

JAMES S. JACOBS ARCHITECTS, PLLC
25 WASHINGTON STREET, MONROE, MI 48161

202543

**Building Renovations, Remodeling, & Site
Improvements For:
Monroe Community Credit Union
14 Winchester Street
Monroe, Michigan 48161**

**Monroe Community Credit Union
715 N. Telegraph Road
Monroe, Michigan 48162**

February 2026

Building Renovations, Remodeling, & Site Improvements For:

**Monroe Community Credit Union
14 Winchester Street
Monroe, Michigan 48161**

JSJA Project Number 202543

Owner

**Monroe Community Credit Union
715 North Telegraph Road
Monroe, Michigan 48162
Contact: Kristine Brenner, President/CEO**

Architect

**James S. Jacobs Architects, PLLC
25 Washington Street
Monroe, Michigan 48161
(734) 241-7933
jimj@jsjacobsarch.com**

Set Number: _____

**These Documents have been prepared for Building Renovations, Remodeling, & Site
Improvements For:**

**Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161**

Copyright © 2026

INDEX

INVITATION TO BID & REQUEST FOR PROPOSAL-----	3
INSTRUCTIONS TO BIDDERS - AIA DOCUMENT A701 - 2018-----	13
BID FORM (Including Attachments)-----	6

CONTRACT FOR CONSTRUCTION

AIA DOCUMENT A105 – 2017 STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR -----	20
AIA DOCUMENT A105-2017 SUPPLEMENTARY GENERAL CONDITIONS -----	7

FORMS

DRAWING INDEX-----	1
JSJA DELIVERY OF ELECTRONIC FILES -----	2

NOTE: TWO (2) COPIES OF THE FOLLOWING ARE TO BE SUBMITTED AS THE BID PACKAGE

BIDDER BID PROPOSAL (Including Attachments Listed Below)-----	6
BIDDER STATEMENT OF QUALIFICATIONS-----	1
STATEMENT REGARDING FAMILIAL RELATIONSHIP AFFIDAVIT-----	1

SPECIFICATIONS

SECTION 00 21 13 – INSTRUCTIONS TO BIDDERS -----	1
SECTION 00 22 13 – SUPPLEMENTARY INSTRUCTIONS TO BIDDERS -----	5
SECTION 00 26 00 – PROCUREMENT SUBSTITUTION PROCEDURES -----	2
SECTION 00 31 43 – PERMIT APPLICATION-----	1
SECTION 01 10 00 – SUMMARY -----	4
SECTION 01 21 00 – ALLOWANCES-----	4
SECTION 01 22 00 – UNIT PRICES -----	2
SECTION 01 23 00 – ALTERNATES -----	2
SECTION 01 25 00 – SUBSTITUTION PROCEDURES -----	4
SECTION 01 26 00 – CONTRACT MODIFICATION PROCEDURES -----	3
SECTION 01 29 00 – PAYMENT PROCEDURES -----	4
SECTION 01 31 00 – PROJECT MANAGEMENT AND COORDINATION -----	8
SECTION 01 32 00 – CONSTRUCTION PROGRESS DOCUMENTATION -----	5
SECTION 01 32 33 – PHOTOGRAPHIC DOCUMENTATION -----	2
SECTION 01 33 00 – SUBMITTAL PROCEDURES-----	8
SECTION 01 35 16 – ALTERATION PROJECT PROCEDURES -----	7
SECTION 01 40 00 – QUALITY REQUIREMENTS-----	9
SECTION 01 42 00 – REFERENCES-----	8
SECTION 01 50 00 – TEMPORARY FACILITIES AND CONTROLS-----	9
SECTION 01 60 00 – PRODUCT REQUIREMENTS-----	5
SECTION 01 70 00 – EXECUTION -----	7
SECTION 01 74 13 – PROGRESS CLEANING -----	2
SECTION 01 74 19 – CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL	3
SECTION 01 74 23 – FINAL CLEANING -----	3
SECTION 01 77 00 – CLOSEOUT PROCEDURES -----	6

SECTION 01 78 23 – OPERATION AND MAINTENANCE DATA----- 7

SECTION 01 78 39 – PROJECT RECORD DOCUMENTS ----- 5

SECTION 01 79 00 – DEMONSTRATION AND TRAINING ----- 5

SECTION 02 23 00 – SITE CLEARING ----- 2

SECTION 02 30 00 – EARTHWORK ----- 8

SECTION 02 41 19 – SELECTIVE DEMOLITION ----- 7

SECTION 02 75 10 – CEMENT CONCRETE PAVEMENT----- 10

SECTION 02 92 00 – LAWNS AND GRASSES ----- 6

SECTION 02 93 00 – LANDSCAPING ----- 9

SECTION 03 30 00 – CAST IN PLACE CONCRETE----- 13

SECTION 04 20 00 – UNIT MASONRY ----- 12

Section Inv - Invitation to Bid

PROJECT Building Renovations, Remodeling & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street
Monroe, Michigan 48161

OWNER Monroe Community Credit Union
715 North Telegraph Road
Monroe, Michigan 48162

PROJECT DESCRIPTION

202543 - Site improvements, Renovations & Remodeling for: Monroe Community Credit Union – Winchester Branch

These documents propose the demolition of the northern portion of the building and the drive-through teller canopy complete with the remaining southern portion to undergo extensive building renovations, remodeling, construction of a new drive-through teller canopy, and site improvements for the Monroe Community Credit Union's branch located at 14 Winchester Street, Monroe, Michigan 48161.

The northern portion of the building to be demolished is approximately 2,922 s.f.
All utility disconnects shall be coordinated with Owner and utility companies prior to demolition.

The remaining southern portion is approximately 3,270 s.f. including a small entrance addition plus the drive-through teller canopy that is approximately 1,140 s.f.

In general, the building renovations and remodeling are to include:

- Complete removal and rebuild of drive-thru teller canopy structure
- Brick veneer removal and replacement
- Windows removal and replacement
- Existing flat roof structure to remain with complete removal of the EPDM membrane and under-layment to the decking. Partial parapet wall removal and modification for new truss bearing.
- New wood truss roof and canopy with asphalt shingle roofing
- Lobby renovation to include new offices, new teller line and service counter top
- New electrical service with back-up generator
- Toilet rooms removed and reconfigured
- Removal and replacement of ceiling grids throughout with new LED laying lighting and mechanical diffusers
- Removal and replacement of finishes throughout
- Removal and replacement of interior sheathing on exterior walls
- Removal and replacement of mechanical systems and ductwork
- Removal and replacement of doors and hardware

In general, site improvements are to include:

- Removal and replacement of landscaping and groundcover
- New LED building and pole mounted site lighting to meet the Heritage Corridor District requirements
- Restoration of the area of building demolition to lawn and landscape area
- New concrete patio, walks, and curbing
- New concrete pad and trash enclosure
- New decorative bollards

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- New bike rack
- New concrete wheel stops
- Milling of the asphalt paving to a depth of 1 1/2" and installation of new 1 1/2" MDOT 36a wearing course with performance grade 5828 binder placed to match existing pavement elevations with lot re-stripping

ALTERNATE #1: ADD TO THE PROPOSAL THE COST TO: Provide, design and install an irrigation system to service all lawn and landscape areas and all areas east to the back of the sidewalk.

BUILDING OPERATIONAL HOURS:

Monroe Community Credit Union Winchester Branch:

Monday to Thursday 9:00 AM to 4:30 PM

Friday 9:00 AM to 5:30 PM

Saturday 9:00 AM to 12:00 PM (Drive Thru Only)

PRE-BID CONFERENCE

Bidders are encouraged to attend a Pre-Bid Conference Meeting scheduled for 4:30 PM, Wednesday, March 11, 2026 and Walk-Through conducted by the Architect at the Monroe Community Credit Union Winchester Branch, 14 Winchester Street, Monroe, Michigan 48161 to gain a better understanding and extent of the overall project scope. Bidders are encouraged by the Instructions to Bidders to visit the Monroe Community Credit Union Winchester Branch Site. Appointments can be made by contacting Jen Langenderfer (734) 915-683 jangenderfer@monroecommunitycu.org or Abby Ball (734) 386-1493 aball@monroecommunitycu.org. A Sign In Sheet will be available at the Site.

MISCELLANEOUS PROJECT INFORMATION

All questions, in written form, shall be directed to the office of the Architect, James S. Jacobs Architects, 25 Washington Street, Monroe, Michigan 48161. Phone: (734) 241-7933.

Email: Kris Benson, Project Manager krisb@jsjacobsarch.com and

Cc: Tyler Gedelian tylger@jsjacobsarch.com

RFI'S & BID CONTRACT QUESTIONS

Bidders are encouraged to submit questions to the Architect no later than Wednesday, March 25, 2026.

CONTRACT DOCUMENTS

Contract Documents will be made available for viewing & purchase on the Newfax Website at:

https://www.newfaxcorp.com/bid-projects-and-listings/bidder_listing_main.html on Friday, March 6, 2026 for potential Bidders.

Documents will be available for review at the office of the Architect; James S. Jacobs Architects, PLLC, 25 Washington Street, Monroe, Michigan 48161, (734) 241-7933

BID BOND – Each proposal submitted must be accompanied by a Bond from a Surety Company, **in an amount not less than five (5%) percent of proposal amount.** No other Bid Security will be accepted.

PERFORMANCE BOND – Each successful Bidder will be required to furnish a Performance Bond and Labor and Materials Payment Bond equal to one hundred (100%) percent of the Contract including accepted Alternates, if any, and in accordance with the Contract Conditions. Premium for Bonds shall be included in the Base Bid.

TWO (2) COPIES OF THE FOLLOWING ARE TO BE SUBMITTED AS THE BID PACKAGE

Bidder Bid Proposal

Bidder Statement of Qualifications

Statement Regarding Familial Relationship Affidavit

Building Renovations, Remodeling, & Site Improvements For:

Monroe Community Credit Union

14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

BID PROPOSAL, DELIVERY AND OPENING

Bid Proposals must be submitted in duplicate within a sealed envelope, and on form provided by the Architect.

Envelopes containing Bids shall be sealed and clearly marked “Building Renovations, Remodeling & Site Improvements for Monroe Community Credit Union Winchester Branch Bid” and with the name and return address of the Bidder on the envelope.

Bid proposals will be received at the office of the Architect:

James S. Jacobs Architects, PLLC
25 Washington Street
Monroe, Michigan 48161
Attn. Kristine Brenner, President/CEO

Prior to 4:00 PM Local Time Thursday, April 2, 2026 and opened at a later time.

Proposals delivered after the designated time will not be accepted.

Bidder may withdraw its Bid at any time prior to the scheduled time for opening Bids without penalty.

Owner reserves the right to reject any, part of any, or all Bids and to waive any irregularities in Bidding.

Bid Proposals shall not be withdrawn for a period of 60 days subsequent to opening of Bid.

Upon submission of all required documents, Contractor awarded the Contract shall be issued a Notice to Proceed.

AIA® Document A701® – 2018

Instructions to Bidders

for the following Project:

(Name, location, and detailed description)

202543 - Site Improvements, Renovations & Remodeling for Monroe Community Credit Union - Winchester Branch
14 Winchester Street
Monroe, Michigan 48161

These Documents Propose The Demolition Of The Northern Portion Of The Building And The Drive-Through Teller Canopy Complete With The Remaining Southern Portion To Undergo Extensive Building Renovations, Remodeling, Construction Of A New Drive-Through Teller Canopy, And Site Improvements For The Monroe Community Credit Union's Branch Located At 14 Winchester Street, Monroe, Michigan 48161. The Northern Portion Of The Building To Be Demolished Is Approximately 2,922 S.F. All Utility Disconnects Shall Be Coordinated With Owner And Utility Companies Prior To Demolition. The Remaining Southern Portion Is Approximately 3,270 S.F. Including A Small Entrance Addition Plus The Drive-Through Teller Canopy That Is Approximately 1,140 S.F. In General, The Building Renovations And Remodeling Are To Include: Complete Removal And Rebuild Of Drive-Thru Teller Canopy Structure Brick Veneer Removal And Replacement Windows Removal And Replacement Existing Flat Roof Structure To Remain With Complete Removal Of The Epdm Membrane And Under-Layment To The Decking. Partial Parapet Wall Removal And Modification For New Truss Bearing New Wood Truss Roof And Canopy With Asphalt Shingle Roofing Lobby Renovation To Include New Offices, New Teller Line And Service Counter Top New Electrical Service With Back-Up Generator Toilet Rooms Removed And Reconfigured Removal And Replacement Of Ceiling Grids Throughout With New Led Laying Lighting And Mechanical Diffusers Removal And Replacement Of Finishes Throughout Removal And Replacement Of Interior Sheathing On Exterior Walls Removal And Replacement Of Mechanical Systems And Ductwork Removal And Replacement Of Doors And Hardware In General, Site Improvements Are To Include: Removal And Replacement Of Landscaping And Groundcover New Led Building And Pole Mounted Site Lighting To Meet The Heritage Corridor District Requirements Restoration Of The Area Of Building Demolition To Lawn And Landscape Area New Concrete Patio, Walks, And Curbing New Concrete Pad And Trash Enclosure New Decorative Bollards New Bike Rack New Concrete Wheel Stops Milling Of The Asphalt Paving To A Depth Of 1 1/2" And Installation Of New 1 1/2" Mdot 36a Wearing Course With Performance Grade 5828 Binder Placed To Match Existing Pavement Elevations With Lot Re-Stripping Alternate #1 Lawn And Landscape Irrigation System - Contractor To Provide Design And Installation Of An Irrigation System To Service All Lawn And Landscape Areas And All Areas East To The Back Of The Sidewalk.

THE OWNER:

(Name, legal status, address, and other information)

Monroe Community Credit Union
715 N. Telegraph Road
Monroe, MI 48162
734-384-2705

THE ARCHITECT:

(Name, legal status, address, and other information)

ADDITIONS AND DELETIONS:

The author of this document may have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

FEDERAL, STATE, AND LOCAL LAWS MAY IMPOSE REQUIREMENTS ON PUBLIC PROCUREMENT CONTRACTS. CONSULT LOCAL AUTHORITIES OR AN ATTORNEY TO VERIFY REQUIREMENTS APPLICABLE TO THIS PROCUREMENT BEFORE COMPLETING THIS FORM.

It is intended that AIA Document G612™-2017, Owner's Instructions to the Architect, Parts A and B will be completed prior to using this document.

James S. Jacobs Architects, PLLC
25 Washington Street
Monroe, MI 48161-2234
734-241-7933

TABLE OF ARTICLES

- 1 DEFINITIONS
- 2 BIDDER'S REPRESENTATIONS
- 3 BIDDING DOCUMENTS
- 4 BIDDING PROCEDURES
- 5 CONSIDERATION OF BIDS
- 6 POST-BID INFORMATION
- 7 PERFORMANCE BOND AND PAYMENT BOND
- 8 ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS

ARTICLE 1 DEFINITIONS

§ 1.1 Bidding Documents include the Bidding Requirements and the Proposed Contract Documents. The Bidding Requirements consist of the advertisement or invitation to bid, Instructions to Bidders, supplementary instructions to bidders, the bid form, and any other bidding forms. The Proposed Contract Documents consist of the unexecuted form of Agreement between the Owner and Contractor and that Agreement's Exhibits, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, all Addenda, and all other documents enumerated in Article 8 of these Instructions.

§ 1.2 Definitions set forth in the General Conditions of the Contract for Construction, or in other Proposed Contract Documents apply to the Bidding Documents.

§ 1.3 Addenda are written or graphic instruments issued by the Architect, which, by additions, deletions, clarifications, or corrections, modify or interpret the Bidding Documents.

§ 1.4 A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.

§ 1.5 The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents, to which Work may be added or deleted by sums stated in Alternate Bids.

§ 1.6 An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from, or that does not change, the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

§ 1.7 A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, as described in the Bidding Documents.

§ 1.8 A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.

§ 1.9 A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment, or labor for a portion of the Work.

ARTICLE 2 BIDDER'S REPRESENTATIONS

§ 2.1 By submitting a Bid, the Bidder represents that:

- .1 the Bidder has read and understands the Bidding Documents;
- .2 the Bidder understands how the Bidding Documents relate to other portions of the Project, if any, being bid concurrently or presently under construction;
- .3 the Bid complies with the Bidding Documents;
- .4 the Bidder has visited the site, become familiar with local conditions under which the Work is to be performed, and has correlated the Bidder's observations with the requirements of the Proposed Contract Documents;
- .5 the Bid is based upon the materials, equipment, and systems required by the Bidding Documents without exception; and
- .6 the Bidder has read and understands the provisions for liquidated damages, if any, set forth in the form of Agreement between the Owner and Contractor.

ARTICLE 3 BIDDING DOCUMENTS

§ 3.1 Distribution

§ 3.1.1 Bidders shall obtain complete Bidding Documents, as indicated below, from the issuing office designated in the advertisement or invitation to bid, for the deposit sum, if any, stated therein.

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Bidders shall obtain Bidding Documents.)

Bidding Documents shall be made available at the Pre-Bid Conference, from the Office of the Architect, James S. Jacobs Architects, PLLC and for purchase on Newfax's Website.

§ 3.1.2 Any required deposit shall be refunded to Bidders who submit a bona fide Bid and return the paper Bidding Documents in good condition within ten days after receipt of Bids. The cost to replace missing or damaged paper documents will be deducted from the deposit. A Bidder receiving a Contract award may retain the paper Bidding

AIA Document A701 – 2018. Copyright © 1970, 1974, 1978, 1987, 1997 and 2018. All rights reserved. "The American Institute of Architects," "American Institute of Architects," "AIA," the AIA Logo, and "AIA Contract Documents" are trademarks of The American Institute of Architects. This document was produced at 17:46:28 EST on 03/05/2026 under Subscription No.20240023894 which expires on 05/08/2026, is not for resale, is licensed for one-time use only, and may only be used in accordance with the AIA Contract Documents® Terms of Service. To report copyright violations, e-mail docinfo@aiacontracts.com.

User Notes:

(6980bfda34536048b3679e90)

Documents, and the Bidder's deposit will be refunded.

§ 3.1.3 Bidding Documents will not be issued directly to Sub-bidders unless specifically offered in the advertisement or invitation to bid, or in supplementary instructions to bidders.

§ 3.1.4 Bidders shall use complete Bidding Documents in preparing Bids. Neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete Bidding Documents.

§ 3.1.5 The Bidding Documents will be available for the sole purpose of obtaining Bids on the Work. No license or grant of use is conferred by distribution of the Bidding Documents.

§ 3.2 Modification or Interpretation of Bidding Documents

§ 3.2.1 The Bidder shall carefully study the Bidding Documents, shall examine the site and local conditions, and shall notify the Architect of errors, inconsistencies, or ambiguities discovered and request clarification or interpretation pursuant to Section 3.2.2.

§ 3.2.2 Requests for clarification or interpretation of the Bidding Documents shall be submitted by the Bidder in writing and shall be received by the Architect at least seven days prior to the date for receipt of Bids.

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Bidders shall submit requests for clarification and interpretation.)

All questions, in written format, shall be directed to the office of the Architect, James S. Jacobs Architects, PLLC, 25 Washington Street, Monroe, Michigan 48161.

Phone: 734-241-7933

Email: Project Manager: Kris Benson krisb@jsjacobsarch.com

CC: Tyler Gedelian tylerg@jsjacobsarch.com

§ 3.2.3 Modifications and interpretations of the Bidding Documents shall be made by Addendum. Modifications and interpretations of the Bidding Documents made in any other manner shall not be binding, and Bidders shall not rely upon them.

§ 3.3 Substitutions

§ 3.3.1 The materials, products, and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance, and quality to be met by any proposed substitution.

§ 3.3.2 Substitution Process

§ 3.3.2.1 Written requests for substitutions shall be received by the Architect at least ten days prior to the date for receipt of Bids. Requests shall be submitted in the same manner as that established for submitting clarifications and interpretations in Section 3.2.2.

§ 3.3.2.2 Bidders shall submit substitution requests on a Substitution Request Form if one is provided in the Bidding Documents.

§ 3.3.2.3 If a Substitution Request Form is not provided, requests shall include (1) the name of the material or equipment specified in the Bidding Documents; (2) the reason for the requested substitution; (3) a complete description of the proposed substitution including the name of the material or equipment proposed as the substitute, performance and test data, and relevant drawings; and (4) any other information necessary for an evaluation. The request shall include a statement setting forth changes in other materials, equipment, or other portions of the Work, including changes in the work of other contracts or the impact on any Project Certifications (such as LEED), that will result from incorporation of the proposed substitution.

§ 3.3.3 The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

§ 3.3.4 If the Architect approves a proposed substitution prior to receipt of Bids, such approval shall be set forth in an Addendum. Approvals made in any other manner shall not be binding, and Bidders shall not rely upon them.

§ 3.3.5 No substitutions will be considered after the Contract award unless specifically provided for in the Contract

Documents.

§ 3.4 Addenda

§ 3.4.1 Addenda will be transmitted to Bidders known by the issuing office to have received complete Bidding Documents.

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Addenda will be transmitted.)

Addenda shall be emailed to the Bidder Contractors of Record and posted on Newfax's Website.

§ 3.4.2 Addenda will be available where Bidding Documents are on file.

§ 3.4.3 Addenda will be issued no later than four days prior to the date for receipt of Bids, except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.

§ 3.4.4 Prior to submitting a Bid, each Bidder shall ascertain that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid.

ARTICLE 4 BIDDING PROCEDURES

§ 4.1 Preparation of Bids

§ 4.1.1 Bids shall be submitted on the forms included with or identified in the Bidding Documents.

§ 4.1.2 All blanks on the bid form shall be legibly executed. Paper bid forms shall be executed in a non-erasable medium.

§ 4.1.3 Sums shall be expressed in both words and numbers, unless noted otherwise on the bid form. In case of discrepancy, the amount entered in words shall govern.

§ 4.1.4 Edits to entries made on paper bid forms must be initialed by the signer of the Bid.

§ 4.1.5 All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change" or as required by the bid form.

§ 4.1.6 Where two or more Bids for designated portions of the Work have been requested, the Bidder may, without forfeiture of the bid security, state the Bidder's refusal to accept award of less than the combination of Bids stipulated by the Bidder. The Bidder shall neither make additional stipulations on the bid form nor qualify the Bid in any other manner.

§ 4.1.7 Each copy of the Bid shall state the legal name and legal status of the Bidder. As part of the documentation submitted with the Bid, the Bidder shall provide evidence of its legal authority to perform the Work in the jurisdiction where the Project is located. Each copy of the Bid shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further name the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current power of attorney attached, certifying the agent's authority to bind the Bidder.

§ 4.1.8 A Bidder shall incur all costs associated with the preparation of its Bid.

§ 4.2 Bid Security

§ 4.2.1 Each Bid shall be accompanied by the following bid security:

(Insert the form and amount of bid security.)

Each proposal submitted must be accompanied by a Bond from a Surety Company, in an amount not less than five (5%) percent of proposal amount. No other Bid Security will be accepted.

§ 4.2.2 The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and shall, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty. In the event the Owner fails to comply with Section 6.2, the amount of the bid security shall not be forfeited to the Owner.

§ 4.2.3 If a surety bond is required as bid security, it shall be written on AIA Document A310™, Bid Bond, unless otherwise provided in the Bidding Documents. The attorney-in-fact who executes the bond on behalf of the surety shall

affix to the bond a certified and current copy of an acceptable power of attorney. The Bidder shall provide surety bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 4.2.4 The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until (a) the Contract has been executed and bonds, if required, have been furnished; (b) the specified time has elapsed so that Bids may be withdrawn; or (c) all Bids have been rejected. However, if no Contract has been awarded or a Bidder has not been notified of the acceptance of its Bid, a Bidder may, beginning 60 days after the opening of Bids, withdraw its Bid and request the return of its bid security.

§ 4.3 Submission of Bids

§ 4.3.1 A Bidder shall submit its Bid as indicated below:

(Indicate how, such as by website, host site/platform, paper copy, or other method Bidders shall submit their Bid.)

Bid Proposals shall be submitted in duplicate within sealed envelope on Form provided by Architect.

§ 4.3.2 Paper copies of the Bid, the bid security, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, the Bidder's name and address, and, if applicable, the designated portion of the Work for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.

§ 4.3.3 Bids shall be submitted by the date and time and at the place indicated in the invitation to bid. Bids submitted after the date and time for receipt of Bids, or at an incorrect place, will not be accepted.

§ 4.3.4 The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

§ 4.3.5 A Bid submitted by any method other than as provided in this Section 4.3 will not be accepted.

§ 4.4 Modification or Withdrawal of Bid

§ 4.4.1 Prior to the date and time designated for receipt of Bids, a Bidder may submit a new Bid to replace a Bid previously submitted, or withdraw its Bid entirely, by notice to the party designated to receive the Bids. Such notice shall be received and duly recorded by the receiving party on or before the date and time set for receipt of Bids. The receiving party shall verify that replaced or withdrawn Bids are removed from the other submitted Bids and not considered. Notice of submission of a replacement Bid or withdrawal of a Bid shall be worded so as not to reveal the amount of the original Bid.

§ 4.4.2 Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids in the same format as that established in Section 4.3, provided they fully conform with these Instructions to Bidders. Bid security shall be in an amount sufficient for the Bid as resubmitted.

§ 4.4.3 After the date and time designated for receipt of Bids, a Bidder who discovers that it made a clerical error in its Bid shall notify the Architect of such error within two days, or pursuant to a timeframe specified by the law of the jurisdiction where the Project is located, requesting withdrawal of its Bid. Upon providing evidence of such error to the reasonable satisfaction of the Architect, the Bid shall be withdrawn and not resubmitted. If a Bid is withdrawn pursuant to this Section 4.4.3, the bid security will be attended to as follows:

(State the terms and conditions, such as Bid rank, for returning or retaining the bid security.)

ARTICLE 5 CONSIDERATION OF BIDS

§ 5.1 Opening of Bids

If stipulated in an advertisement or invitation to bid, or when otherwise required by law, Bids properly identified and received within the specified time limits will be publicly opened and read aloud. A summary of the Bids may be made available to Bidders.

§ 5.2 Rejection of Bids

Unless otherwise prohibited by law, the Owner shall have the right to reject any or all Bids.

§ 5.3 Acceptance of Bid (Award)

§ 5.3.1 It is the intent of the Owner to award a Contract to the lowest responsive and responsible Bidder, provided the Bid

has been submitted in accordance with the requirements of the Bidding Documents. Unless otherwise prohibited by law, the Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's best interests.

§ 5.3.2 Unless otherwise prohibited by law, the Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the lowest responsive and responsible Bidder on the basis of the sum of the Base Bid and Alternates accepted.

ARTICLE 6 POST-BID INFORMATION

§ 6.1 Contractor's Qualification Statement

Bidders to whom award of a Contract is under consideration shall submit to the Architect, upon request and within the timeframe specified by the Architect, a properly executed AIA Document A305™, Contractor's Qualification Statement, unless such a Statement has been previously required and submitted for this Bid.

§ 6.2 Owner's Financial Capability

A Bidder to whom award of a Contract is under consideration may request in writing, fourteen days prior to the expiration of the time for withdrawal of Bids, that the Owner furnish to the Bidder reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. The Owner shall then furnish such reasonable evidence to the Bidder no later than seven days prior to the expiration of the time for withdrawal of Bids. Unless such reasonable evidence is furnished within the allotted time, the Bidder will not be required to execute the Agreement between the Owner and Contractor.

§ 6.3 Submittals

§ 6.3.1 After notification of selection for the award of the Contract, the Bidder shall, as soon as practicable or as stipulated in the Bidding Documents, submit in writing to the Owner through the Architect:

- .1 a designation of the Work to be performed with the Bidder's own forces;
- .2 names of the principal products and systems proposed for the Work and the manufacturers and suppliers of each; and
- .3 names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.

§ 6.3.2 The Bidder will be required to establish to the satisfaction of the Architect and Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.

§ 6.3.3 Prior to the execution of the Contract, the Architect will notify the Bidder if either the Owner or Architect, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Owner or Architect has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, withdraw the Bid or submit an acceptable substitute person or entity. The Bidder may also submit any required adjustment in the Base Bid or Alternate Bid to account for the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder. In the event of either withdrawal or disqualification, bid security will not be forfeited.

§ 6.3.4 Persons and entities proposed by the Bidder and to whom the Owner and Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and Architect.

ARTICLE 7 PERFORMANCE BOND AND PAYMENT BOND

§ 7.1 Bond Requirements

§ 7.1.1 If stipulated in the Bidding Documents, the Bidder shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder.

§ 7.1.2 If the furnishing of such bonds is stipulated in the Bidding Documents, the cost shall be included in the Bid. If the furnishing of such bonds is required after receipt of bids and before execution of the Contract, the cost of such bonds shall be added to the Bid in determining the Contract Sum.

§ 7.1.3 The Bidder shall provide surety bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 7.1.4 Unless otherwise indicated below, the Penal Sum of the Payment and Performance Bonds shall be the amount of the Contract Sum.

(If Payment or Performance Bonds are to be in an amount other than 100% of the Contract Sum, indicate the dollar amount or percentage of the Contract Sum.)

Payment and Performance Bonds are to be in an amount of 100% of the Contract Sum.

§ 7.2 Time of Delivery and Form of Bonds

§ 7.2.1 The Bidder shall deliver the required bonds to the Owner not later than three days following the date of execution of the Contract. If the Work is to commence sooner in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Section 7.2.1.

§ 7.2.2 Unless otherwise provided, the bonds shall be written on AIA Document A312, Performance Bond and Payment Bond.

§ 7.2.3 The bonds shall be dated on or after the date of the Contract.

§ 7.2.4 The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix to the bond a certified and current copy of the power of attorney.

ARTICLE 8 ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS

§ 8.1 Copies of the proposed Contract Documents have been made available to the Bidder and consist of the following documents:

.1

)

AIA Document A105-2017 Standard Form of Agreement Between Owner and Contractor & Supplementary Conditions

.2

.3

.4

.5 Drawings

Number

Detailed in the Project Manual

Title

Date

.6 Specifications

Section

Detailed in the Project Manual

Title

Date

Pages

.7 Addenda:

Number

To be posted on Bidders Proposal

Date

Pages

.8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

[] AIA Document E204™–2017, Sustainable Projects Exhibit, dated as indicated below:
(Insert the date of the E204-2017.)

[] The Sustainability Plan:

Title	Date	Pages
-------	------	-------

[X] Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages
Supplementary General Conditions for AIA A105-2017 Agreement	Section SC - Supplementary General Conditions	February 2026	7 pages

- .9 Other documents listed below:
(List here any additional documents that are intended to form part of the Proposed Contract Documents.)

Bid Project Manual Dated February 2026
AIA Document A105-2017 Standard Form of Agreement Between Owner and Contractor &
Supplementary Conditions

Additions and Deletions Report for AIA® Document A701® – 2018

This Additions and Deletions Report, as defined on page 1 of the associated document, reproduces below all text the author has added to the standard form AIA document in order to complete it, as well as any text the author may have added to or deleted from the original AIA text. Added text is shown underlined. Deleted text is indicated with a horizontal line through the original AIA text.

Note: This Additions and Deletions Report is provided for information purposes only and is not incorporated into or constitute any part of the associated AIA document. This Additions and Deletions Report and its associated document were generated simultaneously by AIA software at 17:46:28 EST on 03/05/2026.

Changes to original AIA text

PAGE 8

- .1 ~~AIA Document A101™ 2017, Standard Form of Agreement Between Owner and Contractor, unless otherwise stated below.
(Insert the complete AIA Document number, including year, and Document title.)~~
- .2 ~~AIA Document A101™ 2017, Exhibit A, Insurance and Bonds, unless otherwise stated below.
(Insert the complete AIA Document number, including year, and Document title.)~~
- .3 ~~AIA Document A201™ 2017, General Conditions of the Contract for Construction, unless otherwise stated below.
(Insert the complete AIA Document number, including year, and Document title.)~~
- .4 ~~Building Information Modeling Exhibit, if completed:~~

Number	Title	Date
<u>Detailed in the Project Manual</u>		

Section	Title	Date	Pages
<u>Detailed in the Project Manual</u>			

Number	Date	Pages
<u>To be posted on Bidders Proposal</u>		

PAGE 9

Document	Title	Date	Pages
<u>Supplementary General Conditions for AIA A105-2017 Agreement</u>	<u>Section SC - Supplementary General Conditions</u>	<u>February 2026</u>	<u>7 pages</u>

Variable Information

PAGE 1

202543 - Site Improvements, Renovations & Remodeling for Monroe Community Credit Union - Winchester Branch

14 Winchester Street
Monroe, Michigan 48161

Additions and Deletions Report for AIA Document A701 – 2018. Copyright © 1970, 1974, 1978, 1987, 1997 and 2018. All rights reserved. "The American Institute of Architects," "American Institute of Architects," "AIA," the AIA Logo, and "AIA Contract Documents" are trademarks of The American Institute of Architects. This document was produced at 17:46:28 EST on 03/05/2026 under Subscription No.20240023894 which expires on 05/08/2026, is not for resale, is licensed for one-time use only, and may only be used in accordance with the AIA Contract Documents® Terms of Service. To report copyright violations, e-mail docinfo@aiacontracts.com.

User Notes:

(6980bfda34536048b3679e90)

These Documents Propose The Demolition Of The Northern Portion Of The Building And The Drive-Through Teller Canopy Complete With The Remaining Southern Portion To Undergo Extensive Building Renovations, Remodeling, Construction Of A New Drive-Through Teller Canopy, And Site Improvements For The Monroe Community Credit Union's Branch Located At 14 Winchester Street, Monroe, Michigan 48161. The Northern Portion Of The Building To Be Demolished Is Approximately 2,922 S.F. All Utility Disconnects Shall Be Coordinated With Owner And Utility Companies Prior To Demolition. The Remaining Southern Portion Is Approximately 3,270 S.F. Including A Small Entrance Addition Plus The Drive-Through Teller Canopy That Is Approximately 1,140 S.F. In General, The Building Renovations And Remodeling Are To Include: Complete Removal And Rebuild Of Drive-Thru Teller Canopy Structure Brick Veneer Removal And Replacement Windows Removal And Replacement Existing Flat Roof Structure To Remain With Complete Removal Of The Epdm Membrane And Under-Layment To The Decking. Partial Parapet Wall Removal And Modification For New Truss Bearing New Wood Truss Roof And Canopy With Asphalt Shingle Roofing Lobby Renovation To Include New Offices, New Teller Line And Service Counter Top New Electrical Service With Back-Up Generator Toilet Rooms Removed And Reconfigured Removal And Replacement Of Ceiling Grids Throughout With New Led Laying Lighting And Mechanical Diffusers Removal And Replacement Of Finishes Throughout Removal And Replacement Of Interior Sheathing On Exterior Walls Removal And Replacement Of Mechanical Systems And Ductwork Removal And Replacement Of Doors And Hardware In General. Site Improvements Are To Include: Removal And Replacement Of Landscaping And Groundcover New Led Building And Pole Mounted Site Lighting To Meet The Heritage Corridor District Requirements Restoration Of The Area Of Building Demolition To Lawn And Landscape Area New Concrete Patio, Walks, And Curbing New Concrete Pad And Trash Enclosure New Decorative Bollards New Bike Rack New Concrete Wheel Stops Milling Of The Asphalt Paving To A Depth Of 1 1/2" And Installation Of New 1 1/2" Mdot 36a Wearing Course With Performance Grade 5828 Binder Placed To Match Existing Pavement Elevations With Lot Re-Stripping Alternate #1 Lawn And Landscape Irrigation System - Contractor To Provide Design And Installation Of An Irrigation System To Service All Lawn And Landscape Areas And All Areas East To The Back Of The Sidewalk.

Monroe Community Credit Union

715 N. Telegraph Road
Monroe, MI 48162

734-384-2705

PAGE 2

James S. Jacobs Architects, PLLC

25 Washington Street
Monroe, MI 48161-2234

734-241-7933

PAGE 3

Bidding Documents shall be made available at the Pre-Bid Conference, from the Office of the Architect, James S. Jacobs Architects, PLLC and for purchase on Newfax's Website.

PAGE 4

All questions, in written format, shall be directed to the office of the Architect, James S. Jacobs Architects, PLLC, 25 Washington Street, Monroe, Michigan 48161.

Phone: 734-241-7933

Email: Project Manager: Kris Benson krisb@jsjacobsarch.com

CC: Tyler Gedelian tylerg@jsjacobsarch.com

PAGE 5

Additions and Deletions Report for AIA Document A701 – 2018. Copyright © 1970, 1974, 1978, 1987, 1997 and 2018. All rights reserved. "The American Institute of Architects," "American Institute of Architects," "AIA," the AIA Logo, and "AIA Contract Documents" are trademarks of The American Institute of Architects. This document was produced at 17:46:28 EST on 03/05/2026 under Subscription No.20240023894 which expires on 05/08/2026, is not for resale, is licensed for one-time use only, and may only be used in accordance with the AIA Contract Documents® Terms of Service. To report copyright violations, e-mail docinfo@aiacontracts.com.

User Notes:

(6980bfda34536048b3679e90)

Addenda shall be emailed to the Bidder Contractors of Record and posted on Newfax's Website.

Each proposal submitted must be accompanied by a Bond from a Surety Company, in an amount not less than five (5%) percent of proposal amount. No other Bid Security will be accepted.

PAGE 6

§ 4.2.4 The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until (a) the Contract has been executed and bonds, if required, have been furnished; (b) the specified time has elapsed so that Bids may be withdrawn; or (c) all Bids have been rejected. However, if no Contract has been awarded or a Bidder has not been notified of the acceptance of its Bid, a Bidder may, beginning 60 days after the opening of Bids, withdraw its Bid and request the return of its bid security.

Bid Proposals shall be submitted in duplicate within sealed envelope on Form provided by Architect.

PAGE 8

Payment and Performance Bonds are to be in an amount of 100% of the Contract Sum.

AIA Document A105-2017 Standard Form of Agreement Between Owner and Contractor & Supplementary Conditions

PAGE 9

[☒] Supplementary and other Conditions of the Contract:

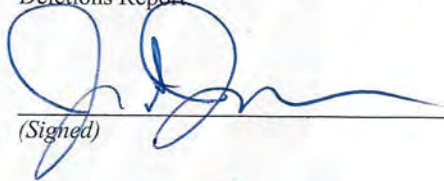
Bid Project Manual Dated February 2026

AIA Document A105-2017 Standard Form of Agreement Between Owner and Contractor & Supplementary Conditions

Certification of Document's Authenticity

AIA® Document D401™ – 2003

I, James S. Jacobs, hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with its associated Additions and Deletions Report and this certification at 17:46:28 EST on 03/05/2026 under Order No. 20240023894 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A701™ - 2018, Instructions to Bidders, other than those additions and deletions shown in the associated Additions and Deletions Report



(Signed)

Principal/Member

(Title)

3/5/2026

(Dated)

Section BF Bid Form

For Receipt Prior To 4:00 PM Local Time Thursday, April 2, 2026 And Will Be Opened At A Later Time.

Bid Proposals will be received at the Office of the Architect

James S. Jacobs Architects, PLLC
25 Washington Street
Monroe, Michigan 48161
Attn. Kristine Brenner, President/CEO

Identified as: Building Renovations, Remodeling, & Site Improvements for:

Monroe Community Credit Union
14 Winchester Street
Monroe, Michigan 48161

Having read the Specifications and examined the Documents entitled Building Renovations, Remodeling, & Site Improvements for:

Monroe Community Credit Union
14 Winchester Street
Monroe, Michigan 48161

And Addenda Numbers _____

Prepared By: James S. Jacobs Architects, PLLC
25 Washington Street
Monroe, Michigan 48161

Having inspected the site and the conditions affecting and governing the construction of said project, the undersigned:

Bidder's Company Name: _____

Date: _____ Telephone No: () _____

Email Address: _____ Fax No: _____

Hereby proposes to furnish all permits, labor, materials, tools, equipment, supervision, and service required for the completion of the work described in the documents for the following sums.

Bidders shall fill in all blanks hereinafter applicable to contract for which bid is being submitted. Write in the sum and figures. In the event of discrepancy, written words shall prevail.

PROPOSAL

GENERAL CONSTRUCTION FOR BUILDING RENOVATIONS, REMODELING & SITE IMPROVEMENTS FOR MONROE COMMUNITY CREDIT UNION: Provide and Install as described in the Invitation to Bid and the Contract Documents.

For The Sum Of _____

_____ Dollars. \$ _____

The Cost of the Performance and Payment Bond included in the Sum above is _____

_____ Dollars. \$ _____

UNIT PRICES: NONE

ALTERNATE #1 - ADD TO THE PROPOSAL THE COST TO: Provide, design and install an irrigation system to service all lawn and landscape areas and all areas east to the back of the sidewalk.

