

REQUEST FOR PROPOSALS

Invitation to Bid

The Town of Monroe ("Town") hereby invites sealed proposals from qualified bidders for the following project/service:

RFP#/Department:	2025-04	PUBLIC WORKS		
Title:		TE (ST. JUDE SCHOOL) GYM WALL REPAIR		
Department:	PUBLIC WORKS			
Release Date:	March 31,2025	@8:00 am		
Response Deadline:	April 23,2025	@10:00 am		
RFP documents	In Person:	Electronically: www.mo	nroect.gov	
may be obtained:	Monroe Town Hall	and/or:		
	Office of the First Selectman	https://portal.ct.gov/das/		
	7 Fan Hill Road	dboard?language=en_US	<u>S</u>	
	Monroe, CT 06468			
	M-Th: 9:00am-4:00pm		ble for checking the Town	
	F: 9:00am-1:00pm		website to obtain RFP addenda,	
DED Ononing Diago.	Monroe Town Hall	if any to ensure complian		
RFP Opening Place:	7 Fan Hill Road	writing. This shall take	pened publicly and recorded in	
	Monroe, CT 06468	witting. This shall take	prace in 100m 204	
Key Dates:	141011100, 01 00400			
Rey Dutes.	Site Visit	A mri 1 0 2025	Mandatawa Vas	
	Interviews	April 9, 2025 TBD	Mandatory: Yes	
	Preliminary Notice of Award	Within sixty (60) days o	f Pagnanga Dandlina	
	Contract Execution		1	
Proposal		Within ten (10) days of Notice of Award		
Instructions:	incorporated herein by reference	e Standard Instructions to Bidders attached hereto and		
mstructions.	2. Proposals shall be submitted:		e clearly marked with the	
	(a) name and address of Bidder;			
	(d) Response Deadline.		· , ·	
	3. Proposals shall consist of: on	e (1) original, two (2) hard	d copies and one (1) electronic	
	copy on a USB drive.		-	
	4. The Town shall not accept an	y oral, facsimile or electro	onic Proposals.	
	5. The Town shall not accept an	y Proposals <u>received</u> afte	er the Response Deadline, time	
	being of the essence.			
	6. Proposals may not be withdra	nwn, cancelled or modified	d for ninety (90) calendar	
T	days after the opening date.	m 1 1 1		
Inquiries:	Procedural:	Technical:	Consultant:	
(Written Only)	Office of the First Selectman fs office@monroect.gov	Bill Phillips Dep. Director of Public	Paul Lisi	
	is office without oect. gov	Works	Antinozzi Associates PLisi@antinozzi.com	
		wphillips@monroect.gov	1 List@antinozzi.com	

STANDARD INSTRUCTIONS TO BIDDERS

- 1. **INTRODUCTION.** The Town is accepting sealed proposals from qualified bidders ("Bidder") for the Work, as hereinafter defined. Interested parties shall submit a proposal in accordance with the requirements and directions contained in this RFP. This RFP is not an offer or contract, and the Town shall not be bound, nor shall any right accrue to any Bidder until a written Notice of Award has been issued to the successful Bidder by the First Selectman **and** a contract is executed by the parties, as approved by the Town Council.
- 2. **RIGHT TO AMEND OR TERMINATE THE RFP.** The Town reserves the right to amend or terminate this RFP, accept or reject any and all proposals, in whole or in part, to waive any informalities, deficiencies, omissions, excess verbiage, or technical defects in any proposal, to give preference to local businesses, and or to award a contract to the Bidder that it determines is in the Town's best interest. The Town is not under any obligation to award to the lowest price proposal, but will purchase from the lowest, best qualified proposal meeting all selection criteria. Notice of any changes to the RFP shall occur by posting on the Town website at www.monroect.gov and <a href="https://portal.ct.gov/das/ctsource/bidboard?language=en_US. Bidders shall be responsible for checking the Town website to obtain said changes or RFP addenda, if any, to ensure its proposals are submitted in compliance with the RFP as may be amended by any addenda. The Town reserves the right to negotiate fees with the selected Bidder.
- 3. **KEY DATES**. As set forth in the RFP cover page. All Key Dates are anticipated, not certain and remain subject to change without notice. Notice of any changes to the RFP shall occur by posting on the Town website at www.monroect.gov and DAS at https://portal.ct.gov/das/ctsource/bidboard?language=en_US
- 4. **PROPOSAL INSTRUCTIONS.** As set forth in the RFP cover page. The Town, in its sole discretion and without obligation, may accept proposals received after the Response Deadline. Proposal pricing must be submitted on the Fee Proposal Form included in this RFP, unless set forth the contrary, and shall be stated in both words and numbers. All forms submitted in response to the RFP, including without limitation, the Fee Proposal Form, must be executed by an individual with express written authorization from the Bidder, which authorization (e.g., Resolution or Consent) shall be included with the proposal. Any errors, alterations, or corrections on Fee Proposal Form shall be initialed.
- 5. **INOUIRIES.** As set forth in the RFP cover page. Bidders are prohibited from contacting any Town employee, officer, official, agent or volunteer ("Town Representative") except as listed on the RFP cover page. All inquiries shall be submitted not less than ten (10) days prior to the Response Deadline. No statement by any Town Representative shall be effective to waive, amend or otherwise modify any of the provisions of this RFP. Noncompliance with the foregoing may result in disqualification of the Bidder and proposal.
- 6. **COMMUNICATION WITH BIDDER.** The Town reserves the right, at any time (before or after the opening of proposals) to communicate with any Bidder to clarify its proposal or to request additional information that the Town, in its sole discretion, deems desirable to evaluate the proposals.
- 7. **COSTS FOR PREPARING PROPOSAL.** All costs incurred in developing its proposal shall be the sole responsibility of the Bidder. The Town shall have no liability for such costs.
- 8. **OWNERSHIP OF PROPOSAL.** Upon submission to the Town, the proposal, and its attachments, shall become the Town's property and shall not be returned to Bidder.

- 9. **PRE-PROPOSAL MEETING/SITE VISIT**. The Bidder shall visit and physically examine all property, real and personal, subject to the RFP, and thoroughly familiarize itself with all site conditions prior to submission of its proposal. If designated as such on the RFP cover page, attendance at all scheduled Pre-Proposal Meetings and Site Visits is **mandatory**. Sign-in shall be required at the commencement of each meeting and or visit. No special arrangements or private tours shall be accommodated outside of the scheduled meeting. Noncompliance with the foregoing may result in disqualification of the Bidder and proposal.
- FREEDOM OF INFORMATION ACT. All information submitted in response to this RFP is subject 10. to disclosure under the Connecticut Freedom of Information Act, as may be amended and judicially interpreted. A Bidder's response may contain financial, trade secret or other data that it claims should not be public (the "Confidential Information"). A Bidder must identify the specific pages and portions of its proposal that contain the claimed Confidential Information by visibly marking same in bold red ink with "CONFIDENTIAL INFORMATION". Provided that the Bidder cooperates with the Town as described in this section, the Town shall make good faith efforts, to the extent permitted by law, to protect such Confidential Information from unauthorized disclosure. If the Town receives a request for a Bidder's Confidential Information, it will promptly notify the Bidder in writing of such request and provide the Bidder with a copy of any written disclosure request. The Bidder may provide written consent to the disclosure or may object to the disclosure by notifying the Town in writing to withhold disclosure of the information, identifying in the notice the basis for its objection, including the statutory exemption(s) from disclosure. The Town may, in its sole discretion, choose to release the Confidential Information or withhold the same, in its sole discretion and without liability to the Bidder or any third party. Should the Town choose to withhold the Confidential Information on behalf of the Bidder, the Bidder shall indemnify, defend and hold the Town harmless from any complaint and damages which may arise from said nondisclosure, including but not limited to reasonable attorney's fees and costs for the defense of any matter before the Freedom of Information Commission. Notwithstanding the foregoing, the Town reserves the right to exempt responses to this RFP, and all records in connection with the contract award process, pursuant to C.G.S. 1-210 (b)(24).
- 11. **REOUIRED DISCLOSURES**. The Town reserves the right to reject any proposal which is incomplete, or which fails to include all submissions in form and substance as required by this RFP, including without limitation, all documents set forth on the Checklist. The Town reserves the right to reject any proposal and or disqualify any Bidder based upon the information provided in the proposal, which, in the sole discretion of the Town, renders the proposal or Bidder unqualified or otherwise not in the best interest of the Town.
- 12. **LEGAL STATUS/QUALIFICATIONS.** If a Bidder is a business entity, it must be registered and in good standing with the Office of the Connecticut Secretary of the State. The Town may request acceptable evidence of a Bidder's: (a) legal status; (b) that it has been regularly engaged in the business of such work as they propose to perform in response to this RFP; and (c) that they are fully prepared with the necessary capital, personnel, materials, tools and equipment, in order to fully perform the work to be contracted to the satisfaction of the Town and to begin work promptly when awarded.
- 13. **BIDDER'S REPRESENTATIONS.** The Bidder represents and acknowledges that it: (a) has received, read and understands this RFP, addenda, plans and specifications, if any; (b) is familiar with the project and scope of work associated therewith; (c) has been regularly engaged in the business of such work as they propose to perform in response to this RFP; (d) fully prepared with the necessary capital, personnel, materials, tools and equipment, in order to fully perform the work to be contracted to the satisfaction of the Town and to begin work promptly when awarded without exception or qualification, except as expressly stated in the proposal; (e) is familiar with and shall comply with all federal, state and local laws, regulations, ordinances, codes and orders that in any manner relate to this RFP; (f) has not

colluded with any other person or entity in regard to any proposal submitted; (e) is not barred from proposing or performing work in any jurisdiction and, (dg if this RFP includes work to be performed to or upon Town property, has visited and physically examined the property and the surrounding territory, and thoroughly familiarized itself with all conditions of the property, both natural and manmade, as well as all such above grade, at grade and subsurface conditions that may in any way affect the work to be done and labor and materials to be furnished for the proper completion of the work, before submission of this proposal with the understanding that any claim for labor, equipment, or materials required, or difficulties encountered which could have been foreseen had such an examination been carefully made will not be recognized.

14. **INSURANCE.** The Bidder shall, at its own expense and cost, obtain and keep in force, at a minimum, the insurance set forth in the Mandatory Insurance Requirements, attached hereto and incorporated by reference into this RFP. The Town reserves the right to request from the Bidder a complete, certified copy of each required insurance policy. At least five (5) days before the contract is executed and prior to commencement of any work contemplated thereby, the Bidder shall provide the Town a certificate of insurance, executed by an authorized representative of the insurance company, in form and substance satisfactory to the Town. The Town reserves the right to reject insurance companies. Noncompliance with this article or the Mandatory Insurance Requirements may result in disqualification of the Bidder and proposal and termination of the contract. The Town reserves the right to withhold payment from the Bidder until evidence of satisfactory insurance has been received by the Town.

15. **SECURITY/BONDS.**

- a. **Proposal Security/Bond.** Proposal security in the form of a certified check or bid surety bond issued by a bonding company licensed to do business in the State of Connecticut, is required in the amount of at least 5% of the total amount set forth on the Fee Proposal Form and shall be payable to the "Town of Monroe."
- b. **Performance Security/Bond**. The successful Bidder shall, within seven (7) days after receipt of the Notice of Award, furnish the Town with a performance, labor and material payment bond in an amount not less than one hundred percent (100%) of the award, in form and substance satisfactory to the Town. The Town reserves the right to withhold payment from the Bidder until the evidence of performance security/bond in compliance with this article has been received by the Town.
- c. <u>Additional Security/Bond-Non-Resident Contractors.</u> Non-resident contractors shall deposit with the Department of Revenue Services an additional sum equivalent to 5% of the total contract value, as assurance that personal property taxes and/or any other State taxes assessed and due the State during the contract will be paid. If this security/bond is not deposited with the State, the Town shall deduct and submit 5% of the total contract value to the State.
- d. <u>Acceptable Bond Companies</u>. All bonds shall be written by a surety company or companies licensed in the State of Connecticut and shall have at least an A-VII policy holders rating, as reported by A.M. Best Rating Services, or otherwise deemed acceptable by the Town. The Town reserves the right to reject surety companies. If an approved surety bond cannot be provided, the bidder shall be deemed non-responsive. A complete list of certified surety companies can be accessed on the U.S. Government Department of Treasury website at https://www.fiscal.treasury.gov/surety-bonds/list-certified-companies.html.
- e. <u>Disqualification</u>. Noncompliance with Security/Bond requirements as set forth in this article shall result in disqualification of the Bidder and proposal.
- 16. **AWARD CRITERIA/PRELIMINARY SELECTION/CONTRACT EXECUTION**. The Town reserves the right to correct, after Bidder verification, any mistake in a proposal that the Town

determines to be a clerical or scrivener's error. If an error exists in an extension of prices, the unit price shall prevail. In the event of a discrepancy between the price quoted in words and in figures, the words shall control.

The Town further reserves the right to award all or any portion of this RFP to any single or combination of separate Bidders or proposals.

The proposals will be evaluated by a Review Committee ("Committee") which will select the proposal that best meets the criteria set forth in the RFP and is in the best interests of the Town, including without limitation, the fee, proposal, the Bidder's understanding of the RFP requirements, approach and timeline; the locale of the Bidder's offices, personnel and staffing; the Bidder's personnel and staffing, resources, experience, references, capabilities, past performance; and any other criteria it determines relevant and in its best interests. The Town may reject any Bidder if, in the sole judgment of the Town, the Bidder's past performance gives rise to a substantial risk that the Bidder may not provide satisfactory performance. The Town reserves the right to pursue or reject any and all proposals, in whole or in part, to give preference to local businesses, and to pursue any proposal deemed to be in the best interests of the Town, notwithstanding it may not be the lowest Bidder. The Town is not under any obligation to award a contract to the lowest Bidder.

If interviews are deemed necessary, a short list of Bidders will be developed and specific information required for the interviews will be provided to Bidders at the time of notification.

The Town shall not award the proposal to any person or business (including any person or business under common control with any Bidder) that is in arrears or in default to the Town with regard to any tax, debt, contract, security or any other obligation or, whom, in the discretion of the Town, has been so within the prior five (5) years on a material obligation.

The Town will issue a Preliminary Notice of Award. The Preliminary Notice of Award may be subject to further negotiations with the Bidder. The making of a preliminary award to a Bidder does not provide the Bidder with any rights and does not impose upon the Town any obligations. The Town is free to withdraw a preliminary award at any time and for any reason. A Bidder has rights, and the Town has obligations, only if and when a formal Contract is executed by the Town and the Bidder, as approved by the Monroe Town Council.

If the Bidder fails to provide all required documents and execute the Contract within ten (10) business days of the date of the Preliminary Notice of Award, unless extended by the Town, the Town may call any proposal security provided by the Bidder and may enter into discussions with another Bidder.

- 17. **EXCEPTION TO SPECIFICATIONS.** No protest regarding the validity or appropriateness of any portion of the RFP, its addenda, plans or specifications will be considered, unless the protest is filed in writing with the Town prior to the Response Deadline. All proposals rendered shall be considered satisfactory and compliant with any specifications unless exceptions are noted on a separate page dated and signed by the Bidder.
- 18. **LIST SUBCONTRACTORS.** Prior to entering into any subcontract agreement for the work described in the contract, the Bidder shall provide the Town with written notice of the identity (full legal name, business address and telephone number) of each proposed subcontractor on the List of Subcontractors provided. The Town may object to any proposed subcontractor by providing the Bidder with written notice thereof within seven (7) business days of receipt of all required information about the proposed subcontractors, whereupon the Bidder shall not use any such subcontractor for any portion of the work described in the contract.

