SECTION 01250 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.

1.2 MINOR CHANGES IN THE WORK

A. When appropriate, the Engineer may issue supplemental instructions authorizing changes in the Work by use of a Field Order (EJCDC Form C-942). Should Contractor believe that a change in price is required to implement a Field Order, present a Contractor Proposal Request per Article 11 of the General Conditions of the Contract.

1.3 **PROPOSAL REQUESTS**

- A. Owner-Initiated Proposal Requests: Engineer 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 Engineer are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
 - 2. Within 20 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 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.
 - 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 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.
- 5. 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: Use AIA Document G709.

1.4 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Proposal Request, Engineer will issue a Change Order for signatures of Owner and Contractor on EJCDC Form C 941.

PART 3 - EXECUTION (Not Used)

PART 2 - PRODUCTS (Not Used)

SECTION 01290 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.2 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including Application for Payment forms with Continuation Sheets.
 - 2. Submit the Schedule of Values to Engineer at earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use 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. 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. Dollar value.
 - 1) Percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
 - 2. 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.
 - 3. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
 - 4. 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.
 - 5. 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.
 - 6. 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.

7. 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.

1.3 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as recommended by Engineer and paid for by Owner.
 - 1. Stating that Surety agrees to payment of the sum requested, that the value of the work stated in the Contractor's request is a true statement, and that the sums requested for stored materials (if any) are correct.
 - 2. Provide Certified Sales Tax Report.
 - 3. Lien waivers.
 - 4. Proof of Payment Certification form (in accordance with section 00102).
 - 5. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements: See related sections below.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction Work covered by each Application for Payment is the period indicated in the Agreement.
- C. Payment Application 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. Engineer 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 3 signed and notarized original copies of each Application for Payment to Engineer by a method ensuring receipt within 48 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. 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. Submittals Schedule (preliminary if not final).
 - 5. Certificates of insurance and insurance policies before construction starts.

- 6. Performance and payment bonds before construction starts.
- G. 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.
- H. 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." Not Applicable.
 - 7. Evidence that claims have been settled.
 - 8. Final meter readings for utilities. Not Applicable.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

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SECTION 01315 - PROJECT MEETINGS

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. Work Included This Section:
 - 1. This Section specifies administrative and procedural requirements for project meetings including but not limited to:
 - a) Pre-Construction Conference.
 - b) Coordination Meetings.
 - c) Progress Meetings.

1.2 PRE-CONSTRUCTION CONFERENCE

- A. A pre-construction conference shall be scheduled by the Engineer and held at the Project site or other convenient location after execution of the Agreement or Notice to Proceed, whichever comes first and prior to commencement of construction activities.
- B. Attendees:
 - The Owner, Engineer, the Contractor(s) and its superintendent(s) shall each be represented at the conference by persons authorized to conclude matters relating to the Work.
- C. Agenda:
 - 1. Discuss items of significance that could affect progress including such topics as:
 - a) Work sequencing.
 - b) Tentative construction schedule.
 - c) Designation of responsible personnel.
 - d) Procedures for processing Change Proposal Requests and Change orders.
 - e) Procedures for processing Applications for Payment.
 - f) Submittal of Shop Drawings, Product Data and Samples.
 - g) Preparation of record documents.
 - h) Use of the premises.
 - i) Staging areas.
 - j) Security.
 - k) Housekeeping.

1.3 COORDINATION MEETINGS

- A. The General Contractor shall conduct project coordination meetings at regularly scheduled times convenient for all parties involved. Project coordination meetings are in addition to specific meetings held for other purposes, such as regular progress meetings and special Pre-installation meetings.
- B. Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting, such as the Owner and Engineer.
- C. Monthly Progress Meetings:

