

SPECIFICATIONS AND CONTRACT DOCUMENTS

FOR:

CITY OF ROSEVILLE

FIRE DEPARTMENT FAÇADE UPGRADES

AEW PROJECT NO. 0100-0579



OWNER:

CITY OF ROSEVILLE

29777 GRATIOT AVE

ROSEVILLE, MICHIGAN 48066

ISSUED FOR BIDS:

JUNE 9, 2026



586.726.1234

www.aewinc.com

DOCUMENT 00 01 00

TABLE OF CONTENTS

<u>Number</u>	<u>Section Name</u>
Section 00 00 00	
00 01 00	Table of Contents
00 20 00	Request for Proposals
00 21 13	Instructions to Bidders
00 30 00	General Project Information
	Federal Labor Standards Provisions
	Debarment/Suspension Certification
00 40 10	Familial Disclosure Statement
00 40 20	Affidavit of Compliance-Iran Economic Sanctions Act
00 40 30	Non-Discrimination In Employment
00 40 50	Contractor Notification Form
00 40 60	Contractors Certification of Asbestos Free Product
00 40 70	Non Collusive Affidavit
00 41 00	Proposal Form
00 72 00	General Conditions
00 81 00	Modification to the General Conditions
00 85 10	Index of Drawings
Section 01 00 00	
01 10 00	Summary
01 20 00	Price and Payment Procedures
01 25 00	Substitution Procedures
01 25 01	Substitution Request Form During Bidding
01 25 02	Substitution Request Form After Award
01 30 00	Administrative Requirements
01 32 16	Construction Progress Schedule
01 33 00	Submittal Procedures
01 40 00	Quality Requirements
01 50 00	Temporary Facilities and Controls
01 60 00	Product Requirements
01 70 00	Execution and Closeout Requirements
Section 02 00 00	
02 41 19	Selective Building Demolition

REQUEST FOR PROPOSAL

PROJECT

Fire Department Façade Upgrades
AEW Project No. 0100-0579

OWNER

City of Roseville
29777 Gratiot Ave
Roseville, Michigan 48066

LOCATION

Fire Administration
18961 Common Rd
Roseville, Michigan 48066

Fire Station No. 1
18750 Common Rd
Roseville, Michigan 48066

Fire Station No. 2
17644 Frazho Rd
Roseville, Michigan 48066

ARCHITECT

AEW Inc.
51301 Schoenherr Road
Shelby Township, Michigan 48315
(586) 726-1234

DESCRIPTION

The scope of work for this project consists of the renovation of the three building façades, the Fire Administration Building, Fire Station No. 1, and Fire Station No. 2. The use of the buildings remains unchanged. The construction type consists of existing masonry structures, with façade improvements including exterior material upgrades with metal panels, trim and building signage, repairs, and aesthetic enhancements.

SCOPE OF PROPOSAL

Sealed proposals are invited for the Project and will be received at the Roseville Purchasing Department until **11:00 am**, local time; **July 9, 2026**. Bids will be publicly opened and read aloud in the City Council Chambers immediately thereafter.

PRE-BID MEETING

A mandatory pre-bid meeting will be held at the project locations at **10:00 a.m., June 16**. Starting at Fire Station 1 at 18750 Common Road. Then traveling to Fire Administration at 18961 Common Road, and ending at Fire Station 2 at 17644 Frazho Road.

Pre-bid questions shall be submitted to the Architect before **June 29th 4:00 p.m.**, local time. Email all questions to: bchirco@AEWINC.com. Please include the Project Name and AEW Project Number in the Subject line of the email, "Project Name – Project Number – Pre-Bid Questions" for example.

DOCUMENTS

This solicitation, along with all attachments may be downloaded from the Michigan Intergovernmental Trade Network (MITN) at www.mitn.info. Documents shall be available on **June 9** after **4:00 p.m.**, local time. Any and all Addenda issued by the owner must be viewed or downloaded from the above listed website.

BID GUARANTEE AND CONTRACT SECURITY

Each bid proposal shall be accompanied by a certified check, bank draft or satisfactory bid bond in an amount of 5% of the maximum bid amount. Checks shall be made payable to "**The City of Roseville**". Bids may not be withdrawn for a period of sixty (60) calendar days after receipt of bids. The successful bidder will be required to furnish the required insurance and bond certificates.

RIGHTS OF THE OWNER

The Owner reserves the right to reject any or all proposals and to waive irregularities in bidding, or to accept the lowest responsible proposal that, in the opinion of the Owner, will serve his best interest.

DATED: June 2026

The City of Roseville

SECTION 00 21 13 - INSTRUCTIONS TO BIDDERS

Owner will receive sealed proposals only as set forth in the Request for Proposal and complying with all requirements as contained in Instructions to Bidders.

DOCUMENTS

Bidding documents consist of plans and specifications as prepared by Anderson, Eckstein and Westrick, Shelby Township, Michigan.

Bid documents can be downloaded from the Michigan intergovernmental Trade Network (MITN) website at www.mitn.info beginning June 9, 2026 after 4:00pm.

BIDDING DOCUMENTS

The Bidding Documents consist of the following:

The Drawings as enumerated in Section 00 85 10, Index of Drawings.

The Specifications as enumerated in the Table of Contents.

All other documents as provided for in Article 1, Paragraph 1, Section 1 of the General Conditions as modified.

EXAMINATION

Each bidder shall examine the Bidding Documents and satisfy himself about the extent of the proposed work by personal examinations of the site and surroundings, and make his own estimate therefrom of the facilities and difficulties attending the performance and completion of the job.

No additional compensation will be allowed on account of conditions which could be determined by examining the Bidding Documents or the site.

INTERPRETATION

If any person contemplating submitting a bid is in doubt as to the true meaning of any part of the Drawings, Specifications, or other Bidding Documents, they must

submit to the Architect, a written request for an interpretation thereof. If such an interpretation is not requested, the bids will be presumed to be based upon the interpretation and directions given by the Architect after Contract award, in accordance with provisions of the Contract. Neither the Owner nor the Architect will be responsible for any verbal explanations or interpretations of the Bidding Documents.

Every request for such interpretation should be in writing, addressed to the Architect at his office, and to be given consideration, must be received at least three (3) days prior to the date fixed for the opening of bids. Any and all such interpretations, and any supplemental instructions will be in the form of written addenda to the Bidding Documents which, if issued, will be posted on MITN prior to the date fixed for the opening of bids. All addenda so issued shall become part of the Bidding Documents.

SUBSTITUTIONS

To obtain approval to use unspecified products, bidders shall submit written requests at least five (5) days before the bid date. Requests received after this time will not be considered. Requests shall clearly describe the product for which approval is asked, including all data necessary to demonstrate acceptability. If the product is acceptable, the Architect will approve it in an Addendum issued to MITN.

BASIS OF BID

A single lump sum proposal is being entertained for the complete work of this proposal.

Partial or segregated bids or assignments will not be considered. Include quotes for all alternates and unit prices; failure to do so may result in rejection of the proposal.

PREPARATION

Proposal shall be submitted on the form bound in these specifications, Form of Proposal, in original form without erasures, interlineations or alterations.

Submit three (3) copies of proposal, retain one for your records. Oral, fax, email, or telephone proposals will not be accepted.

Proposals must be filled out in ink or typewritten in duplicate. Blank spaces in the proposals must be filled in and no changes shall be made to the phraseology of the proposal. Quotes shall be entered in written and numeric forms. In case of a discrepancy between the written and the numeric form, the written form shall govern.

All bids shall be signed and dated in longhand.

Bids which are not signed by the individual making them should have attached thereto a power of attorney, evidencing authority to act as agent for the person whom it is signed.

Bids which are signed for a partnership should be signed by one of the partners or by an attorney-in-fact. If signed by an attorney-in-fact, evidence of authority to sign the bids shall be attached.

Bids which are signed for a corporation should have the correct corporate name thereon and the signature of the president or other officer legally able to contract in the name of the corporations. In addition, a signed Secretary's Certificate evidencing the authority of the Officer to contract in the name of the corporation shall be included. Any proposal submitted by a corporation shall bear its seal.

BID SECURITY

The successful bidders' securities will be retained until they have signed the Contract and furnished the required payment and performance bonds. The Owner reserves the right to retain the security of the next two lowest bidders for each contract until the lowest bidders enter into contract, or until sixty (60) days after the bid opening, whichever is the shorter. All other bid security will be returned as soon as practicable. If any bidder refuses to enter into a Contract, the Owner will retain his Bid Security as liquidated damages, but not as a penalty.

SUBCONTRACTORS

The Owner and Architect reserve the right to require of bidders tentatively selected for consideration in the awarding of the Contract, a list of the subcontractors whom the Contractor intends to employ.

The Owner reserves the right to disapprove the use of any proposed subcontractor, and in such event, the bidder submitting such subcontractor shall submit another such subcontractor in like manner within the time specified by the Owner. The

Owner reserves the right to reject any bid if such information required by the Owner is not submitted as above indicated.

SUBMITTAL

Submit proposals in sealed opaque envelopes having listed thereon the following:

**PROPOSAL: FIRE DEPARTMENT FAÇADE UPGRADES
REQUEST FOR PROPOSAL
THE CITY OF ROSEVILLE
PURCHASING DEPARTMENT**

Contractor: _____

WITHDRAWAL

Proposals for base bids may not be withdrawn for a period of sixty (60) days after the time established for the receiving of proposals. Bidders may withdraw at any time prior to the time set for the receiving of proposals.

IRREGULARITIES

The Owner reserves the right to disqualify Bids before or after opening, upon evidence of collusion with intent to defraud, or other illegal practices upon the part of the bidder.

The Owner also reserves the right to reject any or all bids in whole or in part and to waive any informalities therein.

Any error and/or omission in the proposal form or any other irregularity as a result of negligent preparation shall not furnish cause for relief for any damages resulting therefrom, nor in any way relieve the Contractor from fulfillment of all contractual obligations as provided for in the Bidding Documents.

TAXES AND CONTRIBUTIONS

Proposal, unit prices, alternate prices stated include all taxes or contributions required by bidder's business.

Michigan State sales tax is applicable to this work.

OPENING

Proposals will be publicly opened and read aloud.

BID BREAKDOWN CONSTRUCTION INFORMATION

Upon notice from the Architect, the low bidders shall submit a detailed cost breakdown of all work covered by the Bidding Documents. The breakdown shall show quantity of material and labor, units of material and labor, material cost, labor cost and total cost in a schedule of values on an AIA G703 form.

EXECUTION OF CONTRACT

The Owner reserves the right to accept any and all bids, or to negotiate contract terms with the various bidders when such is deemed by the Owner to be in their best interest.

END OF SECTION 00 21 13

This Page Intentionally Blank

SECTION 00 40 10 - FAMILIAL DISCLOSURE STATEMENT

All Bidders must complete the following familial disclosure form in compliance with MCL 380.1267 (Public Act 232 of 2004) and attach this information to the bid.

By the attached sworn and notarized statement we are disclosing the following familial relationship(s) that exists between the owner or any employee of the bidder and any member of the Board of trustees, or employees of The Owner and will not accept a Bid that does not include this sworn and notarized disclosure statement.

Disclose any familial relationship and complete the form below in its entirety:

The following are familial relationships as described above (provide employee name, family contact name, family contact position, and familial relationship or NONE.)

PRINT:

Company Name: _____

Phone: _____

Street Address: _____

City / State / Zip: _____

Company Officer: _____ Title: _____

Officer's Signature: _____ Date: _____

This Page Intentionally Blank

SECTION 00 40 30 NON-DISCRIMINATION IN EMPLOYMENT

TO _____

Name of union or organization of workers

The undersigned currently holds contract(s) with _____ (Applicant's Name) involving funds or credit of the U.S. Government of (a) subcontract(s) with a prime contractor holding such contract(s).

You are advised that under the provisions of the above contract(s) or subcontract(s) and in accordance with Executive Order 11246, dated September 24, 1965, the undersigned is obliged not to discriminate against any employee or applicant for employment because of race, color, creed, or national origin. This obligation not to discriminate in employment includes, but is not limited to the following:

HIRING, PLACEMENT, UPGRADING, TRANSFER, DEMOTION, RECRUITMENT, ADVERTISING, SOLICITATION FOR EMPLOYMENT, TRAINING DURING EMPLOYMENT, RATES OF PAY OR OTHER FORMS OF COMPENSATION, SELECTION FOR TRAINING INCLUDING, APPRENTICESHIP, LAYOFF OR TERMINATION.

This notice is furnished to you pursuant to the provisions of the above contract(s) or subcontract(s) and Executive Order 11245.

Copies of this notice will be posted by the undersigned in conspicuous places available to employees or applicants for employment.

PRINT:

Company Name: _____ Phone: _____

Street Address _____

City / State / Zip _____

Company Officer: _____ Title: _____

Officer's Signature: _____ Date: _____

This Page Intentionally Blank

SECTION 00 40 50 CONTRACTOR NOTIFICATION FORM FOR NEW OR RENOVATION WORK
(In accordance with 40 CFR Part 763.84 [d])

As required by the EPA AHERA standard, the Owner is responsible for providing Contractors with information regarding locations of known or assumed asbestos containing material prior to entering a building under the district's jurisdiction.

Please complete this form and return it to Anderson, Eckstein & Westrick, Inc.

I (We) representing and having authority for _____(company), hereby indicate and agree that a representative of the Owner has provided me information regarding the specific locations and materials that are asbestos-containing materials which may be encountered or have the potential of being encountered during the course of activities involving Fire Department Façade Upgrades, City of Roseville. 0100-0579.

I expressly agree that neither I nor any of my employees, agents, subcontractors or other individuals or entity over whom I have any responsibility or control, will disturb asbestos-containing materials as listed in the Management Plan for the above-mentioned building, except as required for the completion of the Work and only by licensed abatement contractors per requirements under law.

I further understand and agree that should I, my employees, agents, subcontractors or other individuals or entities over whom I have control, encounter any material suspected of containing asbestos, said materials shall not be disturbed without first notifying the Owner and receiving approval that such material may be disturbed.

PRINT:

Company Name _____ Phone _____

Street Address _____

City / State / Zip _____

Company Officer _____ Title _____

Officer's Signature _____ Date _____

This Page Intentionally Blank

**SECTION 00 40 60 CONTRACTOR'S CERTIFICATION OF ASBESTOS-FREE PRODUCT
AND INSTALLATION**

It is hereby understood and agreed that no products/materials containing asbestos, including Chrysotile, Amosite, Crocidolite, Tremolite Asbestos, Anthophyllite Asbestos, Actinolite Asbestos or any combination of these materials that have been chemically treated and/or altered shall be installed or introduced into the building by the Contractor or their employees, agents, subcontractors or other individuals or entities over whom the Contractor has control. The Contractor shall be required to sign this certification statement ensuring that all products or materials installed or introduced into a building will be asbestos-free.

The Contractor shall also be required to furnish certified statements from the manufacturers of supplied materials used during construction verifying their products to be asbestos-free in accordance with the previous paragraph.

Project's Name: _____

Project's Address: _____

Project's City/State/Zip: _____

Architect's Name: _____

Project Number: _____

CONTRACTOR'S CERTIFICATION

We (I) certify and will direct that all products and materials that will be and/or have been installed or introduced into the above-named Project shall be asbestos-free (or less than one-percent (1%) asbestos by weight).

PRINT:

Company Name: _____

Phone: _____

Street Address: _____

FIRE DEPARTMENT FAÇADE UPGRADES
AEW PROJECT #0100-0579

JUNE 9, 2026

City / State / Zip: _____

Company Officer: _____

Title: _____

Officer's Signature: _____

Date: _____

NON-COLLUSION AFFIDAVIT

County)
) SS:

_____ being first duly sworn, deposes
and says that he is the

(Individual, Partner, Corporate Officer)

making the foregoing proposals or bids; that such bids are genuine and not collusive or sham; such bidder has not colluded, conspired, connived, or agreed, directly or indirectly, with any bidder or person, to put in sham a bid, or that such other person shall refrain from bidding and has not in any manner, directly with any person, to fix the bid price of afferent or any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against the Joint Purchasers or any person or persons proposal are true; and further, that such bidder has not, directly or indirectly submitted this bid, or the contents thereof, or divulged information or data relative thereto any association or to any member or to any member or agent thereof.

Sworn to and subscribed before me this _____ day of _____, 20_____.