Add to the Proposal the Sum of: _____

_____ Dollars. \$ _____

SUBSTITUTIONS

Bidder is to bid on the "standards" specified, and to enter on the following, all material which the bidder wishes to have considered for possible substitution.

The following substitutions from the "standards" specified are listed herein for consideration, and if accepted, the contract sum may be adjusted in accordance with the following:

Item	Add	Deduct	No Change
A.			
B.			
C.			

CONTRACT

The undersigned agrees that above prices shall hold for 60 days after receipt of proposals, to accept provisions of the "Instructions to Bidders" and to comply with all requirements of the Contract Documents.

TIME OF STARTING WORK

The Contractor shall commence work as directed by the Monroe Community Credit Union with fully executed Contract with General Contractor for Award of Contract. Contractor shall also carry on his operations in such a manner as to cause the least delay in the execution of the Work.

CONTRACTOR'S WORK TIME

Hours of Work by the General Contractor/Sub-Contractor(s): No restrictions; Contractor to provide schedule to Owner, Architect, and comply with all local ordinances and laws.

TIME OF COMPLETION

The undersigned warrants that "Substantial Completion of the Work" as defined by the Construction Documents, shall be achieved no later than _____ calendar days from the date of award of contract. A range of days is acceptable.

BID BOND

Each proposal submitted must be accompanied by a Bond from a Surety Company, **in an amount not less than five (5%) percent of proposal amount.** No other Bid Security will be accepted.

PERFORMANCE BOND

Each successful Bidder will be required to furnish a Performance Bond and Labor and Materials Payment Bond equal to one hundred (100%) percent of the Contract including accepted Alternates, if any, and in accordance with the Contract Conditions. Premium for Bonds shall be included in the Base Bid.

WITHDRAWAL OF PROPOSAL

It is understood that this proposal may be withdrawn prior to scheduled opening date or postponement thereof.

BIDDER IS TO INCLUDE THE FOLLOWING DOCUMENTS WITH THE BID FORM

Bidder Statement of Qualifications

Familial Relationship Disclosure Statement

BID BOND

The undersigned hereby confirms that a 5% Bid Bond is enclosed.

SUBMITTED BY:

Company Name: _____

Address: _____

Signed: _____

Typed Signature Title

Proposal Form shall be filled out in true duplicate. If bidder is Corporation, indicate State of Incorporation, if Partnership, give full names of partners.

End Section BF - Bid Form

BIDDER STATEMENT OF QUALIFICATIONS

Company Name: _____

Company Address: _____

Telephone Number: _____

Fax Number: _____

Contact Name: _____

Contact Title: _____

Number of Years in business: _____

Contact Email: _____

Client Data (Reference #1)

Description of Service

Client Data#1: _____

Address: _____

Contact Name: _____

Contact Phone: _____

Contact Email: _____

Client Data (Reference #2)

Description of Service

Client Data#1: _____

Address: _____

Contact Name: _____

Contact Phone: _____

Contact Email: _____

Client Data (Reference #3)

Description of Service

Client Data#1: _____

Address: _____

Contact Name: _____

Contact Phone: _____

Contact Email: _____

STATEMENT REGARDING FAMILIAL RELATIONSHIP

AFFIDAVIT OF _____
(Insert Name of Affiant)

STATE OF MICHIGAN)
)ss
COUNTY OF _____)

_____ makes this Affidavit under oath and states as follows:
(Insert Name of Affiant)

1. I am a/the: ☐ President
 ☐ Vice-President
 ☐ Chief Executive Officer
 ☐ Member
 ☐ Partner Owner
 ☐ Other (please specify) _____
 ☐

of _____, a Bidder on a Construction Project for
(Insert name of Contractor)

Monroe Community Credit Union that involves, at least in part, **Building Renovations, Remodeling, & Site Improvements for Monroe Community Credit Union Project** for **Monroe Community Credit Union**.

2. I have personal knowledge and/or I have personally verified that the following are all of the familial relationships existing between the Owner(s) and the Employee(s) of the aforementioned Contractor and **Monroe Community Credit Union**: (leave blank if none)

3. I have authority to bind the aforementioned Contractor with the representations contained herein, and I am fully aware that the **Monroe Community Credit Union** will rely on my representations in evaluating Bids for the Construction Project.
4. I declare the above information to be true to the best of my knowledge, information and belief. I could completely and accurately testify regarding the information contained in this Affidavit if requested to do so.

(Signature of Affiant)

Dated: _____

Subscribed and sworn before me in _____ County,

Michigan, on the _____ day of _____, 202__.

_____ (signature)

_____ (printed)

Notary public, State of Michigan, County of _____

My Commission expires on _____

Acting in the County of _____

AIA® Document A105® – 2017

Standard Short Form of Agreement Between Owner and Contractor

AGREEMENT made as of the Twenty-seventh day of February in the year Two Thousand Twenty-Six
(*In words, indicate day, month and year.*)

BETWEEN the Owner:
(*Name, legal status, address and other information*)

Monroe Community Credit Union
715 N. Telegraph Road
Monroe, MI 48162
734-384-2705

and the Contractor:
(*Name, legal status, address and other information*)

for the following Project:
(*Name, location and detailed description*)

202543 - Site Improvements, Renovations & Remodeling for Monroe Community Credit Union - Winchester Branch
14 Winchester Street
Monroe, Michigan 48161
These Documents Propose The Demolition Of The Northern Portion Of The Building And The Drive-Through Teller Canopy Complete With The Remaining Southern Portion To Undergo Extensive Building Renovations, Remodeling, Construction Of A New Drive-Through Teller Canopy, And Site Improvements For The Monroe Community Credit Union's Branch Located At 14 Winchester Street, Monroe, Michigan 48161.

The Northern Portion Of The Building To Be Demolished Is Approximately 2,922 S.F. All Utility Disconnects Shall Be Coordinated With Owner And Utility Companies Prior To Demolition.

The Remaining Southern Portion Is Approximately 3,270 S.F. Including A Small Entrance Addition Plus The Drive-Through Teller Canopy That Is Approximately 1,140 S.F.

In General, The Building Renovations And Remodeling Are To Include: Complete Removal And Rebuild Of Drive-Thru Teller Canopy Structure Brick Veneer Removal And Replacement Windows Removal And Replacement Existing Flat Roof Structure To Remain With Complete Removal Of The Epdm Membrane And Under-Layment To The Decking. Partial Parapet Wall Removal And Modification For New Truss Bearing New Wood Truss Roof And Canopy With Asphalt Shingle Roofing Lobby Renovation To Include New Offices, New Teller Line And Service Counter Top New Electrical Service With Back-Up Generator Toilet Rooms Removed And Reconfigured Removal And Replacement Of Ceiling Grids Throughout With New Led Laying Lighting And Mechanical Diffusers Removal And Replacement Of Finishes Throughout Removal And Replacement Of Interior Sheathing On Exterior Walls Removal And Replacement Of Mechanical Systems And Ductwork Removal And Replacement Of Doors And Hardware

In General, Site Improvements Are To Include:
Removal And Replacement Of Landscaping And Groundcover New LED Building And Pole Mounted Site Lighting To Meet The Heritage Corridor District Requirements Restoration Of The Area Of Building Demolition To Lawn And

ADDITIONS AND DELETIONS:

The author of this document may have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

ELECTRONIC COPYING of any portion of this AIA® Document to another electronic file is prohibited and constitutes a violation of copyright laws as set forth in the footer of this document.

Landscape AreaNew Concrete Patio, Walks, And CurbingNew Concrete Pad And Trash EnclosureNew Decorative
BollardsNew Bike RackNew Concrete Wheel StopsMilling Of The Asphalt Paving To A Depth Of 1 1/2" And
Installation Of New 1 1/2" MDOT 36a Wearing Course With Performance Grade 5828 Binder Placed To Match Existing
Pavement Elevations With Lot Re-Stripping
Alternate #1 Lawn And Landscape Irrigation System - Contractor To Provide Design And Installation Of An Irrigation
System To Service All Lawn And Landscape Areas And All Areas East To The Back Of The Sidewalk.

The Architect:

(Name, legal status, address and other information)

James S. Jacobs Architects, PLLC
25 Washington Street
Monroe, MI 48161-2234
734-241-7933

The Owner and Contractor agree as follows.



TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS
- 2 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
- 3 CONTRACT SUM
- 4 PAYMENTS
- 5 INSURANCE
- 6 GENERAL PROVISIONS
- 7 OWNER
- 8 CONTRACTOR
- 9 ARCHITECT
- 10 CHANGES IN THE WORK
- 11 TIME
- 12 PAYMENTS AND COMPLETION
- 13 PROTECTION OF PERSONS AND PROPERTY
- 14 CORRECTION OF WORK
- 15 MISCELLANEOUS PROVISIONS
- 16 TERMINATION OF THE CONTRACT
- 17 OTHER TERMS AND CONDITIONS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contractor shall complete the Work described in the Contract Documents for the Project. The Contract Documents consist of

- .1 this Agreement signed by the Owner and Contractor;
- .2 the drawings and specifications prepared by the Architect, dated 03-06-2026, Issued for Bids and enumerated as follows:

Drawings: Bid Drawings Issued as Detailed Dated 03-06-2026

Number	Title	Date
<u>Detailed Below</u>	<u>Detailed Below</u>	

Drawing Index

T-1 Title Sheet, General Notes, Location Map, & Code Information

LS-1 Life Safety Plan

Structural

S-1 Foundation Plan

S-2 Structural Details

S-3 Structural Notes

Architectural

A-1 Demolition Floor Plan

A-2 Floor Plan & Wall Legend

A-3 Reflected Ceiling Plan

A-4 South & East Elevations
A-5 North & West Elevations
A-6 Building Sections
A-7 Building & Wall Section & Details
A-8 ITM Building Section, ITM Details & Building Section
A-9 ITM Island Plan & Details
A-10 Enlarged Break Room & Toilet Room Plans & Interior Elevations
A-11 Teller Line Plan, Elevation & Sections
A-12 Room Finish Plan, Room Finish Schedule & Window Elevations
A-13 Door Schedule, Door & Frame Elevations, Head, Jamb & Sill Details
A-14 Roof Plan, Roof Framing Plan & Door Hardware Schedule

Mechanical

M-1 Floor Plan Mechanical Demolition
M-2 Floor Plan Mechanical
M-3 Mechanical Schedules & Details
MP-1 Mechanical Specifications

Electrical

E-0 Electrical Legend & Details
E-1 Panel Riser Electrical
E-2 Site Plan New Work Electrical
E-3 Details Electrical
E-4 Details Electrical
E-5 Demolition Electrical
E-6 Power And Lighting Electrical
E-7 Systems Roughin
E-8 Systems Roughin Details
E-9 Specifications Electrical
E-10 Specifications Electrical

Plumbing

P-1 Demolition Floor Plan Plumbing
P-2 Floor Plan Plumbing - Domestic
P-3 Floor Plan Plumbing - Sanitary
P-4 Plumbing Details

Specifications:

<u>INVITATION TO BID & REQUEST FOR PROPOSAL-----</u>	<u>3</u>
<u>INSTRUCTIONS TO BIDDERS - AIA DOCUMENT A701 - 2018-----</u>	<u>13</u>
<u>BID FORM (Including Attachments)-----</u>	<u>6</u>

CONTRACT FOR CONSTRUCTION

<u>AIA DOCUMENT A105 – 2017 STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR -----</u>	<u>20</u>
<u>AIA Document A105-2017 Supplementary general Conditions -----</u>	<u>7</u>

FORMS

<u>DRAWING INDEX-----</u>	<u>1</u>
<u>JSJA DELIVERY OF ELECTRONIC FILES-----</u>	<u>2</u>

NOTE: TWO (2) COPIES OF THE FOLLOWING ARE TO BE SUBMITTED AS THE BID PACKAGE

<u>BIDDER BID PROPOSAL (Including Attachments Listed Below)-----</u>	<u>6</u>
<u>BIDDER STATEMENT OF QUALIFICATIONS-----</u>	<u>1</u>
<u>STATEMENT REGARDING FAMILIAL RELATIONSHIP AFFIDAVIT-----</u>	<u>1</u>

SPECIFICATIONS

SECTION 00 21 13 – INSTRUCTIONS TO BIDDERS-----	1
SECTION 00 22 13 – SUPPLEMENTARY INSTRUCTIONS TO BIDDERS-----	5
SECTION 00 26 00 – PROCUREMENT SUBSTITUTION PROCEDURES -----	2
SECTION 00 31 43 – PERMIT APPLICATION-----	1
SECTION 01 10 00 – SUMMARY-----	4
SECTION 01 21 00 – ALLOWANCES-----	4
SECTION 01 22 00 – UNIT PRICES-----	2
SECTION 01 23 00 – ALTERNATES-----	2
SECTION 01 25 00 – SUBSTITUTION PROCEDURES-----	4
SECTION 01 26 00 – CONTRACT MODIFICATION PROCEDURES-----	3
SECTION 01 29 00 – PAYMENT PROCEDURES-----	4
SECTION 01 31 00 – PROJECT MANAGEMENT AND COORDINATION-----	8
SECTION 01 32 00 – CONSTRUCTION PROGRESS DOCUMENTATION-----	5
SECTION 01 32 33 – PHOTOGRAPHIC DOCUMENTATION -----	2
SECTION 01 33 00 – SUBMITTAL PROCEDURES-----	8
SECTION 01 35 16 – ALTERATION PROJECT PROCEDURES-----	7
SECTION 01 40 00 – QUALITY REQUIREMENTS-----	9
SECTION 01 42 00 – REFERENCES-----	8
SECTION 01 50 00 – TEMPORARY FACILITIES AND CONTROLS-----	9
SECTION 01 60 00 – PRODUCT REQUIREMENTS-----	5
SECTION 01 70 00 – EXECUTION -----	7
SECTION 01 74 13 – PROGRESS CLEANING -----	2
SECTION 01 74 19 – CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL	3
SECTION 01 74 23 – FINAL CLEANING -----	3
SECTION 01 77 00 – CLOSEOUT PROCEDURES-----	6
SECTION 01 78 23 – OPERATION AND MAINTENANCE DATA-----	7
SECTION 01 78 39 – PROJECT RECORD DOCUMENTS-----	5
SECTION 01 79 00 – DEMONSTRATION AND TRAINING-----	5
SECTION 02 23 00 – SITE CLEARING-----	2
SECTION 02 30 00 – EARTHWORK-----	8
SECTION 02 41 19 – SELECTIVE DEMOLITION-----	7
SECTION 02 75 10 – CEMENT CONCRETE PAVEMENT-----	10
SECTION 02 92 00 – LAWNS AND GRASSES-----	6
SECTION 02 93 00 – LANDSCAPING-----	9
SECTION 03 30 00 – CAST IN PLACE CONCRETE-----	13
SECTION 04 20 00 – UNIT MASONRY-----	12

.3 addenda prepared by the Architect as follows:

Number	Date	Pages
--------	------	-------

.4 written orders for changes in the Work, pursuant to Article 10, issued after execution of this Agreement;
and

.5 other documents, if any, identified as follows:

Contractor's Certificate of Liability Insurance - Additional Insureds listed as:

James S. Jacobs Architects, PLLC 25 Washington Street Monroe, MI 48161, their employees, consultants
and agents.

Monroe Community Credit Union 715 North Telegraph Road, Monroe, MI 48162, their employees,
consultants, and agents.

Performance Bond & Labor & Materials Payment Bond equal to one hundred (100%) percent of the
contract including accepted alternates. Premium for Bond shall be included in the Bid Sum.

AIA A105-2017 Supplementary Conditions of the Contract

Contractor's Bid Proposal and accompanying forms as detailed in the Bid Form

ARTICLE 2 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 2.1 The Contract Time is the number of calendar days available to the Contractor to substantially complete the Work.

§ 2.2 Date of Commencement:

Unless otherwise set forth below, the date of commencement shall be the date of this Agreement.

(Insert the date of commencement if other than the date of this Agreement.)

A date set forth in a Notice to proceed issued by the Owner

The Contractor shall commence Work as directed by Monroe Community Credit Union with fully executed Contract with General Contractor for award of Contract. Contractor shall also carry on their operations in such a manner as to cause the least delay in the execution of the Work.

§ 2.3 Substantial Completion:

Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion, as defined in Section 12.5, of the entire Work:

(Check the appropriate box and complete the necessary information.)

TIME OF COMPLETION

The undersigned warrants that "Substantial Completion of the Work" as defined by the Construction Documents, shall be achieved no later than stated below from the date of award of Contract. A range of days is acceptable.

☐ Not later than () calendar days from the date of commencement.

☐ By the following date:

ARTICLE 3 CONTRACT SUM

§ 3.1 The Contract Sum shall include all items and services necessary for the proper execution and completion of the Work. Subject to additions and deductions in accordance with Article 10, the Contract Sum is:

Zero Dollars and Zero Cents (\$ 0.00)

§ 3.2 For purposes of payment, the Contract Sum includes the following values related to portions of the Work:

(Itemize the Contract Sum among the major portions of the Work.)

Portion of the Work	Value
<u>Not Applicable</u>	

§ 3.3 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and hereby accepted by the Owner:

(Identify the accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

§ 3.4 Allowances, if any, included in the Contract Sum are as follows:

(Identify each allowance.)

Item	Price
<u>Not Applicable</u>	

§ 3.5 Unit prices, if any, are as follows:

(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit (\$0.00)
<u>Not Applicable</u>		

ARTICLE 4 PAYMENTS

§ 4.1 Based on Contractor's Applications for Payment certified by the Architect, the Owner shall pay the Contractor, in accordance with Article 12, as follows:

(Insert below timing for payments and provisions for withholding retainage, if any.)

Applications for Payments shall be made on the latest version of the AIA Forms G702 and G703 for review and approval by the Architect and Owner. Applications for Payment shall be made monthly with a 10% retention of payment.

The period covered by each Application for Payment shall be one calendar month, ending the last day of the month. The Owner shall make payment of the Certified Amount to the Contractor not later than the 25th day of the following month.

§ 4.2 Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate below, or in the absence thereof, at the legal rate prevailing at the place of the Project.

(Insert rate of interest agreed upon, if any.)

1.50 % monthly

ARTICLE 5 INSURANCE

§ 5.1 The Contractor shall maintain the following types and limits of insurance until the expiration of the period for correction of Work as set forth in Section 14.2, subject to the terms and conditions set forth in this Section 5.1:

§ 5.1.1 Commercial General Liability insurance for the Project, written on an occurrence form, with policy limits of not less than One Million Dollars and Zero Cents (\$ 1,000,000.00) each occurrence, Two Million Dollars and Zero Cents (\$ 2,000,000.00) general aggregate, and Two Million Dollars and Zero Cents (\$ 2,000,000.00) aggregate for products-completed operations hazard.

§ 5.1.2 Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Contractor, with policy limits of not less than One Million Dollars and Zero Cents (\$ 1,000,000.00) per accident, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance, and use of those motor vehicles along with any other statutorily required automobile coverage.

§ 5.1.3 The Contractor may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided that such primary and excess or umbrella insurance policies result in the same or greater coverage as those required under Section 5.1.1 and 5.1.2, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require exhaustion of the underlying limits only through the actual payment by the underlying insurers.

§ 5.1.4 Workers' Compensation at statutory limits.

§ 5.1.5 Employers' Liability with policy limits not less than Five Hundred Thousand Dollars and Zero Cents (\$ 500,000.00) each accident, Five Hundred Thousand Dollars and Zero Cents (\$ 500,000.00) each employee, and Five Hundred Thousand Dollars and Zero Cents (\$ 500,000.00) policy limit.

§ 5.1.6 The Contractor shall provide builder's risk insurance to cover the total value of the entire Project on a replacement cost basis.

§ 5.1.7 Other Insurance Provided by the Contractor

(List below any other insurance coverage to be provided by the Contractor and any applicable limits.)

Coverage	Limits
<u>As detailed in the Supplementary</u>	
<u>Conditions of the Contract for AIA</u>	
<u>A105-2017.</u>	

§ 5.2 The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance and shall provide property insurance to cover the value of the Owner's property. The Contractor is entitled to receive an increase in the Contract Sum equal to the insurance proceeds related to a loss for damage to the Work covered by the Owner's property insurance.

§ 5.3 The Contractor shall obtain an endorsement to its Commercial General Liability insurance policy to provide

coverage for the Contractor's obligations under Section 8.12.

§ 5.4 Prior to commencement of the Work, each party shall provide certificates of insurance showing their respective coverages.

Listed as Additional Insureds on the Contractor's Liability Insurance shall be:

James S. Jacobs Architects, PLLC 25 Washington Street Monroe, MI 48161, their employees, consultants and agents. Monroe Community Credit Union 715 North Telegraph Road, Monroe, MI 48162, their employees, consultants, and agents

§ 5.5 Unless specifically precluded by the Owner's property insurance policy, the Owner and Contractor waive all rights against (1) each other and any of their subcontractors, suppliers, agents, and employees, each of the other; and (2) the Architect, Architect's consultants, and any of their agents and employees, for damages caused by fire or other causes of loss to the extent those losses are covered by property insurance or other insurance applicable to the Project, except such rights as they have to the proceeds of such insurance.

ARTICLE 6 GENERAL PROVISIONS

§ 6.1 The Contract

The Contract represents the entire and integrated agreement between the parties and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a written modification in accordance with Article 10.

§ 6.2 The Work

The term "Work" means the construction and services required by the Contract Documents, and includes all other labor, materials, equipment, and services provided, or to be provided, by the Contractor to fulfill the Contractor's obligations.

§ 6.3 Intent

The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all.

§ 6.4 Ownership and Use of Architect's Drawings, Specifications and Other Documents

Documents prepared by the Architect, including those in electronic format, are instruments of the Architect's service for use solely with respect to this Project. The Architect shall retain all common law, statutory, and other reserved rights, including the copyright. The Contractor, subcontractors, sub-subcontractors, and suppliers are authorized to use and reproduce the instruments of service solely and exclusively for execution of the Work. The instruments of service may not be used for other Projects or for additions to this Project outside the scope of the Work without the specific written consent of the Architect.

§ 6.5 Electronic Notice

Written notice under this Agreement may be given by one party to the other by email as set forth below.

(Insert requirements for delivering written notice by email such as name, title, and email address of the recipient, and whether and how the system will be required to generate a read receipt for the transmission.)

All emails are to be addressed to:

Project Manager, Kris Benson krisb@jsjacobsarch.com

and copied to:

Tyler Gedelian tylerg@jsjacobsarch.com

ARTICLE 7 OWNER

§ 7.1 Information and Services Required of the Owner

§ 7.1.1 If requested by the Contractor, the Owner shall furnish all necessary surveys and a legal description of the site.

§ 7.1.2 Except for permits and fees under Section 8.7.1 that are the responsibility of the Contractor, the Owner shall obtain and pay for other necessary approvals, easements, assessments, and charges.

§ 7.1.3 Prior to commencement of the Work, at the written request of the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence.

§ 7.2 Owner's Right to Stop the Work

If the Contractor fails to correct Work which is not in accordance with the Contract Documents, the Owner may direct the Contractor in writing to stop the Work until the correction is made.

§ 7.3 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies, correct such deficiencies. In such case, the Architect may withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the cost of correction, provided the actions of the Owner and amounts charged to the Contractor were approved by the Architect.

§ 7.4 Owner's Right to Perform Construction and to Award Separate Contracts

§ 7.4.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project.

§ 7.4.2 The Contractor shall coordinate and cooperate with the Owner's own forces and separate contractors employed by the Owner.

ARTICLE 8 CONTRACTOR

§ 8.1 Review of Contract Documents and Field Conditions by Contractor

§ 8.1.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

§ 8.1.2 The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by the Owner. Before commencing activities, the Contractor shall (1) take field measurements and verify field conditions; (2) carefully compare this and other information known to the Contractor with the Contract Documents; and (3) promptly report errors, inconsistencies, or omissions discovered to the Architect.

§ 8.2 Contractor's Construction Schedule

The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner's and Architect's information a Contractor's construction schedule for the Work.

§ 8.3 Supervision and Construction Procedures

§ 8.3.1 The Contractor shall supervise and direct the Work using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work.

§ 8.3.2 The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner, through the Architect, the names of subcontractors or suppliers for each portion of the Work. The Contractor shall not contract with any subcontractor or supplier to whom the Owner or Architect have made a timely and reasonable objection.

§ 8.4 Labor and Materials

§ 8.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work.

§ 8.4.2 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract Work. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.

§ 8.5 Warranty

The Contractor warrants to the Owner and Architect that: (1) materials and equipment furnished under the Contract will be new and of good quality unless otherwise required or permitted by the Contract Documents; (2) the Work will be free from defects not inherent in the quality required or permitted; and (3) the Work will conform to the requirements of the Contract Documents. Any material or equipment warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 12.5.

§ 8.6 Taxes

The Contractor shall pay sales, consumer, use, and similar taxes that are legally required when the Contract is executed.

§ 8.7 Permits, Fees and Notices

§ 8.7.1 The Contractor shall obtain and pay for the building permit and other permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work.

§ 8.7.2 The Contractor shall comply with and give notices required by agencies having jurisdiction over the Work. If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs. The Contractor shall promptly notify the Architect in writing of any known inconsistencies in the Contract Documents with such governmental laws, rules, and regulations.

§ 8.8 Submittals

The Contractor shall promptly review, approve in writing, and submit to the Architect shop drawings, product data, samples, and similar submittals required by the Contract Documents. Shop drawings, product data, samples, and similar submittals are not Contract Documents.

§ 8.9 Use of Site

The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits, the Contract Documents, and the Owner.

§ 8.10 Cutting and Patching

The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly.

§ 8.11 Cleaning Up

The Contractor shall keep the premises and surrounding area free from accumulation of debris and trash related to the Work. At the completion of the Work, the Contractor shall remove its tools, construction equipment, machinery, and surplus material; and shall properly dispose of waste materials.

§ 8.12 Indemnification

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them, from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder.

ARTICLE 9 ARCHITECT

§ 9.1 The Architect will provide administration of the Contract as described in the Contract Documents. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 9.2 The Architect will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the Work.

§ 9.3 The Architect will not have control over or charge of, and will not be responsible for, construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility. The Architect will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents.

§ 9.4 Based on the Architect's observations and evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor.

§ 9.5 The Architect has authority to reject Work that does not conform to the Contract Documents.

§ 9.6 The Architect will promptly review and approve or take appropriate action upon Contractor's submittals, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the

Contract Documents.

§ 9.7 On written request from either the Owner or Contractor, the Architect will promptly interpret and decide matters concerning performance under, and requirements of, the Contract Documents.

§ 9.8 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from the Contract Documents, and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either and will not be liable for results of interpretations or decisions rendered in good faith.

§ 9.9 The Architect's duties, responsibilities, and limits of authority as described in the Contract Documents shall not be changed without written consent of the Owner, Contractor, and Architect. Consent shall not be unreasonably withheld.

ARTICLE 10 CHANGES IN THE WORK

§ 10.1 The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract, consisting of additions, deletions or other revisions, and the Contract Sum and Contract Time shall be adjusted accordingly, in writing. If the Owner and Contractor cannot agree to a change in the Contract Sum, the Owner shall pay the Contractor its actual cost plus reasonable overhead and profit.

§ 10.2 The Architect may authorize or order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. Such authorization or order shall be in writing and shall be binding on the Owner and Contractor. The Contractor shall proceed with such minor changes promptly.

§ 10.3 If concealed or unknown physical conditions are encountered at the site that differ materially from those indicated in the Contract Documents or from those conditions ordinarily found to exist, the Contract Sum and Contract Time shall be subject to equitable adjustment.

ARTICLE 11 TIME

§ 11.1 Time limits stated in the Contract Documents are of the essence of the Contract.

§ 11.2 If the Contractor is delayed at any time in progress of the Work by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, or other causes beyond the Contractor's control, the Contract Time shall be subject to equitable adjustment.

§ 11.3 Costs caused by delays or by improperly timed activities or defective construction shall be borne by the responsible party.

ARTICLE 12 PAYMENTS AND COMPLETION

§ 12.1 Contract Sum

The Contract Sum stated in this Agreement, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 12.2 Applications for Payment

§ 12.2.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment for Work completed in accordance with the values stated in this Agreement. The Application shall be supported by data substantiating the Contractor's right to payment as the Owner or Architect may reasonably require, such as evidence of payments made to, and waivers of liens from, subcontractors and suppliers. Payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment stored, and protected from damage, off the site at a location agreed upon in writing.

§ 12.2.2 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment, all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or other encumbrances adverse to the Owner's interests.

§ 12.3 Certificates for Payment

The Architect will, within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner in writing of the Architect's reasons for withholding certification in part; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole. If certification or notification is not made within such seven day period, the Contractor may, upon seven additional days' written notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time and the Contract Sum shall be equitably adjusted due to the delay.

§ 12.4 Progress Payments

§ 12.4.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner provided in the Contract Documents.

§ 12.4.2 The Contractor shall promptly pay each subcontractor and supplier, upon receipt of payment from the Owner, an amount determined in accordance with the terms of the applicable subcontracts and purchase orders.

§ 12.4.3 Neither the Owner nor the Architect shall have responsibility for payments to a subcontractor or supplier.

§ 12.4.4 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the requirements of the Contract Documents.

§ 12.5 Substantial Completion

§ 12.5.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use.

§ 12.5.2 When the Contractor believes that the Work or designated portion thereof is substantially complete, it will notify the Architect and the Architect will make an inspection to determine whether the Work is substantially complete. When the Architect determines that the Work is substantially complete, the Architect shall prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion, establish the responsibilities of the Owner and Contractor, and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 12.6 Final Completion and Final Payment

§ 12.6.1 Upon receipt of a final Application for Payment, the Architect will inspect the Work. When the Architect finds the Work acceptable and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment.

§ 12.6.2 Final payment shall not become due until the Contractor submits to the Architect releases and waivers of liens, and data establishing payment or satisfaction of obligations, such as receipts, claims, security interests, or encumbrances arising out of the Contract.

§ 12.6.3 Acceptance of final payment by the Contractor, a subcontractor or supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 13 PROTECTION OF PERSONS AND PROPERTY

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs, including all those required by law in connection with performance of the Contract. The Contractor shall take reasonable precautions to prevent damage, injury, or loss to employees on the Work and other persons who may be affected thereby, the Work and materials and equipment to be incorporated therein, and other property at the site or adjacent thereto. The Contractor shall promptly remedy damage and loss to property caused in whole or in part by the Contractor, or by anyone for whose acts the Contractor may be liable.

ARTICLE 14 CORRECTION OF WORK

§ 14.1 The Contractor shall promptly correct Work rejected by the Architect as failing to conform to the requirements of the Contract Documents. The Contractor shall bear the cost of correcting such rejected Work, including the costs of uncovering, replacement, and additional testing.

§ 14.2 In addition to the Contractor's other obligations including warranties under the Contract, the Contractor shall, for a period of one year after Substantial Completion, correct work not conforming to the requirements of the Contract Documents.

§ 14.3 If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct it in accordance with Section 7.3.

ARTICLE 15 MISCELLANEOUS PROVISIONS

§ 15.1 Assignment of Contract

Neither party to the Contract shall assign the Contract as a whole without written consent of the other.

§ 15.2 Tests and Inspections

§ 15.2.1 At the appropriate times, the Contractor shall arrange and bear cost of tests, inspections, and approvals of portions of the Work required by the Contract Documents or by laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities.

§ 15.2.2 If the Architect requires additional testing, the Contractor shall perform those tests.

§ 15.2.3 The Owner shall bear cost of tests, inspections, or approvals that do not become requirements until after the Contract is executed. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 15.3 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules.

ARTICLE 16 TERMINATION OF THE CONTRACT

§ 16.1 Termination by the Contractor

If the Work is stopped under Section 12.3 for a period of 14 days through no fault of the Contractor, the Contractor may, upon seven additional days' written notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed including reasonable overhead and profit, and costs incurred by reason of such termination.

§ 16.2 Termination by the Owner for Cause

§ 16.2.1 The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the subcontractors;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 is otherwise guilty of substantial breach of a provision of the Contract Documents.

§ 16.2.2 When any of the above reasons exist, the Owner, after consultation with the Architect, may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' written notice, terminate employment of the Contractor and may

- .1 take possession of the site and of all materials thereon owned by the Contractor, and
- .2 finish the Work by whatever reasonable method the Owner may deem expedient.

§ 16.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 16.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 16.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the Owner. This obligation for payment shall survive termination of the Contract.

§ 16.3 Termination by the Owner for Convenience

The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause. The Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.

ARTICLE 17 OTHER TERMS AND CONDITIONS

(Insert any other terms or conditions below.)

This Agreement entered into as of the day and year first written above.

(If required by law, insert cancellation period, disclosures or other warning statements above the signatures.)

If a dispute arises out of or is related to this contract, or the breach thereof, and if said dispute cannot be settled through direct discussion, the parties agree to first endeavor to settle the dispute in an amicable manner by mediation through a mutually selected mediator before having recourse to arbitration or a judicial forum.

OWNER *(Signature)*

BY: Kristine Brenner, President/CEO

(Printed name and title)

CONTRACTOR *(Signature)*

(Printed name and title)

Additions and Deletions Report for AIA® Document A105® – 2017

This Additions and Deletions Report, as defined on page 1 of the associated document, reproduces below all text the author has added to the standard form AIA document in order to complete it, as well as any text the author may have added to or deleted from the original AIA text. Added text is shown underlined. Deleted text is indicated with a horizontal line through the original AIA text.

Note: This Additions and Deletions Report is provided for information purposes only and is not incorporated into or constitute any part of the associated AIA document. This Additions and Deletions Report and its associated document were generated simultaneously by AIA software at 19:51:02 EST on 03/06/2026.

Changes to original AIA text

PAGE 3

- .2 the drawings and specifications prepared by the Architect, dated 03-06-2026, Issued for Bids and enumerated as follows:

Drawings: Bid Drawings Issued as Detailed Dated 03-06-2026

Number	Title	Date
<u>Detailed Below</u>	<u>Detailed Below</u>	

Drawing Index

T-1 Title Sheet, General Notes, Location Map, & Code Information

LS-1 Life Safety Plan

Structural

S-1 Foundation Plan

S-2 Structural Details

S-3 Structural Notes

Architectural

A-1 Demolition Floor Plan

A-2 Floor Plan & Wall Legend

A-3 Reflected Ceiling Plan

A-4 South & East Elevations

A-5 North & West Elevations

A-6 Building Sections

A-7 Building & Wall Section & Details

A-8 ITM Building Section, ITM Details & Building Section

A-9 ITM Island Plan & Details

A-10 Enlarged Break Room & Toilet Room Plans & Interior Elevations

A-11 Teller Line Plan, Elevation & Sections

A-12 Room Finish Plan, Room Finish Schedule & Window Elevations

A-13 Door Schedule, Door & Frame Elevations, Head, Jamb & Sill Details

A-14 Roof Plan, Roof Framing Plan & Door Hardware Schedule

Mechanical

M-1 Floor Plan Mechanical Demolition

M-2 Floor Plan Mechanical

M-3 Mechanical Schedules & Details

MP-1 Mechanical Specifications

Electrical

E-0 Electrical Legend & Details

E-1 Panel Riser Electrical

E-2 Site Plan New Work Electrical

E-3 Details Electrical

<u>E-4 Details Electrical</u>	
<u>E-5 Demolition Electrical</u>	
<u>E-6 Power And Lighting Electrical</u>	
<u>E-7 Systems Roughin</u>	
<u>E-8 Systems Roughin Details</u>	
<u>E-9 Specifications Electrical</u>	
<u>E-10 Specifications Electrical</u>	
<u>Plumbing</u>	
<u>P-1 Demolition Floor Plan Plumbing</u>	
<u>P-2 Floor Plan Plumbing - Domestic</u>	
<u>P-3 Floor Plan Plumbing - Sanitary</u>	
<u>P-4 Plumbing Details</u>	

PAGE 4

<u>INVITATION TO BID & REQUEST FOR PROPOSAL</u>	<u>3</u>
<u>INSTRUCTIONS TO BIDDERS - AIA DOCUMENT A701 - 2018</u>	<u>13</u>
<u>BID FORM (Including Attachments)</u>	<u>6</u>
<u>CONTRACT FOR CONSTRUCTION</u>	
<u>AIA DOCUMENT A105 – 2017 STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR</u>	<u>20</u>
<u>AIA Document A105-2017 Supplementary general Conditions</u>	<u>7</u>
<u>FORMS</u>	
<u>DRAWING INDEX</u>	<u>1</u>
<u>JSJA DELIVERY OF ELECTRONIC FILES</u>	<u>2</u>
<u>NOTE: TWO (2) COPIES OF THE FOLLOWING ARE TO BE SUBMITTED AS THE BID PACKAGE</u>	
<u>BIDDER BID PROPOSAL (Including Attachments Listed Below)</u>	<u>6</u>
<u>BIDDER STATEMENT OF QUALIFICATIONS</u>	<u>1</u>
<u>STATEMENT REGARDING FAMILIAL RELATIONSHIP AFFIDAVIT</u>	<u>1</u>
<u>SPECIFICATIONS</u>	
<u>SECTION 00 21 13 – INSTRUCTIONS TO BIDDERS</u>	<u>1</u>
<u>SECTION 00 22 13 – SUPPLEMENTARY INSTRUCTIONS TO BIDDERS</u>	<u>5</u>
<u>SECTION 00 26 00 – PROCUREMENT SUBSTITUTION PROCEDURES</u>	<u>2</u>
<u>SECTION 00 31 43 – PERMIT APPLICATION</u>	<u>1</u>
<u>SECTION 01 10 00 – SUMMARY</u>	<u>4</u>
<u>SECTION 01 21 00 – ALLOWANCES</u>	<u>4</u>
<u>SECTION 01 22 00 – UNIT PRICES</u>	<u>2</u>
<u>SECTION 01 23 00 – ALTERNATES</u>	<u>2</u>
<u>SECTION 01 25 00 – SUBSTITUTION PROCEDURES</u>	<u>4</u>
<u>SECTION 01 26 00 – CONTRACT MODIFICATION PROCEDURES</u>	<u>3</u>
<u>SECTION 01 29 00 – PAYMENT PROCEDURES</u>	<u>4</u>
<u>SECTION 01 31 00 – PROJECT MANAGEMENT AND COORDINATION</u>	<u>8</u>
<u>SECTION 01 32 00 – CONSTRUCTION PROGRESS DOCUMENTATION</u>	<u>5</u>
<u>SECTION 01 32 33 – PHOTOGRAPHIC DOCUMENTATION</u>	<u>2</u>
<u>SECTION 01 33 00 – SUBMITTAL PROCEDURES</u>	<u>8</u>
<u>SECTION 01 35 16 – ALTERATION PROJECT PROCEDURES</u>	<u>7</u>
<u>SECTION 01 40 00 – QUALITY REQUIREMENTS</u>	<u>9</u>
<u>SECTION 01 42 00 – REFERENCES</u>	<u>8</u>
<u>SECTION 01 50 00 – TEMPORARY FACILITIES AND CONTROLS</u>	<u>9</u>
<u>SECTION 01 60 00 – PRODUCT REQUIREMENTS</u>	<u>5</u>
<u>SECTION 01 70 00 – EXECUTION</u>	<u>7</u>
<u>SECTION 01 74 13 – PROGRESS CLEANING</u>	<u>2</u>
<u>SECTION 01 74 19 – CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL</u>	<u>3</u>
<u>SECTION 01 74 23 – FINAL CLEANING</u>	<u>3</u>
<u>SECTION 01 77 00 – CLOSEOUT PROCEDURES</u>	<u>6</u>
<u>SECTION 01 78 23 – OPERATION AND MAINTENANCE DATA</u>	<u>7</u>

SECTION 01 78 39 – PROJECT RECORD DOCUMENTS-----	5
SECTION 01 79 00 – DEMONSTRATION AND TRAINING-----	5
SECTION 02 23 00 – SITE CLEARING-----	2
SECTION 02 30 00 – EARTHWORK-----	8
SECTION 02 41 19 – SELECTIVE DEMOLITION-----	7
SECTION 02 75 10 – CEMENT CONCRETE PAVEMENT-----	10
SECTION 02 92 00 – LAWNS AND GRASSES-----	6
SECTION 02 93 00 – LANDSCAPING-----	9
SECTION 03 30 00 – CAST IN PLACE CONCRETE-----	13
SECTION 04 20 00 – UNIT MASONRY-----	12

PAGE 5

Contractor's Certificate of Liability Insurance - Additional Insureds listed as:
James S. Jacobs Architects, PLLC 25 Washington Street Monroe, MI 48161, their employees,
consultants and agents.
Monroe Community Credit Union 715 North Telegraph Road, Monroe, MI 48162, their employees,
consultants, and agents.

