION MEETING

- A. Preconstruction Meeting will be scheduled to be held within 15 working days after Owner's Representative has issued the Notice to Proceed.
 - In addition to Contractor, representatives of sitework, mechanical, electrical and other major subcontractors shall attend.
 - 2. Contractor shall notify other interested parties and request their attendance.
 - 3. Preconstruction meeting will be held in the Owner's Representative's office.
- B. Minimum agenda: Data shall be distributed and discussed on at least the following items:
 - 1. Organizational arrangement of Contractor's forces and personnel, those of subcontractors, materials suppliers, Architect and consultants.
 - 2. Channels and procedures for communication.
 - 3. Construction Schedule, including sequence of critical work. Review materials that might require long lead times, etc.
 - 4. Contract Documents, including distribution of required copies of original documents and revisions.
 - 5. Processing of shop drawings and other data submitted to Owner's Representative for review.
 - 6. Processing of Bulletins, field decisions, and change orders.
 - 7. Rules and regulations governing performance of Work.
 - 8. Procedures for safety and first aid, security, quality control, housekeeping, and related matters.
 - 9. Processing of payment requests.
 - 10. Preliminary discussions of future close-out procedures.

3.04 PROJECT MEETINGS

A. Attendance:

- 1. As much as possible, assign the same person or persons to represent the Contractor at project meetings throughout progress of Work.
- 2. Subcontractor, materials suppliers, and others may be invited to attend those project meetings in which their aspect of the Work is involved.

B. Minimum Agenda:

- 1. Review minutes of previous meetings.
- 2. Review of Work progress.
- 3. Field observation, problems and decisions.
- 4. Identification of problems which impede planned progress.
- 5. Review of submittals schedule and status of submittals.
- 6. Review of off-site fabrication and delivery schedules.
- 7. Maintenance of progress schedule.
- 8. Corrective measures to regain projected schedules.
- 9. Planned progress during succeeding work period.
- 10. Coordination of projected progress.
- 11. Maintenance of quality and work standards.
- 12. Effect of proposed changes on progress schedule and coordination.
- 13. Other business relating to Work.

3.05 CONTRACTOR'S MEETINGS

- A. Conduct meetings with his own forces, subcontractors and suppliers as is required in individual specifications sections.
- B. Notify Owner's Representative in writing of any impending meetings for which the Owner's Representative's input is needed.
- C. Provide written notice a minimum of two weeks prior to meeting date and include meeting topic, agenda, location, time and list of expected attendees.
- D. Take meeting minutes and provide copies to Owner's Representative within 3 calendar days after meeting.

3.06 CLOSE-OUT MEETINGS

- A. Review Section 01 70 00 regarding Contract Close-out Procedures. Approximately two months prior to Substantial Completion, weekly Project Meetings will include discussion of close-out activities.
- B. Contractor is responsible to invite subcontractors as necessary to review related close-out work.

END OF SECTION 01 20 00

SECTION 01 25 00 - DEFINITIONS AND EXPLANATIONS

PART 1 GENERAL

1.01 DESCRIPTION

A. Explanation:

This section of the General Requirements defines certain terms used in the specifications and explains the language, format, and certain conventions used in the Project Manual and associated Contract Documents.

B. Related Documents:

Other contract documents directly related to and in some way modified or governed by the General Requirements Division include, but are not necessarily limited to, the following:

- 1. General Provisions
- 2. Supplementary Conditions
- 3. Technical Specifications Sections

C. Limitations of Scope:

The definitions and explanations of this section are not necessarily either complete or exclusive, but are general for the Work to the extent such definitions or explanations are not stated more explicitly in other parts of the Contract Documents.

1.02 DEFINITIONS

A. General:

A substantial amount of the specification language constitutes specific definitions for terms found in the other Contract Documents, including the Drawings which must be recognized as diagrammatic and quantitative in nature and not completely descriptive of the requirements indicated. Certain terms used repetitiously in the Contract Documents are defined generally as follows:

1. Contract Documents:

The Contract Documents consist of the Owner-Contractor Agreement, the Conditions (Provisions) of the Contract (General, Supplementary, & other Conditions), the Drawings, the Specifications and all Addenda issued prior to and all Modifications issued after execution of the Contract.

2. Project Manual:

The Project Manual is a bound volume or volumes, containing the Bidding Requirements and the Contract Documents, (except Drawings, Addenda, and Change Orders).

3. General Requirement:

The Provisions or Requirements of Division 1 sections and the General Requirements apply to the entire Work of the Contract, and where so indicated, to other elements of Work which are included in the project.

4. Work (capitalized, noun):

The Work comprises the completed construction required by the Contract Documents and includes all labor necessary to produce such construction, and all materials and equipment incorporated or to be incorporated in such construction.

5. work (uncapitalized, verb or noun):

Refers to effort or accomplishment.

6. Indicated:

A cross reference to details, notes, or schedules on the drawings, other paragraphs or schedules in the specifications, and similar means of recording requirements in the Contract Documents. Where terms such as "shown", "noted", "scheduled", or "specified" are used in lieu of "indicated", it is for the purpose of helping the reader locate the reference, and no limitation of location is intended except as specifically noted.

7. Directed, Requested, Authorized, Selected, Approved:

Unless otherwise explained, shall imply: "Directed by the Owner's Representative....Authorized by the Owner's Representative", etc. However, no such implied meaning shall be interpreted as to extend the responsibility of the Owner's Representative into the field of responsibility of the Contractor under the Contract.

8. Refer:

Used to indicate that the subject is defined or specified in further detail at another location in the Contract Documents, or elsewhere as indicated. It shall not be interpreted to require the Contractor to procure, subcontract, or purchase the subject work in any specific manner.

9. Approve:

Where used in conjunction with the response of the Owner's Representative (Contracting Agency) to submittals, requests, applications, inquiries, reports, and claims by the contractor, the meaning shall be held to the limitations of the responsibilities and duties of the Owner's Representative. In no case shall it be interpreted as a release of the Contractor from responsibility to fulfill the requirements of the Contract Documents.

10. Project Site, Jobsite:

The location of and the space available and assigned to the Contractor for the performance of the Work. The extent of the Project Site is shown in the Drawings and may or may not correspond with the legal description of the land upon which the project is to be built.

11. Shall/Must/Will:

"Shall" is used generally to indicate a direct indicative requirement. Where encountered, "must" shall be interpreted to mean the same as "shall" and neither is to be interpreted to require more or less stringent compliance than the other.

"Will", where encountered in relation to acts or responsibilities of the Contractor, shall be accorded the same meaning as "shall".

12. Furnish:

Used to mean the procurement, delivery to the project site, unloaded, and ready for unpacking, assembly, erection, or installation, as applicable in each instance.

13. Install:

Used to describe operations at the project site including unpacking, assembly, erection, installation, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations, as applicable in each instance.

14. Provide:

Means Furnish and Install, complete and ready for the intended use, as applicable in each instance.

15. Installer:

The entity (person or firm) engaged by the Contractor, his subcontractor, or subsubcontractor for the performance of a particular unit of work at the project site, including installation, erection, application and similar required operations. It is a general requirement and understanding that such entities (installers) shall be expert in the operations they are engaged to perform.

16. Shop Drawings:

All drawings, diagrams, illustrations, brochures, schedules, and other data which are prepared by the Contractor, his subcontractors, suppliers, or the manufacturers of the products, which illustrate how specific products, assemblies, or systems are fabricated or installed into the Work.

17. Architect, Architect/Engineer:

Generally used interchangeably to denote the professional consultant retained by the Owner to design the project and prepare the Contract Documents; but also for consultation during administration of the Contract, interpretation of Contract Documents, review and evaluation of materials and methods, and general observation of the progress of the Work. The Architect shall provide construction administration and will be the primary contact for the contractor.

18. Owner's Representative:

The designated representative of the Owner during the construction period to administer the Contract, interpret Contract Documents, review and evaluate materials and methods, and observe and evaluate the progress of the Work. The Owner's Representative has final approval on construction administration decisions.

1.03 EXPLANATION

A. General:

This series of explanations is provided to assist the user of these specifications and associated Contract Documents to more readily understand the format, language, implied requirements and similar conventions of the content. None of these explanations shall be interpreted to modify the substance of the specified requirements.

B. Specification Production:

Portions of these specifications have been produced by editing master specifications and may contain minor inconsistencies. Such deviations are a normal result of this production technique, and no other meaning shall be implied or permitted.

C. Format:

The format of principal portions of these specifications can be generally described as follows, although other portions may not fully comply and no particular significance shall be attached to such compliance or non-compliance:

- For convenience, the basic unit of specification text is a "Section", each unit of which is named and numbered. Sections are organized into related families of sections termed "Divisions", which are recognized as the present industry consensus on uniform organization and sequencing of construction specifications.
- 2. The section title is not intended to limit the meaning or content of the section, nor to be fully descriptive of the requirements specified therein, nor to be an integral part of the text. The Section identification is contained in the footer at the bottom of the page.

D. Page Numbering:

Pages are numbered independently and sequentially within each section. A new sequence
of numbers begins with the beginning of each new Section and is located in the right-hand
side of the footer on each page.

E. The Three Part Section:

Generally, each section of the specification has been subdivided into three (3) "parts" for uniformity and convenience. They are:

PART 1 GENERAL PART 2 PRODUCTS PART 3 EXECUTION

In the event additional parts are required for tables, schedules, etc. they will be added in the form of:

PART 4 APPENDIX

These parts do not limit the meaning of, and are not an integral part of, the text which specifies requirements. In some instances one or the other of these parts may not be used in which case it will be so noted as "not used."

F. Language:

Direct imperative language is used generally throughout the specifications, and requirements so expressed are the responsibility of the Contractor, even though the work specified actually may be accomplished by specialty subcontractors hired, retained, or otherwise engaged by the Contractor. Any references to third parties in this regard, shall not be interpreted in any way as to relieve the Contractor of any of his responsibilities under the contractor.

G. Specification Types:

The techniques or types of specification used to record the requirements varies throughout the text, and may include types commonly recognized as "prescriptive," "generic descriptive," "compliance with standards (reference)," "performance," "open," "open multi-product," "closed single product," "proprietary," or a combination of these.

H. Trades, Names:

The use of trade titles such as "carpentry," and degrees of expertise such as "journeyman (men)," implies neither that the work is required to be performed by that specific trade, nor that the level of expertise indicated is recognized as peculiar to membership or nonmembership in any trade or industry association or organization, nor that the specified requirements apply exclusively to work by tradesmen of that corresponding generic name.

PART 2 PRODUCTS (not used)

PART 3 EXECUTION (not used)

END OF SECTION 01 25 00

SECTION 01 31 10 - SCHEDULING

PART 1 GENERAL

1.01 DESCRIPTION

- A. To assure adequate planning and execution of the Work so that the Work is completed prior to the completion date stipulated in the Contract, and to assist the Owner's Representative in appraising the reasonableness of the proposed schedule and in evaluating progress of the Work, prepare a project schedule using the Critical Path Method.
- B. Requirements for progress schedule: General Conditions.
- C. Construction period: Form of Agreement
- D. Definitions:
 - 1. "Day", as used throughout the Contract unless otherwise stated, means "calendar day".

1.02 SECTION INCLUDES

- A. References
- B. Quality Assurance
- C. Format
- D. Schedules
- E. Submittals
- F. Review and evaluation
- G. Updating Schedules
- H. Distribution

1.03 RELATED SECTIONS

- A. General Conditions
- B. Supplementary Conditions
- C. Section 01 02 70 Application for Payment Procedures
- D. Section 01 20 00 Project Meetings
- E. Section 01 34 00 Shop Drawings, Project Data, and Samples
- F. Section 01 37 00 Schedule of Values

1.04 REFERENCES

- A. "The Use of CPM in Construction A Manual for General Contractors and the Construction Industry", The Associated General Contractors of America (AGC), Washington, D.C., 1976 edition.
- B. "CPM in Construction Management Project Management with CPM", James O'Brien, McGraw-Hill Book Company, New York, NY 1984, third edition.

1.05 QUALITY ASSURANCE

A. A statement of CPM capability shall be submitted in writing prior to the award of the contract and will verify that either the contractor's organization has "in-house capability" qualified to use the Microsoft Project or that the contractor employs a consultant (firm) which is so qualified.

1.06 FORMAT

- A. Listing: Reading from left to right, in ascending order for each activity. Identify each activity with the applicable Specification section number.
- B. Diagram Sheet Size: Adequate for clear reading.
- C. Scale and Spacing: To allow for notations and revisions.

1.07 SCHEDULES

- A. Prepare the Critical Path Schedule, under concepts and methods outlined in the references list in Article 1.04 above. Show information in such detail that duration times of activities will range normally from one to 15 calendar days.
- B. Illustrate complete sequence of construction by activity, identifying work of separate areas. Provide dates for submittals, including those for Owner furnished items, and return of submittals; dates for procurement and delivery of products; and dates for installation of provision for testing. Provide legend for symbols and abbreviations used.
- C. Actual start date
 - 1. Actual finish date
 - 2. Latest start date
 - 3. Latest finish date
 - 4. Total and free float
 - 5. Monetary value of activity, keyed to Schedule of Values
 - 6. Percentage of activity completed
 - 7. Responsibility
- D. Analysis Program Microsoft Project: Capable of compiling monetary value of completed and partially completed activities, of accepting revised completion dates, and recomputation of all dates and float.
- F. Coordinate contents with Schedule of Values in Section 01 37 00.

1.08 SUBMITTALS

- A. Within 10 days after date established in Notice to Proceed, submit proposed preliminary critical path schedule defining planned operations for the first 60 days of Work, with a general outline for remainder of Work.
- B. Submittal of preliminary schedule shall occur prior to review and payment of any pay requests.
- C. Participate in review of preliminary and complete schedule jointly with Owner's Representative.

D. Within 20 days after joint review of proposed preliminary schedule, submit draft of proposed complete project schedule for review. Include written certification that major Subcontractors have reviewed and accepted proposed schedule.

- E. Within 10 days after joint review, submit complete critical path schedule to final acceptance of work.
- F. Submit updated schedules with each Application for Payment.
- G. Submit 1 Compact Disc with file saved as MS Project format. Include updates on CD also.

1.09 REVIEW AND EVALUATION

- A. Participate in joint review and evaluation of schedule with Owner's Representative at each submittal.
- B. Evaluate project status to determine work behind schedule and work ahead of schedule.
- C. After review, revise as necessary as result of review, and resubmit within 10 days.

1.10 UPDATING SCHEDULES

- A. Maintain schedules to record actual start and finish dates of completed activities.
- B. Indicate progress of each activity to date of revision, with projected completion date of each activity. Update diagrams to graphically depict current status of Work.
- C. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- D. Indicate changes required to maintain Date of Substantial Completion.
- E. Submit sorts required to support recommended changes.
- F. Provide narrative report to define problem area, anticipated delays, and impact on Schedule. Report corrective action taken, or proposed, and its effect.

1.11 DISTRIBUTION

- A. Following joint review, distribute copies of updated schedules to Contractor's project site file, to Subcontractors, suppliers, Architect, and Owner's Representative.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown on Schedules.

PART 2 PRODUCTS (not used)

PART 3 EXECUTION (not used)

END OF SECTION 01 31 10

SECTION 01 34 00 - SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

PART 1 GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Procedures for submittals.
- B. Related Work Described Elsewhere:
 - 1. General Conditions:

Scheduling:
 Quality Control:
 Product Options and Substitutions:
 Project Record Documents:
 Operation and Maintenance Data:
 Section 01 31 10
 Section 01 40 00
 Section 01 63 00
 Section 01 72 00
 Section 01 73 00

1.02 SHOP DRAWINGS

- A. Present in a clear and thorough manner. Title each drawing with Project name and number; identify each element of drawings by reference to sheet number and detail, schedule, or room number of Contract Documents.
- B. Identify field dimensions; show relation to adjacent or critical features or Work or products.
- C. Sheet Size:
 - Minimum: 8 1/2 x 11 in.
 Maximum: 30 x 42 in.
 - 3. In between: Modules of approximately 8 1/2 x 11 in.
- D. Scale and measurements: Make shop drawing accurately to a scale large enough to show pertinent parts of item and method of connection to Work.
- E. Shop drawings include fabrication, erection and setting drawings, schedule drawings, manufacturer's scale drawings, wiring and control diagrams, cuts or entire catalogs, pamphlets, descriptive literature, performance and test data.
- F. Check drawings and schedules, coordinate them with work of trades involved before submission and indicate their approval.
- G. Identify details by reference to sheet and detail, schedule or room numbers shown on Drawings.

1.03 PRODUCT DATA

- A. Submit product data when required by individual Specification Section.
 - Products which are specified in individual Specification Sections or on Drawings by manufacturer's name and complete product number do not require submittal or product data.

- 2. Supply products specified. Indicate on Submittal Schedule manufacturer's name and complete product number of product to be supplied, and reference Specification Section and Article number and Drawings and detail number.
- B. Submit only pages which are pertinent; mark each copy of standard printed data to identify pertinent products, referenced to Specification Section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.
- C. Modify manufacturers' standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the Work. Delete information not applicable.

1.04 SAMPLES

A. Submit full range of manufacturer's standard finishes except when more restrictive requirements are specified, indicating; colors, textures, patterns, for selection. No color selection shall be made until all items needing color selection have been submitted.

Whenever color is specified "as selected", submit actual material color samples for Architect's selection.

- B. Submit samples to illustrate functional characteristics of products, including parts and attachments.
- C. Label each sample with identification required for transmittal letter.
- D. Provide field samples of finishes at Project, at location acceptable to Owner's Representative, as required by individual Specifications section. Install each sample complete and finished. Acceptable finishes in place may be retained in completed work.

1.05 MANUFACTURER'S INSTRUCTIONS

A. Manufacturer's instructions for storage, preparation, assembly, installation, start-up, adjusting, balancing, and finishing.

1.06 CERTIFICATES OF COMPLIANCE

A. Execute certificates of compliance for specified materials in three copies. Sign certificates by an authorized official of manufacturing company, and list name and address of Contractor, Project name and location, and quantity and date of shipment. List name and address of testing laboratory and date of tests on copies of lab test reports submitted with certificates.