Notary Public

My commission expires on _____

BIDDER: THIS AFFIDAVIT MUST BE COMPLETED, SIGNED, NOTARIZED AND INCLUDED IN YOUR BID SUBMISSION.

SECTION 00 41 00 – PROPOSAL FORM/ALL TRADES

Name of Contractor

Address, City, Zip

Phone #/Fax #

Email Address

PROJECT

FIRE DEPARTMENT FAÇADE UPGRADES

FIRE ADMINISTRATION
18961 COMMON RD
ROSEVILLE, MI 48066

FIRE STATION NO. 1
18750 COMMON RD
ROSEVILLE, MI 48066

FIRE STATION NO. 2
17644 FRAZHO RD
ROSEVILLE, MI 48066

OWNER

CITY OF ROSEVILLE
29777 GRATIOT AVE
ROSEVILLE, MICHIGAN 48066

ARCHITECT

ANDERSON ECKSTEIN & WESTRICK
51301 SCHOENHERR ROAD
SHELBY TOWNSHIP, MICHIGAN 48315

BASE PROPOSAL

Pursuant to and in compliance with the Invitation to Bid and the Instructions to Bidders, and having carefully examined the Bidding Documents with the Owner to complete the work in accordance with the said Bidding Documents for the sum of:

(Sum to be written out)

\$ _____

BREAKDOWN OF BASE PROPOSAL (Submit at time of submission of proposal):

DEMOLITION	(\$_____)	DOLLARS
ARCHITECTURAL	(\$_____)	DOLLARS
TOTAL LUMP SUM BASE PROPOSAL BID	(\$_____)	DOLLARS

UNIT PRICES

The following unit price is for the removal and replacement of additional 3/4" exterior grade plywood sheathing for unknown damage not identified on drawings or specifications:

\$ / sheet	\$ _____
------------	----------

TIME OF COMPLETION

The undersigned agrees to complete the work covered by this proposal within ____ calendar days which includes Saturdays, Sundays, and Holidays to run consecutively after date of notice to proceed with work.

VOLUNTARY ALTERNATES

The following voluntary alternates are offered by the bidder. The undersigned agrees the amounts indicated below shall be added to or deducted from the Base Bid, as the case may be, for each alternate which is accepted.

	<u>Description of Voluntary Alternates</u>	<u>Add</u>	<u>Deduct</u>
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____

PRICE GUARANTEE

The undersigned proposes that the price stated in this Proposal is guaranteed for sixty (60) consecutive days from bid date.

TAXES

The undersigned acknowledges that the price stated above includes all taxes of whatever character or description.

SUPPLEMENTAL FEES

For additional work performed upon instruction of the Owner by subcontractors of the undersigned, add to the subcontractor's prices for such additional work a fee of _____% which includes all the charges of the undersigned for overhead and profit.

Any additional work performed upon instructions of the Owner by persons other than the subcontractors of the undersigned, the charges will be actual cost of all labor and materials (less all discounts) plus the fee of _____% which includes all the charges of the undersigned for overhead and profit and to which shall be added the actual cost of insurance and taxes.

Each proposal covering extra work shall be accompanied with complete itemized materials and labor break downs.

For all revisions involving the deletion of contract work, it is agreed that full credit shall be given the Owner for such work deleted, including overhead and profit as quoted hereinbefore.

ADDENDA

If any addenda or bulletins covering changes to the Bidding Documents have been received during the bidding period, the bidder shall fill in their numbers and dates which acknowledges having received same, and having included in this Proposal the work involved:

_____ Dated _____

_____ Dated _____

_____ Dated _____

BID SECURITY

A bid bond executed by a U.S. Treasury Listed Surety Company acceptable to the City of Roseville or a cashier's check in the amount of 5% of the sum of the proposal payable to City of Roseville shall be submitted with each proposal. All proposals shall be firm for a period of sixty (60) days.

PERFORMANCE, LABOR, AND MAINTENANCE AND GUARANTEE BOND

Successful bidders will be required to furnish a U.S. Treasury Listed Company Performance, Payment, and (2) year Maintenance and Guarantee Bond in the amount of 100% of their bid. The cost of the Bond shall be included in each proposal.

The Owner reserves the right to reject any and/or all bids in whole or in part and to waive any informality therein. The Owner reserves the right to accept the bid which in its opinion, is in the best interest of the Owner.

FAMILIAL DISCLOSURE

Bidder has included Section 00401 Familial Disclosure Form (bid will not be read without this form)

NEGOTIATION

The undersigned agrees that, should the overall cost exceed the funds available, he will be willing to negotiate with the Owner and Architect for the purpose of making further reductions in the Contract work, and shall agree to give full credit for all such reductions in the work requested by the Owner, including full value of labor, materials, and subcontract work and reasonable proportionate reductions in overhead and profit, thereby arriving at an agreed upon Contract price.

CONTRACT EXECUTION

The undersigned agrees to execute a Contract for work covered by this Proposal, provided that he be notified of its acceptance within sixty (60) days after the opening of bids.

The undersigned hereby declares that he has the legal status checked below

() Individual

() Partnership having the following partners:

() Corporation incorporated under the State laws of:

This proposal is submitted in the name of, and notice of acceptance should be mailed, faxed, or delivered to:

FIRE DEPARTMENT FAÇADE UPGRADES
AEW PROJECT #0100-0579

JUNE 9, 2026

Date:

Firm's Name:

Phone No. ()

By:

(Signature)

In the presence of :

Title:

END OF SECTION 00 41 00

SECTION 00 72 00 – GENERAL CONDITIONS

DOCUMENTS:

"The General Conditions of the Contract for the Construction"
A.I.A Documents A-201, 2017 Edition, Forms a part of these Specifications and shall have the same effect as if bound herein.

This Document is modified as described in Modification of the General Conditions.

Contractors shall be held responsible for having familiarized themselves with this Document and all other documents affecting their contracts in this Specification.

END OF SECTION 00 72 00

This Page Intentionally Blank

SECTION 00 81 00 - MODIFICATIONS OF THE GENERAL CONDITIONS

Where any Article of the American Institute of Architects General Conditions, (AIA Document A201- 2017 Edition) is supplemented by the following provisions of such Article shall remain in effect and all supplementary provisions shall be considered as added thereto. Where any such article is modified, superseded or deleted herein, provisions of such articles not so specifically modified, superseded or deleted shall remain in effect.

Article 1 - General Provisions

1.1.1 The Contract Documents. Modification: first sentence: "The Contract Documents consist of the entire Bidding Documents package and the Agreement...."

Deletion: last sentence.

Addition: new text as follows (sub-subparagraph to 1.1.1):

1.1.1.1 As used in the Contract Documents, the following terms are defined as indicated below:

OWNER - as defined in Advertisement or Invitation to Bid.
ARCHITECT/ENGINEER - the firm of Anderson, Eckstein and Westrick, Inc.

CONTRACTOR - the person or entity so named in the Agreement who shall be known as the "prime contractor" in addition to references in Article 3.

SUPPLIER - such person or entity that supplies materials or the work to the Contractor or to a subcontractor but performs no work at the site.

N.I.C. - not in contract, work not included in this Contract.

OCCURRENCE: is defined as follows for purposes of insurance. An event which occurs during the policy period, or a continuous or repeated exposure to condition(s) which result, during the policy period, in bodily injury, sickness, or disease, or injury to, or destruction of property, of one or more persons or organizations, including the loss of use thereof, resulting from a common cause, or from exposure to substantially the same general condition existing at, or emanating from each location shall be deemed to result from one occurrence.

Addition: new text as follows (sub-subparagraph to 1.1.3):

- 1.1.3.1 The Contractor is responsible for coordinating and allocating the work of all trades on the project at the time of bidding as well as during the Construction in regards to the providing of labor and materials, and performance of all cutting, coring, patching and repair work necessary to complete the project as required by the various trades including the proper allocation of work to the proper trade as claimed by the trade unions having jurisdiction over such work. Whether the Contractor's own forces perform such work or he allocates it to various subcontractors or trades, the contractor is responsible for such work and the complete project.
- 1.1.3.2 The Contractor shall interface all Contract work with no duplication of cost incurred due to the allocation of same work to more than one trade, and with no omissions of costs of any work due to such work not being properly assigned or allocated to a specific subcontractor, trade or the Contractor.

Addition: new text as follows:

- 1.2.4 The Drawings show the general arrangement, design and extent of the Work and are partially diagrammatic. The Drawings shall not be scaled for rough-in measurements, nor serve as Shop Drawings.
- 1.2.5 RELATION OF SPECIFICATIONS AND DRAWINGS:
- .1 To be equal authority and priority. Should they disagree in themselves, or with each other, bids shall be based on the most expensive combination of quality and quantity of work indicated. The appropriate Work, in the event of the above mentioned disagreements, shall be determined by the Architect.
 - .2 Figures take precedence over scale measurements.
 - .3 Large scale details take precedence over smaller scale details.
 - .4 Architectural Drawings take precedence in regard to dimensions, when in conflict with Mechanical and Structural Drawings, except for the size of the structural members.
 - .5 Specifically titled drawings and sections of the specifications take precedence over indication of the item in a collateral way.
 - .6 Existing conditions take precedence over Drawings and Specifications for dimensions.
 - .7 When multiple requirements are given for any item, all requirements shall be met.

- 1.2.6 CODE, LAWS, ORDINANCES, RULES, and REGULATIONS: Requirements of public authorities apply as minimum requirements only. They do not supersede more stringent requirements given elsewhere in the Contract Documents. If changes must be made to the Contract because of public authorities, appropriate adjustments will be made in the Contract Sum.
- 1.2.7 ENUMERATION OF ITEMS: Lists of "Work Included", "Scope" or "Description of Work" are not intended to enumerate each and every item of work or appurtenance required, and must be used in conjunction with other portions of the Contract Documents.
- 1.2.8 SPECIFIED MATERIALS, PRODUCTS, BRANDS, and AND PROCESSES: When multiple requirements are given for an item complies with all.
- 1.2.9 REFERENCE NOTES: Terms such as "as shown", "as indicated", "as noted" mean there are additional requirements given elsewhere in the Contract Documents. Comply with all requirements.
- 1.2.10 ABBREVIATIONS AND NAMES: Acronyms or abbreviations as referenced in contract documents and listed on the General Abbreviations and Symbols Sheet G-1 are defined to mean the associated names. Acronyms or abbreviations are subject to change, and believed to be, but not assured to be, accurate and up-to-date as of date of contract documents.
- 1.2.11 DRAWING SYMBOLS AND STANDARDS: Except as otherwise indicated, graphic symbols and standards used on drawings are those symbols recognized in the construction industry for purposes indicated.
- 1.2.12 M/E DRAWINGS: Graphic symbols used on Mechanical/ Electrical drawings are generally aligned with symbols recommended by ASHRAE, supplemented by more specific symbols where appropriate as recommended by other recognized technical associations including ASME, ASPE, IEEE and similar organizations. Refer instances of uncertainty to Architect for clarification before proceeding.
- 1.2.13 STANDARD REFERENCES: Any materials, equipment or workmanship specified by references to number, symbol, or title of any specific Federal, ASTM, Industry, Association or Government Agency Standard Specifications shall comply with all applicable provisions of such standard specifications, except as limited to type, class or grade, or modified in contract documents. Reference to "Standards" referred to in the contract documents, except as modified, shall have full force and effect as though

printed in detail in specifications.

1.2.14 PUBLICATION DATES, except as otherwise indicated, where compliance with an industry standard, ASTM, association standard, or Federal Standard, shall meet the standard in effect as of date of Contract Documents.

1.2.15 ACCEPTABLE MANUFACTURERS where used in the Project Manual shall mean that the listed products and manufacturers shall meet specified and indicated requirements.

Article 2 - Owner

Addition: new text as follows (sub-subparagraph to 2.2.1):

2.2.1.1 "The Owner shall establish site property lines by staking or other means, shall establish a permanent bench mark, and provide copies of soil boring logs and soil report, if any, for the Contractor's convenience and information. None of the data therein relating to sub-surface soil and water conditions; size, elevation and location of existing underground services; existing underground obstructions or structures; etc., are guaranteed as being accurate or uniformly representative of actual conditions. The Owner assumes no responsibility for deductions, interpretations or conclusions drawn there from by the Contractor."

Article 3 - Contractor

Addition: new text as follows:

3.4.4 Materials supplied shall conform to industry and manufacturer's standards specified, in effect on the date of issuance of the specifications. Materials shall generally be shipped, received, stored, installed and protected in accordance with printed manufacturer's instructions as modified by the detailed provisions of the specifications. Copies of the printed manufacturer's or industry standards shall be maintained on file by the Contractor at his field office.

3.4.5 Not later than 72 hours from the Contract Date or letter of intent to award contract, the Contractor shall provide a list showing the name of the manufacturer proposed to be used for each of the products identified in the General Requirements of the Specifications (Division 1) and, where applicable, the name of the

installing Subcontractor.

- 3.4.6 The Architect will promptly reply in writing to the Contractor stating whether the Owner or the Architect, after due investigation, has reasonable objection to any such proposal. If adequate data on any proposed manufacturer or installer is not available, the Architect may state that action will be deferred until the Contractor provides further data. Failure of the Owner or Architect to reply promptly shall constitute notice of no reasonable objection. Failure to object to a manufacturer shall not constitute a waiver of any of the requirements of the Contract Documents, and all products furnished by the listed manufacturer must conform to such requirements.
- 3.4.6.1 Should the Contractor desire after the Contract Award, to substitute for the benefit of the Owner another article, material or item of equipment for one or more specified by name, he shall make a request for such substitution in writing, to the Architect stating the benefit to the Owner and the credit or extra involved and he shall provide all required supporting data and samples. If such request is rejected, the Contractor shall perform the work in accordance with the Contract Documents. Such requests shall be submitted so as to allow a reasonable time for their consideration and shall not be justification for delay of the work.
- 3.4.6.2 If a substitution requires changes in the work or other trades or Contractors, or redesign or other substantial changes in the Contract Documents, the Contractor proposing the substitution shall pay any additional costs thereby incurred.
- 3.4.6.3 After Contract Award, no substitution of any material listed in the Contract Documents or Proposal will be permitted if the request is based on delivery dates, test requirements, or other causes, unless the Bidder proves that the original material was ordered or scheduled for tests within 30 days after the contract was let and due to unforeseen circumstances cannot be delivered at the promised time or tested in accordance with the specifications without materially delaying work.
- 3.4.6.4 by making requests for substitutions based on Clause 3.4.5.1 above, the Contractor:
- (a) Represents that the Contractor has personally investigated

- the proposed substitute product and determined that it is equal or superior in all respects to that specified;
- (b) Represents that the Contractor will provide the same warranty for the substitution that the Contractor would for that specified;
 - (c) certifies that the cost data presented is complete and includes all related costs under this Contract but excludes costs under separate contracts, and excludes the Architect's redesign costs, and waives all claims for additional costs related to the substitution which subsequently became apparent; and
 - (d) will coordinate the installation of the accepted substitute, making such changes as may be required for the Work to be complete in all respects.

3.5 Deletion: last sentence

Addition: new text as follows:

- 3.5.1 Proofs of conformance, as hereinafter defined, will constitute satisfactory evidence as to the kind, quality and performance values of the respective products for which such proofs are required by the Specifications. Neither delivery nor installation of the respective products shall be made until written acceptance by the Architect of the submitted proof of conformance is received by the Contractor, unless Architect gives written instruction to the contrary.
- 3.5.1.1 Affidavit - An affidavit is a notarized statement on the letterhead of the manufacturer and signed by a responsible agent of the manufacturer, certifying that the product is in conformance with the requirements of the specified regulatory agency or reference standard or performance values, as applicable; in the case of the latter, the performance values shall be listed. Each Affidavit shall be identified by name of Project, Architect's Project number, name of product, and Specification section, page and paragraphs for which the product is proposed.
- 3.5.1.2 Testing Laboratory Certificate - A Testing Laboratory Certificate is a notarized test report from a laboratory, bureau or agency acceptable to the Architect, signed by a responsible agency of that facility, certifying that the designated product has been tested within one year of the date of submittal, unless otherwise specified, and is in conformance with the reference standard of performance

requirements specified, and listing the results of all tests required. The testing laboratory certificate shall accompany an Affidavit as defined in clause 3.5.2.1.

Addition: new text as follows:

3.9.2 The Contractors superintendent or his authorized representative shall remain in attendance at the project site and shall be present at all times when work of any kind is in progress, including overtime work.