Performance Bond & Labor & Materials Payment Bond equal to one hundred (100%) percent of the
contract including accepted alternates. Premium for Bond shall be included in the Bid Sum.

AIA A105-2017 Supplementary Conditions of the Contract

Contractor's Bid Proposal and accompanying forms as detailed in the Bid Form

PAGE 6

A date set forth in a Notice to proceed issued by the Owner

The Contractor shall commence Work as directed by Monroe Community Credit Union with fully executed Contract
with General Contractor for award of Contract. Contractor shall also carry on their operations in such a manner as to
cause the least delay in the execution of the Work.

TIME OF COMPLETION

The undersigned warrants that "Substantial Completion of the Work" as defined by the Construction Documents,
shall be achieved no later than stated below from the date of award of Contract. A range of days is acceptable.

Portion of the Work	Value	
<u>Not Applicable</u>		
Item	Price	
<u>Not Applicable</u>		
Item	Units and Limitations	Price per Unit (\$0.00)
<u>Not Applicable</u>		

PAGE 7

Coverage	Limits
<u>As detailed in the Supplementary Conditions of the Contract for AIA A105-2017.</u>	

PAGE 8

Listed as Additional Insureds on the Contractor's Liability Insurance shall be:

James S. Jacobs Architects, PLLC 25 Washington Street Monroe, MI 48161, their employees, consultants and agents.

Monroe Community Credit Union 715 North Telegraph Road, Monroe, MI 48162, their employees, consultants, and agents

Documents prepared by the Architect, including those in electronic format, are instruments of the Architect's service for use solely with respect to this Project. The Architect shall retain all common law, statutory, and other reserved rights, including the copyright. The Contractor, subcontractors, sub-subcontractors, and suppliers are authorized to use and reproduce the instruments of service solely and exclusively for execution of the Work. The instruments of service may not be used for other Projects or for additions to this Project outside the scope of the Work without the specific written consent of the Architect.

Variable Information

PAGE 1

AGREEMENT made as of the Twenty-seventh day of February in the year Two Thousand Twenty-Six
(In words, indicate day, month and year.)

Monroe Community Credit Union

715 N. Telegraph Road
Monroe, MI 48162

734-384-2705

202543 - Site Improvements, Renovations & Remodeling for Monroe Community Credit Union - Winchester Branch

14 Winchester Street
Monroe, Michigan 48161

These Documents Propose The Demolition Of The Northern Portion Of The Building And The Drive-Through Teller Canopy Complete With The Remaining Southern Portion To Undergo Extensive Building Renovations, Remodeling, Construction Of A New Drive-Through Teller Canopy, And Site Improvements For The Monroe Community Credit Union's Branch Located At 14 Winchester Street, Monroe, Michigan 48161.

The Northern Portion Of The Building To Be Demolished Is Approximately 2,922 S.F. All Utility Disconnects Shall Be Coordinated With Owner And Utility Companies Prior To Demolition.

The Remaining Southern Portion Is Approximately 3,270 S.F. Including A Small Entrance Addition Plus The Drive-Through Teller Canopy That Is Approximately 1,140 S.F.

In General, The Building Renovations And Remodeling Are To Include: Complete Removal And Rebuild Of Drive-Thru Teller Canopy Structure Brick Veneer Removal And Replacement Windows Removal And Replacement Existing Flat Roof Structure To Remain With Complete Removal Of The Epdm Membrane And Underlayment To The Decking. Partial Parapet Wall Removal And Modification For New Truss Bearing New Wood Truss Roof And Canopy With Asphalt Shingle Roofing Lobby Renovation To Include New Offices, New Teller Line And Service Counter Top New Electrical Service With Back-Up Generator Toilet Rooms Removed And Reconfigured Removal And Replacement Of Ceiling Grids Throughout With New Led Laying Lighting And Mechanical Diffusers Removal And Replacement Of Finishes Throughout Removal And Replacement Of Interior Sheathing On Exterior Walls Removal And Replacement Of Mechanical Systems And Ductwork Removal And Replacement Of Doors And Hardware

In General, Site Improvements Are To Include:

Removal And Replacement Of Landscaping And Groundcover New LED Building And Pole Mounted Site Lighting

To Meet The Heritage Corridor District Requirements Restoration Of The Area Of Building Demolition To Lawn And Landscape Area New Concrete Patio, Walks, And Curbing New Concrete Pad And Trash Enclosure New Decorative Bollards New Bike Rack New Concrete Wheel Stops Milling Of The Asphalt Paving To A Depth Of 1 1/2" And Installation Of New 1 1/2" MDOT 36a Wearing Course With Performance Grade 5828 Binder Placed To Match Existing Pavement Elevations With Lot Re-Stripping
Alternate #1 Lawn And Landscape Irrigation System - Contractor To Provide Design And Installation Of An Irrigation System To Service All Lawn And Landscape Areas And All Areas East To The Back Of The Sidewalk.

PAGE 2

James S. Jacobs Architects, PLLC

25 Washington Street
Monroe, MI 48161-2234

734-241-7933

PAGE 3

- .2 the drawings and specifications prepared by the Architect, dated 03-06-2026 , Issued for Bids and enumerated as follows:

PAGE 5

Contractor's Certificate of Liability Insurance - Additional Insureds listed as:
James S. Jacobs Architects, PLLC 25 Washington Street Monroe, MI 48161, their employees,
consultants and agents.
Monroe Community Credit Union 715 North Telegraph Road, Monroe, MI 48162, their employees,
consultants, and agents.

Performance Bond & Labor & Materials Payment Bond equal to one hundred (100%) percent of the contract including accepted alternates. Premium for Bond shall be included in the Bid Sum.

AIA A105-2017 Supplementary Conditions of the Contract

Contractor's Bid Proposal and accompanying forms as detailed in the Bid Form

PAGE 6

Zero Dollars and Zero Cents (\$ 0.00)

PAGE 7

Applications for Payments shall be made on the latest version of the AIA Forms G702 and G703 for review and approval by the Architect and Owner. Applications for Payment shall be made monthly with a 10% retention of payment.

The period covered by each Application for Payment shall be one calendar month, ending the last day of the month. The Owner shall make payment of the Certified Amount to the Contractor not later than the 25th day of the following month.

1.50 % monthly

§ 5.1.1 Commercial General Liability insurance for the Project, written on an occurrence form, with policy limits of not less than One Million Dollars and Zero Cents (\$ 1,000,000.00) each occurrence, Two Million Dollars and Zero Cents (\$ 2,000,000.00) general aggregate, and Two Million Dollars and Zero Cents (\$ 2,000,000.00) aggregate for products-completed operations hazard.

§ 5.1.2 Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Contractor, with policy limits of not less than One Million Dollars and Zero Cents (\$ 1,000,000.00) per accident, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance, and use of those motor vehicles along with any other statutorily required automobile coverage.

§ 5.1.5 Employers' Liability with policy limits not less than Five Hundred Thousand Dollars and Zero Cents (\$ 500,000.00) each accident, Five Hundred Thousand Dollars and Zero Cents (\$ 500,000.00) each employee, and Five Hundred Thousand Dollars and Zero Cents (\$ 500,000.00) policy limit.

PAGE 8

All emails are to be addressed to:
Project Manger, Kris Benson krisb@jsjacobsarch.com
and copied to:
Tyler Gedelian tylerg@jsjacobsarch.com

PAGE 14

If a dispute arises out of or is related to this contract, or the breach thereof, and if said dispute cannot be settled through direct discussion, the parties agree to first endeavor to settle the dispute in an amicable manner by mediation through a mutually selected mediator before having recourse to arbitration or a judicial forum.

SECTION SC - SUPPLEMENTARY GENERAL CONDITIONS

GENERAL CONDITIONS

The General Conditions of this Contract are Articles 5 through 17 of the American Institute Of Architects Document A105,"Standard Form of Agreement Between Owner and Contractor", 2017 Edition, which document is hereby specifically made part of the Contract Documents with the same force and effect as though set forth in full herein.

SUPPLEMENTARY GENERAL CONDITIONS:

Modify or Supplement AIA Document A105 as follows:

ARTICLE 5, INSURANCE

5.1. - Add the following sentence.

Notwithstanding the above, the insurance required by paragraph 5.1 shall be on occurrence basis.

Add the following sub-paragraph:

5.1.a Such insurance shall be written to include the following coverages and for not less than the following minimum limits or greater if required by law:

A. CONTRACTOR'S LIABILITY INSURANCE

Concerning the insurance described in Paragraph 5.1 of AIA Document A105, 2017 edition, specify the following minimum limits:

1. Worker's Compensation

- ☒ State Statutory
- ☒ Employer's Liability \$500,000 Each Accident
 - \$500,000 Disease, Policy Limit
 - \$500,000 Disease, Each Employee
 - As Applicable

2. General Liability (including Premises-Operations; Independent Contractors' Protective; Products Completed Operations; Broad Form Property Damage):

(a) Bodily Injury:

\$ 1,000,000 Each Occurrence
\$ 2,000,000 Aggregate

(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 ☐ 2 ☐ _____ year(s) after final payment and the Contractor shall continue to

Building Renovations, Remodeling, & Site Improvements For:

Monroe Community Credit Union

14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

provide evidence of such coverage to the Owner on an annual basis during the aforementioned period.

(d)The Owner, the Architect, their consultants, agents and employees, shall be named as "Additional Insureds" on the Commercial General Liability Policy of the General Contractor and/or Subcontractor of any tier.

(e)Property Damage Liability Insurance shall include coverage for the following hazards:

- ☒ X (Explosion)
- ☒ C (Collapse)
- ☒ U (Underground)

(f)Contractual Liability

Bodily Injury:

\$ 1,000,000 Each Occurrence

Property Damage:

\$ 1,000,000 Each Occurrence

\$ 2,000,000 Aggregate

(g)Personal Injury (With employment exclusion deleted, if applicable):

\$ 2,000,000 Aggregate

(h)If the General Liability Policy includes a General Aggregate, such General Aggregate shall be not less than \$2,000,000. Policy shall be endorsed to have General Aggregate apply to this project only:

☐ Yes ☒ No

3. Automobile Liability (Owned, Non-Owned, Hired Vehicles including the loading or unloading thereof):

Bodily Injury:

\$ 1,000,000 Each Person

\$ 1,000,000 Each Accident

Property Damage:

\$ 1,000,000 Each Occurrence

(a)The Owner, the Architect, their consultants, agents and employees, shall be named as "Additional Insureds" on the Commercial General Liability Policy of the General Contractor and/or Subcontractor of any tier.

4. Owner's and Architect's Protective Liability Insurance:

(a)The contractor will furnish and maintain during the entire period of construction an Owner's Protective Liability Policy written in the name of the Owner, the Architect and Architect's consultants, with the following limits of liability:

Limits of Liability:

\$1,000,000 Each occurrence as respects Bodily
Injury Liability or Property Damage
Liability, or both combined.

Building Renovations, Remodeling, & Site Improvements For:

Monroe Community Credit Union

14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

\$2,000,000 General Aggregate

5.1.b - Add the following paragraph:

5.1.b Certificate of insurance shall contain a statement therein or a rider attached thereto incorporating the indemnity clause stated in Paragraph 8.12 (indemnification) and Subparagraphs 8.12.1, 8.12.1.1, 8.12.2 of AIA DOCUMENT A105 (2017), and including the changes and additions made in those subparagraphs within these supplemental general conditions.

5.1.b.2 These certificates and the insurance policies required by this Paragraph 5.1 shall contain a provision that coverages afforded under the policies will not be cancelled or allowed to expire until at least thirty (30) days' prior written notice has been given to the Owner and Architect. If any of the foregoing insurance coverages are required to remain in force after final payment and are reasonably available, an additional certificate evidencing continuation of such coverage shall be submitted with the final application for payment. Information concerning reduction of coverage shall be furnished by the Contractor with reasonable promptness in accordance with the Contractor's information and belief.

5.1.b.3 The obligations of the Contractor under the provisions of this Article shall not extend to the liability of the Architect, his agents or employees arising out of (1) The preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs, or specifications, or (2) The giving of or the failure to give directions or instructions by the Architect, his agents or employees to the extent that such giving or failure to give is the cause of the injury or damage.

5.3 - Add the following paragraph:

Property Insurance provided by Owners shall not cover any tools, apparatus, machinery, scaffolding, hoists, forms, staging, shoring and other similar items commonly referred to as construction equipment, which may be on site and the capital value of which is not included in the Work. The Contractor shall make his own arrangements for any insurance he may require on such construction equipment.

Concerning the insurance described in Subparagraph 5.2 of AIA Document A105, 2017 edition:

(1) The Owner shall provide this insurance with a limit of \$ (As necessary).

Add the following Paragraph & Subparagraphs:

5.6 – PERFORMANCE BOND AND PAYMENT BOND

5.6.1 The Contractor, before commencing the Work, shall furnish a performance bond and a labor and material payment bond. The performance bond shall be in an amount equal to 100 percent of the full amount of the contract sum as security for the faithful performance of the obligations of the Contract Documents, and the labor and material payment bond shall be in an amount equal to 100 percent of the full amount of the

Building Renovations, Remodeling, & Site Improvements For:

Monroe Community Credit Union

14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

contract sum as security for the payment of all persons performing labor and furnishing materials in connection with the Contract Documents. Such bond shall be on AIA Document A-312 2010, issued by The American Institute Of Architects, shall be issued by a surety satisfactory to the Owner and shall name the Owner as a primary co-obligee.

(a) Performance Bond and Payment Bond as described in Paragraph 5.6 of AIA Document A105, 2017 edition, will be:

☒ Required

(b) Required bonds shall be in the amount of (Select one)

Performance ☒ 100% of Contract Sum

Payment ☒ 100% of Contract Sum

5.6.2 All insurance coverage shall be provided by insurance companies having policy holder ratings no lower than "A" and financial ratings not lower than "XII" in the Best's Insurance Guide, latest edition in effect as of the date of the contract.

5.6.3 The Contractor is responsible for determining that subcontractors are adequately insured against claims arising out of or relating to the Work. The premium cost and charges for such insurance shall be paid by each subcontractor.

5.6.4 The limits of liability as stated, may be arrived at using a split-limit or a combined single limit basis. However, the total limit of liability shall not be less than that stated in the requirements.

ARTICLE 8, CONTRACTOR

Add the following Subparagraphs & clauses to Paragraph 8.3:

8.3.3 Asbestos-Free Product Installation

- .1 It is hereby understood and agreed that no products and 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 construction by the Contractor or his employees, agents, Subcontractors, or other individuals or entities over whom the Contractor has control. Prior to the Final Payment, the Contractor shall provide a signed certification statement on the form provided in this manual indexed as AF-1 ensuring that all products and materials installed or introduced into the construction are asbestos-free.
- .2 The Contractor is required to furnish certified statements from each manufacturer of supplied products and materials used during the construction verifying that the manufacturer's products and materials are asbestos-free in accordance with requirements of clause 8.3.3.1.

Building Renovations, Remodeling, & Site Improvements For:

Monroe Community Credit Union

14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

ARTICLE 10, CHANGES IN THE WORK

Supplement Article 10.1 by adding Subparagraph 10.1.1 as follows:

10.1.1 Prices quoted by Contractor for additional work added to Contract by change order shall include no more than 10 percent for overhead and 10 percent profit on work performed with their own forces and 10 percent overhead and profit combined on work of Subcontractors. The foregoing statement is conclusively presumed to be "reasonable" as that term is used in Article 10.1.

Add the Following Article 17 and Sub-Paragraphs:

Article 17 OTHER TERMS AND CONDITIONS

17.1 LANGUAGE OF SPECIFICATIONS

Specifications are written in Abbreviated Form and include incomplete sentences. Omission of words or phrases such as "A", "An", "The", "All", "Of", "Every", "Which", "Shall Be", "Will Be", "The Contractor Shall", "In Conformity With", "As Noted On The Drawings", "According To The Drawings", Etc., Are Intentional. Such words or phrases are implied and shall therefore be supplied by inference.

Certain words used through the specifications are defined to mean the following:

Architect - authorized representative of James S. Jacobs Architects, PLLC, Monroe, Michigan 48161.

Provide - furnish and install.

Work - labor or materials or both.

Addendum - letter clarifying or amending the Contract Documents and issued before receipt of bids.

Contractor or Prime Contractor - any Contractor who has a direct contract with the Owner.

Approved equal - alternate materials or methods submitted per "Instructions to Bidders".

Owner –

Monroe Community Credit Union
715 North Telegraph Road
Monroe, Michigan 48162

Specification Requirements shall supersede Drawing Requirements. However, work specified but not shown, or vice versa shall be included in each case.

Should the Contract Documents disagree as to the quality or quantity of work required, the better quality and greater quantity shall be provided unless instructions are otherwise given by the Architect in writing.

Building Renovations, Remodeling, & Site Improvements For:

Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

17.2 LAYING OUT WORK

Follow large scale and full size drawings in preference to the small scale drawings. In all cases figured dimensions shall govern. Do not scale drawings. Obtain additional dimensions, if necessary, from the Architect or in field.

17.3 VERIFICATION OF EXISTING CONDITIONS

Before commencing any work, the Contractor shall verify and check the measurements and conditions at the job site with those shown on the drawings. In case any discrepancy is discovered, he shall notify the Architect promptly so that adjustment may be made before subsequent work is executed.

Before ordering any materials or executing any work, the Contractor shall prepare the work to fit properly, and be responsible for the accuracy of the Work.

No extra charge nor extension of time will be allowed on account of slight variations between field measurements and dimensions indicated on the Contract Documents.

17.4 MANUFACTURER'S SPECIFICATIONS

Materials and equipment shall be installed or applied per manufacturer's specifications and recommendations unless otherwise specified or directed by Architect.

17.5 PRIME CONTRACTOR

Total completion of this project is the responsibility of the Contractor. He shall coordinate the work of the various Subcontractors and shall notify them when portions of construction have reached state requiring installation of their work or when materials are to be furnished and/or installed by them.

The Contractor shall give his personal supervision to work and provide a general superintendent acceptable to Owner and Architect. The Contractor shall be responsible for basic layout work and for materials, workmanship, transportation, scaffolding, tools, utensils, etc., for the complete and substantial erection of everything shown and described and shall be responsible for obstructions to streets, drives, etc. Sub-contractors shall provide adequate number of foremen or assistant superintendents to supervise their subdivisions of the Work. Such persons shall be thoroughly experienced and capable of handling the crafts and type of work under their supervision.

17.6 ACCIDENTS

The Contractor shall report in writing to Owner accidents arising out of or in connection with performance of the Work, whether on or adjacent to work site and which causes death, personal injury or property damage giving full details and statements of witnesses. In addition, if death or serious injuries or damages are caused, such shall be reported immediately by telephone to Owner.

17.7 TEMPORARY FACILITIES

The Owner will provide for the Contractor's use, water, gas and electric utilities located at the site of the present building. Telephone services are to be provided by the General Contractor and/or

Building Renovations, Remodeling, & Site Improvements For:

Monroe Community Credit Union

14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

Sub-Contractors for their personal use by either erecting an on-site telephone or the use of individual cell phones.

The Contractor will provide a Port-a-John on site for the use of the workers, unless the Owner provides the necessary services.

17.8 INGRESS AND EGRESS

The Contractor will provide safe ingress and egress at all times during construction.

END OF SECTION SC

DRAWING INDEX

The following list of drawings represents the entire set of drawings issued by James S. Jacobs Architects, PLLC for this Project.

Drawing Index

T-1 Title Sheet, General Notes, Location Map, & Code Information

LS-1 Life Safety Plan

Structural

S-1 Foundation Plan

S-2 Structural Details

S-3 Structural Notes

Architectural

A-1 Demolition Floor Plan

A-2 Floor Plan & Wall Legend

A-3 Reflected Ceiling Plan

A-4 South & East Elevations

A-5 North & West Elevations

A-6 Building Sections

A-7 Building & Wall Section & Details

A-8 ITM Building Section, ITM Details & Building Section

A-9 ITM Island Plan & Details

A-10 Enlarged Break Room & Toilet Room Plans & Interior Elevations

A-11 Teller Line Plan, Elevation & Sections

A-12 Room Finish Plan, Room Finish Schedule & Window Elevations

A-13 Door Schedule, Door & Frame Elevations, Head, Jamb & Sill Details

A-14 Roof Plan, Roof Framing Plan & Door Hardware Schedule

Mechanical

M-1 Floor Plan Mechanical Demolition

M-2 Floor Plan Mechanical

M-3 Mechanical Schedules & Details

MP-1 Mechanical Specifications

Electrical

E-0 Electrical Legend & Details

E-1 Panel Riser Electrical

E-2 Site Plan New Work Electrical

E-3 Details Electrical

E-4 Details Electrical

E-5 Demolition Electrical

E-6 Power And Lighting Electrical

E-7 Systems Roughin

E-8 Systems Roughin Details

E-9 Specifications Electrical

E-10 Specifications Electrical

Plumbing

P-1 Demolition Floor Plan Plumbing

P-2 Floor Plan Plumbing - Domestic

P-3 Floor Plan Plumbing - Sanitary

P-4 Plumbing Details

End of Section Drawing Index

Building Renovations, Remodeling, & Site Improvements For:

Monroe Community Credit Union

14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

JAMES S. JACOBS ARCHITECTS, PLLC
25 Washington Street • Monroe, Michigan 48161

DELIVERY OF ELECTRONIC FILES

In accepting and utilizing any drawings, reports and data on any form of electronic media generated and furnished by the Architect, the Contractor agrees that all such electronic files are instruments of service of the Architect, who shall be deemed the author, and shall retain all common law, statutory law and other rights, including copyrights.

The Contractor agrees not to reuse these electronic files, in whole or in part, for any purpose other than for the Project. The Contractor agrees not to transfer these electronic files to others without the prior written consent of the Architect. The Contractor further agrees to waive all claims against the Architect resulting in any way from any unauthorized changes to or reuse of the electronic files for any other project by anyone other than the Architect.

The Contractor and the Architect agree that any electronic files furnished by either party shall conform to the specifications. Any changes to the electronic specifications by either the Contractor or the Architect are subject to review and acceptance by the other party. Additional services by the Architect made necessary by changes to the electronic file specifications, shall be compensated for as Additional Services.

The Contractor is aware that differences may exist between the electronic files delivered and the printed hard-copy construction documents. In the event of a conflict between the signed construction documents prepared by the Architect and electronic files, the signed or sealed hard-copy construction documents shall govern.

In addition, the Contractor agrees, to the fullest extent permitted by law, to indemnify and hold harmless the Architect, its officers, directors, employees and sub-Architects (collectively, Architect) against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, arising from any changes made by anyone other than the Architect or from any reuse of the electronic files without the prior written consent of the Architect.

Under no circumstances shall delivery of electronic files for use by the Contractor be deemed a sale by the Architect, and the Architect makes no warranties, either expressed or implied, of merchantability and fitness for any particular purpose. In no event shall the Architect be liable for indirect or consequential damages as a result of the Contractor's use or reuse of the electronic files.

Project #202543
Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street
Monroe, Michigan 48161

Accepted for:
James S. Jacobs Architects, PLLC

James S. Jacobs AIA

Date: _____

Accepted for:
Contractor

Signature

Date: _____

Printed Name

Title

Mailing Address:

PLEASE NOTE:

**BEFORE REQUESTED PDFs WILL BE ISSUED ELECTRONICALLY, THE
INTENDED RECIPIENT MUST SIGN FOR THE COMPANY, PRINT NAME,
TITLE, DATE, ADDRESS AND RETURN THE COMPLETED DOCUMENT TO:**

JAMES S. JACOBS ARCHITECTS, PLLC.

scan and email to: tylery@jsjacobsarch.com

DOCUMENT 00 21 13 - INSTRUCTIONS TO BIDDERS

1.1 INSTRUCTIONS TO BIDDERS

- A. AIA Document A701, "Instructions to Bidders," is hereby incorporated into the Procurement and Contracting Requirements by reference.

1. A copy of AIA Document A701, "Instructions to Bidders," is bound in this Project Manual.

END OF DOCUMENT 00 21 13

INSTRUCTIONS TO BIDDERS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

00 21 13 - 1

JSJA Project # 202543

DOCUMENT 00 22 13 - SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

1.1 INSTRUCTIONS TO BIDDERS

- A. Instructions to Bidders for Project consist of the following:
 - 1. AIA Document A701, "Instructions to Bidders," a copy of which is bound in this Project Manual.
 - 2. The following Supplementary Instructions to Bidders that modify and add to the requirements of the Instructions to Bidders.

1.2 SUPPLEMENTARY INSTRUCTIONS TO BIDDERS, GENERAL

- A. The following supplements modify AIA Document A701, "Instructions to Bidders." Where a portion of the Instructions to Bidders is modified or deleted by these Supplementary Instructions to Bidders, unaltered portions of the Instructions to Bidders shall remain in effect.

1.3 ARTICLE 2 - BIDDER'S REPRESENTATIONS

- A. Add Section 2.1.7:
 - 1. 2.1.7 - The Bidder has investigated all required fees, permits, and regulatory requirements of authorities having jurisdiction and has properly included in the submitted bid the cost of such fees, permits, and requirements not otherwise indicated as provided by Owner.
- B. Add Section 2.1.8:
 - 1. 2.1.8 - The Bidder is a properly licensed Contractor according to the laws and regulations of Michigan and meets qualifications indicated in the Procurement and Contracting Documents.
- C. Add Section 2.1.9:
 - 1. 2.1.9 - The Bidder has incorporated into the Bid adequate sums for work performed by installers whose qualifications meet those indicated in the Procurement and Contracting Documents.

1.4 ARTICLE 3 - BIDDING DOCUMENTS

- A. 3.4 - Addenda:
 - 1. Delete Section 3.4.3 and replace with the following:
 - a. 3.4.3 - Addenda may be issued at any time prior to the receipt of bids.
 - 2. Add Section 3.4.4.1:

SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

00 22 13 - 1

JSJA Project # 202543

- a. 3.4.4.1 - Owner may elect to waive the requirement for acknowledging receipt of 3.4.4 Addenda as follows:
 - 1) 3.4.4.1.1 - Information received as part of the Bid indicates that the Bid, as submitted, reflects modifications to the Procurement and Contracting Documents included in an unacknowledged Addendum.
 - 2) 3.4.4.1.2 - Modifications to the Procurement and Contracting Documents in an unacknowledged Addendum do not, in the opinion of Owner, affect the Contract Sum or Contract Time.

1.5 ARTICLE 4 - BIDDING PROCEDURES

A. 4.1 - Preparation of Bids:

- 1. Add Section 4.1.1.1:
 - a. 4.1.1.1 - Printable electronic Bid Forms and related documents are available from Architect.
- 2. Add Section 4.1.9:
 - a. 4.1.9 - The Bid shall include unit prices when called for by the Procurement and Contracting Documents. Owner may elect to consider unit prices in the determination of award. Unit prices will be incorporated into the Contract.
- 3. Add Section 4.1.10:
 - a. 4.1.10 - Owner may elect to disqualify a bid due to failure to submit a bid in the form requested, failure to bid requested alternates or unit prices, failure to complete entries in all blanks in the Bid Form, or inclusion by the Bidder of any alternates, conditions, limitations or provisions not called for.
- 4. Add Section 4.1.11:
 - a. 4.1.11 - Bids shall include sales and use taxes. Contractors shall show separately with each monthly payment application the sales and use taxes paid by them and their subcontractors in the form indicated. Reimbursement of sales and use taxes, if any, shall be applied for by Owner for the sole benefit of Owner.

B. 4.4 - Modification or Withdrawal of Bid:

- 1. Add the following sections to 4.4.2:
 - a. 4.4.2.1 - Such modifications to or withdrawal of a bid may only be made by persons authorized to act on behalf of the Bidder. Authorized persons are those so identified in the Bidder's corporate bylaws, specifically empowered by the Bidder's charter or similar legally binding document acceptable to Owner, or by a power of attorney, signed and dated, describing the scope and limitations of the power of

SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

00 22 13 - 2

JSJA Project # 202543

attorney. Make such documentation available to Owner at the time of seeking modifications or withdrawal of the Bid.

- b. 4.4.2.2 - Owner will consider modifications to a bid written on the sealed bid envelope by authorized persons when such modifications comply with the following: the modification is indicated by a percent or stated amount to be added to or deducted from the Bid; the amount of the Bid itself is not made known by the modification; a signature of the authorized person, along with the time and date of the modification, accompanies the modification. Completion of an unsealed bid form, awaiting final figures from the Bidder, does not require power of attorney due to the evidenced authorization of the Bidder implied by the circumstance of the completion and delivery of the Bid.

C. 4.5 - Break-Out Pricing Bid Supplement:

1. Add Section 4.5:

- a. 4.5 - Provide detailed cost breakdowns no later than two business days following Architect's request.

D. 4.6 - Subcontractors, Suppliers, and Manufacturers List Bid Supplement:

1. Add Section 4.6:

- a. 4.6 - Provide list of major subcontractors, suppliers, and manufacturers furnishing or installing products no later than two business days following Architect's request. Include those subcontractors, suppliers, and manufacturers providing work totaling three percent or more of the Bid amount. Do not change subcontractors, suppliers, and manufacturers from those submitted without approval of Architect.

1.6 ARTICLE 5 - CONSIDERATION OF BIDS

A. 5.2 - Rejection of Bids:

1. Add Section 5.2.1:

- a. 5.2.1 - Owner reserves the right to reject a bid based on Owner's and Architect's evaluation of qualification information submitted following opening of bids. Owner's evaluation of the Bidder's qualifications will include: status of licensure and record of compliance with licensing requirements, record of quality of completed work, record of Project completion and ability to complete, record of financial management including financial resources available to complete Project and record of timely payment of obligations, record of Project site management including compliance with requirements of authorities having jurisdiction, record of and number of current claims and disputes and the status of their resolution, and qualifications of the Bidder's proposed Project staff and proposed subcontractors.

SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

00 22 13 - 3

JSJA Project # 202543

1.7 ARTICLE 6 - POSTBID INFORMATION

A. 6.1 - Contractor's Qualification Statement:

1. Add Section 6.1.1:

- a. 6.1.1 - Submit Contractor's Qualification Statement no later than two business days following Architect's request.

B. 6.3 - Submittals:

1. Add Section 6.3.1.4:

- a. 6.3.1.4 - Submit information requested in Sections 6.3.1.1, 6.3.1.2, and 6.3.1.3 no later than two business days following Architect's request.

1.8 ARTICLE 7 - PERFORMANCE BOND AND PAYMENT BOND

A. 7.1 - Bond Requirements:

1. Add Section 7.1.1.1:

- a. 7.1.1.1 - Both a Performance Bond and a Payment Bond will be required, each in an amount equal to 100 percent of the Contract Sum.

B. 7.2 - Time of Delivery and Form of Bonds:

1. Delete the first sentence of Section 7.2.1 and insert the following:

- a. The Bidder shall deliver the required bonds to Owner no later than 10 days after the date of Notice of Intent to Award and no later than the date of execution of the Contract, whichever occurs first. Owner may deem the failure of the Bidder to deliver required bonds within the period of time allowed a default.

2. Delete Section 7.2.3 and insert the following:

- a. 7.2.3 - Bonds shall be executed and be in force on the date of the execution of the Contract.

1.9 ARTICLE 8 – ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS

- A. The Agreement for the Work will be written on AIA Document A105 - 2017, Standard Form of Agreement Between Owner and Contractor for a Residential or Small Commercial Project where the Basis of Payment is a Stipulated Sum.

1.10 ARTICLE 9 - EXECUTION OF THE CONTRACT

A. Add Article 9:

SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

00 22 13 - 4

JSJA Project # 202543

1. 9.1.1 - Subsequent to the Notice of Intent to Award, and within 10 days after the prescribed Form of Agreement is presented to the Awardee for signature, the Awardee shall execute and deliver the Agreement to Owner through Architect, in such number of counterparts as Owner may require.
2. 9.1.2 - Owner may deem as a default the failure of the Awardee to execute the Contract and to supply the required bonds when the Agreement is presented for signature within the period of time allowed.
3. 9.1.3 - Unless otherwise indicated in the Procurement and Contracting Documents or the executed Agreement, the date of commencement of the Work shall be the date of the executed Agreement or the date that the Bidder is obligated to deliver the executed Agreement and required bonds to Owner.
4. 9.1.4 - In the event of a default, Owner may declare the amount of the Bid security forfeited and elect to either award the Contract to the next responsible bidder or re-advertise for bids.

END OF DOCUMENT 00 22 13

DOCUMENT 00 26 00 - PROCUREMENT SUBSTITUTION PROCEDURES

1.1 DEFINITIONS

- A. Procurement Substitution Requests: Requests for changes in products, materials, equipment, and methods of construction from those indicated in the Procurement and Contracting Documents, submitted prior to receipt of bids.
- B. Substitution Requests: Requests for changes in products, materials, equipment, and methods of construction from those indicated in the Contract Documents, submitted following Contract award. See Section 01 25 00 "Substitution Procedures" for conditions under which Substitution requests will be considered following Contract award.

1.2 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.3 PROCUREMENT SUBSTITUTIONS

- A. Procurement Substitutions, General: By submitting a bid, the Bidder represents that its bid is based on materials and equipment described in the Procurement and Contracting Documents, including Addenda. Bidders are encouraged to request approval of qualifying substitute materials and equipment when the Specifications Sections list materials and equipment by product or manufacturer name.
- B. Procurement Substitution Requests will be received and considered by Owner when the following conditions are satisfied, as determined by Architect; otherwise, requests will be returned without action:
 - 1. Extensive revisions to the Contract Documents are not required.
 - 2. Proposed changes are in keeping with the general intent of the Contract Documents, including the level of quality of the Work represented by the requirements therein.
 - 3. The request is fully documented and properly submitted.

1.4 SUBMITTALS

- A. Procurement Substitution Request: Submit to Architect. Procurement Substitution Request must be made in writing by prime contract Bidder only in compliance with the following requirements:
 - 1. Requests for substitution of materials and equipment will be considered if received no later than 15 days prior to date of bid opening.

PROCUREMENT SUBSTITUTION PROCEDURES

00 26 00 - 1

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

2. Submittal Format: Submit three copies of each written Procurement Substitution Request, using form bound in Project Manual or CSI Substitution Request Form 1.5C.
3. Submittal Format: Submit Procurement Substitution Request, using format provided on Project Web site.
 - a. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specifications Sections and drawing numbers.
 - b. Provide complete documentation on both the product specified and the proposed substitute, including the following information as appropriate:
 - 1) Point-by-point comparison of specified and proposed substitute product data, fabrication drawings, and installation procedures.
 - 2) Copies of current, independent third-party test data of salient product or system characteristics.
 - 3) Samples where applicable or when requested by Architect.
 - 4) Detailed comparison of significant qualities of the proposed substitute with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - 5) Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - 6) Research reports, where applicable, evidencing compliance with building code in effect for Project, from ICC-ES.
 - 7) Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, which will become necessary to accommodate the proposed substitute.
 - c. Provide certification by manufacturer that the substitute proposed is equal to or superior to that required by the Procurement and Contracting Documents, and that its in-place performance will be equal to or superior to the product or equipment specified in the application indicated.
 - d. Bidder, in submitting the Procurement Substitution Request, waives the right to additional payment or an extension of Contract Time because of the failure of the substitute to perform as represented in the Procurement Substitution Request.

B. Architect's Action:

1. Architect may request additional information or documentation necessary for evaluation of the Procurement Substitution Request. Architect will notify all bidders of acceptance of the proposed substitute by means of an Addendum to the Procurement and Contracting Documents.

- C. Architect's approval of a substitute during bidding does not relieve Contractor of the responsibility to submit required shop drawings and to comply with all other requirements of the Contract Documents.

END OF DOCUMENT 00 26 00

PROCUREMENT SUBSTITUTION PROCEDURES

00 26 00 - 2

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

DOCUMENT 00 31 43 - PERMIT APPLICATION

1.1 PERMIT APPLICATION INFORMATION

- A. Permit Application: Complete building permit application and file with authorities having jurisdiction within five days of the Notice to Proceed.

END OF DOCUMENT 00 31 43

PERMIT APPLICATION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

00 31 43 - 1

JSJA Project # 202543

SECTION 01 10 00 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Phased construction.
4. Work under separate contracts.
5. Access to site.
6. Coordination with occupants.
7. Work restrictions.
8. Specification and Drawing conventions.

B. Related Requirements:

1. Section 01 50 00 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.2 PROJECT INFORMATION

A. Project Identification: 202543 – Building Renovations, Remodeling, & Site Improvements For: Monroe Community Credit Union.

1. Project Location: 14 Winchester Street, Monroe, Michigan 48161.

B. Owner: Monroe Community Credit Union.

1. Owner's Representative: Kristine Brenner, President/CEO.

C. Architect: James S. Jacobs Architects, PLLC.

1. Contact: Jim Jacobs, AIA
2. Contact: Kris Benson, Project Manager

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and consists of the following:

1. These Documents Propose The Demolition Of The Northern Portion Of The Building And The Drive-Through Teller Canopy Complete With The Remaining Southern Portion To Undergo Extensive Building Renovations, Remodeling, Construction Of A New

SUMMARY

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 10 00 - 1

JSJA Project # 202543

Drive-Through Teller Canopy, And Site Improvements For The Monroe Community Credit Union's Branch Located At 14 Winchester Street, Monroe, Michigan 48161.

The Northern Portion Of The Building To Be Demolished Is Approximately 2,922 S.F. All Utility Disconnects Shall Be Coordinated With Owner And Utility Companies Prior To Demolition.

The Remaining Southern Portion Is Approximately 3,270 S.F. Including A Small Entrance Addition Plus The Drive-Through Teller Canopy That Is Approximately 1,140 S.F

In General, The Building Renovations And Remodeling Are To Include:
Complete Removal And Rebuild Of Drive-Thru Teller Canopy Structure
Brick Veneer Removal And Replacement
Windows Removal And Replacement
Existing Flat Roof Structure To Remain With Complete Removal Of The EPDM Membrane And Under-Layment To The Decking. Partial Parapet Wall Removal And Modification For New Truss Bearing
New Wood Truss Roof And Canopy With Asphalt Shingle Roofing
Lobby Renovation To Include New Offices, New Teller Line And Service Countertop
New Electrical Service With Back-Up Generator
Toilet Rooms Removed And Reconfigured
Removal And Replacement Of Ceiling Grids Throughout With New Led Laying Lighting And Mechanical Diffusers
Removal And Replacement Of Finishes Throughout
Removal And Replacement Of Interior Sheathing On Exterior Walls
Removal And Replacement Of Mechanical Systems And Ductwork
Removal And Replacement Of Doors And Hardware

In General, Site Improvements Are To Include:
Removal And Replacement Of Landscaping And Groundcover
New LED Building And Pole Mounted Site Lighting To Meet The Heritage Corridor District Requirements
Restoration Of The Area Of Building Demolition To Lawn And Landscape Area
New Concrete Patio, Walks, And Curbing
New Concrete Pad And Trash Enclosure
New Decorative Bollards
New Bike Rack
New Concrete Wheel Stops
Milling Of The Asphalt Paving To A Depth Of 1 1/2" And Installation Of New 1 1/2" MDOT 36a Wearing Course With Performance Grade 5828 Binder Placed To Match Existing Pavement Elevations With Lot Re-Stripping

SUMMARY

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 10 00 - 2

JSJA Project # 202543

Alternate #1

Lawn And Landscape Irrigation System - Contractor To Provide Design And Installation Of An Irrigation System To Service All Lawn And Landscape Areas And All Areas East To The Back Of The Sidewalk.

B. Type of Contract:

1. Project will be constructed under a single prime contract.

1.4 PHASED CONSTRUCTION

- A. The Work shall be conducted in one phase, with each phase substantially complete as indicated.
- B. Before commencing Work of each phase, submit an updated copy of Contractor's construction schedule showing the sequence, commencement and completion dates, and move-out and -in dates of Owner's personnel for all phases of the Work.

1.5 ACCESS TO SITE

- A. General: Contractor shall have full use of Project site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.
- B. Use of Site: Limit use of Project site to Work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 1. Driveways, Walkways, and Entrances: Keep driveways loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.
- C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.

1.6 COORDINATION WITH OCCUPANTS

- A. Full Owner Occupancy: Owner will occupy site and existing building(s) during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.
- B. Partial Owner Occupancy: Owner will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.

SUMMARY

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 10 00 - 3

JSJA Project # 202543

- C. Owner Limited Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed portions of the Work, prior to Substantial Completion of the Work, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and limited occupancy shall not constitute acceptance of the total Work.

1.7 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: No restrictions, Contractor to provide schedule to Owner and Architect and comply with all local ordinances and hours.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Architect not less than two days in advance of proposed utility interruptions.
 - 2. Obtain Owner's written permission before proceeding with utility interruptions.
- D. Restricted Substances: Use of tobacco products and other controlled substances on Project site is not permitted.