- 19. **LIST OF REFERENCES**. The Bidder shall disclose to the Town a list of at least three (3) references (full legal name, business address and telephone number) for past performance on similar projects of comparable size and scope within the last five (5) years.
- 20. **SELECTION CRITERIA**. Bidder will be evaluated by the Committee based on the following criteria:
 - a. Demonstrated specialized experience and competence in providing the services outlined in this RFP document.
 - b. Examples of past performance on similar services and references for services of comparable size and scope within the last five (5) years.
 - c. Competitiveness of the fee proposal and the capacity and capability to complete all work on-time and within budget.
 - d. The knowledge of the Bidder and its relative experience with municipalities and public sector entities in the State of Connecticut.
 - e. Suggestions for improvement, innovation, efficiency and fiscal economy relative to the project.
 - f. Quality of submission and understanding of the project requirements, including timeline, budget and scope of work.
 - g. The Committee will individually review and rank each proposal based on the criteria outlined in the RFP document.
 - h. After the opening of the proposals, one or more Bidder may be asked to provide additional information, to meet with the Committee to discuss their proposal, or to address such other issues as deemed in the best interests of the Town.
 - i. The Committee will meet to discuss Bidder's experience, credentials and qualifications, including its personnel.
 - j. The Committee may short-list Bidders for interview in order to clarify qualifications and verify its evaluation.
 - k. No additional services or significant changes to the proposals during the interview will be entertained.
 - 1. The Town reserves the right to amend or terminate this RFP, accept or reject any and all bids, in whole or in part, to waive any informalities, deficiencies, omissions, excess verbiage, or technical defects in any proposal, to give preference to local businesses, and to award a contract to the Bidder that it determines is in its best interest.
 - m. The Town reserves the right to negotiate fees with the selected Bidder.
- 21. **TAX EXEMPTION**. The Town is exempt from the payment of federal excise taxes and Connecticut sales and use taxes per Federal Tax Exempt #06-6002038 and Conn. Gen. Stat. Chapter 219, § 12-412(1), as may be hereafter amended. No exemption certificates are required, and none will be issued.
- 22. **REOUIRED BID LANGUAGE FOR STATE-FUNDED PROJECTS.** The Bidder who is selected to perform this State project must comply with CONN. GEN. STAT. §§4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2015 Special Session Public Act 15-5.

State law requires a minimum of twenty-five (25%) percent of the state-funded portion of the contract for award to subcontractors holding current certification from the Connecticut Department of Administrative Services ("DAS") under the provisions of CONN. GEN. STAT. § 4a-60g. (25% of the work with DAS certified Small and Minority owned businesses and 25% of that work with DAS certified Minority, Women and/or Disabled owned businesses.) The Bidder must demonstrate good faith effort to meet the 25% set-aside goals.

For municipal public works contracts and quasi-public agency projects, the Bidder must file a written or electronic project-specific Set-Aside Plan ("SAP") or Affirmative Action Plan ("AAP") as well as completion of other filing requirements as required by and with the Commission on Human Rights and Opportunities.

The Bidder must include in its proposal a fully completed Notification to Bidders/Contract Compliance Monitoring Report.

Forms can be found at: <a href="https://portal.ct.gov/chro/contractcompliance/contractcom

- 23. **SECURITY/BONDS-IN LIEU.** Pursuant to Conn. Gen. Stat. § 4a-60g(i), Bidder may, in lieu of a performance, bid, labor and materials or other required bonds, provide a letter of credit in an amount equal to ten percent (10%) of the contract for any contract that is less than one hundred thousand dollars (\$100,000) and in an amount equal to twenty five percent (25%) of the contract for any contract that exceeds one hundred thousand dollars (\$100,000) one hundred thousand dollars.
- 24. **AFFIRMATIVE ACTION/EOUAL OPPORTUNITY EMPLOYER.** The Town is an affirmative action/equal opportunity employer and encourages the participation of legitimate minority business enterprises as bidders, Bidders, subcontractors and suppliers of materials for this project.
- 25. **LOTCIP FUNDING PROGRAM SIGN REOUIREMENTS.** The State of Connecticut Department of Transportation currently requires that project funding program signs by placed on LOTCIP projects in accordance with the following guidelines/details. Inclusion of the signs is mandatory. The cost of the signs is considered a LOTCIP-eligible contract cost. For this project, the following information is to be included on the sign(s) where shown on the attached detail:
 - 1. NAME OF PROJECT will be:
 - 2. Funding program will be:
 - 3. The name of the municipality and name of chief elected official (with title) will also need to be included where indicated on the sign detail.

END OF STANDARD INSTRUCTIONS TO BIDDERS

REQUIRED GENERAL CONTRACT TERMS

The following provisions are mandatory terms which shall be incorporated into the Town's contract with the successful Bidder.

1. **LIABILTY OF BIDDER/DEFENSE, HOLD HARMLESS AND INDEMNIFICATION.** The Bidder shall safely guard the Town's property from injury or loss in connection with its performance of the work set forth in the RFP and this contract. The Bidder shall take all responsibility for the work and take precautions for preventing injuries to persons and property in or about the work. The Bidder shall, to the fullest extent permitted by law, to defend, indemnify, and hold harmless the Town, its employees, officers, officials, agents, volunteers and independent contractors, jointly and severally, and in their fiduciary and individual capacity, (collectively, the "Town Indemnified Parties"), from and against all proceedings, suits, actions, claims, damages, injuries, awards, judgments, losses or expenses, including attorney's fees and costs, arising out of or relating, directly or indirectly, to the Bidder's acts or omissions relative to the performance of the work, the RFP and the Contract. The Bidder's obligations under this section shall not be limited in any way by any limitation on the amount or type of the Bidder's insurance.

In any and all claims against the Town Indemnified Parties made or brought by any employee or agent of the Bidder, or anyone directly or indirectly employed or contracted with by the Bidder, or anyone for whose acts or omissions the Bidder is or may be liable, the Bidder's obligations under this section shall not be limited by any limitation on the amount or type of damages, compensation or benefits payable by the Bidder under workers' compensation acts, disability benefit acts, or other employee benefits acts.

The Bidder shall pay any and all attorney's fees and costs incurred by the Town Indemnified Parties in enforcing any of the Bidder's obligations under this section. The Bidder's obligations under this section shall survive the termination or expiration of the Contract.

As a municipal agency of the State of Connecticut, the Town shall NOT defend, indemnify, or hold harmless the Bidder.

2. No ASSIGNMENT/SUBCONTRACTING. No rights under the RFP, award or any contract may be assigned or transferred without the consent of the Town. The Bidder may only propose to enter into a subcontract agreement for any work described in the contract with a subcontractor set forth on the List of Subcontractors submitted with the proposal. The Bidder shall provide the Town with written notice of its intention to enter a contract with listed subcontractor whereupon the Town shall have seven (7) business days from receipt of said notice to object. Upon notice of objection, the Bidder shall not use that subcontractor for any portion of the work described in the Contract. All subcontractors shall be subject to the same terms and conditions as the Bidder and notwithstanding any permitted subcontracting the Bidder shall remain fully and solely liable and responsible to the Town for performance of the work described in the Contract and for the acts and omissions of its subcontractors and of persons employed, whether directly or indirectly, by its subcontractor(s). The Bidder shall promptly pay each of its subcontractors within thirty (30) days of receipt of payment from

the Town or otherwise in accordance with law.

- 3. **W-9 FORM**. The Bidder shall provide the Town with a completed W-9 form contemporaneous with Contract execution.
- 4. **PAYMENT.** Except as otherwise set forth in the contract, the Town shall endeavor to make payment within thirty days (30) after the last to occur of: delivery of the item; acceptance of the work; or receipt of a properly completed invoice/pay requisition. All requisitions for payment shall include certified payrolls from the Bidder. For projects that do not require a performance or proposal bond, the Town reserves the right to retain five percent (5%) of the total contract amount, which shall be payable ninety (90) days after the last to occur of final payment or acceptance of the work by the Town. The Bidder shall provide the Town with proof of payment and subcontractor lien waivers contemporaneously with each requisition submitted to the Town and as a condition of any payment obligation of the Town.
- 5. **PERFORMANCE OF THE WORK.** The Bidder shall perform all work and furnish all equipment, materials, tools, and appliances necessary or proper to comply with its obligations pursuant to the contract, including the RFP, addenda, plans, specifications and other directives of the Town, as may be given from time to time during the progress of the work, to the satisfaction of the Town and in accordance with and for the consideration herein agreed upon. The Bidder shall perform the work in an first class manner and so as not to interfere with or willfully annoy employees and officials of the Town. The Bidder shall employ only competent employees trained/certified/licensed to perform the work. The Bidder shall forthwith and forever discharge from the work any employee whom, in the Town's opinion, is, incompetent, unfaithful, disorderly, or otherwise unsatisfactory to the Town.
- 6. **TOWN INSPECTION OF WORK.** The Town reserves the right to and may at all reasonable times inspect the Bidder's work. This right of inspection is solely for the Town's benefit and shall not join the Town in any responsibility for discovering patent or latent defects. The Bidder has the sole and exclusive responsibility for performing the work in accordance with the Contract.
- 7. **REJECTION OF WORK**. The Bidder, at its sole cost and expense, shall remove from the Town's property all materials, items, commodities and/or work which do not conform to the contract or have or will result in inferior or unsatisfactory work, within forty-eight (48) hours of the Town's notice of rejection, except where safety or health issues are present whereupon immediate removal may be demanded by the Town. The Bidder shall forthwith replace and correct all rejected materials, items, commodities and/or work in the direction of the Town and to its reasonable satisfaction. The Bidder's failure to timely comply with any notice pursuant to this section shall be deemed default of the contract.
- 8. **GUARANTEE OF THE WORK.** The Bidder hereby guarantees for a minimum period of one (1) year from the date of the Town's final acceptance of all the work as substantially complete, all equipment, materials, and work performed against defective material and workmanship. The cost of all labor, materials, shipping charges, and other expenses in conjunction with the replacement of defective or unsatisfactory work, equipment, or materials shall be borne by solely the Bidder. Upon written notice from the Town, the Bidder, at its sole cost and expense, shall forthwith remedy any and all defects in materials or workmanship resulting from work done under this contract and repair any damage to any property caused by the Bidder incidental to this work, in strict compliance with direction from the Town.

9. **NONDISCRIMINATION/AFFIRMATIVE ACTION**. The Bidder shall not discriminate or permit discrimination in any manner prohibited by the laws of the United States or the State of Connecticut against any person or group of persons on the grounds of race, color, religious creed, age (except minimum age), marital status or civil union status, national origin, ancestry, sex, sexual orientation, gender identity, mental retardation, mental or physical disability or veteran status, in their employment practices, in any contractual arrangements, in all service and accommodation they offer to the public, and in any of their business operations.

The Bidder shall comply with all provisions of federal and state discrimination laws including without limitation, the Civil Rights Act of 1964 and the Equal Employment Opportunity Act of 1972. Executive order #11246 inclusive of all its amendments thereto relative to equal employment opportunities and implementation rules and regulations of the Department of Labor and equal employment opportunities are incorporated herein by specific reference.

Any violation of these provisions shall be considered a material violation of the contract and shall be grounds for the Town's cancellation, termination or suspension, in whole or in part, of the contract and may result in ineligibility for further Town contracts.

- 10. COMPLIANCE WITH IMMIGRATION LAWS/AUTHORIZATION TO WORK. The Bidder confirms that it has complied with the obligations under the Immigration Reform and Control Act (IRCA) and that the employees, independent contractors, and other personnel it provides under this Contract are authorized for employment in the United States. The Bidder further confirms that it has properly completed I-9s for all employees assigned—to the Town's place of business. The Bidder agrees to hold harmless and indemnify the Town in the event that any of the employees, independent contractors, and other personnel provided by the Bidder are found to be unauthorized to work under the law or in the event that there is a determination that the obligations set forth under IRCA, including, but not limited to, the failure to correctly prepare and maintain I-9s, have not been complied with by the Bidder. The Bidder agrees to indemnify, defend and hold the Town harmless against any claims brought against the Bidder or the Town as a result of these obligations, including but not limited to, settlement fees, judgments and attorneys' fees and costs. The Bidder's obligations under this section shall survive the termination or expiration of the Contract.
- 11. CESSATION OF BUSINESS/BANKRUPTCY/RECEIVERSHIP. If the Bidder ceases to exist or operate, dissolves as a business entity, files a petition or proceeding under any bankruptcy or insolvency laws or has such a petition or proceeding filed against it, the Town may terminate the contract effective immediately whereupon the Town, may, in its sole discretion as it deems appropriate and without prior notice to the Bidder, make arrangements with another person or business entity to complete the performance of the contract without waiver and with full reservation of the Town's rights to enforce all of its rights at law, in equity and or under the contract.
- 12. <u>INDEPENDENT CONTRACTOR STATUS/NON-EMPLOYMENT RELATIONSHIP.</u> The Town and the Bidder are independent parties. Nothing contained in the contract shall create, or be construed or deemed as creating, the relationships of principal and agent, partnership, joint venture, employer and employee, and/or any relationship other than that of independent parties contracting with each other solely for the purpose of carrying out the terms and conditions of the contract. The Bidder understands and agrees that it is not entitled to employee benefits, including but not limited to workers' compensation and employment insurance coverage, and disability. The Bidder shall be solely

responsible for any applicable taxes attributable to the contract or its performance of the work thereunder.

13. **COMPLIANCE WITH LAWS: PERMITS.** All applicable federal, state, and local laws, rules and regulations, codes and orders of governmental bodies having jurisdiction over the locality of the project shall apply to the contract, are deemed to be included herein, and shall be strictly complied with by the Bidder. The Bidder shall indemnify and hold the Town harmless from and against all damages that may be assessed against the Town on account of the Bidder's noncompliance including but not limited to, settlement fees, judgments and attorneys' fees and costs. The Bidder shall, at its own expense, obtain all permits and approvals from all such governmental bodies as may be required for the performance of the contract, and shall notify the Town in writing within twenty-four (24) hours of the loss or suspension of any such approval or permit. Should the total amount of the project, including any current or future change orders, exceed \$100,000.00, all work shall be done in accordance with Connecticut Department of Labor (CT-DOL) rules and regulations. More information may be obtained from: www.ctdol.state.ct.us.

The Bidder confirms compliance with the Davis-Bacon and Related Acts, which apply to contractors and subcontractors performing federally funded or assisted contracts in excess of \$2,000 for the construction, alteration, or repair (including painting and decorating) of public buildings or public works. More information may be obtained from: https://www.dol.gov/whd/govcontracts/dbra.htm.

The Town shall apply the most current wage decision applicable at the time of delivery of the Notice of Award. The Bidder certifies that all equipment shall comply with all regulations and conditions stipulated under the Williams-Steiger Occupational Safety and Health Act of 1971, as amended. The Bidder further certifies that all items furnished under this project will conform and comply with Federal and State of Connecticut OSHA standards.

14. **RIGHT OF TOWN TO TERMINATE CONTRACT.** Should the Town, at any time, be of the opinion that: (i) the Bidder has or is willfully violating any of the conditions of this contract; (ii) is not performing the contract in good faith; (iii) the work is unnecessarily delayed and may not be finished within the prescribed contract time; or (iv) the work to be done under this contract has been abandoned, then the Town may provide written notice to the Bidder (and or Surety) demanding the Bidder correct the unsatisfactory conditions within five (5) business days. Should the Bidder fail to correct, or take such measures as will, in the sole judgment of the Town, correct the unsatisfactory conditions and ensure the timely completion of the work, the Town may order the discontinuance of all or any portion or the work whereupon the Bidder shall cease to continue said work. The Town may, in its discretion, thereafter, make arrangements with another person or business entity to complete the performance of the contract without waiver and with full reservation of the Town's rights to enforce all of its rights at law, in equity and or under the contract. The new contractor may use such materials, tools, and appliances found upon the property or to procure other materials, tools, and appliances for the completion of the work and charge the expenses of said labor, materials, tools, and appliances to the Bidder; and the expense so charged shall be deducted and paid by the Town out of such money as may be then due, or may at any time thereafter grow due to the Bidder under and by virtue of this contract, or any part thereof; and in case the expense so charged is less than the sum which would have been payable under this contract if the same had been completed by the Bidder, the Bidder shall be entitled to receive the difference; and in case greater, the Bidder shall pay amount of such excess so due.