3.13.1 Modification: Insert "the directions of the owner" into the paragraph to read in part as follows: "The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits, the directions of the owner and the contract documents..."

Addition: new text as follows:

3.14.1.1 Unless specified otherwise, Work specified in each section of the specifications includes cutting, fitting, and patching for that trade section, including that required to accommodate the work of other trades.

Addition: new text as follows (paragraph to 3.15.1):

3.15.1.1 "The Contractor, each Subcontractor and all separate Contractors shall at all times keep the project free from their surplus and waste materials, and bulk rubbish and debris; combustible materials shall be removed daily or more often as may be required, non-combustible materials at least once a week. Such materials shall not be allowed to accumulate or disperse around the neighborhood. Further the Contractor is responsible for:

1. Positive implementation of the "General Safety Rules and Regulations for the Construction Industry", "State Construction Safety Commission, and appropriate City Ordinances as regards the scope of this paragraph.
2. Maintenance of the site and premises in an orderly and clean condition at all times.
3. Keeping all sidewalks, pavements, parking areas, floors and roofs free from any accumulations of snow, ice, dirt, rubbish and general refuse prior to "closing-in" of the building.
4. Broom clean (exclusive of removal of bulk debris described above) floors in all interior spaces where work is in progress

after the project has been "closed-in", with the participation and cooperation of all Subcontractors and separate Contractors employed on the work.

5. Final cleaning of the entire building, including all interior finish materials, as specified in detail under Section 01700, Contract Closeout.

Addition: new text as follows (sub-subparagraph to 4.2.3):

- 4.2.3.1 The Architects presence does not imply concurrence or approval of the work. The Contractor shall call specific things to the Architect's attention if he wishes to know the Architects opinion.

Addition: new text as follows (sub-paragraph to 5.2.1):

- 5.2.1.1 The Contractor shall have primary responsibility for obtaining bids and preparing and awarding Subcontracts for all portions of the Work (except General Condition Items).

- 5.4.1 Deletion: sub-paragraph & sub-subparagraphs in its entirety

Addition: new text as follows:

- 5.4.1 Unless the Owner elects otherwise, all Subcontracts shall be between the Contractor and the appropriate Subcontractor, and shall provide that the Subcontractor consents to the assignment of the Subcontract to the Owner pursuant to Section 5.3 hereof, and agrees in the event such assignment becomes effective, to recognize the Owner as successor to the Contractor and to complete the Work under the Subcontract.
- 5.4.2 The Contractor shall cause all Subcontractors, laborers and vendors to agree to indemnify the Owner and hold it harmless from all claims for property damage and bodily injury that may arise from such Subcontractor's operations. Such provisions shall be in a form reasonably satisfactory to Owner.
- 5.4.3 The agreement between Contractor and the Subcontractors (and, where appropriate, between Subcontractors and Sub-Subcontractors) shall contain provisions that:
 - 5.4.3.1 Preserve and protect the right of the owner and the Architect under this Agreement with respect to the Work to be performed under the Subcontract so that the subcontracting thereof will not prejudice

such rights;

5.4.3.2 Require that such Work be performed in accordance with the requirements of these Contract Documents;

5.4.3.3 Require submission to Contractor of applications for payment under each Subcontract and Sub-Subcontract, in reasonable time to enable Contractor to apply for payment in accordance with General Conditions of the Construction Contract, all such applications to be in a form that fully complies with all requirements of the Michigan Construction Lien Act, the Michigan Builder's Trust Fund Act, any other requirements of law, the requirements of any financing agency and any requirements of Owner and Owner's title insurer to demonstrate the foregoing;

5.4.3.4 Require that all claims for additional costs or extension of time with respect to subcontracted portions of the Work shall be submitted to Contractor (via any Subcontractor or Sub-Subcontractor where appropriate) in sufficient time so that Contractor may comply in the manner provided, if any, in this Agreement for a like claim by Contractor upon the Owner;

5.4.3.5 Waive all rights the contracting parties may have against one another for damages caused by fire or other perils covered by the property insurance described in General Conditions hereof;

5.4.4 Contractor hereby assigns to Owner, as security for Contractor's performance hereunder, all Subcontracts and all other contracts and agreements entered into in connection with the Project, and appoints Owner as attorney to enforce said contracts according to their terms. Such assignment shall be operative only in the event of default by, or termination of, Contractor under this Agreement.

5.4.2 Modification: change paragraph number to 5.4.5.

7.3.3 Addition: insert new item after 7.3.3.4 as follows: ".5 cost to be determined based on estimated cost of materials, equipment and labor for the work, plus the percentage thereof stated in the Contract Documents for supervision, overhead and profit."

Addition: new text as follows:

8.3.4 Should the progress of the Work or of the Project be delayed by any fault

or neglect or act or failure to act of the Contractor or any of Contractor's agents, employees, or anyone for whose acts any of them may be liable, so as to cause additional cost, expense, liability or damage to the Owner or damages or additional costs or expenses for which the Owner may or shall become liable, the Contractor shall and does hereby agree to compensate the Owner for and indemnify him against such costs, expenses, damages and liability.

Addition: new paragraph as follows:

8.4 Liquidated Damages

8.4.1 If the Contractor fails to complete the work by the completion date agreed upon by the parties or by an authorized extension thereof, the Contractor will be charged damages due the Owner from the Contractor for its failure to complete the project within the specified time at the scheduled charges as specified per calendar day. Sums assessed as liquidated damages shall not be considered penalties but shall reflect the costs to the Owner for continuing supervision and administration of the project and other directly attributable costs.

SCHEDULE OF LIQUIDATED DAMAGES

<u>Original Contract Amount</u>	<u>Charges Per Calendar Day</u>
\$0-\$50,000	\$ 50.00
\$50,000-\$100,000	\$100.00
\$100,000-\$500,000	\$175.00
\$500,000-\$1,000,000	\$225.00
\$1,000,000-\$2,000,000	\$300.00
over-\$2,000,000	\$500.00

9.3.1 Modification: change existing text to read as follows: "At least 20 days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment for operations completed in accordance with the schedule of values. The Contractor shall be responsible to ensure that Application for Payment is complete, including notarized signature. A Sworn Statement from Contractor and partial waivers of lien from Subcontractors and major materials Suppliers shall also accompany each payment request, to

confirm and acknowledge disbursement of the preceding payment. The Sworn Statement shall be a record attesting to the fact that sub-constructors suppliers, materials, etc. have been paid or paid for, when considering materials, from the time of the last application for payment by the Contractor. Partial waivers of lien shall be properly completed and shall list the cumulative amounts of payments received by the date of the waiver. This requirement shall not be waived unless agreed upon in writing by both the Surety and Owner."

Addition: new text as follows (sub-subparagraph to 11.1.2)

11.1.2.1 The insurance required by sub-paragraph 11.1.1 shall be written and maintained without interruption from date of commencement of the work until date of final payment and termination of any coverage required to be maintained after final payment for not less than the following (or greater if required by law):

1. Workers' Compensation
 - (a) State: Michigan Statutory
 - (b) Applicable Federal
(e.g., Longshoremen,
harbor work, Work at
or outside U.S.
Boundaries): Statutory
 - (c) Employer's Liability:
\$100,000 Each Accident
\$500,000 Policy Limit
\$100,000 Each Employee
 - (d) Benefits Required by
Union labor Contracts: As applicable
2. Comprehensive General Liability (Including Premises-
Operations; Independent Contractors' Protective; Products
and Completed Operations; Broad Form Property Damage):
 - (a) Bodily Injury:
\$1,000,000 Each Occurrence
\$2,000,000 Aggregate, Products & Completed
Operations
 - (b) Property Damage:
\$1,000,000 Each Occurrence

\$2,000,000 Aggregate

- (c) Products and Completed Operations Insurance shall be maintained for a minimum period of 1 year after final payment and Contractor shall continue to provide evidence of such coverage to Owner on an annual basis during the aforementioned period.
 - (d) Property Damage Liability Insurance shall include coverage for the following hazards:
 - X (Explosion)
 - C (Collapse)
 - U (Underground)
 - (e) Contractual Liability (Hold Harmless Coverage):
 - (1) Bodily Injury:
 - \$1,000,000 Each Occurrence
 - (2) Property Damage:
 - \$1,000,000 Each Occurrence
 - \$2,000,000 Aggregate
 - (f) Personal Injury, with Employment Exclusion deleted:
 - \$1,000,000 Aggregate
 - (g) Fire Damage
 - \$50,000
 - (h) Medical Payments
 - \$5,000
3. Comprehensive Automobile Liability (owned, non-owned, and hired):
- (a) Bodily Injury:
 - \$1,000,000 Each Person
 - \$1,000,000 Each Accident
 - (b) Property Damage:
 - \$1,000,000 Each Occurrence
 - (c) Combined Single:
 - \$1,000,000 Limit

NOTE: The State of Michigan has a no-fault insurance requirement. The Contractor shall be certain coverage is provided which conforms to any specific stipulation in the law.

4. ADD Item 4. Additional Insured: Commercial General Liability

and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating that the following shall be Additional Insured:

- a. City of Roseville
Anderson, Eckstein and Westrick, Inc.

5. ADD Item 5. Additional Insured: The contractor shall cause the commercial liability coverage required by the Contract Documents to include an endorsement stating that the following shall be Additional Insured:

- a. City of Roseville
Anderson, Eckstein and Westrick, Inc.

6. ADD Item 6. Owners and Contractors protective liability.

- (a) General Aggregate: \$2,000,000
- (b) Each Occurance: \$1,000,000
- (c) Combined Single Limit: \$1,000,000

7. ADD Item 7. The Owners and Contractors Protective Liability Insurance Policy shall include as Additional Insured all persons listed as follows:

- a. City of Roseville
- b. Anderson, Eckstein and Westrick, Inc.

11.1.2.2 Contractor shall procure and maintain builders risk insurance (Fire and Extended Coverage) on 100% completed value basis including the value of all materials furnished by parties other than the Contractors for installation in the project to cover all project structures and materials, supplies, equipment and fixtures including the installation cost thereof which are owned by the insured or for which the insured is legally liable. This policy is to have a zero (0) deductible for any and all claims made.

This policy will cover the property of insured a) while in transit at the risk of the insured, b) while on the construction site or awaiting installation, c) during construction installation or testing. This policy shall insure against all risk of direct physical damage or loss to the property insured hereunder and shall specially cover loss due to fire, wind, flood, collapse, extended coverage, vandalism and malicious mischief.

The Owner and Architect/Engineer and their consultants for this project shall be named on the policy as being also insured.

11.1.2.3 Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance:

(a) The Contractor shall either:

- (1) Require each of his subcontractors to procure and to maintain during the life of his subcontract, Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance of the type and in the amounts specified for the Contractor herein, or
- (2) Insure the activities of his subcontractors in his policy as specified herein.

Umbrella Excess Liability:

- (a) Umbrella Excess Liability must be supplied in an amount not less than \$2,000,000 and be made to cover at least all risks described in the Comprehensive General Liability and Comprehensive Motor Vehicle Liability policies.

11.2.1 Modification: change the text to read as follows: "The Contractor shall obtain, maintain in force, and pay all cost incurred for, public liability insurance to protect the Owner & Architect/Engineer and their consultants for this project from claims which may arise from operations under the Contract. This policy is to have a zero (0) deductible for any and all claims made and name Owner and Architect/Engineer and their consultants as insured parties hereunder. Certificates of this insurance must be filed with the Owner and the Architect/Engineer prior to commencing works and remains in force for the full duration of the project.

11.3.1 Modification: delete phrase "Unless otherwise provided, the Owner..." in the first sentence and substitute, "The Contractor..."

11.3.1 Modification: change text of last part of first sentence after the phrase, "...at the site on a replacement cost basis..." to following test, "...with a zero deductible for any and all claims made."

11.3.1 Modification: change text of last sentence to read as follows: "This insurance shall name, in addition to the contractor, subcontractors and

sub-subcontractors, the Owner and Architect/Engineer and there consultants is insured parties hereunder."

11.3.1 Addition: After last sentence insert the following: "The form of policy for this coverage shall be Completed Value. If the Owner is damaged by the failure of the Contractor to maintain such insurance, then the Contractor shall bear all reasonable costs properly attributable thereto."

11.3.1.2 Deletion: omit entire sub-subparagraph.

11.3.1.3 Deletion: omit entire sub-subparagraph.

11.3.3 Addition: to end of last sentence insert the following: "...unless through gross negligence of contractor."

11.3.4 Deletion: omit entire sub-subparagraph.

11.3.6 Modification: change the text to read as follows: "Before an exposure to loss may occur, the Contractor shall file with the Owner two certified copies of the policy or policies providing this Property Insurance coverage, each containing those endorsements specifically related to the Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire until at least 30 days prior written prior written notice has been given to the Contractor."

11.3.7 Modification: at end of first sentence, substitute "Contractor" for "Owner."

11.3.8 Modification: at first reference to "Owner" in the first sentence, the word "this should be substituted for "Owner's."

11.3.8 Modification: in first sentence, substitute "Contractor" for "Owner" as fiduciary.

11.3.9 Modification: throughout text of subparagraph, substitute "Contractor" for "Owner" each time the latter appears.

11.3.10 Modification: throughout text of subparagraph, substitute "Contractor" for "Owner" each time the latter word appears.

11.4.1 Modification: change the text to read as follows: "The Contractor shall furnish bonds covering faithful performance of the Contract and payment of obligations arising hereunder. Bonds may be obtained through the Contractors usual source and the cost thereof shall be included in the

Contract Sum. The amount of each bond shall be equal to 100% of the total contract sum."

Addition: new text as follows (sub-subparagraph to 11.4.1):

- 11.4.1.1 The Contractor shall deliver the required bonds to the Owner not later than three days following the date the Agreement is entered into, or if the Work is to be commenced prior thereto in response to a letter of intent, the Contractor shall, prior to the commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished.

Addition: new text as follows (sub-subparagraph to 11.4.1):

- 11.4.1.2 The Contractor shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

- 12.2.1 Modification: in the first line, after the words "shall correct it promptly", insert the words: "...commencing corrective action within seven days..."

- 12.2.2 Addition: insert new text before first sentence: The Contractor, as a condition precedent to final payment, shall execute a guarantee in writing, warranting all products provided by him or for which he may be required to accept responsibility in accordance with the terms of the Contract Documents, to be and to remain without defect and in accordance with the Contract Documents.

Addition: new text as follows (sub-subparagraph to 12.2.2):

- 12.2.2.1 Where special guarantee is specified, the Contractor, as a condition precedent to final payment, shall submit to the Architect the guarantee in triplicate on 8-1/2-inch by 11-inch paper in the following form:

A.E.W. Project Number

Contractor's Job Number

Date

Guaranteed Work

Specification Section Number Reference

Specification Page and Paragraphs Describing Guarantee

Length of Guarantee (Years)

Contractor

Subcontractor

The Undersigned herewith warrant that the Work to which this guarantee applies has been executed in conformance with the requirements of the Contract Documents, and guarantee the Work to perform as specified without failure for the stated period of time after Substantial Completion or as otherwise agreed to by the Owner.

This guarantee does not apply to failure or to failure to perform due to abuse or neglect by the Owner, or his successor in interest, or damage by vandalism.

SUBCONTRACTOR -

Signed _____

Title _____

Notary _____

Date _____

CONTRACTOR -

Signed _____

Title _____

Notary _____

Date _____

- 12.2.2.2 Responsibility for the securing, verifying, recording, transmitting to the Architect, and all other actions, regarding the specified special guarantees rests with the Contractor. The Architect will not accept transmittals of guarantees from parties other than the Contractor.

Addition: new text as follow (sub-subparagraph to 12.2.3):

- 12.2.3.1 Limits of non-conforming Work: When any such Work is found, the entire area of work involved shall be corrected unless the Contractor can completely define the limits. Additional testing, sampling, or inspecting needed to define non-conforming work shall be at the contractor's expense. He shall employ the Owner's independent testing laboratory, or a mutually satisfactory independent testing laboratory, if such services are required. All corrected work shall be re-tested at the Contractor's expense.

Addition: new text as follows: (sub-subparagraph to 12.2.4):

- 12.2.4.1 Restriction of Supplier's Identification: In areas generally accessible to the public. Omit all supplier's name plates and identification symbols from visible products.