1.8 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 10 00

SUMMARY

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 10 00 - 4

JSJA Project # 202543

SECTION 01 21 00 - ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
 - 1. Lump-sum allowances.
 - 2. Unit-cost allowances.
 - 3. Quantity allowances.
 - 4. Contingency allowances.
- C. Related Requirements:
 - 1. Section 01 22 00 "Unit Prices" for procedures for using unit prices, including adjustment of quantity allowances when applicable.

1.2 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection, or purchase and delivery, of each product or system described by an allowance must be completed by the Owner to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

1.3 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.

1.4 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.

ALLOWANCES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 21 00 - 1

JSJA Project # 202543

- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.5 LUMP-SUM ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

1.6 UNIT-COST ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

1.7 QUANTITY ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

1.8 CONTINGENCY ALLOWANCES

- A. Use the contingency allowance only as directed by Architect for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.

ALLOWANCES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 21 00 - 2

JSJA Project # 202543

- C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit.
- D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

1.9 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other markups.
 - 3. Submit substantiation of a change in scope of Work, if any, claimed in Change Orders related to unit-cost allowances.
 - 4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.
 - 1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of Work has changed from what could have been foreseen from information in the Contract Documents.
 - 2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

ALLOWANCES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 21 00 - 3

JSJA Project # 202543

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No. As defined by Contractor: Lump-Sum, Unit-Cost, or Quantity Contingency
 - 1. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
 - 2. Coordinate quantity allowance adjustment with corresponding unit-price requirements in Section 01 22 00 "Unit Prices."

END OF SECTION 01 21 00

ALLOWANCES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 21 00 - 4

JSJA Project # 202543

SECTION 01 22 00 - UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for unit prices.
- B. Related Requirements:
 - 1. Section 01 21 00 "Allowances" for procedures for using unit prices to adjust quantity allowances.

1.2 DEFINITIONS

- A. Unit price is an amount incorporated into the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

UNIT PRICES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 22 00 - 1

JSJA Project # 202543

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES (Not Used) Contractor may submit list in compliance with this section for consideration.

END OF SECTION 01 22 00

UNIT PRICES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 22 00 - 2

JSJA Project # 202543

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Execute accepted alternates under the same conditions as other work of the Contract.
- C. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

ALTERNATES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 23 00 - 1

JSJA Project # 202543

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

ALTERNATE #1 - ADD TO THE PROPOSAL THE COST TO: Provide, Design And Install An Irrigation System To Service All Lawn And Landscape Areas And All Areas East To The Back Of The Sidewalk.

Base Bid: No work related to Irrigation System included in the Base Bid.

END OF SECTION 01 23 00

ALTERNATES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 23 00 - 2

JSJA Project # 202543

SECTION 01 25 00 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
 - 1. Section 01 60 00 "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

1.2 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

1.3 ACTION SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation method cannot be provided, if applicable.
 - b. Coordination of information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitutions with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes, such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

SUBSTITUTION PROCEDURES

01 25 00 - 1

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects, with project names and addresses as well as names and addresses of architects and owners.
 - h. Material test reports from a qualified testing agency, indicating and interpreting test results for compliance with requirements indicated.
 - i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
 - j. Detailed comparison of Contractor's construction schedule using proposed substitutions with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
 - k. Cost information, including a proposal of change, if any, in the Contract Sum.
 - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents, except as indicated in substitution request, is compatible with related materials and is appropriate for applications indicated.
 - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
 - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.4 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.5 PROCEDURES

- A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

SUBSTITUTION PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

01 25 00 - 2

JSJA Project # 202543

1.6 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
- a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. Substitution request is fully documented and properly submitted.
 - c. Requested substitution will not adversely affect Contractor's construction schedule.
 - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - e. Requested substitution is compatible with other portions of the Work.
 - f. Requested substitution has been coordinated with other portions of the Work.
 - g. Requested substitution provides specified warranty.
 - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Not allowed unless otherwise indicated.
- C. Substitutions for Convenience: Architect will consider requests for substitution if received within 30 days after the Notice of Award. Requests received after that time may be considered or rejected at discretion of Architect.
1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
- a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
 - b. Requested substitution does not require extensive revisions to the Contract Documents.
 - c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - d. Substitution request is fully documented and properly submitted.
 - e. Requested substitution will not adversely affect Contractor's construction schedule.
 - f. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - g. Requested substitution is compatible with other portions of the Work.
 - h. Requested substitution has been coordinated with other portions of the Work.

SUBSTITUTION PROCEDURES

01 25 00 - 3

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- i. Requested substitution provides specified warranty.
- j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 25 00

SUBSTITUTION PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 25 00 - 4

JSJA Project # 202543

SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

1.2 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on form included in Project Manual.

1.3 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within time specified in Proposal Request after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.

CONTRACT MODIFICATION PROCEDURES

01 26 00 - 1

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Include costs of labor and supervision directly attributable to the change.
5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
6. Comply with requirements in Section 01 25 00 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.

1.4 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Work Change Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on form included in Project Manual.

1.5 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on form included in Project Manual. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

1.6 WORK CHANGE DIRECTIVE

- A. Work Change Directive: Architect may issue a Work Change Directive on form included in Project Manual. Work Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 1. Work Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Work Change Directive.

CONTRACT MODIFICATION PROCEDURES

01 26 00 - 2

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 26 00

SECTION 01 29 00 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.2 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
 - 1. Coordinate line items in the schedule of values with items required to be indicated as separate activities in Contractor's construction schedule.
 - 2. Submit the schedule of values to Architect at earliest possible date, but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
 - 1. Arrange schedule of values consistent with format of AIA Document G703.
 - 2. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
 - 3. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site.
 - 4. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
 - 5. Overhead Costs: Include total cost and proportionate share of general overhead and profit for each line item.
 - 6. Overhead Costs: Show cost of temporary facilities and other major cost items that are not direct cost of actual work-in-place as separate line items.
 - 7. Closeout Costs. Include separate line items under Contractor and principal subcontracts for Project closeout requirements in an amount totaling five percent of the Contract Sum and subcontract amount.
 - 8. Schedule of Values Revisions: Revise the schedule of values when Change Orders or Construction Change Directives result in a change in the Contract Sum. Include at least one separate line item for each Change Order and Construction Change Directive.

PAYMENT PROCEDURES

01 29 00 - 1

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

1.3 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
- C. Payment Application Times: Submit Application for Payment to Architect by the 10th day of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.
 - 1. Submit draft copy of Application for Payment seven days prior to due date for review by Architect.
- D. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
- E. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
 - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 - 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- F. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
 - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
 - 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit conditional final or full waivers.
 - 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.

PAYMENT PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 29 00 - 2

JSJA Project # 202543

4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
 5. Waiver Forms: Submit executed waivers of lien on forms acceptable to Owner.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
 2. Schedule of values.
 3. Contractor's construction schedule (preliminary if not final).
 4. Products list (preliminary if not final).
 5. Schedule of unit prices.
 6. Submittal schedule (preliminary if not final).
 7. List of Contractor's staff assignments.
 8. List of Contractor's principal consultants.
 9. Copies of building permits.
 10. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 11. Initial progress report.
 12. Report of preconstruction conference.
 13. Certificates of insurance and insurance policies.
 14. Performance and payment bonds.
 15. Data needed to acquire Owner's insurance.
- I. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 3. Updated final statement, accounting for final changes to the Contract Sum.
 4. AIA Document G706.
 5. AIA Document G706A.
 6. AIA Document G707.
 7. Evidence that claims have been settled.
 8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.

PAYMENT PROCEDURES

01 29 00 - 3

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 29 00

PAYMENT PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 29 00 - 4

JSJA Project # 202543

SECTION 01 31 00 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Coordination drawings.
 - 3. RFIs.
 - 4. Digital project management procedures.
 - 5. Project meetings.
- B. Related Requirements:
 - 1. Section 01 70 00 "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.

1.2 DEFINITIONS

- A. BIM: Building Information Modeling.
- B. RFI: Request for Information. Request from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

1.3 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name, address, telephone number, and email address of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.

1.4 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.

PROJECT MANAGEMENT AND COORDINATION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 31 00 - 1

JSJA Project # 202543

1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of Contractor's construction schedule.
 2. Preparation of the schedule of values.
 3. Installation and removal of temporary facilities and controls.
 4. Delivery and processing of submittals.
 5. Progress meetings.
 6. Preinstallation conferences.
 7. Project closeout activities.
 8. Startup and adjustment of systems.

1.5 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare coordination drawings according to requirements in individual Sections, and additionally where installation is not completely indicated on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
 - a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - b. Indicate dimensions shown on Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternative sketches to Architect indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
- B. Coordination Drawing Organization: Organize coordination drawings as follows:
1. Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements, and mechanical, plumbing, fire-protection, fire-alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan drawings with section drawings where required to adequately represent the Work.
 2. Plenum Space: Indicate subframing for support of ceiling and wall systems, mechanical and electrical equipment, and related Work. Locate components within plenums to

PROJECT MANAGEMENT AND COORDINATION

01 31 00 - 2

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- accommodate layout of light fixtures and other components indicated on Drawings. Indicate areas of conflict between light fixtures and other components.
3. Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire-protection, fire-alarm, and electrical equipment.
 4. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
 5. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
 6. Review: Architect will review coordination drawings to confirm that in general the Work is being coordinated, but not for the details of the coordination, which are Contractor's responsibility.
- C. Coordination Digital Data Files: Prepare coordination digital data files according to the following requirements:
1. File Preparation Format: Same digital data software program, version, and operating system as original Drawings.
 2. File Preparation Format: DWG, Version 2025, operating in Microsoft Windows operating system.
 3. File Submittal Format: Submit or post coordination drawing files using format same as file preparation format or PDF format.
 4. Architect will furnish Contractor one set of digital data files of Drawings for use in preparing coordination digital data files.
 - a. Architect makes no representations as to the accuracy or completeness of digital data files as they relate to Drawings.
 - b. Digital Data Software Program: Drawings are available in AutoCAD 2025.
 - c. Contractor shall execute a data licensing agreement in the form of AIA Document C106 or JSJA Delivery of Electronic Files Form.

1.6 REQUEST FOR INFORMATION (RFI)

- A. General: Immediately on discovery of the need for additional information, clarification, or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified or form acceptable to Owner and Architect.
1. Architect will return without response those RFIs submitted to Architect by other entities controlled by Contractor.
 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
1. Project name.
 2. Project number.
 3. Date.

PROJECT MANAGEMENT AND COORDINATION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 31 00 - 3

JSJA Project # 202543

4. Name of Contractor.
 5. Name of Architect.
 6. RFI number, numbered sequentially.
 7. RFI subject.
 8. Specification Section number and title and related paragraphs, as appropriate.
 9. Drawing number and detail references, as appropriate.
 10. Field dimensions and conditions, as appropriate.
 11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 12. Contractor's signature.
 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
- C. RFI Forms: AIA Document G716 or Software-generated form with substantially the same content as indicated above, acceptable to Architect.
- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
1. The following Contractor-generated RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for approval of Contractor's means and methods.
 - d. Requests for coordination information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of Architect's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
 2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt by Architect of additional information.
 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 01 26 00 "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.
- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Include the following:
1. Project name.
 2. Name and address of Contractor.
 3. Name and address of Architect.
 4. RFI number including RFIs that were returned without action or withdrawn.

PROJECT MANAGEMENT AND COORDINATION

01 31 00 - 4

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

5. RFI description.
6. Date the RFI was submitted.
7. Date Architect's response was received.

- F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.

1.7 DIGITAL PROJECT MANAGEMENT PROCEDURES

- A. Use of Architect's Digital Data Files: Digital data files of Architect's CAD drawings will be provided by Architect for Contractor's use during construction upon written request.
1. Digital data files may be used by Contractor in preparing coordination drawings, Shop Drawings, and Project record Drawings.
 2. Architect makes no representations as to the accuracy or completeness of digital data files as they relate to Contract Drawings.
 3. Digital Drawing Software Program: Contract Drawings are available in AutoCAD 2014 or PDF formats.
 4. Contractor shall execute a data licensing agreement in the form of AIA Document C106 Digital Data Licensing Agreement or Agreement form acceptable to Owner and Architect.
 - a. Subcontractors, and other parties granted access by Contractor to Architect's digital data files shall execute a data licensing agreement in the form of AIA Document C106 or JSJA Delivery of Electronic Files Form.
- B. PDF Document Preparation: Where PDFs are required to be submitted to Architect, prepare as follows:
1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 2. Name file with submittal number or other unique identifier, including revision identifier.
 3. Certifications: Where digitally submitted certificates and certifications are required, provide a digital signature with digital certificate on where indicated.

1.8 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.
- B. Preconstruction Conference: Architect will schedule a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement.
1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned

PROJECT MANAGEMENT AND COORDINATION

01 31 00 - 5

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

2. Agenda: Discuss items of significance that could affect progress, including the following:

- a. Responsibilities and personnel assignments.
- b. Tentative construction schedule.
- c. Phasing.
- d. Critical work sequencing and long lead items.
- e. Designation of key personnel and their duties.
- f. Lines of communications.
- g. Use of web-based Project software.
- h. Procedures for processing field decisions and Change Orders.
- i. Procedures for RFIs.
- j. Procedures for testing and inspecting.
- k. Procedures for processing Applications for Payment.
- l. Distribution of the Contract Documents.
- m. Submittal procedures.
- n. Sustainable design requirements.
- o. Preparation of Record Documents.
- p. Use of the premises and existing building.
- q. Work restrictions.
- r. Working hours.
- s. Owner's occupancy requirements.
- t. Responsibility for temporary facilities and controls.
- u. Procedures for moisture and mold control.
- v. Procedures for disruptions and shutdowns.
- w. Construction waste management and recycling.
- x. Parking availability.
- y. Office, work, and storage areas.
- z. Equipment deliveries and priorities.
- aa. First aid.
- bb. Security.
- cc. Progress cleaning.

3. Minutes: Architect will record and distribute meeting minutes.

C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity when required by other sections and when required for coordination with other construction.

- 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
- 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
 - a. Contract Documents.
 - b. Options.
 - c. Related RFIs.

PROJECT MANAGEMENT AND COORDINATION

01 31 00 - 6

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- d. Related Change Orders.
 - e. Purchases.
 - f. Deliveries.
 - g. Submittals.
 - h. Sustainable design requirements.
 - i. Review of mockups.
 - j. Possible conflicts.
 - k. Compatibility requirements.
 - l. Time schedules.
 - m. Weather limitations.
 - n. Manufacturer's written instructions.
 - o. Warranty requirements.
 - p. Compatibility of materials.
 - q. Acceptability of substrates.
 - r. Temporary facilities and controls.
 - s. Space and access limitations.
 - t. Regulations of authorities having jurisdiction.
 - u. Testing and inspecting requirements.
 - v. Installation procedures.
 - w. Coordination with other work.
 - x. Required performance results.
 - y. Protection of adjacent work.
 - z. Protection of construction and personnel.
- 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
 - 4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
 - 5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Conduct progress meetings at weekly intervals unless agreed to in writing by Owner and Architect.
- 1. Coordinate dates of meetings with preparation of payment requests.
 - 2. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to

PROJECT MANAGEMENT AND COORDINATION

01 31 00 - 7

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

- 1) Review schedule for next period.
- b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Status of sustainable design documentation.
 - 5) Deliveries.
 - 6) Off-site fabrication.
 - 7) Access.
 - 8) Site use.
 - 9) Temporary facilities and controls.
 - 10) Progress cleaning.
 - 11) Quality and work standards.
 - 12) Status of correction of deficient items.
 - 13) Field observations.
 - 14) Status of RFIs.
 - 15) Status of Proposal Requests.
 - 16) Pending changes.
 - 17) Status of Change Orders.
 - 18) Pending claims and disputes.
 - 19) Documentation of information for payment requests.
 - 20) Safety update.
 - 21) Security update.
4. Minutes: Contractor will record and distribute the meeting minutes to each party present and to parties requiring information.
 - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 31 00

SECTION 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Contractor's Construction Schedule.
 - 2. Construction schedule updating reports.
 - 3. Daily construction reports.
 - 4. Site condition reports.
- B. Related Requirements: (Not Used)

1.2 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction Project. Activities included in a construction schedule consume time and resources.
 - 1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.
- B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Event: The starting or ending point of an activity.
- E. Float: The measure of leeway in starting and completing an activity.
 - 1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
 - 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
 - 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.

CONSTRUCTION PROGRESS DOCUMENTATION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 32 00 - 1

JSJA Project # 202543

1.3 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
 - 1. Working electronic copy of schedule file, where indicated.
 - 2. PDF file.
 - 3. Two paper copies, of sufficient size to display entire period or schedule, as required.
- B. Startup Network Diagram: Of size required to display entire network for entire construction period. Show logic ties for activities.
- C. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
 - 1. Submit a working digital copy of schedule, using software indicated, and labeled to comply with requirements for submittals.
- D. CPM Reports: Concurrent with CPM schedule, submit each of the following reports. Format for each activity in reports shall contain activity number, activity description, original duration, remaining duration, early start date, early finish date, late start date, late finish date, and total float in calendar days.
 - 1. Activity Report: List of activities sorted by activity number and then early start date, or actual start date if known.
 - 2. Logic Report: List of preceding and succeeding activities for each activity, sorted in ascending order by activity number and then by early start date, or actual start date if known.
 - 3. Total Float Report: List of activities sorted in ascending order of total float.
- E. Construction Schedule Updating Reports: Submit with Applications for Payment.
- F. Daily Construction Reports: Submit at weekly intervals.
- G. Site Condition Reports: Submit at time of discovery of differing conditions.

1.4 COORDINATION

- A. Coordinate Contractor's Construction Schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.
 - 1. Secure time commitments for performing critical elements of the Work from entities involved.
 - 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

1.5 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend schedule from date established for commencement of the Work to date of final completion.
 - 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each floor or separate area as a separate numbered activity for each main element of the Work. Comply with the following:
 - 1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Architect.
 - 2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 - 3. Submittal Review Time: Include review and resubmittal times indicated in Section 01 33 00 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with submittal schedule.
 - 4. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
 - 5. Punch List and Final Completion: Include not more than 30 days for completion of punch list items and final completion.
- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
 - 1. Phasing: Arrange list of activities on schedule by phase.
 - 2. Owner-Furnished Products: Include a separate activity for each product. Include delivery date indicated in Section 01 10 00 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
 - 3. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Coordination with existing construction.
 - b. Limitations of continued occupancies.
 - c. Uninterruptible services.
 - d. Partial occupancy before Substantial Completion.
 - e. Use-of-premises restrictions.
 - f. Provisions for future construction.
 - g. Seasonal variations.
 - h. Environmental control.
- D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion, and the following interim milestones:
 - 1. Temporary enclosure and space conditioning.

CONSTRUCTION PROGRESS DOCUMENTATION

01 32 00 - 3

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- E. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
1. Unresolved issues.
 2. Unanswered Requests for Information.
 3. Rejected or unreturned submittals.
 4. Notations on returned submittals.
 5. Pending modifications affecting the Work and the Contract Time.
- F. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule two days before each regularly scheduled progress meeting.
1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 3. As the Work progresses, indicate final completion percentage for each activity.
- G. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, equipment required to achieve compliance, and date by which recovery will be accomplished.
- H. Distribution: Distribute copies of approved schedule to Architect Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
1. Post copies in Project meeting rooms and temporary field offices.
 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

1.6 GANTT-CHART SCHEDULE REQUIREMENTS

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's Construction Schedule within 30 days of date established for commencement of the Work.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
1. For construction activities that require three months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.

1.7 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
1. List of subcontractors at Project site.
 2. List of separate contractors at Project site.
 3. Approximate count of personnel at Project site.
 4. Equipment at Project site.
 5. Material deliveries.
 6. High and low temperatures and general weather conditions, including presence of rain or snow.
 7. Testing and inspection.
 8. Accidents.
 9. Meetings and significant decisions.
 10. Stoppages, delays, shortages, and losses.
 11. Meter readings and similar recordings.
 12. Emergency procedures.
 13. Orders and requests of authorities having jurisdiction.
 14. Change Orders received and implemented.
 15. Change Directives received and implemented.
 16. Services connected and disconnected.
 17. Equipment or system tests and startups.
 18. Partial completions and occupancies.
 19. Substantial Completions authorized.
- B. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 32 00

SECTION 01 32 33 - PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 - 1. Preconstruction photographs.
 - 2. Periodic construction photographs.
 - 3. Final completion construction photographs.
- B. Related Requirements:
 - 1. Section 01 77 00 "Closeout Procedures" for submitting photographic documentation as Project Record Documents at Project closeout.
 - 2. Section 02 41 19 "Selective Demolition" for photographic documentation before selective demolition operations commence.

1.2 INFORMATIONAL SUBMITTALS

- A. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each photograph. Indicate elevation or story of construction. Include same information as corresponding photographic documentation.
- B. Digital Photographs: Submit image files within three days prior to selective demolition or construction activities taking place and within seven days of taking photographs.
 - 1. Submit photos on Thumb-drive. Include copy of key plan indicating each photograph's location and direction.
 - 2. Identification: Provide the following information with each image description in file metadata tag:
 - a. Name of Project.
 - b. Name and contact information for photographer.
 - c. Name of Contractor.
 - d. Date photograph was taken.
 - e. Description of location, vantage point, and direction.
 - f. Unique sequential identifier keyed to accompanying key plan.

1.3 FORMATS AND MEDIA

- A. Digital Photographs: Provide color images in JPG format, produced by a digital camera with minimum sensor size of 12 megapixels, and at an image resolution of not less than 3200 by

PHOTOGRAPHIC DOCUMENTATION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 32 33 - 1

JSJA Project # 202543

2400 pixels, and with vibration-reduction technology. Use flash in low light levels or backlit conditions.

- B. Digital Images: Submit digital media as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
- C. Metadata: Record accurate date and time from camera.
- D. File Names: Name media files with date, Project area and sequential numbering suffix.

1.4 CONSTRUCTION PHOTOGRAPHS

- A. Photographer: Engage a qualified photographer to take construction photographs.
- B. General: Take photographs with maximum depth of field and in focus.
 - 1. Maintain key plan with each set of construction photographs that identifies each photographic location.
- C. Preconstruction Photographs: Before starting construction, take photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points.
 - 1. Flag construction limits before taking construction photographs.
 - 2. Take photographs to show existing conditions adjacent to property before starting the Work.
 - 3. Take photographs of existing buildings either on or adjoining property to accurately record physical conditions at start of construction.
 - 4. Take additional photographs as required to record settlement or cracking of adjacent structures, pavements, and improvements.
- D. Periodic Construction Photographs: Take photographs weekly at a minimum. Select vantage points to show status of construction and progress since last photographs were taken.
- E. Final Completion Construction Photographs: Take photographs after date of Substantial Completion for submission as Project Record Documents.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 32 33

PHOTOGRAPHIC DOCUMENTATION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 32 33 - 2

JSJA Project # 202543

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Submittal schedule requirements.
2. Administrative and procedural requirements for submittals.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

1.3 SUBMITTAL SCHEDULE

- A. Submittal Schedule: Submit, as an action submittal, a list of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.

1.4 SUBMITTAL FORMATS

A. Submittal Information: Include the following information in each submittal:

1. Project name.
2. Date.
3. Name of Architect.
4. Name of Contractor.
5. Name of firm or entity that prepared submittal.
6. Names of subcontractor, manufacturer, and supplier.
7. Unique submittal number, including revision identifier. Include Specification Section number with sequential alphanumeric identifier; and alphanumeric suffix for resubmittals.
8. Category and type of submittal.

SUBMITTAL PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 33 00 - 1

JSJA Project # 202543

9. Submittal purpose and description.
10. Number and title of Specification Section, with paragraph number and generic name for each of multiple items.
11. Drawing number and detail references, as appropriate.
12. Indication of full or partial submittal.
13. Location(s) where product is to be installed, as appropriate.
14. Other necessary identification.
15. Remarks.
16. Signature of transmitter.

B. Options: Identify options requiring selection by Architect.

C. Deviations and Additional Information: On each submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information and revisions, other than those requested by Architect on previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheet.

D. Paper Submittals:

1. Place a permanent label or title block on each submittal item for identification; include name of firm or entity that prepared submittal.
2. Provide a space approximately **6 by 8 inches (150 by 200 mm)** on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
3. Action Submittals: Submit five paper copies of each submittal unless otherwise indicated. Architect will return two copies.
4. Informational Submittals: Submit two paper copies of each submittal unless otherwise indicated. Architect will not return copies.
5. Transmittal for Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using AIA Document G810 or similar form prepared by contractor as transmittal form containing similar information as approved by Architect.

E. PDF Submittals: Prepare submittals as PDF package, incorporating complete information into each PDF file. Name PDF file with submittal number.

F. Submittals for Web-Based Project Software: Prepare submittals as PDF files, or other format indicated by Project software website.

1.5 SUBMITTAL PROCEDURES

A. Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.

1. Email: Prepare submittals as PDF package, and transmit to Architect by sending via email. Include PDF transmittal form. Include information in email subject line as requested by Architect.

SUBMITTAL PROCEDURES

01 33 00 - 2

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

2. Web-Based Project Software: Prepare submittals in PDF form, and upload to web-based Project software website. Enter required data in web-based software site to fully identify submittal.
 3. Paper: Prepare submittals in paper form, and deliver to Architect.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 2. Resubmittal Review: Allow 15 days for review of each resubmittal.
- D. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
- E. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- F. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

1.6 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.
 2. Mark each copy of each submittal to show which products and options are applicable.
 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.

SUBMITTAL PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

01 33 00 - 3

JSJA Project # 202543

- f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 - 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams that show factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 - 5. Submit Product Data before Shop Drawings, and before or concurrent with Samples.
- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data unless submittal based on Architect's digital data drawing files is otherwise permitted.
- 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 - 2. Paper Sheet Size: Except for templates, patterns, and similar full-size Drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm), but no larger than 24 by 36 inches (609 by 915 mm).
 - a. Two opaque (bond) copies of each submittal. Architect will return one copy(ies).
 - b. Three opaque copies of each submittal. Architect will retain two copies; remainder will be returned.
- C. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other materials.
- 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Identification: Permanently attach label on unexposed side of Samples that includes the following:
 - a. Project name and submittal number.
 - b. Generic description of Sample.
 - c. Product name and name of manufacturer.
 - d. Sample source.
 - e. Number and title of applicable Specification Section.

SUBMITTAL PROCEDURES

01 33 00 - 4

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- f. Specification paragraph number and generic name of each item.
- 3. Email Transmittal: Provide PDF transmittal. Include digital image file illustrating Sample characteristics, and identification information for record.
- 4. Web-Based Project Software: Prepare submittals in PDF form, and upload to web-based Project software website. Enter required data in web-based software site to fully identify submittal.
- 5. Paper Transmittal: Include paper transmittal including complete submittal information indicated.
- 6. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
- 7. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit two full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
- 8. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three sets of Samples. Architect will retain two Sample sets; remainder will be returned.
 - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- D. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:

SUBMITTAL PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 33 00 - 5

JSJA Project # 202543

- E. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- F. Design Data: Prepare and submit written and graphic information indicating compliance with indicated performance and design criteria in individual Specification Sections. Include list of assumptions and summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of submittal.
- G. Certificates:
 - 1. Certificates and Certifications Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
 - 2. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
 - 3. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
 - 4. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
 - 5. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
 - 6. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- H. Test and Research Reports:
 - 1. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
 - 2. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
 - 3. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
 - 4. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
 - 5. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

SUBMITTAL PROCEDURES

01 33 00 - 6

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

6. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - a. Name of evaluation organization.
 - b. Date of evaluation.
 - c. Time period when report is in effect.
 - d. Product and manufacturers' names.
 - e. Description of product.
 - f. Test procedures and results.
 - g. Limitations of use.

1.7 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 1. If criteria indicated are insufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF file and three paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

1.8 CONTRACTOR'S REVIEW

- A. Action Submittals and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Contractor's Approval: Indicate Contractor's approval for each submittal with a uniform approval stamp. Include name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
 1. Architect will not review submittals received from Contractor that do not have Contractor's review and approval.

SUBMITTAL PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 33 00 - 7

JSJA Project # 202543

1.9 ARCHITECT'S REVIEW

- A. Action Submittals: Architect will review each submittal, indicate corrections or revisions required, and return it.
 - 1. PDF Submittals: Architect will indicate, via markup on each submittal, the appropriate action.
 - 2. Paper Submittals: Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- B. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Architect will return without review submittals received from sources other than Contractor.
- F. Submittals not required by the Contract Documents will be returned by Architect without action.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 33 00

SUBMITTAL PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 33 00 - 8

JSJA Project # 202543

SECTION 01 35 16 - ALTERATION PROJECT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes special procedures for alteration work.

1.2 DEFINITIONS

- A. Alteration Work: This term includes remodeling, renovation, repair, and maintenance work performed within existing spaces or on existing surfaces as part of the Project.
- B. Consolidate: To strengthen loose or deteriorated materials in place.
- C. Design Reference Sample: A sample that represents the Architect's prebid selection of work to be matched; it may be existing work or work specially produced for the Project.
- D. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.
- E. Match: To blend with adjacent construction and manifest no apparent difference in material type, species, cut, form, detail, color, grain, texture, or finish; as approved by Architect.
- F. Refinish: To remove existing finishes to base material and apply new finish to match original, or as otherwise indicated.
- G. Repair: To correct damage and defects, retaining existing materials, features, and finishes. This includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials.
- H. Replace: To remove, duplicate, and reinstall entire item with new material. The original item is the pattern for creating duplicates unless otherwise indicated.
- I. Replicate: To reproduce in exact detail, materials, and finish unless otherwise indicated.
- J. Reproduce: To fabricate a new item, accurate in detail to the original, and from either the same or a similar material as the original, unless otherwise indicated.
- K. Retain: To keep existing items that are not to be removed or dismantled.
- L. Strip: To remove existing finish down to base material unless otherwise indicated.

ALTERATION PROJECT PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 35 16 - 1

JSJA Project # 202543

1.3 PROJECT MEETINGS FOR ALTERATION WORK

- A. Preliminary Conference for Alteration Work: Before starting alteration work, Architect will conduct conference at Project site.
 - 1. Attendees: In addition to representatives of Owner, Architect, and Contractor, testing service representative, and chemical-cleaner manufacturer(s) shall be represented at the meeting.
 - 2. Agenda: Discuss items of significance that could affect progress of alteration work, including review of the following:
 - a. Fire-prevention plan.
 - b. Governing regulations.
 - c. Areas where existing construction is to remain and the required protection.
 - d. Hauling routes.
 - e. Sequence of alteration work operations.
 - f. Storage, protection, and accounting for salvaged and specially fabricated items.
 - g. Existing conditions, staging, and structural loading limitations of areas where materials are stored.
 - 3. Reporting: Record conference results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from conference.
- B. Coordination Meetings: Conduct coordination meetings specifically for alteration work at weekly intervals. Coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
 - 1. Agenda: Review and correct or approve minutes of previous coordination meeting. Review other items of significance that could affect progress of alteration work. Include topics for discussion as appropriate to status of Project.
 - 2. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

1.4 MATERIALS OWNERSHIP

- A. Historic items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to Owner that may be encountered or uncovered during the Work, regardless of whether they were previously documented, remain Owner's property.

1.5 INFORMATIONAL SUBMITTALS

- A. Alteration Work Program: Submit 30 days before work begins.
- B. Fire-Prevention Plan: Submit 30 days before work begins.

ALTERATION PROJECT PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 35 16 - 2

JSJA Project # 202543

1.6 QUALITY ASSURANCE

- A. Title X Requirement: Each firm conducting activities that disturb painted surfaces shall be a "Lead-Safe Certified Firm" according to 40 CFR 745, Subpart E, and use only workers that are trained in lead-safe work practices.
- B. Alteration Work Program: Prepare a written plan for alteration work for whole Project, including each phase or process and protection of surrounding materials during operations. Show compliance with indicated methods and procedures specified in this and other Sections. Coordinate this whole-Project alteration work program with specific requirements of programs required in other alteration work Sections.
 - 1. Dust and Noise Control: Include locations of proposed temporary dust- and noise-control partitions and means of egress from occupied areas coordinated with continuing on-site operations and other known work in progress.
 - 2. Debris Hauling: Include plans clearly marked to show debris hauling routes, turning radii, and locations and details of temporary protective barriers.
- C. Fire-Prevention Plan: Prepare a written plan for preventing fires during the Work, including placement of fire extinguishers, fire blankets, rag buckets, and other fire-control devices during each phase or process. Coordinate plan with Owner's fire-protection equipment and requirements. Include fire-watch personnel's training, duties, and authority to enforce fire safety.
- D. Safety and Health Standard: Comply with ANSI/ASSE A10.6.

1.7 STORAGE AND HANDLING OF SALVAGED MATERIALS

- A. Salvaged Materials:
 - 1. Clean loose dirt and debris from salvaged items unless more extensive cleaning is indicated.
 - 2. Pack or crate items after cleaning; cushion against damage during handling. Label contents of containers.
 - 3. Store items in a secure area until delivery to Owner.
 - 4. Transport items to Owner's storage area off-site designated by Owner.
 - 5. Protect items from damage during transport and storage.
- B. Salvaged Materials for Reinstallation:
 - 1. Repair and clean items for reuse as indicated.
 - 2. Pack or crate items after cleaning and repairing; cushion against damage during handling. Label contents of containers.
 - 3. Protect items from damage during transport and storage.
 - 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment unless otherwise indicated. Provide connections, supports, and miscellaneous materials to make items functional for use indicated.

ALTERATION PROJECT PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 35 16 - 3

JSJA Project # 202543

- C. Existing Materials to Remain: Protect construction indicated to remain against damage and soiling from construction work. Where permitted by Architect, items may be dismantled and taken to a suitable, protected storage location during construction work and reinstalled in their original locations after alteration and other construction work in the vicinity is complete.
- D. Storage: Catalog and store items within a weathertight enclosure where they are protected from moisture, weather, condensation, and freezing temperatures.
 - 1. Identify each item for reinstallation with a nonpermanent mark to document its original location. Indicate original locations on plans, elevations, sections, or photographs by annotating the identifying marks.
 - 2. Secure stored materials to protect from theft.
 - 3. Control humidity so that it does not exceed 85 percent. Maintain temperatures 5 deg F (3 deg C) or more above the dew point.

PART 2 - PRODUCTS - (Not Used)

PART 3 - EXECUTION

3.1 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm resulting from alteration work.
 - 1. Use only proven protection methods, appropriate to each area and surface being protected.
 - 2. Provide temporary barricades, barriers, and directional signage to exclude the public from areas where alteration work is being performed.
 - 3. Erect temporary barriers to form and maintain fire-egress routes.
 - 4. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during alteration work.
 - 5. Contain dust and debris generated by alteration work, and prevent it from reaching the public or adjacent surfaces.
 - 6. Provide shoring, bracing, and supports as necessary. Do not overload structural elements.
 - 7. Protect floors and other surfaces along hauling routes from damage, wear, and staining.
 - 8. Provide supplemental sound-control treatment to isolate demolition work from other areas of the building.
- B. Temporary Protection of Materials to Remain:
 - 1. Protect existing materials with temporary protections and construction. Do not remove existing materials unless otherwise indicated.
 - 2. Do not attach temporary protection to existing surfaces except as indicated as part of the alteration work program.

ALTERATION PROJECT PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 35 16 - 4

JSJA Project # 202543

- C. Comply with each product manufacturer's written instructions for protections and precautions. Protect against adverse effects of products and procedures on people and adjacent materials, components, and vegetation.
- D. Utility and Communications Services:
 - 1. Notify Owner, Architect, authorities having jurisdiction, and entities owning or controlling wires, conduits, pipes, and other services affected by alteration work before commencing operations.
 - 2. Disconnect and cap pipes and services as required by authorities having jurisdiction, as required for alteration work.
 - 3. Maintain existing services unless otherwise indicated; keep in service, and protect against damage during operations. Provide temporary services during interruptions to existing utilities.
- E. Existing Drains: Prior to the start of work in an area, test drainage system to ensure that it is functioning properly. Notify Architect immediately of inadequate drainage or blockage. Do not begin work in an area until the drainage system is functioning properly.
 - 1. Prevent solids such as adhesive or mortar residue or other debris from entering the drainage system. Clean out drains and drain lines that become sluggish or blocked by sand or other materials resulting from alteration work.
 - 2. Protect drains from pollutants. Block drains or filter out sediments, allowing only clean water to pass.
- F. Existing Roofing: Prior to the start of work in an area, install roofing protection.

3.2 PROTECTION FROM FIRE

- A. General: Follow fire-prevention plan and the following:
 - 1. Comply with NFPA 241 requirements unless otherwise indicated. Perform duties titled "Owner's Responsibility for Fire Protection."
 - 2. Remove and keep area free of combustibles, including rubbish, paper, waste, and chemicals, unless necessary for the immediate work.
 - a. If combustible material cannot be removed, provide fire blankets to cover such materials.
- B. Heat-Generating Equipment and Combustible Materials: Comply with the following procedures while performing work with heat-generating equipment or combustible materials, including welding, torch-cutting, soldering, brazing, removing paint with heat, or other operations where open flames or implements using high heat or combustible solvents and chemicals are anticipated:
 - 1. Obtain Owner's approval for operations involving use of open-flame or welding or other high-heat equipment. Notify Owner at least 72 hours before each occurrence, indicating location of such work.

ALTERATION PROJECT PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 35 16 - 5

JSJA Project # 202543

2. As far as practicable, restrict heat-generating equipment to shop areas or outside the building.
 3. Do not perform work with heat-generating equipment in or near rooms or in areas where flammable liquids or explosive vapors are present or thought to be present. Use a combustible gas indicator test to ensure that the area is safe.
 4. Use fireproof baffles to prevent flames, sparks, hot gases, or other high-temperature material from reaching surrounding combustible material.
 5. Prevent the spread of sparks and particles of hot metal through open windows, doors, holes, and cracks in floors, walls, ceilings, roofs, and other openings.
 6. Fire Watch: Before working with heat-generating equipment or combustible materials, station personnel to serve as a fire watch at each location where such work is performed. Fire-watch personnel shall have the authority to enforce fire safety. Station fire watch according to NFPA 51B, NFPA 241, and as follows:
 - a. Train each fire watch in the proper operation of fire-control equipment and alarms.
 - b. Prohibit fire-watch personnel from other work that would be a distraction from fire-watch duties.
 - c. Cease work with heat-generating equipment whenever fire-watch personnel are not present.
 - d. Have fire-watch personnel perform final fire-safety inspection each day beginning no sooner than 30 minutes after conclusion of work to detect hidden or smoldering fires and to ensure that proper fire prevention is maintained.
 - e. Maintain fire-watch personnel at Project site until two hours after conclusion of daily work.
- C. Fire-Control Devices: Provide and maintain fire extinguishers, fire blankets, and rag buckets for disposal of rags with combustible liquids. Maintain each as suitable for the type of fire risk in each work area. Ensure that nearby personnel and the fire-watch personnel are trained in fire-extinguisher and blanket use.
- D. Sprinklers: Where sprinkler protection exists and is functional, maintain it without interruption while operations are being performed. If operations are performed close to sprinklers, shield them temporarily with guards.
1. Remove temporary guards at the end of work shifts, whenever operations are paused, and when nearby work is complete.

3.3 PROTECTION DURING APPLICATION OF CHEMICALS

- A. Protect motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm or spillage resulting from applications of chemicals and adhesives.
- B. Cover adjacent surfaces with protective materials that are proven to resist chemicals selected for Project unless chemicals being used will not damage adjacent surfaces as indicated in alteration work program. Use covering materials and masking agents that are waterproof and UV resistant and that will not stain or leave residue on surfaces to which they are applied. Apply protective materials according to manufacturer's written instructions. Do not apply liquid masking agents or adhesives to painted or porous surfaces. When no longer needed, promptly remove protective materials.

ALTERATION PROJECT PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

01 35 16 - 6

JSJA Project # 202543

- C. Do not apply chemicals during winds of sufficient force to spread them to unprotected surfaces.
- D. Neutralize alkaline and acid wastes and legally dispose of off Owner's property.
- E. Collect and dispose of runoff from chemical operations by legal means and in a manner that prevents soil contamination, soil erosion, undermining of paving and foundations, damage to landscaping, or water penetration into building interior.

3.4 GENERAL ALTERATION WORK

- A. Record existing work before each procedure (preconstruction), and record progress during the work. Use digital preconstruction documentation photographs or video recordings. Comply with requirements in Section 01 32 33 "Photographic Documentation."
- B. Perform surveys of Project site as the Work progresses to detect hazards resulting from alterations.
- C. Notify Architect of visible changes in the integrity of material or components whether from environmental causes including biological attack, UV degradation, freezing, or thawing or from structural defects including cracks, movement, or distortion.
 - 1. Do not proceed with the work in question until directed by Architect.