- 15. **APPLICABLE LAW AND FORUM**. Except as provided herein, this contract shall be governed and construed in accordance with the laws of the State of Connecticut without regard to conflicts of law principles. The Parties submit to personal jurisdiction in and for the Connecticut Superior Court for the Judicial District of Fairfield at Bridgeport and hereby waive all objections to same as the place of venue.
- 16. **HEADINGS AND CAPTIONS.** The headings and captions inserted into this contract are for convenience only and in no way define, limit or otherwise describe the scope or intent of this contract, or any provision hereof, or in any way affect the interpretation of this contract.

17. MISC. REPRESENTATIONS. The Bidder represents:

- a. that it, nor any of its officers, directors, members, partners or other person or business who has administrative or managerial control of the Bidder:
 - i. is currently in arrears or in default to the Town with regard to any tax, debt, contract, security or any other obligation or has been so within the prior five (5) years;
 - ii. has secured the contract without collusion or fraud;
 - iii. are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from proposing or performing work in any jurisdiction.
- b. that no officer or employee of the Town, nor any member of the immediate family of any such person, has or shall have a financial interest in the performance of the work or business to which it relates, or in any portion of the profits thereof, except as permitted by the Town Code of Ethics, which may be found at https://ecode360.com/12124160.
- c. that it shall not name the Town in its advertising, news releases, or promotional efforts without the Town's prior written approval; and,
- d. that it shall maintain all records related to the work described in the RFP for a period of five (5) years after final payment under the contract or until all pending Town, state and federal audits are completed, whichever shall last occur. Such records shall be available for examination and audit by Town, state and federal representatives upon request during that time.

END OF REQUIRED GENERAL CONTRACT TERMS

MANDATORY INSURANCE REQUIREMENTS

- 1. Without limiting its liability, the Bidder shall provide and maintain in full force and effect at all times until all work required by the contract has been fully completed, except that Products/Completed Operations coverage shall be maintained for five (5) years, insurance coverage related to its services in connection with the work in compliance with the following requirements.
- 2. The insurance required shall be written for not less than the scope and limits of insurance specified hereunder, or required by applicable federal, state, and/or municipal law, regulation or requirement, whichever coverage requirement is greater. It is agreed and understood that the scope and limits of insurance specified hereunder are minimum requirements and shall in no way limit or preclude the Town from requiring additional limits and coverage to be provided under the Bidder's policies.
- 3. Minimum Scope and Limits of Insurance:
 - a. Worker's Compensation and Employers Liability Insurance.
 - i. In accordance with the requirements of the laws of the State of Connecticut.
 - ii. \$500,000 Employer Liability each accident/each employee by disease.
 - b. Commercial General Liability Insurance.
 - i. Bodily Injury, Personal Injury and Property Damage-\$1,000,000 each occurrence/\$2,000,000 aggregate.
 - ii. Products/Completed Operations- \$1,000,000 each occurrence/\$2,000,000 aggregate.
 - c. **Automobile Liability Insurance** A combined single limit of 1,000,000. This policy shall include all liability of the Bidder arising from the operation of all self-owned motor vehicles used in the performance of the contract; and shall also include a "non-ownership" provision covering the operation of motor vehicles not owned by the Bidder, but used in the performance of the work, and rider CA9948 or equivalent.
 - d. **Cyber Liability Insurance-** \$1,000,000 each occurrence/\$1,000,000 aggregate.
 - e. **Professional/Errors and Omissions Insurance-** \$1,000,000 each occurrence/ \$2,000,000 aggregate.
 - f. **Umbrella/Excess Liability Insurance-** \$3,000,000 each occurrence/\$3,000,000 aggregate. Such coverage must follow form over Worker's Compensation, Commercial General Liability, Pollution Liability and Automobile Liability.
- 4. **Indemnification**: The Bidder shall defend, indemnify and save harmless the Town and its officers, agents, servants, officials, employees, volunteers, boards and commissions from and against any and all claims, demands, suits, proceedings, liabilities, judgments, awards, losses, damages, costs and expenses of any nature, including but not limited to attorneys' fees, on account of bodily injury, sickness, disease, death or any other damages or loss sustained by any person or persons or injury or damage to or destruction of any property, directly or indirectly arising out of, relating to, or in connection with the work called for in the contract, whether or not due or claimed to be due in whole or in part to the active, passive or concurrent negligence, fault or contractual default of the Bidder, its officers, agents, servants or employees, any of its sub-contractors, the Town, any of its respective officers, agents, servants, officials, employees, volunteers, boards and commissions and/or any other person or persons, and whether or not such claims, demands, suits or proceedings are just, unjust, groundless, false, or fraudulent, and the Bidder shall and does hereby assume and agrees to pay for the defense of all such claims, demands, suits and proceedings, provided, however, that the Bidder shall not be required to indemnify the Town, its officers, agents, servants, officials, employees, volunteers, boards and commissions, against any such damages occasioned solely by acts or omissions of the Town, its officers,

agents, servants, officials, employees, volunteers, boards and commissions, other than supervisory acts or omissions of the Town, its officers, agents, servants, officials, employees, volunteers, boards and commissions, in connection with the work called for in the contract.

- 5. "Tail" Coverage: If any of the required liability insurance is on a claims-made basis, "tail" coverage will be required at the completion of this contract for a duration of 36 months, or the maximum time period reasonably available in the marketplace. The Bidder shall furnish certification of "tail" coverages described or continuous "claims made" liability coverage for 36 months following contract completion. Continuous "claims made" coverage will be acceptable in lieu of "tail" coverage provided its retroactive date is on or before the effective date of this contract. If continuous "claims made" coverage is used, the Bidder shall be required to keep the coverage in effect for duration of not less than 36 months from the end of the contract.
- 6. **Acceptability of Insurers:** The Bidder's policies shall be written by insurance companies licensed to do business in the State of Connecticut, with an A.M. Best rating of A- XV or otherwise acceptable by the Town.
- 7. **Subcontractors**: The Bidder shall require subcontractors to provide the same "minimum scope and limits of insurance" as required herein, with the exception of Errors and Omissions/Professional Liability insurance/Fiduciary Liability, unless Errors and Omissions/Professional Liability/Fiduciary Liability insurance is applicable to the work performed by the subcontractor. All Certificates of Insurance shall be provided to and approved by the Town prior to the commencement of work, as required herein.
- 8. **Aggregate Limits:** The Bidder shall notify the Town when fifty percent (50%) of the aggregate limits are eroded during the contract term. If the aggregate limit is eroded for the full limit, the Bidder shall reinstate or purchase additional limits to meet the minimum limit requirements stated herein. The premium shall be paid by the Bidder.
- 9. **Deductibles and Self-Insured Retentions:** Any deductible or self-insured retention must be declared to, and approved by, the Town. All deductibles or self-insured retentions are the sole responsibility of the Bidder to pay and/or to indemnify. Under no circumstances will the Town be responsible for paying any deductible or self-insured retentions related to this contract.
- 10. **Notice of Cancellation or Non-renewal**: Each insurance policy required shall be endorsed to state that coverage shall not be suspended, voided, cancelled, or reduced in coverage or in limits except after 30 days prior written notice by certified mail, return receipt requested, has been given to the Town, (provided ten (10) days' prior written notice shall be sufficient in the case of termination for nonpayment).
- 11. **Waiver of Governmental Immunity:** Unless requested otherwise by the Town, the Bidder and its insurer shall waive governmental immunity as defense and shall not use the defense of governmental immunity in the adjustment of claims or in the defense of any suit brought against the Town.
- 12. **Additional Insured:** The liability insurance coverage, except Errors and Omissions, Professional Liability, or Workers Compensation, if included, required for the performance of the contract shall include the Town as Additional Insured. Coverage shall be primary and non-contributory with any other insurance and self-insurance and contain no special limitations on the scope of protection afforded to the Town. The Town and/or its representative retain the right to make inquiries to the Bidder, its agents or broker and insurer directly.
- 13. Waiver of Subrogation: A waiver of subrogation in favor of the Town.
- 14. **Waiver/Estoppel:** Neither approval by the Town nor failure to disapprove the insurance furnished by the Bidder shall relieve the Bidder of its full responsibility to provide insurance as required under this contract.
- 15. **Bidder's Insurance Additional Remedy**: Compliance with the insurance requirements of this contract shall not limit the liability of the Bidder or its sub-contractors/firms, employees or agents to the Town or

- others. Any remedy provided to the Town shall be in addition to, and not in lieu of, any other remedy available under this contract or otherwise.
- 16. **Certificate of Insurance:** As evidence of the insurance coverage required by this contract, the Bidder shall furnish Certificate(s) of Insurance to the Town prior to the award of the contract if required by the RFP, but in all events prior to Bidder's commencement of work under this contract. The Certificate(s) will specify all parties who are endorsed on the policy as Additional Insured (or Loss Payees). The certificates and endorsements for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf. Renewals of expiring certificates shall be filed thirty (30) days prior to expiration. The Town reserves the right to require complete, certified copies of all required policies at any time. All insurance documents required should be mailed to:

Office of the First Selectman Town of Monroe 7 Fan Hill Road, Monroe, CT 06468

17. The term "Bidder" shall include their respective agents, representatives, employees, and subcontractors, and their respective agents, representatives, and employees; and the term "Town shall include their respective officers, agents, servants, officials, employees, volunteers, boards, commissions, authorities, and committees.

END OF MANDATORY INSURANCE REQUIREMENTS

BIDDER'S FEE PROPOSAL FORM

	the duly authorized
(Print Name of Individual)	(Print Title)
("Bidder"), (Print Nan	ne of Bidder)
	ments as set forth on the checklist; and (b) physically site, conditions and specifications, hereby proposes the um price:
Type of Service	Bid Amount
TOTAL PROPOSAL:	\$

RFP # 2025-04

TOTAL PROPOSAL (written out in words)

2. <u>ACKNOWLEDGEMENT.</u> In submitting this Fee Proposal Form, the undersigned Bidder acknowledges that the Total Proposal set forth above is all-inclusive and the guaranteed maximum price, including without limitation, all labor, materials, transportation, hauling, fees, insurances, bonds/letters of credit, profit, security, permits and licenses, and any and all other costs required to complete the work set forth in the RFP. Except as otherwise expressly stated in the RFP, no additional payment of any kind will be made for the products and/or services called for in the RFP. 3. REQUIRED DISCLOSURES. a. Exceptions to/Clarifications of/Modifications of the RFP This proposal does not take exception to or seek to clarify or modify any requirement of the RFP, including without limitation, the Plans, Specifications, or Required Contract Terms as set forth in this RFP. The Bidder agrees to each requirement, term, provision and condition of this RFP. OR This proposal **does** take exception to or seeks to clarify or modify certain of the RFP requirements, including the Required Contract Terms. Attached is a sheet fully describing each such exception. b. State Debarment List Is the Bidder on the State of Connecticut's Debarment List? \square Yes \square No c. Occupational Safety and Health Law Violations Has the Bidder, including any person or business in which it has an interest or in which it has any common control: (i) been cited for three (3) or more willful or serious violations of any occupational safety and health act or of any standard, order or regulation promulgated pursuant to such act, during the three (3) year period preceding the proposal (provided such violations were cited in accordance with the provisions of any state occupational safety and health act or the Occupational Safety and Health Act of 1970, and not abated within the time fixed by the citation and such citation has not been set aside following appeal to the appropriate agency or court having jurisdiction); or (ii) received one or more criminal convictions related to the injury or death of any employee in the three (3) year period preceding the proposal? ☐ Yes □ No If "yes," attach a sheet fully describing each such matter.

RFP # 2025-04

d.	Arbitration/	<u>Litigation</u>
h: ir	as any commo nvolved for the	idder, including any person or business in which it has an interest or in which it in control, or any of its principals (regardless of place of employment), been most recent ten (10) years in any pending or resolved arbitration, litigation or on whether pending or resolved?
	□Yes	□ No
If	f "yes," attach	a sheet fully describing each such matter.
e.	Criminal Pro	ceedings
h	as any commo	sidder, including any person or business in which it has an interest or in which it in control, or any of its principals (regardless of place of employment), ever been by criminal proceedings?
	□Yes	□ No
If	f "yes," attach	a sheet fully describing each such matter.
f.	Ethics and O	ffenses in Public Projects or Contracts
ha fo st	as any commo ound to have v andard, or to h	ridder, including any person or business in which it has an interest or in which it in control, or any of its principals (regardless of place of employment), ever been itolated any federal, state or local ethics law, regulation, ordinance, code, policy or have committed any other offense arising out of the submission of proposals or bids ince of work on public works projects or contracts with any governmental body?
	□Yes	□ No
If	f "yes," attach	a sheet fully describing each such relationship.
g.	No Conflict o	<u>f Interest</u>
V	olunteer and a	vare of any personal or business relationship between a Town officer, employee or a officer, director, member, manager or partner of the Bidder that could be regarded afflict of interest?
	□Yes	□ No
If	f "yes," attach	a sheet fully describing each such matter.
h.	Binding Effec	<u>et.</u>
pro	posal and acco	is an authorized representative of the Bidder and hereby acknowledges that the impanying documents shall be valid and binding upon the Bidder for a period of ty (90) days from the Response Deadline.
	☐ Yes	□ No

NOTE: THIS DOCUMENT, IN ORDER TO BE CONSIDERED A VALID PROPOSAL, MUST BE SIGNED BY A DULY AUTHORIZED PRINCIPAL, OFFICER OR OWNER OF THE BUSINESS ENTITY THAT IS SUBMITTING THE PROPOSAL ("BIDDER"). SIGNATURE BELOW CONSTITUTES THE BIDDER'S REPRESENTATION THAT IT HAS READ, UNDERSTOOD AND FULLY ACCEPTED EACH AND EVERY PROVISION OF EACH DOCUMENT COMPROMISING THE RFP, UNLESS AN EXCEPTION IS DESCRIBED ABOVE.

(Print E	Print Bidder's Full Legal Name)		
Ву:			
	(Signature)	(Date)	
	(Print Name and Title)		

END OF BIDDER'S FEE PROPOSAL FORM

BIDDER'S NON-COLLUSION AFFIDAVIT

The undersigned Bidder, having fully informed himself/herself/itself regarding the accuracy of the statements made herein, certifies that:

- 1. the proposal is genuine, not collusive nor a sham proposal;
- 2. the Bidder developed the proposal independently and submitted it without collusion and without any agreement, understanding, communication or planned common course of action with any other person or entity designed to limit independent competition;
- 3. the Bidder has not communicated the contents of its proposal to any person not an employee or agent of the Bidder and will not communicate its proposal to any such person prior to the official opening of the proposal; and,
- 4. no elected or appointed official or other officer or employee of the Town of Monroe is directly or indirectly interested in the Bidder's proposal, or in the supplies, materials, equipment, work or labor to which it relates, or in any of the profits thereof.

The undersigned Bidder further certifies that this affidavit is executed for the purpose of inducing the Town of Monroe to consider its proposal and make an award in accordance therewith.

(Print Bi	dder's Full Legal Name	e)			
By:					
	Signature)	(Date)			
(1	Print Name and Title)				
Subscrib 2025.	ed and sworn to before	e me, the undersigned	Notary Public, this _	day of	
Notary P	Public mission Expires:				

END OF NON-COLLUSION AFFIDAVIT

BIDDER'S LEGAL STATUS DISCLOSURE

Each Bidder must complete the applicable section below, attaching a separate sheet if additional space is required.

For purposes of this disclosure, "permanent place of business" means an office continuously maintained, occupied and used by the Bidder's employees to carry on the Bidder's business in the Bidder's own name. An office maintained, occupied and used by a Bidder only for the duration of a contract will not be considered a permanent place of business. An office maintained, occupied and used by a person affiliated with a Bidder will not be considered a permanent place of business of the Bidder.