- 14.2.1 Addition: new text as follows, sub-subparagraph after last item listed: ".5 should cause or give cause for legal proceeding seeking to have himself adjudged a bankrupt, or should the Contractor become insolvent, or if the contractor is adjudged a bankrupt, or if he makes a general assignment for the benefit of his creditors."

Addition: new article as follows:

Article 16

Equal Opportunity

- 16.1 The Contractor shall maintain policies of employment as follows:
- 16.1.1 The Contractor and all Subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin or age. The Contractor shall take affirmative action to insure that applicants are employed, and that employees are treated during employment without regard to their race, religion, color, sex, national origin or age. Such action shall include, but not be limited to the

following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of non-discrimination.

16.1.2 The Contractor and all Subcontractors shall, in all solicitations or advertisements for employees placed by them or on their behalf; state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, national origin or age.

Addition: new article as follows:

Article 17

Special Conditions

17.1 Michigan Construction Lien Statute

17.1.1 Contractor must record the notice of commencement, on behalf of the Owner, with the Register of Deeds and shall post the notice in a conspicuous place on the site.

Addition: new article as follows:

Article 18

Abbreviations

18.1 Abbreviations

18.1.1 When the following abbreviations and symbols are used in the Contract Documents, or Subcontract documents, they shall have the meaning shown. Many of the abbreviations used throughout the Subcontract documents refer to associations, institutes, societies and other public bodies who publish standards which are readily available to the public. Whenever the initials representing such a body are shown, followed by a number or a combination of numbers and letters, they refer to a particular standard to which the Subcontractor shall conform. The number or combination of numerals and letters, following the abbreviation designates the standard. In all such cases, the Subcontractor shall

conform to the edition or issue of the standard which is current at the Subcontract date, as revised or amended to the Subcontract date.

18.1.2 Abbreviations and Meanings for Organizations.

AIA	American Institute of Architects
AASHO	American Association of State Highway Officials
ACI	American Concrete Institute
AIEE	American Institute of Electrical Engineers
AISC	American Institute of Steel Construction
ASA	American Standard Association
ASH & AE	American Society of Heating & Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWI	American Woodwork Institute
AWSC	American Welding Society Code
CSI	Construction Specification Institute
FS	Federal Specifications
NAFM	National Association of Fan Manufacturers
NBFU	National Board of Fire Underwriters
NBS	National Bureau of Standards
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
UL	Underwriters Laboratories
USDC	U.S. Department of Commerce

18.1.3 Abbreviations and Meanings for Construction Terms.

Ad	access door	oc	on center
B	bottom layer reinf. concrete	Od	outside diameter
brg	bearing	part	partition
brkt	bracket	pol	polished
cl	centerline	po	polyethylene
ci	cast iron	pl	plate
cc	center to center	psi	pounds per sq. in.
conc	concrete	psf	pounds per sq. foot
cont	continuous	rec	recessed
csk	countersunk	reinf	reinforced
crs	courses	rh	right hand
dh	double hung	rhr	right hand reverse

FIRE DEPARTMENT FAÇADE UPGRADES
 AEW PROJECT #0100-0579

JUNE 9, 2026

div	division	rm	room
dpc	dampproof course	rs	roof sump
dwg	drawing	rwc	rain water conductor
ef	exhaust fan	rwl	rain water leader
elev	elevation	s.f.	square foot
ewc	electric water cooler	ss	stainless steel
exist	existing	std	standard
fin	finished, finishing	t&f	tongue and groove
ftg	footing	terr	terrazzo
fd	floor drain	typ	typical
flr/fl	floor	u/s	underside
ga	gauge	ul	upper layer reinf. concrete
Gi	galvanized iron		
gs	galvanized sheet	vct	vinyl composition
gsg	galvanized sheet gauge		tile
hor	horizontal	vb	vapor barrier
ins	inches	vert	vertical
id	inside diameter	wc	water closet
ksf	kips per square foot	wt	weight
lav	lavatory	wd	wood
lh	left hand		
lhr	left hand reverse	E-W	East to West in reinf. concrete
lpc	laminated plastic covering	N-S	North to South in reinf. concrete
mk	master keyed		
max	maximum	O/	diameter
met	metal	'	foot, feet
min	minimum		
mfgr	manufacturer	"	inch, inches
ms	manufacturers standard #		pounds (behind numerals)
mo	masonry opening		
nrc	noise reduction coefficient		

END OF SECTION

SECTION 00 85 10 - INDEX OF DRAWINGS

TITLE SHEET

The following drawings, dated June 09, 2026, are issued for The City of Roseville, Fire Department Façade Upgrades, Roseville, Michigan. Architect's Project Number 0100-0579

TITLE SHEET

SHEET NO.

TITLE

COVER SHEET

A011	GENERAL PROJECT INFORMATION
AD101	FIRE STATION NO. 1 DEMOLITION PLAN
AD102	FIRE STATION NO. 1 DEMOLITION ELEVATION
AD103	FIRE STATION NO. 1 DEMOLITION ELEVATION
A101	FIRE STATION NO. 1 COMPOSITE FLOOR PLAN
A102	FIRE STATION NO. 1 EXTERIOR ELEVATIONS
A103	FIRE STATION NO. 1 EXTERIOR ELEVATIONS
A104	FIRE STATION NO. 1 WALL SECTION AND DETAILS
AD201	FIRE STATION NO. 2 DEMOLITION PLAN
AD202	FIRE STATION NO. 2 DEMOLITION ELEVATION
A201	FIRE STATION NO. 2 COMPOSITE FLOOR PLAN
A202	FIRE STATION NO. 2 EXTERIOR ELEVATIONS
A203	FIRE STATION NO. 2 WALL SECTION AND DETAILS
AD301	FIRE ADMINISTRATION DEMOLITION PLAN
AD302	FIRE ADMINISTRATION DEMOLITION ELEVATIONS
A301	FIRE ADMINISTRATION COMPOSITE FLOOR PLAN
A302	FIRE ADMINISTRATION EXTERIOR ELEVATION
A303	FIRE ADMINISTRATION WALL SECTION AND DETAILS

END OF SECTION 00 85 10

SECTION 01 10 00 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Contract description.
2. Work by Owner or other Work at the Site.
3. Owner-furnished products.
4. Contractor's use of Site and premises.
5. Work sequence.
6. Owner occupancy.
7. Permits.
8. Specification conventions.

1.2 CONTRACT DESCRIPTION

- A. Work of the Project includes is as identified in the bidding documents.
- B. Perform Work of Contract under fixed cost Contract with Owner according to Conditions of Contract.

1.3 WORK BY OWNER OR OTHERS

- A. Owner will award contracts, if required, for installation of security system and cameras, audio/visual and other low voltage system under a separate contract, unless called out in the Contract Document.
- B. If Owner-awarded contracts interfere with each other due to work being performed at the same time or at the same Site, Owner will determine the sequence of work under all contracts according to "Work Sequence" and "Contractor's Use of Site" Articles in this Section.
- C. Coordinate Work with utilities of Owner and public or private agencies.
- D. Work under this Contract includes:
 1. Work as indicated in the Contract Documents.

1.4 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Limit use of Site and premises to allow:
 - 1. Owner occupancy.
 - 2. Work by Others.
 - 3. Use of Site and premises by the public.
- B. Construction Operations: Limited to areas indicated on Drawings.
 - 1. Noisy and Disruptive Operations (such as Use of Jack Hammers and Other Noisy Equipment): Coordinate and schedule such operations with Owner to minimize disruptions.
- C. Utility Outages and Shutdown:
 - 1. Coordinate and schedule electrical and other utility outages with Owner.
- D. Construction Plan: Before start of construction, post electronic file to Project website of construction plan regarding access to Work, use of Site, and utility outages for acceptance by Owner. After acceptance of plan, construction operations shall comply with accepted plan unless deviations are accepted by Owner in writing.
- E. Background Checks: All Contractor employees, subcontractors, and sub-subcontractors are subject to background check and approval of the XXX Safety Department prior to working on-site.

1.5 WORK SEQUENCE

- A. Construct Work in order to accommodate Owner's occupancy requirements during construction period. Coordinate construction schedule and operations with Owner:
- B. Sequencing of Construction Plan: Before start of construction, post electronic file to Project website of construction plan regarding phasing of demolition, renovation, and new Work for acceptance by Owner. After acceptance of plan, construction sequencing shall comply with accepted plan unless deviations are accepted by Owner in writing.

1.6 OWNER OCCUPANCY

- A. Owner will occupy Premises during entire period of construction.

- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

1.7 SPECIFICATION CONVENTIONS

- A. These Specifications are written in imperative mood and streamlined form. This imperative language is directed to Contractor unless specifically noted otherwise. The words "shall be" are included by inference where a colon (:) is used within sentences or phrases.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 10 00

This Page Intentionally Blank

SECTION 01 20 00 - PRICE AND PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Schedule of Values.
- B. Application for Payment.
- C. Change procedures.
- D. Defect assessment.

1.2 SCHEDULE OF VALUES

- A. Submit electronic file to Project website of schedule on AIA G703 - Continuation Sheet for G702.
- B. Submit Schedule of Values as electronic file to Project website within 15 days after date of Owner-Contractor Agreement.
- C. Format: Use Table of Contents of this Project Manual. Identify each line item with number and title of major Specification Section. Also identify Site mobilization, bonds and insurance, General Conditions, and General Contractor Overhead and Profit.
- D. Include separately from each line item, direct proportional amount of Contractor's overhead and profit.
- E. Revise schedule to list approved Change Orders with each Application for Payment.

1.3 APPLICATION FOR PAYMENT

- A. Submit electronic file to Project website of each Application for Payment on AIA G702 - Application and Certificate for Payment and AIA G703 - Continuation Sheet for G702.
- B. Content and Format: Use Schedule of Values for listing items in Application for Payment.
- C. Submit updated construction schedule with each Application for Payment.
- D. Payment Period: Submit at intervals stipulated in the Agreement.

- E. Submit submittals with transmittal letter as specified in Section 01 33 00 - Submittal Procedures.
- F. Submit three copies of waivers requested by Owner.
- G. Substantiating Data: When Architect/Engineer requires substantiating information, submit data justifying dollar amounts in question. Include the following with Application for Payment:
 - 1. Current construction photographs specified in Section 01 33 00 - Submittal Procedures or requested by the Architect.
 - 2. Partial release of liens from major Subcontractors and vendors.
 - 3. Record Documents as specified in Section 01 70 00 - Execution and Closeout Requirements, for review by Owner, which will be returned to Contractor.
 - 4. Affidavits attesting to off-Site stored products.
 - 5. Construction Progress Schedule, revised and current as specified in Section 01 33 00 - Submittal Procedures.

1.4 CHANGE PROCEDURES

- A. Submittals: Submit name of individual who is authorized to receive change documents and is responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.
- B. Carefully study and compare Contract Documents before proceeding with fabrication and installation of Work. Promptly advise Architect/Engineer of any error, inconsistency, omission, or apparent discrepancy.
- C. Requests for Interpretation (RFI) and Clarifications: Allot time in construction scheduling for liaison with Architect/Engineer; establish procedures for handling queries and clarifications.
 - 1. Use AIA G716 - Request for Information for requesting interpretations.
 - 2. Architect/Engineer may respond with a direct answer on the Request for Interpretation form, AIA G710 - Architect's Supplemental Instruction, or AIA G709 - Work Changes Proposal Request.
- D. Architect/Engineer will advise of minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time by issuing supplemental instructions on AIA G710.
- E. Architect/Engineer may issue AIA G709 including a detailed description of proposed change with supplementary or revised Drawings and Specifications, a change in Contract Time for executing the change with stipulation of overtime work required and with the period of time during which the requested price will be considered valid. Contractor will prepare and submit estimate within 10 days.
- F. Contractor may propose changes by submitting a request for change to Architect/Engineer, describing proposed change and its full effect on the Work.

Include a statement describing reason for the change and the effect on Contract Sum/Price and Contract Time with full documentation and a statement describing effect on the Work by separate or other Contractors.

- G. Document requested substitutions according to Section 012500 - Substitution Procedures.
- H. Stipulated Sum/Price Change Order: Based on AIA G709 and Contractor's fixed price quotation or Contractor's request for Change Order as approved by Architect/Engineer.
- I. Unit Price Change Order: For Contract unit prices and quantities, the Change Order will be executed on a fixed unit price basis. For unit costs or quantities of units of that which are not predetermined, execute Work under Construction Change Directive. Changes in Contract Sum/Price or Contract Time will be computed as specified for Time and Material Change Order.
- J. Construction Change Directive: Architect/Engineer may issue directive, on AIA G714 - Construction Change Directive signed by Owner, instructing Contractor to proceed with change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change.
- K. Time and Material Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in Conditions of the Contract. Architect/Engineer will determine change allowable in Contract Sum/Price and Contract Time as provided in Contract Documents.
- L. Maintain detailed records of Work done on time and material basis. Provide full information required for evaluation of proposed changes and to substantiate costs for changes in the Work.
- M. Document each quotation for change in Project Cost or Time with sufficient data to allow evaluation of quotation.
- N. Change Order Forms: AIA G701 - Change Order.
- O. Execution of Change Orders: Architect/Engineer will issue Change Orders for signatures of parties as provided in Conditions of the Contract.
- P. Correlation of Contractor Submittals:
 - 1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
 - 2. Promptly revise Progress Schedules to reflect change in Contract Time, revise sub schedules to adjust times for other items of Work affected by the change, and resubmit.

3. Promptly enter changes in Record Documents.

1.5 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of Architect/Engineer, it is not practical to remove and replace the Work, Architect/Engineer will direct appropriate remedy or adjust payment.
- C. Authority of Architect/Engineer to assess defects and identify payment adjustments is final.
- D. Nonpayment for Rejected Products: Payment will not be made for rejected products for any of the following reasons:
 1. Products wasted or disposed of in a manner that is not acceptable.
 2. Products determined as unacceptable before or after placement.
 3. Products not completely unloaded from transporting vehicle.
 4. Products placed beyond lines and levels of the required Work.
 5. Products remaining on hand after completion of the Work.
 6. Loading, hauling, and disposing of rejected products.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 20 00

SECTION 01 25 00 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Quality assurance.
- B. Product options.
- C. Product substitution procedures.

1.2 QUALITY ASSURANCE

- A. Contract is based on products and standards established in Contract Documents without consideration of proposed substitutions.
- B. Products specified define standard of quality, type, function, dimension, appearance, and performance required.
- C. Substitution Proposals: Permitted for specified products except where specified otherwise. Do not substitute products unless substitution has been accepted and approved in writing by Owner.

1.3 PRODUCT OPTIONS

- A. See Section 01 60 00 - Product Requirements.

1.4 PRODUCT SUBSTITUTION PROCEDURES

- A. Architect/Engineer may consider requests for substitutions during bidding. Contractor to provide Substitution Request form in 01 25 01 and relevant supporting data. Requests must be submitted prior to the final deadline for questions during bidding. Architect/Engineer's decision on acceptance/rejection of products is final.
- B. Architect/Engineer may consider requests for substitutions within 15 days after date of Owner-Contractor Agreement. Contractor to provide Substitution Request form in 01 25 02 and relevant supporting data. Architect/Engineer's decision on acceptance/rejection of products is final.
- C. Substitutions may be considered if within 90 days of contract award a product becomes unavailable, through no fault of the contractor. Contractor to provide documentation from the product manufacturer that product is no longer

available. Failure to provide notification that a product is no longer available within 90 days of contract award shall result in the Architect selecting an alternative material at no additional cost.

- D. Document each request with complete data, substantiating compliance of proposed substitution with Contract Documents, including:
1. Manufacturer's name and address, product, trade name, model, or catalog number, performance and test data, and reference standards.
 2. Itemized point-by-point comparison of proposed substitution with specified product, listing variations in quality, performance, and other pertinent characteristics.
 3. Reference to Article and Paragraph numbers in Specification Section.
 4. Cost data comparing proposed substitution with specified product and amount of net change to Contract Sum.
 5. Changes required in other Work.
 6. Availability of maintenance service and source of replacement parts as applicable.
 7. Certified test data to show compliance with performance characteristics specified.
 8. Samples when applicable or requested.
 9. Other information as necessary to assist Architect/Engineer's evaluation.
- E. A request constitutes a representation that Bidder or Contractor:
1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product, and provides the same features and options as the specified product.
 2. Will provide same warranty for substitution as for specified product.
 3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
 4. Waives claims for additional costs or time extension that may subsequently become apparent.
 5. Will coordinate installation of the accepted substitute, making such changes as may be required for the Work to be complete in all respects.
 6. Will reimburse Owner and Architect/Engineer for review or redesign services associated with reapproval by authorities having jurisdiction.
- F. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals without separate written request or when acceptance will require revision to Contract Documents.
- G. Substitution Submittal Procedure:
1. Submit requests for substitutions on form 01 25 01 Request for Substitution Form.
 2. Submit electronic files to Project website of Request for Substitution for consideration. Limit each request to one proposed substitution.
 3. Submit Shop Drawings, Product Data, and certified test results attesting to proposed product equivalence. Burden of proof is on proposer.
 4. Architect/Engineer will notify Contractor in writing of decision to accept or reject request.