1.07 CONTRACTOR REVIEW

- A. Review submittals prior to transmittal; determine and verify field measurements, field construction criteria, manufacturer's catalog numbers, and conformance of submittal with requirement of Contract Documents.
- B. Coordinate submittals with requirements of Work and of Contract Documents.
- C. Apply Contractor's review stamp, signed or initialed certifying to review, verification of products, field dimensions and field construction criteria, and coordination of information with

requirements of Work and Contract Documents, for each sheet of shop drawings, manufacturer's installation instructions and product data, and label each sample to certify compliance with requirements of Contract Documents. Notify in writing at time of submittal, of any deviations from requirements of Contract Documents, with brief explanation describing deviation.

- D. Do not fabricate products or begin work which requires submittals until return of submittal with acceptance.
- E. It is the Contractor's responsibility to coordinate and verify field conditions, with approved shop drawings, prior to construction, in areas requiring shop drawings.

1.08 SUBMITTAL REQUIREMENTS

- A. Submittal Schedule: Within thirty days from receipt of Notice to Proceed, submit two copies of schedule of submittals requiring review to Owner's Representative.
 - 1. Include such items as shop drawings, product data, certificates of compliance, and material samples.
 - 2. Indicate type of item, requirement reference, and submittal dates.
 - 3. Allow 10 calendar days for Owner's Representative's review.
 - 4. Submittals not required will not be reviewed by Architect.
- B. Transmit submittals in accordance with approved progress schedule and in such sequence to avoid delay in the Work or work of other contracts.
 - 1. Transmit far enough in advance of scheduled dates for installation to provide time required for reviews, for securing necessary approvals, for possible revisions and resubmittals, and for placing orders and securing delivery.
 - 2. For shop drawing submittal, schedule shall provide for maximum of 10 shop drawings per calendar week to be submitted for review for each of the mechanical, electrical, structural and architectural disciplines.
- C. Submittals shall be delivered to Owner's Representative's Office.
- D. Transmit submittals in groups containing all information required for complete review.
 - 1. Partial, incomplete submittals will be rejected.
- E. Provide 8 x 4 in. blank space on each submittal for Contractor's and Owner's Representative's stamp.
- F. Coordinate submittals into logical grouping to facilitate interrelation of the several items:
 - 1. Finishes which involve selection of colors, textures, or patterns.
 - 2. Associated items which require correlation for efficient function or for installation.
- G. PDF files of shop drawings are acceptable.
- H. Submit number of copies of product data and manufacturer's instructions Contractor requires, plus four copies which will be retained by Owner's Representative (two copies) and his consultants (two copies).
- I. Submit number of samples specified in individual Specifications Sections.

- J. Submit under accepted form of transmittal letter. Identify Project by title and number. Identify Work and product by Specifications section and Article number.
- K. Maintain submittal log showing status of submittals, make available for Owner's Representative's review upon request.

1.09 RESUBMITTALS

A. Make resubmittals under procedures specified for initial submittals; identify changes made since previous submittal.

1.10 DISTRIBUTION

- A. Pick up reviewed copies of submittals at Owner's Representative's office when notified.
- B. Duplicate and distribute reproductions of shop drawings, copies of product data, and samples, which bear stamp of approval, to job site file, Record Documents file, Owner's Representative (2 copies), subcontractors, suppliers, and other entities requiring information.

PART 2 PRODUCTS (not used)

PART 3 EXECUTION (not used)

END OF SECTION 01 34 00

SECTION 01 37 00 - SCHEDULE OF VALUES

PART 1 GENERAL

1.01 DESCRIPTION

A. Work Included:

- 1. Breakdown of Contract Sum showing values allocated to each of various parts of Work, as specified here and in other provisions of the Contract Documents.
- 2. Schedule of values shall be compatible with "continuation sheet" accompanying applications for payment.

B. Related Work Described Elsewhere:

- 1. General Conditions:
- 2. Supplementary Conditions
- 3. Sections in Division 1 of this Specification.

1.02 QUALITY ASSURANCE

- A. Use required means to assure arithmetical accuracy of sums described.
- B. When required by Owner's Representative, provide copies of subcontractors or other acceptable data substantiating sums described.

1.03 SUBMITTALS

- A. Submit to Owner's Representative a Schedule of Values for Contractor's Work and subcontracted work in each applicable Section of Specifications, Division 2 through 33 inclusive, within ten days after Notice to Proceed.
- B. Upon Owner's Representative's request, support values with data substantiating correctness.
- C. Schedule of Values, unless objected to by Owner's Representative, shall be used only as basis for Contractor's Applications for Payment.
- D. Meet with Owner's Representative's and determine additional information, if any, required to be submitted.
- E. Secure the Owner Representative's approval of the schedule of values prior to submitting first application for payment.

1.04 FORM AND CONTENT OF SCHEDULE OF VALUES

- A. Type schedule on 8 1/2 x 11 in. white paper, Contractor's standard forms and automated printout will be considered for acceptance by Owner's Representative upon Contractor's request. Include emailing to Owner and Architect file saved to MS Excel format. Identify schedule with:
 - 1. Project title and location.
 - 2. Name and Address of Contractor.

- 3. Date of Submission
- B. List installed value of component parts of Work in sufficient detail to serve as basis for computing values for progress payments during construction.
- C. Follow Table of Contents as format for listing component item:
 - 1. Identify each line item with number and title of respective Section of Specifications.
- D. Under each major item list sub-values of major products or operations.
 - 1. Each line item shall include directly proportional amount of Contractor's overhead and profit.
 - 2. For items on which progress payments will be requested for stored materials, breakdown values into:
 - a. Cost of materials, delivered and unloaded, with taxes paid.
 - b. Total installed value.
- E. Sum of values listed in schedule shall equal total Contract Sum.

1.05 SUB-SCHEDULE OF UNIT MATERIAL VALUES

- A. Submit sub-schedule of unit costs and quantities for products on which progress payments will be requested for stored products.
- B. Form of submittal shall parallel Schedule of Values, with each item identified same as line item in Schedule of Values.
- C. Unit quantity for bulk materials shall include allowance for normal waste.
- D. Break unit values for material down into:
 - 1. Cost of material, delivered and unloaded at Site, with taxes paid.
 - 2. Installation costs, including Contractor's overhead and profit.
- E. Installed unit value multiplied by quantity listed shall equal cost of item in Schedule of Values.
- F. Materials incorrectly stored at the jobsite are subject to damage and may not be included in progress payments as determined by the Owner's Representative.
- G. The contract sum identified on the schedule of values as "Final" shall be based on the contract award and in an amount as found in the general conditions.

PART 2 PRODUCTS (not used)

PART 3 EXECUTION (not used)

END OF SECTION 01 37 00

SECTION 01 40 00 - QUALITY CONTROL

PART 1 GENERAL

1.01 DESCRIPTION

- A. All material and workmanship shall be subject to inspection, examination, and test by the Owner's Representative at any and all times during manufacture and/or construction and at any and all places where such manufacture and/or construction are carried on. The Owner's Representative shall have the right to reject defective material and workmanship or require its correction. Rejected workmanship shall be satisfactorily corrected and rejected material shall be satisfactorily replaced with proper material without charge therefor, and the Contractor shall promptly segregate and remove rejected material from the premises. If the Contractor fails to proceed at once with replacement of rejected material and/or correction of defective workmanship, the Owner's Representative may, by contract or otherwise, replace such material and/or correct such workmanship and charge the cost thereof to the Contractor, or may terminate the right of the Contractor to proceed as provided in the General Conditions.
- B. The Contractor shall call for, coordinate and support inspections and tests required by the Contract Documents. The Owner shall pay all costs for special inspections and tests, required by the Contract Documents with the Contractor paying for coordination of said tests. The presence of, or absence from, the Contract work site of any Owner's Representative shall not relieve the Contractor of his responsibilities for providing of inspection or testing requirements of the Contract.
- C. Should it be considered necessary or advisable by the Owner's Representative, at any time before final acceptance of the entire work, to make an examination of work already completed by removing or tearing out, the Contractor shall promptly on request furnish all necessary facilities, labor, and materials. If such work is found to be defective or nonconforming in any material respect, due to the fault of the Contractor or his Subcontractors, the Contractor shall defray all the expenses of such examinations and of satisfactory reconstruction. However, if such work is found to meet the requirements of the Contract, the actual direct cost of labor and material necessarily involved in the examination and replacement plus ten percent (10%) shall be allowed the Contractor and, in addition, if completion of the work has been delayed thereby, he shall be granted a suitable extension of time based on the additional work involved.
- D. Inspection of material and finished articles at the place of production, manufacture, or shipment shall be final except as regards latent defects, departures from specific requirements of the Contract, damage or loss in transit, and fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceding sentence, the inspection of materials and workmanship for final acceptance as a whole or in part shall be made at the site. Nothing contained in this paragraph shall in any way restrict the Contracting Agency's rights under any warranty or guarantee.

DIVISION 1 SECTIONS 01 40 00 QUALITY CONTROL

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E. Manufactured articles, materials and equipment shall be applied, installed, connected, erected, cleaned, and conditioned as per manufacturer's printed directions, unless specified to contrary. The Contractor shall provide at least one set of all manufacturers' installation directions, on the jobsite at all times for inspection information.

PART 2 PRODUCTS (not used)

PART 3 EXECUTION (not used)

END OF SECTION 01 40 00

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 DESCRIPTION

A. Work Included:

- 1. Temporary utilities such as heat, water, electricity, and land line telephone.
- 2. Computer with high speed internet access and fax machine.
- 3. Field offices for the Contractor's personnel, Field offices and utilities for Owner's field office.
- 4. Sanitary facilities.
- 5. Enclosures such as tarpaulins, barricades, and canopies.
- 6. Temporary security fencing.
- 7. Project Sign.
- 8. Site and interior lighting.
- 9. Interior ventilation.
- 10. Dust control.
- 11. Traffic control.
- 12. Security protection provisions.
- 13. Access barriers.
- 14. Removal of temporary facilities and controls.

B. Related Work Described Elsewhere:

- 1. General Conditions
- 2. Supplementary Conditions

3.	Summary of Work	Section 01 01 00
4.	Construction Cleaning	Section 01 56 90
5.	Storage and Protection	Section 01 62 00
6.	Contract Close-out Procedures	Section 01 70 00
7.	Final Cleaning	Section 01 71 00

1.02 REQUIREMENTS NOT INCLUDED

- A. Except that equipment furnished by subcontractors shall comply with requirements of pertinent safety regulations, such equipment normally furnished by the individual trades in execution of their own portions of the work are not part of this Section.
- B. Permanent installation and hookup of various utility lines are described in other Sections.
 - 1. Contractor shall coordinate with Electric Utility for temporary power.
 - 2. Telephone: Contractor to provide phone for construction.
- C. Nothing in this Section is intended to limit types and amounts of temporary work required, and no omission from this Section will be recognized as indication by Owner's Representative such temporary activity or facility is not required for successful completion of Work and compliance with requirements of Contract Documents.

1.03 QUALITY ASSURANCE

- A. In addition to compliance with governing regulations and rules, and recommendations of utility companies, comply with specific requirements indicated in these specifications and with applicable local codes and industry standards for construction work.
- B. Comply with provision of Section 01 61 00 Transportation and Handling.
- C. Temporary connections shall be made in an approved manner meeting all applicable codes. Caution shall be taken so systems are not overloaded. Contractor shall take special precautions to keep his temporary connections and lines from being damaged. Temporary connections shall be disconnected and removed prior to completion of Project and returned to original conditions.

1.04 JOB CONDITIONS

A. General:

- 1. Establish and initiate use of each temporary facility at time first reasonably required for proper performance of Work.
- 2. Terminate use and remove facilities at earliest reasonable time, when no longer needed or when permanent facilities have, with authorized use, replaced need.

B. Conditions of Use:

- 1. Install, operate, maintain, and protect temporary facilities in safe, non-hazardous, sanitary, manner and location, protective of persons and property, and free of deleterious effects.
- C. Pay costs for such general services and temporary facilities, except as otherwise specified, until final acceptance with Work unless Owner's Representative makes arrangements for use of complete portions of Work after Substantial Completion in accordance with provisions of General Conditions.

PART 2 PRODUCTS

2.01 ELECTRICITY AND LIGHTING

- A. The Contractor shall provide the following:
 - 1. Connect to temporary service and provide all equipment necessary for temporary power and lighting. Verify electrical service is of adequate capacity for all construction tools and equipment without overloading facilities.
 - 2. Provide power distribution as required throughout for construction operations of all trades. Locate power distribution boxes at convenient locations in building. Provide distribution boxes for each voltage supply complete with circuit breakers, disconnect switches, and other electrical devices required to protect power distribution system.
 - 3. Provide a temporary lighting system required to satisfy minimum requirements of work, inspection, safety and security. Supply not less than 2 watts per square foot of floor area for illumination in areas of building where work is being performed, unless higher illumination requirements are specified elsewhere.

4. Temporary interior and exterior lighting during construction is to be maintained by Contractor so that work can be properly and safely performed. Special attention shall be given so that stairs, ladders, openings, barricades and other similar items and spaces are adequately lighted.

- 5. Conform to applicable provision of governing codes. Maintain temporary wiring in safe manner, utilized to not constitute hazard to persons or property.
- 6. Permanent electrical power, when in operating condition, may be used for temporary power for construction purposes, provided Contractor assumes full responsibility for entire power system.
- 7. At completion of construction work remove temporary wiring, lighting and other temporary electrical equipment devices.
- 8. Contractor shall be responsible for all power and gas utility costs during construction until substantial completion is approved.

2.02 HEATING AND VENTILATION

- A. Contractor shall provide, at his own expense, sufficient temporary heat for proper installation of work; and to protect all work and materials; and shall keep humidity down to extent required to prevent corrosion, dampness and mildew potentially damaging to materials and finishes. Fuel, equipment, and method of temporary heat shall be reviewed by Owner's Representative for appropriateness. Do not overheat spaces and materials. All such heating, ventilation and services shall be provided and maintained until final acceptance of all work. In addition, provide heat and ventilation prior and during Work operations as specified in Specifications.
- B. Connect temporary heating and ventilating equipment to electric facilities; contractor to pay cost for energy used.
- C. Provide ventilation of enclosed areas to cure materials, to disperse humidity, and to prevent accumulations of dust, fumes, vapors, or gases.
- D. Prior to operation of permanent facilities for temporary purposes, verify installation is approved for operation, and filters are in place. Provide and pay for operation, maintenance and utilities. Use of permanent heating plant shall not relieve Contractor of guarantee responsibilities.
- E. If permanent heating system is used for temporary heat, or ducts used for ventilation, completely clean ducts of dust and dirt and replace disposable type filers on as-needed basis, and install new permanent type filters prior to occupancy by Owner.

2.03 WATER

- A. Contractor shall furnish and install necessary temporary piping to carry on work and upon completion of Work shall remove all temporary piping.
- B. Contractor shall obtain necessary permits.
- C. Furnish drinking water with suitable containers and cups for use of employees. Conveniently locate drinking water dispensers in areas where Work is in progress.
- D. Contractor shall pay for all water brought to the site for construction work or obtained through utility.

2.04 SANITARY FACILITIES

- A. Provide and maintain adequate temporary toilet and hand washing facilities, approved by regulating authorities, throughout construction for all personnel connected with Work.
- B. Locate where directed when work is started and maintain in sanitary condition at all times supplied with adequate amounts of tissue, subject to inspection and approval of Owner's Representative.
- C. Provide separate facilities for male and female personnel when both sexes are working at Project.
- D. As soon as conditions allow, temporary toilets may, upon approval of Owner's Representative, be located outside near building entries.
- E. Remove temporary facilities when directed and disinfect premises.

2.05 STORAGE AND SHOP

- A. Contractor shall provide temporary storage and shop rooms and /or enclosures that may be required at site for safe and proper storage of tools, materials, etc. Locate such facilities only in locations approved by Owner's Representative and so as not to interfere in any way with proper installation and completion of other work.
- B. During progress of Work, materials shall be neatly stacked at such points as Owner's Representative may direct and shall be properly cared for and protected from weather and theft.
- C. Contractor shall store construction material and equipment within boundaries of designated areas. Storage of gasoline or similar fuels shall conform to NFPA regulations and local fire marshal regulations and shall be confined within definite boundaries apart from buildings as approved by authorities having jurisdiction.

2.06 TELEPHONE SERVICE

- A. Provide and maintain direct line telephone service at Site to each of Contractor's field offices.
- B. Pay all costs for installation, maintenance, normal monthly charges and all Contractor's long distance charges.
- C. Remove temporary telephone service at completion of work.
- D. Provide functioning facsimile machine, copier, and network connection for contractor's email in office for duration of project.

2.07 UTILITY MARKERS

- A. Provide markers above all new and disturbed existing below grade buried utility lines in accordance with this Article. Identify location of markers and include marker information on Record Documents, specified in Section 01 72 00.
- B. Provide stake at each extremity end of utility with 14 gauge trace wire along side of each utility line. Securely attach trace wire to stake at each end.
- C. Set markers at all locations where the following conditions exist:
 - 1. Above utility lines at exterior walls of building and at entries and exits of lines from above grade installations.
 - 2. At ends and changes of direction of lines.
 - 3. Debatable locations shall be directed by the Owner's Representative.

PART 3 EXECUTION

3.01 MAINTENANCE

- A. Maintain temporary facilities and controls as long as needed for safe and proper completion of Work.
- B. Remove such temporary facilities and controls as rapidly as progress of Work will permit, or as directed by Owner's Representative.

3.02 USE OF TEMPORARY FACILITIES

A. Temporary facilities shall be made available for use by workmen and subcontractors employed on Project and Owner's Representative, subject to reasonable direction by Contractor as to their proper and most efficient utilization.

3.03 CONSTRUCTION AIDS

- A. Provide and operate drainage and pumping equipment; maintain excavations and Site free of standing water.
- B. Provide and maintain properly calibrated moisture meter of type acceptable to Owner's Representative.
 - 1. Verify moisture content of concrete and concrete masonry units, wood and wood products, gypsum wallboard and other materials to assure that substrate products are dry and cured to subsequent finish manufacturer's recommendations prior to installation of finish materials.