END OF SECTION 01 35 16

ALTERATION PROJECT PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 35 16 - 7

JSJA Project # 202543

SECTION 01 40 00 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspection services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 2. Requirements for Contractor to provide quality-assurance and quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

1.2 DEFINITIONS

- A. Experienced: When used with an entity or individual, "experienced" unless otherwise further described means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.
- B. Field Quality-Control Tests: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- C. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, assembly, and similar operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- D. Mockups: Full-size physical assemblies that are constructed on-site either as freestanding temporary built elements or as part of permanent construction. Mockups are constructed to verify selections made under Sample submittals; to demonstrate aesthetic effects and qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.

QUALITY REQUIREMENTS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 40 00 - 1

JSJA Project # 202543

1. Laboratory Mockups: Full-size physical assemblies constructed and tested at testing facility to verify performance characteristics.
 2. Integrated Exterior Mockups: Mockups of the exterior envelope constructed on-site as freestanding temporary built elements or as part of permanent construction, consisting of multiple products, assemblies, and subassemblies.
 3. Room Mockups: Mockups of typical interior spaces complete with wall, floor, and ceiling finishes; doors; windows; millwork; casework; specialties; furnishings and equipment; and lighting.
- E. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.
- F. Product Tests: Tests and inspections that are performed by a nationally recognized testing laboratory (NRTL) according to 29 CFR 1910.7, by a testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program (NVLAP), or by a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- G. Source Quality-Control Tests: Tests and inspections that are performed at the source; for example, plant, mill, factory, or shop.
- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- I. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- J. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Contractor's quality-control services do not include contract administration activities performed by Architect.

1.3 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1.4 CONFLICTING REQUIREMENTS

- A. Conflicting Standards and Other Requirements: If compliance with two or more standards or requirements are specified and the standards or requirements establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for direction before proceeding.

QUALITY REQUIREMENTS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 40 00 - 2

JSJA Project # 202543

- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.5 ACTION SUBMITTALS

- A. Delegated-Design Services Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit a statement signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional, indicating that the products and systems are in compliance with performance and design criteria indicated. Include list of codes, loads, and other factors used in performing these services.

1.6 INFORMATIONAL SUBMITTALS

- A. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility submitted to authorities having jurisdiction before starting work on the following systems:
 - 1. Seismic-force-resisting system, designated seismic system, or component listed in the Statement of Special Inspections.
 - 2. Main wind-force-resisting system or a wind-resisting component listed in the Statement of Special Inspections.
- B. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- C. Permits, Licenses, and Certificates: For Owner's record, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents established for compliance with standards and regulations bearing on performance of the Work.

1.7 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, telephone number, and email address of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.

QUALITY REQUIREMENTS

01 40 00 - 3

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

7. Identification of product and Specification Section.
 8. Complete test or inspection data.
 9. Test and inspection results and an interpretation of test results.
 10. Record of temperature and weather conditions at time of sample taking and testing and inspection.
 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 12. Name and signature of laboratory inspector.
 13. Recommendations on retesting and reinspecting.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
1. Statement on condition of substrates and their acceptability for installation of product.
 2. Statement that products at Project site comply with requirements.
 3. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 4. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 5. Other required items indicated in individual Specification Sections.
- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
1. Statement that equipment complies with requirements.
 2. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 3. Other required items indicated in individual Specification Sections.

1.8 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units. As applicable, procure products from manufacturers able to meet qualification requirements, warranty requirements, and technical or factory-authorized service representative requirements.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, applying, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

QUALITY REQUIREMENTS

01 40 00 - 4

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.
- F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspection indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
- H. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- J. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
 - 1. Contractor responsibilities include the following:
 - a. Provide test specimens representative of proposed products and construction.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
 - d. When testing is complete, remove test specimens and test assemblies, and mockups; do not reuse products on Project.
 - 2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- K. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:

QUALITY REQUIREMENTS

01 40 00 - 5

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

1. Build mockups of size indicated.
 2. Build mockups in location indicated or, if not indicated, as directed by Architect.
 3. Notify Architect seven days in advance of dates and times when mockups will be constructed.
 4. Employ supervisory personnel who will oversee mockup construction. Employ workers that will be employed to perform same tasks during the construction at Project.
 5. Demonstrate the proposed range of aesthetic effects and workmanship.
 6. Obtain Architect's approval of mockups before starting corresponding work, fabrication, or construction.
 - a. Allow seven days for initial review and each re-review of each mockup.
 7. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
 8. Demolish and remove mockups when directed unless otherwise indicated.
- L. Laboratory Mockups: Comply with requirements of preconstruction testing and those specified in individual Specification Sections.

1.9 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspection they are engaged to perform.
 2. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor.
- B. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities, whether specified or not, to verify and document that the Work complies with requirements.
1. Engage a qualified testing agency to perform quality-control services.
 - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
 2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspection will be performed.
 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 4. Testing and inspection requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.

QUALITY REQUIREMENTS

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

01 40 00 - 6

JSJA Project # 202543

- C. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- D. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. Determine the locations from which test samples will be taken and in which in-situ tests are conducted.
 - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 - 6. Do not perform duties of Contractor.
- E. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 01 33 00 "Submittal Procedures."
- F. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.
- G. Associated Contractor Services: Cooperate with agencies and representatives performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of representative samples of materials that require testing and inspection. Assist agency in obtaining samples.
 - 4. Facilities for storage and field curing of test samples.
 - 5. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - 6. Security and protection for samples and for testing and inspection equipment at Project site.
- H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspection.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.

QUALITY REQUIREMENTS

01 40 00 - 7

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

1.10 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: Engage a qualified testing agency and/or special inspector to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, and as follows:
1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
 2. Notifying Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect with copy to Contractor and to authorities having jurisdiction.
 4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 6. Retesting and reinspecting corrected work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
1. Date test or inspection was conducted.
 2. Description of the Work tested or inspected.
 3. Date test or inspection results were transmitted to Architect.
 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.
1. Submit log at Project closeout as part of Project Record Documents.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspection, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Section 01 70 00 "Execution."

QUALITY REQUIREMENTS

01 40 00 - 8

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01 40 00

QUALITY REQUIREMENTS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 40 00 - 9

JSJA Project # 202543

SECTION 01 42 00 - REFERENCES

PART 1 - GENERAL

1.1 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.2 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.

REFERENCES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 42 00 - 1

JSJA Project # 202543

- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.3 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."
- B. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.
1. AABC - Associated Air Balance Council; www.aabc.com.
 2. AAMA - American Architectural Manufacturers Association; www.aamanet.org.
 3. AAPFCO - Association of American Plant Food Control Officials; www.aapfco.org.
 4. AASHTO - American Association of State Highway and Transportation Officials; www.transportation.org.
 5. AATCC - American Association of Textile Chemists and Colorists; www.aatcc.org.
 6. ABMA - American Bearing Manufacturers Association; www.americanbearings.org.
 7. ABMA - American Boiler Manufacturers Association; www.abma.com.
 8. ACI - American Concrete Institute; (Formerly: ACI International); www.concrete.org
 9. ACPA - American Concrete Pipe Association; www.concrete-pipe.org.
 10. AEIC - Association of Edison Illuminating Companies, Inc. (The); www.aeic.org.
 11. AF&PA - American Forest & Paper Association; www.afandpa.org.
 12. AGA - American Gas Association; www.aga.org.
 13. AHAM - Association of Home Appliance Manufacturers; www.aham.org.
 14. AHRI - Air-Conditioning, Heating, and Refrigeration Institute (The); www.ahrinet.org.
 15. AI - Asphalt Institute; www.asphaltinstitute.org.
 16. AIA - American Institute of Architects (The); www.aia.org.
 17. AISC - American Institute of Steel Construction; www.aisc.org.
 18. AISI - American Iron and Steel Institute; www.steel.org.
 19. AITC - American Institute of Timber Construction; www.aitc-glulam.org.
 20. AMCA - Air Movement and Control Association International, Inc.; www.amca.org.
 21. ANSI - American National Standards Institute; www.ansi.org.
 22. AOSA - Association of Official Seed Analysts, Inc.; www.aosaseed.com.
 23. APA - APA - The Engineered Wood Association; www.apawood.org.
 24. APA - Architectural Precast Association; www.archprecast.org.
 25. API - American Petroleum Institute; www.api.org.
 26. ARI - Air-Conditioning & Refrigeration Institute; (See AHRI).
 27. ARI - American Refrigeration Institute; (See AHRI).
 28. ARMA - Asphalt Roofing Manufacturers Association; www.asphaltroofing.org.
 29. ASCE - American Society of Civil Engineers; www.asce.org.
 30. ASCE/SEI - American Society of Civil Engineers/Structural Engineering Institute; (See ASCE).

REFERENCES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 42 00 - 2

JSJA Project # 202543

31. ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers; www.ashrae.org.
32. ASME - ASME International; (American Society of Mechanical Engineers); www.asme.org.
33. ASSE - American Society of Safety Engineers (The); www.asse.org.
34. ASSE - American Society of Sanitary Engineering; www.asse-plumbing.org.
35. ASTM - ASTM International; www.astm.org.
36. ATIS - Alliance for Telecommunications Industry Solutions; www.atis.org.
37. AWEA - American Wind Energy Association; www.awea.org.
38. AWI - Architectural Woodwork Institute; www.awinet.org.
39. AWMAC - Architectural Woodwork Manufacturers Association of Canada; www.awmac.com.
40. AWWA - American Water Works Association; www.awwa.org.
41. AWS - American Welding Society; www.aws.org.
42. AWWA - American Water Works Association; www.awwa.org.
43. BHMA - Builders Hardware Manufacturers Association; www.buildershardware.com.
44. BIA - Brick Industry Association (The); www.gobrick.com.
45. BICSI - BICSI, Inc.; www.bicsi.org.
46. BIFMA - BIFMA International; (Business and Institutional Furniture Manufacturer's Association); www.bifma.org.
47. BISSC - Baking Industry Sanitation Standards Committee; www.bissc.org.
48. BWF - Badminton World Federation; (Formerly: International Badminton Federation); www.bissc.org.
49. CDA - Copper Development Association; www.copper.org.
50. CE - Conformite Europeenne; <http://ec.europa.eu/growth/single-market/ce-marking/>
51. CEA - Canadian Electricity Association; www.electricity.ca.
52. CEA - Consumer Electronics Association; www.ce.org.
53. CFFA - Chemical Fabrics and Film Association, Inc.; www.chemicalfabricsandfilm.com.
54. CFSEI - Cold-Formed Steel Engineers Institute; www.cfsei.org.
55. CGA - Compressed Gas Association; www.cganet.com.
56. CIMA - Cellulose Insulation Manufacturers Association; www.cellulose.org.
57. CISCA - Ceilings & Interior Systems Construction Association; www.cisca.org.
58. CISPI - Cast Iron Soil Pipe Institute; www.cispi.org.
59. CLFMI - Chain Link Fence Manufacturers Institute; www.chainlinkinfo.org.
60. CPA - Composite Panel Association; www.pbmdf.com.
61. CRI - Carpet and Rug Institute (The); www.carpet-rug.org.
62. CRRC - Cool Roof Rating Council; www.coolroofs.org.
63. CRSI - Concrete Reinforcing Steel Institute; www.crsi.org.
64. CSA - Canadian Standards Association; www.csa.ca.
65. CSA - CSA International; (Formerly: IAS - International Approval Services); www.csa-international.org.
66. CSI - Construction Specifications Institute (The); www.csinet.org.
67. CSSB - Cedar Shake & Shingle Bureau; www.cedarbureau.org.
68. CTI - Cooling Technology Institute; (Formerly: Cooling Tower Institute); www.cti.org.
69. CWC - Composite Wood Council; (See CPA).
70. DASMA - Door and Access Systems Manufacturers Association; www.dasma.com.
71. DHI - Door and Hardware Institute; www.dhi.org.
72. ECA - Electronic Components Association; (See ECIA).
73. ECAMA - Electronic Components Assemblies & Materials Association; (See ECIA).
74. ECIA - Electronic Components Industry Association; www.eciaonline.org.

REFERENCES

01 42 00 - 3

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

75. EIA - Electronic Industries Alliance; (See TIA).
76. EIMA - EIFS Industry Members Association; www.eima.com.
77. EJMA - Expansion Joint Manufacturers Association, Inc.; www.ejma.org.
78. ESD - ESD Association; (Electrostatic Discharge Association); www.esda.org.
79. ESTA - Entertainment Services and Technology Association; (See PLASA).
80. ETL - Intertek (See Intertek); www.intertek.com.
81. EVO - Efficiency Valuation Organization; www.evo-world.org.
82. FCI - Fluid Controls Institute; www.fluidcontrolsintstitute.org.
83. FIBA - Federation Internationale de Basketball; (The International Basketball Federation); www.fiba.com.
84. FIVB - Federation Internationale de Volleyball; (The International Volleyball Federation); www.fivb.org.
85. FM Approvals - FM Approvals LLC; www.fmglobal.com.
86. FM Global - FM Global; (Formerly: FMG - FM Global); www.fmglobal.com.
87. FRSA - Florida Roofing, Sheet Metal & Air Conditioning Contractors Association, Inc.; www.floridarooft.com.
88. FSA - Fluid Sealing Association; www.fluidsealing.com.
89. FSC - Forest Stewardship Council U.S.; www.fscus.org.
90. GA - Gypsum Association; www.gypsum.org.
91. GANA - Glass Association of North America; www.glasswebsite.com.
92. GS - Green Seal; www.greenseal.org.
93. HI - Hydraulic Institute; www.pumps.org.
94. HI/GAMA - Hydronics Institute/Gas Appliance Manufacturers Association; (See AHRI).
95. HMMA - Hollow Metal Manufacturers Association; (See NAAMM).
96. HPVA - Hardwood Plywood & Veneer Association; www.hpva.org.
97. HPW - H. P. White Laboratory, Inc.; www.hpwhite.com.
98. IAPSC - International Association of Professional Security Consultants; www.iapsc.org.
99. IAS - International Accreditation Service; www.iasonline.org.
100. IAS - International Approval Services; (See CSA).
101. ICBO - International Conference of Building Officials; (See ICC).
102. ICC - International Code Council; www.iccsafe.org.
103. ICEA - Insulated Cable Engineers Association, Inc.; www.icea.net.
104. ICPA - International Cast Polymer Alliance; www.icpa-hq.org.
105. ICRI - International Concrete Repair Institute, Inc.; www.icri.org.
106. IEC - International Electrotechnical Commission; www.iec.ch.
107. IEEE - Institute of Electrical and Electronics Engineers, Inc. (The); www.ieee.org.
108. IES - Illuminating Engineering Society; (Formerly: Illuminating Engineering Society of North America); www.ies.org.
109. IESNA - Illuminating Engineering Society of North America; (See IES).
110. IEST - Institute of Environmental Sciences and Technology; www.iest.org.
111. IGMA - Insulating Glass Manufacturers Alliance; www.igmaonline.org.
112. IGSHPA - International Ground Source Heat Pump Association; www.igshpa.okstate.edu.
113. ILI - Indiana Limestone Institute of America, Inc.; www.ili.ai.
114. Intertek - Intertek Group; (Formerly: ETL SEMCO; Intertek Testing Service NA); www.intertek.com.
115. ISA - International Society of Automation (The); (Formerly: Instrumentation, Systems, and Automation Society); www.isa.org.
116. ISAS - Instrumentation, Systems, and Automation Society (The); (See ISA).

REFERENCES

01 42 00 - 4

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

117. ISFA - International Surface Fabricators Association; (Formerly: International Solid Surface Fabricators Association); www.isfanow.org.
118. ISO - International Organization for Standardization; www.iso.org.
119. ISSFA - International Solid Surface Fabricators Association; (See ISFA).
120. ITU - International Telecommunication Union; www.itu.int/home.
121. KCMA - Kitchen Cabinet Manufacturers Association; www.kcma.org.
122. LMA - Laminating Materials Association; (See CPA).
123. LPI - Lightning Protection Institute; www.lightning.org.
124. MBMA - Metal Building Manufacturers Association; www.mbma.com.
125. MCA - Metal Construction Association; www.metalconstruction.org.
126. MFMA - Maple Flooring Manufacturers Association, Inc.; www.maplefloor.org.
127. MFMA - Metal Framing Manufacturers Association, Inc.; www.metalframingmfg.org.
128. MHIA - Material Handling Industry of America; www.mhia.org.
129. MIA - Marble Institute of America; www.marble-institute.com.
130. MMPA - Moulding & Millwork Producers Association; www.wmmpa.com.
131. MPI - Master Painters Institute; www.paintinfo.com.
132. MSS - Manufacturers Standardization Society of The Valve and Fittings Industry Inc.; www.mss-hq.org.
133. NAAMM - National Association of Architectural Metal Manufacturers; www.naamm.org.
134. NACE - NACE International; (National Association of Corrosion Engineers International); www.nace.org.
135. NADCA - National Air Duct Cleaners Association; www.nadca.com.
136. NAIMA - North American Insulation Manufacturers Association; www.naima.org.
137. NBGQA - National Building Granite Quarries Association, Inc.; www.nbgqa.com.
138. NBI - New Buildings Institute; www.newbuildings.org.
139. NCAA - National Collegiate Athletic Association (The); www.ncaa.org.
140. NCMA - National Concrete Masonry Association; www.ncma.org.
141. NEBB - National Environmental Balancing Bureau; www.nebb.org.
142. NECA - National Electrical Contractors Association; www.necanet.org.
143. NeLMA - Northeastern Lumber Manufacturers Association; www.nelma.org.
144. NEMA - National Electrical Manufacturers Association; www.nema.org.
145. NETA - InterNational Electrical Testing Association; www.netaworld.org.
146. NFHS - National Federation of State High School Associations; www.nfhs.org.
147. NFPA - National Fire Protection Association; www.nfpa.org.
148. NFPA - NFPA International; (See NFPA).
149. NFRC - National Fenestration Rating Council; www.nfrc.org.
150. NHLA - National Hardwood Lumber Association; www.nhla.com.
151. NLGA - National Lumber Grades Authority; www.nlga.org.
152. NOFMA - National Oak Flooring Manufacturers Association; (See NWFA).
153. NOMMA - National Ornamental & Miscellaneous Metals Association; www.nomma.org.
154. NRCA - National Roofing Contractors Association; www.nrca.net.
155. NRMCA - National Ready Mixed Concrete Association; www.nrmca.org.
156. NSF - NSF International; www.nsf.org.
157. NSPE - National Society of Professional Engineers; www.nspe.org.
158. NSSGA - National Stone, Sand & Gravel Association; www.nssga.org.
159. NTMA - National Terrazzo & Mosaic Association, Inc. (The); www.ntma.com.
160. NWFA - National Wood Flooring Association; www.nwfa.org.
161. PCI - Precast/Prestressed Concrete Institute; www.pci.org.
162. PDI - Plumbing & Drainage Institute; www.pdionline.org.

REFERENCES

01 42 00 - 5

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

163. PLASA - PLASA; (Formerly: ESTA - Entertainment Services and Technology Association); <http://www.plasa.org>.
164. RCSC - Research Council on Structural Connections; www.boltcouncil.org.
165. RFCI - Resilient Floor Covering Institute; www.rfci.com.
166. RIS - Redwood Inspection Service; www.redwoodinspection.com.
167. SAE - SAE International; www.sae.org.
168. SCTE - Society of Cable Telecommunications Engineers; www.scte.org.
169. SDI - Steel Deck Institute; www.sdi.org.
170. SDI - Steel Door Institute; www.steeldoor.org.
171. SEFA - Scientific Equipment and Furniture Association (The); www.sefalabs.com.
172. SEI/ASCE - Structural Engineering Institute/American Society of Civil Engineers; (See ASCE).
173. SIA - Security Industry Association; www.siaonline.org.
174. SJI - Steel Joist Institute; www.steeljoist.org.
175. SMA - Screen Manufacturers Association; www.smainfo.org.
176. SMACNA - Sheet Metal and Air Conditioning Contractors' National Association; www.smacna.org.
177. SMPTE - Society of Motion Picture and Television Engineers; www.smpte.org.
178. SPFA - Spray Polyurethane Foam Alliance; www.sprayfoam.org.
179. SPIB - Southern Pine Inspection Bureau; www.spib.org.
180. SPRI - Single Ply Roofing Industry; www.spri.org.
181. SRCC - Solar Rating & Certification Corporation; www.solar-rating.org.
182. SSINA - Specialty Steel Industry of North America; www.ssina.com.
183. SSPC - SSPC: The Society for Protective Coatings; www.sspc.org.
184. STI - Steel Tank Institute; www.steeltank.com.
185. SWI - Steel Window Institute; www.steelwindows.com.
186. SWPA - Submersible Wastewater Pump Association; www.swpa.org.
187. TCA - Tilt-Up Concrete Association; www.tilt-up.org.
188. TCNA - Tile Council of North America, Inc.; www.tileusa.com.
189. TEMA - Tubular Exchanger Manufacturers Association, Inc.; www.tema.org.
190. TIA - Telecommunications Industry Association (The); (Formerly: TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance); www.tiaonline.org.
191. TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance; (See TIA).
192. TMS - The Masonry Society; www.masonrysociety.org.
193. TPI - Truss Plate Institute; www.tpinst.org.
194. TPI - Turfgrass Producers International; www.turfgrasssod.org.
195. TRI - Tile Roofing Institute; www.tilerroofing.org.
196. UL - Underwriters Laboratories Inc.; <http://www.ul.com>.
197. UNI - Uni-Bell PVC Pipe Association; www.uni-bell.org.
198. USAV - USA Volleyball; www.usavolleyball.org.
199. USGBC - U.S. Green Building Council; www.usgbc.org.
200. USITT - United States Institute for Theatre Technology, Inc.; www.usitt.org.
201. WASTEC - Waste Equipment Technology Association; www.wastec.org.
202. WCLIB - West Coast Lumber Inspection Bureau; www.wclib.org.
203. WCMA - Window Covering Manufacturers Association; www.wcmanet.org.
204. WDMA - Window & Door Manufacturers Association; www.wdma.com.
205. WI - Woodwork Institute; www.wicnet.org.
206. WSRCA - Western States Roofing Contractors Association; www.wsrca.com.

REFERENCES

01 42 00 - 6

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

207. WWPA - Western Wood Products Association; www.wwpa.org.

C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is believed to be accurate as of the date of the Contract Documents.

1. DIN - Deutsches Institut fur Normung e.V.; www.din.de.
2. IAPMO - International Association of Plumbing and Mechanical Officials; www.iapmo.org.
3. ICC - International Code Council; www.iccsafe.org.
4. ICC-ES - ICC Evaluation Service, LLC; www.icc-es.org.

D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Information is subject to change and is up to date as of the date of the Contract Documents.

1. COE - Army Corps of Engineers; www.usace.army.mil.
2. CPSC - Consumer Product Safety Commission; www.cpsc.gov.
3. DOC - Department of Commerce; National Institute of Standards and Technology; www.nist.gov.
4. DOD - Department of Defense; www.quicksearch.dla.mil.
5. DOE - Department of Energy; www.energy.gov.
6. EPA - Environmental Protection Agency; www.epa.gov.
7. FAA - Federal Aviation Administration; www.faa.gov.
8. FG - Federal Government Publications; www.gpo.gov/fdsys.
9. GSA - General Services Administration; www.gsa.gov.
10. HUD - Department of Housing and Urban Development; www.hud.gov.
11. LBL - Lawrence Berkeley National Laboratory; Environmental Energy Technologies Division; www.eetd.lbl.gov.
12. OSHA - Occupational Safety & Health Administration; www.osha.gov.
13. SD - Department of State; www.state.gov.
14. TRB - Transportation Research Board; National Cooperative Highway Research Program; The National Academies; www.trb.org.
15. USDA - Department of Agriculture; Agriculture Research Service; U.S. Salinity Laboratory; www.ars.usda.gov.
16. USDA - Department of Agriculture; Rural Utilities Service; www.usda.gov.
17. USDOJ - Department of Justice; Office of Justice Programs; National Institute of Justice; www.ojp.usdoj.gov.
18. USP - U.S. Pharmacopeial Convention; www.usp.org.
19. USPS - United States Postal Service; www.usps.com.

E. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.

1. CFR - Code of Federal Regulations; Available from Government Printing Office; www.gpo.gov/fdsys.
2. DOD - Department of Defense; Military Specifications and Standards; Available from DLA Document Services; www.quicksearch.dla.mil.

REFERENCES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 42 00 - 7

JSJA Project # 202543

3. DSCC - Defense Supply Center Columbus; (See FS).
 4. FED-STD - Federal Standard; (See FS).
 5. FS - Federal Specification; Available from DLA Document Services; www.quicksearch.dla.mil.
 - a. Available from Defense Standardization Program; www.dsp.dla.mil.
 - b. Available from General Services Administration; www.gsa.gov.
 - c. Available from National Institute of Building Sciences/Whole Building Design Guide; www.wbdg.org/ccb.
 6. MILSPEC - Military Specification and Standards; (See DOD).
 7. USAB - United States Access Board; www.access-board.gov.
 8. USATBCB - U.S. Architectural & Transportation Barriers Compliance Board; (See USAB).
- F. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.
1. CBHF; State of California; Department of Consumer Affairs; Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation; www.bearhfti.ca.gov.
 2. CCR; California Code of Regulations; Office of Administrative Law; California Title 24 Energy Code; www.calregs.com.
 3. CDHS; California Department of Health Services; (See CDPH).
 4. CDPH; California Department of Public Health; Indoor Air Quality Program; www.cal-iaq.org.
 5. CPUC; California Public Utilities Commission; www.cpuc.ca.gov.
 6. SCAQMD; South Coast Air Quality Management District; www.aqmd.gov.
 7. TFS; Texas A&M Forest Service; Sustainable Forestry and Economic Development; www.txforestservation.tamu.edu.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 42 00

REFERENCES

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

01 42 00 - 8

JSJA Project # 202543

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Requirements:
 - 1. Section 01 10 00 "Summary" for work restrictions and limitations on utility interruptions.

1.2 USE CHARGES

- A. General: Installation, modification, extension, maintenance, and removal of temporary utilities in Contract Sum, shall be included in the Contract Sum unless otherwise indicated. Allow other entities engaged in the Project to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, testing agencies, and authorities having jurisdiction.
- B. New Service Use Charges: Pay use charges for temporary utilities used by all entities involved in the on-site construction operations.
- C. Existing Service Use Charges: Owner will pay use charges for use of existing utility systems for construction operations, unless otherwise indicated.
 - 1. Additional Service Use Charges: When Owner's existing utility service is inadequate for construction needs, provide and pay use charges for additional temporary utilities of capacity or characteristics required for construction operations.
 - 2. Metering: Arrange for installation of separate metering for utilities used for construction operations to measure consumption for which Contractor will pay.
- D. Water and Sewer Service from Existing System: Water and Sewer Service from Owner's existing systems, where adequate, is available for use without metering and without payment of use charges. Provide temporary connections and extensions of services as required for construction operations.
- E. Electric Power Service from Existing System: Electric power from Owner's existing system, where adequate, is available for use without metering and without payment of use charges. Provide temporary connections and extensions of services as required for construction operations.

TEMPORARY FACILITIES AND CONTROLS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 50 00 - 1

JSJA Project # 202543

1.3 INFORMATIONAL SUBMITTALS

- A. Site Utilization Plan: Show temporary facilities, temporary utility lines and connections, staging areas, construction site entrances, vehicle circulation, and parking areas for construction personnel.
- B. Project Identification and Temporary Signs: Show fabrication and installation details, including plans, elevations, details, layouts, typestyles, graphic elements, and message content.
- C. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.
- D. Moisture-and Mold-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage and mold.
- E. Dust- and HVAC-Control Plan: Submit coordination drawing and narrative that indicates the dust- and HVAC-control measures proposed for use, proposed locations, and proposed time frame for their operation. Include the following:
 - 1. Locations of dust-control partitions at each phase of work.
 - 2. HVAC system isolation schematic drawing.
 - 3. Location of proposed air-filtration system discharge.
 - 4. Waste-handling procedures.
 - 5. Other dust-control measures.

1.4 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- C. Accessible Temporary Egress: Comply with applicable provisions in the United States Access Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.

1.5 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

TEMPORARY FACILITIES AND CONTROLS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 50 00 - 2

JSJA Project # 202543

PART 2 - PRODUCTS

2.1 TEMPORARY FACILITIES

- A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
- B. Common-Use Field Office: Of sufficient size to accommodate needs of Owner, Architect, and construction personnel office activities and to accommodate Project meetings specified in other Division 01 Sections. Keep office clean and orderly. Furnish and equip offices as follows:
 - 1. Furniture required for Project-site documents including file cabinets, plan tables, plan racks, and bookcases, as needed.
 - 2. Conference room of sufficient size to accommodate meetings of 10 individuals. Provide electrical power service and 120-V ac duplex receptacles, with no fewer than one receptacle on each wall. Furnish room with conference table, chairs, and 4-foot- (1.2-m-) square tack and marker boards.
 - 3. Access to temporary toilets, wash facilities, and drinking water within close proximity of filed office.
 - 4. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72 deg F (20 to 22 deg C).
 - 5. Lighting fixtures capable of maintaining average illumination of 20 fc (215 lx) at desk height.

2.2 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
 - 1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
 - 2. Heating Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
 - 3. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 8 at each return-air grille in system and remove at end of construction and clean HVAC system as required in Section 01 77 00 "Closeout Procedures."
- C. Air-Filtration Units: Primary and secondary HEPA-filter-equipped portable units with four-stage filtration. Provide single switch for emergency shutoff. Configure to run continuously.

TEMPORARY FACILITIES AND CONTROLS

01 50 00 - 3

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

PART 3 - EXECUTION

3.1 TEMPORARY FACILITIES, GENERAL

- A. Conservation: Coordinate construction and use of temporary facilities with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.
 - 1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. See other Sections for disposition of salvaged materials that are designated as Owner's property.

3.2 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.3 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
- C. Water Service: Use of Owner's water is permitted via hose bib connection where adequate in size to service the temporary construction needs otherwise contractor shall provide and include all costs to provide temporary water needs for construction purposes.
- D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
- E. Temporary Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.
 - 1. Provide temporary dehumidification systems when required to reduce ambient and substrate moisture levels to level required to allow installation or application of finishes and their proper curing or drying.

TEMPORARY FACILITIES AND CONTROLS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 50 00 - 4

JSJA Project # 202543

- F. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.
- G. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
- H. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
 - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

3.4 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 - 1. Provide construction for temporary offices, shops, and sheds located within construction area or within 30 feet (9 m) of building lines that is noncombustible according to ASTM E 136. Comply with NFPA 241.
 - 2. Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Traffic Controls: Comply with requirements of authorities having jurisdiction.
 - 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
 - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- C. Parking: Use designated areas of Owner's existing parking areas for construction personnel.
- D. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
 - 1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
 - 2. Remove snow and ice as required to minimize accumulations.
- E. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.
 - 1. Identification Signs: Provide Project identification signs as indicated on Drawings.
 - 2. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.
 - a. Provide temporary, directional signs for construction personnel and visitors.
 - 3. Maintain and touch up signs so they are legible at all times.

TEMPORARY FACILITIES AND CONTROLS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 50 00 - 5

JSJA Project # 202543

- F. Waste Disposal Facilities: Comply with requirements specified in Section 01 74 19 "Construction Waste Management and Disposal."
- G. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Section 01 74 13 "Progress Cleaning."
- H. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
 - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

3.5 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
 - 1. Where access to adjacent properties is required in order to affect protection of existing facilities, obtain written permission from adjacent property owner to access property for that purpose.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- C. Temporary Erosion and Sedimentation Control: Comply with requirements of MCDC SESC Permit or authorities having jurisdiction, whichever is more stringent and requirements specified in Section 02 23 00 "Site Clearing."
- D. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.
 - 1. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross tree- or plant-protection zones.
 - 2. Inspect, repair, and maintain erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
 - 3. Clean, repair, and restore adjoining properties and roads affected by erosion and sedimentation from Project site during the course of Project.
 - 4. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.
- E. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.

TEMPORARY FACILITIES AND CONTROLS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 50 00 - 6

JSJA Project # 202543

- F. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion. Water vegetation within work zone until substantial completion of site work. Contractor shall replace vegetation damaged by construction operations or lack of protection with like plant size and species or as approved by Architect.
- G. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using materials approved by authorities having jurisdiction.
- H. Work-Zone/Construction Site Enclosure Fence: Before construction operations begin, furnish and install Work-Zone/Construction site enclosure fence in a manner that will prevent people from easily entering the work-zone/construction site except by entrance gates.
 - 1. Extent of Fence: As required to enclose entire Work-Zone/Construction Site or portion determined sufficient to accommodate construction operations including material storage and staging areas. This may be one or more enclosure areas and shall be outlined for approval with the Site Utilization Plan provided by the Contractor.
 - 2. Maintain security by limiting number of keys and restricting distribution to authorized personnel.
 - 3. Material: 6 feet (1.83 m) tall pre-galvanized (zinc treated) chain link fencing, cross braced for extra strength, 1-3/8 inch post diameter min., 16 Ga. fencing, metal tube stands and anchor blocks as required for support. Include lockable entrance gate(s) for controlled access.
- I. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each workday.
- J. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- K. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.
- L. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
 - 1. Where heating or cooling is needed and permanent enclosure is incomplete, insulate temporary enclosures.
- M. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise.
 - 1. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side, and fire-retardant-treated plywood on construction operations side.

TEMPORARY FACILITIES AND CONTROLS

01 50 00 - 7

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

2. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
 3. Provide walk-off mats at each entrance through temporary partition.
- N. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.
1. Prohibit smoking in construction areas. Comply with additional limits on smoking specified in other Sections.
 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
 4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.6 MOISTURE AND MOLD CONTROL

- A. Contractor's Moisture-Protection Plan: Describe delivery, handling, storage, installation, and protection provisions for materials subject to water absorption or water damage.
1. Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water-damaged Work.
 2. Indicate sequencing of work that requires water, such as sprayed fire-resistive materials, plastering, and terrazzo grinding, and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.
 3. Indicate methods to be used to avoid trapping water in finished work.
- B. Exposed Construction Period: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
1. Protect porous materials from water damage.
 2. Protect stored and installed material from flowing or standing water.
 3. Keep porous and organic materials from coming into prolonged contact with concrete.
 4. Remove standing water from decks.
 5. Keep deck openings covered or dammed.
- C. Partially Enclosed Construction Period: After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:
1. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
 2. Keep interior spaces reasonably clean and protected from water damage.
 3. Periodically collect and remove waste containing cellulose or other organic matter.

TEMPORARY FACILITIES AND CONTROLS

01 50 00 - 8

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

4. Discard or replace water-damaged material.
 5. Do not install material that is wet.
 6. Discard and replace stored or installed material that begins to grow mold.
 7. Perform work in a sequence that allows wet materials adequate time to dry before enclosing the material in gypsum board or other interior finishes.
- D. Controlled Construction Period: After completing and sealing of the building enclosure but prior to the full operation of permanent HVAC systems, maintain as follows:
1. Control moisture and humidity inside building by maintaining effective dry-in conditions.
 2. Use temporary or permanent HVAC system to control humidity within ranges specified for installed and stored materials.
 3. Comply with manufacturer's written instructions for temperature, relative humidity, and exposure to water limits.

3.7 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
 2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 01 77 00 "Closeout Procedures."

END OF SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 50 00 - 9

JSJA Project # 202543

SECTION 01 60 00 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
- B. Related Requirements:
 - 1. Section 01 25 00 "Substitution Procedures" for requests for substitutions.

1.2 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved by Architect through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Basis-of-Design Product Specification: A specification in which a single manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation. In addition to the basis-of-design product description, product attributes and characteristics may be listed to establish the significant qualities related to type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other special features and requirements for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.3 ACTION SUBMITTALS

- A. Comparable Product Request Submittal: Submit request for consideration of each comparable product. Identify basis-of-design product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

PRODUCT REQUIREMENTS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 60 00 - 1

JSJA Project # 202543

1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
 2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
 - a. Form of Architect's Approval of Submittal: As specified in Section 01 33 00 "Submittal Procedures."
 - b. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.
- B. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 01 33 00 "Submittal Procedures." Show compliance with requirements.

1.4 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.
- C. Storage:
1. Store products to allow for inspection and measurement of quantity or counting of units.
 2. Store materials in a manner that will not endanger Project structure.
 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.

PRODUCT REQUIREMENTS

01 60 00 - 2

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
6. Protect stored products from damage and liquids from freezing.

1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
 3. See other Sections for specific content requirements and particular requirements for submitting special warranties.

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 3. Owner reserves the right to limit selection to products with warranties meeting requirements of the Contract Documents.
 4. Where products are accompanied by the term "as selected," Architect will make selection.
 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.

PRODUCT REQUIREMENTS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 60 00 - 3

JSJA Project # 202543

B. Product Selection Procedures:

1. Sole Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - a. Sole product may be indicated by the phrase: "Subject to compliance with requirements, provide the following: ..."
2. Sole Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - a. Sole manufacturer/source may be indicated by the phrase: "Subject to compliance with requirements, provide products by the following: ..."
3. Limited List of Products: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will be considered unless otherwise indicated.
 - a. Limited list of products may be indicated by the phrase: "Subject to compliance with requirements, provide one of the following: ..."
4. Non-Limited List of Products: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, which complies with requirements.
 - a. Non-limited list of products is indicated by the phrase: "Subject to compliance with requirements, available products that may be incorporated in the Work include, but are not limited to, the following: ..."
5. Limited List of Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.
 - a. Limited list of manufacturers is indicated by the phrase: "Subject to compliance with requirements, provide products by one of the following: ..."
6. Non-Limited List of Manufacturers: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, which complies with requirements.
 - a. Non-limited list of manufacturers is indicated by the phrase: "Subject to compliance with requirements, available manufacturers whose products may be incorporated in the Work include, but are not limited to, the following: ..."

PRODUCT REQUIREMENTS

01 60 00 - 4

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

7. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
 - a. For approval of products by unnamed manufacturers, comply with requirements in Section 01 25 00 "Substitution Procedures" for substitutions for convenience.
- C. Visual Matching Specification: Where Specifications require "match Architect's sample," provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
 1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 01 25 00 "Substitution Procedures" for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration of Comparable Products: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:
 1. Evidence that proposed product does not require revisions to the Contract Documents, is consistent with the Contract Documents, will produce the indicated results, and is compatible with other portions of the Work. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant product qualities include attributes such as type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other specific features and requirements.
 2. Evidence that proposed product provides specified warranty.
 3. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
 4. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 60 00

PRODUCT REQUIREMENTS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 60 00 - 5

JSJA Project # 202543

SECTION 01 70 00 - EXECUTION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:

1. Construction layout.
2. Field engineering and surveying.
3. Installation of the Work.
4. Cutting and patching.
5. Progress cleaning.
6. Starting and adjusting.
7. Protection of installed construction.

- B. Related Requirements:

1. Section 01 10 00 "Summary" for limits on use of Project site.
2. Section 01 77 00 "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, replacing defective work, and final cleaning.

1.2 INFORMATIONAL SUBMITTALS

- A. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.

1.3 QUALITY ASSURANCE

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.

1. Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection.
2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in

EXECUTION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 70 00 - 1

JSJA Project # 202543

reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.

4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

- B. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, mechanical and electrical systems, and other construction affecting the Work.
 1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; underground electrical services; and other utilities.
 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.

EXECUTION

01 70 00 - 2

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- C. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Existing Utility Information: Furnish information to Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Section 01 31 00 "Project Management and Coordination."

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.
- B. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.
- C. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect.

3.4 FIELD ENGINEERING

- A. Identification: Owner will identify existing benchmarks, control points, and property corners.

EXECUTION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 70 00 - 3

JSJA Project # 202543

- B. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
- C. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
 - 1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.

3.5 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 - 3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
- F. Tools and Equipment: Where possible, select tools or equipment that minimize production of excessive noise levels.
- G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other portions of the Work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
 - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
 - 2. Allow for building movement, including thermal expansion and contraction.

EXECUTION

01 70 00 - 4

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- J. Remove and replace damaged, defective, or non-conforming Work.

3.6 CUTTING AND PATCHING

- A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Section 01 10 00 "Summary."
- F. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize interruption to occupied areas.
- G. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.

EXECUTION

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

01 70 00 - 5

JSJA Project # 202543

4. Excavating and Backfilling: Comply with requirements in applicable Sections where required by cutting and patching operations.
 5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 6. Proceed with patching after construction operations requiring cutting are complete.
- H. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.
- I. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.7 STARTING AND ADJUSTING

- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Manufacturer's Field Service: Comply with qualification requirements in Section 01 40 00 "Quality Requirements."