1.5 INSTALLER SUBSTITUTION PROCEDURES

- A. Architect/Engineer will consider requests for substitutions only within 15 days after date of Owner-Contractor Agreement.
- B. Document each request with:
 - 1. Installer's qualifications.
 - 2. Installer's experience in work similar to that specified.
 - 3. Other information as necessary to assist Architect/Engineer's evaluation.
- C. Substitution Submittal Procedure:
 - 1. Submit electronic files to Project website of Request for Substitution for consideration. Limit each request to one proposed substitution.
 - 2. Architect/Engineer will notify Contractor in writing of decision to accept or reject request.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 25 00

This Page Intentionally Blank



**SUBSTITUTION
REQUEST**
(During the Bidding Phase)

Project: _____ Substitution Request Number: _____

From: _____
To: _____ Date: _____
A/E Project Number: _____
Re: _____ Contract For: _____

Specification Title: _____ Description: _____
Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____
Manufacturer: _____ Address: _____ Phone: _____
Trade Name: _____ Model No.: _____

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

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

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: _____
Signed by: _____
Firm: _____
Address: _____
Telephone: _____

A/E's REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01 33 00.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01 33 00.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: _____ Date: _____

Supporting Data Attached: Drawings Product Data Samples Tests Reports _____

This Page Intentionally Blank

JUNE 9, 2026

**SUBSTITUTION
REQUEST**
(After the Bidding/Negotiating Phase)

Project: _____ Substitution Request Number: _____

From: _____

To: _____ Date: _____

A/E Project Number: _____

Re: _____ Contract For: _____

Specification Title: _____ Description: _____

Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____

Manufacturer: _____ Phone: _____

Address: _____

Trade Name: _____ Model No.: _____

Installer: _____ Phone: _____

Address: _____

History: New Product 1-4 years old 5-10 years old More than 10 years old

Differences between proposed substitution and specified product: _____

Point-by-point comparative data attached.

Reason for not providing specified item: _____

Similar Installation:

Project: _____ Architect: _____

Address: _____ Owner: _____

_____ Date Installed: _____

Proposed Substitution affects other parts of work: No Yes; explain _____

Savings to Owner for accepting substitution: _____ (\$_____).

Proposed substitution changes Contract Time: No Yes [Add] [Deduct] _____ days.

Supporting Data Attached: Drawings Product Data Samples Tests

Reports _____ The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effects on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

Telephone: _____

Attachments: _____

A/E's Review Action

Substitution approved – Make submittals in accordance with Specification Section 01 33 00.

Substitution approved as noted – Make submittals in accordance with Specification Section 01 33 00.

Substitution rejected – Use specified materials.

Substitution Request received too late – Use specified materials.

Signed by: _____ Date: _____

Additional Comments: Contractor Subcontractor Supplier Manufacturer

A/E Other

SECTION 01 30 00 - ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Coordination and Project conditions.
- B. Preconstruction meeting.
- C. Site mobilization meeting.
- D. Progress meetings.
- E. Preinstallation meetings.
- F. Closeout meeting.
- G. Alteration procedures.

1.2 COORDINATION AND PROJECT CONDITIONS

- A. Coordinate scheduling, submittals, and Work of various Sections of Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later as identified by the owner.
- B. Verify that utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate Work of various Sections having interdependent responsibilities for installing, connecting to, and placing operating equipment in service.
- C. Coordinate space requirements, supports, and installation of mechanical and electrical Work indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit as closely as practical; place runs parallel with lines of building. Use spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
 - 1. Coordination Drawings: Prepare as required to coordinate all portions of Work. Show relationship and integration of different construction elements that require coordination during fabrication or installation to fit in space provided or to function as intended. Indicate locations where space is limited for installation and access and where sequencing and coordination of installations are important.

- D. Coordination Meetings: In addition to other meetings specified in this Section, hold coordination meetings with personnel and Subcontractors to ensure coordination of Work.
- E. In finished areas, conceal pipes, ducts, and wiring within construction. Coordinate locations of fixtures and outlets with finish elements.
- F. Coordinate completion and clean-up of Work of separate Sections in preparation for Substantial Completion and for portions of Work designated for Owner's occupancy.
- G. After Owner's occupancy of premises, coordinate access to Site for correction of defective Work and Work not complying with Contract Documents, to minimize disruption of Owner's activities.

1.3 PRECONSTRUCTION MEETING

- A. Architect/Engineer will schedule and preside over meeting after Notice of Award.
- B. Attendance Required: Architect/Engineer, Owner, and Contractor.
- C. Minimum Agenda:
 - 1. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of Subcontractors, list of products, schedule of values, and Progress Schedule.
 - 5. Designation of personnel representing parties in Contract, and Architect/Engineer.
 - 6. Communication procedures.
 - 7. Procedures and processing of requests for interpretations, field decisions, submittals, substitutions, Applications for Payments, proposal request, Change Orders, and Contract closeout procedures.
 - 8. Scheduling.
 - 9. Critical Work sequencing.
- D. Contractor: Record minutes and distribute electronic copies to participants within two days after meeting, with copies to Architect/Engineer, Owner, and those affected by decisions made.

1.4 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum bi-weekly intervals.

- B. Make arrangements for meetings, prepare agenda with copies for participants, and preside over meetings.
- C. Attendance Required: Job superintendent, major Subcontractors and suppliers, and Architect/Engineer, Owner, as appropriate to agenda topics for each meeting.
- D. Minimum Agenda:
 - 1. Review minutes of previous meetings.
 - 2. Review of Work progress.
 - 3. Field observations, problems, and decisions.
 - 4. Identification of problems impeding planned progress.
 - 5. Review of submittal 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.
- E. Contractor: Record minutes and distribute electronic copies to participants within two days after meeting, with copies to Architect/Engineer, Owner, and those affected by decisions made.

1.5 PREINSTALLATION MEETINGS

- A. When required in individual Specification Sections, convene preinstallation meetings at Project Site before starting Work of specific Section.
- B. Require attendance of parties directly affecting, or affected by, Work of specific Section.
- C. Notify Architect/Engineer four days in advance of meeting date.
- D. Prepare agenda and preside over meeting:
 - 1. Review conditions of installation, preparation, and installation procedures.
 - 2. Review coordination with related Work.
- E. Record minutes and distribute electronic copies to participants within two days after meeting, with copies to Architect/Engineer, Owner, and those affected by decisions made.

1.6 CLOSEOUT MEETING

- A. Schedule Project closeout meeting with sufficient time to prepare for requesting Substantial Completion. Preside over meeting and be responsible for minutes.
- B. Attendance Required: Contractor, Architect/Engineer, Owner, and others appropriate to agenda.
- C. Notify Architect/Engineer ten days in advance of meeting date.
- D. Minimum Agenda:
 - 1. Start-up of facilities and systems.
 - 2. Operations and maintenance manuals.
 - 3. Testing, adjusting, and balancing.
 - 4. System demonstration and observation.
 - 5. Operation and maintenance instructions for Owner's personnel.
 - 6. Contractor's inspection of Work.
 - 7. Contractor's preparation of an initial "punch list."
 - 8. Procedure to request Architect/Engineer inspection to determine date of Substantial Completion.
 - 9. Completion time for correcting deficiencies.
 - 10. Inspections by authorities having jurisdiction.
 - 11. Certificate of Occupancy and transfer of insurance responsibilities.
 - 12. Partial release of retainage.
 - 13. Final cleaning.
 - 14. Preparation for final inspection.
 - 15. Closeout Submittals:
 - a. Project record documents.
 - b. Operating and maintenance documents.
 - c. Operating and maintenance materials.
 - d. Affidavits.
 - 16. Final Application for Payment.
 - 17. Contractor's demobilization of Site.
 - 18. Maintenance.
- E. Record minutes and distribute electronic copies to participants within five days after meeting, with copies to Architect/Engineer, Owner, and those affected by decisions made.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION

3.1 ALTERATION PROCEDURES

- A. Designated areas of existing facilities will be occupied for normal operations during progress of construction. Cooperate with Owner in scheduling operations to minimize conflict and to permit continuous usage.
 - 1. Perform Work not to interfere with operations of occupied areas.
 - 2. Keep utility and service outages to a minimum and perform only after written approval of Owner.
 - 3. Clean Owner-occupied areas daily. Clean spillage, overspray, and heavy collection of dust in Owner-occupied areas immediately.
- B. Materials: As specified in product Sections; match existing products with new products for patching and extending Work.
- C. Employ skilled and experienced installer to perform alteration and renovation Work.
- D. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion. Comply with Section 01 70 00 - Execution and Closeout Requirements
- E. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.
- F. Remove debris and abandoned items from area and from concealed spaces.
- G. Prepare surface and remove surface finishes to permit installation of new Work and finishes.
- H. Close openings in exterior surfaces to protect existing Work from weather and extremes of temperature and humidity.
- I. Remove, cut, and patch Work to minimize damage and to permit restoring products and finishes to match adjacent condition, unless specified otherwise.
- J. Refinish existing visible surfaces to remain in renovated rooms and spaces, to renewed condition for each material, with neat transition to adjacent finishes.
- K. Where new Work abuts or aligns with existing Work, provide smooth and even transition. Patch Work to match existing adjacent Work in texture and appearance.

- L. When finished surfaces are cut so that smooth transition with new Work is not possible, terminate existing surface along straight line at natural line of division and submit recommendation to Architect/Engineer for review.
- M. Where change of plane of 1/4 inch or more occurs, submit recommendation for providing smooth transition to Architect/Engineer for review.
- N. Trim existing doors to clear new floor finish. Refinish trim to specified condition.
- O. Patch or replace portions of existing surfaces that are damaged, lifted, discolored, or showing other imperfections.
- P. Finish surfaces as specified in individual product Sections.

END OF SECTION 01 30 00

This Page Intentionally Blank

SECTION 01 32 16 - CONSTRUCTION PROGRESS SCHEDULE

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Submittals.
- B. Quality assurance.
- C. Bar chart schedules.
- D. Review and evaluation.
- E. Updating schedules.
- F. Distribution.

1.2 SUBMITTALS

- A. Within 10 days after date of Owner-Contractor Agreement, submit proposed preliminary network diagram defining planned operations for Work.
- B. Participate in review of preliminary and complete network diagrams jointly with Architect/Engineer.
- C. Submit updated network schedules with each Application for Payment.
- D. Post as electronic file to Project website.
- E. Submit network schedules under transmittal letter form specified in Section 01 33 00 - Submittal Procedures.
- F. Schedule Updates:
 - 1. Overall percent complete, projected and actual.
 - 2. Completion progress by listed activity and sub-activity, to within five working days prior to submittal.
 - 3. Changes in Work scope and activities modified since submittal.
 - 4. Delays in submittals or resubmittals, deliveries, or Work.
 - 5. Adjusted or modified sequences of Work.
 - 6. Other identifiable changes.
 - 7. Revised projections of progress and completion.

1.3 QUALITY ASSURANCE

- A. Scheduler: Contractor's personnel specializing in CPM scheduling with five years' minimum experience in scheduling construction work of complexity comparable to the Project, and having use of computer facilities capable of delivering detailed graphic printout within 48 hours of request.
- B. Contractor's Administrative Personnel: five years' minimum experience in using and monitoring CPM schedules on comparable Projects.

1.4 BAR CHART SCHEDULES

- A. Format: Bar chart Schedule, to include at least:
 - 1. Identification and listing in chronological order of those activities reasonably required to complete the Work, including:
 - a. Subcontract Work.
 - b. Major equipment design, fabrication, factory testing, and delivery dates including required lead times.
 - c. Move-in and other preliminary activities.
 - d. Equipment and equipment system test and startup activities.
 - e. Project closeout and cleanup.
 - f. Work sequences, constraints, and milestones.
 - 2. Listings identified by Specification Section number.
 - 3. Identification of the following:
 - a. Horizontal time frame by year, month, and week.
 - b. Duration, early start, and completion for each activity and sub-activity.
 - c. Critical activities and Project float.
 - d. Sub-schedules to further define critical portions of Work.

1.5 REVIEW AND EVALUATION

- A. Participate in joint review and evaluation of schedules with Architect/Engineer at each submittal.
- B. Evaluate Project status to determine Work behind schedule and Work ahead of schedule.
- C. After review, revise schedules incorporating results of review, and resubmit within **10** days.

1.6 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 schedules to depict current status of Work.

- C. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- D. Upon approval of a Change Order, include the change in the next schedule submittal.
- E. Indicate changes required to maintain Date of Substantial Completion.
- F. Submit sorts as required to support recommended changes.
- G. Prepare narrative report to define problem areas, anticipated delays, and impact on schedule. Report corrective action taken or proposed and its effect including effects of changes on schedules of separate Contractors.

1.7 DISTRIBUTION

- A. Following joint review, distribute copies of updated schedules to Contractor's Project site file, to Subcontractors, suppliers, Architect/Engineer, Owner, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 32 16

This Page Intentionally Blank

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Definitions.
- B. Submittal procedures.
- C. Construction progress schedules.
- D. Proposed product list.
- E. Product data.
- F. Use of electronic CAD files of Project Drawings.
- G. Shop Drawings.
- H. Samples.
- I. Other submittals.
- J. Design data.
- K. Test reports.
- L. Certificates.
- M. Manufacturer's instructions.
- N. Manufacturer's field reports.
- O. Erection Drawings.
- P. Construction photographs.
- Q. Contractor review.
- R. Architect/Engineer review.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect/Engineer's responsive action.

- B. Informational Submittals: Written and graphic information and physical Samples that do not require Architect/Engineer's responsive action. Submittals may be rejected for not complying with requirements.

1.3 SUBMITTAL PROCEDURES

- A. Number submittals with a prefix of the specification number related to the submittal, a sequential number, and a revision number (i.e. 092216-001-001).
- B. Identify: Project, Contractor, Subcontractor and supplier, pertinent Drawing and detail number, and Specification Section number appropriate to submittal.
- C. Apply Contractor's stamp, signed or initialed, certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is according to requirements of the Work and Contract Documents.
- D. Schedule submittals to expedite Project, and submit electronic submittals via email as PDF electronic files. Coordinate submission of related items.
- E. For each submittal for review, allow 15 working days excluding delivery time to and from Contractor.
- F. Identify variations in Contract Documents and product or system limitations that may be detrimental to successful performance of completed Work.
- G. Allow space on submittals for Contractor and Architect/Engineer review stamps.
- H. When revised for resubmission, identify changes made since previous submission.
- I. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.
- J. Submittals not requested will not be recognized nor processed.
- K. Incomplete Submittals: Architect/Engineer will not review. Complete submittals for each item are required. Delays resulting from incomplete submittals are not the responsibility of Architect/Engineer.

1.4 CONSTRUCTION PROGRESS SCHEDULES

- A. Comply with Section 01 32 16 - Construction Progress Schedule.

1.5 PROPOSED PRODUCT LIST

- A. Within 15 working days after date of Owner-Contractor Agreement, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
- B. For products specified only by reference standards, indicate manufacturer, trade name, model or catalog designation, and reference standards.

1.6 PRODUCT DATA

- A. Product Data: Action Submittal: Submit to Architect/Engineer for review for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Submit electronic submittals via email as PDF electronic files.
- C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- D. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- E. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

1.7 ELECTRONIC CAD FILES OF PROJECT DRAWINGS

- A. Electronic CAD Files of Project Drawings: May only be used to expedite production of Shop Drawings for the Project. Use for other Projects or purposes is not allowed.
- B. Electronic CAD Files of Project Drawings: Distributed only under the following conditions:
 - 1. Use of files is solely at receiver's risk. Architect/Engineer does not warrant accuracy of files. Receiving files in electronic form does not relieve receiver of responsibilities for measurements, dimensions, and quantities set forth in Contract Documents. In the event of ambiguity, discrepancy, or conflict between information on electronic media and that in Contract Documents, notify Architect/Engineer of discrepancy and use information in hard-copy Drawings and Specifications.
 - 2. CAD files do not necessarily represent the latest Contract Documents, existing conditions, and as-built conditions. Receiver is responsible for determining and complying with these conditions and for incorporating addenda and modifications.