3.04 ENCLOSURES

- A. Security:
 - 1. At earliest possible date, secure building against unauthorized entrance at times personnel are not working.
 - 2. Provide temporary, insulation, weather-tight closures of openings in exterior surfaces to provide acceptable work conditions and protection for material; to allow for temporary

heating and prevent entry of unauthorized persons. Provide doors with self-closing hardware and locks.

B. Access Provisions:

- 1. Provide ramps, stairs, ladders, and similar temporary access elements as reasonably required to perform Work and facilitate inspection during installation.
- 2. Comply with reasonable requests of governing authorities performing inspections.
- 3. When permanent stairs are available for access, during construction, cover finished surfaces and maintain free from damage and deterioration through substantial completion.

3.05 PROTECTION OF INSTALLED WORK

- A. Provide temporary protection for installed products in accordance with requirements specified in Section 01 62 00 and as follows. Control traffic in immediate area of installed products to minimize damage.
- B. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings. Protect finished floors and stairs from traffic, movement of heavy objects, and storage.
- C. Prohibit traffic and storage on waterproofed and roofed surfaces, on lawn, on concrete paving, and landscaped areas.
- D. Prohibit and take necessary precautions to prevent oil, gas and other liquids from vehicles and equipment from discharging onto concrete and asphalt concrete pavement.

3.06 POLLUTION CONTROL

- A. Use water sprinkling and other suitable methods to limit dust and dirt rising and scattering in air to lowest practicable level.
 - 1. Do not use water if use may create hazardous or objectionable conditions such as ice, flooding and pollution.
 - 2. Comply with governing regulations pertaining to environmental protection.

3.07 TRAFFIC

- A. Conduct operations and removal of debris to ensure minimum interference with adjacent occupied facilities.
- B. Do not close or obstruct completed areas without permission from Owner's Representative. Provide alternate and safe routes around closed or obstructed traffic ways if required.

3.08 SECURITY AND PROTECTION PROVISIONS

A. Provide temporary security and protection including, but not limited to; fire protection, barricades, warning signs/lights, personnel security program (theft prevention), environmental protection, and similar provision intended to minimize property losses, personal injuries, and claims for damages at Site.

- B. Unauthorized Entry:
 - 1. Maintain provision for closing and locking building during non-working hours.

3.09 REMOVAL

- A. Completely remove temporary materials and equipment when use is no longer required.
- B. Remove temporary underground installations to depth of 2 ft. below finish Site grade.
- C. Clean and repair damage caused by temporary installations or use of temporary facilities. Restore any installed facilities used for temporary services to specified, or original condition.

3.10 CLEANING

- A. Comply with requirement specified in Section 01 56 90.
- B. Maintain the public road and access to the Site in a clean condition. Remove the mud, dirt, rocks, etc. from the tires of vehicles before they exit the Site.

END OF SECTION 01 50 00

01 50 00 - 7

SECTION 01 56 90 -

CONSTRUCTION CLEANING

PART 1 GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Cleaning and disposal of waste materials, debris, and rubbish during construction.
- B. Related Work Described Elsewhere:
 - 1. General Conditions:
 - 2. Final Cleaning

Section 01 71 00

Division 1

3. Individual Specification Sections: Specific cleaning for Product or Work.

PART 2PRODUCTS

2.01 EQUIPMENT

A. Provide covered containers for deposit of waste materials, debris, and rubbish.

PART 3EXECUTION

3.01 CLEANING

- A. Maintain areas under Contractor's control free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition. Remove scrap materials, rubbish and trash daily from in and about building. Do not permit scrap materials, rubbish and trash to be scattered on adjacent areas.
- B. Maintain the public road and access to the site in a clean condition. Remove the mud, dirt, rocks, etc. from the tires of vehicles before they exit the Site.
- C. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to closing the space.
- D. Periodically clean interior areas to provide suitable conditions for work.
- E. Broom clean interior areas prior to start of surface finishing and continue cleaning on an asneeded basis.
- F. Control cleaning operations so that dust and other particles will not adhere to wet or newly-coated surfaces.

3.02 DISPOSAL

A. Remove waste material, debris, and rubbish from site periodically and dispose of off-site.

END OF SECTION 01 56 90

SECTION 01 60 00 - MATERIAL AND EQUIPMENT

PART 1 GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Products
- B. Related Work Described Elsewhere:
 - 1. Instructions to Bidders:
 - 2. General Conditions: Division 1
 - 3. Quality Control: Section 01 40 00

1.02 PRODUCTS

- A. Products: Means new materials, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work.
- B. Provide interchangeable components of the same manufacture, for similar components.
- C. No product or material shall be used as a building material in this project which contains any asbestos.

PART 2PRODUCTS (not used)

PART 3EXECUTION (not used)

END OF SECTION 01 60 00

SECTION 01 61 00 - TRANSPORTATION AND HANDLING

PART 1 GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Protection of products schedule for use in Work.
- B. Related Work Described Elsewhere:
 - 1. General Conditions
 - 2. Additional procedures as specified in other sections of these Specifications.

1.02 QUALITY ASSURANCE

A. Include procedures required to assure full protection of work and materials.

1.03 MANUFACTURERS' RECOMMENDATIONS

A. Except as otherwise approved by the Owner's Representative, determine and comply with manufacturers' recommendations on product handling, storage, and protection.

1.04 PACKAGING, TRANSPORTATION

- A. Require supplier to package products in boxes or crates for protection during shipment, handling, and storage. Protect sensitive products against exposure to elements and moisture, including ocean barging.
- B. Protect sensitive equipment and finishes against impact, abrasion, and other damage. Temperature sensitive products, such as paint, shall be protected from freezing during shipment.
- C. Arrange deliveries of products in accordance with construction progress schedules. Allow time for inspection prior to installation.
- D. Coordinate deliveries to avoid conflict with work; conditions at site; limitations on storage space; availability of personnel and handling equipment; and Owner's use of premises.
- E. Deliver products to job site in their manufacturer's original container, with labels intact and legible.
 - 1. Maintain packaged materials with seals unbroken and labels intact until time of use.
 - 2. Promptly remove damaged material and unsuitable items from job site, and promptly replace with material meeting specified requirements, at no additional cost to Owner.
- F. Owner's Representative may reject as non-complying such material and products that do not bear identification satisfactory to the Owner's Representative as to manufacturer, grade, quality, and other pertinent information.

G. Clearly mark partial deliveries of component parts of equipment. Identify equipment and contents to permit easy accumulation of parts and facilitate assembly.

- H. Immediately on delivery inspect shipment to ensure:
 - 1. Product complies with requirement of Contract Documents and reviewed submittals.
 - 2. Quantities are correct.
 - 3. Accessories and installation are correct.
 - 4. Containers and packages are intact and labels are legible.
 - 5. Products are protected and undamaged.

1.05 PRODUCTS

- A. Provide equipment and personnel to handle products, including those provided by Owner, by methods to prevent soiling and damage.
- B. Provide additional protection during handling to prevent marring and otherwise damaging products, packaging, and surrounding surfaces.
- C. Handle product by methods to avoid bending or overstressing. Lift large and heavy components only at designed lift points.

1.06 PROTECTION

- A. Protect finished surfaces, including jambs and soffits of openings used as passageways, through which equipment and materials are handled.
- B. Provide protection for finished floor surfaces in traffic areas prior to allowing equipment or materials to be moved over such surfaces.
- C. Maintain finished surfaces clean, unmarred and suitably protected until accepted by Owner's Representative.

1.07 REPAIRS AND REPLACEMENTS

- A. In event of damage, promptly make replacement and repairs to approval of and at no additional cost to Owner.
- B. Additional time required to secure replacements and to make repairs will not be considered by Owner to justify an extension in Contract Time.

PART 2PRODUCTS (not used)

PART 3EXECUTION (not used)

END OF SECTION 01 61 00

SECTION 01 62 00 - STORAGE AND PROTECTION

PART 1 GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Storage and protection of products scheduled for use in Work.

1.02 QUALITY ASSURANCE

A. Include within Contractor's quality assurance program such procedures as are required to assure full protection of Work and materials.

1.03 MANUFACTURERS' RECOMMENDATIONS

A. Except as otherwise approved by the Owner's Representative, determine and comply with manufacturers' recommendations on product handling, storage, and protection.

1.04 STORAGE - GENERAL

- A. Store products, immediately on delivery, in accordance with manufacturer's instruction, with seals and labels intact. Protect until installed.
- B. Arrange storage in manner to provide access for maintenance of stored items and for inspection.

1.05 ENCLOSED STORAGE

- A. Store products, subject to damage by elements, in substantial, weather-tight enclosures.
- B. Maintain temperature and humidity within ranges stated in manufacturer's instruction and/or individual technical specifications section.
- C. Provide humidity control and ventilation for sensitive products as required by manufacturer's instructions and as necessary to protect product.
- D. Store unpacked and loose products on shelves, in bins, or in neat groups of like items.

1.06 EXTERIOR STORAGE

- A. Provide substantial platforms, blocking, or skids to support fabricated products above ground; slope to provide drainage. Protect products from soiling and staining.
- B. For products subject to discoloration or deterioration from exposure to elements, cover with impervious sheet material. Provide ventilation to avoid condensation.
- C. Store loose granular materials in clean solid surfaces such as pavement, or on rigid sheet materials, to prevent mixing with foreign matter.

- D. Provide surface drainage to prevent erosion and ponding of water.
- E. Prevent mixing of refuse, chemically injurious materials, and liquids.

1.07 MAINTENANCE OF STORAGE

- A. Periodically inspect stored products on a schedule basis.
- B. Verify storage facilities comply with manufacturer's product storage requirements.
- C. Verify manufacturer required environmental conditions are maintained continually.

1.08 MAINTENANCE OF EQUIPMENT STORAGE

- A. For mechanical and electrical equipment in long-term storage, provide manufacturer's service instructions to accompany each item, with notice of enclosed instructions shown on exterior of package.
- B. Service equipment on regularly scheduled basis, maintaining log of services; submit as record document.

PART 2PRODUCTS (not used)

PART 3EXECUTION (not used)

END OF SECTION 01 62 00

SECTION 01 63 00 - PRODUCT OPTIONS AND SUBSTITUTIONS

PART 1 GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Contractor's options in selection of products.
 - 2. Products List
 - 3. Requests for Substitution Form.
- B. Related Work Described Elsewhere:
 - 1. Instructions to Bidders
 - 2. Substitution Request Form
 - 3. General Conditions

Summary of Work:
 Reference Standards:
 Shop Drawings, Product Data, and Samples:
 Project Record Documents:
 Operation and Maintenance Data:
 Section 01 01 00
 Section 01 34 00
 Section 01 72 00
 Section 01 73 00

1.02 OPTIONS

- A. Products Specified by Reference Standard or by Description Only: Any product meeting those standards.
- B. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution a minimum of 10 days prior to Bid for any manufacturer not specifically named. Following Proposal opening, only products of named manufacturers meeting specifications or approved substitutions shall be allowed.
- C. Products Specified by Naming Only One or More Manufacturers with "No Substitution" statement: Products of named manufacturers meeting specifications; no substitution allowed.

1.03 PRODUCTS LIST

- A. Within 15 days after date of Notice to Proceed, transmit three copies of list of major products which are proposed for installation, including name of manufacturer.
- B. Tabulate products by Specifications Section number, title and Article number.
- C. For Products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.
- D. Owner's Representative will reply in writing within 10 days stating whether there is reasonable objection to listed items. Failure to object to listed items shall not constitute waiver of requirements of Contract Documents.

1.04 LIMITATIONS ON SUBSTITUTIONS

- A. Instructions to Bidder govern terms for submitting request for substitutions under requirements specified in this Section.
- B. Requests for substitutions after Contract Award may be considered only in proven cases of product unavailability through no fault of Contractor.
- Substitutions will not be considered when acceptance will require substantial revision of Bidding or Contract Documents.
- D. Do not order or install substitute products without written acceptance.
- E. Two requests for substitution for each product will be considered. When substitution is not accepted, provide specified product.
- F. Owner's Representative and Architect will determine acceptability of substitutions.

1.05 REQUESTS FOR SUBSTITUTIONS

- A. Submit substitution requests using a Substitution Request Form. Substitution requests will not be reviewed without an accompanying fully executed Substitution Request Form.
- B. Submit separate request for each substitution. Document each request with complete data substantiating compliance of proposed substitution with requirements of Contract Documents.
 - Submit samples, shop drawings from prior jobs, product date, manufacturer's installation instructions, and certified test results attesting to proposed product equivalence.
- C. Identify product by Specification Section and Article numbers. Provide manufacturer's name and address, trade name of product, and model or catalog number. List fabricators and suppliers as appropriate.
- D. Attach product data as specified in Section 01 34 00.
- List similar project using product, dates of installation, and names with numbers of Owner and Architect.
- F. Give itemized quality and performance comparison between proposed substitution with specified product, listing variations, and reference to Specification Section and Article numbers. Base comparison on tests and criteria specified, and with specified manufacturer's performance criteria when tests and criteria are not otherwise specified.
- G. List availability of maintenance services and replacement materials.
- H. State effect of substitution on construction schedule, and changes required in other work or products.
- I. Forms that are incomplete or incorrectly filled out will be rejected.

1.06 BIDDER REPRESENTATION

A. Request for substitution constitutes representation that Bidder:

- 1. Has investigated proposed product and has determined that it meets or exceed the quality level of specified product.
- 2. Will provide same warranty for substitution as for specified product.
- 3. Will coordinate installation and make changes to other Work which may be required for work to be complete with no additional costs to Owner.
- 4. Waives claims for additional costs or time extension which may subsequently become apparent.
- 5. Will reimburse Owner for review or redesign service associated with re-approval by authorities.

1.07 SUBMITTAL PROCEDURES

- A. Submit five copies of the Request for Substitution Form with attachments. Limit each request to one proposed substitution.
- B. Owner's Representative and Architect will review Contractor's request for substitutions with reasonable promptness.
- C. During bidding period, Owner will record acceptable substitutions in Addenda.
- D. For accepted products, submit shop drawings, product data, and samples under provisions of Section 01 34 00.

PART 2PRODUCTS (not used)

PART 3EXECUTION (not used)

DIVISION 1 SECTIONS 01 63 00 PRODUCT OPTIONS AND SUBSTITUTIONS

K+A DESIGNSTUDIOS PAGE 4 OF 4

SUBSTITUTION REQUEST FORM

TO: CITY OF KENAI

ATTN: ALAN ROBILLARD 210 FIDALGO AVE. KENAI, AK 99611 (907) 283+8238

PROJECT: KENAI VISITORS CENTER RE-ROOF PROJECT

SPECIFIED ITEM:

Section Paragraph Description

The undersigned requests consideration of the following:

PROPOSED SUBSTITUTION:

Attached data includes product description, specifications, drawings, photographs, performance and test date adequate for evaluation of the request; applicable portions of the data area clearly identified.

Attached data also includes description of changes to Contract Documents which proposed substitution will require for its proper installation.

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

- 1. The proposed substitution does not affect dimensions shown on Drawings.
- 2. The undersigned will pay for changes to the building design, including engineering design, detailing and construction costs caused by the requested substitution.
- 3. The proposed substitution will have no adverse effect on other trades, the construction schedule, or specified warranty requirements.
- 4. Maintenance and service parts will be locally available for the proposed substitution.

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

Submitted by:	
Signature	For use by Design Consultant:
Firm	☐ Accepted ☐ Accepted as noted
Address	☐ Not Accepted By:
Date Telephone	Date: Remarks:

END OF SECTION 01 63 00

SECTION 01 67 00 - SYSTEM DEMONSTRATION

PART 1 GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Procedures for demonstration of equipment operation and instruction of Owner's personnel.
 - 2. Contractor shall be responsible for instruction and training of operating personnel in operation and maintenance of mechanical, electrical, and other systems in building.
- B. Related Work Described Elsewhere:
 - 1. Summary of Work:

Section 01 01 00

2. Operation and Maintenance Data:

Section 01 73 00

Other Individual Sections: Specific requirements for demonstrating systems and equipment.

1.02 QUALITY ASSURANCE

- A. When specified in individual sections, require manufacturer to provide authorized representative to demonstrate operation of equipment and systems, instruct Owner personnel, and provide written report stating demonstrations and instructions have been completed.
- B. Owner's Representative will provide list of personnel to receive instructions and will coordinate their attendance at agreed upon times.

1.03 SUBMITTALS

- A. Submit preliminary schedule for Owner's Representative's approval, listing times and dates for demonstration of each item of equipment and each system three weeks prior to proposed dates.
- B. Contractor shall submit his training materials and agenda to the Owner's Representative at least 15 days prior to start of formal maintenance training classes. Mutually agreeable dates for receiving training shall be arranged with Owner's Representative. Building system shall be complete when training is given.
- C. Submit reports within one week after completion of demonstrations, that demonstrations and instructions have been satisfactorily completed. Give time and date of each demonstration, hours devoted to demonstration, and list of persons present.

PART 2PRODUCTS (Not Used)

PART 3EXECUTION

3.01 PREPARATION

- A. Verify equipment has been inspected and put into operation in accordance with applicable specification Section; testing, adjusting, and balancing has been performed in accordance with applicable specification Section, and equipment and systems are fully operational.
- B. Have copies of completed operation and maintenance manuals at hand for use in demonstrations and instructions.

3.02 TYPE OF TRAINING

- A. Instruction shall be on the job.
- B. Services of competent contractors or manufacturer engineers and qualified maintenance personnel shall be provided to adequately train designated Owner's employees in operation and maintenance of all mechanical and electrical systems.
- C. Operating and maintenance manuals prepared by Contractor, manufacturers literature of actual equipment installed and copies of approved posted operating instructions shall be used as a basis for training.

3.03 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of equipment and systems to Owner's personnel two weeks prior to date of final inspection. For equipment requiring seasonal operation, perform instructions for operation and maintenance.
- B. Use operation and maintenance manuals as basis of instruction. Review contents of manual with personnel in detail to explain all aspects of operation and maintenance.
- C. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled times, at equipment location.
- D. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instructions.

3.04 TIME ALLOCATED FOR INSTRUCTIONS

- A. Training period: Training shall occur within one week after substantial completion. Not less than four hours for each category of major equipment and system except as specifically listed below:
 - 1. HVAC System: Including air handlers, duct work, dampers and related equipment with respective operating controls. 8 hours.
 - 2. Overall Control System: Coordinate respective HVAC and other system controls, show how controls function together and provide integrated overall system control. 8 hours.
 - 3. Electrical System: All building services, lighting, communications, public address system, access control, energy management systems, and all other electrical systems. 8 hours.