Business Structure:	□Sole Proprietorship	□Partnership
	□Limited Liability Company	□Corporation
Bidder's Full Legal Name:		
Trade Name(s) (DBA):		
Business Address:		
Mailing Address:		
Number of years engaged in l	ousiness under business name or trac	le name:
The Bidder scope of business	is primarily (check one): □local □	regional □national □ international
Does the Bidder have a "perm	nanent place of business" in Connect	icut, as defined above?
□Yes	□ No	
If yes, please state the address	S:	
If a Sole Proprietorship:		
Owner's Name:		
Owner's Home Address:		
If a Partnership:		
List the Name, Title, Ownersh	nip Interest and Address of each Parti	ner
Name/Title/Interest:		
Home Address:		
Name/Title/Interest:		
Home Address:		

If a LLC:
List the Name, Title, Ownership Interest and Address of each Member:
Name/Title/Interest:
Home Address:
If a Corporation:
List the Name, Title, Ownership Interest (if any) and Address of each Director and Officer:
Name/Title/Interest:
Home Address:
Name/Title/Interest:

END OF STATEMENT OF BIDDER'S STATUS LEGAL DISCLOSURE

Home Address:

BIDDER'S STATEMENT OF REFERENCES

Provide at least three (3) references and samples of the work performed:

1.	BUSINESS NAME:	
	ADDRESS:	
	EMAIL:	PHONE:
	CONTACT NAME:	TITLE:
2.	BUSINESS NAME:	
	ADDRESS:	
	CITY, STATE, ZIP:	
	EMAIL:	PHONE:
	CONTACT NAME:	TITLE:
3.	BUSINESS NAME:	
	ADDRESS:	
	CITY, STATE, ZIP:	
	EMAIL:	PHONE:
	CONTACT NAME:	TITLE:
4.	BUSINESS NAME: ADDRESS:	
	EMAIL:	PHONE:
		TITLE:
5.	BUSINESS NAME:	
	ADDRESS:	
	CITY, STATE, ZIP:	
	EMAIL:	PHONE:
	CONTACT NAME:	TITLE:

END OF STATEMENT OF REFERENCES

BIDDER'S LIST OF SUBCONTRACTORS

List all subcontractors which you intend to work on the project (add additional pages if required):

1.	BUSINESS NAME:	
	ADDRESS:	
	CITY, STATE, ZIP:	
		PHONE:
		TITLE:
2.	BUSINESS NAME:	
	ADDRESS:	
	CITY, STATE, ZIP:	
	EMAIL:	PHONE:
	CONTACT NAME:	TITLE:
	PROPOSED WORK: _	
3.	BUSINESS NAME:	
	ADDRESS:	
	CITY, STATE, ZIP:	
	EMAIL:	PHONE:
	CONTACT NAME:	TITLE:
	PROPOSED WORK: _	
4.	BUSINESS NAME:	
	ADDRESS:	
	CITY, STATE, ZIP:	
	EMAIL:	PHONE:
		TITLE:
	PROPOSED WORK: _	
5.	BUSINESS NAME:	
	ADDRESS:	
	EMAIL:	PHONE:
	CONTACT NAME:	TITLE:
	PROPOSED WORK:	

END OF STATEMENT OF REFERENCES

RFP CHECKLIST PROPOSAL FORMAT & SUBMISSION

The Bidder shall provide and submit in the sequence set forth below, the following documents, fully completed

BIDDER MUST CHECK OFF EACH BOX ACKNOWLEDING SUBMISSION # of P				
	1.	Cover Letter (optional)		
	2.	RFP Checklist/Proposal Format & Submission		
	3.	Fee Proposal Form		
	4.	RFP Invitation to Bid		
		a. Standard Instructions to Bidders		
		b. Required General Contract Terms		
		c. Mandatory Insurance Requirements		
		d. Fee Proposal Form		
		e. Bidder's Non-Collusion Affidavit Form		
		f. Bidder's Legal Status Disclosure		
		g. Bidder's Statement of References		
		h. Bidder's List of Subcontractors		
		i. Addenda Nos		
	5.	Scope of Work		
		a. Plans:		
		b. Specifications:		
		c. Other:		
	6.	Size, history and organizational structure of business, including project specific key personnel ("proposed project team"), including their		
		relative education, experience and qualifications.		
	7.	A single-age narrative describing your approach to the project.		
	8.	A detailed project schedule and timeline.		
	9.	A statement of financial responsibility including all financial		
		information sufficient to evidence the financial ability to perform and		
		fund the entire cost of the project throughout the term.		
	10.	[Description]:		
		[Description]:		
		[Description]:		

and executed where required:

END OF RFP CHECKLIST, PROPOSAL FORMAT AND SUBMISSION

TOWN OF MONROE, CONNECTICUT

SCOPE OF WORK

1. PROJECT OVERVIEW.

The St. Jude School Gymnasium, located at 707 Monroe Turnpike in Monroe, CT, has determined that a portion of the south elevation exterior masonry wall is showing evidence of displacement, and requires the removal and reconstruction of the existing wall and all associated work.

2. GENERAL SCOPE OF WORK AND CLARIFICATIONS.

The scope of work includes the removal and replacement of the existing exterior masonry wall (south elevation) of the Gymnasium, and any associated work.

- 3. PROJECT TIMELINE/SCHEDULE.
- 4. PROJECT SPECIFIC PROPOSAL EVALUATION CRITERIA.
- **5. PLANS/SPECIFICATIONS/ DOCUMENTS.** The following plans, specifications and other documents are attached hereto:
 - a. PLANS: Dated February 24, 2025
 - **b. SPECIFICATIONS:** Dated February 24, 2025
 - c. OTHER:

END OF SCOPE OF WORK

SECTION 011000 - SUMMARY OF WORK

PART 1 - GENERAL

- 1.1 PROJECT INFORMATION
 - A. Project: Gymnasium Wall Repair
 - B. Project Location:
 - 1. Saint Jude School 707 Monroe Turnpike, Monroe, CT 06468
 - C. Owner: Town of Monroe, 7 Fan Hill Road, Monroe, CT 06468
 - D. Architect: Antinozzi Associates Architects, PC, 271 Fairfield Avenue, Bridgeport, CT 06604
 - E. This project consists of renovations at the above listed building, including but not limited to Removal and replacement of a portion of the exterior wall, and associated work.
 - F. Work by Owner: Coordinate the work of this contract with the work being performed by owner's security vendor for installation of electronic door access control.
 - G. The Project will be constructed under a single prime-contracting arrangement.
- 1.2 GENERAL REQUIREMENTS
 - A. DIVISION 0 BIDDING DOCUMENTS, CONTRACTS AND CONDITIONS
 - B. DIVISION 1 GENERAL REQUIREMENTS
- 1.3 CONTRACTOR'S USE OF PREMISES
 - A. General: During the construction period the prime Contractors jointly shall have full use of the premises for construction operations, including use of the site. The General Contractors use of the premises is limited only by the Owner's right to perform work or retain other contractors on portions of the Project.
 - B. Access to the building will be Monday through Friday, 8:00 am thru 5:00 pm. Access to the buildings on weekends will not be permitted without written permission by the Owner. If access is granted on weekends, the Owner reserves the right to invoice the Contractor for their personnel costs in the form of a change order to the Contract.
 - C. Use of the Site: Limit use of the premises to work in areas indicates. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.
 - 1. Owner Occupancy: Allow for Owner occupancy and use by the public.

- 2. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.
- D. Use of the Existing Building: Maintain the existing building in a weather tight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period.

1.4 OCCUPANCY REQUIREMENTS

A. Full Owner Occupancy: The Owner will occupy the site and existing building during the entire construction period. Cooperate with the Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with the Owner's operations.

1.5 DEFINITIONS

- A. Definitions as applied to "Contractors" involved with the work of this Project:
 - 1. "The Contractor" or "Contractor" meaning that General Contractor (GC) responsible for the work referenced.
 - 2. "Trade Contractor" meaning that General Contractor as above; and such other terms relating to Contractors to be taken in context with respect to referenced work.
 - 3. Further, wherein said Division 00 and 01 and respective Sections therein, any reference is made to "General Contractor", same shall be construed to mean "Contractor for the General Construction".
 - 4. The Architect cannot guarantee the correctness of the existing conditions shown and assumes no responsibility therefore, it shall be the responsibility of the Contractor to visit the site and verify all existing conditions prior to bid.
- B. The Owner will purchase certain items required for the overall operation of this facility.
 - 1. The Contractor will cooperate with said vendors as may be necessary to permit the work to be accomplished.
 - a. The cooperation may extend to the receiving, unloading and placement of said equipment if directed by the Owner.
 - b. Terms of payment, if any, shall be in accordance with Article 7 of the General Conditions as amended or modified.
- C. The Contractor is advised that the Owner may enter into separate contracts as may be in their best interests.

D. ADDITIONAL SECURITY PROVISIONS

1. All Contractors' employees shall use a single means of access and egress, except in the

- case of emergency, to be designated by the Owner.
- 2. Each Contractor and each Subcontractor shall require his employees, while on the job site, to wear, in a conspicuous location, a Photo I.D. button bearing the name of the Contractor. The buttons of each Contractor shall be numbered consecutively. An up-to-date list of all I.D. buttons, indicating the name and number for each employee, shall be furnished to the Construction Manager.

1.6 ASBESTOS AND LEAD PAINT AWARENESS REQUIREMENTS

- A. Contractor agrees not to use or permit the use of any asbestos containing material in or on any property belonging to the Owner.
- B. For purposes of this requirement, asbestos free shall mean free from all forms of asbestos, including actinolite, amosite, anthrophyhllite, chrysotile, cricidolite and tremolite, both in friable and non-friable states and without regard to the purposes for which such material is used.

1.7 COORDINATE CLOSELY WITH BOARD OF EDUCATION PERSONNEL.

- A. All work and storage areas shall be completely enclosed by a fence or barricade at all times so that no student or the public can approach the area or the equipment.
 - 1. The Contractor shall maintain fences and barricades at all times and shall -
 - 2. Repair/restore and/or pay for any temporary fencing damaged by their work.
 - 3. Maintain at all times, all exits and walkways from the Building.
 - 4. Where the barricade is removed for work, the Contractor performing such work shall provide adequate safety personnel to prevent unauthorized persons from approaching the work area.

1.8 PROOF OF ORDERS AND DELIVERY DATES - Coordinate with Sections 01 3300.

A. Within 1 week after the approval of shop drawings, samples, product data and the like, the Contractor shall provide copies of purchase orders for all equipment and materials which are not available in local stock. The Contractor shall submit written statements from suppliers confirming the orders and stating promised delivery dates.

1.9 INTENT OF DOCUMENTS

A. In the event of conflict, ambiguity and/or unclear circumstances between any of the requirements of the Contract Documents, the requirement that is most inclusive and of highest quality, quantity, and/or cost shall govern. The Contractor shall (1) provide the better quality or greater quantity of Work and/or (2) comply with the more stringent requirement; either or both in accordance with the Architect's interpretation. The Contractor herewith agrees that no extra compensation shall be awarded to him based upon a claim of conflict, ambiguity or unclear circumstances in the Contract Documents. See the General Conditions for greater detail.

1.10 FIELD MEASUREMENTS

SUMMARY OF WORK 011000 - 3

- A. The General Contractor shall take all necessary field measurements prior to fabrication and installation of work and shall assume complete responsibility for accuracy of same.
- B. This project is an ALTERATION / RENOVATION and therefore necessitates additional attention to existing conditions receiving newly fabricated and installed equipment, i.e. note the requirements for field dimensioning of shop fabricated items whether or not so required by each technical section.

1.11 INITIAL SUBMITTAL REQUIREMENTS

A. As outlines in Sections 01 3300 and 01 5000, the General Contractor shall provide items noted including - bonds, insurance, emergency telephone numbers, progress scheduling, schedules of submittals, subcontractor listings and the like prior to the start of any work.

1.12 SCHEDULES

A. General

- 1. The objective of this project is to complete the overall work in the shortest period of time and to protect the building and occupants from damages caused by weather and construction activity during the progress of the work.
- 2. To meet these objectives, the Contractor shall plan the work, obtain materials, and execute the construction in the most expeditious manner possible in accordance with the requirements listed below.
- 3. If the Contractor fails to expedite and pursue any part of the work, the Owner may terminate the Contract.
- 4. The Contractor shall work in coordination with work of other Contractors and with school activities with special attention to noise, dust, safety and other contract requirements for work in and around the occupied buildings.

1.13 DELAYS IN TIMEFRAME / TIME CHARGE

- A. The Contractor recognizes that time is of the essence for this Project and the date set for Final Completion shall be no later than the date indicated in their Contract Documents.
- B. Within four (4) calendar days from an occurrence of any such delay, The Contractor shall notify the Purchasing Director in writing as soon as he/she knows that the original Final Completion timeframe cannot be met. The Board of Education shall have the right to agree to a new completion timeframe that will include working on Saturdays.
- C. The Contractor shall be liable for all additional cost (at the applicable pay rates) incurred by the Owner to provide staff required to make the facility accessible to the Contractor, Consultants and Owner's representative as required to perform inspection after the contract completion date.
- D. All costs incurred by the Owner, and the cost of additional services and Owner's representative inspections will be subtracted from payment due the Contractor or, if the amount due the

Contractor for payment is sufficient, the deficiency shall be paid by the Contractor to the Owner.

1.14 ADDITIONAL REQUIREMENTS

- A. The following are additional general and special requirements which will govern the work of the projects covered by these Documents.
 - 1. If it appears that some of the work cannot be completed by the scheduled date, the Contractor shall increase the work force or increase the hours of work, including evenings and weekends as necessary, at no additional cost to the Owner.
 - 2. If the work is complete but the area is not cleaned and debris or equipment is not removed, the Owner shall have the right to prepare the area for occupancy with his own forces and deduct the costs from the Contract Amount. (If Contractor does not respond within 24 hours' notice).
 - 3. If the Contractor fails to staff the job adequately to meet the completion date, the Owner reserves the right to assume possession of the material and complete installation with the Owner's forces or other Contractors or to require the Contractor to work evenings and weekends at no additional cost.
 - 4. The facility can be made available on weekends and evenings to allow the Contractor adequate time to complete the work before final completion date. Any custodial cost resulting in this after hours scheduling will be the Contractor's responsibility.
 - 5. Work in each work period shall progress at least at a pace in proportion to the Contract time available.
 - 6. The Contractor is responsible for temporary protection of all work until acceptance.
 - 7. The facility will be closed on Saturdays, Sundays, regularly schedules holidays, and at night after cleaning crews have finished.
 - 8. If any contractor wishes to work at any time when the facility is normally closed, that Contractor shall arrange and pay for custodial services for the building at the applicable pay rates.
 - 9. All existing conditions must be verified in the field. The Owner takes no responsibility for actual conditions found deviating from the drawings. If existing condition interferes with contract work, contractor is responsible to eliminate this condition.
 - 10. Contractor must plan, provide and maintain his own access, ramping, and egress as required into and out of the site, staging of trailer(s), materials, machinery, and equipment in agreement with the Owner. Maintain free and safe access on the jobsite for other related project personnel. Maintain safe pedestrian or vehicular traffic must be regulated by a flagman. Trucking and delivery operation should be coordinated with Construction Manager's Superintendent and all other trades.
 - 11. Contractors' proposed schedule must be approved by the Owner. Contractor shall

indicate significant events such as submittals, shop drawings, material ordering, fabrication, delivery, coordination precedents, installation, testing and turnover by area or system as agreed with Owner. A revised progress status shall be required on a weekly basis.