- 1. To enable orderly review of progress during construction and to provide for systematic discussion of problems, weekly project meetings shall be held throughout the construction period.
- 2. Persons designated by each Subcontractor shall attend and participate in weekly project meetings shall have all required authority to commit the Contractor or Subcontractor to decisions agreed upon in the project meetings.
- 3. The General Contractor shall conduct the meetings, compile minutes of each meeting and will distribute copies to the Owner and the Engineer. The General Contractor shall distribute such other copies as he wishes. Each Contractor shall, to the maximum extent practicable, assign the same person or persons to represent the Contractor or Subcontractor at project meetings throughout the construction period.
- D. Owner, Engineer, Contractor Progress Meetings:
 - 1. To enable orderly review of progress during construction and to provide for systematic discussion of problems, project meetings shall be held throughout the construction period at intervals determined prior to construction.
 - 2. The General Contractor shall attend and participate in the Progress meetings and shall have all required authority to commit the Contractor and Subcontractor(s) to decisions agreed upon in the project meetings.
 - 3. The Engineer will conduct the Progress Meetings and compile minutes of each meeting and will distribute copies to the Owner and Contractor. The Contractor shall distribute such other copies as required. The General Contractor shall, to the maximum extent practicable, assign the same person or persons to represent the Contractor at project meetings throughout the construction period.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

SECTION 01330 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.
- B. See Division 1 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule and the Submittals Schedule.
- C. See Division 1 Section "Closeout Procedures" for submitting warranties Project Record Documents and operation and maintenance manuals.

1.2 **DEFINITIONS**

- A. Action Submittals: Written and graphic information that requires Engineer's responsive action.
- B. Informational Submittals: Written information that does not require Engineer's approval. Submittals may be rejected for not complying with requirements.

1.3 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. 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.
 - a. Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
 - 3. Submittals shall be made in digital (pdf) form via email to the Engineer. Paper copies of submittals are not required or desired and will not be acted upon.
- B. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Engineer's receipt of submittal.
 - 1. If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 2. Allow 14 days for processing each resubmittal.
 - 3. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
- C. Identification: Include the following information with each submittal for identification.
 - 1. Indicate name of firm or entity that prepared each submittal.
 - 2. Include the following information for processing and recording action taken:

- a. Project name.
- b. Date.
- c. Name and address of supplier.
- d. Name of manufacturer.
- e. Unique identifier, including revision number.
- f. Number and title of appropriate Specification Section.
- g. Drawing number and detail references, as appropriate.
- h. Other necessary identification.
- D. Deviations: Highlight, encircle, or otherwise identify deviations from the Contract Documents on submittals.
- E. Transmittal: Send each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a digital transmittal form.
- F. Engineer will not review submittals received from sources other than Contractor.
- G. Include Contractor's certification stating that information submitted complies with requirements of the Contract Documents.
- H. 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.
- I. Use for Construction: Use only final submittals with mark indicating action taken by Engineer in connection with construction.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
 - 1. Number of Copies: Submit 1 digital copy in pdf format via email. Engineer will return a digital copy via email.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. Mark each copy of each submittal to show which products and options are applicable.
 - 2. Include the following information, as applicable:
 - a. Manufacturer's written recommendations.
 - b. Manufacturer's product specifications.
 - c. Manufacturer's installation instructions.
 - d. Manufacturer's catalog cuts.
 - e. Wiring diagrams showing factory-installed wiring.
 - f. Printed performance curves.
 - g. Operational range diagrams.
 - h. Compliance with recognized trade association standards.
 - i. Compliance with recognized testing agency standards.
- C. Shop Drawings: <u>Prepare Project-specific information</u>, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.

- 1. Preparation: Include the following information, as applicable:
 - a. Dimensions.
 - b. Identification of products.
 - c. Fabrication and installation drawings.
 - d. Roughing-in and setting diagrams.
 - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
 - f. Shopwork manufacturing instructions.
 - g. Templates and patterns.
 - h. Schedules.
 - i. Notation of coordination requirements.
 - j. Notation of dimensions established by field measurement.
- 2. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
- D. Samples: Not Applicable.

2.2 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by other Specification Sections.
 - 1. Number of Copies: Submit 1 digital submittal in pdf format via email.
 - 2. Certificates and Certifications: Provide a notarized 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.
 - 3. Test and Inspection Reports: Comply with requirements in Division 1 Section "Quality Requirements."
- B. Contractor's Construction Schedule: Comply with requirements in Division 1 Section "Construction Progress Documentation."
- C. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of Engineers and owners, and other information specified.
- D. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements.
- E. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements and, where required, is authorized for this specific Project.
- F. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements.
- G. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements.
- H. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements. 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.