- 4. Piping and Plumbing Systems: Storm and sanitary drainage systems, and hot and cold water supply systems. 4 hours.
- 5. Fire protection equipment, intercom system, and other equipment not specifically stated above. 4 hours/each.
- B. Proof of training must be certified in writing by Owner's personnel.

END OF SECTION 01 67 00

SECTION 01 70 00 - CONTRACT CLOSE-OUT PROCEDURES

PART 1 GENERAL

1.01 DESCRIPTION

A. Work Included:

1. Administrative provisions for Substantial Completion and Final Acceptance.

B. Related Work Described Elsewhere:

1.	General Conditions:	
2.	Summary of Work:	Section 01 01 00
3.	Applications for Payment	Section 01 02 70
4.	Temporary Facilities and Temporary Controls	Section 01 50 00
5.	Final Cleaning	Section 01 71 00
6.	Project Record Documents	Section 01 72 00
7.	Operations and Maintenance Data	Section 01 73 00
8.	Warranties and Bonds	Section 01 74 00
9.	Spare Parts and Maintenance Materials	Section 01 75 00

1.02 SUBSTANTIAL COMPLETION

- A. Advise Owner's Representative of pending insurance change-over requirements.
- B. When Contractor considers Work or designated portion of Work is substantially complete, submit written notice with list of items to be completed or corrected.
 - 1. Submit formal written request for Substantial Completion Inspection.
 - 2. Contractor shall submit Certificate of Occupancy issued by local Building Official with the request for Substantial Completion Inspection.
- C. Should Owner Representative's inspection find Work is not substantially complete, he will promptly terminate the inspection, and notify Contractor in writing, listing observed deficiencies.
- D. Contractor shall remedy deficiencies and send a second written notice of substantial completion.
- E. When Owner's Representative finds Work is substantially complete he will prepare a Certificate of Substantial completion in accordance with provisions of General Conditions.

1.03 FINAL COMPLETION

- A. When Contractor considers Work is complete, submit written certification:
 - 1. Contract Documents have been reviewed.
 - 2. Work has been inspected for compliance with Contract Documents.
 - 3. Work has been completed in accordance with Contract Documents, and deficiencies listed with Certificate of Substantial Completion have been corrected.
 - 4. Equipment and systems have been tested, adjusted, and balanced, and are fully operational.

- 5. Operation of systems has been demonstrated to Owner's Personnel.
- 6. Work is complete and ready for final inspection.
- B. Should Owner's Representative inspection find Work incomplete, he will promptly notify Contractor in writing listing observed deficiencies.
- Contractor shall remedy deficiencies and send a second certification of final completion.
- D. When Owner's Representative finds work is complete, he will consider close-out submittals.

1.04 REINSPECTION FEES

A. Should status of completion of Work require re-inspection by Owner's Representative due to failure of Work to comply with Contractor's claims on initial inspection, Owner will deduct the amount of his expense, including but not necessarily limited to Owner's Representative compensation for re-inspection services from final payment to Contractor.

1.05 CLOSE-OUT SUBMITTALS

- A. Evidence of Compliance with Requirements of Governing Authorities:
 - Certificate of Occupancy
 - 2. Certificates of Inspection required for mechanical and electrical systems.
- B. Project Record Documents: Under provision of Section 01 72 00.
- C. Operation and Maintenance Data: Under provisions of Section 01 73 00.
- D. Warranties and Bonds: Under provisions of Section 01 74 00.
- E. Spare Parts and Maintenance Materials: Under provisions of Section 01 75 00.
- F. Keys and Keying Schedule: Under provisions of Section 08 70 00.
- G. Evidence of Payment and Release of Liens: In accordance with Conditions of the Contract.
- H. Consent of Surety to Final Payment.
- I. Certificates of Insurance for Products and Completed Operations: In accordance with Supplementary Conditions.

1.06 STATEMENT OF ADJUSTMENT OF ACCOUNTS

- A. Submit final statement reflecting adjustments to Contract Sum indicating:
 - 1. Original Contract Sum
 - 2. Previous Change Orders
 - 3. Changes Under Allowances
 - 4. Changes Under Unit Prices
 - 5. Deductions for Uncorrected Work
 - 6. Deductions for Liquidated Damages
 - 7. Deductions for Re-inspection Fees
 - 8. Other Adjustments to Contract Sum
 - 9. Total Contract Sum as adjusted.

- 10. Previous Payments
- 11. Sum Remaining Due
- B. Owner's Representative will issue a final Change Order reflecting approved adjustments to Contract Sum not previously made by change orders.

1.07 APPLICATION FOR FINAL PAYMENT

A. Submit application for final payment in accordance with provisions of Conditions of the Contract.

PART 2PRODUCTS (not used)

PART 3EXECUTION (not used)

END OF SECTION 01 70 00

01 70 00 - 3

SECTION 01 71 00 - FINAL CLEANING

PART 1 GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Final Cleaning of Project.
- B. Related Work Described Elsewhere:
 - 1. General Conditions
 - Construction Cleaning: Section 01 56 90
 Contract Close-out Procedures: Section 01 70 00
 - 4. Individual Specifications Section: Specific cleaning of product or work.

1.02 CLEANING

A. Execute cleaning prior to inspection for Substantial Completion of the Work.

PART 2 PRODUCTS

2.01 CLEANING MATERIALS

- A. Use materials which will not create hazards to health or property, and which will not damage surfaces.
- B. Use only materials and methods recommended by manufacturer of material being cleaned.

PART 3 EXECUTION

3.01 CLEANING

- A. In addition to removal of debris and cleaning specified in other section, clean interior and exterior exposed-to-view surfaces.
- B. Remove temporary protection and labels not required to remain.
- C. Clean finishes free of dust, stains, films, and other foreign substances.
- D. Clean transparent and glossy materials to a polished condition; remove foreign substances. Polish reflective surfaces to a clear shine.
- E. Vacuum clean carpeted and similar soft surfaces.
- F. Clean, damp mop, wax, and polish resilient and hard-surface floors as specified.
- G. Clean surfaces of equipment and remove excess lubrication.

- H. Clean plumbing fixtures, food service equipment, and toilet accessories to a sanitary condition.
- I. Clean permanent filters of ventilation equipment and replace disposable filters when units have been operated during construction; in addition, clean ducts, blowers and coils when units have been operated without filters during construction.
- J. Clean light fixtures and lamps.
- K. Maintain cleaning until Substantial Completion.
- L. Remove waste, foreign matter, and debris from roofs, gutters, area ways, and drainage systems.
- M. Remove waste, debris, and surplus materials from site. Clean grounds; remove stains, spills, and foreign substances from paved areas and sweep clean. Rake clean other exterior surfaces.
- N. Owner will provide final cleaning of interiors after Substantial Completion, except that items not adequately cleaned prior to Substantial Completion shall be recleaned prior to final inspection. Provide access and coordinate with Owner's personnel at a time agreeable to both parties.
- O. Prior to Substantial Completion, clean all parking lots, aprons and driveways on site to a new state.

END OF SECTION 01 71 00

SECTION 01 72 00 - RECORD DOCUMENTS

PART 1 GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Maintenance of Record Document and samples.
 - 2. Submittal of Record Documents and samples.
- B. Related Work Descried Elsewhere:

Grades, Lines and Levels:
 Shop Drawings, Product Data and Samples
 Contract Close-out Procedures
 Operation and Maintenance Data
 Section 01 05 20
 Section 01 34 00
 Section 01 70 00
 Section 01 73 00

- 5. Individual Specifications Sections:
- 6. Manufacturer's certificates and certificates of inspection.
- C. The Contractor shall maintain on the jobsite one complete set of drawings and specifications on which all items located at jobsite and all changes of material, equipment, or dimensions shall be recorded and kept current on a daily basis and shall be made available to the Owner's Representative at all times. This shall include all work of the Contractor and Subcontractors. Each progress pay request will not be processed until Owner's Representative determines that the Contractor has kept the "As-Built" drawings and specifications as specified.

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. In addition to requirements in General Conditions, maintain at the site for Owner's Representative one record copy of:
 - 1. Contract Drawings
 - 2. Specifications
 - 3. Addenda
 - 4. Change Orders and other modifications to the Contract
 - 5. Reviewed shop drawings, product data, and samples
 - 6. Field test records
 - Inspection certificates
 - 8. Manufacturer's certificates
- B. Store Record Documents and samples in Field Office apart from documents used for construction. Provide files, racks, and secure storage for Record Documents and samples.
 - Delegate the responsibility for maintenance of Record Documents to one person on the Contractor's staff.
- C. Label and file Record Documents and samples in accordance with Section number listing in Table of Contents of this Project Manual. Label each document "PROJECT RECORD" in neat, printed letters.

- D. Maintain Record Document in a clean, dry and legible condition. Do not use Record Documents for construction purposes.
- E. In the event of loss of recorded data, use means necessary to again secure the data to the Owner's Representatives approval.
- F. Keep Record Documents and samples available for inspection by Owner's Representative.

1.04 RECORDING

- A. Record information on a set of blue line opaque drawings, and in a copy of a Project Manual, provided by Owner's Representative.
- B. Provide felt tip marking pens, maintaining separate colors for each major system, for recording information.
- C. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.
 - 1. Make entries within 24 hours after receipt of information that the change has occurred.
- D. Contract Drawings and Shop Drawing: Legibly mark each item to record actual construction, including:
 - 1. Measured depths of elements of foundation in relation to finish first floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surfaces improvements.
 - a. Locate with actual dimensions to building walls and corners, buried and concealed wiring and piping.
 - b. Show end of run, changes in direction, valves and splice boxes.
 - c. Record average depth relating to building datum.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of construction. Show on Record Drawings, the centerline of each run.
 - a. Clearly identify the item by accurate note such as "cast iron drain"," galv. water." etc.
 - b. Show, by symbol or note, the vertical location of the item ("under slab," "in ceiling plenum," "exposed," etc.).
 - c. Make all identification sufficiently descriptive that it may be related reliably to the Specifications.
 - 4. Field changes of dimension and detail.
 - 5. Changes made by Modifications.
 - 6. Details not on original Contract Drawings.
 - 7. References to related shop drawings and Modifications.
- E. Specifications: Legibly mark each item to record actual construction, including:
 - 1. Manufacturer, trade name, and catalog number of each product actually installed, particularly optional items and substitute items.
 - 2. Changes made by Addenda and Modifications.

F. Other Documents: Maintain manufacturer's certifications and inspection certifications required by individual Specifications sections.

1.05 SUBMITTALS

- A. At Contract close-out, deliver Record Documents and samples under provisions of Section 01
- B. Transmit with cover letter in duplicate, listing:
 - 1. Date
 - 2. Project Title and Number
 - 3. Contractor's name, address and telephone number
 - 4. Number and title of each Record Document.
 - 5. Signature of Contractor or authorized representative.

PART 2 PRODUCTS (not used)

PART 3 EXECUTION (not used)

END OF SECTION 01 72 00

SECTION 01 73 00 - OPERATION AND MAINTENANCE DATA

PART 1 GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Format and content of manuals.
 - 2. Instruction of Owner's personnel.
 - 3. Schedule of submittals.
- B. Related Work Described Elsewhere:

1.	Shop Drawings, Product Data, an	d Samples Section 01 34 00
2.	Quality Control:	Section 01 40 00
3.	Systems Demonstration:	Section 01 67 00
4.	Project Record Documents:	Section 01 72 00
5.	Warranties and Bonds:	Section 01 74 00
6	Individual Considerations Continu	Chapita requirements for exerction and maintenance

6. Individual Specifications Section: Specific requirements for operation and maintenance data.

1.02 QUALITY ASSURANCE

A. Prepare instructions and data by personnel experienced in maintenance and operation of described products.

1.03 FORMAT

- A. Prepare data in the form of an instructional manual.
- B. Binders: Commercial quality, 8 1/2 x 11 in. three-ring binders with hardback, cleanable, plastic covers; two in. maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- C. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; list title of Project, identify subject matter of contents.
- D. Arrange content under direction of Owner's Maintenance Department. Coordinate with Owner's personnel one week prior to assembly of manuals.
- E. Provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.
- F. Text: manufacturer's printed data, or typewritten data on 24-pound paper.
- G. Drawings: Provide with reinforced punched binders tab. Bind in with text; fold larger drawings to size of text pages.

1.04 CONTENTS, EACH VOLUME

- A. Table of Contents: Provide title of Project, names, addresses, and telephone number of Owner's Representative, subconsultants, and Contractor with name of responsible parties, schedule of products and systems, indexed to content of the volume.
- B. For Each Product or System: List names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- C. Product Data: Mark (by highlighting, etc. each sheet to clearly identify specific products and component model numbers of equipment and materials used, and data applicable to installation. Delete inapplicable information.
 - 1. Furnish a separate complete set of approved product data, in file folders for each Section, with specification item number recorded on folder. Assemble in cardboard "bankers box", in section number sequence. Turn over to the City of Kenai.
- D. Drawings: Supplement product date to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
 - Furnish a complete set of shop drawings, as installed, and turn over to the City of Kenai.
 Fold and place in folders as above for product data, with Drawing and Specification item
 number recorded on folder. Assemble in same cardboard "banker's box" as above, in
 Section number sequence.
- E. Type Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions specified in Section 01 40 00.
- F. Warranties and Bonds: As specified in Section 01 74 00.

1.05 MANUAL FOR MATERIALS AND FINISHES

- A. Building Products, Applied Materials, and Finishes: Include product data, with catalog number, size, composition, and color and texture designations. Provide information for reordering custom manufactured products.
 - 1. Furnish a complete list (room by room) of all paint used. List is to include: paint Manufacturer, Manufacturer's color codes used (by area), and the name, address and phone number of supplier.
 - 2. Furnish a complete list (room by room) of all floorcovering products used. List is to include: type of floorcovering, manufacturer, manufacturer's color codes used (by area), and the name, address and phone number of Installer.
 - 3. Furnish a complete list of all roofing materials used.
- B. Instructions for Care and Maintenance: Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.

- C. Moisture Protection and Weather Exposed Products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
- D. Additional Requirements: As specified in individual product specification Section.
- E. Provide a listing in Index for design data, with tabbed fly sheet and space for insertion of data.

1.06 MANUAL FOR EQUIPMENT AND SYSTEMS

- A. Each Item of Equipment and Each System: Include description of unit or system, and component parts. Identify function, normal operating characteristics, and limiting conditions. Include performance curves, with engineering data and tests, and complete nomenclature and commercial number of replaceable parts.
- B. Panelboard Circuit Directories: Provide electrical service characteristics, controls and communications.
- C. Include color coded wiring diagrams as installed.
- D. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- E. Maintenance Requirements: Include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- F. Provide servicing and lubrication schedule, and list of lubricants required.
- G. Include manufacturer's printed operation and maintenance instructions.
- H. Include sequence of operation by controls manufacturer.
- I. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- J. Provide control diagrams by controls manufacturer as installed.
- K. Provide contractor's coordination drawings, with color coded piping diagrams as installed.
- L. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- M. Include test and balancing reports.
- N. Additional Requirements: As specified in individual product specification Sections.
- O. Provide a listing in Index for design data, with tabbed fly sheet and space for insertion of data.

1.07 INSTRUCTION OF OWNER PERSONNEL

A. Before final inspection, instruct Owner's designated personnel in operation, adjustment, and maintenance of products, equipment, and systems, at agreed upon times.

- B. For equipment requiring seasonal operation, perform instructions for other seasons within six months.
- C. Use operation and maintenance manuals as basis for instruction. Review contents of manual with personnel in detail to explain all aspects of operation and maintenance.
- D. Prepare and insert additional data in Operation and Maintenance Manual when need for such data becomes apparent during instruction.

1.08 SUBMITTALS

- A. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Owner's Representative will review draft and return one copy with comments.
- B. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit documents within ten days after acceptance.
- C. Submit one copy of completed volumes in final form 15 days prior to final inspection. Copy will be returned after final inspection, and after review by Owner's Maintenance Department and with Owner's Representative comments. Revise content of documents as required prior to final submittal.
- Submit six copies of revised volumes of data in final form within ten days after final inspection.
- E. A separate chapter will be prepared and submitted for each of the following types of equipment or systems included in the project:
 - 1. Heating, ventilating, and air conditioning system.
 - 2. Control Systems.
 - 3. Plumbing.
 - 4. Electrical Systems.
 - Emergency Systems.
 - Communication Systems.
 - Energy Management Systems.
 - 8. Miscellaneous Building Equipment.
 - 9. Other equipment or systems as specified in individual specification Sections.

PART 2 PRODUCTS (not used)
PART 3 EXECUTION (not used)

END OF SECTION 01 73 00

SECTION 01 74 00 - WARRANTIES AND BONDS

PART 1 GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Preparation and submittal
 - 2. Time and schedules of submittals
- B. Related Work Described Elsewhere:
 - 1. Instructions to Bidders:
 - General Conditions:
 - Contract Close-out Procedures
 Operation and Maintenance Data
 Section 01 70 00
 Section 01 73 00
 - 5. Individual Specification Sections: Warranties required for specific products or Work.

1.02 FORM OF SUBMITTALS

- A. Bind in commercial quality, 8-1/2 x 11 in. three ring side binders with hardback, cleanable, plastic covers.
- B. Label cover of each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor and equipment supplier; and name of responsible principal.
- C. Table of Contents: Neatly typed, in the sequence of index to Project Manual, with each item identified with its Section, and name of product or work item. Provide complete information for each of:
 - 1. Product or work item
 - 2. Supplier with name of principal, address and telephone number
 - 3. Date of beginning of warranty or bond
 - 4. Duration of warranty or bond
 - 5. Provide information for Owner's personnel:
 - a. Proper procedure in case of failure.
 - b. Instances which might affect validity of warranty or bond.
 - 6. Contractor, name of responsible principal, address and telephone number.
- D. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address and telephone number of responsible principal.

1.03 PREPARATION OF SUBMITTALS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within ten days after completion of the applicable item or work. Except for items put into use with Owner's Representative's permission, leave date of beginning of time of warranty until the Date of Substantial Complete is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.