- 12. Decisions required from the Owner, Architect and/or Engineer, shall be anticipated by the Contractor to provide ample time for inspection, investigation or detailed drawings.
- 13. Contractor shall limit his operations including storage of materials and prefabrication to areas within the Contract Limit Lines unless otherwise permitted by the Owner.
- 14. Contractor shall coordinate the use of premises with the Owner and Construction Manager and shall move at his own expense any stored products under Contractor's control, including excavated material, which interfere with operations of the Owner or separate contractors.
- 15. Contractor shall obtain and pay for the use of additional storage of work areas needed for operations.
- 16. Contractor shall assume full responsibility for the protection and safekeeping of products under this Contract stored on the site and shall cooperate with the Owner to insure security for the Owner's Property.
- 17. The intention of the work is to follow a logical sequence; however, the Contractor may be required by Owner to temporarily omit or leave out any section of his work, or perform his work out of sequence. All such out of sequence work and come back time to these areas shall be performed at no additional cost.
- 18. Contractor shall submit a two-week look ahead (man-loaded by work activity and area) to the Owner each week. Contractor's representative shall attend a weekly meeting with all contractors, chaired by the Architect, for the purpose of job coordination and sequencing. Contractor is responsible to coordinate the job with other trades and the Architect, and to cooperate with other trades in pursuit of the overall project's shop drawings and actively participate in resolving discrepancies, conflicts, interferences, etc.
- 19. Sufficient manpower shall be provided at all times to maintain progress of the job. A shortage of labor in the industry shall not be accepted as an excuse for not properly manning the job.
- 20. The Contractor shall take special care in verifying that his equipment matches the characteristics of the power being supplied.
- 21. Insubordination, unsafe practices, horseplay, abusive behavior or language, wanton destruction of property, use of drugs or alcohol, possession of firearms, and solicitation shall not be tolerated. There will be no warnings, and Contractor shall designate a responsible on-site supervisor to handle any situations that may arise, including termination.
- 22. Contractor is responsible to supply and install all wood blocking/bracing necessary to

- properly secure their work. This responsibility includes coordinating the installation in concealed areas without delaying other trades.
- 23. Organize daily clean ups as well as participating in a weekly joint clean up involving all prime contractors on site. Clean up shall be considered a safety issue. All Contractors that do not participate in clean-up will have the work performed by others and their contract amount adjusted accordingly.
- 24. General Contractor shall provide protection from damage to adjacent and adjoining work and/or structures. Contractor shall clean, repair and/or replace any damage for which this contractor is responsible.
- 25. General Contractor shall submit hourly rate sheets that would apply to time and material work for all pertinent trades upon Award of Contract.
- 26. General Contractor shall examine surfaces and conditions prior to start of work. Report unacceptable conditions to the Architect. Do not proceed until unacceptable conditions are corrected and acceptable. Starting of work implies acceptance.
- 27. General Contractor shall include general housekeeping of light debris. All debris from will be collected daily and disposed of into dumpsters. Contractor shall provide a weekly broom sweep of all areas for the entire duration of the project. The broom sweep shall include debris from all trades working on site.
- 28. It is the responsibility of the General Contractor to review the entire Summary of Work and remaining documents for additional work items.
- 29. General Contractor shall coordinate with the Owner for lay down areas, staging areas, and overall use of project site.
- 30. All contractors and their employees, subcontractors and supplier are expressly prohibited from entering the occupied areas of the school buildings during school hours without prior written permission of the Owner and for using any of its facilities (i.e. restrooms, cafeteria, etc.).

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 012500 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes administrative and procedural requirements for substitutions.

B. Related Sections:

- 1. Division 01 Section "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.
- 2. Divisions 02 through 33 Sections for specific requirements and limitations for substitutions.

1.3 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.

1.4 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. Substitution Request Form: Use CSI Form 13.1A.
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.

- b. 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, that will be necessary to accommodate proposed substitution.
- c. Detailed comparison of significant qualities of proposed substitution 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.
- 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 and 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 substitution 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.
- 1. 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.
- 3. 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 through Construction Manager 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.

1.5 QUALITY ASSURANCE

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

1.6 PROCEDURES

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

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately upon 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.
 - i. If a comparable product or substitution is proposed, the Contractor shall be solely responsible for verifying that the substitution does not impact the structural design, HVAC, electrical, plumbing or utility requirements, clearances, dimensions or layouts, building or fire code requirements or any other change in the original design. If the substitution does require a change in any of the items noted above or similar design change or physical changes, the contractor shall be responsible for the cost of any redesign and for the additional construction costs associated with the changes due to the substitution.
- B. Substitutions for Convenience: Architect will consider requests for substitution if received within 60 days after the Notice to Proceed. 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.
- 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.
- k. If a comparable product or substitution is proposed, the Contractor shall be solely responsible for verifying that the substitution does not impact the structural design, HVAC, electrical, plumbing or utility requirements, clearances, dimensions or layouts, building or fire code requirements or any other change in the original design. If the substitution does require a change in any of the items noted above or similar design change or physical changes, the contractor shall be responsible for the cost of any redesign and for the additional construction costs associated with the changes due to the substitution.
- 1. If a Contractor does propose a substitution for convenience within 60 days of notice to proceed, the Architect shall be compensated directly by the Contractor for the Architect's time reviewing such a request.

PART 3 - EXECUTION (Not Used)

SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Sections include the following:
 - 1. Division 1 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.

1.3 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, within this specification.

1.4 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. Proposal Requests issued by Architect are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
 - 2. Within 5 days 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 unforeseen conditions require modifications to the Contract, Contractor may propose changes 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.
 - 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 Division 1 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.
- C. Proposal Request Form: Recommended form is AIA Document G709 for Proposal Requests.

1.5 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701 (or similar format).

1.6 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714 (or similar format). 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.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Sections include the following:
 - 1. Division 1 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
 - 2. Division 1 Section "Construction Progress Documentation" for administrative requirements governing preparation and submittal of Contractor's Construction Schedule and Submittals Schedule.

1.3 DEFINITIONS

A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with Continuation Sheets.
 - b. Submittals Schedule.
 - 2. Submit the Schedule of Values to Architect at earliest possible date but no later than fifteen (15) days before the date scheduled for submittal of initial Applications for Payment.
 - 3. Subschedules: Where the Work is separated into phases requiring separately phased payments, provide subschedules showing values correlated with each phase of payment.
- B. Format and Content: Use the 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. Identification: Include the following Project identification on the Schedule of Values:

- a. Project name and location.
- b. Name of Architect.
- c. Architect's project number.
- d. Contractor's name and address.
- e. Date of submittal.
- 2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:
 - a. Related Specification Section or Division.
 - b. Description of the Work.
 - c. Name of subcontractor.
 - d. Name of manufacturer or fabricator.
 - e. Name of supplier.
 - f. Change Orders (numbers) that affect value.
 - g. Dollar value.
 - 1) Percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
- 3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate.
- 4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
- 5. 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. Include evidence of insurance or bonded warehousing if required.
- 6. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 7. 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.
- 8. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.
- 9. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
 - 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: The period covered by each Application for Payment starts on the first day of each calendar month and ends with the last day of the same month.
- C. Payment Application Forms: Use AIA Document G702 and AIA Document G703 Continuation Sheets as form for Applications for Payment.
- D. 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 of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- E. Transmittal: Submit 5 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.
- F. Waivers of Mechanic's Lien: Commencing with the second Application for Payment, with each Application for Payment, submit waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment. Waivers shall indicate partial release of lien with respect to that period of time covered by the preceding Application for Payment.
 - 1. Submit partial waivers on each item for amount requested, before deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit final or full waivers.
 - 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 4. Waiver Delays: Submit each Application for Payment with Contractor's waiver of mechanic's lien for construction period covered by the application.
 - a. Submit final Application for Payment with or preceded by 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 waivers of lien on forms, and executed in a manner, acceptable to Owner.
- G. 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.
- 5. Schedule of unit prices.
- 6. Submittals 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.
- 16. Initial settlement survey and damage report if required.
- H. Application for Payment at Substantial Completion: After issuing 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 Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- I. Final Payment Application: 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, "Contractor's Affidavit of Payment of Debts and Claims."
 - 5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
 - 6. AIA Document G707, "Consent of Surety to Final Payment."
 - 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.
 - 9. Final, liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General project coordination procedures.
 - 2. Administrative and supervisory personnel.
 - 3. Coordination drawings.
 - 4. Requests for Information (RFIs).
 - 5. Project meetings.
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.

C. Related Sections:

- 1. Division 01 Section "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
- 2. Division 01 Section "Closeout Procedures" for coordinating closeout of the Contract.

1.3 DEFINITIONS

A. RFI: Request from Owner, Construction Manager, Architect, or Contractor seeking information from each other during construction.

1.4 COORDINATION

- 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.
 - 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. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each contractor shall coordinate its operations with operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
 - 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 with other contractors to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- C. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- D. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities, and activities of other contractors 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.
 - 9. Project closeout activities.
- E. Conservation: Coordinate construction activities to ensure that operations are carried out 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. Refer to other Sections for disposition of salvaged materials that are designated as Owner's property.

1.5 COORDINATION DRAWINGS

A. Coordination Drawings, General: Prepare coordination drawings in accordance with requirements in individual Sections, where installation is not completely shown 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. Use applicable Drawings as a basis for preparation of coordination drawings. Prepare sections, elevations, and details as needed to describe relationship of various systems and components.
 - b. Coordinate the addition of trade-specific information to the coordination drawings by multiple contractors in a sequence that best provides for coordination of the information and resolution of conflicts between installed components before submitting for review.
 - c. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - d. Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
 - e. Show location and size of access doors required for access to concealed dampers, valves, and other controls.
 - f. Indicate required installation sequences.
 - g. Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate 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 ceiling plenum to accommodate layout of light fixtures 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. Mechanical and Plumbing Work: Show the following:
 - a. Sizes and bottom elevations of ductwork, piping, and conduit runs, including insulation, bracing, flanges, and support systems.

- b. Dimensions of major components, such as dampers, valves, diffusers, access doors, cleanouts and electrical distribution equipment.
- c. Fire-rated enclosures around ductwork.
- 7. Electrical Work: Show the following:
 - a. Runs of vertical and horizontal conduit 1-1/4 inch diameter and larger.
 - b. Light fixture, exit light, emergency battery pack, smoke detector, and other fire alarm locations.
 - c. Panel board, switch board, switchgear, transformer, busway, generator, and motor control center locations.
 - d. Location of pull boxes and junction boxes, dimensioned from column center lines.
- 8. Fire Protection System: Show the following:
 - a. Locations of standpipes, mains piping, branch lines, pipe drops, and sprinkler heads.
- 9. Review: Architect will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are the Contractor's responsibility. If the Architect determines that the coordination drawings are not being prepared in sufficient scope or detail, or are otherwise deficient, the Architect will so inform the Contractor, who shall make changes as directed and resubmit.
- 10. Coordination Drawing Prints: Prepare coordination drawing prints in accordance with requirements of Division 01 Section "Submittal Procedures."
- C. Coordination Digital Data Files: Prepare coordination digital data files in accordance with the following requirements:
 - 1. Upon issuance of a Notice to Proceed or similar authorization by the Owner, the Architect will transfer a copy of the current version of the digital model of the project to the Construction Manager's website for use by all trade contractors in preparing submittals and coordination drawings. The model was prepared using Revit 2013 software.
 - 2. All contractors using or accessing the digital Model shall first be required to execute a data licensing agreement in the form of AIA Document C106 Agreement form acceptable to the Owner and Architect. A fee of \$5,000 will be requested to gain access to the digital model.
 - 3. Over the course of the multi-year construction project, all contractors using or accessing the model shall be required to update their version of Revit to the latest available version of the software in general use at that time.
 - 4. File Preparation Format: RVT operating in Microsoft Windows operating system.
 - 5. File Submittal Format: Submit or post coordination drawing files using the same format as the file preparation or PDF format.
 - 6. The Architect or his consultants make no representation as to the accuracy or completeness of the digital model as it relates to the drawings.

7. The Architect and his consultants shall be granted access to the coordination model on the Construction Manager's website for their use in conducting their construction administration responsibilities.

1.6 KEY PERSONNEL

- A. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office, and cellular telephone numbers and email addresses. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.
 - 1. Post copies of list in project meeting room, in temporary field office, on Project designated Web site, and by each temporary telephone. Keep list current at all times.

1.7 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
 - 1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
 - 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.
 - 4. Name of Contractor.
 - 5. Name of Architect and Construction Manager.
 - 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 solution(s) 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.
 - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.

- C. RFI Forms: AIA Document G716 Software-generated form with substantially the same content as indicated above, acceptable to Architect.
- D. Architect's and Construction Manager's Action: Architect and Construction Manager will review each RFI, determine action required, and respond. Allow seven working days for Architect's response for each RFI. RFIs received by Architect or Construction Manager after 1:00 p.m. will be considered as received the following working day.
 - 1. The following RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for coordination information already indicated in the Contract Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.
 - e. Requests for interpretation of Architect's actions on submittals.
 - f. 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 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 Division 01 Section "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect and Construction Manager in writing within 10 days of receipt of the RFI response.
- E. On receipt of Architect's and Construction Manager's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect and Construction Manager within seven days if Contractor disagrees with response.
- F. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Use software log that is part of Project Web site. Include the following:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect and Construction Manager.
 - 4. RFI number including RFIs that were dropped and not submitted.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect's and Construction Manager's response was received.
 - 8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
 - 9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

1.8 PROJECT MEETINGS

- A. General: Construction Manager will schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
 - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner, Construction Manager, and Architect, within three days of the meeting.
- B. Preconstruction Conference: Construction Manager will schedule and conduct 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. Conduct the conference to review responsibilities and personnel assignments.
 - 2. Attendees: Authorized representatives of Owner, Owner's Commissioning Authority, Construction Manager, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Discuss items of significance that could affect progress, including the following:
 - Tentative construction schedule.
 - b. Phasing.
 - c. Critical work sequencing and long-lead items.
 - d. Designation of key personnel and their duties.
 - e. Lines of communications.
 - f. Procedures for processing field decisions and Change Orders.
 - g. Procedures for RFIs.
 - h. Procedures for testing and inspecting.
 - i. Procedures for processing Applications for Payment.
 - j. Distribution of the Contract Documents.
 - k. Submittal procedures.
 - 1. Sustainable design requirements.
 - m. Preparation of record documents.
 - n. Use of the premises.
 - o. Work restrictions.
 - p. Working hours.
 - q. Owner's occupancy requirements.
 - r. Responsibility for temporary facilities and controls.
 - s. Procedures for moisture and mold control.
 - t. Procedures for disruptions and shutdowns.
 - u. Construction waste management and recycling.
 - v. Parking availability.
 - w. Office, work, and storage areas.
 - x. Equipment deliveries and priorities.

- y. First aid.
- z. Security.
- aa. Progress cleaning.
- 4. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
 - 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, Construction Manager, and Owner's Commissioning Authority, 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.
 - d. Related Change Orders.
 - e. Purchases.
 - f. Deliveries.
 - g. Submittals.
 - h. Review of mockups.
 - i. Possible conflicts.
 - j. Compatibility problems.
 - k. Time schedules.
 - 1. Weather limitations.
 - Manufacturer's written recommendations.
 - n. Warranty requirements.
 - o. Compatibility of materials.
 - p. Acceptability of substrates.
 - q. Temporary facilities and controls.
 - r. Space and access limitations.
 - s. Regulations of authorities having jurisdiction.
 - t. Testing and inspecting requirements.
 - u. Installation procedures.
 - v. Coordination with other work.
 - w. Required performance results.
 - x. Protection of adjacent work.
 - y. 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. Project Closeout Conference: Construction Manager will schedule and conduct a Project closeout conference, at a time convenient to Owner and Architect, but no later than 90 days prior to the scheduled date of Substantial Completion.
 - 1. Conduct the conference to review requirements and responsibilities related to Project closeout.
 - 2. Attendees: Authorized representatives of Owner, Owner's Commissioning Authority, Construction Manager, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
 - a. Preparation of record documents.
 - b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
 - c. Submittal of written warranties.
 - d. Requirements for preparing sustainable design documentation.
 - e. Requirements for preparing operations and maintenance data.
 - f. Requirements for demonstration and training.
 - g. Preparation of Contractor's punch list.
 - h. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
 - i. Submittal procedures.
 - j. Coordination of separate contracts.
 - k. Owner's partial occupancy requirements.
 - 1. Installation of Owner's furniture, fixtures, and equipment.
 - m. Responsibility for removing temporary facilities and controls.
 - 4. Minutes: Entity conducting meeting will record and distribute meeting minutes.
- E. Progress Meetings: Construction Manager will conduct progress meetings at weekly regular intervals.
 - 1. Coordinate dates of meetings with preparation of payment requests.
 - 2. Attendees: In addition to representatives of Owner, Owner's Commissioning Authority, Construction Manager, 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 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) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Progress cleaning.
 - 10) Quality and work standards.
 - 11) Status of correction of deficient items.
 - 12) Field observations.
 - 13) Status of RFIs.
 - 14) Status of proposal requests.
 - 15) Pending changes.
 - 16) Status of Change Orders.
 - 17) Pending claims and disputes.
 - 18) Documentation of information for payment requests.
- 4. Minutes: Entity responsible for conducting the meeting 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.
- F. Coordination Meetings: Construction Manager will conduct Project coordination meetings at weekly regular intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
 - 1. Attendees: In addition to representatives of Owner, Owner's Commissioning Authority, Construction Manager, 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 meetings shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

- a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to combined Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
- b. Schedule Updating: Revise combined Contractor's construction schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
- c. Review present and future needs of each contractor present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Work hours.
 - 10) Hazards and risks.
 - 11) Progress cleaning.
 - 12) Quality and work standards.
 - 13) Change Orders.
- 3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This 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. Submittals Schedule.
 - 3. Special reports.
- B. Related Sections include the following:
 - 1. Division 1 Section "Payment Procedures" for submitting the Schedule of Values.
 - 2. Division 1 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes.
 - 3. Division 1 Section "Submittal Procedures" for submitting schedules and reports.