- I. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements in Division 1 Section "Closeout Procedures."
- J. Design Data: Prepare 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.
- K. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer.
- L. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections.
- M. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Engineer.
- B. 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 ENGINEER'S ACTION

- C. General: Engineer will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- D. Action Submittals: Engineer will review each submittal, make marks to indicate corrections or modifications required, and return it. Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken:
- E. Informational Submittals: Engineer will review each submittal and will not return it, or will reject and return it if it does not comply with requirements. Engineer will forward each submittal to appropriate party.
- F. Submittals not required by the Contract Documents will not be reviewed and may be discarded.

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SECTION 01631 - PRODUCT SUBSTITUTIONS

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. Work Specified This Section:
 - 1. This Section specifies administrative and procedural requirements for handling requests as a substitution request made after the Notice to Proceed or award of the Contract as a CPR.
 - 2. All requests for substitution shall be made no later than 15 days after Notice to Proceed in order to be considered.

1.2 SUBMITTALS

- A. Substitution Request Submittal:
 - 1. Submit 1 digital copy of each request for substitution for consideration.
 - 2. Submit each request on the attached form and in accordance with procedures required for Change Proposal Requests (CPR). See Section 01250 for additional information.
 - 3. Identify the product, or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers.
 - 4. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:
 - a) Original copies of Product Data, including Drawings and descriptions of products, fabrication and installation procedures.
 - b) Samples, where applicable or requested.
 - c) A detailed point by point comparison of the proposed substitution and the specified product detailing the significant qualities of both products.
 - 1) Significant qualities may include elements such as size, weight, durability, performance and visual effect.
 - d) Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate Contractors that will become necessary to accommodate the proposed substitution.
 - e) A statement indicating the substitutions effect on the Contractor's Construction Schedule.
 - f) Cost information, including a proposal of the net deduct change in the Contract Sum.
 - g) Certification by the Contractor that the substitution proposed is equal-to or better in every significant respect to that required by the Contract Documents, and that the product/assembly will perform adequately in the application indicated.
 - Include the Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.
- B. Engineer's Action:
 - 1. After receipt of the request for substitution, the Engineer may request additional information or documentation necessary for evaluation of the request.
 - 2. If a decision on use of a proposed substitute is not made or obtained within sufficient time to have no adverse impact on the construction schedule, the Contractor shall use the product specified in the Contract Documents.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.1 SUBSTITUTIONS:

- A. Conditions:
 - 1. No substitution will be considered unless such request include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for a complete comparison with the specified products or materials and an evaluation of the proposed products or materials.
 - 2. A statement setting forth changes in other materials, equipment or other portions of the Work including changes in the work of other contracts that incorporation of the proposed substitution would require shall be included.
 - 3. Savings or Credit to Owner for accepting substitution
 - 4. The burden of proof of the merit of the proposed substitution is upon the proposer.
 - 5. In addition to the requirements in the Supplemental General Conditions, the following items will apply:
 - a) The substitution is in compliance with subsequent interpretations of code or insurance requirements.
 - b) The manufacturer or fabricator shall certify or guarantee the specified product as required by the Contract Documents.
 - c) Product shall perform properly and fit in the designated space.
- B. The Contractor shall bear all expenses resulting from substitutions including the cost of work in general, structural, plumbing, mechanical and electrical trades required due to the substitution and the cost of any Engineer's services made necessary by the substitution.
- C. The Engineer's decision of approval or disapproval of a proposed substitution shall be final.

3.2 SUBMITTAL FORMS:

A. All proposed substitutions shall use the following form.

			REQUEST			
Project:	Substitution Request No					
		CPR No. (After Bid)				
		From:				
То:		Date:				
		A/E Project No.				
Re:		Contract For: _				
Specification Title/or Drawing Sh	neet:					
Section No.:	_ Page No.: _	Article/Paragraph:				
Proposed Substitution:						
Manufacturer:	Address:		Phone #:			
Trade Name:			Model #:			
Installer:	Address:		Phone #:			
History: New Product:	2 -5 years old	5-10 years old	More than ten years old			
Briefly explain differences betwe	en proposed substitu	ution and specified p	product			
Point-by-Point comparative da	ata attached - REQU	IRED BY A/E				
Reason for not providing specifie	ed item:					