1.04 TIME OF SUBMITTALS

- A. For equipment or component parts of equipment put into service during construction with Owner's Representative's permission, submit documents within ten days after acceptance.
- B. Make other submittals within ten days after Date of Substantial Completion, prior to final Application for Payment.
- C. For items of Work when acceptance is delayed beyond Date of Substantial Completion, submit within ten days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 PRODUCTS (not used)

PART 3 EXECUTION (not used)

END OF SECTION 01 74 00

DIVISION 2 EXISTING CONDITIONS SECTION 00 20 50 DEMOLITION

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SECTION 00 20 50

DEMOLITION

PART 1 GENERAL

1.01 DESCRIPTION

A. Work Included:

Demolition required for this work includes all removal of existing materials and installations required to accept the additions and renovations of the new work indicated in the Drawings.

B. Definitions:

The term "demolition" as used herein, includes the removal of all existing objects, (excepting those designated to remain) to the substrate indicated in the Drawings, or as necessary to provide proper interface for the new work, plus such other work as further described in the Drawings and specified in subsequent sections.

1.02 QUALITY ASSURANCE

A. Qualification of Workmen:

Employ at least one thoroughly qualified supervisor who shall be present at all times during the demolition operations, who shall be thoroughly familiar with the extent of the operations required, the limitations under which they are to be conducted, and who shall direct all the work under this section.

B. Codes and Standards:

In addition to complying with all pertinent codes and regulations, comply with the requirements of all insurance carriers providing coverage for this project.

1.03 SUBMITTALS

A. Schedule:

Submit proposed methods and operations of building demolition to Architect for review prior to start of work. Include in schedule coordination for shut-off, capping and continuation of utility services as required.

1.04 JOB CONDITIONS

A. Owner's Access to Premises:

The Owner will require access to and occupancy of portions of facilities affected by operations of this section. It shall be the responsibility of the Contractor to make arrangements with the Owner in order to coordinate access to the facilities necessary for his operations. Maintain a minimum of two exits at all facilities at all times, conforming to all applicable codes and regulations.

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B. Environmental Requirements:

Employ all means necessary to prevent the spread of dust and noxious odors during demolition operations.

C. Burning:

Disposal of waste by burning will not be permitted except upon express written permission of the Owner.

D. Partial Removal:

Items of salvageable value to Contractor may be removed from structure as work progresses. Salvaged items must be transported from site as they are removed. Storage or sale of removed items on site will not be permitted.

E. Explosives:

Explosives shall not be used in any of the demolition work. This shall not be interpreted to preclude the use of powder actuated fasteners in construction operations.

F. Traffic:

Conduct demolition operations and removal of debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities. Do not close or obstruct streets, walks or other occupied or used facilities without permission from authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.

G. Protections:

Ensure safe passage of persons around area of demolition. Conduct operations to prevent injury to adjacent buildings, structures, other facilities, and persons.

- 1. Erect temporary covered passageways as required by authorities having jurisdiction.
- 2. Provide interior and exterior shoring, bracing, or support to prevent movement, settlement or collapse of structures to be demolished and adjacent facilities to remain.

H. Damages:

Promptly repair damages caused to adjacent facilities by demolition operations at no cost to Owner.

I. Utility Services:

Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to governing authorities.

DIVISION 2 EXISTING CONDITIONS SECTION 00 20 50 DEMOLITION

K+A DESIGNSTUDIOS

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PART 2 PRODUCTS

2.01 MATERIALS

A. Other Materials:

Provide all other materials not specifically described but required for the proper completion of the work of this section which shall be subject to the approval of the Owner's Representative.

PART 3 EXECUTION

3.01 SURFACE CONDITIONS

A. Inspection:

Prior to all demolition work carefully examine the items, surfaces, or equipment which are to be removed, and determine all conditions, exposed or concealed, which may affect subsequent operations. Verify that demolition operations may be accomplished in accordance with all codes and regulations, the original design, and all approved submittals.

B. Discrepancies:

In the event of discrepancies, ambiguities, interferences, or any other unanticipated condition which might impede orderly & timely execution of the demolition and subsequent operations, immediately notify the Owner's Representative, and do not proceed in questioned areas until resolution or clarification has been obtained.

C. Protection:

Use all means necessary to protect the installations and objects designated to remain intact before, during, and after the demolition work. In the event of damage, immediately make all repairs or replacements necessary, which shall be subject to the approval of the Owner's Representative, and shall be accomplished at no additional expense to the Owner.

3.02 DISPOSAL

All removed materials, not designated for salvage or reuse by the Owner shall become the property of the Contractor, and shall be removed from the premises or disposed of in a legal manner or as directed by the Owner's Representative.

END OF SECTION

DIVISION 6 WOOD AND PLASTIC SECTION 06 01 00 LUMBER

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SECTION 06 01 00

LUMBER

PART 1 GENERAL

1.01 DESCRIPTION

A. Work Included:

Materials required under this section include, but are not necessarily limited to all wood, plywood, nails, bolts, framing anchors and other hardware, and all other materials or items needed for rough and finish carpentry, but not specifically described in other sections.

- B. Related Work Described Elsewhere:
 - 1. Rough Carpentry

Section 06 10 00

1.02 QUALITY ASSURANCE

In addition to complying with applicable codes and regulations, comply with the following standards:

- A. Lumber Grading Rules and Wood Species to be in conformance with PS20.
- B. Grading rules of the following associations apply to materials furnished under this Section:
 - 1. West Coast Lumber Inspection Bureau (WCLB).
 - 2. American Plywood Association (APA).
- C. Grade marks of the above association shall appear on all wood products furnished under this section.
- D. Testing Exposed Finishes:
 - 1. ASTM E84, maximum 25 flame spread rating.
- E. Regulatory Agencies:
 - 1. International Building Code (IBC) published by the International Code Council.
 - 2. Lumber Treatment:
 - a. Preservative treatment of lumber and plywood:
 American Wood Preserves Bureau Standards. (AWPB)
- F. Referenced Standards:
 - 1. American Society for Testing and Materials (ASTM)
 - 2. American Wood Preserves Bureau (AWPB)
 - a. AWPB LP-2 Standard for Softwood Lumber, timber and plywood treated with Waterbone Preservatives for above ground locations.
 - 3. National Forest Products Association (NFPA)
 - a. National Design Specifications for Wood Construction. 1977

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DIVISION 6

WOOD AND PLASTIC

SECTION 06 01 00

4. American Institute of Timber Construction (AITC)

1.03 SUBMITTALS

Submit in accordance with Section 013400, the following:

A. Materials List:

A complete list of all the types of materials proposed to be furnished under this section.

- 1. Lumber with framing.
- 2. Plywood.
- 3. Roof Decking.
- 4. Cedar Siding.

PART 2 PRODUCTS

2.01 GRADE STAMPS

A. Framing Lumber:

Identify all framing lumber by the grade stamp of the West Coast Lumber Inspection Bureau.

B. Plywood:

Identify all plywood by the grade of the American Plywood Association.

C. Other:

Identify all other products by the grade stamp of the appropriate grading agency for that particular product.

2.02 DIMENSION LUMBER

A. Material:

- 1. Provide kiln dried dimension lumber of the species and grade noted on the Drawings with not more than 15% moisture content, and complying with the dry size requirements of the appropriate grading agency.
- 2. Dress dimension lumber s4s unless otherwise specifically called out.

B. Appearance:

Where framing lumber will be exposed to view and is shown or scheduled to receive a transparent or natural finish, provide lumber of "Appearance" grade.

C. Pressure Treated:

Pressure treated framing and sheathing noted in drawings. All bolts, nails, screws and other fasteners in contact with pressure treated wood shall be made of type 304 or type 316 stainless steel. Cut ends to be dipped in pentachloryphenol. Treat with Ammoniacal Copper Arsenate (ACA) to 2 retention of 0.60 pcf per UBC Standard 25-12 and American Wood Preserves Bureau AWPB "FDN".

DIVISION 6 WOOD AND PLASTIC SECTION 06 01 00 LUMBER

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2.03 PLYWOOD

A. Rough Carpentry:

Provide interior type with exterior glue of the grade and type indicated on the Drawings.

B. Appearance:

Where plywood will not be concealed by other work, provide A-D plugged grade with 'A' side showing unless otherwise noted.

2.04 PARAPET CAP

Use beveled 1 x T&G cedar siding to provide slope at top of parapet. As shown on the drawings.

2.05 MISCELLANEOUS MATERIALS

A. Anchorage and Fastenings:

Select proper type, size, material, and finish for each application. Comply with the following:

Nails and staples: FS FF-N-105
 Tacks: FS FF-N-103
 Wood screws: FS FF-N-111
 Bolts and studs: FS FF-B-575
 Nuts: FS FF-B-836
 Washers: FS FF-W-92
 Lag bolts: FS FF-B-561
 Toggle bolts: FS FF-B-588

9. Bar or strap anchors: ASTM A-575

PART 3 EXECUTION

3.01 PRODUCT HANDLING

A. Storage and Protection:

Do not deliver any of the products of this section to the jobsite until a secure, dry, sheltered area, away from traffic, is available for their storage. Use all means necessary to protect the products of this section before, during, and after installation and to protect the installed materials and work of all other trades.

B. Repairs and Replacement:

In the event of damage make all repairs and replacements necessary to restore the item to original undamaged condition. Repairs and replacements shall be subject to approval of the Architect and shall be accomplished at no additional expense to the Owner.

C. Damaged Material:

Segregate all damaged material to ensure against its incorporation into the Work, until all necessary repairs, where authorized, have been accomplished.

D. Stockpiling:

DIVISION 6 WOOD AND PLASTIC SECTION 06 01 00 LUMBER

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Stockpile all materials sufficiently in advance to ensure their availability in a timely manner for the work of all related sections.

E. Compliance:

Do not permit non-complying materials to be delivered to the jobsite and immediately remove any which are delivered, replacing them with materials complying with the requirements of this section.

END OF SECTION

DIVISION 6 WOOD AND PLASTIC SECTION 06 10 00 ROUGH CARPENTRY

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SECTION 06 10 00

ROUGH CARPENTRY

PART 1 GENERAL

1.01 DESCRIPTION

A. Work Included:

The carpentry work required for this project is shown in the Drawings and includes, but is not necessarily limited to framing, blocking, sheathing, backing, inserts, fasteners, framing anchors and other hardware, and all other materials or items needed for Carpentry but not specifically described in other sections of this specification.

1.02 QUALITY ASSURANCE

- A. For actual cutting, fitting, and installing of the rough carpentry and associated woodwork, employ only qualified journeymen mechanics who are trained and experienced in the skills required and who are completely familiar with the materials and methods involved.
- B. Qualifications of Supervisors:

Employ at least one supervisor who is thoroughly trained in the trade, who is completely familiar with the requirements of the work, who shall be present during all the rough carpentry operations, and who shall direct all the work under this section.

1.03 PRODUCT HANDLING

A. Storage and Protection:

Do not deliver any of the products of this section to the jobsite until a secure, dry, sheltered area, away from traffic, is available for their storage. Use all means necessary to protect the products of this section before, during, and after installation and to protect the installed materials and work of all other trades.

B. Repairs and Replacement:

In the event of damage make all repairs and replacements necessary to restore the item to original undamaged condition. Repairs and replacements shall be subject to approval of the Architect and shall be accomplished at no additional expense to the Owner.

PART 2 PRODUCTS

2.01 MATERIALS

A. Lumber: Refer to Section 060100 "Lumber".

PART 3 EXECUTION

3.01 INSTALLATION

A. General:

DIVISION 6 WOOD AND PLASTIC SECTION 06 10 00 ROUGH CARPENTRY

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Install all work in strict accordance with the design, the approved submittals, and all applicable codes and regulations. All wood framing shall be true, straight and plumb to within 1/4" in 12 foot of length.

B. Workmanship:

Discard material with defects which might impair the quality of the work, and units which are too small to fabricate into the work with minimum joints, or with optimum joint arrangement.

Set all work accurately to required levels and lines, with members plumb and true; accurately cut and fitted. Workmanship shall conform to NFPA Construction Specification.

C. Grounds, Nailers, Blocking, Backing:

- 1. All material in contact with concrete or built-up roofing shall have moisture protection treatment as specified.
- 2. Provide where shown or where required for screeding or attachment of other work. Form to shapes as shown and cut as required for true line and level of work to be attached. Coordinate with other work or trades involved.
- 3. Attach to substrates as required to support applied loading.

D. Plywood:

Install as recommended by APA "Guide to Plywood Sheathing for Floors, Walls, and Roofs", using tight butt joints with edges true and plumb. Back vertical joints as required to keep edges flush. Provide thicknesses shown, or if not shown, provide thickness recommended by APA.

E. Fastening:

- 1. Securely attach carpentry work to substrates by anchoring and fastening as shown or necessary, or required by recognized standards.
- 2. Nail as appropriate to the particular item according to nailing tables in the applicable edition of the Uniform Building Code.
- 3. Use common wire nails except as otherwise indicated. Use finish nails for finish work.
- 4. Select fasteners that will not penetrate where opposite side will be exposed to view or receive finish materials.
- 5. Pre drill as necessary to prevent splitting. Do not lubricate fasteners where friction is essential to develop strength.
- 6. Screw, do not drive, wood screws and lag bolts, except that they may be started by driving and then screwed home.

F. Other Items:

Install other items in compliance with original design, approved submittals, and applicable codes and regulations. Anchor all work into place for long life under hard use.

DIVISION 6 WOOD AND PLASTIC SECTION 06 10 00 ROUGH CARPENTRY

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Remove all work related debris and at completion leave work room clean.

END OF SECTION

DIVISION 7 THERMAL/MOISTURE PROTECTION SECTION 07 21 30 BATT INSULATION

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SECTION 07 21 30

BATT INSULATION

PART 1 GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Fiber Glass Loosefill Insulation.
 - 2. Batt insulation for filling crevices in exterior wall and roof assemblies.
- B. Related Work Described Elsewhere:
 - 1. Joint Sealants Section 07 90 00
- C. References:

American Society for Testing and Manufacturing (ASTM):

- 1. C518-85 Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter.
- 2. C665-86 Mineral Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.
- 3. E84-87 Surface Burning Characteristics of Building Materials.

1.02 SYSTEM DESCRIPTION

A. Provide thermal barrier at building enclosure elements were designated in drawings.

1.03 SUBMITTALS

A. Submit manufacturer's product data and installation instructions under provision of Section 013400.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Owens Corning.
- B. Manville
- C. CertainTeed.

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2.02 INSULATION MATERIALS

A. Fibrous Insulation:

- 1. Thermal insulation: ASTM C665 unfaced, friction fit blanket. Thickness indicated, 1 lb. density.
- 2. Minimum 'R' value per inch of thickness: 3 per ASTM C518.
- 3. Flame Spread: 25 maximum per ASTM E84.

PART 3EXECUTION

3.01 PREPARATION

- A. Verify adjacent materials are dry and ready to receive installation.
- B. Verify mechanical and electrical services within walls have been installed and tested.

3.02 INSTALLATION

- A. Install batt insulation in accordance with manufacturer's instructions.
- B. Install batt insulation in exterior wall spaces between framing members and elsewhere as indicated, without gaps or voids.
- Staple wall insulation at top to prevent sagging.
- D. Trim insulation neatly to fit spaces. Use batts free of damage.
- E. Fit insulation tight in spaces and tight to exterior side of mechanical and electrical services within the plane of insulation. Leave no gaps or voids.
- F. Stuff loose insulation into miscellaneous voids and cavity spaces as indicated. Compact to approximately 40 percent of normal volume.

END OF SECTION

DIVISION 7 THERMAL/MOISTURE PROTECTION SECTION 07 31 13 ASPHALT SHINGLES PAGE 1 OF 9

K+A DESIGNSTUDIOS

SECTION 07 31 13

ASPHALT SHINGLES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Designer heavyweight asphalt shingles.
- B. Underlayment and accessories.
- C. Ventilation accessories.

1.2 RELATED SECTIONS

- A. Section 02 05 00 Demolition.
- B. Section 06 10 00 Rough Carpentry.

1.3 REFERENCES

- A. ASTM International (ASTM):
 - 1. ASTM C209 Standard Test Methods for Cellulosic Fiber Insulating Board.
 - 2. ASTM C1289 Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.
 - 3. ASTM D226 Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
 - 4. ASTM D1621 Standard Test Method for Compressive Properties of Rigid Cellular Plastics.
 - ASTM D1970 Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
 - 6. ASTM D2126 Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging.
 - 7. ASTM D3018 Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules.
 - 8. ASTM D3161 Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method).
 - 9. ASTM D3462 Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules.
 - 10. ASTM D4586 Standard Specification for Asphalt Roof Cement, Asbestos- Free.
 - 11. ASTM D4601 Standard Specification for Asphalt-Coated Glass Fiber Base Sheet Used in Roofing.
 - 12. ASTM D4869 Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing.
 - 13. ASTM D6757 Standard Specification for Underlayment Felt Containing Inorganic Fibers Used in Steep-Slope Roofing.
 - 14. ASTM D7158 Standard Test Method for Wind Resistance of Asphalt Shingles (Uplift Force/Uplift Resistance Method).
 - ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 16. ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials.
 - 17. ASTM E108 Standard Test Methods for Fire Tests of Roof Coverings.