3.8 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

EXECUTION

01 70 00 - 6

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- B. Protection of Existing Items: Provide protection and ensure that existing items to remain undisturbed by construction are maintained in condition that existed at commencement of the Work.
- C. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION 01 70 00

EXECUTION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 70 00 - 7

JSJA Project # 202543

SECTION 01 74 13 - PROGRESS CLEANING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes general administrative and procedural requirements for progress cleaning while construction is in progress.
- B. Related Requirements:
 - 1. Requirements of this Section apply to, and are a component part of, each Section of the Specifications.
 - 2. Section 01 74 23 "Final Cleaning."

1.02 ACTION SUBMITTALS

- A. Product Data: For cleaning agents.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. Cleaning Agents: Use cleaning materials and agents specifically recommended by manufacturer or fabricator of the surface to be cleaned. If specific cleaning materials are not recommended, use cleaning materials and agents that are not hazardous to health or property and that will not damage exposed, finished surfaces.

PART 3 - EXECUTION

3.01 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
 - a. Use containers intended for holding waste materials of type to be stored.
 - 4. Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.

33TPROGRESS CLEANING

35T01 74 13 - 1

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Immediately upon completion of installation of products, clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- H. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- I. Waste Disposal: See Section 01 74 19 "Construction Waste Management and Disposal."

END OF SECTION 01 74 13

33TPROGRESS CLEANING

35T01 74 13 - 2

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes administrative and procedural requirements for construction waste management and waste disposal.
- B. Related Requirements:
 - 1. Requirements of this Section apply to, and are a component part of, each Section of the Specifications.

1.02 REFERENCES

- A. Definitions:
 - 1. Clean: Untreated and unpainted; not contaminated with oils, solvents, caulk, or the like.
 - 2. Construction Waste: Solid wastes, typically including building materials, packaging, trash, debris, excavated soil, land-clearing debris, rubble resulting from construction, and other materials generated during construction process but not incorporated into the Work.
 - 3. Hazardous Waste: As defined by EPA in CFR Title 40 261.3.
 - 4. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product for reuse by others.
 - 5. Recycle: To remove a waste material from the Project site to another site for remanufacture into a new product for reuse by others.
 - 6. Return: To give back reusable items or unused products to vendors for credit.
 - 7. Sediment: Soil and other debris that has been eroded and transported by storm or well production run-off water.
 - 8. Solid Waste: As defined by EPA in CFR Title 40 261.2. Solid wastes can be solid, liquid, semi-solid, or containerized gaseous material.
 - 9. Toxic Waste: As defined by EPA in CFR Title 40 261.24.
 - 10. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
 - 11. Waste: Extra material or material that has reached the end of its useful life in its intended use.
 - 12. Waste Management Plan: A Project-related plan for the collection, transportation, and disposal of the waste generated at the construction site.

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Waste Management Meeting: Review methods and procedures related to waste management including, but not limited to, the following:

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

Building Renovations, Remodeling, & Site Improvements For:

Monroe Community Credit Union

14 Winchester Street, Monroe, Michigan 48161

01 74 19 - 1

JSJA Project # 202543

1. Review and discuss daily waste management plan to maintain a clean work zone free of unnecessary debris and trash.
2. Review and discuss waste management plan including protection of existing and newly installed surfaces, site staging, and management priorities.
3. Review procedures for periodic waste collection and transportation to disposal facilities.
4. Review procedures to ensure debris is contained within the waste receptacle to prevent contamination of the site.

1.04 QUALITY ASSURANCE

- A. Review and discuss Construction Waste Management Plan implementation and progress at Pre-construction Conference and Progress Meetings.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Designate separate areas to facilitate separation of materials for potential recycling, and return.
- B. Clearly identify waste holding areas and receptacles.
- C. Keep waste holding areas and receptacles clean and orderly; prevent contamination of materials.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 WASTE MANAGEMENT

- A. Pro-actively manage construction waste:
 1. Practice efficient waste management when sizing, cutting, and installing products.
 2. Protect and Return unused products and overages to supplier.
 3. Arrange for return of packing materials, such as wood pallets, where economically feasible.
 4. Carefully install products; avoid removal of ill-timed and poorly installed products.
 5. Use centralized cutting areas to facilitate waste collection.
 6. Deliver, store, and handle products to prevent damage.
- B. Require sub-contractors and suppliers to participate in waste management efforts.
- C. Ensure that firms and facilities used for disposal have legal permits for intended uses.

3.02 WASTE COLLECTION

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 74 19 - 2

JSJA Project # 202543

- A. Provide containers and storage areas to facilitate waste management, clearly identified.
 - 1. Provide protection of hard surface paved areas during drop-off and pick-up of containers to prevent damage to surfaces.
- B. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 1. Remove debris from elevated portions of building via chute, hoist, or other device that will convey debris to grade level in a controlled descent. Do not throw or drop waste from upper levels.

3.03 WASTE DIVERSION

- A. Return: Set aside and protect misdelivered and substandard products and materials; return to supplier for credit.

3.04 DISPOSAL

- A. Do not allow waste materials to accumulate on-site.
- B. Identify and comply with Federal, State and Local regulatory requirements pertaining to legal disposal of construction waste materials
- C. Legally dispose of waste off Owner's property.
 - 1. Storage or sale of waste items or materials on-site is not permitted.
- D. Burning is not permitted: Do not burn waste materials of any type.
- E. Handle, store, and dispose of hazardous wastes in accordance with applicable codes, ordinances, rules, and regulations.
- F. Dispose of non-hazardous waste materials at licensed landfill or incinerator.

END OF SECTION 01 74 19

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 74 19 - 3

JSJA Project # 202543

SECTION 01 74 23 - FINAL CLEANING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes general administrative and procedural requirements for final cleaning prior to Substantial Completion.
- B. Related Requirements:
 - 1. Requirements of this Section apply to, and are a component part of, each Section of the Specifications.
 - 2. Section 01 74 13 "Progress Cleaning."

1.02 ACTION SUBMITTALS

- A. Product Data: For cleaning agents.

1.03 INFORMATIONAL SUBMITTALS

- A. Qualification Statements for HVAC System Cleaner.

1.04 QUALITY ASSURANCE

- A. Qualifications: In addition to qualifications per Section 01 40 00 "Quality Requirements":
 - 1. HVAC System Cleaner: NADCA Certified ASCS technicians.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.01 FINAL CLEANING

- A. General: Perform final cleaning.
 - 1. Employ experienced workers or professional cleaners for final cleaning.
 - 2. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

FINAL CLEANING

01 74 23 - 1

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

3. Do not use materials or methods which may damage finished surfaces or surrounding construction.
 4. Clean products and finished surfaces per written instructions of product and finished surface manufacturers.
 5. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program.
- B. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
1. Project Site:
 - a. Clean site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Remove snow and ice to provide safe access to building.
 2. Building Exterior:
 - a. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - b. Clean transparent materials, including glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish glass, taking care not to scratch surfaces.
 - c. Remove labels and protective coatings and coverings that are not permanent.
 3. Building Interior:
 - a. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - b. Sweep concrete floors broom clean in unoccupied spaces.
 - c. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.
 - d. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - e. Remove labels that are not permanent.

FINAL CLEANING

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 74 23 - 2

JSJA Project # 202543

- f. Remove dust from accessible surfaces.
 - 4. Equipment, General:
 - a. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
 - 5. Fire Protection and Plumbing Equipment:
 - a. Clean exposed piping and hangers free of dirt, oils, and other contaminants.
 - b. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
 - 6. HVAC Equipment:
 - a. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
 - b. Clean ducts, blowers, and coils if units were operated without filters during construction or that display contamination with particulate matter on inspection.
 - 7. Electrical Equipment:
 - a. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.
- C. Leave Project clean and ready for occupancy.
- D. Waste Disposal: See Section 01 74 19 "Construction Waste Management and Disposal."

END OF SECTION 01 74 23

SECTION 01 77 00 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.
- B. Related Requirements:
 - 1. Section 01 78 23 "Operation and Maintenance Data" for additional operation and maintenance manual requirements.
 - 2. Section 01 78 39 "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
 - 3. Section 01 79 00 "Demonstration and Training" for requirements to train the Owner's maintenance personnel to adjust, operate, and maintain products, equipment, and systems.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of cleaning agent.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at final completion.

1.3 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.
- C. Field Report: For pest control inspection.

CLOSEOUT PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 77 00 - 1

JSJA Project # 202543

1.4 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.
 - 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect. Label with manufacturer's name and model number.
 - 5. Submit testing, adjusting, and balancing records.
 - 6. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Advise Owner of pending insurance changeover requirements.
 - 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 - 3. Complete startup and testing of systems and equipment.
 - 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
 - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings specified in Section 01 79 00 "Demonstration and Training."
 - 6. Advise Owner of changeover in utility services.
 - 7. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
 - 8. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 9. Complete final cleaning requirements.
 - 10. Touch up paint and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of

CLOSEOUT PROCEDURES

01 77 00 - 2

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

1.5 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
 - 1. Submit a final Application for Payment according to Section 01 29 00 "Payment Procedures."
 - 2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - 4. Submit pest-control final inspection report.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1.6 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 - 1. Organize list of spaces in sequential order.
 - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 - 3. Submit list of incomplete items in one of the following format:
 - a. MS Excel electronic file. Architect will return annotated file.
 - b. PDF electronic file. Architect will return annotated file.
 - c. Web-based project software upload. Utilize software feature for creating and updating list of incomplete items (punch list).
 - d. Three paper copies. Architect will return two copies.

1.7 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where warranties are indicated to commence on dates other than date of Substantial

CLOSEOUT PROCEDURES

01 77 00 - 3

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

Completion, or when delay in submittal of warranties might limit Owner's rights under warranty.

- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
- C. Warranty Electronic File: Provide warranties and bonds in PDF format. Assemble complete warranty and bond submittal package into a single electronic PDF file with bookmarks enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
 - 1. Submit by email to Architect.
- D. Warranties in Paper Form:
 - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
- E. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.

CLOSEOUT PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 77 00 - 4

JSJA Project # 202543

- b. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - c. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - d. Clean flooring, removing debris, dirt, and staining; clean according to manufacturer's recommendations.
 - e. Vacuum, mop, and sweep concrete floors.
 - f. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.
 - g. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - h. Remove labels that are not permanent.
 - i. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
 - j. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
 - k. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
 - l. Clean ducts, blowers, and coils if units were operated during construction or that display contamination with particulate matter on inspection.
 - m. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.
 - n. Leave Project clean and ready for occupancy.
- C. Pest Control: Comply with pest control requirements in Section 01 50 00 "Temporary Facilities and Controls." Prepare written report.
- D. Construction Waste Disposal: Comply with waste disposal requirements in Section 01 50 00 "Temporary Facilities and Controls." Section 01 74 19 "Construction Waste Management and Disposal."

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations, before requesting inspection for determination of Substantial Completion.
- B. Repair, or remove and replace, defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.

END OF SECTION 01 77 00

CLOSEOUT PROCEDURES

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

01 77 00 - 5

JSJA Project # 202543

SECTION 01 78 23 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance documentation directory manuals.
 - 2. Emergency manuals.
 - 3. Systems and equipment operation manuals.
 - 4. Systems and equipment maintenance manuals.
 - 5. Product maintenance manuals.

1.2 CLOSEOUT SUBMITTALS

- A. Submit operation and maintenance manuals indicated. Provide content for each manual as specified in individual Specification Sections, and as reviewed and approved at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
 - 1. Architect will comment on whether content of operation and maintenance submittals is acceptable.
 - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operation and maintenance manuals in the following format:
 - 1. Submit on digital media acceptable to Architect by email to Architect. Enable reviewer comments on draft submittals.
 - 2. Submit three paper copies. Architect will return two copies.
- C. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Architect will return copy with comments.
 - 1. Correct or revise each manual to comply with Architect's comments. Submit copies of each corrected manual within 15 days of receipt of Architect's comments and prior to commencing demonstration and training.
- D. Comply with Section 01 77 00 "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

OPERATION AND MAINTENANCE DATA

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 78 23 - 1

JSJA Project # 202543

1.3 FORMAT OF OPERATION AND MAINTENANCE MANUALS

- A. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
 - 1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
 - 2. File Names and Bookmarks: Bookmark individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.
- B. Manuals, Paper Copy: Submit manuals in the form of hard-copy, bound and labeled volumes.
 - 1. Binders: Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch (215-by-280-mm) paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - 2. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

1.4 REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS

- A. Organization of Manuals: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
 - 1. Title page.
 - 2. Table of contents.
 - 3. Manual contents.
- B. Title Page: Include the following information:
 - 1. Subject matter included in manual.
 - 2. Name and address of Project.
 - 3. Name and address of Owner.
 - 4. Date of submittal.
 - 5. Name and contact information for Contractor.
 - 6. Name and contact information for Construction Manager.
 - 7. Name and contact information for Architect.

OPERATION AND MAINTENANCE DATA

01 78 23 - 2

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

8. Name and contact information for Commissioning Authority.
 9. Names and contact information for major consultants to the Architect that designed the systems contained in the manuals.
 10. Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

1.5 EMERGENCY MANUALS

- A. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.
- B. Content: Organize manual into a separate section for each of the following:
1. Type of emergency.
 2. Emergency instructions.
 3. Emergency procedures.
- C. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
1. Fire.
 2. Flood.
 3. Gas leak.
 4. Water leak.
 5. Power failure.
 6. Water outage.
 7. System, subsystem, or equipment failure.
 8. Chemical release or spill.
- D. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- E. Emergency Procedures: Include the following, as applicable:

OPERATION AND MAINTENANCE DATA

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

01 78 23 - 3

JSJA Project # 202543

1. Instructions on stopping.
2. Shutdown instructions for each type of emergency.
3. Operating instructions for conditions outside normal operating limits.
4. Required sequences for electric or electronic systems.
5. Special operating instructions and procedures.

1.6 SYSTEMS AND EQUIPMENT OPERATION MANUALS

- A. Systems and Equipment Operation Manual: Assemble a complete set of data indicating operation of each system, subsystem, and piece of equipment not part of a system. Include information required for daily operation and management, operating standards, and routine and special operating procedures.
- B. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
 1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
 2. Performance and design criteria if Contractor has delegated design responsibility.
 3. Operating standards.
 4. Operating procedures.
 5. Operating logs.
 6. Wiring diagrams.
 7. Control diagrams.
 8. Piped system diagrams.
 9. Precautions against improper use.
 10. License requirements including inspection and renewal dates.
- C. Descriptions: Include the following:
 1. Product name and model number. Use designations for products indicated on Contract Documents.
 2. Manufacturer's name.
 3. Equipment identification with serial number of each component.
 4. Equipment function.
 5. Operating characteristics.
 6. Limiting conditions.
 7. Performance curves.
 8. Engineering data and tests.
 9. Complete nomenclature and number of replacement parts.
- D. Operating Procedures: Include the following, as applicable:
 1. Startup procedures.
 2. Equipment or system break-in procedures.
 3. Routine and normal operating instructions.
 4. Regulation and control procedures.
 5. Instructions on stopping.
 6. Normal shutdown instructions.

OPERATION AND MAINTENANCE DATA

01 78 23 - 4

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

7. Seasonal and weekend operating instructions.
 8. Required sequences for electric or electronic systems.
 9. Special operating instructions and procedures.
- E. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- F. Piped Systems: Diagram piping as installed, and identify color coding where required for identification.

1.7 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

- A. Systems and Equipment Maintenance Manuals: Assemble a complete set of data indicating maintenance of each system, subsystem, and piece of equipment not part of a system. Include manufacturers' maintenance documentation, preventive maintenance procedures and frequency, repair procedures, wiring and systems diagrams, lists of spare parts, and warranty information.
- B. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranties and bonds, as described below.
- C. Manufacturers' Maintenance Documentation: Include the following information for each component part or piece of equipment:
1. Standard maintenance instructions and bulletins; include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
 - a. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
 3. Identification and nomenclature of parts and components.
 4. List of items recommended to be stocked as spare parts.
- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
1. Test and inspection instructions.
 2. Troubleshooting guide.
 3. Precautions against improper maintenance.
 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 5. Aligning, adjusting, and checking instructions.
 6. Demonstration and training video recording, if available.

OPERATION AND MAINTENANCE DATA

01 78 23 - 5

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.
- H. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.

1.8 PRODUCT MAINTENANCE MANUALS

- A. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- B. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Color, pattern, and texture.
 - 4. Material and chemical composition.
 - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 - 1. Inspection procedures.
 - 2. Types of cleaning agents to be used and methods of cleaning.
 - 3. List of cleaning agents and methods of cleaning detrimental to product.
 - 4. Schedule for routine cleaning and maintenance.
 - 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

OPERATION AND MAINTENANCE DATA

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 78 23 - 6

JSJA Project # 202543

1. Include procedures to follow and required notifications for warranty claims.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 78 23

OPERATION AND MAINTENANCE DATA

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 78 23 - 7

JSJA Project # 202543

SECTION 01 78 39 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for project record documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.
- B. Related Requirements:
 - 1. Section 01 70 00 "Execution" for final property survey.
 - 2. Section 01 78 23 "Operation and Maintenance Data" for operation and maintenance manual requirements.

1.2 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit one set(s) of marked-up record prints.
 - 2. Number of Copies: Submit copies of record Drawings as follows:
 - a. Initial Submittal:
 - 1) Submit one paper-copy set(s) of marked-up record prints.
 - 2) Submit PDF electronic files of scanned record prints and one of file prints.
 - 3) Submit record digital data files and one set(s) of plots.
 - 4) Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
 - b. Final Submittal:
 - 1) Submit three paper-copy set(s) of marked-up record prints.
 - 2) Submit PDF electronic files of scanned record prints and three set(s) of prints.
 - 3) Print each drawing, whether or not changes and additional information were recorded.
 - c. Final Submittal:
 - 1) Submit one paper-copy set(s) of marked-up record prints.
 - 2) Submit record digital data files and three set(s) of record digital data file plots.

PROJECT RECORD DOCUMENTS

01 78 39 - 1

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- 3) Plot each drawing file, whether or not changes and additional information were recorded.
- B. Record Specifications: Submit one paper copy or annotated PDF electronic files of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit one paper copy or annotated PDF electronic files and directories of each submittal.
 1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.

1.3 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an acceptable drawing technique.
 - c. Record data as soon as possible after obtaining it.
 - d. Record and check the markup before enclosing concealed installations.
 - e. Cross-reference record prints to corresponding photographic documentation.
 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Depths of foundations.
 - d. Locations and depths of underground utilities.
 - e. Revisions to routing of piping and conduits.
 - f. Revisions to electrical circuitry.
 - g. Actual equipment locations.
 - h. Duct size and routing.
 - i. Locations of concealed internal utilities.
 - j. Changes made by Change Order or Construction Work Change Directive.
 - k. Changes made following Architect's written orders.
 - l. Details not on the original Contract Drawings.
 - m. Field records for variable and concealed conditions.
 - n. Record information on the Work that is shown only schematically.
 3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.

PROJECT RECORD DOCUMENTS

01 78 39 - 2

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Record Digital Data Files: Immediately before inspection for Certificate of Substantial Completion, review marked-up record prints with Architect. When authorized, prepare a full set of corrected digital data files of the Contract Drawings, as follows:
1. Format: Same digital data software program, version, and operating system as the original Contract Drawings.
 2. Format: DWG, Version AutoCAD 2014, Microsoft Windows operating system.
 3. Format: Annotated PDF electronic file with comment function enabled.
 4. Incorporate changes and additional information previously marked on record prints. Delete, redraw, and add details and notations where applicable.
 5. Refer instances of uncertainty to Architect for resolution.
 6. Architect will furnish Contractor with one set of digital data files of the Contract Drawings for use in recording information.
 - a. See Section 01 31 00 "Project Management and Coordination" for requirements related to use of Architect's digital data files.
 - b. Architect will provide data file layer information. Record markups in separate layers.
- C. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
1. Record Prints: Organize record prints into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
 2. Format: Annotated PDF electronic file with comment function enabled.
 3. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
 4. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Architect.
 - e. Name of Contractor.

1.4 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.

PROJECT RECORD DOCUMENTS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 78 39 - 3

JSJA Project # 202543

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
 4. For each principal product, indicate whether record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
 5. Note related Change Orders, record Product Data, and record Drawings where applicable.
- B. Format: Submit record Specifications as annotated PDF electronic file, paper copy, or scanned PDF electronic file(s) of marked-up paper copy of Specifications.

1.5 RECORD PRODUCT DATA

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.
- B. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 3. Note related Change Orders, record Specifications, and record Drawings where applicable.
- C. Format: Submit record Product Data as annotated PDF electronic file, paper copy, or scanned PDF electronic file(s) of marked-up paper copy of Product Data.
1. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.

1.6 MAINTENANCE OF RECORD DOCUMENTS

- A. Maintenance of Record Documents: Store record documents in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Architect's reference during normal working hours.

PROJECT RECORD DOCUMENTS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 78 39 - 4

JSJA Project # 202543

PART 2 - PRODUCTS

PART 3 - EXECUTION

END OF SECTION 01 78 39

PROJECT RECORD DOCUMENTS

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 78 39 - 5

JSJA Project # 202543

SECTION 01 79 00 - DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
 - 1. Instruction in operation and maintenance of systems, subsystems, and equipment.
 - 2. Demonstration and training video recordings.

1.2 INFORMATIONAL SUBMITTALS

- A. Instruction Program: Submit outline of instructional program for demonstration and training, including a list of training modules and a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.
 - 1. Indicate proposed training modules using manufacturer-produced demonstration and training video recordings for systems, equipment, and products in lieu of video recording of live instructional module.

1.3 CLOSEOUT SUBMITTALS

- A. Demonstration and Training Video Recordings: Submit two copies within seven days of end of each training module.
 - 1. At completion of training, submit complete training manual(s) for Owner's use prepared in same paper and PDF file format required for operation and maintenance manuals specified in Section 01 78 23 "Operation and Maintenance Data."

1.4 QUALITY ASSURANCE

- A. Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Section 01 40 00 "Quality Requirements," experienced in operation and maintenance procedures and training.

DEMONSTRATION AND TRAINING

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 79 00 - 1

JSJA Project # 202543

- C. Preconstruction Conference: Conduct conference at Project site to comply with requirements in Section 01 31 00 "Project Management and Coordination."

1.5 COORDINATION

- A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's personnel.
- B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.
- C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data have been reviewed and approved by Architect.

1.6 INSTRUCTION PROGRAM

- A. Program Structure: Develop an instruction program that includes individual training modules for each system and for equipment not part of a system, as required by individual Specification Sections.
- B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following as applicable to the system, equipment, or component:
 - 1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
 - a. System, subsystem, and equipment descriptions.
 - b. Performance and design criteria if Contractor is delegated design responsibility.
 - c. Operating standards.
 - d. Regulatory requirements.
 - e. Equipment function.
 - f. Operating characteristics.
 - g. Limiting conditions.
 - h. Performance curves.
 - 2. Documentation: Review the following items in detail:
 - a. Emergency manuals.
 - b. Systems and equipment operation manuals.
 - c. Systems and equipment maintenance manuals.
 - d. Product maintenance manuals.
 - e. Project Record Documents.
 - f. Identification systems.
 - g. Warranties and bonds.
 - h. Maintenance service agreements and similar continuing commitments.

DEMONSTRATION AND TRAINING

01 79 00 - 2

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

3. Emergencies: Include the following, as applicable:
 - a. Instructions on meaning of warnings, trouble indications, and error messages.
 - b. Instructions on stopping.
 - c. Shutdown instructions for each type of emergency.
 - d. Operating instructions for conditions outside of normal operating limits.
 - e. Sequences for electric or electronic systems.
 - f. Special operating instructions and procedures.
4. Operations: Include the following, as applicable:
 - a. Startup procedures.
 - b. Equipment or system break-in procedures.
 - c. Routine and normal operating instructions.
 - d. Regulation and control procedures.
 - e. Control sequences.
 - f. Safety procedures.
 - g. Instructions on stopping.
 - h. Normal shutdown instructions.
 - i. Operating procedures for emergencies.
 - j. Operating procedures for system, subsystem, or equipment failure.
 - k. Seasonal and weekend operating instructions.
 - l. Required sequences for electric or electronic systems.
 - m. Special operating instructions and procedures.
5. Adjustments: Include the following:
 - a. Alignments.
 - b. Checking adjustments.
 - c. Noise and vibration adjustments.
 - d. Economy and efficiency adjustments.
6. Troubleshooting: Include the following:
 - a. Diagnostic instructions.
 - b. Test and inspection procedures.
7. Maintenance: Include the following:
 - a. Inspection procedures.
 - b. Types of cleaning agents to be used and methods of cleaning.
 - c. List of cleaning agents and methods of cleaning detrimental to product.
 - d. Procedures for routine cleaning.
 - e. Procedures for preventive maintenance.
 - f. Procedures for routine maintenance.
 - g. Instruction on use of special tools.
8. Repairs: Include the following:

DEMONSTRATION AND TRAINING

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 79 00 - 3

JSJA Project # 202543

- a. Diagnosis instructions.
- b. Repair instructions.
- c. Disassembly; component removal, repair, and replacement; and reassembly instructions.
- d. Instructions for identifying parts and components.
- e. Review of spare parts needed for operation and maintenance.

1.7 PREPARATION

- A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Section 01 78 23 "Operation and Maintenance Data."
- B. Set up instructional equipment at instruction location.

1.8 INSTRUCTION

- A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.
- B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
- C. Scheduling: Provide instruction at mutually agreed-on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
 - 1. Schedule training with Owner, through Architect with at least seven days' advance notice.
- D. Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.
- E. Evaluation: At conclusion of each training module, assess and document each participant's mastery of module by use of an oral or a demonstration performance-based test.
- F. Cleanup: Collect used and leftover educational materials and give to Owner. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

1.9 DEMONSTRATION AND TRAINING VIDEO RECORDINGS

- A. Digital Video Recordings: Provide high-resolution, digital video in MPEG format, produced by a digital camera with minimum sensor resolution of 12 megapixels and capable of recording in full HD mode with vibration reduction technology.

DEMONSTRATION AND TRAINING

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

01 79 00 - 4

JSJA Project # 202543

1. Submit video recordings on CD-ROM or thumb drive.
- B. Recording: Mount camera on tripod before starting recording, unless otherwise necessary to adequately cover area of demonstration and training. Display continuous running time.
- C. Light Levels: Verify light levels are adequate to properly light equipment. Verify equipment markings are clearly visible prior to recording.
- D. Preproduced Video Recordings: Provide video recordings used as a component of training modules in same format as recordings of live training.

PART 2 - PRODUCTS

PART 3 - EXECUTION

END OF SECTION 01 79 00

DEMONSTRATION AND TRAINING

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

01 79 00 - 5

JSJA Project # 202543

SECTION 02 23 00 - SITE CLEARING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Clearing and grubbing.
 - 2. Topsoil stripping.
- B. Related Sections include the following:
 - 1. Section 02 30 00 "Earthwork" for soil materials, excavating, backfilling, and site grading.
 - 2. Section 02 93 00 "Landscaping" for finish grading, including placing and preparing topsoil for lawns and planting.

1.3 DEFINITIONS

- A. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of weeds, roots, and other deleterious materials.

1.4 MATERIALS OWNERSHIP

- A. Except for materials indicated to be stockpiled, i.e., topsoil, or to remain Owner's property, cleared materials shall become Contractor's property and shall be removed from the site.

1.5 SUBMITTALS

1.6 QUALITY ASSURANCE

- A. Preinstallation Conference: Conduct conference at Project site with Architect prior to commencing work.

1.7 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
- B. Notify utility locator service (Miss Dig) for area where Project is located before site clearing.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

SITE CLEARING

02 23 00 - 1

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Provide erosion-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.2 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, grass, and other vegetation to permit installation of new construction. Removal includes digging out stumps and obstructions and grubbing roots.
 - 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
 - 2. Cut minor roots and branches of trees indicated to remain in a clean and careful manner where such roots and branches obstruct installation of new construction.
 - 3. Completely remove stumps, roots, obstructions, and debris extending to a depth of 18 inches below exposed subgrade.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated.
 - 1. Place fill material in horizontal layers not exceeding 8-inch loose depth, and compact each layer to a density equal to adjacent original ground.

3.3 TOPSOIL STRIPPING

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to whatever depths are encountered in a manner to prevent intermingling with underlying subsoil or other waste materials.
 - 1. Strip surface soil of unsuitable topsoil, including trash, debris, weeds, roots, and other waste materials.
- C. Stockpile topsoil materials away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Limit height of topsoil stockpiles to 72 inches.
 - 2. Do not stockpile topsoil within drip line of remaining trees.
 - 3. Stockpile surplus topsoil and allow for respreading deeper topsoil.

3.4 DISPOSAL

- A. Disposal: Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials, including trash and debris, and legally dispose of them off Owner's property.

END OF SECTION 02 23 00

SITE CLEARING

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 23 00 - 2

JSJA Project # 202543

SECTION 02 30 00 - EARTHWORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Preparing subgrades for slabs-on-grade, walks, pavements, lawns, and plantings.
 - 2. Excavating and backfilling for buildings and structures.
 - 3. Subbase course for concrete walks and pavements.
 - 4. Base course for asphalt paving.
 - 5. Subsurface drainage backfill for walls and trenches.
- B. Related Sections include the following:
 - 1. Section 02 23 00 "Site Clearing" for site stripping, grubbing, removing topsoil, and protecting trees to remain.
 - 2. Section 02 93 00 "Landscaping" for finish grading, including placing and preparing topsoil for lawns and plantings.

1.3 DEFINITIONS

- A. Backfill: Soil materials used to fill an excavation.
- B. Base Course: Layer placed between the subbase course and asphalt paving.
- C. Borrow: Satisfactory soil imported from off-site for use as fill or backfill.
- D. Drainage Course: Layer supporting slab-on-grade used to minimize capillary flow of pore water.
- E. Excavation: Removal of material encountered above subgrade elevations.
 - 1. Additional Excavation: Excavation below subgrade elevations as directed by Architect. Additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
 - 2. Bulk Excavation: Excavations more than 10 feet in width and pits more than 30 feet in either length or width.
 - 3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.
- F. Fill: Soil materials used to raise existing grades.

EARTHWORK

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 30 00 - 1

JSJA Project # 202543

- G. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- H. Subbase Course: Layer placed between the subgrade and base course for asphalt paving, or layer placed between the subgrade and a concrete pavement or walk.
- I. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below subbase, drainage fill, or topsoil materials.

1.4 QUALITY ASSURANCE

- A. Preexcavation Conference: Conduct conference at Project with Architect prior to commencing work.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: ASTM D 2487 soil classification groups GW, GP, GM, SW, SP, and SM, or a combination of these group symbols; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Unsatisfactory Soils: ASTM D 2487 soil classification groups GC, SC, ML, MH, CL, CH, OL, OH, and PT, or a combination of these group symbols.
 - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- D. Backfill and Fill: Satisfactory soil materials.
- E. Subbase: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2- inch sieve and not more than 12 percent passing a No. 200 sieve.
- F. Base: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- G. Drainage Fill: Washed, narrowly graded mixture of crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2- inch sieve and 0 to 5 percent passing a No. 8 sieve.
- H. Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand; ASTM D 448; coarse-aggregate grading Size 67; with 100 percent passing a 1- inch sieve and 0 to 5 percent passing a No. 4 sieve.

EARTHWORK

02 30 00 - 2

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

2.2 ACCESSORIES

- A. Drainage Fabric: Nonwoven geotextile, specifically manufactured as a drainage geotextile; made from polyolefins, polyesters, or polyamides; and with the following minimum properties determined according to ASTM D 4759 and referenced standard test methods:
 - 1. Grab Tensile Strength: 110 lbf; ASTM D 4632.
 - 2. Tear Strength: 40 lbf; ASTM D 4533.
 - 3. Puncture Resistance: 50 lbf; ASTM D 4833.
 - 4. Water Flow Rate: 150 gpm per sq. ft.; ASTM D 4491.
 - 5. Apparent Opening Size: No. 50; ASTM D 4751.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
- B. Protect subgrades and foundation soils against freezing temperatures or frost. Provide protective insulating materials as necessary.
- C. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.2 DEWATERING

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
 - 2. Install a dewatering system to keep subgrades dry and convey ground water away from excavations. Maintain until dewatering is no longer required.

3.3 EXPLOSIVES

- A. Explosives: Do not use explosives.

3.4 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavation to subgrade elevations regardless of the character of surface and subsurface conditions encountered, including rock, soil materials, and obstructions.

EARTHWORK

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 30 00 - 3

JSJA Project # 202543

1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

3.5 EXCAVATION FOR STRUCTURES

- A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. Extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
 1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
 2. Pile Foundations: Stop excavations from 6 to 12 inches above bottom of pile cap before piles are placed. After piles have been driven, remove loose and displaced material. Excavate to final grade, leaving solid base to receive concrete pile caps.

3.6 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated cross sections, elevations, and grades.

3.7 APPROVAL OF SUBGRADE

- A. Notify Architect when excavations have reached required subgrade.
- B. If Architect determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
 1. Additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
- C. Proof roll subgrade with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof roll wet or saturated subgrades.
- D. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect.

3.8 UNAUTHORIZED EXCAVATION

- A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill may be used when approved by Architect.
 1. Fill unauthorized excavations under other construction or utility pipe as directed by Architect.

3.9 STORAGE OF SOIL MATERIALS

EARTHWORK

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 30 00 - 4

JSJA Project # 202543

- A. Stockpile borrow materials and satisfactory excavated soil materials. Stockpile soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.10 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:
 - 1. Construction below finish grade including, where applicable, dampproofing, waterproofing, and perimeter insulation.
 - 2. Removing concrete formwork.
 - 3. Removing trash and debris.
 - 4. Removing temporary shoring and bracing, and sheeting.
 - 5. Installing permanent or temporary horizontal bracing on horizontally supported walls.

3.11 FILL

- A. Preparation: Remove vegetation, topsoil, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface before placing fills.
- B. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- C. Place and compact fill material in layers to required elevations as follows:
 - 1. Under walks and pavements, use satisfactory soil material.
 - 2. Under building slabs, use engineered fill.

3.12 MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill layer before compaction to within 2 percent of optimum moisture content.
 - 1. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
 - 2. Remove and replace, or scarify and air-dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.13 COMPACTION OF BACKFILLS AND FILLS

- A. Place backfill and fill materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.

EARTHWORK

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 30 00 - 5

JSJA Project # 202543

- B. Place backfill and fill materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.
- C. Compact soil to not less than the following percentages of maximum dry unit weight according to ASTM D 1557:
- D. Compact soil to not less than the following percentages of maximum dry unit weight according to ASTM D 698:
 - 1. Under structures, building slabs, steps, and pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill material at 95 percent.
 - 2. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill material at 92 percent.

3.14 GRADING

- A. General: Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - 1. Provide a smooth transition between adjacent existing grades and new grades.
 - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
 - 1. Lawn or Unpaved Areas: Plus or minus 1 inch.
 - 2. Walks: Plus or minus 1 inch.
 - 3. Pavements: Plus or minus 1/2 inch.
- C. Grading inside Building Lines: Finish subgrade to a tolerance of 1/2 inch when tested with a 10-foot straightedge.

3.15 SUBSURFACE DRAINAGE

- A. Subsurface Drain: Place a layer of drainage fabric around perimeter of drainage trench as indicated. Place a 6-inch course of filter material on drainage fabric to support drainage pipe. Encase drainage pipe in a minimum of 12 inches of filter material and wrap in drainage fabric, overlapping sides and ends at least 6 inches.
 - 1. Compact each course of filter material to 95 percent of maximum dry unit weight according to ASTM D 698.
- B. Drainage Backfill: Place and compact filter material over subsurface drain, in width indicated, to within 12 inches of final subgrade. Overlay drainage backfill with one layer of drainage fabric, overlapping sides and ends at least 6 inches.

EARTHWORK

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 30 00 - 6

JSJA Project # 202543

1. Compact each course of filter material to 95 percent of maximum dry density according to ASTM D 698.
2. Place and compact impervious fill material over drainage backfill to final subgrade.

3.16 SUBBASE AND BASE COURSES

- A. Install separation fabric on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends.
- B. Under pavements and walks, place subbase course on separation fabric according to fabric manufacturer's written instructions and as follows:
- C. Under pavements and walks, place subbase course on prepared subgrade and as follows:
 1. Place base course material over subbase.
 2. Compact subbase and base courses at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.
 3. Shape subbase and base to required crown elevations and cross-slope grades.
 4. When thickness of compacted subbase or base course is 6 inches or less, place materials in a single layer.
 5. When thickness of compacted subbase or base course exceeds 6 inches, place materials in equal layers, with no layer more than 6 inches thick or less than 3 inches thick when compacted.
- D. Pavement Shoulders: Place shoulders along edges of subbase and base course to prevent lateral movement. Construct shoulders, at least 12 inches wide, of satisfactory soil materials and compact simultaneously with each subbase and base layer to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.

3.17 FIELD QUALITY CONTROL

- A. Testing Agency: Owner reserves the right to engage a qualified independent geotechnical engineering testing agency to perform field quality-control testing.
- B. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earthwork only after test results for previously completed work comply with requirements.
- C. Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Architect.
- D. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2922, and ASTM D 2937, as applicable. Tests will be performed at the following locations and frequencies:

EARTHWORK

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 30 00 - 7

JSJA Project # 202543

1. Paved and Building Slab Areas: At subgrade and at each compacted fill and backfill layer, at least one test for every 2000 sq. ft. or less of paved area or building slab, but in no case fewer than three tests.

- E. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil to depth required; recompact and retest until specified compaction is obtained.

3.18 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 1. Scarify or remove and replace soil material to depth as directed by Architect; reshape and recompact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.

3.19 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

END OF SECTION 02 30 00

EARTHWORK

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 30 00 - 8

JSJA Project # 202543

SECTION 02 41 19 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Demolition and removal of selected portions of building or structure.
2. Demolition and removal of selected site elements.
3. Salvage of existing items to be reused or recycled.

1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and installed.
- B. Remove and Salvage: Carefully detach from existing construction, in a manner to prevent damage, and deliver to Owner ready for reuse.
- C. Remove and Reinstall: Detach items from existing construction, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.3 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
 1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.4 PREINSTALLATION MEETINGS

- A. Pre-demolition Meeting: Conduct at Project site.

SELECTIVE DEMOLITION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 41 19 - 1

JSJA Project # 202543

1.5 INFORMATIONAL SUBMITTALS

- A. Pre-demolition Photographs or Video Survey: Submit photographic survey of condition of building before Work begins.
- B. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control and, for noise control. Indicate proposed locations and construction of barriers.
- C. Schedule of selective demolition activities with starting and ending dates for each activity.
- D. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician.
- E. Qualification Data: For refrigerant recovery technician.

1.6 CLOSEOUT SUBMITTALS

- A. Inventory of items that have been removed and salvaged.
- B. Landfill Records: Indicate receipt and acceptance of hazardous waste by a landfill facility licensed to accept hazardous waste.

1.7 QUALITY ASSURANCE

- A. Refrigerant Recovery Technician Qualifications: Certified by an EPA-approved certification program.

1.8 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
 - 1. Phase I - Partial Building Demolition: Before selective demolition, Owner will package for removal the following items:
 - a. Three (3) "L" Shaped systems furniture glass/wall divider systems surrounding desks. All other partitions and furniture are to remain for removal and disposal by contractor.
 - 2. Phase II - Drive Through Demolition: Before selective demolition, Owner will package for removal the following items:
 - a. Video Camera Equipment
 - b. All other Drive-through Teller Equipment is to remain for removal and disposal by contractor.

SELECTIVE DEMOLITION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 41 19 - 2

JSJA Project # 202543

3. Phase III - Office Selective Demolition: Before selective demolition, Owner will package for removal the following items:
 - a. Bank & IT Equipment
 - b. Fridge & Microwave
 - c. Teller Stools
 - d. All other partitions and furniture are to remain for removal and disposal by contractor.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
 1. Hazardous materials will be removed by Owner before start of the Work.
 2. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.
- E. Storage or sale of removed items or materials on-site is not permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
 1. Maintain fire-protection facilities in service during selective demolition operations.
- G. Arrange selective demolition schedule so as not to interfere with Owner's operations.

1.9 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials and using approved contractors so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ASSE A10.6 and NFPA 241.

SELECTIVE DEMOLITION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 41 19 - 3

JSJA Project # 202543

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.
- D. Survey of Existing Conditions: Record existing conditions by use of measured drawings, preconstruction photographs, preconstruction videotapes, and templates.
 - 1. Comply with requirements specified in Division 01 Section "Photographic Documentation."
- E. Perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective building demolition operations.
- F. Inventory and record the condition of items to be removed and salvaged.

3.2 PREPARATION

- A. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of authorities having jurisdiction.

3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
 - 1. Owner will arrange to shut off indicated services/systems when requested by Contractor.
 - 2. Arrange to shut off utilities with utility companies.
 - 3. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
 - 4. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated on Drawings to be removed.