3. User is responsible for removing information not normally provided on Shop Drawings and removing references to Contract Documents. Shop Drawings submitted with information associated with other trades or with references to Contract Documents will not be reviewed and will be immediately returned.
4. Receiver shall not hold Architect/Engineer responsible for data or file clean-up required to make files usable, nor for error or malfunction in translation, interpretation, or use of this electronic information.
5. Receiver shall understand that even though Architect/Engineer has computer virus scanning software to detect presence of computer viruses, there is no guarantee that computer viruses are not present in files or in electronic media.
6. Receiver shall not hold Architect/Engineer responsible for such viruses or their consequences, and shall hold Architect/Engineer harmless against costs, losses, or damage caused by presence of computer virus in files or media.
7. Receiver shall submit Electronic Documents Request Form, 01 33 01, indicating what documents are requested.

1.8 SHOP DRAWINGS

- A. Shop Drawings: Action Submittal: Submit to Architect/Engineer for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. When required by individual Specification Sections, provide Shop Drawings signed and sealed by a professional Engineer responsible for designing components shown on Shop Drawings.
 1. Include signed and sealed calculations to support design.
 2. Submit Shop Drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
 3. Make revisions and provide additional information when required by authorities having jurisdiction.
- D. Submit electronic submittals via email as PDF electronic files.
- E. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.
- F. Shop drawings shall be drafted in a professional manner on a title block provided by the shop drawing producer. Markups, photocopies or PDF files of Construction Documents are not an acceptable shop drawing submittal.

1.9 SAMPLES

- A. Samples: Action Submittal: Submit to Architect/Engineer for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Samples for Selection as Specified in Product Sections:
 - 1. Submit to Architect/Engineer for aesthetic, color, and finish selection.
 - 2. Submit Samples of finishes, textures, and patterns for Architect/Engineer selection.
- C. Submit Samples to illustrate functional and aesthetic characteristics of products, with integral parts and attachment devices. Coordinate Sample submittals for interfacing work.
- D. Include identification on each Sample, with full Project information.
- E. Submit number of Samples specified in individual Specification Sections; Architect/Engineer will retain one Sample.
- F. Reviewed Samples that may be used in the Work are indicated in individual Specification Sections.
- G. Samples will not be used for testing purposes unless specifically stated in Specification Section.
- H. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

1.10 OTHER SUBMITTALS

- A. Closeout Submittals: Comply with Section 01 70 00 - Execution and Closeout Requirements.
- B. Informational Submittal: Submit data for Architect/Engineer's knowledge as Contract administrator or for Owner.
- C. Submit information for assessing conformance with information given and design concept expressed in Contract Documents.

1.11 TEST REPORTS

- A. Informational Submittal: Submit reports for Architect/Engineer's knowledge as Contract administrator or for Owner.
- B. Submit test reports for information for assessing conformance with information given and design concept expressed in Contract Documents.

1.12 CERTIFICATES

- A. Informational Submittal: Submit certification by manufacturer, installation/application Subcontractor, or Contractor to Architect/Engineer, in quantities specified for Product Data.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or product but must be acceptable to Architect/Engineer.

1.13 MANUFACTURER'S INSTRUCTIONS

- A. Informational Submittal: Submit manufacturer's installation instructions for Architect/Engineer's knowledge as Contract administrator or for Owner.
- B. Submit printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing, to Architect/Engineer in quantities specified for Product Data.
- C. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.14 MANUFACTURER'S FIELD REPORTS

- A. Informational Submittal: Submit reports for Architect/Engineer's knowledge as Contract administrator or for Owner.
- B. Submit report within 5 days of observation to Architect/Engineer for information.
- C. Submit reports for information for assessing conformance with information given and design concept expressed in Contract Documents.

1.15 ERECTION DRAWINGS

- A. Informational Submittal: Submit Drawings for Architect/Engineer's knowledge as Contract administrator or for Owner.
- B. Submit Drawings for information assessing conformance with information given and design concept expressed in Contract Documents.
- C. Data indicating inappropriate or unacceptable Work may be subject to action by Architect/Engineer or Owner.

1.16 CONTRACTOR REVIEW

- A. Review for compliance with Contract Documents and approve submittals before transmitting to Architect/Engineer.
- B. Contractor: Responsible for:
 - 1. Determination and verification of materials including manufacturer's catalog numbers.
 - 2. Determination and verification of field measurements and field construction criteria.
 - 3. Checking and coordinating information in submittal with requirements of Work and of Contract Documents.
 - 4. Determination of accuracy and completeness of dimensions and quantities.
 - 5. Confirmation and coordination of dimensions and field conditions at Site.
 - 6. Construction means, techniques, sequences, and procedures.
 - 7. Safety precautions.
 - 8. Coordination and performance of Work of all trades.
- C. Stamp, sign or initial, and date each submittal to certify compliance with requirements of Contract Documents.
- D. Do not fabricate products or begin Work for which submittals are required until approved submittals have been received from Architect/Engineer.

1.17 ARCHITECT/ENGINEER REVIEW

- A. Do not make "mass submittals" to Architect/Engineer. "Mass submittals" are defined as six or more submittals or items in one day or 15 or more submittals or items in one week. If "mass submittals" are received, Architect/Engineer's review time stated above will be extended as necessary to perform proper review. Architect/Engineer will review "mass submittals" based on priority determined by Architect/Engineer after consultation with Owner and Contractor.
- B. Informational submittals and other similar data are for Architect/Engineer's information, do not require Architect/Engineer's responsive action, and will not be reviewed or returned with comment.
- C. Submittals made by Contractor that are not required by Contract Documents may be returned without action.
- D. Submittal approval does not authorize changes to Contract requirements unless accompanied by Change Order, Architect's Supplemental Instruction or Construction Change Directive.
- E. Owner may withhold monies due to Contractor to cover additional costs beyond the second submittal review.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 33 00

This Page Intentionally Blank

SECTION 01 40 00 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Quality control.
- B. Tolerances.
- C. References.
- D. Labeling.
- E. Mockup requirements.
- F. Testing and inspection services.
- G. Manufacturers' field services.

1.2 QUALITY CONTROL

- A. Monitor quality control over suppliers, manufacturers, products, services, Site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with specified standards as the minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- C. Perform Work using persons qualified to produce required and specified quality.
- D. Products, materials, and equipment may be subject to inspection by Architect/Engineer and Owner at place of manufacture or fabrication. Such inspections shall not relieve Contractor of complying with requirements of Contract Documents.
- E. Supervise performance of Work in such manner and by such means to ensure that Work, whether completed or in progress, will not be subjected to harmful, dangerous, damaging, or otherwise deleterious exposure during construction period.

1.3 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

- B. Comply with manufacturers' recommended tolerances and tolerance requirements in reference standards. When such tolerances conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

1.4 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current as of date for receiving Bids except where specific date is established by code.
- C. Obtain copies of standards and maintain on Site when required by product Specification Sections.
- D. When requirements of indicated reference standards conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- E. Neither contractual relationships, duties, or responsibilities of parties in Contract nor those of Architect/Engineer shall be altered from Contract Documents by mention or inference in reference documents.

1.5 LABELING

- A. Attach label from agency approved by authorities having jurisdiction for products, assemblies, and systems required to be labeled by applicable code.
- B. Label Information: Include manufacturer's or fabricator's identification, approved agency identification, and the following information, as applicable, on each label:
 - 1. Model number.
 - 2. Serial number.
 - 3. Performance characteristics.
- C. Manufacturer's Nameplates, Trademarks, Logos, and Other Identifying Marks on Products: Not allowed on surfaces exposed to view in public areas, interior or exterior.

1.6 MOCK-UP REQUIREMENTS

- A. Tests will be performed under provisions identified in this Section and identified in individual product Specification Sections.

- B. Assemble and erect specified or indicated items with specified or indicated attachment and anchorage devices, flashings, seals, and finishes.
- C. Accepted mockups shall be comparison standard for remaining Work.
- D. Where mockup has been accepted by Architect/Engineer and is specified in product Specification Sections to be removed, remove mockup and clear area when directed to do so by Architect/Engineer.

1.7 TESTING AND INSPECTION SERVICES

- A. Employ and pay for services of an independent testing agency or laboratory acceptable to Owner to perform specified testing.
 - 1. Before starting Work, submit testing laboratory name, address, and telephone number, and names of full-time Professional Engineer or specialist and responsible officer.
 - 2. Submit copy of report of laboratory facilities' inspection made by Materials Reference Laboratory of National Bureau of Standards during most recent inspection, with memorandum of remedies of deficiencies reported by inspection.
- B. Independent firm will perform tests, inspections, and other services specified in individual Specification Sections and as required by Architect/Engineer or authorities having jurisdiction.
 - 1. Laboratory: Authorized to operate in the project's jurisdiction.
 - 2. Laboratory Staff: Maintain full-time Professional Engineer on staff to review services.
 - 3. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to National Bureau of Standards or accepted values of natural physical constants.
- C. Testing, inspections, and source quality control may occur on or off Project Site. Perform off-Site testing as required by Architect/Engineer or Owner.
- D. Reports shall be submitted by independent firm to Architect/Engineer, Contractor, and authorities having jurisdiction, indicating observations and results of tests and compliance or noncompliance with Contract Documents.
 - 1. Submit final report indicating correction of Work previously reported as noncompliant.
- E. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.
 - 1. Notify Architect/Engineer and independent firm 48 hours before expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional Samples and tests required for Contractor's use.

- F. Employment of testing agency or laboratory shall not relieve Contractor of obligation to perform Work according to requirements of Contract Documents.
- G. Retesting or re-inspection required because of nonconformance with specified or indicated requirements shall be performed by same independent firm on instructions from Architect/Engineer. Payment for retesting or re-inspection will be charged to Contractor by deducting testing charges from Contract Sum/Price.
- H. Agency Responsibilities:
 - 1. Test Samples of mixes submitted by Contractor.
 - 2. Provide qualified personnel at Site. Cooperate with Architect/Engineer and Contractor in performance of services.
 - 3. Perform indicated sampling and testing of products according to specified standards.
 - 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 5. Promptly notify Architect/Engineer and Contractor of observed irregularities or nonconformance of Work or products.
 - 6. Perform additional tests required by Architect/Engineer.
 - 7. Attend preconstruction meetings and progress meetings.
- I. Agency Reports: After each test, promptly submit two copies of report to Architect/Engineer, Contractor, and authorities having jurisdiction. When requested by Architect/Engineer, provide interpretation of test results. Include the following:
 - 1. Date issued.
 - 2. Project title and number.
 - 3. Name of inspector.
 - 4. Date and time of sampling or inspection.
 - 5. Identification of product and Specification Section.
 - 6. Location in Project.
 - 7. Type of inspection or test.
 - 8. Date of test.
 - 9. Results of tests.
 - 10. Conformance with Contract Documents.
- J. Limits on Testing Authority:
 - 1. Agency or laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency or laboratory may not approve or accept any portion of the Work.
 - 3. Agency or laboratory may not assume duties of Contractor.
 - 4. Agency or laboratory has no authority to stop the Work.

1.8 MANUFACTURER'S FIELD SERVICES

- A. When specified in individual Specification Sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe Site conditions, conditions of surfaces and installation, quality of workmanship, as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Architect/Engineer 30 days in advance of required observations. Observer is subject to approval of Architect/Engineer.
- C. Report observations and Site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturer's written instructions.
- D. Refer to Section 01 33 00 - Submittal Procedures, "Manufacturer's Field Reports" Article.

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

1.1 SECTION INCLUDES

- A. Temporary facilities under Construction Management Agreement.
- B. Temporary Utilities:
 - 1. Temporary electricity.
 - 2. Temporary lighting for construction purposes.
 - 3. Temporary heating.
 - 4. Temporary cooling.
 - 5. Temporary ventilation.
 - 6. Communication services.
 - 7. Temporary water service.
 - 8. Temporary sanitary facilities.
- C. Construction Facilities:
 - 1. Field offices and sheds.
 - 2. Vehicular access.
 - 3. Parking.
 - 4. Progress cleaning and waste removal.
 - 5. Project identification.
 - 6. Traffic regulation.
 - 7. Fire-prevention facilities.
- D. Temporary Controls:
 - 1. Barriers.
 - 2. Enclosures and fencing.
 - 3. Security.
 - 4. Water control.
 - 5. Dust control.
 - 6. Erosion and sediment control.
 - 7. Noise control.
 - 8. Pest and rodent control.
 - 9. Pollution control.
- E. Removal of utilities, facilities, and controls.

1.2 REFERENCES

- A. ASTM International:
 - 1. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

2. ASTM E 90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
3. ASTM E 119 - Standard Test Methods for Fire Tests of Building Construction and Materials.

1.3 TEMPORARY ELECTRICITY

- A. Owner will pay cost of energy used. Exercise measures to conserve energy. Use Owner's existing power service.
- B. Complement existing power service capacity and characteristics as required for construction operations.
- C. Provide power outlets with branch wiring and distribution boxes located as required for construction operations. Provide suitable, flexible power cords as required for portable construction tools and equipment.
- D. Provide feeder switch at source distribution equipment.
- E. Permanent convenience receptacles may be used during construction.

1.4 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES

- A. Provide and maintain lighting for construction operations to achieve minimum lighting level of 2 watts/sq. ft.
- B. Provide and maintain 0.25 watt/sq. ft. HID lighting to interior work areas after dark for security purposes.
- C. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, lamps, and the like, for specified lighting levels.
- D. Maintain lighting and provide routine repairs.
- E. Permanent building lighting may be used during construction.

1.5 TEMPORARY HEATING

- A. Provide and pay for heating devices and heat as needed to maintain specified conditions for construction operations. Provide separate metering and reimburse Owner for cost of energy used.
- B. Enclose building before activating temporary heat according to "Enclosures and Fencing" Article in this Section.

- C. Before operating permanent equipment for temporary heating purposes, verify installation is approved for operation, equipment is lubricated, and filters are in place. Provide and pay for operation, maintenance, and regular replacement of filters and worn or consumed parts. Replace filters at Substantial Completion.
- D. Maintain minimum ambient temperature of 50 degrees F in areas not occupied by the owner where construction is in progress unless indicated otherwise in individual product Sections.
- E. Maintain minimum ambient temperature of 68 degrees F in areas occupied by the owner where construction is in progress unless indicated otherwise in individual product Sections.

1.6 TEMPORARY COOLING

- A. Provide and pay for cooling devices and cooling as needed to maintain specified conditions for construction operations. Provide separate metering and reimburse Owner for cost of energy used.
- B. Enclose building before activating temporary cooling according to "Enclosures and Fencing" Article in this Section.
- C. Before operating permanent equipment for temporary cooling purposes, verify installation is approved for operation, equipment is lubricated, and filters are in place. Provide and pay for operation, maintenance, and regular replacement of filters and worn or consumed parts. Replace filters at Substantial Completion.
- D. Limit maximum ambient temperature to 80 degrees F in areas where construction is in progress unless indicated otherwise in individual product Sections.

1.7 TEMPORARY VENTILATION

- A. Ventilate enclosed areas to achieve curing of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- B. Use existing ventilation equipment. Extend and supplement equipment with temporary fan units as required to maintain clean air for construction operations.

1.8 COMMUNICATION SERVICES

- A. Telephone Service: Provide, maintain, and pay for telephone service to field office at time of Project mobilization and until completion of Work.
- B. Facsimile Service: Provide, maintain, and pay for facsimile service including dedicated telephone line to field office at time of Project mobilization and until completion of Work.

- C. Internet Service: Provide, maintain, and pay for broadband Internet service to field office at time of Project mobilization. Provide desktop computer with Microsoft operating system and appropriate office function software, modem, and printer.

1.9 TEMPORARY WATER SERVICE

- A. Owner will pay cost of temporary water. Exercise measures to conserve energy. Use Owner's existing water system, extended and supplemented with temporary devices as needed to maintain specified conditions for construction operations.
- B. Extend branch piping with outlets located so that water is available by hoses with threaded connections. Provide temporary pipe insulation and heat tape to prevent freezing.