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- B. ICC Evaluation Service (ICC-ES).
 - 1. ICC Approval ESR-1561: Roofing Felt and Underlayment.
 - 2. ICC Approval ESR-3150: Asphalt Shingles.
 - 3. ICC-ES AC188: Acceptance Criteria for Roof Underlayments.
- C. Intertek Testing Services (ITS).
 - 1. Fire Resistance Directory, Current Edition.
 - 2. Code Compliance Research Report CCRR-1082: Roofing Felt and Underlayment.
- D. Underwriters Laboratory (UL):
 - 1. UL 790 Standard Test Methods for Fire Tests of Roof Coverings.
 - 2. UL 2218 Impact Resistance of Prepared Roof Covering Materials.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Samples for Selection: For the following products, of sizes indicated: For each product specified, two complete sets of color samples representing manufacturer's full range of available colors and patterns.
 - 1. Asphalt Shingles: Full size.
 - 2. Asphalt Starter Shingles: Full size.
 - 3. NEX Polymer Modified Fiberglass Hip and Ridge Shingles: Full size.
 - 4. Synthetic Underlayment: 12 inches (305 mm) square.
 - 5. NEX Polymer Modified Self-Adhering Fiberglass Reinforced Underlayment: 12 inches (305 mm) square.
 - 6. NEX Polymer Modified Fiberglass Reinforced Underlayment: 12 inches (305 mm) square.
 - 7. Nails Used for Fastening Shingles: 5 of each nail type and size.
 - 8. Vented Nail Base: 12 inches (305 mm) square.
- D. Samples for Verification: For the following products, of sizes indicated: For each product specified, two samples representing actual product, color, and patterns.
 - 1. Asphalt Shingles: Full size.
 - 2. Asphalt Starter Shingles: Full size.
 - 3. NEX Polymer Modified Fiberglass Hip and Ridge Shingles: Full size.
 - 4. Synthetic Underlayment: 12 inches (305 mm) square.
 - 5. NEX Polymer Modified Self-Adhering Fiberglass Reinforced Underlayment: 12 inches (305 mm) square.
 - 6. NEX Polymer Modified Fiberglass Reinforced Underlayment: 12 inches (305 mm) square.
 - 7. Nail Used for Fastening Shingles: 5 of each nail type and size.
 - 8. Vented Nail Base: 12 inches (305 mm) square.

1.5 QUALITY ASSURANCE

- A. Primary Roofing Materials Manufacturer Requirements:
 - 1. Manufacturer specified asphalt shingles for a minimum of ten years.

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- 2. Manufacturer shall be an associate member in good standing of either the National Roofing Contractors Association (NRCA), Western States Roofing Contractors Association (WSRCA), or the Midwest Roofing Contractors Association (MRCA).
- B. Installer Qualifications: Approved by the manufacturer to install the specified products and provide the specified warranties.
- C. Source Limitations: Obtain hip and ridge shingles, starter, all underlayment products, insulation, and vented nail base from single source, from single manufacturer.
- D. Fire-Resistance Characteristics: Where indicated, provide asphalt shingles and related roofing materials identical to those of assemblies tested for fire resistance per test method below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify products with appropriate markings of applicable testing agency.
- E. Exterior Fire-Test Exposure: Class A; ASTM E108 or UL 790, for application and roof slopes indicated.
- F. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.8 PROJECT MEETINGS

- A. Pre-Construction Meeting:
 - 1. Prior to the start of the roofing project, the Owner will hold a job-site meeting and roof tour to review the scope of work.
 - 2. Authorized representatives of the Owner, the Roofing Contractor (Project Superintendent), the asphalt shingle manufacturer, other Subcontractors whose work complements, penetrates, or is mounted on the roof or will use the roof as a work platform, will be in attendance.
 - 3. The agenda for the meeting shall include:
 - A review of the submittals.
 - b. Distribution of approved submittals.
 - c. A walkover inspection of the roof.
 - d. Establishment of a schedule for the work.
 - Selection of staging and storage locations.

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B. Final Inspection: Following the completion of the work, a final inspection shall be scheduled by Owner's Representative. Any uncompleted work shall be noted on a punch list. Final payment shall be made only after punch list is completed.

1.9 WARRANTY

- A. Special Warranty for Polymer Modified Shingles: Manufacturer's standard or customized form, without monetary limitation (NDL), in which manufacturer agrees to repair or replace components of asphalt shingle roofing system that fail in materials or workmanship within specified warranty period. Includes asphalt shingles, flashings, roof insulation, nail base, and other components of roofing system.
 - 1. Warranty Length: 20 years from date of Substantial Completion.
 - 2. Emerald Pro: Limited Lifetime 50 years
- B. Upon project completion and acceptance by Owner, the Roofing Contractor shall promptly provide executed copies of the specified warranties.
- C. Furnish a list containing the names and contact telephone numbers of the Roofing Contractor's Service Manager, Superintendent, and Project Manager and the Roofing Contractor's current mailing address.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers: Malarkey Roofing Products, which is located at: 3131 N. Columbia Blvd. P.O. Box 17217; Portland, OR 97217; Toll Free Tel: 800-545-1191; Tel: 503-283-1191; Fax: 503-289-7644; Email: request info (jkouba@malarkeyroofing.com); Web: WWW.MALARKEYROOFING.COM
- B. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 Product Requirements.

2.2 SHINGLES

- A. Designer Heavyweight Shingles:
 - 1. Windsor Scotchgard (285) as manufactured by Malarkey Roofing Products.
 - a. Malarkey Windsor Scotchgard shingles hold a Class A Fire Rating.
 - b. As manufactured, Windsor meets the requirements of:
 - ASTM D7158 Class H, ASTM D3462, ASTM D3161 Class F, ASTM D3018 Type I, ASTM E108 Class A, UL 2218 Class 4 Impact Resistance, and CSA A123.5.
 - 2) ICC Approval: ESR-3150.
 - 3) FBC Approval: No. 14809.
 - 4) Listed with UL and Intertek/WHI.
 - c. Performance:
 - 1) Limited Material Warranty: 50 years.
 - 2) Enhanced Wind Warranty Available: 140 mph (225 kph).
 - 3) Limited Lifetime Scotchgard Protector Warranty.
 - 4) Your Choice Warranty Program.
 - 5) Right Start Period: 15 years.
 - 6) NEX polymer mix includes recycled rubber and plastics.
 - 7) SEBS asphalt seal-down adhesive.
 - 8) 3M Smog-Reducing Granules.

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- 2. Legacy Scotchgard (273) as manufactured by Malarkey Roofing Products.
 - Malarkey Legacy Scotchgard shingles hold a Class A Fire Rating.
 - b. As manufactured, Legacy meets the requirements of:
 - ASTM D7158 Class H, ASTM D3462, ASTM D3161 Class F, ASTM D3018 Type I, ASTM E108 Class A, UL 2218 Class 4 Impact Resistance, ICC-ES AC438, and CSA A123.5.
 - 2) ICC Approval: ESR-3150.
 - 3) FBC Approval: No. 14809.
 - 4) Listed with UL and Intertek/WHI.
 - c. Performance:
 - 1) Limited Material Warranty: 50 years.
 - 2) Limited Wind Warranty: 15 years. 110 mph (177 kph).
 - 3) Enhanced Wind Warranty Available: 130 mph (209 kph).
 - 4) Limited Lifetime Scotchgard Protector Warranty.
 - 5) Your Choice Warranty Program.
 - 6) Right Start Period: 15 years.
 - 7) NEX polymer mix includes recycled rubber and plastics.
 - 8) SEBS polymer modified asphalt laminate adhesive.
 - 9) SEBS asphalt seal-down adhesive.
 - 10) 3M Smog-Reducing Granules.
 - 11) Enlarged nailing area of The Zone.
- B. Color: Color shall be selected from the manufacturer's standard colors.

2.3 UNDERLAYMENT

- A. NEX Polymer Modified. Self-Adhering Fiberglass Underlayment:
 - Product: Malarkey 401 Arctic Seal.
 - 2. As manufactured, 401 Arctic Seal meets the requirements of ASTM D1970.
 - 3. Self-adhering sheet shall be nominal 55 mils (1.4 mm) thick.
 - 4. Self-adhering sheet shall be 36 inches (0.91 meter) in width.
 - 5. One (1) roll covers two (2) squares of roof.
 - 6. NEX polymer mix includes recycled rubber and plastics.
- B. Synthetic Underlayment:
 - 1. Product: 1030 SecureStart SG.
 - 2. As manufactured, SecureStart SG meets the requirements of ASTM D226, ASTM D4869, ASTM E108 Class A, ICC-ES AC188, and CAN/CSA A123.3.
 - 3. FBC Approval: FL23186.
 - 4. Code Approval: CCRR-1082.
 - 5. Sheet shall be nominal 15 ±1 mils (0.4 mm) thick.
 - 6. Sheet shall be 48 inches (1.2 meter) in width.
 - 7. One (1) roll covers ten (10) squares of roof.

2.5 RELATED PRODUCTS

- A. Cor-A-Vent Inc.: Revolution Rolled Ridge Vent (REV-11). Install at ridge of roof as shown in drawings. Install per manufacturers recommendations.
- B. Cor-A-Vent Inc.: Roof-2- Wall Vent. Install at roof to sidewall transitions as shown in drawings. Install per manufacturers recommendations.

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- C. NEX Polymer Modified 8 inches (203 mm) High-Profile Hip and Ridge: Malarkey No. 222 EZ-Ridge Scotchgard.
- D. NEX Polymer Modified 10 inches (254 mm) High-Profile Hip and Ridge: Malarkey No. 224 EZ-Ridge XT Scotchgard.
- E. NEX Polymer Modified 10 inches (254 mm) Hip and Ridge: Malarkey No. 225 RidgeFlex Scotchgard.
- F. NEX Polymer Modified 12 inches (305 mm) Hip and Ridge: Malarkey No. 227 RidgeFlex Scotchgard.
- G. NEX Polymer Modified Full-Width Perforated Starter Shingle: Malarkey Smart Start No. 210.
- H. NEX Polymer Modified Full-Width Starter Shingle: Malarkey Windsor Starter No. 212.
- Plastic Roof Cement conforming to ASTM D4586.
- J. Fasteners: Hot Dip Galvanized nails with minimum 3/8 inch (9.5 mm) head.

PART 3 EXECUTION

3.1 DELIVERY, STORAGE, AND HANDLING IMPORT

- A. New and dry roof materials delivered to the job site in containers unopened and undamaged. Manufacturer's products stamped with labels, names, and run codes of manufacture and testing laboratory.
- B. Store underlayment materials on ends only. Discard rolls which may have been flattened, creased, or otherwise damaged. Place materials on pallets or wood sleepers. Do not stack palletized materials.
- C. Cover underlayment rolls with weatherproof materials secured to prevent materials from becoming exposed to moisture. Use breathable tarps.
- D. Disperse materials stored on the roof surface to avoid concentrated loading. Set larger concentrations over structural members.

3.2 ENVIRONMENTAL REQUIREMENTS

A. Application of roofing materials shall not be performed when weather conditions interfere with good roofing practices.

3.3 UNDERLAYMENT AND EDGING

- A. Apply specified underlayment as follows:
 - 1. Over entire roof, provide and install Malarkey 401 Arctic Seal below 1030 SecureStart SG.
- B. Valleys: Only those valley installations listed in the manufacturer's installation instructions shall be permitted.
 - 1. Regardless of valley method used, begin application by centering a full-width valley liner of self-adhering underlayment to the roof deck in all valleys.

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- The field underlayment is then woven through the valley over the layer of self-adhering underlayment or lapped 6 inches (152 mm) on each side. If fastening the field underlayment, be aware no fasteners are allowed within 6 inches (152 mm) of the valley centerline.
- C. Pipe Flashing: Apply ASTM D1970 underlayment around the pipe, sealing it to the field underlayment prior to installing the metal pipe flashing. Install and secure the metal jack so the bottom flange laps over onto the shingles. Side and top flanges shall have shingles lapping onto the flange. Shingles that lap onto flanges shall be sealed to the metal with asphalt roof cement conforming to ASTM D4586.
- D. Perimeter Flashing: Use non-corrosive, 24-gauge (0.55 mm) sheet metal drip edge flashing. Install prior to underlayment on eave edges of roof and then along rake edges over the ends of installed underlayment. Install drip edge with flanges large enough (4-inch (102 mm) flanges) to completely cover roof edges. Secure with galvanized (or compatible) roofing nails, centered on the top flange at 8 to 10 inches (203 to 254 mm) O.C. or according to local code requirements.

3.4 APPLICATION OF SHINGLES

- A. Windsor Shingle Application; 6-3/8 inches (162 mm) Offset Diagonal Pattern:
 - 1. Starter courses: Use Malarkey starter shingles or self-sealing 3-tab shingles with the tabs cut off; apply to eave and rake edges of roof.
 - 2. Apply the initial, full-length starter shingle on a lower corner of roof. The starter course shall overhang the edge metal 1/4 to 3/4 inch (6 mm to 19 mm). Fasten with four (4) nails, 1-1/2 inches to 3 inches (38-76 mm) up from the eave with one fastener 1 inch (25 mm) from each end and the remaining two evenly spaced on the same line as the end fasteners.
 - 3. Continue starter course across the roof, butting the shingles loosely together to avoid buckling and fastening in place.
 - 4. Windsor Starter course: Trim one end of the first Windsor Starter shingle, 6-3/8 inches (162 mm), and lay it over the starter course, positioning the Windsor Starter so the full color blend overhangs the starter course by approximately 1/8 inches (3 mm). Fasten with four (4) nails in-between the paint lines, approximately 1 inch (25 mm) from each side of the starter and the remaining two evenly spaced. Continue across the roof, butting the shingles loosely together to prevent buckling and fastening in place.
 - 5. First course: Start with a full shingle applied directly over the Windsor Starter course at the same lower corner of the roof. Maintain the 1/8 inch (3 mm) overhang previously established, and secure with fasteners.
 - 6. Second course: Cut 6-3/8 inches (162 mm) off one end of a full shingle and apply the remaining 31-7/8 inch (810 mm) piece over the underlying first course shingle. The bottom edge of the shingle tabs should line up with the top edge of the cutouts in the underlying shingle, exposing the first course 5-3/4 inches (146 mm). Secure with fasteners.
 - 7. Another way to position it is to align the right side with the right outside notch in the underlying first course shingle.
 - 8. Third course: Cut 12-3/4 inches (314 mm) off the rake end of a full shingle and apply the remaining 25-1/2 inch (648 mm) piece over the underlying second course shingle. Position as before, lining up the bottom edge of the shingle tabs with the top edge of the cutouts in the underlying shingle, exposing the second course 5-3/4 inches (146 mm). Secure with fasteners.
 - 9. Another way to position it is to align the right side with the right outside notch in the underlying second course shingle.

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- 10. Fourth course: Cut 19-1/8 inches (486 mm) off the rake end of a full shingle and apply the remaining 19-1/8 inch (486 mm) piece over the underlying third course shingle.
- 11. Position as before, lining up the bottom edge of the shingle tabs with the top edge of the cutouts in the underlying shingle, exposing the third course 5-3/4 inches (146 mm). Secure with fasteners.
- 12. Another way to position it is to align the right side with the right outside notch in the underlying third course shingle.
- 13. Apply a full shingle adjacent to each of the first four courses to extend the pattern. When fastening, butt ends loosely together to prevent buckling.
- 14. Courses five and above: To continue installation on up the roof, repeat the diagonal pattern established in courses one to four.
- 15. Strike a chalk line every six courses or so to ensure straight courses. Shingles may be laid from either lower corner of roof. Start at either rake edge and follow layout and cutting instructions as required for proper application. If starting from the right rake, position the left side of cut shingles with the left outside notch in shingles of underlying courses.
- B. Laminate Shingle Application; 8 inches (203 mm) Offset Diagonal Pattern:
 - 1. Starter courses: Use Malarkey starter shingles or self-sealing 3-tab shingles with the tabs cut off; apply to eave and rake edges of roof.
 - 2. Cut 6 inches (152 mm) off the length of the first starter shingle and apply at a lower corner of roof. The starter course shall overhang the edge metal 1/4 to 3/4 inch (6 mm to 19 mm). Fasten with four (4) nails, 1-1/2 inches to 3 inches (38 to 76 mm) up from the eave with one fastener 1 inch (25 mm) from each end and the remaining two evenly spaced on the same line as the end fasteners.
 - 3. Continue starter course across the roof with a full-length shingles, butting them loosely together to avoid buckling.
 - 4. First course: Start with a full shingle applied directly over the starter course at the same lower corner of the roof, and secure with fasteners.
 - 5. Second course: Cut 8 inches (203 mm) off one end of a full shingle and apply the remaining piece over the underlying, first course shingle. Align the bottom edge along a line level with the "sawtooth" overlay in the preceding course, exposing the first course 5-5/8 inches (143 mm). Secure with fasteners.
 - 6. Succeeding Courses: Courses three through five are begun with partial shingles, each progressively 8 inches (203 mm) shorter, establishing the overall diagonal pattern or stair-step effect. (Pieces cut from shingles along one rake edge can be used to finish off courses on the opposite rake.)
 - 7. Apply a full shingle adjacent to each of the first five courses to extend the pattern. Butt the shingles loosely together to prevent buckling.
 - 8. Courses six through ten repeat the process beginning with a full shingle and repeating the 1-to-5 course cycle on up the roof.
 - 9. Strike a chalk line every six courses or so to ensure straight courses. Shingles may be laid from either lower corner of the roof. Start at the rake edge and follow layout and cutting instructions as required for proper application. Installation of shingles with a 4-inch (102 mm) offset is also acceptable. Offsets must be no less than 4 inches (102 mm).

C. Valley Installation:

1. Valley Underlayment: Center a full-width strip of self-adhering underlayment (or equivalent conforming to ASTM D1970) in the valley and apply it directly to the roof deck. Ensure this valley liner is tight to the deck without bridging in the center of the valley. Apply the field underlayment across the valley liner and up the opposite side at

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- least 12" (305 mm) or overlap the valley liner a minimum of 6 inches (152 mm) on each side. When fastening, none should be placed closer than 6 inches (152 mm) from the valley centerline.
- 2. Open metal valleys: Install minimum 24 inches (610 mm) wide, 26-gauge, metal valley flashing over the valley liner, and secure with fasteners no more than 1 inch (25 mm) from the outside edges at a spacing of 10 inches (254 mm) to 12 inches (305 mm) on center. For additional sealing, a continuous, 6-inch (152 mm) wide stripping ply of self-adhering Arctic Seal may be applied over the fasteners. Overlaps in the metal should be a minimum of 4 inches (102 mm) and embedded in a continuous bead of sealant. Do not fasten the metal laps. Lay a first course of shingles along the eave of one roof area and over the valley, making sure the end of the last shingle meets or goes beyond the centerline of the metal valley. Complete the installation of shingles on that roof section. After all shingles have been installed in the valley, snap a chalk line 2 inches (51 mm) from the center of the metal valley, and trim shingles to the chalk line, matching the centerline angle. Crop the tops of each shingle course at a 1 inch (25 mm), 45 degree cut. Embed the ends of the cut valley shingles in a continuous 3 inch (76 mm) wide bead of mastic. Install shingles on the adjoining roof as described above.
- 3. "Bleeder," "Point," or "California-cut" valleys are not acceptable.