SELECTIVE DEMOLITION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 41 19 - 4

JSJA Project # 202543

- a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
 - b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material and leave in place.
 - c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
 - d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
 - e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.
 - f. Ducts to Be Removed: Remove portion of ducts indicated to be removed and plug remaining ducts with same or compatible ductwork material.
 - g. Ducts to Be Abandoned in Place: Cap or plug ducts with same or compatible ductwork material and leave in place.
- C. Refrigerant: Remove refrigerant from mechanical equipment to be selectively demolished according to 40 CFR 82 and regulations of authorities having jurisdiction.

3.4 PROTECTION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- B. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- C. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
- D. Remove temporary barricades and protections where hazards no longer exist.

3.5 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
 - 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - 3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden

SELECTIVE DEMOLITION

02 41 19 - 5

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.

4. Maintain fire watch during and for at least two hours after flame-cutting operations.
5. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
6. Dispose of demolished items and materials promptly. Comply with requirements in Section 01 74 19 "Construction Waste Management and Disposal."

B. Removed and Salvaged Items:

1. Clean salvaged items.
2. Pack or crate items after cleaning. Identify contents of containers.
3. Store items in a secure area until delivery to Owner.
4. Transport items to Owner's storage area off-site as designated by Owner.
5. Protect items from damage during transport and storage.

C. Removed and Reinstalled Items:

1. Clean and repair items to functional condition adequate for intended reuse.
2. Pack or crate items after cleaning and repairing. Identify contents of containers.
3. Protect items from damage during transport and storage.
4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

D. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

A. General: Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, Remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.

1. Do not allow demolished materials to accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
4. Comply with requirements specified in Section 01 74 19 "Construction Waste Management and Disposal."

B. Burning: Do not burn demolished materials.

SELECTIVE DEMOLITION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 41 19 - 6

JSJA Project # 202543

3.7 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 02 41 19

SELECTIVE DEMOLITION

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 41 19 - 7

JSJA Project # 202543

SECTION 02 75 10 - CEMENT CONCRETE PAVEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes exterior cement concrete pavement for the following:
 - 1. Driveways and roadways.
 - 2. Curbs and gutters.
 - 3. Walkways.
- B. Related Sections include the following:
 - 1. Section 02 30 00 "Earthwork" for subgrade preparation, grading, and subbase course.
 - 2. Section 03 30 00 "Cast-in-Place Concrete" for general building applications of concrete.

1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, expansive hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume.

1.4 SUBMITTALS

- A. Product Data: For each type of manufactured material and product indicated.
- B. Design Mixes: For each concrete pavement mix. Include alternate mix designs when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.

1.5 QUALITY ASSURANCE

- A. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant and each aggregate from one source.
- B. Work in City of Monroe Right-of-Ways: Contractor to follow all City of Monroe regulations and specifications for construction work in right-of-ways under the jurisdiction of the City of Monroe. Contractor to be responsible for all permits, inspections, and any fees associated with them.
- C. Testing Agency Qualifications: An independent testing agency, acceptable to authorities having jurisdiction, qualified according to ASTM C 1077 and ASTM E 329 to conduct the testing indicated, as documented according to ASTM E 548.

CEMENT CONCRETE PAVEMENT

02 75 10 - 1

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- D. ACI Publications: Comply with ACI 301, "Specification for Structural Concrete," unless modified by the requirements of the Contract Documents.
- E. Concrete Testing Service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixes.
- F. Preinstallation Conference: Conduct conference at Project site with Architect prior to commencing work.

1.6 PROJECT CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.

PART 2 - PRODUCTS

2.1 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, smooth exposed surfaces.
 - 1. Use flexible or curved forms for curves of a radius 100 feet or less.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.

2.2 STEEL REINFORCEMENT

- A. Plain-Steel Welded Wire Fabric: ASTM A 185, fabricated from as-drawn steel wire into flat sheets.
- B. Reinforcement Bars: ASTM A 615/A 615M, Grade 60, deformed.
- C. Plain Steel Wire: ASTM A 82, as drawn.
- D. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcement bars, welded wire fabric, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete or fiber-reinforced concrete of greater compressive strength than concrete, and as follows:
 - 1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.

2.3 CONCRETE MATERIALS

- A. General: Use the same brand and type of cementitious material from the same manufacturer throughout the Project.
- B. Portland Cement: ASTM C 150, Type I or II.

CEMENT CONCRETE PAVEMENT

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 75 10 - 2

JSJA Project # 202543

1. Fly Ash: ASTM C 618, Class F or C.
- C. Aggregate: ASTM C 33, uniformly graded, from a single source, with coarse aggregate as follows:
 1. Class: 4S.
 2. Maximum Aggregate Size: 1 inch nominal.
 3. Do not use fine or coarse aggregates containing substances that cause spalling.
- D. Water: ASTM C 94.

2.4 ADMIXTURES

- A. General: Admixtures certified by manufacturer to contain not more than 0.1 percent water-soluble chloride ions by mass of cement and to be compatible with other admixtures.
- B. Air-Entraining Admixture: ASTM C 260.

2.5 CURING MATERIALS

- A. Water: Potable.
- B. Clear Waterborne Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B.
- C. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 1. Clear Waterborne Membrane-Forming Curing Compound:
 - a. AH Curing Compound #2 DR WB; Anti-Hydro International, Inc.
 - b. Aqua Resin Cure; Burke Group, LLC (The).
 - c. Safe-Cure Clear; ChemMasters.
 - d. W.B. Resin Cure; Conspec Marketing & Manufacturing Co., Inc.
 - e. Day Chem Rez Cure (J-11-W); Dayton Superior Corporation.
 - f. Nitocure S; Fosroc.
 - g. Aqua Kure-Clear; Lambert Corporation.
 - h. L&M Cure R; L&M Construction Chemicals, Inc.
 - i. 1100 Clear; W. R. Meadows, Inc.
 - j. Resin Cure E; Nox-Crete Products Group, Kinsman Corporation.
 - k. Rich Cure E; Richmond Screw Anchor Co.
 - l. Resi-Chem Clear Cure; Symons Corporation.
 - m. Horncure 100; Tamms Industries Co., Div. of LaPorte Construction Chemicals North America, Inc.
 - n. Hydro Cure; Unitex.
 - o. Certi-Vex Enviocure; Vexcon Chemicals, Inc.

2.6 RELATED MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber.

CEMENT CONCRETE PAVEMENT

02 75 10 - 3

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- B. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber, or ASTM D 1752, cork or self-expanding cork.
- C. Bonding Agent: ASTM C 1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.
- D. Epoxy Bonding Adhesive: ASTM C 881, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class and grade to suit requirements, and as follows:
 - 1. Type II, non-load bearing, for bonding freshly mixed concrete to hardened concrete.

2.7 CONCRETE MIXES

- A. Prepare design mixes, proportioned according to ACI 211.1 and ACI 301, for each type and strength of normal-weight concrete determined by either laboratory trial mixes or field experience.
- B. Proportion mixes to provide concrete with the following properties:
 - 1. Compressive Strength (28 Days): 3500 psi.
 - 2. Maximum Water-Cementitious Materials Ratio: 0.50.
 - 3. Slump Limit: 3-1/2 inches.
- C. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement according to ACI 301 requirements for concrete exposed to deicing chemicals.
- D. Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content as follows within a tolerance of plus or minus 1.5 percent:
 - 1. Air Content: 6.0 percent for 1-inch maximum aggregate.

2.8 CONCRETE MIXING

- A. Ready-Mixed Concrete: Comply with requirements and with ASTM C 94.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Proof-roll prepared subbase surface to check for unstable areas and verify need for additional compaction. Proceed with pavement only after nonconforming conditions have been corrected and subgrade is ready to receive pavement.
- B. Remove loose material from compacted subbase surface immediately before placing concrete.

3.2 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for pavement to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.

CEMENT CONCRETE PAVEMENT

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 75 10 - 4

JSJA Project # 202543

- B. Clean forms after each use and coat with form release agent to ensure separation from concrete without damage.

3.3 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating reinforcement and with recommendations in CRSI's "Placing Reinforcing Bars" for placing and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- D. Install welded wire fabric in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

3.4 JOINTS

- A. General: Construct construction, isolation, and contraction joints and tool edgings true to line with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline, unless otherwise indicated.
 - 1. When joining existing pavement, place transverse joints to align with previously placed joints, unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of pavement and at locations where pavement operations are stopped for more than one-half hour, unless pavement terminates at isolation joints.
 - 1. Provide preformed galvanized steel or plastic keyway-section forms or bulkhead forms with keys, unless otherwise indicated. Embed keys at least 1-1/2 inches into concrete.
 - 2. Continue reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of pavement strips, unless otherwise indicated.
 - 3. Provide tie bars at sides of pavement strips where indicated.
 - 4. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
 - 5. Use epoxy bonding adhesive at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated.
 - 1. Locate expansion joints at intervals of 50 feet, unless otherwise indicated.
 - 2. Extend joint fillers full width and depth of joint.
 - 3. Terminate joint filler less than 1/2 inch or more than 1 inch below finished surface if joint sealant is indicated.
 - 4. Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.

CEMENT CONCRETE PAVEMENT

02 75 10 - 5

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

5. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
 6. Protect top edge of joint filler during concrete placement with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.
- D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows:
1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with groover tool to the following radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover marks on concrete surfaces.
 - a. Radius: 1/4 inch.
 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before developing random contraction cracks.
- E. Edging: Tool edges of pavement, gutters, curbs, and joints in concrete after initial floating with an edging tool to the following radius. Repeat tooling of edges after applying surface finishes. Eliminate tool marks on concrete surfaces.
1. Radius: 3/8 inch.

3.5 CONCRETE PLACEMENT

- A. Inspection: Before placing concrete, inspect and complete formwork installation, reinforcement steel, and items to be embedded or cast in. Notify other trades to permit installation of their work.
- B. Remove snow, ice, or frost from subbase surface and reinforcement before placing concrete. Do not place concrete on frozen surfaces.
- C. Moisten subbase to provide a uniform dampened condition at the time concrete is placed. Do not place concrete around manholes or other structures until they are at the required finish elevation and alignment.
- D. Comply with requirements and with recommendations in ACI 304R for measuring, mixing, transporting, and placing concrete.
- E. Do not add water to concrete during delivery, at Project site, or during placement.
- F. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.

CEMENT CONCRETE PAVEMENT

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

02 75 10 - 6

JSJA Project # 202543

- G. Consolidate concrete by mechanical vibrating equipment supplemented by hand-spading, rodding, or tamping. Use equipment and procedures to consolidate concrete according to recommendations in ACI 309R.
1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand-spreading and consolidation. Consolidate with care to prevent dislocating reinforcement, dowels, and joint devices.
- H. Place concrete in two operations; strike off initial pour for entire width of placement and to the required depth below finish surface. Lay welded wire fabric or fabricated bar mats immediately in final position. Place top layer of concrete, strike off, and screed.
1. Remove and replace portions of bottom layer of concrete that have been placed more than 15 minutes without being covered by top layer, or use bonding agent if approved by Architect.
- I. Screed pavement surfaces with a straightedge and strike off. Commence initial floating using bull floats or darbies to form an open textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading dry-shake surface treatments.
- J. Curbs and Gutters: When automatic machine placement is used for curb and gutter placement, submit revised mix design and laboratory test results that meet or exceed requirements. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing as specified for formed concrete. If results are not approved, remove and replace with formed concrete.
1. Compact subbase and prepare subgrade of sufficient width to prevent displacement of paver machine during operations.
- K. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
 2. Do not use frozen materials or materials containing ice or snow.
 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators, unless otherwise specified and approved in mix designs.
- L. Hot-Weather Placement: Place concrete according to recommendations in ACI 305R and as follows when hot-weather conditions exist:
1. Cool ingredients before mixing to maintain concrete temperature at time of placement below 90 deg F. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.

CEMENT CONCRETE PAVEMENT

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 75 10 - 7

JSJA Project # 202543

2. Cover reinforcement steel with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
3. Fog-spray forms, reinforcement steel, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.6 CONCRETE FINISHING

- A. General: Wetting of concrete surfaces during screeding, initial floating, or finishing operations is prohibited.
- B. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and the concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats, or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots, and fill low spots. Refloat surface immediately to uniform granular texture.
 1. Medium-to-Fine-Textured Broom Finish: Draw a soft bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.

3.7 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and follow recommendations in ACI 305R for hot-weather protection during curing.
- B. Begin curing after finishing concrete, but not before free water has disappeared from concrete surface.
- C. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound, or a combination of these as follows:
 1. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

3.8 PAVEMENT TOLERANCES

- A. Comply with tolerances of ACI 117 and as follows:
 1. Elevation: 1/4 inch.
 2. Thickness: Plus 3/8 inch, minus 1/4 inch.
 3. Surface: Gap below 10-foot- long, unleveled straightedge not to exceed 1/4 inch.
 4. Joint Spacing: 3 inches.
 5. Contraction Joint Depth: Plus 1/4 inch, no minus.
 6. Joint Width: Plus 1/8 inch, no minus.

3.9 FIELD QUALITY CONTROL

CEMENT CONCRETE PAVEMENT

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 75 10 - 8

JSJA Project # 202543

- A. Testing Agency: Engage a qualified independent testing and inspection agency to sample materials, perform tests, and submit test reports during concrete placement according to requirements specified in this Article.
- B. Testing Services: Contractor shall be responsible for all testing and the cost of the testing, as outlined below. Testing shall be performed according to the following requirements:
 - 1. Sampling Fresh Concrete: Representative samples of fresh concrete shall be obtained according to ASTM C 172, except modified for slump to comply with ASTM C 94.
 - 2. Slump: ASTM C 143; one test at point of placement for each compressive-strength test, but not less than one test for each day's pour of each type of concrete. Additional tests will be required when concrete consistency changes.
 - 3. Air Content: ASTM C 231, pressure method; one test for each compressive-strength test, but not less than one test for each day's pour of each type of air-entrained concrete.
 - 4. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each set of compressive-strength specimens.
 - 5. Compression Test Specimens: ASTM C 31/C 31M; one set of four standard cylinders for each compressive-strength test, unless otherwise indicated. Cylinders shall be molded and stored for laboratory-cured test specimens unless field-cured test specimens are required.
 - 6. Compressive-Strength Tests: ASTM C 39; one set for each day's pour of each concrete class exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd.. One specimen shall be tested at 7 days and two specimens at 28 days; one specimen shall be retained in reserve for later testing if required.
 - 7. When frequency of testing will provide fewer than five compressive-strength tests for a given class of concrete, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
 - 8. When total quantity of a given class of concrete is less than 50 cu. yd., Architect may waive compressive-strength testing if adequate evidence of satisfactory strength is provided.
 - 9. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, current operations shall be evaluated and corrective procedures shall be provided for protecting and curing in-place concrete.
 - 10. Strength level of concrete will be considered satisfactory if averages of sets of three consecutive compressive-strength test results equal or exceed specified compressive strength and no individual compressive-strength test result falls below specified compressive strength by more than 500 psi.
- C. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 24 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing agency, concrete type and class, location of concrete batch in pavement, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- D. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as the sole basis for approval or rejection.

CEMENT CONCRETE PAVEMENT

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 75 10 - 9

JSJA Project # 202543

- E. Additional Tests: Testing agency shall make additional tests of the concrete when test results indicate slump, air entrainment, concrete strengths, or other requirements have not been met, as directed by Architect. Testing agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42, or by other methods as directed.

3.10 REPAIRS AND PROTECTION

- A. Remove and replace concrete pavement that is broken, damaged, or defective, or does not meet requirements in this Section.
- B. Drill test cores where directed by Architect when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory pavement areas with portland cement concrete bonded to pavement with epoxy adhesive.
- C. Protect concrete from damage. Exclude traffic from pavement for at least 14 days after placement. When construction traffic is permitted, maintain pavement as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete pavement free of stains, discoloration, dirt, and other foreign material. Sweep concrete pavement not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 02 75 10

CEMENT CONCRETE PAVEMENT

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 75 10 - 10

JSJA Project # 202543

SECTION 02 92 00 - LAWNS AND GRASSES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Seeding.
- B. Related Sections include the following:
 - 1. Section 02 23 00 "Site Clearing" for topsoil stripping and stockpiling.
 - 2. Section 02 30 00 "Earthwork" for excavation, filling and backfilling, and rough grading.
 - 3. Section 02 93 00 "Landscaping" for other landscape work.

1.3 DEFINITIONS

- A. Finish Grade: Elevation of finished surface of planting soil.
- B. Manufactured Soil: Soil produced off-site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.
- C. Planting Soil: Native or imported topsoil, manufactured topsoil, or surface soil modified to become topsoil; mixed with soil amendments.
- D. Subgrade: Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill immediately beneath planting soil.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Certification of Grass Seed: From seed vendor for each grass-seed monostand or mixture stating the botanical and common name and percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.
- C. Planting Schedule: Indicating anticipated planting dates for each type of planting.
- D. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of lawns during a calendar year. Submit before expiration of required maintenance periods.

1.5 QUALITY ASSURANCE

LAWNS AND GRASSES

02 92 00 - 1

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful lawn establishment.
- B. Topsoil Analysis: Furnish soil analysis by a qualified soil-testing laboratory stating percentages of organic matter; gradation of sand, silt, and clay content; cation exchange capacity; deleterious material; pH; and mineral and plant-nutrient content of topsoil.
- C. Preinstallation Conference: Conduct conference at Project site with Architect prior to commencing work.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Seed: Deliver seed in original sealed, labeled, and undamaged containers.

1.7 SCHEDULING

- A. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with maintenance periods to provide required maintenance from date of Substantial Completion.
 - 1. Spring Planting: prior to the last day of May.
- B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit.

1.8 LAWN MAINTENANCE

- A. Begin maintenance immediately after each area is planted and continue until acceptable lawn is established, but for not less than the following periods:
 - 1. Seeded Lawns: 60 days from date of Substantial Completion.
 - a. When full maintenance period has not elapsed before end of planting season, or if lawn is not fully established, continue maintenance during next planting season.
- B. Maintain and establish lawn by watering, fertilizing, weeding, mowing, trimming, replanting, and other operations. Roll, regrade, and replant bare or eroded areas and mulch to produce a uniformly smooth lawn.
 - 1. In areas where mulch has been disturbed by wind or maintenance operations, add new mulch. Anchor as required to prevent displacement.
- C. Watering: Provide and maintain temporary piping, hoses, and lawn-watering equipment to convey water from sources and to keep lawn uniformly moist to a depth of 4 inches.
 - 1. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.
 - 2. Water lawn at a minimum rate of 1 inch per week.

LAWNS AND GRASSES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 92 00 - 2

JSJA Project # 202543

- D. Mow lawn as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than 40 percent of grass height. Remove no more than 40 percent of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:
 - 1. Mow grass 1-1/2 to 2 inches high.
- E. Lawn Postfertilization: Apply fertilizer after initial mowing and when grass is dry.
 - 1. Use fertilizer that will provide actual nitrogen of at least 1 lb/1000 sq. ft. to lawn area.

PART 2 - PRODUCTS

2.1 SEED

- A. Grass Seed: Fresh, clean, dry, new-crop seed complying with AOSA's "Journal of Seed Technology; Rules for Testing Seeds" for purity and germination tolerances.
- B. Seed Species: State-certified seed of grass species, as follows:
 - 1. Sun and Partial Shade: Proportioned by weight as follows:
 - a. 50 percent Kentucky bluegrass (*Poa pratensis*).
 - b. 30 percent chewings red fescue (*Festuca rubra* variety).
 - c. 10 percent perennial ryegrass (*Lolium perenne*).
 - d. 10 percent redtop (*Agrostis alba*).

2.2 TOPSOIL

- A. Topsoil: ASTM D 5268, pH range of 5.5 to 7, a minimum 6 percent organic material content; free of stones 1 inch or larger in any dimension and other extraneous materials harmful to plant growth.
 - 1. Topsoil Source: Amend existing in-place surface soil to produce topsoil. Verify suitability of surface soil to produce topsoil. Clean surface soil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful to plant growth.
 - a. Surface soil may be supplemented with imported or manufactured topsoil from off-site sources. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep; do not obtain from bogs or marshes.

2.3 ORGANIC SOIL AMENDMENTS

- A. Compost: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:

LAWNS AND GRASSES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 92 00 - 3

JSJA Project # 202543

1. Organic Matter Content: 50 to 60 percent of dry weight.
2. Feedstock: Agricultural, food, or industrial residuals; biosolids; yard trimmings; or source-separated or compostable mixed solid waste.

2.4 FERTILIZER

- A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
 1. Composition: 1 lb/1000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.
 2. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing agency.

2.5 MULCHES

- A. Fiber Mulch: Biodegradable, dyed-wood, cellulose-fiber mulch; nontoxic; free of plant-growth or germination inhibitors; with maximum moisture content of 15 percent and a pH range of 4.5 to 6.5.
- B. Nonasphaltic Tackifier: Colloidal tackifier recommended by fiber-mulch manufacturer for slurry application; nontoxic and free of plant-growth or germination inhibitors.

2.6 PLANTING SOIL MIX

- A. Planting Soil Mix: Mix topsoil with the following soil amendments and fertilizers in the following quantities:
 1. Ratio of Loose Compost to Topsoil by Volume: 1:4.
 2. Weight of Commercial Fertilizer per 1000 Sq. Ft.: 10 pounds

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive lawns and grass for compliance with requirements and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, and plantings from damage caused by planting operations.
 1. Protect adjacent and adjoining areas from hydroseeding overspray.
- B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

LAWNS AND GRASSES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 92 00 - 4

JSJA Project # 202543

3.3 LAWN PREPARATION

- A. Limit lawn subgrade preparation to areas to be planted.
- B. Newly Graded Subgrades: Loosen subgrade to a minimum depth of 6 inches. Remove stones larger than 2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
 - 1. Apply fertilizer directly to subgrade before loosening.
 - 2. Thoroughly blend planting soil mix off-site before spreading or spread topsoil, apply soil amendments and fertilizer on surface, and thoroughly blend planting soil mix.
 - a. Delay mixing fertilizer with planting soil if planting will not proceed within a few days.
 - 3. Spread planting soil mix to a depth of 4 inches but not less than required to meet finish grades after light rolling and natural settlement. Do not spread if planting soil or subgrade is frozen, muddy, or excessively wet.
 - a. Spread approximately one-half the thickness of planting soil mix over loosened subgrade. Mix thoroughly into top 4 inches of subgrade. Spread remainder of planting soil mix.
- C. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus 1/2 inch of finish elevation. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit fine grading to areas that can be planted in the immediate future.
- D. Moisten prepared lawn areas before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
- E. Restore areas if eroded or otherwise disturbed after finish grading and before planting.

3.4 HYDROSEEDING

- A. Hydroseeding: Mix specified seed, fertilizer, and fiber mulch in water, using equipment specifically designed for hydroseed application. Continue mixing until uniformly blended into homogeneous slurry suitable for hydraulic application.
 - 1. Mix slurry with nonasphaltic tackifier.
 - 2. Apply slurry uniformly to all areas to be seeded in a one-step process. Apply mulch at a minimum rate of 1500-lb/acre dry weight but not less than the rate required to obtain specified seed-sowing rate.

3.5 SATISFACTORY LAWNS

- A. Satisfactory Seeded Lawn: At end of maintenance period, a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. (0.92 sq. m) and bare spots not exceeding 5 by 5 inches.

LAWNS AND GRASSES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 92 00 - 5

JSJA Project # 202543

- B. Reestablish lawns that do not comply with requirements and continue maintenance until lawns are satisfactory.

3.6 CLEANUP AND PROTECTION

- A. Promptly remove soil and debris created by lawn work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
- B. Erect barricades and warning signs as required to protect newly planted areas from traffic. Maintain barricades throughout maintenance period and remove after lawn is established.

END OF SECTION 02 92 00

LAWNS AND GRASSES

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 92 00 - 6

JSJA Project # 202543

SECTION 02 93 00 - LANDSCAPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Trees.
 - 2. Shrubs.
 - 3. Edgings.
- B. Related Sections include the following:
 - 1. Section 02 23 00 "Site Clearing" for topsoil stripping and stockpiling, and site clearing.
 - 2. Section 02 30 00 "Earthwork" for excavation, filling, and rough grading and for subsurface aggregate drainage and drainage backfill materials.
 - 3. Section 02 92 00 "Lawns and Grasses" for other landscaping.

1.3 DEFINITIONS

- A. Balled and Burlapped Stock: Exterior plants dug with firm, natural balls of earth in which they are grown, with ball size not less than diameter and depth recommended by ANSI Z60.1 for type and size of tree or shrub required; wrapped, tied, rigidly supported, and drum-laced as recommended by ANSI Z60.1.
- B. Balled and Potted Stock: Exterior plants dug with firm, natural balls of earth in which they are grown and placed, unbroken, in a container. Ball size is not less than diameter and depth recommended by ANSI Z60.1 for type and size of exterior plant required.
- C. Finish Grade: Elevation of finished surface of planting soil.
- D. Manufactured Topsoil: Soil produced off-site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.
- E. Planting Soil: Native or imported topsoil, manufactured topsoil, or surface soil modified to become topsoil; mixed with soil amendments.
- F. Subgrade: Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill, before placing planting soil.

1.4 SUBMITTALS

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

LANDSCAPING

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 93 00 - 1

JSJA Project # 202543

- B. Planting Schedule: Indicating anticipated planting dates for exterior plants.
- C. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of exterior plants during a calendar year. Submit before expiration of required maintenance periods.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful establishment of exterior plants.
- B. Topsoil Analysis: Furnish soil analysis by a qualified soil-testing laboratory stating percentages of organic matter; gradation of sand, silt, and clay content; cation exchange capacity; deleterious material; pH; and mineral and plant-nutrient content of topsoil.
 - 1. Report suitability of topsoil for plant growth. State recommended quantities of nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce a satisfactory topsoil.
- C. Provide quality, size, genus, species, and variety of exterior plants indicated, complying with applicable requirements in ANSI Z60.1, "American Standard for Nursery Stock."
- D. Tree and Shrub Measurements: Measure according to ANSI Z60.1 with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements 6 inches above ground for trees up to 4-inch caliper size, and 12 inches above ground for larger sizes. Measure main body of tree or shrub for height and spread; do not measure branches or roots tip-to-tip.
- E. Observation: Architect may observe trees and shrubs either at place of growth or at site before planting for compliance with requirements for genus, species, variety, size, and quality. Architect retains right to observe trees and shrubs further for size and condition of balls and root systems, insects, injuries, and latent defects and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from Project site.
 - 1. Notify Architect of sources of planting materials seven days in advance of delivery to site.
- F. Preinstallation Conference: Conduct conference at Project site with Architect prior to commencing work.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver exterior plants freshly dug.
- B. Do not prune trees and shrubs before delivery, except as approved by Architect. Protect bark, branches, and root systems from sun scald, drying, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of exterior plants during delivery. Do not drop exterior plants during delivery.

LANDSCAPING

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 93 00 - 2

JSJA Project # 202543

- C. Handle planting stock by root ball.
- D. Deliver exterior plants after preparations for planting have been completed and install immediately. If planting is delayed more than six hours after delivery, set exterior plants trees in shade, protect from weather and mechanical damage, and keep roots moist.
 - 1. Set balled stock on ground and cover ball with soil, peat moss, sawdust, or other acceptable material.
 - 2. Water root systems of exterior plants stored on-site with a fine-mist spray. Water as often as necessary to maintain root systems in a moist condition.

1.7 COORDINATION

- A. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with maintenance periods to provide required maintenance from date of Substantial Completion.
 - 1. Spring Planting: prior to the last day of May
- B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit.
- C. Coordination with Lawns: Plant trees and shrubs after finish grades are established and before planting lawns, unless otherwise acceptable to Architect.
 - 1. When planting trees and shrubs after lawns, protect lawn areas and promptly repair damage caused by planting operations.

1.8 WARRANTY

- A. Special Warranty: Warrant the following exterior plants, for the warranty period indicated, against defects including death and unsatisfactory growth, except for defects resulting from lack of adequate maintenance, neglect, or abuse by Owner, or incidents that are beyond Contractor's control.
 - 1. Warranty Period for Trees and Shrubs: One year from date of Substantial Completion.
 - 2. Remove dead exterior plants immediately. Replace immediately unless required to plant in the succeeding planting season.
 - 3. Replace exterior plants that are more than 25 percent dead or in an unhealthy condition at end of warranty period.
 - 4. A limit of one replacement of each exterior plant will be required, except for losses or replacements due to failure to comply with requirements.

1.9 MAINTENANCE

- A. Trees and Shrubs: Maintain for the following maintenance period by pruning, cultivating, watering, weeding, fertilizing, restoring planting saucers, tightening and repairing stakes and guy supports, and resetting to proper grades or vertical position, as required to establish healthy, viable plantings. Spray as required to keep trees and shrubs free of insects and disease. Restore or replace damaged tree wrappings.

LANDSCAPING

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 93 00 - 3

JSJA Project # 202543

1. Maintenance Period: 12 months from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 TREE AND SHRUB MATERIAL

- A. General: Furnish nursery-grown trees and shrubs complying with ANSI Z60.1, with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock free of disease, insects, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.
- B. Grade: Provide trees and shrubs of sizes and grades complying with ANSI Z60.1 for type of trees and shrubs required. Trees and shrubs of a larger size may be used if acceptable to Architect, with a proportionate increase in size of roots or balls.
- C. Label each tree and shrub with securely attached, waterproof tag bearing legible designation of botanical and common name.
- D. Label at least one tree and one shrub of each variety and caliper with a securely attached, waterproof tag bearing legible designation of botanical and common name.
- E. If formal arrangements or consecutive order of trees or shrubs is shown, select stock for uniform height and spread, and number label to assure symmetry in planting.

2.2 SHADE AND FLOWERING TREES

- A. Shade Trees: Single-stem trees with straight trunk, well-balanced crown, and intact leader, of height and caliper indicated, complying with ANSI Z60.1 for type of trees required.
 1. Provide balled and burlapped trees.
 2. Branching Height: One-third to one-half of tree height.
- B. Small Upright and Spreading Trees: Branched or pruned naturally according to species and type, with relationship of caliper, height, and branching according to ANSI Z60.1; stem form as follows:
 1. Provide balled and burlapped trees.

2.3 CONIFEROUS EVERGREENS

- A. Form and Size: Normal-quality, well-balanced, coniferous evergreens, of type, height, spread, and shape required, complying with ANSI Z60.1.

2.4 BROADLEAF EVERGREENS

- A. Form and Size: Normal-quality, well-balanced, broadleaf evergreens, of type, height, spread, and shape required, complying with ANSI Z60.1.
 1. Provide balled and potted trees.

2.5 TOPSOIL

LANDSCAPING

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 93 00 - 4

JSJA Project # 202543

- A. Topsoil: ASTM D 5268, pH range of 5.5 to 7, a minimum of 6percent organic material content; free of stones 1 inch or larger in any dimension and other extraneous materials harmful to plant growth.
 - 1. Topsoil Source: Reuse surface soil stockpiled on-site. Verify suitability of stockpiled surface soil to produce topsoil. Clean surface soil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful to plant growth.
 - a. Supplement with imported or manufactured topsoil from off-site sources when quantities are insufficient. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep; do not obtain from bogs or marshes.

2.6 ORGANIC SOIL AMENDMENTS

- A. Compost: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 3/4-inch sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:
 - 1. Organic Matter Content: 50 to 60 percent of dry weight.
 - 2. Feedstock: Agricultural, food, or industrial residuals; biosolids; yard trimmings; or source-separated or compostable mixed solid waste.

2.7 FERTILIZER

- A. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:
 - 1. Composition: 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.
 - 2. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing agency.

2.8 MULCHES

- A. Compost Mulch: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:
 - 1. Organic Matter Content: 50 to 60 percent of dry weight.
 - 2. Feedstock: Agricultural, food, or industrial residuals; biosolids; yard trimmings; or source-separated or compostable mixed solid waste.

2.9 STAKES AND GUYS

- A. Upright and Guy Stakes: Rough-sawn, sound, new hardwood, redwood, or pressure-preservative-treated softwood, free of knots, holes, cross grain, and other defects, 2 by 2 inches by length indicated, pointed at one end.

LANDSCAPING

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 93 00 - 5

JSJA Project # 202543

- B. Guy and Tie Wire: ASTM A 641/A 641M, Class 1, galvanized-steel wire, 2-strand, twisted, 0.106 inch in diameter.
- C. Hose Chafing Guard: Reinforced rubber or plastic hose at least 1/2 inch in diameter, black, cut to lengths required to protect tree trunks from damage.

2.10 LANDSCAPE EDGINGS

- A. Polyethylene Edging: Standard black polyethylene edging, horizontally grooved, extruded in standard lengths, with 9-inch steel angle stakes.
 - 1. Edging Size: 0.1 inch wide by 5 inches deep.
 - 2. Top Profile: Round top, 1/2 inch in diameter.
 - 3. Accessories: Manufacturer's standard connecting clips or plugs.
- B. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Plastic Edging:
 - a. Oly-Ola Sales, Inc.
 - b. Valley View Industries.

2.11 MISCELLANEOUS PRODUCTS

- A. Trunk-Wrap Tape: Two layers of crinkled paper cemented together with bituminous material, 4-inch- wide minimum, with stretch factor of 33 percent.

2.12 PLANTING SOIL MIX

- A. Planting Soil Mix: Mix topsoil with the following soil amendments and fertilizers in the following quantities:
 - 1. Ratio of Loose Compost to Topsoil by Volume: 1:4.
 - 2. Weight of Bonemeal per 1000 Sq. Ft.: 5 pounds.
 - 3. Weight of Slow-Release Fertilizer per 1000 Sq. Ft.: 10 pounds.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive exterior plants for compliance with requirements and conditions affecting installation and performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities, and lawns and existing exterior plants from damage caused by planting operations.

LANDSCAPING

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 93 00 - 6

JSJA Project # 202543

- B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- C. Lay out individual tree and shrub locations and areas for multiple exterior plantings. Stake locations, outline areas, adjust locations when requested, and obtain Architect's acceptance of layout before planting. Make minor adjustments as required.
- D. Lay out exterior plants at locations directed by Architect. Stake locations of individual trees and shrubs and outline areas for multiple plantings.

3.3 PLANTING BED ESTABLISHMENT

- A. Loosen subgrade of planting beds to a minimum depth of 8 inches. Remove stones larger than 2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
 - 1. Apply fertilizer directly to subgrade before loosening.
 - 2. Spread topsoil, apply soil amendments and fertilizer on surface, and thoroughly blend planting soil mix.
 - a. Delay mixing fertilizer with planting soil if planting will not proceed within a few days.
 - 3. Spread planting soil mix to a depth of 8 inches but not less than required to meet finish grades after natural settlement. Do not spread if planting soil or subgrade is frozen, muddy, or excessively wet.
 - a. Spread approximately one-half the thickness of planting soil mix over loosened subgrade. Mix thoroughly into top 4 inches of subgrade. Spread remainder of planting soil mix.
- B. Finish Grading: Grade planting beds to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.
- C. Restore planting beds if eroded or otherwise disturbed after finish grading and before planting.

3.4 TREE AND SHRUB EXCAVATION

- A. Pits and Trenches: Excavate circular pits with sides sloped inward. Trim base leaving center area raised slightly to support root ball and assist in drainage. Do not further disturb base. Scarify sides of plant pit smeared or smoothed during excavation.
 - 1. Excavate approximately three times as wide as ball diameter for balled and burlapped and the balled and potted stock.
 - 2. If drain tile is shown or required under planted areas, excavate to top of porous backfill over tile.
- B. Subsoil removed from excavations may not be used as backfill.

LANDSCAPING

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

02 93 00 - 7

JSJA Project # 202543

- C. Obstructions: Notify Architect if unexpected rock or obstructions detrimental to trees or shrubs are encountered in excavations.
 - 1. Hardpan Layer: Drill 6-inch- diameter holes into free-draining strata or to a depth of 10 feet, whichever is less, and backfill with free-draining material.
- D. Drainage: Notify Architect if subsoil conditions evidence unexpected water seepage or retention in tree or shrub pits.
- E. Fill excavations with water and allow to percolate away before positioning trees and shrubs.

3.5 TREE AND SHRUB PLANTING

- A. Set balled and burlapped stock plumb and in center of pit or trench with top of root ball 1 inch above adjacent finish grades.
 - 1. Remove burlap and wire baskets from tops of root balls and partially from sides, but do not remove from under root balls. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.
 - 2. Place planting soil mix around root ball in layers, tamping to settle mix and eliminate voids and air pockets. When pit is approximately one-half backfilled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Water again after placing and tamping final layer of planting soil mix.
- B. Set balled and potted stock plumb and in center of pit or trench with top of root ball 1 inch above adjacent finish grades.
 - 1. Carefully remove root ball from container without damaging root ball or plant.
 - 2. Place planting soil mix around root ball in layers, tamping to settle mix and eliminate voids and air pockets. When pit is approximately one-half backfilled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Water again after placing and tamping final layer of planting soil mix.
- C. Wrap trees of 2-inch caliper and larger with trunk-wrap tape. Start at base of trunk and spiral cover trunk to height of first branches. Overlap wrap, exposing half the width, and securely attach without causing girdling. Inspect tree trunks for injury, improper pruning, and insect infestation; take corrective measures required before wrapping.

3.6 TREE AND SHRUB PRUNING

- A. Prune, thin, and shape trees and shrubs as directed by Architect.
- B. Prune, thin, and shape trees and shrubs according to standard horticultural practice. Prune trees to retain required height and spread. Unless otherwise indicated by Architect, do not cut tree leaders; remove only injured or dead branches from flowering trees. Prune shrubs to retain natural character. Shrub sizes indicated are sizes after pruning.

3.7 GUYING AND STAKING

LANDSCAPING

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 93 00 - 8

JSJA Project # 202543

- A. Upright Staking and Tying: Stake trees of 2- through 5-inch caliper. Stake trees of less than 2-inch caliper only as required to prevent wind tip-out. Use a minimum of 2 stakes of length required to penetrate at least 18 inches below bottom of backfilled excavation and to extend at least 72 inches above grade. Set vertical stakes and space to avoid penetrating root balls or root masses. Support trees with two strands of tie wire encased in hose sections at contact points with tree trunk. Allow enough slack to avoid rigid restraint of tree. Use the number of stakes as follows:
 - 1. Use 2 stakes for trees up to 12 feet high and 2-1/2 inches or less in caliper; 3 stakes for trees less than 14 feet high and up to 4 inches in caliper. Space stakes equally around trees.

3.8 PLANTING BED MULCHING

- A. Mulch backfilled surfaces of planting beds and other areas indicated.
 - 1. Organic Mulch: Apply 2-inch average thickness of organic mulch, and finish level with adjacent finish grades. Do not place mulch against plant stems.

3.9 EDGING INSTALLATION

- A. Plastic Edging: Install plastic edging at the perimeter of landscaping areas adjoining the building according to manufacturer's written instructions. Anchor with steel stakes spaced approximately 36 inches apart, driven through upper base grooves or V-lip of edging.

3.10 CLEANUP AND PROTECTION

- A. During exterior planting, keep adjacent pavings and construction clean and work area in an orderly condition.
- B. Protect exterior plants from damage due to landscape operations, operations by other contractors and trades, and others. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged exterior planting.

3.11 DISPOSAL

- A. Disposal: Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION 02 93 00

LANDSCAPING

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

02 93 00 - 9

JSJA Project # 202543

SECTION 03 30 00 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies cast-in place concrete, including formwork, reinforcement, concrete materials, mix design, placement procedures, and finishes.
- B. Related Sections include the following:
 - 1. Section 02 30 00 "Earthwork" for drainage fill under slabs-on-grade.
 - 2. Section 02 75 10 "Cement Concrete Pavement" for concrete pavement and walks.

1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume.

1.4 SUBMITTALS

- A. Product Data: For each type of manufactured material and product indicated.
- B. Design Mixes: For each concrete mix. Include alternate mix designs when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.
 - 1. Indicate amounts of mix water to be withheld for later addition at Project site.

1.5 QUALITY ASSURANCE

- A. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, each aggregate from one source, and each admixture from the same manufacturer.
- B. ACI Publications: Comply with the following, unless more stringent provisions are indicated:
 - 1. ACI 301, "Specification for Structural Concrete."
 - 2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
- C. Preinstallation Conference: Conduct conference at Project with Architect prior to commencing work.
 - 1. Require representatives of each entity directly concerned with cast-in-place concrete to attend, including the following:

CAST-IN-PLACE CONCRETE

03 30 00 - 1

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- a. Contractor's superintendent.
- b. Ready-mix concrete producer.
- c. Concrete subcontractor.
- d. Concrete testing agency.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle steel reinforcement to prevent bending and damage.