1.10 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Existing facility use is not permitted. Provide facilities at time of Project mobilization.

1.11 FIELD OFFICES AND SHEDS

- A. Designated existing spaces may be used for field offices. Coordinate locations with Owner.
- B. Storage Areas and Sheds: Size to storage requirements for products of individual Sections, allowing for access and orderly provision for maintenance and inspection of products to suit requirements in Section 01 60 00 - Product Requirements.
- C. Preparation: Fill and grade Sites for temporary structures sloped for drainage away from buildings.
- D. Installation:
 - 1. Install field office spaces ready for occupancy 15 days after date established by Owner-Contractor Agreement.
 - 2. Employee Residential Occupancy: Not allowed on Owner's property.
- E. Maintenance and Cleaning:
 - 1. Weekly janitorial services for field offices; periodic cleaning and maintenance for sheds and storage areas.
 - 2. Maintain walks free of mud, water, snow, and the like.
- F. Removal: At completion of Work remove buildings, foundations, utility services, and debris. Restore areas to same or better condition as original condition.

1.12 VEHICULAR ACCESS

- A. Extend and relocate vehicular access as Work progress requires and provide detours as necessary for unimpeded traffic flow.
- B. Provide unimpeded access for emergency vehicles. Maintain 20-foot-wide driveways with turning space between and around combustible materials.
- C. Provide and maintain access to fire hydrants and control valves free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.
- E. Use designated existing on-Site roads for construction traffic.

1.13 PARKING

- A. Arrange for temporary surface parking areas to accommodate construction personnel.
- B. Locate as approved by Owner.
- C. If Site space is not adequate, provide additional off-Site parking.
- D. Use of Owner designated areas of existing on-Site streets and driveways used for construction traffic is permitted. Tracked vehicles are not allowed on paved areas.
- E. Use of Owner designated areas of existing parking facilities used by construction personnel is permitted.
- F. Do not allow heavy vehicles or construction equipment in parking areas.
- G. Do not allow vehicle parking on existing pavement.
- H. Permanent Pavements and Parking Facilities:
 - 1. Avoid traffic loading beyond paving design capacity. Tracked vehicles are not allowed.
- I. Maintenance:
 - 1. Maintain traffic and parking areas in sound condition free of excavated material, construction equipment, products, mud, snow, ice, and the like.
 - 2. Maintain existing paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original condition.
- J. Removal, Repair:
 - 1. Remove temporary materials and construction before Substantial Completion.

2. Remove underground Work and compacted materials to depth of 2 feet fill and grade Site as indicated.
3. Repair existing facilities damaged by use, to original condition.

K. Mud from Site vehicles: Provide means of removing mud from vehicle wheels before entering streets.

1.14 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain Site in clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, before enclosing spaces.
- C. Broom and vacuum clean interior areas before starting surface finishing, and continue cleaning to eliminate dust.
- D. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.15 PROJECT IDENTIFICATION

- A. Project Identification Sign:
 1. **One** painted sign of construction, design, and content shown on Drawings, location designated.
 2. Content:
 - a. Project, title, and name of Owner.
 - b. Names and titles of authorities.
 - c. Names and titles of Architect/Engineer and Consultants.
 - d. Name of Prime Contractor.
 3. Graphic Design, Colors, and Style of Lettering: Designated by Architect/Engineer.
- B. Project Informational Signs:
 1. Painted informational signs of same colors and lettering as Project identification sign or standard products; size lettering for legibility at 100-foot distance.
 2. Provide sign at each field office and storage shed, and provide directional signs to direct traffic into and within Site. Relocate as Work progress requires.
 3. Provide municipal traffic agency directional traffic signs to and within Site.
 4. No other signs are allowed without Owner's permission except those required by law.
- C. Design sign and structure to withstand 60-mph wind velocity.
- D. Sign Painter: Experienced as professional sign painter for minimum of three years.

- E. Finishes, Painting: Adequate to withstand weathering, fading, and chipping for duration of construction.
- F. Show content, layout, lettering, and color.
- G. Sign Materials:
 - 1. Structure and Framing: New wood structurally adequate.
 - 2. Sign Surfaces: Exterior grade plywood with medium-density overlay, minimum of $\frac{3}{4}$ inches thick, standard large sizes to minimize joints.
 - 3. Rough Hardware: Galvanized, aluminum, or brass.
 - 4. Paint and Primers: Exterior quality, two coats; sign background of as selected.
 - 5. Lettering: Exterior quality paint, contrasting colors as selected.
- H. Installation:
 - 1. Install Project identification sign within 15 days after date established by Owner-Contractor Agreement.
 - 2. Erect at Owner designated location.
 - 3. Erect supports and framing on secure foundation, rigidly braced and framed to resist wind loadings.
 - 4. Install sign surface plumb and level, with butt joints. Anchor securely.
 - 5. Paint exposed surfaces of sign, supports, and framing.
- I. Maintenance: Maintain clean signs and supports; repair deterioration and damage.
- J. Removal: Remove signs, framing, supports, and foundations at completion of Project and restore area.

1.16 TRAFFIC REGULATION

- A. Signs, Signals, and Devices:
 - 1. Post-Mounted and Wall-Mounted Traffic Control and Informational Signs: As approved by authorities having jurisdiction.
 - 2. Traffic Cones, Drums, Flares, and Lights: As approved by authorities having jurisdiction.
 - 3. Flag Person Equipment: As required by authorities having jurisdiction.
- B. Flag Persons: Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.
- C. Flares and Lights: Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.
- D. Haul Routes:
 - 1. Consult with authorities having jurisdiction and establish public thoroughfares to be used for haul routes and Site access.
- E. Traffic Signs and Signals:

1. Provide signs at approaches to Site and on Site, at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.
2. Provide, operate, and maintain traffic control signals to direct and maintain orderly flow of traffic in areas under Contractor's control and areas affected by Contractor's operations.
3. Relocate signs and signals as Work progresses, to maintain effective traffic control.

F. Removal:

1. Remove equipment and devices when no longer required.
2. Repair damage caused by installation.
3. Remove post settings to depth of 2'-0".

1.17 FIRE-PREVENTION FACILITIES

- A. Prohibit smoking within buildings under construction and demolition. Designate area on Site where smoking is permitted. Provide approved ashtrays in designated smoking areas.
- B. Establish fire watch for cutting, welding, and other hazardous operations capable of starting fires. Maintain fire watch before, during, and after hazardous operations until threat of fire does not exist.
- C. Portable Fire Extinguishers: NFPA 10; 10-pound capacity, 4A-60B: C UL rating.
 1. Provide one fire extinguisher at each stairway on each floor of buildings under construction and demolition.
 2. Provide minimum of one fire extinguisher in every construction trailer and storage shed.
 3. Provide minimum of one fire extinguisher on roof during roofing operations using heat-producing equipment.

1.18 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to allow for Owner's use of Site, and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by authorities having jurisdiction for public rights-of-way and for public access to existing building.
- C. Tree and Plant Protection: Preserve and protect existing trees and plants designated to remain.

1. Protect areas within drip lines from traffic, parking, storage, dumping, chemically injurious materials and liquids, ponding, and continuous running water.
 2. Provide 6-foot-high barriers around drip line, with access for maintenance.
 3. Replace trees and plants damaged by construction operations.
- D. Protect non-owned vehicular traffic, stored materials, Site, and structures from damage.

1.19 ENCLOSURES AND FENCING

- A. Construction: Commercial-grade chain-link fence.
- B. Provide 6-foot-high fence around construction Site, at locations coordinated with Owner; equip with vehicular and pedestrian gates with locks.
- C. Exterior Enclosures:
1. Provide temporary insulated weathertight closure of exterior openings to accommodate acceptable working conditions and protection for products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual Specification Sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.
- D. Interior Enclosures:
1. Provide temporary partitions and ceilings at locations requested by owner to separate work areas from Owner-occupied areas, to prevent penetration of dust and moisture into Owner-occupied areas, and to prevent damage to existing materials and equipment.
 2. Construction: Framing and gypsum board sheet materials with closed joints and sealed edges at intersections with existing surfaces.
 - a. STC rating of 35 according to ASTM E 90.
 - b. Surface-Burning Characteristics: Maximum 25/450 flame-spread/smoke-developed index when tested according to ASTM E 84.
 - c. Fire-Rated Wall Construction: 2-hour rating.
 - 1) Tested Rating: Determined according to ASTM E 119.
 3. Paint surfaces exposed to view from Owner-occupied areas.

1.20 SECURITY

- A. Security Program:
1. Protect Work on existing premises and Owner's operations from theft, vandalism, and unauthorized entry.

2. Initiate program in coordination with Owner's existing security system at Project mobilization.
 3. Maintain program throughout construction period until Owner's acceptance precludes need for Contractor's security.
- B. Entry Control:
1. Restrict entrance of persons and vehicles to Project Site and existing facilities.
 2. Allow entrance only to authorized persons with proper identification.
 3. Maintain log of workers and visitors and make available to Owner on request.
 4. Coordinate access of Owner's personnel to Site in coordination with Owner's security forces.
- C. Personnel Identification:
1. Provide identification badge for each person authorized to enter premises.
 2. Badge to Include: Personal photograph, name, expiration date, and employer.
 3. Maintain list of accredited persons and submit copy to Owner on request.
 4. Require return of badges at expiration of employment on the Work.
- D. Restrictions:
1. Do not allow cameras on Site or photographs taken except by written approval of Owner.
 2. All Contractors, Subcontractors, and individuals requiring access to the site are subject to a background check and prior approval of the Owner.
 3. Do no work on days indicated in Owner-Contractor Agreement.
- 1.21 WATER CONTROL
- A. Grade Site to drain. Maintain excavations free of water. Provide, operate, and maintain necessary pumping equipment.
 - B. Protect Site from puddles or running water.
- 1.22 DUST CONTROL
- A. Execute Work by methods that minimize raising dust from construction operations.
 - B. Provide positive means to prevent airborne dust from dispersing into atmosphere and into Owner-occupied areas.
- 1.23 PEST AND RODENT CONTROL
- A. Provide methods, means, and facilities to prevent pests and insects from damaging the Work or entering facility.

- B. Provide methods, means, and facilities to prevent rodents from accessing or invading premises.

1.24 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, and materials before Final Application for Payment inspection.
- B. Remove underground installations to minimum depth of 2'-0".
- C. Clean and repair damage caused by installation or use of temporary Work.
- D. Restore existing and permanent facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 01 50 00

This Page Intentionally Blank

SECTION 01 60 00 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Products.
- B. Product delivery requirements.
- C. Product storage and handling requirements.
- D. Product options.
- E. Equipment electrical characteristics and components.

1.2 PRODUCTS

- A. At minimum, comply with specified requirements and reference standards.
- B. Specified products define standard of quality, type, function, dimension, appearance, and performance required.
- C. Furnish products of qualified manufacturers that are suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise. Confirm that manufacturer's production capacity can provide sufficient product, on time, to meet Project requirements.
- D. Do not use materials and equipment removed from existing premises except as specifically permitted by Contract Documents.
- E. Furnish interchangeable components from same manufacturer for components being replaced.

1.3 PRODUCT DELIVERY REQUIREMENTS

- A. Transport and handle products according to manufacturer's instructions.
- B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.

- C. Provide equipment and personnel to handle products; use methods to prevent soiling, disfigurement, or damage.

1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

- A. Store and protect products according to manufacturer's instructions.
- B. Store products with seals and labels intact and legible.
- C. Store sensitive products in weathertight, climate-controlled enclosures in an environment suitable to product.
- D. For exterior storage of fabricated products, place products on sloped supports aboveground.
- E. Provide off-Site storage and protection when Site does not permit on-Site storage or protection.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.
- H. Provide equipment and personnel to store products; use methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.5 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Products complying with specified reference standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of one of manufacturers named and complying with Specifications; no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit Request for Substitution for any manufacturer not named, according to Section 01 25 00 - Substitution Procedures.

PART 2 - PRODUCTS

2.1 EQUIPMENT ELECTRICAL CHARACTERISTICS AND COMPONENTS

- A. Wiring Terminations: Furnish terminal lugs to match branch circuit conductor quantities, sizes, and materials indicated. Include lugs for terminal box.
- B. Cord and Plug: Furnish minimum 6-foot long cord and plug including grounding connector for connection to electric wiring system. Cord of longer length may be specified in individual Specification Sections.

PART 3 - EXECUTION - Not Used

END OF SECTION 01 60 00

This Page Intentionally Blank

SECTION 01 70 00 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Field engineering.
- B. Closeout procedures.
- C. Starting of systems.
- D. Demonstration and instructions.
- E. Testing, adjusting, and balancing.
- F. Project record documents.
- G. Operation and maintenance data.
- H. Manual for materials and finishes.
- I. Manual for equipment and systems.
- J. Spare parts and maintenance products.
- K. Product warranties and product bonds.
- L. Maintenance service.
- M. Examination.
- N. Preparation.
- O. Execution.
- P. Cutting and patching.
- Q. Protecting installed construction.
- R. Final cleaning.

1.2 CLOSEOUT PROCEDURES

- A. Prerequisites to Substantial Completion: Complete following items before requesting Certification of Substantial Completion, either for entire Work or for portions of Work:
1. Submit maintenance manuals, Project record documents, digital images of construction photographs, and other similar final record data in compliance with this Section.
 2. Complete facility startup, testing, adjusting, balancing of systems and equipment, demonstrations, and instructions to Owner's operating and maintenance personnel as specified in compliance with this Section.
 3. Conduct inspection to establish basis for request that Work is substantially complete. Create comprehensive list (initial punch list) indicating items to be completed or corrected, value of incomplete or nonconforming Work, reason for being incomplete, and date of anticipated completion for each item. Include copy of list with request for Certificate of Substantial Completion.
 4. Obtain and submit releases enabling Owner's full, unrestricted use of Project and access to services and utilities. Include certificate of occupancy, operating certificates, and similar releases from authorities having jurisdiction and utility companies.
 5. Deliver tools, spare parts, extra stocks of material, and similar physical items to Owner.
 6. Make final change-over of locks and transmit keys directly to Owner. Advise Owner's personnel of change-over in security provisions.
 7. Discontinue or change over and remove temporary facilities and services from Project Site, along with construction tools, mockups, and similar elements.
 8. Perform final cleaning according to this Section.
- B. Substantial Completion Inspection:
1. When Contractor considers Work to be substantially complete, submit to Architect/Engineer:
 - a. Written certificate that Work, or designated portion, is substantially complete.
 - b. List of items to be completed or corrected (initial punch list).
 2. Within seven days after receipt of request for Substantial Completion, Architect/Engineer will make inspection to determine whether Work or designated portion is substantially complete.
 3. Should Architect/Engineer determine that Work is not substantially complete:
 - a. Architect/Engineer will promptly notify Contractor in writing, stating reasons for its opinion.
 - b. Contractor shall remedy deficiencies in Work and send second written request for Substantial Completion to Architect/Engineer.
 - c. Architect/Engineer will reinspect Work.
 - d. Redo and Inspection of Deficient Work: Repeated until Work passes Architect/Engineer's inspection.

4. When Architect/Engineer finds that Work is substantially complete, Architect/Engineer will:
 - a. Prepare Certificate of Substantial Completion on AIA G704 - Certificate of Substantial Completion, accompanied by Contractor's list of items to be completed or corrected as verified and amended by Architect/Engineer and Owner (final punch list).
 - b. Submit Certificate to Owner and Contractor for their written acceptance of responsibilities assigned to them in Certificate.
 5. After Work is substantially complete, Contractor shall:
 - a. Allow Owner occupancy of Project under provisions stated in Certificate of Substantial Completion.
 - b. Complete Work listed for completion or correction within time period stipulated.
 6. Owner will occupy portions of building as specified in Section 01 10 00 - Summary.
- C. Prerequisites for Final Completion: Complete following items before requesting final acceptance and final payment.
1. When Contractor considers Work to be complete, submit written certification that:
 - a. Contract Documents have been reviewed.
 - b. Work has been examined for compliance with Contract Documents.
 - c. Work has been completed according to Contract Documents.
 - d. Work is completed and ready for final inspection.
 2. Submittals: Submit following:
 - a. Final punch list indicating all items have been completed or corrected.
 - b. Final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
 - c. Specified warranties, workmanship/maintenance bonds, maintenance agreements, and other similar documents.
 - d. Accounting statement for final changes to Contract Sum.
 - e. Contractor's affidavit of payment of debts and claims on AIA G706 - Contractor's Affidavit of Payment of Debts and Claims.
 - f. Contractor affidavit of release of liens on AIA G706A - Contractor's Affidavit of Release of Liens.
 - g. Consent of surety to final payment on AIA G707 - Consent of Surety to Final Payment Form.
 3. Perform final cleaning for Contractor-soiled areas according to this Section.
- D. Final Completion Inspection:
1. Within seven days after receipt of request for final inspection, Architect/Engineer will make inspection to determine whether Work or designated portion is complete.
 2. Should Architect/Engineer consider Work to be incomplete or defective:

- a. Architect/Engineer will promptly notify Contractor in writing, listing incomplete or defective Work.
- b. Contractor shall remedy stated deficiencies and send second written request to Architect/Engineer that Work is complete.
- c. Architect/Engineer will reinspect Work.
- d. Redo and Inspection of Deficient Work: Repeated until Work passes Architect/Engineer's inspection.