1.3 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 activities are activities on the critical path. They 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. Cost Loading: The allocation of the Schedule of Values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum, unless otherwise approved by Architect.
- C. 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.
- D. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.

- E. Event: The starting or ending point of an activity.
- F. 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.
- G. Fragnet: A partial or fragmentary network that breaks down activities into smaller activities for greater detail.
- H. Major Area: A story of construction, a separate building, or a similar significant construction element.
- I. Milestone: A key or critical point in time for reference or measurement.
- J. Network Diagram: A graphic diagram of a network schedule, showing activities and activity relationships.
- K. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

1.4 SUBMITTALS

- A. Submittals Schedule: Submit three copies of schedule. Arrange the following information in a tabular format:
 - 1. Scheduled date for first submittal.
 - 2. Specification Section number and title.
 - 3. Submittal category (action or informational).
 - 4. Name of subcontractor.
 - 5. Description of the Work covered.
 - 6. Scheduled date for Architect's final release or approval.
- B. Contractor's Construction Schedule: Submit two opaque copies of initial schedule, large enough to show entire schedule for entire construction period.
- C. Special Reports: Submit two copies at time of unusual event.

1.5 QUALITY ASSURANCE

A. Prescheduling Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination." Review methods and procedures related to the Preliminary Construction Schedule and Contractor's Construction Schedule, including, but not limited to, the following:

- 1. Review software limitations and content and format for reports.
- 2. Verify availability of qualified personnel needed to develop and update schedule.
- 3. Discuss constraints.
- 4. Review delivery dates for Owner-furnished products.
- 5. Review schedule for work of Owner's separate contracts.
- 6. Review time required for review of submittals and resubmittals.
- 7. Review requirements for tests and inspections by independent testing and inspecting agencies.
- 8. Review time required for completion and startup procedures.
- 9. Review and finalize list of construction activities to be included in schedule.
- 10. Review submittal requirements and procedures.
- 11. Review procedures for updating schedule.

1.6 COORDINATION

A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.

PART 2 - PRODUCTS

2.1 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
 - 1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
 - 2. Final Submittal: Submit concurrently with the first complete submittal of Contractor's Construction Schedule.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Procedures: Comply with procedures contained in AGC's "Construction Planning & Scheduling."
- B. 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.
- C. Activities: Treat each separate area as a separate numbered activity for each principal 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 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 Division 1 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals 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.
- D. 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. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Use of premises restrictions.
 - b. Work Sequence.
- E. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion.
- F. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragnets to demonstrate the effect of the proposed change on the overall project schedule.

2.3 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Construction Schedule within 30 days of date established for the Notice to Proceed. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of Project.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.

2.4 SPECIAL REPORTS

- A. General: Submit special reports directly to Owner within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.
- B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At bi-monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule at 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 Actual Completion percentage for each activity.
- B. 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. 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.

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

B. Related Sections:

- 1. Division 01 Section "Payment Procedures" for submitting Applications for Payment and the schedule of values.
- 2. Division 01 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule.
- 3. Division 01 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.
- 4. Division 01 Section "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
- 5. Division 01 Section "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.
- C. Action Submittals: Written and graphic information and physical samples that require Architect's [and Construction Manager's] responsive action. Action submittals are those submittals indicated in individual Specification Sections as action submittals.
- D. Informational Submittals: Written and graphic information and physical samples that do not require Architect's [and Construction Manager'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.
- E. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users are able to access files.
- F. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

1.3 ACTION SUBMITTALS

- A. Submittal Schedule: Submit a schedule 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 modifications to submittals noted by the Architect and Construction Manager and additional time for handling and reviewing submittals required by those corrections.
 - 1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
 - 2. Initial Submittal: Submit concurrently with start-up construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
 - 3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.
 - a. Submit revised submittal schedule to reflect changes in current status and timing for submittals.
 - 4. Format: Arrange the following information in a tabular format:
 - a. Scheduled date for first submittal.
 - b. Specification Section number and title.
 - c. Submittal category: Action, informational.
 - d. Name of subcontractor.
 - e. Description of the Work covered.
 - f. Scheduled date for Architect's and Construction Manager's final release or approval.
 - g. Scheduled dates for purchasing.
 - h. Scheduled dates for installation.
 - i. Activity or event number.

1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Architect's Digital Data Files: Architect can furnish Contractors access to the digital model of the Contract Drawings for use in preparing Shop Drawings, Coordination Drawings and Project record drawings.
 - 1. Upon issuance of a Notice to Proceed or similar authorization by the Owner, the Architect will transfer a copy of the current version of the digital model of the project to the Construction Manager's website for use by all trade contractors in preparing submittals and coordination drawings. The model was prepared using Revit 2013 software.
 - 2. All contractors using or accessing the digital Model shall first be required to execute a data licensing agreement in the form of AIA Document C106 Agreement form acceptable to the Owner and Architect. A fee of \$5,000 will be requested to gain access to the digital model.

- 3. Over the course of the multi-year construction project, all contractors using or accessing the model shall be required to update their version of Revit to the latest available version of the software in general use at that time.
- 4. File Preparation Format: RVT operating in Microsoft Windows operating system.
- 5. File Submittal Format: Submit or post coordination drawing files using the same format as the file preparation or PDF format.
- 6. The Architect or his consultants make no representation as to the accuracy or completeness of the digital model as it relates to the drawings.
- 7. The Architect and his consultants shall be granted access to the coordination model on the Construction Manager's website for their use in conducting their construction administration responsibilities.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with the project phasing, fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - a. Transmit submittals only as required for the work of the current phase. Do not transmit submittals for work in subsequent phases prior to or concurrently with the submittals of the current phase. Submittals issued for work that is not in the current phase of construction will not be reviewed until all other submittals have been reviewed for the work in the current phase.
 - 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.
 - 4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - Architect and Construction Manager reserve the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- 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. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
- 3. Resubmittal Review: Allow 15 days for review of each resubmittal.
- 4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 21 days for initial review of each submittal.
- 5. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow 15 days for review of each submittal. Submittal will be returned to Construction Manager, through Architect, before being returned to Contractor.
- D. Identification and Information: Place a permanent label or title block on each paper copy submittal item for identification.
 - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
 - 2. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Architect and Construction Manager.
 - 3. Include the following information for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name of Architect.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of subcontractor.
 - g. Name of supplier.
 - h. Name of manufacturer.
 - i. Submittal number or other unique identifier, including revision identifier.
 - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).
 - j. Number and title of appropriate Specification Section.
 - k. Drawing number and detail references, as appropriate.
 - 1. Location(s) where product is to be installed, as appropriate.
 - m. Other necessary identification.
- E. Identification and Information: Identify and incorporate information in each electronic submittal file as follows:
 - 1. Assemble complete submittal package into a single indexed file with links enabling navigation to each item.
 - 2. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01).

Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).

- 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect [and Construction Manager].
- 4. Include the following information on an inserted cover sheet:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of firm or entity that prepared submittal.
 - g. Name of subcontractor.
 - h. Name of supplier.
 - i. Name of manufacturer.
 - j. Number and title of appropriate Specification Section.
 - k. Drawing number and detail references, as appropriate.
 - 1. Location(s) where product is to be installed, as appropriate.
 - m. Related physical samples submitted directly.
 - n. Other necessary identification.
- 5. Include the following information as keywords in the electronic file metadata:
 - a. Project name.
 - b. Number and title of appropriate Specification Section.
 - c. Manufacturer name.
 - d. Product name.
- F. Options: Identify options requiring selection by the Architect.
- G. Deviations: Identify deviations from the Contract Documents on submittals.
- H. Additional Paper Copies: Unless additional copies are required for final submittal, and unless Architect or Construction Manager observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
 - 1. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect and Construction Manager.
- I. Transmittal: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect and Construction Manager will return submittals, without review, received from sources other than Contractor.
 - 1. Transmittal Form: Use CSI Form 12.1A.
 - 2. Transmittal Form: Provide locations on form for the following information:
 - a. Project name.
 - b. Date.
 - c. Destination (To:).
 - d. Source (From:).

- e. Names of subcontractor, manufacturer, and supplier.
- f. Category and type of submittal.
- g. Submittal purpose and description.
- h. Specification Section number and title.
- i. Indication of full or partial submittal.
- j. Drawing number and detail references, as appropriate.
- k. Transmittal number [numbered consecutively].
- 1. Submittal and transmittal distribution record.
- m. Remarks.
- n. Signature of transmitter.
- 3. On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect and Construction Manager on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- J. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked with approval notation from Architect's and Construction Manager's action stamp.
- K. 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.
- L. Use for Construction: Use only final submittals that are marked with approval notation from Architect's and Construction Manager's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 - 1. Post electronic submittals as PDF electronic files directly to Construction Manager's FTP site specifically established for Project.
 - a. Architect, through Construction Manager, will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
 - 2. Action Submittals: Submit two paper copies of each submittal, unless otherwise indicated. Architect, will not return paper copies.

- 3. Informational Submittals: Submit two paper copies of each submittal, unless otherwise indicated. Architect and Construction Manager will not return copies.
- 4. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 01 Section "Closeout Procedures."
- 5. Certificates and Certifications Submittals: Provide 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.
 - a. Provide a digital signature with digital certificate on electronically-submitted certificates and certifications where indicated.
 - b. Provide a notarized statement on original paper copy certificates and certifications where indicated.
- 6. Test and Inspection Reports Submittals: Comply with requirements specified in Division 01 Section "Quality Requirements."
- B. 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 not suitable 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.
 - 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 showing 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 or concurrent with Samples.
 - 6. Submit Product Data in the following format:
 - a. PDF electronic file.
 - b. Two paper copies of Product Data, unless otherwise indicated. Architect will not return paper copies.

- C. 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 upon 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. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 42 inches.
 - 3. Submit Shop Drawings in the following format:
 - a. Two opaque copies of each submittal. Architect will not return paper copies.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of applicable Specification Section.
 - 3. 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.
 - 4. 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, through Construction Manager, will return one submittal with options selected.

- 5. 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 and Construction Manager will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a Project record sample.
 - 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.
- E. 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:
 - 1. Type of product. Include unique identifier for each product [indicated in the Contract Documents].
 - 2. Manufacturer and product name, and model number if applicable.
 - 3. Number and name of room or space.
 - 4. Location within room or space.
 - 5. Submit product schedule in the following format:
 - a. Two paper copies of product schedule or list, unless otherwise indicated. Architect will not return paper copies.
- F. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."
- G. Application for Payment: Comply with requirements specified in Division 01 Section "Payment Procedures."
- H. Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."
- I. 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. Use CSI Form 1.5A.

- 1. Name, address, and telephone number 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.
- 4. Submit subcontract list in the following format:
 - a. Number of Copies: Three paper copies of subcontractor list, unless otherwise indicated. Architect, through Construction Manager, will return two copies.
- J. Coordination Drawings: Comply with requirements specified in Division 01 Section "Project Management and Coordination."
- K. 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.
- L. 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 American Welding Society (AWS) forms. Include names of firms and personnel certified.
- M. 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.
- N. 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.
- O. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- P. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- Q. 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.
- R. Product Test Reports: Submit written reports indicating 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.
- S. 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:
 - 1. Name of evaluation organization.
 - 2. Date of evaluation.
 - 3. Time period when report is in effect.

- 4. Product and manufacturers' names.
- 5. Description of product.
- 6. Test procedures and results.
- 7. Limitations of use.
- T. Schedule of Tests and Inspections: Comply with requirements specified in Division 01 Section "Quality Requirements."
- U. 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.
- V. 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.
- W. Field Test Reports: Submit 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.
- X. Maintenance Data: Comply with requirements specified in Division 01 Section "Operation and Maintenance Data."
- Y. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

2.2 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 not sufficient 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 electronic 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.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action 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 and Construction Manager.
- B. Project Closeout and Maintenance/Material Submittals: Refer to requirements in Division 01 Section "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, 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.

3.2 ARCHITECT'S AND CONSTRUCTION MANAGER'S ACTION

- A. General: Architect and Construction Manager will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect and Construction Manager will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect and Construction Manager will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- C. Informational Submittals: Architect and Construction Manager will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect and Construction Manager will forward each submittal to appropriate party.
- D. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect and Construction Manager.
- E. Incomplete submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- F. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting 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. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, Construction Manager, or authorities having jurisdiction are not limited by provisions of this Section.

C. Related Sections:

1. Divisions 02 through 49 Sections for specific test and inspection requirements.

1.3 DEFINITIONS

- A. 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.
- B. 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. Services do not include contract enforcement activities performed by Architect or Construction Manager.
- C. Mockups: Full size physical assemblies that are constructed on-site. Mockups are constructed to verify selections made under sample submittals; to demonstrate aesthetic effects and, where indicated, 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.

- 1. Laboratory Mockups: Full-size, physical assemblies constructed at testing facility to verify performance characteristics.
- 2. Integrated Exterior Mockups: Mockups of the exterior envelope erected separately from the building but on the project site, 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.
- D. Preconstruction Testing: Tests and inspections performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
- E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.
- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- I. 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, 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 or trades.
- J. Experienced: When used with an entity or individual, "experienced" 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.

1.4 CONFLICTING REQUIREMENTS

A. Referenced Standards: If compliance with two or more standards is specified and the standards 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 a decision before proceeding.

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. Shop Drawings: For mockups, provide plans, sections, and elevations, indicating materials and size of mockup construction.
 - 1. Indicate manufacturer and model number of individual components.
 - 2. Provide axonometric drawings for conditions difficult to illustrate in two dimensions.

1.6 INFORMATIONAL SUBMITTALS

- A. Contractor's Quality-Control Plan: For quality-assurance and quality-control activities and responsibilities.
- B. Contractor's Quality-Control Manager Qualifications: For supervisory personnel.
- C. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems.
 - 1. Seismic-force resisting system, designated seismic system, or component listed in the designated seismic system quality assurance plan prepared by the Architect.
 - 2. Main wind-force resisting system or a wind-resisting component listed in the wind-force-resisting system quality assurance plan prepared by the Architect.
- D. 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.
- E. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 - 1. Specification Section number and title.
 - 2. Entity responsible for performing tests and inspections.
 - 3. Description of test and inspection.
 - 4. Identification of applicable standards.
 - 5. Identification of test and inspection methods.
 - 6. Number of tests and inspections required.
 - 7. Time schedule or time span for tests and inspections.
 - 8. Requirements for obtaining samples.
 - 9. Unique characteristics of each quality-control service.