3.5 FASTENERS

- A. Windsor Nailing Pattern: Due to its open-tab design and size, Windsor shingles have three (3) nailing patterns that are determined by conditions. Consistent in all patterns are the placing of end fasteners 1 inch (25 mm) in from each end of the shingle and the remaining nails in the high or low nailing areas as directed. Fasteners shall be seated flush to the shingle surface and not overdriven to cut into shingles. When fastening, butt shingles loosely together to prevent buckling.
 - 1. Fasteners per shingle/high wind areas: Nine (9), and six (6) each for Windsor Starter shingles and Smart Start starter shingles.
 - 2. Steep slope fastening (roof decks > 21:12): Nine (9), six (6) each for Windsor Starter shingles and Smart Start starter shingles, and hand-sealing of tabs with ASTM D4586.
- B. Laminate Nailing Pattern: Nails must be placed within the nailing zone, 1 inch (25 mm) in from each end of the shingle and the remaining nails evenly spaced on the same line as the end nails. Fasteners shall be seated flush to the shingle surface and not overdriven to cut into shingles. When fastening, butt shingles loosely together to prevent buckling.
 - 1. Fasteners per shingle: Four (4).
 - 2. Fasteners per shingle/high wind areas: Six (6), including starter shingles.
 - 3. Steep slope fastening (roof decks > 21:12): Six (6), including starter shingles, and hand-sealing underneath with ASTM D4586.

END OF SECTION

SECTION 07 55 00 - EPDM ROOFING

PART 1 GENERAL

1.01 DESCRIPTION

A. The project consists of installing Fully Adhered Roofing System as outlined below:

Apply the Fully Adhered EPDM Roofing System over the existing roof decks as described in the contract documents.

1.02 EXTENT OF WORK

- A. Provide all labor, material, tools, equipment, and supervision necessary to complete the installation of a .090 inch thick external reinforced EPDM membrane Fully Adhered Roofing System including flashings and insulation as specified herein and as indicated on the drawings in accordance with the manufacturer's most current specifications and details.
- B. The roofing contractor shall be fully knowledgeable of all requirements of the contract documents and shall make themselves aware of all job site conditions that will affect their work.
- C. The roofing contractor shall confirm all given information and advise the building owner, prior to bid, of any conflicts that will affect their cost proposal.
- D. Any contractor who intends to submit a bid using a roofing system other than the approved manufacturer must submit for pre-qualification in writing fourteen (14) days prior to the bid date. Any contractor who fails to submit all information as requested will be subject to rejection. Bids stating "as per plans and specs" will be unacceptable.

1.03 SUBMITTALS

- A. Prior to starting work, the roofing contractor must submit the following:
 - Shop drawings showing layout, details of construction and identification of materials.
 - 2. Sample of the manufacturer's Membrane System Warranty.
 - 3. Submit a letter of certification from the manufacturer which certifies the roofing contractor is authorized to install the manufacturer's roofing system and lists foremen who have received training from the manufacturer along with the dates training was received.
 - 4. Certification from the membrane manufacturer indicating the fasteners are capable of providing a static backout resistance of 10 inch pounds minimum is required.
 - 5. Certification of the manufacturer's warranty reserve.
- B. Upon completion of the installed work, submit copies of the manufacturer's final inspection to the specifier prior to the issuance of the manufacturer's warranty.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Deliver materials to the job site in the manufacturer's original, unopened containers or wrappings with the manufacturer's name, brand name and installation instructions intact and legible. Deliver in

sufficient quantity to permit work to continue without interruption.

- B. Comply with the manufacturer's written instructions for proper material storage.
 - Store materials, except membrane, between 60F and 80F in dry areas protected from water and direct sunlight. If exposed to lower temperature, restore to 60F minimum temperature before using.
 - 2. Store materials containing solvents in dry, well ventilated spaces with proper fire and safety precautions. Keep lids on tight. Use before expiration of their shelf life.
- C. Insulation must be on pallets, off the ground and tightly covered with waterproof materials.
- D. Any materials which are found to be damaged shall be removed and replaced at the applicator's expense.

1.05 WORK SEQUENCE

- A. Schedule and execute work to prevent leaks and excessive traffic on completed roof sections. Care should be exercised to provide protection for the interior of the building and to ensure water does not flow beneath any completed sections of the membrane system.
- B. Do not disrupt activities in occupied spaces.

1.06 USE OF THE PREMISES

- A. Before beginning work, the roofing contractor must secure approval from the building owner's representative for the following:
 - 1. Areas permitted for personnel parking.
 - Access to the site.
 - 3. Areas permitted for storage of materials and debris.
 - 4. Areas permitted for the location of cranes, hoists and chutes for loading and unloading materials to and from the roof.
- B. Interior stairs or elevators may not be used for removing debris or delivering materials, except as authorized by the building superintendent.

1.07 EXISTING CONDITIONS

A. If discrepancies are discovered between the existing conditions and those noted on the drawings, immediately notify the owner's representative by phone and solicit the manufacturer's approval prior to commencing with the work. Necessary steps shall be taken to make the building watertight until the discrepancies are resolved.

1.08 JOB SITE PROTECTION

A. The roofing contractor shall adequately protect building, paved areas, service drives, lawn, shrubs, trees, etc. from damage while performing the required work. Provide canvas, boards and sheet metal (properly secured) as necessary for protection and remove protection material at completion. The contractor shall repair or be responsible for costs to repair all property damaged during the roofing

application.

- B. During the roofing contractor's performance of the work, the building owner will continue to occupy the existing building. The contractor shall take precautions to prevent the spread of dust and debris, particularly where such material may sift into the building. The roofing contractor shall provide labor and materials to construct, maintain and remove necessary temporary enclosures to prevent dust or debris in the construction area(s) from entering the remainder of the building.
- C. Do not overload any portion of the building, either by use of or placement of equipment, storage of debris, or storage of materials.
- D. Protect against fire and flame spread. Maintain proper and adequate fire extinguishers.
- E. Take precautions to prevent drains from clogging during the roofing application. Remove debris at the completion of each day's work and clean drains, if required. At completion, test drains to ensure the system is free running and drains are watertight. Remove strainers and plug drains in areas where work is in progress. Install flags or other telltales on plugs. Remove plugs each night and screen drain.
- F. Store moisture susceptible materials above ground and protect with waterproof coverings.
- G. Remove all traces of piled bulk materials and return the job site to its original condition upon completion of the work.

1.09 SAFETY

A. The roofing contractor shall be responsible for all means and methods as they relate to safety and shall comply with all applicable local, state and federal requirements that are safety related. Safety shall be the responsibility of the roofing contractor. All related personnel shall be instructed daily to be mindful of the full time requirement to maintain a safe environment for the facility's occupants including staff, visitors, customers and the occurrence of the general public on or near the site.

1.10 WORKMANSHIP

- A. Applicators installing new roof, flashing and related work shall be factory trained and approved by the manufacturer they are representing.
- B. All work shall be of highest quality and in strict accordance with the manufacturer's published specifications and to the building owner's satisfaction.
- C. There shall be a supervisor on the job site at all times while work is in progress.

1.11 QUALITY ASSURANCE

- A. The manufacturer must have a minimum of 20 years experience in the manufacturing of vulcanized thermal set sheeting.
- B. Unless otherwise noted in this specification, the roofing contractor must strictly comply with the manufacturer's current specifications and details.
- C. The roofing system must be installed by an applicator authorized and trained by the manufacturer in compliance with shop drawings as approved by the manufacturer. The roofing applicator shall be thoroughly experienced and upon request be able to provide evidence of having at least five (5) years

successful experience installing single-ply EPDM roofing systems and having installed at least one (1) roofing application or several similar systems of equal or greater size within one year.

- E. Provide adequate number of experienced workmen regularly engaged in this type of work who are skilled in the application techniques of the materials specified. Provide at least one thoroughly trained and experienced superintendent on the job at all times roofing work is in progress.
- F. There shall be no deviations made from this specification or the approved shop drawings without the prior written approval of the specifier. Any deviation from the manufacturer's installation procedures must be supported by a written certification on the manufacturer's letterhead and presented for the specifier's consideration.
- G. Upon completion of the installation, the applicator shall arrange for an inspection to be made by a non-sales technical representative of the membrane manufacturer in order to determine whether or not corrective work will be required before the warranty will be issued. Notify the building owner seventy-two (72) hours prior to the manufacturer's final inspection.

1.12 JOB CONDITIONS, CAUTIONS AND WARNINGS

Refer to Manufacturers Fully Adhered Roofing System specification, - Application, for General Job Site Considerations.

- A. Material Safety Data Sheets (MSDS) must be on location at all times during the transportation, storage and application of materials.
- B. When positioning membrane sheets, exercise care to locate all field splices away from low spots and out of drain sumps. All field splices should be shingled to prevent bucking of water.
- C. When loading materials onto the roof, the Authorized Roofing Applicator must comply with the requirements of the building owner to prevent overloading and possible disturbance to the building structure.
- D. Proceed with roofing work only when weather conditions are in compliance with the manufacturer's recommended limitations, and when conditions will permit the work to proceed in accordance with the manufacturer's requirements and recommendations.
- E. Proceed with work so new roofing materials are not subject to construction traffic. When necessary, new roof sections shall be protected and inspected upon completion for possible damage.
- F. Provide protection, such as 3/4 inch thick plywood, for all roof areas exposed to traffic during construction. Plywood must be smooth and free of fasteners and splinters.
- G. The surface on which the insulation or roofing membrane is to be applied shall be clean, smooth, dry, and free of projections or contaminants that would prevent proper application of or be incompatible with the new installation, such as fins, sharp edges, foreign materials, oil and grease.
- H. New roofing shall be complete and weathertight at the end of the work day.
- Contaminants such as grease, fats and oils shall not be allowed to come in direct contact with the roofing membrane.

1.13 WARRANTY

A. Provide manufacturer's 20 year Membrane System Warranty covering both labor and material with no

dollar limitation. The maximum wind speed coverage shall be peak gusts of 120 mph measured at 10 meters above ground level.

- B. Pro-rated System Warranties shall not be accepted.
- C. Evidence of the manufacturer's warranty reserve shall be included as part of the project submittals for the specifier's approval.

PART 2 PRODUCTS

2.01 GENERAL

- A. The basis of design for all components of the specified roofing system shall be products of Carlisle SynTec Incorporated or accepted by the Architect as compatible.
 - i. Firestone Building Products.
- B. Unless otherwise approved by the specifier and accepted by the membrane manufacturer, all products (including insulation, fasteners, fastening plates and edgings) must be manufactured and supplied by the roofing system manufacturer and covered by the warranty.
- C. Submit written request for approval of substituation per section 016000.

2.02 MEMBRANE

Furnish Sure-Seal externally reinforced with fabric EPDM (Ethylene, Propylene, Diene Terpolymer) conforming to the minimum physical properties of ASTM D4637. The membrane shall be manufactured in a single panel with no factory splices to reduce splice intersections.

- 1. Thickness: 0.090 Inch.
- 2. Sheet Width: 76 inch minimum; factory-fabricate into largest sheets possible.
- 3. Color: Black
- 4. Tensile Strength: 1400 psi, measured in accordance with ASTM D412.
- 5. Ultimate Elongation: 400 percent, measured in accordance with ASTM D412.
- 6. Tear Strength: 185 lbf/in, measure in accordance with ASTM D624.
- 7. Brittleness Temperature: -75 deg. F, measured in accordance with ASTM D746.
- 8. Seaming Materials: As recommended by membrane manufacturer.

2.03 RECOVERY BOARDS

- Recovery Board: Provide glass mat faced gypsum panels meeting ASTM C1177/C1177M fire resistance type over all insulation.
 - 1. Acceptable Manufactureers: Georgia-Pacific
 - 2. Thickness: 5/8"

2.04 INSULATION

- A. General: Provide preformed roof insulation boards that comply with requirements and referenced standards, selected from manufacturer's standard sizes totallying the R-Value indicated on drawings.
- B. Molded-Polystyrene Board (EPS) Insulation: ASTM C 578 Type II, 1.35-lb/cu. ft. minimum density. The R-Value for calculation purposes for Type II EPS insulation is to be R-4.55 per inch thickness, measured at 40 degrees F.
 - 1. Available Manufacturers:

- a. Insulfoam, Inc.
- b. Approved equal.
- 2. Thickness: As indicated
- 3. Maximum dimension: 4 feet by 4 feet
- C. Polyisocyanurate Board Insulation: ASTM C 1289, Type II, felt facer on both major surfaces. The R-value for calculation purposes for Polyisocyanurate insulation is to be R-5.0 per inch thickness.
 - 1. Available Manufacturers:
 - a. Atlas Roofing Corporation.
 - b. Celotex Corporation.
 - c. Firestone Building Products Company.
 - d. Hunter Panel, Inc.
 - e. Johns Manville International, Inc.
 - f. RMAX
 - g. Approved equal.
 - 2. Thickness: As indicated
 - 3. Maximum dimension 4 feet by 4 feet
- D. Cellulosic-Fiber Board Insulation: ASTM C 208, Type II, Grade 1, fibrous-felted wood fiber or other cellulosic-fiber and water-resistant binders, asphalt impregnated on all six surfaces, chemically treated to resist deterioration.
 - 1. Available Manufacturers:
 - a. CMI-Temple Inland.
 - b. Firestone Building Products Company.
 - c. Georgia-Pacific Corporation.
 - d. Structoduck.
 - e. Approved equal.
- E. Tapered Insulation: Provide factory-tapered insulation boards fabricated to form a minimum finished slope of 1/8-inch per 12 inches (1:48), unless otherwise indicated.
 - 1. Minimum thickness: 1/2-inch
- F. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes where

indicated for sloping to drain. Fabricates to slopes as indicated.

2.05 INSULATION ACCESSORIES

- A. General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatible with membrane roofing.
- B. Insulation Cant Strips: ASTM C 728, perlite insulation board; OR –ASTM C 208 Type II, Grade 1, cellulosic-fiber insulation board.

2.06 ADHESIVES AND CLEANERS

All products shall be furnished by Carlisle and specifically formulated for the intended purpose.

- A. Bonding Adhesive: Sure-Seal 90-8-30A
- B. Splicing Cement: Sure-Seal EP-95 Splicing Cement
- C. Splice Tape and Primer: Sure-Seal SecurTAPE and HP-250 Primer
- D. Cleaning Solvent: Sure-Seal Splice Cleaner or Weathered Membrane Cleaner
- E. Internal seam sealant: Sure-Seal In-Seam Sealant
- F. External seam sealant: Sure-Seal Lap Sealant
- G. Sealer: Sure-Seal Pourable Sealer

2.07 VAPOR BARRIER

A. Carlisle VapAir Seal 725TR Air & Vapor Barrier: 725TR is a 40-mil composite consisting of 35-mils of self-adhering rubberized asphalt factory laminated to a 5-mil polyethylene film with an adhesion textured surface. 725TR roll dimensions are 39" x 100' and the product is applied after priming an acceptable substrate with CCW 702, 702-LV or Cav-Grip III primer.

2.08 RELATED MATERIALS

A. Povide all Carlisle approved related flashings, adhesives and to provide a watertight assemble qualifying for the above stated warranty regirements.

2.09 METAL EDGING AND MEMBRANE TERMINATIONS

A. Provide all metal edging and terminations as defined in drawings. Color as selected by Architect.

PART 3 EXECUTION

3.01 GENERAL

- A. Comply with the manufacturer's published instructions for the installation of the membrane roofing system including proper substrate preparation, jobsite considerations and weather restrictions.
- B. Position sheets to accommodate contours of the roof deck and shingle splices to avoid bucking water.

3.02 INSULATION PLACEMENT

- A. Install insulation or membrane underlayment over the substrate with boards butted tightly together with no joints or gaps greater than 1/4 inch. Stagger joints both horizontally and vertically if multiple layers are provided.
- B. Secure insulation to the substrate with the required adhesive in accordance with the manufacturer's specifications.

3.03 MEMBRANE PLACEMENT AND ATTACHMENT

- A. Unroll and position membrane without stretching. Allow the membrane to relax for approximately 1/2 hour prior to application. Provide and secure both perimeter and field membrane sheets in accordance with the manufacturer's most current specifications and details.
- B. Secure the membrane with Carlisle approved adhesion system.
- Install adjoining membrane sheets in the same manner in accordance with the manufacturer's specifications.

3.04 MEMBRANE SPLICING (Adhesive Splice)

- A. Membrane splices must be a minimum of 6 inches wide where mechanical attachment is required along the length of the membrane. Membrane splices at the end roll sections (the width of the membrane) must be a minimum of 3 inches wide.
- B. When using PRE-KLEENED Reinforced EPDM Membrane, cleaning the splice area is not required unless contaminated with field dirt, adhesive or other residue. To remove accumulated dirt, footprints, etc., scrub the membrane sheets with Splice Cleaner or HP-250 Primer.
- C. Apply Splicing Cement and In-Seam Sealant in accordance with the manufacturer's specifications and roll the top sheet onto the mating surface.
- D. Roll the splice with a 2 inch wide steel roller and wait at least 2 hours before applying Lap Sealant to the splice edge following the manufacturer's requirements.
- E. Field splices without In-Seam Sealant must be overlaid with uncured flashing.

3.05 MEMBRANE SPLICING (Tape Splice)

- A. Tape splices where fastening plates are located (along the length of the membrane) must utilize 6 inch wide Splice Tape. Tape splices at end roll sections (along the width of the membrane without fastening plates) shall utilize 3 inch wide Splice Tape.
- B. Overlap adjacent sheets and mark a line 1/2 inch out from the top sheet.
- C. Apply Sure-Seal HP-250 Primer to splice area.
- D. Position Splice Tape onto bottom membrane sheet with the edge of the release film along the marked line.

- E. Remove the release film and press the top sheet onto the tape using hand pressure. Roll the splice with a 2 inch wide steel roller.
- F. Install a 6 inch wide section of Pressure-Sensitive Flashing or Elastoform Flashing over all field splice intersections and seal edges of flashing with Lap Sealant.
- G. The use of Lap Sealant with tape splices is optional except at tape overlaps and cut edges of reinforced membrane where Lap Sealant is required.