1.3 STARTING OF SYSTEMS

- A. Coordinate schedule for startup of various equipment and systems.
- B. Notify Architect/Engineer seven days prior to startup of each item.
- C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions which may cause damage.
- D. Verify that tests, meter readings, and electrical characteristics agree with those required by equipment or system manufacturer.
- E. Verify that wiring and support components for equipment are complete and tested.
- F. Execute startup under supervision of manufacturer's representative or Contractors' personnel according to manufacturer's instructions.
- G. Submit a written report according to Section 01 33 00 - Submittal Procedures that equipment or system has been properly installed and is functioning correctly.

1.4 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- C. Use operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.
- D. Demonstrate startup, operation, control, adjustment, troubleshooting, servicing, maintenance, and shutdown of each item of equipment at agreed time, at equipment location.

- E. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.
- F. Required instruction time for each item of equipment and system is specified in individual Specification Sections.

1.5 TESTING, ADJUSTING, AND BALANCING

- A. Owner will appoint, employ, and pay for services of independent firm to perform testing, adjusting, and balancing.

1.6 PROJECT RECORD DOCUMENTS

- A. Maintain on Site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed Shop Drawings, product data, and Samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record, at each product Section, description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates used.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction as follows:
 - 1. Include Contract modifications such as Addenda, supplementary instructions, change directives, field orders, minor changes in the Work, and change orders.
 - 2. Include locations of concealed elements of the Work.
 - 3. Identify depth of buried utility lines and provide dimensions showing distances from permanent facility components that are parallel to utilities.
 - 4. Dimension ends, corners, and junctions of buried utilities to permanent facility components using triangulation.
 - 5. Identify and locate existing buried or concealed items encountered during Project.
 - 6. Measured depths of foundations in relation to finish floor datum.

7. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 8. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 9. Field changes of dimension and detail.
 10. Details not on original Drawings.
- G. Submit marked-up paper copy documents to Architect/Engineer before Substantial Completion.

1.7 OPERATION AND MAINTENANCE DATA

- A. Submit in PDF composite electronic indexed file.
- B. Submit data bound in 8-1/2 x 11-inch text pages, three D side ring binders with durable plastic covers.
- C. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS," title of Project, and subject matter of binder when multiple binders are required.
- D. Internally subdivide binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- E. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- F. Contents: Prepare table of contents for each volume, with each product or system description identified, typed on white paper, in three parts as follows:
 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, Subcontractors, and major equipment suppliers.
 2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by Specification Section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Include the following:
 - a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.
 - d. Operating instructions.
 - e. Maintenance instructions for equipment and systems.
 - f. Maintenance instructions for finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
 - g. Safety precautions to be taken when operating and maintaining or working near equipment.

3. Part 3: Project documents and certificates, including the following:
 - a. Shop Drawings and product data.
 - b. Air and water balance reports.
 - c. Certificates.
 - d. Originals of warranties.

1.8 MANUAL FOR MATERIALS AND FINISHES

- A. For equipment or component parts of equipment put into service during construction and operated by Owner, submit documents within ten days after acceptance.
- B. Submit one copy of completed volumes before Substantial Completion.
- C. Submit two sets of revised final volumes within ten days after final inspection.
- D. Submit in PDF composite electronic indexed file of final manual within ten days after final inspection.
- E. Building Products, Applied Materials, and Finishes: Include product data, with catalog number, size, composition, and color and texture designations.
- F. 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.
- G. Moisture Protection and Weather Exposed Products: Include product data listing applicable reference standards, chemical composition, and details of installation. Include recommendations for inspections, maintenance, and repair.
- H. Additional Requirements: As specified in individual product Specification Sections.
- I. Include listing in table of contents for design data, with tabbed fly sheet and space for insertion of data.

1.9 MANUAL FOR EQUIPMENT AND SYSTEMS

- A. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit documents within ten days after acceptance.
- B. Submit one copy of completed volumes before Substantial Completion.
- C. Submit two sets of final volumes within ten days after final inspection.
- D. Submit in PDF composite electronic indexed file of final manual within ten days after final inspection.

- E. 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 model number of replaceable parts.
- F. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications; by label machine.
- G. Include color-coded wiring diagrams as installed.
- H. Operating Procedures: Include startup, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shutdown, and emergency instructions. Include summer, winter, and special operating instructions.
- I. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and troubleshooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- J. Include servicing and lubrication schedule and list of lubricants required.
- K. Include manufacturer's printed operation and maintenance instructions.
- L. Include sequence of operation by controls manufacturer.
- M. Include original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- N. Include control diagrams by controls manufacturer as installed.
- O. Include Contractor's coordination drawings with color-coded piping diagrams as installed.
- P. Include charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- Q. Include list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- R. Include test and balancing reports as specified in Section 01 40 00 - Quality Requirements.
- S. Additional Requirements: As specified in individual product Specification Sections.
- T. Include listing in table of contents for design data with tabbed dividers and space for insertion of data.

1.10 SPARE PARTS AND MAINTENANCE PRODUCTS

- A. Furnish spare parts, maintenance, and extra products in quantities specified in individual Specification Sections.
- B. Deliver to Project Site and place in location as directed by Owner; obtain receipt prior to final payment.

1.11 PRODUCT WARRANTIES AND PRODUCT BONDS

- A. Obtain warranties and bonds executed in duplicate by responsible Subcontractors, suppliers, and manufacturers within ten days after completion of applicable item of Work.
- B. Execute and assemble transferable warranty documents and bonds from Subcontractors, suppliers, and manufacturers.
- C. Verify documents are in proper form, contain full information, and are notarized.
- D. Co-execute submittals when required.
- E. Include table of contents and assemble in three D side ring binder with durable plastic cover.
- F. Submit prior to final Application for Payment.
- G. Time of Submittals:
 - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within ten days after acceptance.
 - 2. Make other submittals within ten days after date of Substantial Completion, prior to final Application for Payment.
 - 3. For items of Work for which acceptance is delayed beyond Substantial Completion, submit within ten days after acceptance, listing date of acceptance as beginning of warranty or bond period.

1.12 MAINTENANCE SERVICE

- A. Furnish service and maintenance of components indicated in Specification Sections during warranty period.
- B. Examine system components at frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- C. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by manufacturer of original component.

- D. Do not assign or transfer maintenance service to agent or Subcontractor without prior written consent of Owner.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that existing Site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual Specification Sections.
- D. Verify that utility services are available with correct characteristics and in correct locations.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance according to manufacturer's instructions.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer-required or -recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

3.3 EXECUTION

- A. Comply with manufacturer's installation instructions, performing each step in sequence. Maintain one set of manufacturer's installation instructions at Project Site during installation and until completion of construction.
- B. When manufacturer's installation instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- C. Verify that field measurements are as indicated on approved Shop Drawings or as instructed by manufacturer.
- D. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1. Secure Work true to line and level and within specified tolerances, or if not specified, industry-recognized tolerances.
 2. Physically separate products in place, provide electrical insulation, or provide protective coatings to prevent galvanic action or corrosion between dissimilar metals.
 3. Exposed Joints: Provide uniform joint width and arrange to obtain best visual effect. Refer questionable visual-effect choices to Architect/Engineer for final decision.
- E. Allow for expansion of materials and building movement.
- F. Climatic Conditions and Project Status: Install each unit of Work under conditions to ensure best possible results in coordination with entire Project.
1. Isolate each unit of Work from incompatible Work as necessary to prevent deterioration.
 2. Coordinate enclosure of Work with required inspections and tests to minimize necessity of uncovering Work for those purposes.
- G. Mounting Heights: Where not indicated, mount individual units of Work at industry recognized standard mounting heights for particular application indicated.
1. Refer questionable mounting heights choices to Architect/Engineer for final decision.
 2. Elements Identified as Accessible to Handicapped: Comply with applicable codes and regulations.
- H. Adjust operating products and equipment to ensure smooth and unhindered operation.
- I. Clean and perform maintenance on installed Work as frequently as necessary through remainder of construction period. Lubricate operable components as recommended by manufacturer.
- 3.4 CUTTING AND PATCHING
- A. Employ skilled and experienced installers to perform cutting and patching.
- B. Submit written request in advance of cutting or altering elements affecting:
1. Structural integrity of element.
 2. Integrity of weather-exposed or moisture-resistant elements.
 3. Efficiency, maintenance, or safety of element.
 4. Visual qualities of sight-exposed elements.
 5. Work of Owner or separate contractor.
- C. Execute cutting, fitting, and patching to complete Work and to:
1. Fit the several parts together, to integrate with other Work.
 2. Uncover Work to install or correct ill-timed Work.
 3. Remove and replace defective and nonconforming Work.

4. Remove samples of installed Work for testing.
 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- D. Execute Work by methods to avoid damage to other Work and to provide proper surfaces to receive patching and finishing.
 - E. Cut masonry and concrete materials using masonry saw or core drill.
 - F. Restore Work with new products according to requirements of Contract Documents.
 - G. Fit Work tight to pipes, sleeves, ducts, conduits, and other penetrations through surfaces.
 - H. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
 - I. At penetrations of fire-rated walls, partitions, ceiling, or floor construction, completely seal voids with fire-rated material according to Section 078400 – Firestopping, to full thickness of penetrated element.
 - J. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit.
 - K. Identify hazardous substances or conditions exposed during the Work to Architect/Engineer for decision or remedy.

3.5 PROTECTING INSTALLED CONSTRUCTION

- A. Protect installed Work and provide special protection where specified in individual Specification Sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate Work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Use durable sheet materials to protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from landscaped areas.

3.6 FINAL CLEANING

- A. Execute final cleaning prior to final Project assessment.
 - 1. Employ experienced personnel or professional cleaning firm.
- B. Clean interior and exterior glass and surfaces exposed to view; remove temporary labels, stains, and foreign substances; polish transparent and glossy surfaces.
- C. Clean equipment and fixtures to sanitary condition with appropriate cleaning materials.
- D. Replace filters of operating equipment.
- E. Clean debris from roofs, gutters, downspouts, and drainage systems.
- F. Clean Site; sweep paved areas, rake clean landscaped surfaces.
- G. Remove waste and surplus materials, rubbish, and construction facilities from Site.

END OF SECTION 01 70 00

SECTION 02 41 19 - SELECTIVE BUILDING DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Demolishing designated building equipment and fixtures.
 2. Demolishing designated construction.
 3. Cutting and alterations for completion of the Work.
 4. Removing designated items for reuse and Owner's retention.
 5. Protecting items designated to remain.
 6. Removing demolished materials.

1.2 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Demolition Schedule: Indicate overall schedule and interruptions required for utility and building services.
- C. Shop Drawings:
 1. Indicate demolition and removal sequence.
 2. Indicate location of items designated for reuse and Owner's retention.
 3. Indicate location and construction of temporary work.

1.3 CLOSEOUT SUBMITTALS

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for submittals.
- B. Project Record Documents: Accurately record actual locations of capped utilities, concealed utilities discovered during demolition, and subsurface obstructions.
- C. Operation and Maintenance Data: Submit description of system, inspection data, and parts lists.

1.4 QUALITY ASSURANCE

- A. Conform to applicable code for demolition work, dust control, products requiring electrical disconnection and re-connection.

- B. Conform to applicable code for procedures when hazardous or contaminated materials are discovered.
- C. Obtain required permits from authorities having jurisdiction.
- D. Perform Work in accordance with The City of Roseville standard.
- E. Maintain one copy of each document on site.

1.5 PRE-INSTALLATION MEETINGS

- A. Section 01 30 00 - Administrative Requirements: Pre-installation meeting.
- B. Convene minimum one week prior to commencing work of this section.

1.6 SEQUENCING

- A. Section 01 10 00 - Summary: Requirements for sequencing.
- B. Owner will conduct salvage operations before demolition begins to remove materials Owner chooses to retain.

1.7 SCHEDULING

- A. Section 01 32 16 - Construction Progress Schedule: Requirements for scheduling.
- B. Cooperate with Owner in scheduling noisy operations and waste removal that may impact Owners operation and in adjoining spaces.
- C. Coordinate utility and building service interruptions with Owner.
 - 1. Do not disable or disrupt building fire or life safety systems without three days prior written notice to Owner.
 - 2. Schedule tie-ins to existing systems to minimize disruption.
 - 3. Coordinate Work to ensure fire sprinklers, fire alarms, smoke detectors, emergency lighting, exit signs and other life safety systems remain in full operation in occupied areas.

1.8 PROJECT CONDITIONS

- A. Conduct demolition to minimize interference with adjacent and occupied building areas.
- B. Cease operations immediately if structure appears to be in danger and notify Architect/Engineer. Do not resume operations until directed.

PART 2 - PRODUCTS

2.1 Not Used.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Notify affected utility companies before starting work and comply with their requirements.
- B. Mark location and termination of utilities.
- C. Erect, and maintain temporary barriers and security devices at locations indicated requested by owner, including warning signs and lights, and similar measures, for protection of the public, Owner, and existing improvements indicated to remain.
- D. Layout cuts in post tensioned concrete elements to avoid cutting concrete within 12 inches of any stressing tendon. Notify Architect/Engineer three days in advance of cutting post-tensioned concrete.
- E. Erect and maintain weatherproof closures for exterior openings.
- F. Erect and maintain temporary partitions to prevent spread of dust, odors, and noise to permit continued Owner occupancy.
- G. Prevent movement of structure; provide temporary bracing and shoring required to ensure safety of existing structure.
- H. Provide appropriate temporary signage including signage for exit or building egress.
- I. Do not close or obstruct building egress path.
- J. Do not disable or disrupt building fire or life safety systems without **3** days prior written notice to Owner.

3.2 SALVAGE REQUIREMENTS

- A. Coordinate with Owner to identify building components and equipment required to be removed and delivered to Owner.
- B. Tag components and equipment Owner designates for salvage.
- C. Protect designated salvage items from demolition operations until items can be removed.

- D. Carefully remove building components and equipment indicated to be salvaged.
- E. Disassemble as required to permit removal from building.
- F. Package small and loose parts to avoid loss.
- G. Mark equipment and packaged parts to permit identification and consolidation of components of each salvaged item.
- H. Prepare assembly instructions consistent with disassembled parts. Package assembly instructions in protective envelope and securely attach to each disassembled salvaged item.
- I. Deliver salvaged items to Owner. Obtain signed receipt from Owner.

3.3 DEMOLITION

- A. Conduct demolition to minimize interference with adjacent and occupied building areas.
- B. Maintain protected egress from and access to adjacent existing buildings at all times.
- C. Do not close or obstruct roadways or sidewalks without permits.
- D. Cease operations immediately when structure appears to be in danger and notify Architect/Engineer.
- E. Disconnect and remove utilities within demolition areas.
- F. Cap and identify abandoned utilities at termination points when utility is not completely removed. Annotate Record Drawings indicating location and type of service for capped utilities remaining after demolition.
- G. Demolish in orderly and careful manner. Protect existing improvements, and supporting structural members.
- H. Carefully remove building components indicated to be reused.
 - 1. Disassemble components as required to permit removal.
 - 2. Package small and loose parts to avoid loss.
 - 3. Mark components and packaged parts to permit reinstallation.
 - 4. Store components, protected from construction operations, until reinstalled.
- I. Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.
- J. Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.

K. Remove temporary Work.

END OF SECTION 02 41 19

This Page Intentionally Blank