1.7 CONTRACTOR'S QUALITY-CONTROL PLAN

- A. Quality-Control Plan, General: Submit quality-control plan within 10 days of Notice to Proceed, and not less than five days prior to preconstruction conference. Submit in format acceptable to Architect. Identify personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out Contractor's quality-assurance and quality-control responsibilities. Coordinate with Contractor's construction schedule.
- B. Quality-Control Personnel Qualifications: Engage qualified full-time personnel trained and experienced in managing and executing quality-assurance and quality-control procedures similar in nature and extent to those required for Project.
 - 1. Project quality-control manager shall not have other Project responsibilities.
- C. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.
- D. Testing and Inspection: Include in quality-control plan a comprehensive schedule of Work requiring testing or inspection, including the following:
 - Contractor-performed tests and inspections including subcontractor-performed tests and inspections. Include required tests and inspections and Contractor-elected tests and inspections.
 - 2. Special inspections required by authorities having jurisdiction and indicated on the "Statement of Special Inspections."
 - 3. Owner-performed tests and inspections indicated in the Contract Documents, including tests and inspections indicated to be performed by the Commissioning Authority.
- E. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.
- F. Monitoring and Documentation: Maintain testing and inspection reports including log of approved and rejected results. Include work Architect has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

1.8 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, and telephone number 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.
- 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 inspecting.
- 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. Name, address, and telephone number of technical representative making report.
 - 2. Statement on condition of substrates and their acceptability for installation of product.
 - 3. Statement that products at Project site comply with requirements.
 - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 6. Statement whether conditions, products, and installation will affect warranty.
 - 7. 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. Name, address, and telephone number of factory-authorized service representative making report.
 - 2. Statement that equipment complies with requirements.
 - 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 4. Statement whether conditions, products, and installation will affect warranty.
 - 5. Other required items indicated in individual Specification Sections.
- D. Permits, Licenses, and Certificates: For Owner's records, 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.

1.9 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.
- 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, 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.
- 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 to those indicated for this Project in material, design, and extent.
- 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 inspecting 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.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- 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. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
- d. Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.
- e. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
- f. When testing is complete, remove test specimens, assemblies, 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, through Construction Manager, 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:
 - 1. Build mockups in location and of size indicated or, if not indicated, as directed by Architect or Construction Manager.
 - 2. Notify Architect and Construction Manager seven days in advance of dates and times when mockups will be constructed.
 - 3. Employ supervisory personnel who will oversee mockup construction. Employ workers that will be employed during the construction at the Project.
 - 4. Demonstrate the proposed range of aesthetic effects and workmanship.
 - 5. Obtain Architect's and Construction Manager's approval of mockups before starting work, fabrication, or construction.
 - a. Allow seven days for initial review and each re-review of each mockup.
 - 6. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
 - 7. Demolish and remove mockups when directed, unless otherwise indicated.
- L. Integrated Exterior Mockups: Construct integrated exterior mockup in accordance with approved Shop Drawings as indicated on Drawings. Coordinate installation of exterior envelope materials and products for which mockups are required in individual specification sections, along with supporting materials.

1.10 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 inspecting they are engaged to perform.
- 2. Payment for these services will be made from testing and inspecting allowances, as authorized by Change Orders.
- 3. 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, and the Contract Sum will be adjusted by Change Order.
- B. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.
 - 1. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
 - 2. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
 - 3. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 - 4. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 - 5. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 - 6. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. 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 Division 01 Section "Submittal Procedures."
- D. 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.
- E. 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.
- F. Testing Agency Responsibilities: Cooperate with Architect, Construction Manager, and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.

- 1. Notify Architect, Construction Manager, and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
- 2. Determine the location 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 any duties of Contractor.
- G. Associated Services: Cooperate with agencies 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 inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and field curing of test samples.
 - 5. Delivery of samples to testing agencies.
 - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- I. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents as a component of the Contractor's quality-control plan. Coordinate and submit concurrently with Contractor's construction schedule. Update as the Work progresses.
 - 1. Distribution: Distribute schedule to Owner, Architect, Construction Manager, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

1.11 SPECIAL TESTS AND INSPECTIONS

A. Special Tests and Inspections: Owner will engage a qualified testing agency special inspector to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, as indicated in Statement of Special Inspections included in the project manual, and as follows:

- B. Special Tests and Inspections: Conducted by a qualified testing agency as required by authorities having jurisdiction, as indicated in individual Specification Sections, and in Statement of Special Inspections included in the project manual, 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, Construction Manager, 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, through Construction Manager, 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. 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 modifications as they occur. Provide access to test and inspection log for Architect's and Construction Manager's reference during normal working hours.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, 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 Division 01 Section "Execution."
- 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 014000

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SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes requirements for temporary facilities and controls.
- B. Temporary utilities include, but are not limited to, the following:
 - 1. Electric power service.
 - 2. Lighting.
 - 3. Telephone service.
 - 4. Water Service
 - 5. Sanitary Facilities.
 - Protection Facilities.

1.3 USE CHARGES

A. Temporary Utilities Service: With the exception of toilet facilities and telephone service, the owner will pay for service use charges for usage of temporary utilities, by all parties engaged in construction, at Project site for construction operations for this project.

1.4 QUALITY ASSURANCE

- A. Standards: Comply with ANSI A10.6, NECA's "Temporary Electrical Facilities," and NFPA 241.
 - 1. Trade Jurisdictions: Assigned responsibilities for installation and operation of temporary utilities are not intended to interfere with trade regulations and union jurisdictions.
 - 2. 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.

1.5 PROJECT CONDITIONS

- A. Conditions of Use: The following conditions apply to use of temporary services and facilities by all parties engaged in the Work:
 - 1. Keep temporary services and facilities clean and neat.
 - 2. Relocate temporary services and facilities as required by progress of the Work.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Provide new materials. Provide materials suitable for use intended.
- B. Tarpaulins: Fire-resistive labeled with flame-spread rating of 15 or less.

2.2 EQUIPMENT

- A. General: Provide equipment suitable for use intended.
- B. Fire Extinguishers: Hand carried, portable, UL rated. Provide class and extinguishing agent as indicated or a combination of extinguishers of NFPA-recommended classes for exposures.
 - 1. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Water Service: Use of Owner's existing water service facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- B. Sanitary Facilities: Contractor shall 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.
- C. Electric Power Service: Use of Owner's existing electric power service will be permitted, as long as equipment is maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- D. Lighting: If required, provide temporary lighting that provides adequate illumination to allow for safe working conditions during normal working hours.

3.2 TEMPORARY FACILITIES INSTALLATION

- A. Lighting: If required, provide temporary lighting that provides adequate illumination for construction operations and traffic conditions.
- B. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.
 - 1. Prior to commencing work, isolate the HVAC system in area where work is to be performed in accordance with procedures approved by the architect.
 - a. Disconnect supply and return ductwork in work area from HVAC systems servicing occupied areas as required.
 - b. Maintain negative air pressure within work area using HEPA-equipped air filtration units, starting with commencement of temporary partition construction, and continuing until removal of temporary partitions is complete.
 - 2. Maintain dust partitions during the Work. Use vacuum collection attachments on dust-producing equipment. Isolate limited work within occupied areas using portable dust containment devices.
 - 3. Perform daily construction cleanup and final cleanup using approved, HEPA-filter-equipped vacuum equipment.

3.3 OPERATION, TERMINATION, AND REMOVAL

- A. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage.
- B. Termination and Removal: Remove each temporary facility when need for its service has ended.
 - 1. Materials and facilities that constitute temporary facilities are the property of Contractor. Owner reserves right to take possession of Project identification signs.
 - 2. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements in Division 1 Section "Closeout Procedures."

END OF SECTION 015000

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 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 Sections:

1. Division 01 Section "Substitution Procedures" for requests for substitutions.

1.3 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 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 specific manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.4 ACTION SUBMITTALS

- A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 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 one week of receipt of a comparable product request. Architect will notify Contractor through Construction Manager 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 Approval: As specified in Division 01 Section "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 Division 01 Section "Submittal Procedures." Show compliance with requirements.

1.5 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. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
 - 2. If a dispute arises between contractors over concurrently selectable but incompatible products, Architect will determine which products shall be used.

1.6 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.
- 4. Store 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.
- 7. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

1.7 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. Refer to Divisions 02 through 49. Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

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 not in conflict with 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.
- 6. Or Equal: For products specified by name and accompanied by the term "or equal," or "or approved equal," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.

B. Product Selection Procedures:

- 1. Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements or a comparable product. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product. If a comparable product or substitution is proposed, the Contractor shall be solely responsible for verifying that the substitution does not impact the structural design, HVAC, electrical, plumbing or utility requirements, clearances, dimensions or layouts, building or fire code requirements or any other change in the original design. If the substitution does require a change in any of the items noted above or similar design change or physical changes, the contractor shall be responsible for the cost of any redesign and for the additional construction costs associated with the changes due to the substitution.
- 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or comparable source that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product. If a comparable product or substitution is proposed, the Contractor shall be solely responsible for verifying that the substitution does not impact the structural design, HVAC, electrical, plumbing or utility requirements, clearances, dimensions or layouts, building or fire code requirements or any other change in the original design. If the substitution does require a change in any of the items noted above or similar design change or physical changes, the contractor shall be responsible for the cost of any redesign and for the additional construction costs associated with the changes due to the substitution.

3. Products:

a. Product List: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products will be considered during the bid period. If a product selected from the list of names is other than the Basis of Design indicated OR IT IS A COMPARABLE PRODUCT, the Contractor shall be solely responsible for verifying that the product does not impact the structural design, HVAC, electrical, plumbing or utility requirements, clearances, dimensions or layouts, building or fire code requirements or any other change

in the original design. If the product does require a change in any of the items noted above or similar design change or physical changes, the contractor shall be responsible for the cost of any redesign and for the additional construction costs associated with the changes due to not providing the Basis of Design product.

4. Manufacturers:

- a. Manufacturer List: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products will be considered during the bid period. If a manufacturer selected from the list of names is other than the Basis of Design indicated OR IT IS A COMPARABLE PRODUCT, the Contractor shall be solely responsible for verifying that the product does not impact the structural design, HVAC, electrical, plumbing or utility requirements, clearances, dimensions or layouts, building or fire code requirements or any other change in the original design. If the manufacturer does require a change in any of the items noted above or similar design change or physical changes, the contractor shall be responsible for the cost of any redesign and for the additional construction costs associated with the changes due to not providing the Basis of Design manufacturer.
- 5. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, provide the specified or indicated product or a comparable product. 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. If a comparable product or substitution is proposed, the Contractor shall be solely responsible for verifying that the substitution does not impact the structural design, HVAC, electrical, plumbing or utility requirements, clearances, dimensions or layouts, building or fire code requirements or any other change in the original design. If the substitution does require a change in any of the items noted above or similar design change or physical changes, the contractor shall be responsible for the cost of any redesign and for the additional construction costs associated with the changes due to the substitution.
- 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 Division 01 Section "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: 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 the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work. If a comparable product or substitution is proposed, the Contractor shall be solely responsible for verifying that the substitution does not impact the structural design, HVAC, electrical, plumbing or utility requirements, clearances, dimensions or layouts, building or fire code requirements or any other change in the original design. If the substitution does require a change in any of the items noted above or similar design change or physical changes, the contractor shall be responsible for the cost of any redesign and for the additional construction costs associated with the changes due to the substitution.
 - 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - 3. Evidence that proposed product provides specified warranty.
 - 4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
 - 5. Samples, if requested.
 - 6. If a Contractor proposes using a comparable product for an item that only listed one product or manufacturer, the Architect will consider the request in the bidding period and during the scope reviews after the bidding period before award of contract at no cost to the Contractor. If the request is made after award of contract, the Architect shall be compensated directly by the Contractor for the Architect's time reviewing the proposal.
 - 7. If a Contractor proposes using a comparable product for an item that listed at least three products or manufacturers, the Architect will consider the request in the bidding period at no cost to the Contractor. If the request is made after the bidding period, the Architect shall be compensated directly by the Contractor for the Architect's time reviewing the proposal.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 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. Coordination of Owner-installed products.
 - 6. Progress cleaning.
 - 7. Starting and adjusting.
 - 8. Protection of installed construction.
 - 9. Correction of the Work.

B. Related Sections:

- 1. Division 01 Section "Submittal Procedures" for submitting surveys.
- 2. Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

1.3 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.
- B. Patching: Fitting and repair work required to restore construction to original conditions after installation of other work.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For land surveyor, and professional engineer.

- B. Certificates: Submit certificate signed by land surveyor, or professional engineer certifying that location and elevation of improvements comply with requirements.
- C. Cutting and Patching Plan: Submit plan describing procedures at least 10 days prior to the time cutting and patching will be performed. Include the following information:
 - 1. Extent: Describe reason for and extent of each occurrence of cutting and patching.
 - 2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building appearance and other significant visual elements.
 - 3. Products: List products to be used for patching and firms or entities that will perform patching work.
 - 4. Dates: Indicate when cutting and patching will be performed.
 - 5. Utilities and Mechanical and Electrical Systems: List services and systems that cutting and patching procedures will disturb or affect. List services and systems that will be relocated and those that will be temporarily out of service. Indicate how long services and systems will be disrupted.
- D. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.
- E. Certified Surveys: Submit two copies signed by land surveyor, or professional engineer.
- F. Final Property Survey: Submit 5 copies showing the Work performed and record survey data.

1.5 QUALITY ASSURANCE

- A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.
- B. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
 - Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from the Architect before proceeding. Shore, brace, and support structural element during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection
 - a. Applies to all structural elements.
 - 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. Operational elements include the following:
 - a. Primary operational systems and equipment.
 - b. Fire separation assemblies.

- c. Air or smoke barriers.
- d. Fire-suppression systems.
- e. Mechanical systems piping and ducts.
- f. Control systems.
- g. Communication systems.
- h. Conveying systems.
- i. Electrical wiring systems.
- j. Operating systems of special construction.
- 3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, which results in reducing their capacity to perform as intended, or that result in increased maintenance or decreased operational life or safety. Other construction elements include but are not limited to the following:
 - a. Water, moisture, or vapor barriers.
 - b. Membranes and flashings.
 - c. Exterior curtain-wall construction.
 - d. Equipment supports.
 - e. Piping, ductwork, vessels, and equipment.
 - f. Noise- and vibration-control elements and systems.
- 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.
- C. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.
- D. 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.
 - 1. For projects requiring compliance with sustainable design and construction practices and procedures, utilize products for patching that comply with requirements of Division 01 Section "Sustainable Design Requirements."
- 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 the 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, including 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. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
 - a. Description of the Work.
 - b. List of detrimental conditions, including substrates.
 - c. List of unacceptable installation tolerances.
 - d. Recommended corrections.
 - 2. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 - 3. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 - 4. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 - 5. 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 local utility 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 the Contractor, submit a request for information to Architect according to requirements in Division 01 Section "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 and Construction Manager promptly.
- B. General: Engage a land surveyor or professional engineer to lay out the Work using accepted surveying practices.
 - 1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
 - 2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
 - 3. Inform installers of lines and levels to which they must comply.
 - 4. Check the location, level and plumb, of every major element as the Work progresses.
 - 5. Notify Architect and Construction Manager when deviations from required lines and levels exceed allowable tolerances.
 - 6. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.
- C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.
- D. 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.
- E. 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 and Construction Manager.

3.4 FIELD ENGINEERING

- A. Identification: Owner will identify existing benchmarks, control points, and property corners.
- 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.
 - 1. Do not change or relocate existing benchmarks or control points without prior written approval of Architect or Construction Manager. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to Architect and Construction Manager before proceeding.
 - 2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.
- 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.
 - 2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
 - 3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.
- D. Certified Survey: On completion of foundation walls, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and sitework.
- E. Final Property Survey: Engage a land surveyor or professional engineer to prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by land surveyor or professional engineer, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey.
 - 1. Show boundary lines, monuments, streets, site improvements and utilities, existing improvements and significant vegetation, adjoining properties, acreage, grade contours, and the distance and bearing from a site corner to a legal point.
 - 2. Recording: At Substantial Completion, have the final property survey recorded by or with authorities having jurisdiction as the official "property survey."

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.
- 4. Maintain minimum headroom clearance of 96 inches (2440 mm) in occupied spaces and 90 inches (2300 mm) in unoccupied spaces.
- 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. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- G. 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.
 - 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.
- H. 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.
- I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

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. Temporary Support: Provide temporary support of work to be cut.