3.06 FLASHING

- A. Wall and curb flashing shall be cured EPDM membrane. Continue the deck membrane as wall flashing where practicable.
- B. Follow manufacturer's typical flashing procedures for all wall, curb, and penetration flashing including metal edging/coping and roof drain applications.

3.07 WALKWAYS

- A. Install walkways at all traffic concentration points (such as roof hatches, access doors, rooftop ladders, etc.) and all locations as identified on the specifier's drawing. Provide walkway mats covering drainage sump.
- B. Adhere walkways to the EPDM membrane in accordance with the manufacturer's specifications.

3.08 DAILY SEAL

- A. On phased roofing, when the completion of flashings and terminations is not achieved by the end of the work day, a daily seal must be performed to temporarily close the membrane to prevent water infiltration.
- B. Use Sure-Seal Pourable Sealer or other acceptable membrane seal in accordance with the manufacturer's requirements.

3.09 CLEAN UP

- A. Perform daily clean-up to collect all wrappings, empty containers, paper, and other debris from the project site. Upon completion, all debris must be disposed of in a legally acceptable manner.
- B. Prior to the manufacturer's inspection for warranty, the applicator must perform a pre-inspection to review all work and to verify all flashing has been completed as well as the application of all caulking.

END OF SECTION

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SECTION 07 62 00 - METAL FLASHING, TRIM AND GUTTERS

PART 1 GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Roof copings, reglets and counterflashings.
 - 2. Exterior rain gutters and downspouts.
 - 3. Miscellaneous flashings.
- B. Related Work Specified Elsewhere:

1.	Composite Siding and Trim	Section 07 62 00
2.	Joint Sealers	Section 07 90 00
3.	Painting	Section 09 90 00

- C. References:
 - 1. American Society for Testing and Materials (ASTM):
 - a. A525-86 Steel Sheet, Zinc Coated, Galvanized by the Hot Dip Process.
 - b. B32-87 Solder Metal
 - c. D226-87 Asphalt Saturated Organic Felt Used in Roofing and Waterproofing.
 - d. D1187-82 Asphalt Based Emulsions for Use as Protective Coatings for Metal.
 - 2. Federal Specifications (FS): O-F-506 Flux, Soldering, Paste and Liquid.
 - 3. Sheet Metal and Air Conditioning Contractors National Association (SMACNA): SMACNA Architectural Sheet Metal Manual.

1.02 SYSTEM DESCRIPTION

A. Work of this Section is to physically protect composition or flexible roof flashing and building components from damage that would permit water leakage to building interior.

1.03 QUALITY ASSURANCE

A. Applicator: Company specializing in sheet metal flashing work with 3 years minimum experience.

1.04 SUBMITTALS

- A. Submit shop drawings, product data, installation instructions, color sample, and samples under provisions of Section 013400.
- B. Describe material profile, jointing pattern, jointing details, fastening methods, and installation details.

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C. Provide 12 in. length of full sized sample of metal flashings illustrating typical external corner, internal corner, junction to vertical dissimilar surface, material and finish.

1.05 STORAGE AND HANDLING

- A. Store products under provisions of Section 016200.
- B. Stack preformed and prefinished material to prevent twisting, bending, or abrasion, and to provide ventilation.
- Prevent contact with materials during storage which may cause discoloration, staining or damage.

1.06 PERFORMANCE AGREEMENT

- A. Provide two year guaranty under provisions of Section 017500, substantially in the following form:
 - Inspect and make emergency repairs to defects and leaks in building flashings within 24
 hours of notice by Owner. As soon as weather permits, make permanent repairs and
 restore effected area to standards of contract requirements. Work shall be done without
 additional cost to Owner, unless leaks were caused by abuse or unusual natural
 phenomena as lightning strikes or hurricane.
- B. Provide 20 year manufacturer's finish warranty for prefinished items under provision of Section 017500.

PART 2 PRODUCTS

2.01 MATERIALS

A. Galvanized Sheet Stock: ASTM A446, Grade C minimum; coating designation G90 in conformance with A525, or 1.9 mil Zincalume coating composed of 45 percent zinc and 55 percent aluminum alloy by weight, per ASTM A792.

B. Counterflashings:

- Manufactured: Provide counterflashings similar and equal to Springlok Flashing System as manufactured by Fry Reglet Corp. Flashing shall be made of 26 ga. galvanized steel. Prefinish where exposed to view form exterior grade and elsewhere as indicated. Flashing shall have a 3 in. factory formed end lap. Provide with prefabricated flashing corners and accessories.
- 2. Fabricated: Provide counterflashings of galvanized steel as indicated, thickness shown. Pre-finish where exposed to view from exterior grade and elsewhere as indicated. Fabricate as specified below, to shapes shown and as required to maintain building watertight and weatherproof.
- C. Copings: Provide copings of preformed, galvanized sheet stock as indicated, thickness shown. Fabricate as specified below, to shapes shown and as required to maintain building watertight and weatherproof.

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D. Raingutters: Provide Continuous Aluminum Raingutters. Provide .027 aluminum 5" K-Line gutters, 3105, H14 or equal, 1 mil polyester paint top side with .2 mil wash coat back side, 3-3/4" Tall, 3-5/16" Bottom, with 3" x 4" aluminum downspouts, .019 aluminum 3105, H14 or equal 1 mil. polyester paint tip side .2 mil clear wash coat back side, as shown on the Drawings. Provide baked on enamel finish with Life-Time Warranty. Fasten per manufacturers installation instructions. Color as selected by Architect. Provide a concrete splashblock at each downspout.

2.02 ACCESSORIES

- A. Fastener: Galvanized steel with soft neoprene washers at exposed fasteners. Finish exposed fasteners same as flashing metal.
- B. Underlayment: ASTM D266; No. 15 asphalt saturated roofing felt.
- C. Metal Primer: FS TT-P-641.
- D. Protective Backing Paint: Bituminous, conforming to ASTM D1187, Type A.
- E. Sealant: Refer to Section 07900.
- F. Solder: ASTM B32; 50/50 type.
- G. Flux: FS O-F-506.

2.03 FABRICATION

- A. Form section true to shape, accurate in size, square, and free from distortion or deflects.
- B. Form pieces in longest practicable lengths. Minimum bend radius 2.5 times the thickness of the metal, unless more stringent requirements are specified by coating manufacturer. Form bends at room temperature.
- C. Hem exposed edges on underside 1/2 in.; miter and rivet lap seam corners. Provide sealant in laps as specified in Section 07900.
- D. Form material with cover plate seams.
- E. Where indicated, and at all corner installations, solder and seal metal joints. After soldering, remove flux. Wipe and wash solder joints clean.
- F. Fabricate vertical faces with bottom edge formed outward 1/4 in. and hemmed to form drip.
- G. Provide 24 gauge coping with 22 gauge continuous concealed cleats on exterior face and exposed screw fasteners on interior face, as shown.

2.04 FINISH

Shop prepare and prime exposed ferrous metal surfaces, including galvanized.

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- B. Backpaint concealed ferrous metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil.
- C. Exposed flashings at sloped glazing to match sloped glazing framing color.
- D. Exposed flashings at louvers to match louver color.
- E. Prefinishing of Sheet Stock:
 - Exterior surfaces of prefinished flashings shall have a shop applied baked-on epoxy primer (.2 mil) and a baked-on PVF 2 (Polyvinylidene Flouride) finish coat (.8 mil) equal to Glidden "Nubelar", DeSoto "Fluropon", Whittaker "Fluoroceram" and PPG "Duranar"; full 70% Kynar 500, totaling a nominal 1.0 mil dry film thickness.
 - 2. Interior finish consists of .15 mil epoxy primer and .35 mil off-white backer, except match exterior surface finish where exposed.
- G. Touch Up Finishes: Touch up finish or refinish hardware items and small scratches and abrasions on prefinished metal with an air dry fluorocarbon refinishing system or touch up system, similar and equal to ADS Kynar.
- H. Back paint concealed metal surfaces and dissimilar metal contact surfaces with protective backing paint to a minimum dry film thickness of 15 mil.

PART 3 EXECUTION

3.01 INSPECTION

A. Beginning of installation means installer accepts existing substrates.

3.02 PREPARATION

A. Field measure site conditions prior to fabricating work.

3.03 INSTALLATION

- A. Install surface mounted reglets and accessories true to lines and levels, at wall/roof connections above top of base flashings.
 - 1. Seal top of reglet as specified in Section 079000 and in accordance with reglet manufacturer's recommendations.
 - 2. Place beads of sealant under holes. Prefinish reinforcing bars to match flashing. Anchor bars to substrate through flashing with round head bolts with neoprene washers into sleeve anchors, of metal compatible with flashing and with heads prefinished color to match flashing.
- B. Secure flashings in place using concealed fasteners unless exposed specifically shown. Fastener size and type suitable for conditions of use. Provide sizes and spacings shown, and

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where not shown, provide in accordance with applicable requirements of SMACNA manual and FM 1-49 for Wind Zone 2 whichever is the more stringent for the application.

- C. Provide butt joints between coping lengths with minimum 22 ga. cover plates and seal between cover plates and coping with two beads of polyisobutylene sealant each side (four rows of sealant total for each covered joint). Allow for expected expansion and contraction between coping lengths.
- D. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- E. Seal metal joints watertight. Apply sealant between metal flashings as specified in Section 07900.
- F. Conform to drawing details included in SMACNA manual where referenced or where applicable to conditions and not in conflict with Contract Documents.

END OF SECTION

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SECTION 07 90 00 - JOINT SEALANTS

PART 1 GENERAL

1.01 DESCRIPTION

A. Work Included:

- 1. Clean and prepare sealant substrate surfaces.
- Sealant and backing.

B. Related Work Described Elsewhere:

1.	Flashing and Metal Trim	Section 07 62 00
2.	Sloped Glazing Assemblies	Section 08 44 33
3.	Glazing	Section 08 80 00

C. References:

- 1. American Society for Testing and Materials (ASTM):
 - a. C790-84 Recommended Practices for Use of Latex Sealing Compounds.
 - b. C804-83 Recommended Practices for Use of Solvent Release Type Sealants.
 - c. D1056-85 Flexible Cellular Materials Sponge or Expanded Rubber.
 - d. D1565-81 (1986) Flexible Cellular Materials Vinyl Chloride polymers and Copolymers (Open Cell Foam).
 - e. E119-83 Fire Tests of Building Construction Materials.

2. Federal Specifications (FS):

- a. TT-S-001543 Sealing Compound, Silicone Rubber Base.
- b. TT-S-001657 Sealing Compound, Single Component, Butyl Rubber Based, Solvent Release Type.
- c. TT-S-00227 Sealing Compound: Elastromeric Type , Multi-Component.
- d. TT-S-00230 Sealing Compound: Elastromeric Type, Single-Component.

1.02 SUBMITTALS

- A. Submit product data and samples under provision of Section 013400.
- B. Submit product data and samples of each sealant type and sealant colors.
- C. Submit manufacturer's surface preparation and installation instructions under provisions of Section 013400.

1.03 EXTRA STOCK

A. Furnish tube or equivalent of each type of sealant used on this project under provisions of Section 017500.

B. Turn over to Owner's Representative at Substantial Completion and receive a receipt therefore.

PART 2 PRODUCTS

2.01 SEALANT MATERIALS

- A. Silicone Sealant: Silicone base, single component, moisture curing, non-sagging, non-staining, non-bleeding; color as selected; conforming to the requirements of FS TT-S-001543A, Class A. Dow Corning 795 Sealant, GE Gesil N 2600, or Tremco Spectrum 2.
 - 1. Dynamic Movement Capability + 50 percent.
 - 2. Service Temperature Range -35 to +140 degrees F.
 - 3. Shore A Hardness Range 15 to 35.
- B. Polyurethane Sealant: Moisture curing, non-staining, non-bleeding, capable of continuous water immersion, non-sagging type; conforming to the requirements of FS TT-S-00230C, Type 11, Class A. Sonneborn Sonolastic NP II, Tremco Dymeric. Color as selected.
 - 1. Dynamic Movement Capability + 25 percent.
 - 2. Service Temperature Range -60 to +180 degrees F.
 - 3. Shore A Hardness 20 to 35.
- C. Butyl Sealant: Butyl rubber base, single component, conforming to requirements of FS TT-S-001657, Type 1; Shore A hardness of maximum 30; non-staining; non-bleeding; non-sagging; color as selected. Tremco Butyl Sealant, Pecora BC-158, or Sonneboren Butakauk.
- D. Acrylic Sealant: Acrylic base, single component, solvent curing, capable of being continuously immersed in water, withstand movement of up to 7.5 percent of joint width and paintable. Tremco Acrylic Latex Caulk or Sonneborn Sonolac.
- E. Accoustical Sealant: Conforming to ASTM C-919, Smoke & Sound Sealant. Tremco Tremflex 834.
- F. Sealant Tape: AAMA 804.1, Butyl-polyisobutylene preformed sealant, service temperature range -40 to 200 degrees F; color as selected; Tremco 440 tape, PTI 606, or acceptable substitute. Provide pre-shimmed where required.
- G. Penetration Sealant: Conform to requirements of ASTM E119 or ASTM E 814; provide materials UL Listed with assembly and for equal rating. Seal walls and floors at pipe, conduit and cable penetrations. Where required for rating, provide with mineral wool of ceramic fiber forming material listed. Dow Corning 2000 Fire Stop Sealant, GS Pensil 851, or equal.
- H. Sanitary Sealant: Dow Corning 786 mildew resistant silicone sealant of GE SCS 1702 Sanitary Sealant. Seal joints around plumbing fixtures.
- I. Rated Joint Sealant: Conform to requirements of ASTM E119 or UL 263; provide material UL listed with assembly and for equal rating. Seal walls at control joints in 2 hour CMU or concrete walls. Where required for rating, provide with mineral wool or ceramic fiber forming material listed. Dow Corning 795, Tremco Dymeric, or equal.
- J. Traffic Sealant: Two component, self-leveling type; conforming to the requirements of FS TT-S-00227E, Type I, Class A and ASTM C920 Type S, Grade P, Class 25, Use T; Sonneborn

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Sonolastic Paving Joint Sealant, Tremco THC-900, "Chem-Calk 550" by Bostik, or equal. Color as selected.

K. Substitutions: Refer to Section 016300 for substitution procedures.

2.02 ACCESSORIES

- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- C. Joint Filler (Backer Rod): Round, open cell polyurethane foam rod; oversized 30 to 50 percent larger than joint width; compatible with joint sealer.
- D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 EXECUTION

3.01 JOB CONDITIONS

- A. Verify joint openings are ready to receive work and field measurements are as shown on Drawings and recommended by manufacturer.
- B. Beginning of installation means installer accepts existing substrate.

3.02 PREPARATION

- A. Clean, prepare, and size joints in accordance with manufacturer's instructions. Remove loose materials and foreign matter which might impair adhesion of sealant.
- B. Verify that joint shaping materials and release tapes are compatible with sealant.
- C. Examine joint dimensions and size materials to achieve required width/depth rations.
- D. Use joint filler to achieve required joint width/depth rations. Provide neck dimension no greater than 1/3 joint width. Verify that joint backing and release tapes are compatible with sealant. Do not puncture backer rod.
- E. Use bone breaker where joint backing is not used.
- F. Perform preparation in accordance with ASTM C804 for solvent release and C790 for latex base sealants as applicable.
- G. Protect elements surrounding the work of this Section from damage or disfiguration.

3.03 INSTALLATION

- A. Perform work in accordance with ASTM C804 for solvent release and C790 for latex base sealants as applicable.
- B. Install sealant per manufacturer's instructions.

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- C. Apply sealant within recommended temperature ranges. Consult manufacturer when sealant cannot be applied within recommended temperature ranges.
- D. Tool joints concave.
- E. Joint: Free of air pockets, foreign embedded matter, ridges, and sags.

3.04 CLEANING AND REPAIRING

- A. Clean work under provisions of Section 017100.
- B. Clean adjacent soiled surfaces.
- C. Repair or replace defaced or disfigured finishes caused by work of this Section.

3.05 PROTECTION OF FINISHED WORK

- A. Protect finished installation under provisions of Section 015000.
- B. Protect sealants until cured.

3.06 SCHEDULE

Location: Type:

A. Concrete Masonry

Exterior Control Joints Polyurethane
Exterior Penetrations Polyurethane
Interior Control Joints Rated Joint Sealant

B. Vapor Retarder (Reference Section 07190)

Floor/Roof Acrylic Penetrations Acrylic

C. Flashing and Metal Trim (Ref. Section 07620)

Metal/Metal (concealed)Sealant TapeMetal/Metal (exposed)SiliconeMetal/CMUPolyurethane

D. Windows (Ref. Sections 08520)

Cap Glazing Bead Silicone Weather Seal Heel Glazing Bead Silicone Structural Sealant

Metal/Metal Flashing lap Joints (concealed)

Exterior Perimeter/Metal (exposed)

Exterior Perimeter/CUM (exposed)

Tape Sealant
Polyurethane

Sill/Flashing (concealed) Butyl

Wood/Wood (exposed)
Structural Glazing
Interior Perimeter/Metal (exposed)
Polyurethane
Silicone
Acrylic

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E. Door and Relite Frames

Interior Door and Relite Frames/Walls Acrylic Exterior Door and Relite Frames/CMU Polyurethane

Interior Door and Relite Glazing

Exterior Door and Relite Glazing

Tape Sealant (pre-shimmed)

Tape Sealant (pre-shimmed)

Threshold Butyl

F. Tile

Н.

Fixtures, Fittings and Equipment/Substrate

Accessories and Partitions/Substrate

Control/Expansion Joints

Top of Base at Kitchen

Sanitary Sealant

Polyurethane
Sanitary Sealant

G. Penetrations

Cable, Pipe, & Utility/Rated Floor/Wall

Voids Between Rated Wall/Roof Sheathing

Penetration Sealant

Penetration Sealant

In Acoustical Walls and Ceilings Acrylic
P. Lam/Gypsum Board Acrylic

I. Horizontal Interior Traffic Joints Traffic Sealant

J. Provide sealants for other joints between material, assemblies, and components not scheduled above as specified in individual Sections. Where not indicated above or called out in individual Sections, provide acceptable sealant best suited to application.

END OF SECTION 07 90 00