PART 2 - PRODUCTS

2.1 FORM-FACING MATERIALS

- A. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.

2.2 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.
- B. Plain-Steel Wire: ASTM A 82, as drawn.
- C. Plain-Steel Welded Wire Fabric: ASTM A 185, fabricated from as-drawn steel wire into flat sheets.

2.3 REINFORCEMENT ACCESSORIES

- A. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire fabric in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete or fiber-reinforced concrete of greater compressive strength than concrete, and as follows:
 - 1. For concrete surfaces exposed to view where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected or CRSI Class 2 stainless-steel bar supports.

2.4 CONCRETE MATERIALS

- A. Portland Cement: ASTM C 150, Type I.
- B. Fly Ash: ASTM C 618, Class C or F
- C. Normal-Weight Aggregate: ASTM C 33, uniformly graded, and as follows:
 - 1. Class: Severe weathering region, but not less than 3S.
 - 2. Nominal Maximum Aggregate Size: 1 inch.
 - 3. Combined Aggregate Gradation: Well graded from coarsest to finest with not more than 18 percent and not less than 8 percent retained on an individual sieve, except that less than 8 percent may be retained on coarsest sieve and on No. 50 sieve, and less than 8 percent may be retained on sieves finer than No. 50.

CAST-IN-PLACE CONCRETE

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

03 30 00 - 2

JSJA Project # 202543

- D. Water: Potable and complying with ASTM C 94.

2.5 ADMIXTURES

- A. General: Admixtures certified by manufacturer to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material and to be compatible with other admixtures and cementitious materials. Do not use admixtures containing calcium chloride.
- B. Air-Entraining Admixture: ASTM C 260.

2.6 VAPOR RETARDERS

- A. Vapor Retarder: ASTM E 1745, Class C, of one of the following materials; or polyethylene sheet, ASTM D 4397, not less than 10 mils thick:
 - 1. Nonwoven, polyester-reinforced, polyethylene coated sheet; 10 mils thick.
 - 2. Three-ply, nylon- or polyester-cord-reinforced, laminated, high-density polyethylene sheet; 7.8 mils thick.

2.7 FLOOR AND SLAB TREATMENTS

- A. Penetrating Liquid Floor Treatment: Chemically reactive, waterborne solution of inorganic silicate or silicate materials and proprietary components; odorless; colorless; that penetrates, hardens, and densifies concrete surfaces.
- B. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Penetrating Liquid Floor Treatment:
 - a. Titan Hard; Burke Group, LLC (The).
 - b. Chemisil Plus; ChemMasters.
 - c. Intraseal; Conspec Marketing & Manufacturing Co., Inc.
 - d. Ashford Formula; Curecrete Chemical Co., Inc.
 - e. Day-Chem Sure Hard; Dayton Superior Corporation.
 - f. Euco Diamond Hard; Euclid Chemical Co.
 - g. Seal Hard; L&M Construction Chemicals, Inc.
 - h. Vexcon Starseal PS; Vexcon Chemicals, Inc.

2.8 CURING MATERIALS

- A. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- B. Water: Potable.
- C. Clear, Waterborne, Membrane-Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.

CAST-IN-PLACE CONCRETE

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

03 30 00 - 3

JSJA Project # 202543

- D. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:

1. Clear, Waterborne, Membrane-Forming Curing and Sealing Compound:
 - a. Klear-Kote Cure-Sealer-Hardener, 30 percent solids; Burke Group, LLC (The).
 - b. Polyseal WB; ChemMasters.
 - c. UV Safe Seal; Lambert Corporation.
 - d. Lumiseal WB Plus; L&M Construction Chemicals, Inc.
 - e. Vocomp-30; W. R. Meadows, Inc.
 - f. Metcure 30; Metalcrete Industries.
 - g. Vexcon Starseal 1315; Vexcon Chemicals, Inc.

2.9 RELATED MATERIALS

- A. Epoxy Joint Filler: Two-component, semirigid, 100 percent solids, epoxy resin with a Shore A hardness of 80 per ASTM D 2240.
- B. Waterstops: PVC Ribbed Center Bulb type; nominal width to match thickness of poured concrete joint; sized for min. 65' hydrostatic head pressure; suitable for below-grade installations.

2.10 CONCRETE MIXES

- A. Prepare design mixes for each type and strength of concrete determined by either laboratory trial mix or field test data bases, as follows:
 1. Proportion normal-weight concrete according to ACI 211.1 and ACI 301.
- B. Footings, Basement Walls, and Foundation Walls: Proportion normal-weight concrete mix as follows:
 1. Compressive Strength (28 Days): 3000 psi.
 2. Maximum Slump: 4 inches.
- C. Slab-on-Grade and concrete topping over plant-precast structural concrete: Proportion normal-weight concrete mix as follows:
 1. Compressive Strength (28 Days): 4000 psi.
 2. Maximum Slump: 4 inches.
- D. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
 1. Fly Ash: 25 percent.
 2. Combined Fly Ash and Pozzolan: 25 percent.
- E. Maximum Water-Cementitious Materials Ratio: 0.50 for concrete required to have low water permeability.

CAST-IN-PLACE CONCRETE

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

03 30 00 - 4

JSJA Project # 202543

- F. Maximum Water-Cementitious Materials Ratio: 0.45 for concrete exposed to deicers or subject to freezing and thawing while moist.
- G. Air Content: Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content as follows within a tolerance of plus 1 or minus 1.5 percent, unless otherwise indicated:
 - 1. Air Content: 6 percent for 1-inch- nominal maximum aggregate size.
- H. Do not air entrain concrete to trowel-finished interior floors and suspended slabs. Do not allow entrapped air content to exceed 3 percent.
- I. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.
- J. Admixtures: Use admixtures according to manufacturer's written instructions.

2.11 FABRICATING REINFORCEMENT

- A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.12 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94, and furnish batch ticket information.
 - 1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 FORMWORK

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until concrete structure can support such loads.
- B. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical. Kerf wood inserts for forming keyways, reglets, recesses, and the like, for easy removal.
 - 1. Do not use rust-stained steel form-facing material.
- C. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.

CAST-IN-PLACE CONCRETE

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

03 30 00 - 5

JSJA Project # 202543

- D. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- E. Do not chamfer corners or edges of concrete.
- F. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.

3.2 EMBEDDED ITEMS

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use Setting Drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 - 1. Install anchor bolts, accurately located, to elevations required.

3.3 VAPOR RETARDERS

- A. Vapor Retarder: Place, protect, and repair vapor-retarder sheets according to ASTM E 1643 and manufacturer's written instructions.

3.4 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.
 - 1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials.
- C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.
 - 1. Shop- or field-weld reinforcement according to AWS D1.4, where indicated.
- D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.
- E. Install welded wire fabric in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least one mesh spacing. Offset laps of adjoining sheet widths to prevent continuous laps in either direction. Lace overlaps with wire.

3.5 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.

CAST-IN-PLACE CONCRETE

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

03 30 00 - 6

JSJA Project # 202543

1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of strip placements of floors and slabs.
 2. Form from preformed galvanized steel, plastic keyway-section forms, or bulkhead forms with keys, unless otherwise indicated. Embed keys at least 1-1/2 inches into concrete.
 3. Locate joints for beams, slabs, joists, and girders in the middle third of spans. Offset joints in girders a minimum distance of twice the beam width from a beam-girder intersection.
 4. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- C. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness.
- D. Waterstops: Install at all below-grade joints in strict accord with manufacturer's specifications. Provide continuous waterstop material at all joints, or weld material per manufacturer's instructions.

3.6 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Do not add water to concrete during delivery, at Project site, or during placement, unless approved by Architect.
- C. Before placing concrete, water may be added at Project site, subject to limitations of ACI 301.
- D. Deposit concrete continuously or in layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as specified. Deposit concrete to avoid segregation.
- E. Deposit concrete in forms in horizontal layers no deeper than 24 inches and in a manner to avoid inclined construction joints. Place each layer while preceding layer is still plastic, to avoid cold joints.
1. Consolidate placed concrete with mechanical vibrating equipment. Use equipment and procedures for consolidating concrete recommended by ACI 309R.
 2. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations no farther than the visible effectiveness of the vibrator. Place vibrators to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mix constituents to segregate.
- F. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.

CAST-IN-PLACE CONCRETE

03 30 00 - 7

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

1. Consolidate concrete during placement operations so concrete is thoroughly worked around reinforcement and other embedded items and into corners.
2. Maintain reinforcement in position on chairs during concrete placement.
3. Screed slab surfaces with a straightedge and strike off to correct elevations.
4. Slope surfaces uniformly to drains where required.
5. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, free of humps or hollows, before excess moisture or bleedwater appears on the surface. Do not further disturb slab surfaces before starting finishing operations.

G. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.

1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators, unless otherwise specified and approved in mix designs.

H. Hot-Weather Placement: Place concrete according to recommendations in ACI 305R and as follows, when hot-weather conditions exist:

1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.7 FINISHING FORMED SURFACES

A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defective areas repaired and patched. Remove fins and other projections exceeding ACI 347R limits for class of surface specified.

3.8 FINISHING FLOORS AND SLABS

A. General: Comply with recommendations in ACI 302.1R for screeding, restraighening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.

B. Scratch Finish: While still plastic, texture concrete surface that has been screeded and bull-floated or darbied. Use stiff brushes, brooms, or rakes.

1. Apply scratch finish to surfaces indicated and to surfaces to receive concrete floor topping or mortar setting beds for ceramic or quarry tile, portland cement terrazzo, and other bonded cementitious floor finishes.

CAST-IN-PLACE CONCRETE

03 30 00 - 8

Building Renovations, Remodeling, & Site Improvements For:

Monroe Community Credit Union

14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- C. Trowel Finish: After applying float finish, apply first trowel finish and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighten until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.
 - 1. Apply a trowel finish to surfaces indicated and to floor and slab surfaces exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin film-finish coating system
 - 2. Finish surfaces to the following tolerances, measured within 24 hours according to ASTM E 1155/E 1155M for a randomly trafficked floor surface:
 - a. Specified overall values of flatness, F(F) 25; and levelness, F(L) 20; with minimum local values of flatness, F(F) 17; and levelness, F(L) 15.

3.9 MISCELLANEOUS CONCRETE ITEMS

- A. Filling In: Fill in holes and openings left in concrete structures, unless otherwise indicated, after work of other trades is in place. Mix, place, and cure concrete, as specified, to blend with in-place construction. Provide other miscellaneous concrete filling indicated or required to complete Work.
- B. Steel Pan Stairs: Provide concrete fill for steel pan stair treads, landings, and associated items. Cast-in inserts and accessories as shown on Drawings. Screed, tamp, and trowel-finish concrete surfaces.

3.10 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and with recommendations in ACI 305R for hot-weather protection during curing.
- B. Verify proposed finish treatments for concrete slabs. Where resilient tile or sheet vinyl floor coverings are proposed, do not use curing compounds; cure concrete with moisture-retaining – cover methods.
- C. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing by one or a combination of the following methods:
- D. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces, by one or a combination of the following methods:
 - 1. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.

CAST-IN-PLACE CONCRETE

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

03 30 00 - 9

JSJA Project # 202543

- a. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive floor coverings.
 - b. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive penetrating liquid floor treatments.
2. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

3.11 LIQUID FLOOR TREATMENTS

- A. Penetrating Liquid Floor Treatment: Prepare, apply, and finish penetrating liquid floor treatment according to manufacturer's written instructions.
 1. Remove curing compounds, sealers, oil, dirt, laitance, and other contaminants and complete surface repairs.
 2. Do not apply to concrete that is less than seven days old.
 3. Apply liquid until surface is saturated, scrubbing into surface until a gel forms; rewet; and repeat brooming or scrubbing. Rinse with water; remove excess material until surface is dry. Apply a second coat in a similar manner if surface is rough or porous.
- B. Sealing Coat: Uniformly apply a continuous sealing coat of curing and sealing compound to hardened concrete by power spray or roller according to manufacturer's written instructions.

3.12 JOINT FILLING

- A. Prepare, clean, and install joint filler according to manufacturer's written instructions.
 1. Defer joint filling until concrete has aged at least six months. Do not fill joints until construction traffic has permanently ceased.
- B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joint clean and dry.

3.13 CONCRETE SURFACE REPAIRS

- A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.
- B. Patching Mortar: Mix dry-pack patching mortar, consisting of one part portland cement to two and one-half parts fine aggregate passing a No. 16 sieve, using only enough water for handling and placing.
- C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.

CAST-IN-PLACE CONCRETE

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

03 30 00 - 10

JSJA Project # 202543

1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension in solid concrete but not less than 1 inch in depth. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
 2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar will match surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
 3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Architect.
- D. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.
1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.
 2. After concrete has cured at least 14 days, correct high areas by grinding.
 3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
 4. Repair defective areas, except random cracks and single holes 1 inch or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least 3/4 inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mix as original concrete except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
 5. Repair random cracks and single holes 1 inch or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.
- E. Perform structural repairs of concrete, subject to Architect's approval, using epoxy adhesive and patching mortar.
- F. Repair materials and installation not specified above may be used, subject to Architect's approval.

3.14 FIELD QUALITY CONTROL

- A. Testing Services: Contractor shall be responsible for all concrete testing and associated costs. Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:

CAST-IN-PLACE CONCRETE

03 30 00 - 11

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

1. Testing Responsibility: Contractor shall retain the services of an independent testing agency. All required testing outlined below shall be done by the independent testing agency.
 2. Frequency: Obtain one composite sample for each day's pour of each concrete mix exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd. or fraction thereof.
 3. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mix placed each day.
 - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mix, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
 4. Slump: ASTM C 143; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mix. Perform additional tests when concrete consistency appears to change.
 5. Air Content: ASTM C 231, pressure method, for normal-weight concrete; ASTM C 173, volumetric method, for structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mix.
 6. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each composite sample.
 7. Compression Test Specimens: ASTM C 31/C 31M; cast and laboratory cure one set of four standard cylinder specimens for each composite sample.
 - a. Cast and field cure one set of four standard cylinder specimens for each composite sample.
 8. Compressive-Strength Tests: ASTM C 39; test two laboratory-cured specimens at 7 days and two at 28 days.
 - a. Test two field-cured specimens at 7 days and two at 28 days.
 - b. A compressive-strength test shall be the average compressive strength from two specimens obtained from same composite sample and tested at age indicated.
- B. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, Contractor shall evaluate operations and provide corrective procedures for protecting and curing in-place concrete.
- C. Strength of each concrete mix will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
- D. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both 7-and 28-day tests.

CAST-IN-PLACE CONCRETE

03 30 00 - 12

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
- F. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42 or by other methods as directed by Architect.

END OF SECTION 03 30 00

CAST-IN-PLACE CONCRETE

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

03 30 00 - 13

JSJA Project # 202543

SECTION 04 20 00 – UNIT MASONRY

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes clay brick masonry units, decorative concrete masonry units, masonry mortaring, grouting, anchorage, reinforcing, accessories, and installation requirements for unit masonry assemblies.

1.02 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For fabricated flashing; detail corner units, end-dam units, and other special applications.
- C. Samples for Verification: For each type and color of exposed masonry unit and colored mortar.

1.03 INFORMATIONAL SUBMITTALS

- A. Mix designs for each type of mortar and grout. Include description of type and proportions of ingredients.
- B. Material Certificates: For each type and size of product indicated. For masonry units include material test reports substantiating compliance with requirements.

1.04 QUALITY ASSURANCE

- A. Masonry Standard: Comply with ACI 530.1/ASCE 6/TMS 602 unless modified by requirements in the Contract Documents.
 - 1. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated in the standard. Do not use units where such defects will be exposed in the completed Work.
- B. Mockups:
 - 1. Location: As directed.
 - 2. Size: 4 feet high by 4 feet wide.

UNIT MASONRY

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

04 20 00 - 1

JSJA Project # 202543

3. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
4. Remove mockups prior to Substantial Completion or earlier if directed by the Architect.

1.04 FIELD CONDITIONS

- A. Cold-Weather Construction Requirements: Comply with TMS Spec.
 1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F and higher and will remain so until masonry has dried, but not less than seven days after completing cleaning.
- B. Hot-Weather Construction Requirements: Comply with TMS Spec.

PART 2 - PRODUCTS

2.01 CLAY BRICK MASONRY UNITS, GENERAL

- A. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated in the standard. Do not use units where such defects will be exposed in the completed Work.
- B. Source Limitations: Obtain exposed clay brick masonry units of a uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, from one source from single manufacturer for each product required for entire Project.
- C. Shapes: Provide shapes indicated and as follows, with exposed surfaces matching finish and color of exposed faces of adjacent units.
 1. For ends of sills and caps and for similar applications that would otherwise expose unfinished brick surfaces, provide units without cores, cells, or frogs and with exposed surfaces finished.
 2. Provide special shapes for special conditions.
 3. Provide special shapes for applications where stretcher units cannot accommodate special conditions, including those at corners, movement joints, bond beams, sashes, and lintels.
 4. Provide special shapes for applications requiring brick of size, form, color, and texture on exposed surfaces that cannot be produced by sawing.
 5. Provide special shapes for applications where shapes produced by sawing would result in sawed surfaces being exposed to view.
- D. Solid Facing Brick: ASTM C216.
 1. Color and Texture: Provide facing brick matching color range, texture, and size of existing adjacent brickwork.

2.02 MORTAR AND GROUT MATERIALS

- A. Description:
 1. Provide mortar of the type and color specified, and conforming with ASTM C270.
 2. Provide grout conforming with ASTM C476.
- B. Portland Cement: ASTM C150, Type I or II, except Type III may be used for cold-weather

UNIT MASONRY

04 20 00 - 2

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

construction. Provide natural color or white cement as required to produce mortar color indicated.

- C. Portland Cement-Lime Mix: Packaged blend of portland cement and hydrated lime containing no other ingredients.
- D. Mortar Cement: ASTM C1329.
- E. Masonry Cement: Not permitted.
- F. Aggregate for Mortar: ASTM C144.
 - 1. For mortar exposed to view, use washed aggregate.
 - 2. For joints less than 1/4 inch thick, use aggregate graded with 100 percent passing No. 16 sieve.
 - 3. Aggregate Color: Natural color or color-blend as required to produce approved mortar color.
- G. Aggregate for Grout: ASTM C404.
- H. Hydrated Lime: ASTM C207, Type S.
- I. Mortar Pigments: Pure mineral oxide type, compounded for use in mortar, complying with ASTM C979 and with record of satisfactory performance in masonry mortar.
 - 1. Products:
 - a. True Tone Mortar Colors by Davis Colors.
 - b. Bayferrox Iron Oxide Pigments by Lanxess Corporation.
 - c. SGS Mortar Colors by Solomon Colors, Inc.
 - d. Comparable products will be considered.
- J. Colored Cement Product: Pre-packaged blend made from Portland cement and hydrated lime and mortar pigments, complying with specified requirements, and containing no other ingredients.
 - 1. Products:
 - a. Colored Portland Cement-Lime Mix:
 - 1) Rainbow Mortamix Custom Color Cement-Lime by Holcim (US), Inc.
 - 2) Eaglebond Portland & Lime by Lafarge North America Inc.
 - 3) Lehigh Custom Color Portland/Lime Cement by Lehigh Hanson, Inc.
 - 4) Comparable products will be considered.
 - 2. Color: As indicated or, if not indicated, as selected from manufacturer's full range.
- K. Cold-Weather Admixture: Not permitted without express written approval.

2.03 REINFORCING BARS

- A. Steel Reinforcing Bars: ASTM A615 or ASTM A996, Grade 60; uncoated, unless otherwise indicated.
- B. Reinforcing Bar Positioners: Wire units designed to fit into mortar bed joints, span masonry unit cells, and hold reinforcing bars in place. Form units from 0.148-inch steel wire, bent to fit masonry unit cells and welded at intersections and hot-dip galvanized after fabrication. Provide

UNIT MASONRY

04 20 00 - 3

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

units to hold number of bars indicated.

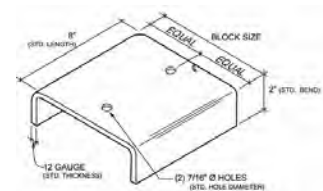
2.04 HORIZONTAL JOINT REINFORCEMENT

- A. Horizontal Joint Reinforcement: ASTM A951; hot-dip galvanized, carbon steel wire.
1. Wire Diameter: W1.7 or 0.148-inch (9 gage) for side and cross rods.
 2. Spacing of Cross Rods: 16 inches o.c.
 3. Veneer Wire Ties and Tabs, General: Unless otherwise indicated, size to extend at least 1/2 inch into outer face shell for hollow units and at least 1-1/2 inch into solid units, but with a not less than 5/8 inch cover on outside face. Form outer face wire of ties and tabs to 2 inch width parallel to face of veneer. Bend legs of ties and tabs 90 degrees to allow vertical adjustment of 1-1/4 inches.
 4. Provide in standard 10 foot lengths.
 5. Configuration for Single-Wythe Masonry: Ladder type with single pair of side rods.
 - a. Basis-of-Design Product: Ladder 2 Wire by Wire-Bond.
 - 1) Comparable products will be considered.



2.05 TIES AND ANCHORS

- A. Materials: Comply with the following, unless otherwise indicated.
1. Materials: Steel, hot-dip galvanized after fabrication with ASTM A153, Class B-2 coating, unless otherwise indicated.
 - a. Carbon-Steel Wire: ASTM A1064 cold-drawn steel wire .
 - b. Steel Sheet, Galvanized after Fabrication: ASTM A1008.
 - c. Steel Plates, Shapes, and Bars: ASTM A36.
 - d. Steel Rods; ASTM A82.
- B. Wire Ties, General: Unless otherwise indicated, size wire ties to extend at least 1/2 inch into outer face shell for hollow units and at least 1-1/2 inch into solid units, but with not less than 5/8 inch cover on outside face. Form outer face wire of ties to 2 inch width parallel to face of wall.
1. Wire Diameter: W2.8 or 0.1875 inch (3/16 inch) for veneer ties.
 2. Tie Shape: Triangular-, rectangular-, or T-shaped.
- C. Partition Top Anchors: 8 inch long by 0.108-inch thick metal plate with pre-drilled 7/16 inch attachment holes and with side edges bent down 2 inches to fit over top of CMU wall to restrain lateral movement.
1. Products:
 - a. PTA 422 by Hohmann & Barnard, Inc.
 - b. 4310 by Wire-Bond.
 - c. Comparable products will be considered.
- D. Adjustable Masonry-Veneer Anchors:
1. General: Provide anchors for attachment through sheathing to studs that allow differential vertical and in-plane movement but resist a 100-lbf load in both tension and compression perpendicular to plane of wall without deforming or developing play in excess of 0.05 inch.



UNIT MASONRY

04 20 00 - 4

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

2. Anchor Sections: Fabricate from sheet metal in 0.078 inch (14 gage) thickness.
3. Wire Ties: Fabricate from W2.8 or 0.1875 inch (3/16 inch) wire in triangular, rectangular, or T-shape.
4. Contractor's Option: Unless otherwise indicated, provide any of the following types of anchors:
5. Dual-Screw-Attachment Types:
 - a. Anchor Section: Sheet metal plate, 1-1/4 inch wide by 5 to 6 inch long with screw holes top and bottom; raised rib-stiffened strap stamped into center to provide a slot between strap and plate to hold triangular wire tie.



- 1) Products:
 - a) DW-10HS Anchor by Hohmann & Barnard, Inc.
 - b) Type III Screw-On Veneer Anchor by Wire-Bond.
 - c) Comparable products will be considered.
6. Single-Screw-Attachment Types:
 - a. Anchor Section: Corrosion-resistant, self-drilling, eye-screw with spacer to seat directly against stud; eye designed to receive specially formed wire tie



- 1) Products:
 - a) Pos-I-Tie by Heckmann Building Products Inc.
 - b) SureTie by Wire-Bond; .
 - c) Comparable products will be considered.

2.06 EMBEDDED FLASHING MATERIALS

- A. Metal Flashing: Provide metal flashing and solder.
 1. Provide sealants per manufacturer's specifications.
 2. Provide metal flashing where shown on Drawings and in the following applications, unless otherwise indicated:
 - a. Where indicated to receive hooked counterflashing.
 - b. Where indicated to be exposed at or beyond wall face.
 - c. Where indicated to be a drip edge.
- B. Flexible Flashing: Use the following unless otherwise indicated:
 1. Asphalt-Coated Copper Flashing: 7-oz./sq. ft. copper sheet coated with flexible asphalt. Use only where flashing is fully concealed in masonry.

2.07 MISCELLANEOUS MASONRY ACCESSORIES

- A. Movement Joint Fillers and Gaskets:
 1. Compressible Filler: Premolded filler strips complying with ASTM D1056, Grade 2A1;

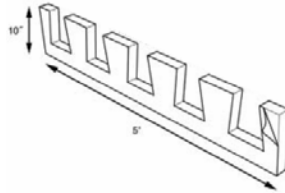
UNIT MASONRY

04 20 00 - 5

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- compressible up to 35 percent; of width and thickness indicated.
 2. Preformed CMU Control-Joint Gaskets: Made from styrene-butadiene-rubber compound, complying with ASTM D2000, Designation M2AA-805 or PVC, complying with ASTM D2287, with durometer hardness of 85 \pm and tensile strength not less than 1575 psi; and designed to fit standard sash block and to maintain lateral stability in masonry wall; size and configuration as indicated.
 3. CMU Bond-Breaker Strips: Asphalt-saturated felt per ASTM D226, Type I (No. 15 asphalt felt).
- B. Cavity Drainage Material: Not less than 90 percent open, free-draining mesh made from synthetic polymer strands that will not degrade within the wall cavity.



1. Configuration: Strips, manufacturer's standard thickness by 10 inch high, with dovetail shaped notches 7 inches deep that prevent clogging with mortar droppings.
 - a. Products:
 - 1) Mortar Net USA, Ltd.; Mortar Net Solutions.
 - 2) Mortar Trap; Hohmann & Barnard Co.
 - 3) Cavity Net DT by Wire-Bond.
 - 4) Comparable products will be considered.

2.08 MASONRY CLEANERS

- A. Proprietary Acidic Cleaner: Manufacturer's standard-strength cleaner designed for removing mortar/grout stains, efflorescence, and other new construction stains from new masonry without discoloring or damaging masonry surfaces. Use product expressly approved for intended use by cleaner manufacturer and manufacturer of masonry units being cleaned.

2.09 MORTAR MIXES

- A. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients, including color pigments, as preblended mix to produce color required. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.
- B. Setting Mortar: Comply with ASTM C270, Proportion Specification.
1. Use Portland cement-lime or mortar cement mortar, unless otherwise indicated.
 2. Provide the following types of setting mortar for applications stated unless otherwise indicated.
 3. For masonry below grade or in contact with earth: Type M or Type S.
 - a. For exterior, above-grade veneer,: Type N.
 4. Admixtures:
 - a. Add color pigments as required to achieve color specified.
 - b. Do not add other admixtures, without express written approval.
 5. Pigmented Mortar: One of the following at Contractor's option:
 - a. Use preblended, pigmented, dry mortar mix.

UNIT MASONRY

04 20 00 - 6

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

- b. Use factory colored cement product. Mix per mortar manufacturer's written instructions.
- c. Use field blended and pigmented mortar. Select and proportion pigments with other ingredients to produce color required. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before use.
- d. Pigmented Mortar Application: Use for exposed mortar joints with masonry units as follows:
 - 1) Face brick.

2.10 GROUT MIXES

- A. Grout for Unit Masonry: Comply with ASTM C476.
 - 1. Use grout of type indicated or, if not indicated, of type (fine or coarse) that will comply with Table 3.2.1 in TMS Code for dimensions of grout spaces and pour height.
 - 2. Proportion grout in accordance with ASTM C476, Table 1 or paragraph 4.2.2 for specified 28-day compressive strength indicated, but not less than 2000 psi.
 - 3. Provide grout with a slump of 8 to 11 inches as measured according to ASTM C143.
 - a. Admixtures: Do not add admixtures, without express written approval. Field addition of admixtures with self-consolidating grout is prohibited.

PART 3 - EXECUTION

3.01 INSTALLATION, GENERAL

- A. Select and arrange units for exposed masonry to produce a uniform blend of colors and textures.
 - 1. Mix masonry units from several pallets or cubes as they are placed to ensure uniformity of blend.
- B. Use full-size units without cutting if possible. When cutting is required to provide a continuous pattern or to fit units to adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.
- C. Tolerances: Per TMS Spec and as follows:
 - 1. Face alignment of adjacent exposed masonry units: $\pm 1/16$ inch.
 - 2. At conspicuous horizontal and vertical lines reduce tolerances to one-half of dimensions allowed by referenced standards.
 - 3. Measure variation in face plane between adjacent exposed rough or split-face units from average face plane of each unit.
 - 4. Do not exceed tolerances allowed plus one-half of the unit size or distortion tolerances.
 - 5. Reinforcing Bars:
 - a. Variation from d for flexural elements (where d= distance from extreme compression face of masonry to centroid of tension reinforcement):
 - 1) $d < 8$ inch: $\pm 1/2$ inch
 - 2) $d \geq 8$ inch and < 24 inch: ± 1 inch
 - 3) $d \geq 24$ inch: $\pm 1-1/4$ inch
 - b. For vertical bars in walls: ± 2 inch from the location along the length of the wall indicated on the project drawings.
 - c. Minimum clear distance between reinforcing bars and adjacent face of masonry

UNIT MASONRY

04 20 00 - 7

Building Renovations, Remodeling, & Site Improvements For:
 Monroe Community Credit Union
 14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

unit: 1/4 inch for fine grout, 1/2 inch for coarse grout.

3.02 LAYING UNIT MASONRY WALLS

- A. Wetting of Brick: Wet brick before laying if initial rate of absorption exceeds 30 g/30 sq. in. per minute when tested according to ASTM C67. Allow units to absorb water so they are damp but not wet at time of laying.
- B. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.
- C. Bond Pattern: Exposed Masonry: Lay in running bond, unless otherwise indicated.
- D. Built-in Work: As construction progresses, build in items specified in this and other Sections. Fill in solidly with masonry around built-in items.
 - 1. Steel Frames: Fill space between steel frame and masonry solidly with mortar unless otherwise indicated.
 - 2. Hollow Metal Frames: Build masonry around pre-installed hollow metal frames.
 - 3. Mechanical and Electrical Components: Exercise care to embed conduits and pipes in masonry without fracturing exposed shells and to fit units around switch, receptacle, and other boxes set in walls. Where electric conduits, outlets, switch boxes, and similar items occur, grind and cut units before building in services.
 - 4. Where built-in items are to be embedded in cores of hollow masonry units, place a layer of metal lath, wire mesh, or plastic mesh in the joint below and rod mortar or grout into core.
 - 5. Fill cores in hollow masonry units with grout 24 inches under bearing plates, beams, lintels, posts, and similar items unless otherwise indicated.
- E. Build non-load-bearing interior partitions full height of story underside of solid floor or roof structure above leaving 1 inch gap, unless otherwise indicated.
 - 1. Fasten partition top anchors to structure above. Capture tops of walls with channels with no attachment of channels to masonry. Space anchors 48 inches o.c. unless otherwise indicated.
 - 2. Install compressible filler, slightly compressed, in joint between top of masonry and underside of structure above.
 - 3. At fire-rated partitions, coordinate treatment of joint between top of masonry and underside of structure.

3.03 MASONRY MORTARING

- A. Lay hollow masonry units as follows:
 - 1. With head joints of depth approximately equal to bed joints, adjusting within allowable tolerances as required for proper wall length.
 - 2. With entire units, including areas under cells, fully bedded in mortar at starting course on footings where cells are not grouted.
- B. Lay solid masonry units with completely filled bed and head joints; butter ends with sufficient

UNIT MASONRY

04 20 00 - 8

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

mortar to fill head joints and shove into place. Do not deeply furrow bed joints or slush head joints.

- C. Build reinforcement, anchors and ties into mortar joints as masonry is set maintaining approximately equal mortar cover between masonry units and reinforcement, anchors and ties.
- D. When exposed mortar is thumbprint hard, tool joints to produce the following joint profile. During the tooling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar.
 - 1. Joint Profile: Concave using 3/4 inch diameter jointer tool.
 - 2. Joint Texture: Smooth but not polished.
- E. Rake out joints indicated for installation of sealant with square bottoms and clean sides before setting mortar has hardened.
 - 1. For movement joints, rake entire joint space free of mortar and other rigid materials for installation of sealant with backer rod.
 - 2. For non-moving joints, rake to uniform depth equal to joint width.

3.04 HORIZONTAL JOINT REINFORCEMENT INSTALLATION

- A. Space horizontal joint reinforcement as follows:
 - 1. Not more than 16 inches o.c. vertically.
 - 2. Not more than 8 inches o.c. vertically in foundation walls.
 - 3. Not more than 8 inches above and below wall openings and extending 12 inches beyond openings in addition to continuous reinforcement.
- B. Intersecting and Abutting Walls: Unless vertical expansion or control joints are shown at juncture, bond walls together as follows:
 - 1. Provide rigid metal anchors not more than 48 inches o.c. If used with hollow masonry units, embed ends in mortar-filled cores.
 - 2. Provide continuity with horizontal joint reinforcement by cutting and bending side wires as directed by manufacturer at wall corners, intersections, returns, offsets, column fireproofing, pipe enclosures, and other special conditions. At Contractor's option provide prefabricated joint reinforcement; L-shape units at corners and T-shape units at intersections.
- C. Interrupt horizontal joint reinforcement at control and expansion joints, unless otherwise indicated.

3.05 VENEER INSTALLATION, GENERAL

- A. Provide air space (cavity) as indicated, but not less than 1 inch, between back of veneer and face of backup.
- B. Slope mortar beds toward cavity to minimize mortar protrusions into cavity. Do not attempt to trowel or remove mortar fins protruding into cavity. Keep cavity free of mortar droppings, debris, and other materials during construction.
- C. Embed ties in veneer joints at spacing indicated. Maintain not less than 5/8 inch mortar cover over exterior face of ties.

UNIT MASONRY

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

04 20 00 - 9

JSJA Project # 202543

3.06 ANCHORING MASONRY VENEERS TO STUD FRAMING

- A. Anchor masonry veneers to wall framing studs with adjustable masonry-veneer anchors with ties as follows:
 - 1. Locate anchor sections to allow maximum vertical differential movement of ties up and down. Fasten anchor section through sheathing to wall framing with screws of type indicated. Use two screws unless anchor design requires only one screw.
 - 2. Space anchors as indicated, but not more than 25 inches o.c. vertically and 32 inches o.c. horizontally with not less than 1 anchor for each 3.5 sq. ft. of wall area. Install additional anchors within 12 inches of openings and at intervals, not exceeding 36 inches, around perimeter.

3.07 LINTEL INSTALLATION

- A. Install steel lintels where indicated.
- B. Provide minimum bearing of 8 inches at each jamb unless otherwise indicated.

3.08 CONTROL AND EXPANSION JOINT INSTALLATION

- A. Install control and expansion joint materials in unit masonry as masonry progresses. Do not allow rigid materials to span control and expansion joints without provision to allow for in-plane wall or partition movement.
 - 1. Form joints of width required for installing sealant and backer rod not less than 3/8 inch .
- B. Locate unit expansion joints in clay unit masonry at locations indicated on Drawings and in accordance with recommendations in BIA Technical Note 18A and as follows. Form joints using any method illustrated in BIA Technical Note 18A. Obtain Architect's approval of visual effect for locations not specifically shown on Drawings
 - 1. Space expansion joints not to exceed the following:
 - a. Using sealant with $\pm 50\%$ elongation capacity: 20 feet for 3/8 inch joints.
- C. Locate control joints in concrete unit masonry at locations indicated on Drawings and in accordance with recommendations in NCMA TEK 10-2B and NCMA TEK 10-3 and as follows. Form joints using any method illustrated in NCMA TEK 10-2B. Obtain Architect's approval of visual effect for locations not specifically shown on Drawings.

3.09 FLASHING INSTALLATION

- A. Install embedded flashing in masonry at obstructions to downward flow of water in wall, and where indicated.
 - 1. Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing.
 - 2. Where flashing is within mortar joint, place flashing on sloping bed of mortar and cover with mortar. Before covering with mortar, seal around penetrations in flashing with butyl sealant.
 - 3. Lap ends and overlap preformed corners 4 inches minimum. Bond laps watertight with adhesive or sealant if not self-adhering.
 - 4. At lintels extend flashing full length of angle but not less than 6 inches into masonry at

UNIT MASONRY

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

04 20 00 - 10

JSJA Project # 202543

- each end.
5. At heads and sills, extend flashing 4 inches at ends and turn up not less than 1 inch to form end dams.
- B. Install metal flashing as shown on Drawings, per SMACNA “Architectural Sheet Metal Manual” Chapter 4 Flashing and NCMA TEK Bulletins 19-4 and 19-5 details, and as follows to ensure water resistant masonry construction:
1. At stud-framed walls, extend smooth flashing through veneer, across air space, and turn up face of sheathing a minimum of 8 inches; tuck upper edge behind water-resistive barrier.
 2. Extend sheet metal flashing 1/4 inch beyond masonry face at exterior, turn down dimensions as indicated, but not less than 1 inch, and form drip edge bent out 30 degrees and folded under in a hemmed edge.
 3. Seal lap seams, gaps, and penetrations with butyl sealant for application indicated.
- C. Install flexible flashing in accordance with flexible flashing manufacturer’s recommendations and as follows:
1. Prime substrates as required.
 2. Install preformed corners and end dams, under flexible flashing membrane, bedded in sealant in appropriate locations along wall.
 3. Roll flashing into place ensuring continuous and direct contact with substrate. without trapping air and forming wrinkles.
 4. Extend membrane through outer wythe, turn up backup wall or wythe a minimum of 8 inches. Terminate top edge of flashing membrane on vertical surface behind water-resistive barrier with a metal termination bar. Apply sealant bead at each termination.
 5. Install metal drip edges beneath flexible flashing at exterior face of wall. Stop flexible flashing 1/2 to 3/4 inch back from outside face of wall and adhere flexible flashing to top of metal drip edges.
 6. Protect installed flexible flashing from damage during construction.
 - a. Inspect before covering and make repairs as necessary. Remove and replace damaged material. Repair holes and tears by covering with cut patch of similar product overlapping damage 2 inches minimum. Seal perimeter of patch repair with sealant/mastic.
 - b. Cover flexible flashing as soon as possible after installation has been observed and tested. Do not expose longer than 60 days, unless otherwise approved by membrane manufacturer in writing.
- D. Install weep holes in head joints in exterior wythes of first course of masonry immediately above embedded flashing and as follows:
1. Use open head joints to form weep holes.
 2. Space weep holes 24 inches o.c. unless otherwise indicated.
- E. Cavity Drainage: Maintain open, free-draining weep holes as follows:
1. Install cavity drainage material in air space behind veneers where downward flow of water is interrupted including, but not limited to, above window and wall openings, at the base of walls.
- F. Install cavity vents in head joints in exterior wythes at the top of each continuous cavity/air space at same spacing as indicated for weeps. Use open head joints to form vents. Install vents

UNIT MASONRY

04 20 00 - 11

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

JSJA Project # 202543

at a consistent height for each compartment.

1. Close cavities off vertically and horizontally (compartmentalize) with blocking in manner indicated in BIA Technical Note 27. Install through-wall flashing and weep holes above horizontal blocking.

3.10 REPAIRING

- A. Remove and replace damaged or defective masonry of the following description:
 1. Broken, chipped, loose, stained, or otherwise damaged masonry.
 2. Defective joints.
 3. Masonry not matching adjoining units, approved samples, and mockups.
 4. Masonry not complying with requirements indicated.
- B. Replace damaged or defective work in a manner to match approved samples and mockups complying with other requirements, and showing no evidence of replacement. Install replacement masonry with fresh mortar.

3.11 JOINT-SEALANT INSTALLATION

- A. Prepare joints and apply sealants of type and at locations indicated to comply with applicable requirements. Remove excess sealant and smears as sealant is installed.

3.12 CLEANING

- A. In-Progress Cleaning: Clean masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- B. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows. Do not use acid or caustic solutions or abrasives without express written approval.
 1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
 2. Test cleaning methods on field mockup panel; leave one-half of panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before proceeding with cleaning of masonry.
 3. Clay Masonry: Clean by bucket-and-brush hand-cleaning method per BIA Technical Notes 20.
 4. Concrete Masonry: Clean by hand-cleaning method or water-cleaning method per NCMA TEK 8-4A.

END OF SECTION 04 20 00

UNIT MASONRY

Building Renovations, Remodeling, & Site Improvements For:
Monroe Community Credit Union
14 Winchester Street, Monroe, Michigan 48161

04 20 00 - 12

JSJA Project # 202543