- C. 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.
- D. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching in accordance with requirements of Division 01 Section "Summary."
- E. 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 prevent interruption to occupied areas.
- F. 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.
 - 4. Excavating and Backfilling: Comply with requirements in applicable Division 31 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.
- G. 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.
 - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
 - b. Restore damaged pipe covering to its original condition.
 - 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.

- a. Where patching occurs in a painted surface, prepare substrate and apply primer and intermediate paint coats appropriate for substrate over the patch, and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
- 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.
- H. 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 OWNER-INSTALLED PRODUCTS

- A. Site Access: Provide access to Project site for Owner's construction personnel.
- B. Coordination: Coordinate construction and operations of the Work with work performed by Owner's construction personnel.
 - Construction Schedule: Inform Owner of Contractor's preferred construction schedule for Owner's portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify Owner if changes to schedule are required due to differences in actual construction progress.
 - 2. Preinstallation Conferences: Include Owner's construction personnel at preinstallation conferences covering portions of the Work that are to receive Owner's work. Attend preinstallation conferences conducted by Owner's construction personnel if portions of the Work depend on Owner's construction.

3.8 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 (27 deg C).
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
 - a. Utilize containers intended for holding waste materials of type to be stored.
 - 4. Coordinate progress cleaning for joint-use areas where more than one installer has worked.
- 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. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- 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. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Division 01 Section "Temporary Facilities and Controls" or Division 01 Section "Construction Waste Management and Disposal."
- H. 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.
- I. 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.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.9 STARTING AND ADJUSTING

- A. Coordinate startup and adjusting of equipment and operating components with requirements in Division 01 Section "General Commissioning Requirements."
- B. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- C. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.
- D. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

E. Manufacturer's Field Service: Comply with qualification requirements in Division 01 Section "Quality Requirements."

3.10 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.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.11 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.
 - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 017300

SECTION 017329 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.
- B. Related Sections include the following:
 - 1. Divisions 2 through 33 Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.

1.3 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other Work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.

1.4 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- B. 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. Operating elements include the following:
 - 1. Primary operational systems and equipment.
 - 2. Mechanical systems piping and ducts.
 - 3. Control systems.
 - 4. Communication systems.
 - 5. Electrical wiring systems.
- C. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their

capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. Miscellaneous elements include the following:

- 1. Equipment supports.
- 2. Piping, ductwork, vessels, and equipment.
- 3. Noise- and vibration-control elements and systems.
- D. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces 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.

PART 2 - PRODUCTS

2.1 MATERIALS

A. General: Comply with requirements specified in other Sections.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut. Provide temporary dams to contain water and moisture.
- B. Protection: Protect in-place construction during cutting and patching to prevent damage. Protect fixtures and personal property on other occupied floors in building from moisture, dust and impact damage.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

3.3 PERFORMANCE

- A. 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. 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 as small as possible, neatly to 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 / Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 - 4. 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.
 - 5. Proceed with patching after construction operations requiring cutting are complete.
- C. 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 possible. Provide materials and comply with installation requirements specified in other Sections.
 - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate 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 eliminate evidence of patching and refinishing.
 - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
 - b. Restore damaged pipe covering to its original condition.
 - 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.
 - a. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface

containing the patch. Provide additional coats until patch blends with adjacent surfaces.

- 4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
- D. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION 017329

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 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.

B. Related Sections:

- 1. Division 01 Section "Execution" for progress cleaning of Project site.
- 2. Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
- 3. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
- 4. Division 01 Section "Demonstration and Training" for requirements for instructing Owner's personnel.
- 5. Divisions 02 through 33 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.3 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete with request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.

- 6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
- 7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
- 8. Complete startup testing of systems.
- 9. Submit test/adjust/balance records.
- 10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
- 11. Advise Owner of changeover in heat and other utilities.
- 12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- 13. Complete final cleaning requirements, including touchup painting.
- 14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect [and Construction Manager] will either proceed with inspection or notify Contractor of 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. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for final completion.

1.4 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:
 - 1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
 - 2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - 4. Submit pest-control final inspection report and warranty.
 - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect [and Construction Manager] 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. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.5 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. Use CSI Form 14.1A.
 - 1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
 - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 - 3. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of Architect and Construction Manager.
 - d. Name of Contractor.
 - e. Page number.
 - 4. Submit list of incomplete items in the following format:
 - a. PDF electronic file.
 - b. [Three] paper copies of product schedule or list, unless otherwise indicated. Architect[, through Construction Manager,] will return [two] <Insert number> copies.

1.6 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- C. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 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.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.

- 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- 4. Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide table of contents at beginning of document.
- D. 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.
 - 1. Use cleaning products that comply with the specified maximum allowable VOC levels.

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 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.
 - 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.
 - f. 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.

- g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
- h. Sweep concrete floors broom clean in unoccupied spaces.
- i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain. Vacuum all carpeted and soft surfaces with a higherficiency particulate arrestor (HEPA) vacuum. For phased or occupied renovations, HEPA vacuum the carpet daily in occupied areas.
- j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
- k. Remove labels that are not permanent.
- 1. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 1) Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates.
- m. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- n. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
- o. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
- p. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
- q. Clean ducts, blowers, and coils if units were operated without filters during construction or that display contamination with particulate matter upon inspection.
 - 1) Clean HVAC system in compliance with NADCA Standard 1992-01. Provide written report upon completion of cleaning.
- r. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
- s. Leave Project clean and ready for occupancy.

END OF SECTION 017700

SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance documentation directory.
 - 2. Product maintenance manuals.

B. Related Sections:

- 1. Division 01 Section "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.
- 2. Division 01 Section "General Commissioning Requirements" for verification and compilation of data into operation and maintenance manuals.
- 3. Divisions 02 through 33 Sections for specific operation and maintenance manual requirements for the Work in those Sections.

1.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

1.4 CLOSEOUT SUBMITTALS

- A. Manual Content: Operations and maintenance manual content is specified in individual specification sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
 - 1. Where applicable, clarify and update reviewed manual content to correspond to modifications and field conditions.
- B. Format: Submit operations and maintenance manuals in the following format:

- 1. Three paper copies. Include a complete operation and maintenance directory. Enclose title pages and directories in clear plastic sleeves. Architect, through Construction Manager, will return two copies.
- C. Initial Manual Submittal: Submit draft copy of each manual at least 30 days before commencing demonstration and training. Architect and Commissioning Agent will comment on whether general scope and content of manual are acceptable.
- D. 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 and Commissioning Agent will return copy with comments.
 - 1. Correct or modify each manual to comply with Architect's and Commissioning Agent's comments. Submit copies of each corrected manual within 15 days of receipt of Architect's and Commissioning Agent's comments and prior to commencing demonstration and training.

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

- A. Organization: Include a section in the directory for each of the following:
 - 1. List of documents.
 - 2. List of systems.
 - 3. List of equipment.
 - 4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- 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."

2.2 REQUIREMENTS FOR OPERATION, AND MAINTENANCE MANUALS

A. Organization: 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.
 - 8. Name and contact information for Commissioning Agent.
 - 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.
 - 1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- 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. 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
 - 2. File Names and Bookmarks: Enable bookmarking of individual documents based upon 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 upon opening file.
- F. 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.

- a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
- b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents, and indicate Specification Section number on bottom of spine]. Indicate volume number for multiple-volume sets.
- 2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
- 3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software storage media for computerized electronic equipment.
- 4. Supplementary Text: Prepared on 8-1/2-by-11-inch (215-by-280-mm) white bond paper.
- 5. 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.

2.3 PRODUCT MAINTENANCE MANUALS

- A. 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.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
- 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.
 - 1. Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.
- B. 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.
- C. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- D. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
 - 1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
 - 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- E. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, 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.
 - 1. 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.
- F. 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. Do not use original project record documents as part of operation and maintenance manuals.
- 2. Comply with requirements of newly prepared record Drawings in Division 01 Section "Project Record Documents."
- G. Comply with Division 01 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 017823

SECTION 017839 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 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.
 - 4. Miscellaneous record submittals.

B. Related Sections:

- 1. Division 01 Section "Execution" for final property survey.
- 2. Division 01 Section "Closeout Procedures" for general closeout procedures.
- 3. Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
- 4. Divisions 02 through 33 Sections for specific requirements for project record documents of the Work in those Sections.

1.3 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit three (3) sets of marked-up record prints.
 - 2. Number of Copies: Submit copies of record Drawings as follows:
 - Initial Submittal: Submit one paper copy set, and one PDF electronic files of marked-up record prints and one sets of plots from corrected record digital data files. Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
 - b. Final Submittal: Submit three paper copies sets, and one PDF electronic files of marked-up record prints. Print each Drawing, whether or not changes and additional information were recorded.
- B. Record Specifications: Submit three paper copies and one annotated PDF electronic files of Project's Specifications, including addenda and contract modifications.

- C. Record Product Data: Submit one paper copy and one 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.
- D. Miscellaneous Record Submittals: Refer to other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Submit one paper copy and one annotated PDF electronic files and directories of each submittal.
- E. Reports: Submit written report weekly indicating items incorporated in Project record documents concurrent with progress of the Work, including modifications, concealed conditions, field changes, product selections, and other notations incorporated.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings.
 - 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 archive 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 below first floor.
 - 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.
 - 1. 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. Utilize personnel proficient at recording graphic information in production of marked-up record prints.
- 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 and Construction Manager. When authorized, prepare a full set of corrected digital data files of the Contract Drawings, as follows:
 - Upon issuance of a Notice to Proceed or similar authorization by the Owner, the Architect will transfer a copy of the current version of the digital model of the project to the Construction Manager's website for use by all trade contractors in preparing submittals, coordination drawings and record drawings. The model was prepared using Revit 2013 software.
 - 2. All contractors using or accessing the digital Model shall first be required to execute a data licensing agreement in the form of AIA Document C106 Agreement form acceptable to the Owner and Architect. A fee of \$5,000 will be requested to gain access to the digital model.
 - 3. Over the course of the multi-year construction project, all contractors using or accessing the model shall be required to update their version of Revit to the latest available version of the software in general use at that time.
 - 4. File Preparation Format: RVT operating in Microsoft Windows operating system.
 - 5. File Submittal Format: Submit or post coordination drawing files using the same format as the file preparation or PDF format.
 - 6. The Architect or his consultants make no representation as to the accuracy or completeness of the digital model as it relates to the drawings.
 - 7. The Architect and his consultants shall be granted access to the coordination model on the Construction Manager's website for their use in conducting their construction administration responsibilities.
- C. Newly Prepared Record Drawings: Prepare new Drawings instead of preparing record Drawings where Architect determines that neither the original Contract Drawings nor Shop Drawings are suitable to show actual installation.
 - 1. New Drawings may be required when a Change Order is issued as a result of accepting an alternate, substitution, or other modification.

- 2. Consult Architect and Construction Manager for proper scale and scope of detailing and notations required to record the actual physical installation and its relation to other construction. Integrate newly prepared record Drawings into record Drawing sets; comply with procedures for formatting, organizing, copying, binding, and submitting.
- D. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
 - 1. Record Prints: Organize record prints and newly prepared record Drawings 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 and Construction Manager.
 - e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
 - 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.

2.3 RECORD PRODUCT DATA

- A. 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.
- B. Format: Submit record Product Data as annotated PDF electronic file.
 - 1. Include record Product Data directory organized by specification section number and title, electronically linked to each item of record Product Data.

2.4 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
- B. Format: Submit miscellaneous record submittals as PDF electronic file.
 - 1. Include miscellaneous record submittals directory organized by specification section number and title, electronically linked to each item of miscellaneous record submittals.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and modifications to project record documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents and Samples: Store record documents and Samples 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 and Construction Manager's reference during normal working hours.

END OF SECTION 017839

SECTION 02 41 19 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Demolition and removal of selected portions of a building or structure.
 - 2. Repair procedures for selective demolition operations.
- B. Related Sections include the following:
 - 1. Division 1 Section "Cutting and Patching" for cutting and patching procedures for selective demolition operations.

1.3 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 reinstalled.
- B. Remove and Salvage: Detach items from existing construction and deliver them to Owner.
- C. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
- D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.4 MATERIALS OWNERSHIP

- A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, demolished materials shall become Contractor's property and shall be removed from Project site.
- B. 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 during selective demolition remain Owner's property.

Carefully remove and salvage each item or object in a manner to prevent damage and deliver promptly to Owner.

1.5 SUBMITTALS

- A. Proposed Dust-Control and Noise-Control Measures: Submit statement or drawing that indicates the measures proposed for use, proposed locations, and proposed time frame for their operation. Identify options if proposed measures are later determined to be inadequate.
- B. Inventory: After selective demolition is complete, submit a list of items that have been removed and salvaged.
- C. Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.

1.6 QUALITY ASSURANCE

- 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 ANSI A10.6 and NFPA 241.

1.7 PROJECT CONDITIONS

- A. Tenants will occupy portions of building immediately adjacent to selective demolition areas. Conduct selective demolition so Tenants will not be disrupted. Provide not less than 72 hours' notice to Owner of activities that will create excessive disturbance to the Tenants.
- B. Maintain access to existing walkways, doorways, and other adjacent occupied or used facilities.
 - 1. Do not close or obstruct walkways, doorways, or other occupied or used facilities without written permission from authorities having jurisdiction and the Owner.
- C. Owner assumes no responsibility for condition of areas to be selectively demolished.
 - 1. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- D. Storage or sale of removed items or materials on-site will not be permitted.
- E. Hazardous Materials: Hazardous materials, if present shall be the responsibility of the building owner. Do not disturb hazardous materials or items suspected of containing hazardous materials. The Contractor shall contact the Owner immediately upon discovery of suspect material.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

1.8 WARRANTY

A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 REPAIR MATERIALS

- A. Use repair materials identical to existing materials.
 - 1. If identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
 - 2. Use materials whose installed performance equals or surpasses that of existing materials.
- B. Comply with material and installation requirements specified in individual Specification Sections.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. 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 the Architect.
- E. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.2 UTILITY SERVICES

- A. Existing Utilities: Maintain services indicated to remain and protect them against damage during selective demolition operations.
- B. Do not interrupt existing utilities serving occupied or operating facilities unless authorized in writing by the Owner. Provide temporary services during interruptions to existing utilities, as acceptable to Owner and to authorities having jurisdiction.

1. Provide at least 72 hours' notice to the Owner if shutdown of service is required.

3.3 PREPARATION

- 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.
 - 1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from the Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
 - 2. Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction.
 - 3. Protect existing site improvements, appurtenances, and landscaping to remain.
- B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to existing areas to remain.
 - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
 - 2. Protect walls and other existing finish work that are to remain or that are exposed during selective demolition operations.

3.4 POLLUTION CONTROLS

- A. Dust Control: Limit the spread of dust and dirt. Comply with governing environmental-protection regulations.
 - 1. Do not use water when it may damage existing construction or create hazardous or objectionable conditions, such as ice, flooding and pollution.
- B. Disposal: Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- C. Cleaning: 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.

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. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above before disturbing the next lower areas below.

- 2. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
- 3. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- 4. Dispose of demolished items and materials promptly.
- 5. Return elements of construction and surfaces that are to remain to condition existing before selective demolition operations began.
- B. Existing Facilities: Protect existing, stairs, walkways, building entries, and other building facilities during selective demolition operations.
- C. Removed and Reinstalled Items: Comply with the following:
 - 1. Clean and repair items to functional condition adequate for intended reuse. Paint equipment to match new equipment.
 - 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 Owner, 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 PATCHING AND REPAIRS

- A. General: Promptly repair damage to adjacent construction caused by selective demolition operations.
- B. Patching: Comply with Division 1 Section "Cutting and Patching."
- C. Repairs: Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials.
 - 1. Completely fill holes and depressions in existing masonry walls that are to remain with an approved masonry patching material applied according to manufacturer's written recommendations.
- D. Finishes: Restore exposed finishes of patched areas and extend restoration into adjoining construction in a manner that eliminates evidence of patching and refinishing.

3.7 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
- B. Burning: Do not burn demolished materials.

- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.
- 3.8 SELECTIVE DEMOLITION SCHEDULE
 - A. Scope of Selective Demolition is indicated on the Drawings.

END OF SECTION 02 41 19