SUBSTITUTION

Similar Installation:							
Project:			Engineer:				
Address:		Owner	Owner: Owner Representative:				
-		Owner					
Telephone:			Date	Installed:			
Proposed substitution affects	s other parts of Work:	No	Yes;	explain			
Savings or Credit to Owner f	or accepting substitution:			(\$	S)		
(MUST BE FILLED OUT TO	RECEIVE REVIEW.)						
Proposed substitution chang	es Contract Time: No	o Yes	; Ac	d/Deduct	days.		
Supporting Data Attached: Product Data Fire Tests ASTM Tests	Drawings Tests Acoustical Tests UL, FM or WHI listed: p	Rep provide cop		Samples st reports.			
 to specified product. Same or better warranty Same or better maintena Proposed substitution wi Cost data as stated above substitution, which may set the substitution of the substitution of the substitution of the substitution costs caused above substruction above substruction costs caused above substruction above substruction costs caused above substruction ab	as been fully investigated will be furnished for prop ance service and source of all not affect or delay Prog ve is complete. Contracto subsequently become ap bes not affect dimensions or A/E changes to building ed by the requested subst and changes in the Wo	osed subs of replacer ress Sche or (s) claim parent are and funct design, ir itution.	titution nent pa dule. ns for ac to be w ional cle ncluding	as for specified rts, as applicable dditional costs re vaived. earances. engineering des	product. e is available. elated to accepted sign, detailing, and		
Submitted By:							
Signature:							
Firm:							
Address:							
Telephone:	Approved By:	General	Contra	ctor	Date		

Attachments:							
ENGINEER'S REVIEW	AND ACTION						
Substitution approved - Make submittals in accordance with Division One. Substitution approved as noted - Make submittals in accordance with Division One.							
Signed by: Date:							
Additional Comments	Contractor	Subcontractor	Supplier	Manufacturer	A/E		

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SECTION 01731 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.
- B. See Divisions 2 through 16 Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.
- C. Requirements in this Section apply to mechanical and electrical installations. See Divisions 15 and 16 Sections for other requirements and limitations applicable to cutting and patching mechanical and electrical installations.

1.2 SUBMITTALS

1.3 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements.
- 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.
- C. 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 Engineer's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

1.4 WARRANTY

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

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections of these Specifications.
- B. Existing Materials: Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.

1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of existing materials.

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 existing 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.
- B. Protection: Protect existing 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.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Existing Services: Where existing services are required to be removed, relocated, or abandoned, bypass such services before cutting to avoid interruption of services to occupied 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 existing 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 existing 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. Existing Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 - 3. Concrete: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.

- 4. 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 of these Specifications.
 - 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.
 - 3. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.

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SECTION 01732 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Demolition and removal of selected portions of building or structure.

1.2 **DEFINITIONS**

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. 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.

1.3 QUALITY ASSURANCE

Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

A. Standards: Comply with ANSI A10.6 and NFPA 241.

1.4 **PROJECT CONDITIONS**

- A. Notify Engineer of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- B. Hazardous Materials: It is unknown whether hazardous materials will be encountered in the Work.
 - 1. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Engineer and Owner. Owner will remove hazardous materials under a separate contract.
- C. Hazardous Materials: The owner will identify and remove all hazardous materials requiring removal.
- D. Storage or sale of removed items or materials on-site is not permitted.
- E. Utility Service: Maintain existing utilities that are incorporated in new work and protect them against damage during selective demolition operations.

1.5 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 (Not Used)

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 Engineer.
- E. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.2 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. Comply with requirements for access and protection specified in Division 1 Section "Temporary Facilities and Controls."
- B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- C. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.

3.3 SELECTIVE DEMOLITION

A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

- 1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
- 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
- 3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.
- 4. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- 5. Dispose of demolished items and materials promptly.
- B. Reuse of Building Elements: Do not demolish building elements beyond what is indicated on Drawings without Engineer's approval.
- C. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Engineer, 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.

3.4 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.
 - 1. Comply with requirements specified in Division 1 Section "Construction Waste Management."
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

3.5 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

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