# SECTION 01010 - SUMMARY OF THE WORK

## PART 1 - GENERAL

### RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification section, apply to work of this section.

### PROJECT/WORK IDENTIFICATION:

General: Project name is Comfort Suites Hotel shown on the Contract Documents prepared by Richard Molenaar, Architect. Drawings and specifications for this work are dated November 1, 2007. The project consists of the construction of the Comfort Suites Hotel; a four story, limited service hotel; constructed of wood studs exterior and interior bearing walls and pre-engineered factory wood joists floor roof framing with plywood decking, brick masonry and an exterior insulation/finish system with a single-ply membrane roof and a standing seam metal roof, extruded aluminum windows and entry system doors. All site work, utility work, unless noted otherwise is a part of this contract.

Summary by References: Work of the Contract shall include all contract documents and these can be summarized by references to the Contract, General Conditions, Supplementary Conditions, Specification Sections, the Construction Contract, Drawings, Addenda and modifications to the Contract Documents issued subsequent to the initial printing of this project manual and including but not necessarily limited to printed material referenced by any of these. It is recognized that work of the Contract is also unavoidably affected or influenced by governing regulations, natural phenomenon including weather conditions and other forces outside the contract documents.

All survey documents referencing or indicating "Existing Conditions", or "Existing Conditions Map", are not a part of the Contract Documents. The Owner, Owner's Representative(s), and the Architect assume no responsibility or liability for the Contractor's performance to carry out the work and verification of all existing conditions in accordance with the Contract Documents. It is the Contractor's responsibility to verify all existing conditions.

The building systems and components include all interior and exterior non-bearing walls and wall, floor and roof finishes, and coordination with the mechanical/electrical systems. Exterior non-bearing walls include metal stud framing and gypsum wallboard interior cladding and exterior sheathing, concrete and brick masonry, structural steel framing, a covered entry canopy with metal roof. Also included is an elevator system, swimming pool and , laundry room, serving kitchen and breakfast lounge, offices, 66 total Guest rooms scheduled as Queen/Queen standard guestrooms, Executive Suite guestrooms, Accessible standard guestrooms, Accessible Suite guestrooms and King Suite guestroom as indicated on drawings.

The site work includes coordination with excavation, earthwork, site clearing, installation of a foundation system, parking lot construction, site utilities, parking lot and accent lighting, sidewalks and patterned concrete area under Entrance Canopy.

The construction includes several logistical and organizational requirements. Included are the following:

1. Contractors performing the work shall endeavor to maintain the schedule for the project. Contractors performing the work shall be responsible for developing and submitting detailed schedules in accordance with Section 01310, Schedules, Reports, and Payments.

2. Protect all non-construction persons at the site by means of barricades, enclosures and warning signs. Provide professionally made signs as specified to direct and instruct the public on acceptable entries, construction zones and areas of no-admittance.

3. Maintain all means of egress, and do not interfere with other contractors work on site.

The new work also includes all equipment, products, coordination, temporary facilities, clean up, and all other requirements for a complete job. Refer to all other division one sections included herein for further requirements of Contractor.

Contractor shall be responsible for obtaining all permits. The Contractor shall pay for all demolition and building permits, mechanical and electrical permits, and plan review as required by the City of Olive Branch, Mississippi.

**CONTRACTOR USE OF PREMISES:**

General: The Contractors shall limit their use of the premises to the work indicated.

Use of the Site: Confine operations at the site to the areas permitted under the Contract. Portions of the site beyond areas on which work is indicated are not to be disturbed. Conform to site rules and regulations affecting the work while engaged in project construction.

Keep existing roads, driveways, and entrances not under construction and serving the premises clear and available to the public or other contractors at all times. Do not use these areas for parking or storage of materials. Barricade or fence off entrances and parking exit lanes from construction areas to maintain them in operating condition during construction.

Do not encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds and office trailers within the confines of the site and site fencing. If additional storage is necessary, obtain and pay for such storage off-site.

Lock automotive type vehicles such as passenger cars and trucks and other types of mechanized and motorized construction equipment, when parked and unattended, so as to prevent unauthorized use. Do not leave such vehicles or equipment unattended with the motor running or the ignition key in place.

Repair damage caused by construction or demolition operations. Take all precautions necessary to protect all adjacent buildings, sitework, and its occupants during the construction period.

**OWNER'S MILESTONE DATES:**

The milestone dates indicated on the Owner's construction schedule included in Section 01310; Schedules, Reports, and Payments are provided as part of the Contract Documents. Liquidated Damages as negotiated between Owner and Contractor will be assessed against the Contractor for failure to complete on the milestone dates.

**SPECIAL REQUIREMENTS:**

No blasting of any kind is allowed on site.

Construction traffic shall give the right-of-way to the general public, public safety vehicles, and other commercial traffic at all times.

Throughout construction, protect all finished concrete slabs, including but not limited to the finished structural slabs in the hotel first floor and paving, form abrasion, chipping, staining (i.e., from rust, oil, paint, etc.), wheel marks, skid marks, and any other damage. Protection shall remain in place until surrounding work is completed and building is accepted by the Owner.

## ALTERATIONS AND COORDINATION:

General: The work of this Contract includes coordination of the entire work of the project, and all sub-contractors. General Contractor shall prepare coordination drawings, diagrams and schedules as necessary for the proper communication between all interested parties. Contractor shall also control site utilization, from beginning of construction activity through project close-out and warranty periods. Contractor shall secure all areas within the prescribed construction limits.

## WORK BY OTHERS

Responsibility for the Work shall be as listed below. Items not listed below shall be included in the Contract.

**Comfort Suites – Vicksburg, MS**

**Item Furnishing Schedule**

| ITEM | FURNISHED BY | INSTALLATION BY |
|---|---|---|
| VWC Prep and adhesives | Contractor | Contractor |
| Wall Coverings (Selected by Owner and to meet Franchisor Standards) | Owner | Contractor |
| Vanity Mirrors (Decorative/Framed) | Contractor | Contractor |
| Furniture - Public Rooms | Owner | Contractor |
| Granite vanity tops, apron, splash with white china bowl, faces, framing and blocking | Contractor | Contractor |
| Shower Curtains & Hooks | Owner | Contractor |
| Shower Curtains Rods (Curved) | Contractor | Contractor |
| Lamps | Owner | Contractor |
| All Blocking for fixtures | Contractor | Contractor |
| Guest Room Coat Racks with Hangers | Contractor | Contractor |
| Wall-Mounted Light Fixtures in Guest Rooms | Owner | Contractor |
| Vanity Lights in typical Guest Rooms | Contractor | Contractor |
| Draperies & Tracks | Owner | Contractor |
| Carpet, Carpet Pad & Carpet Base-Public Areas (Selected by Owner) | Owner | Contractor |
| Carpet prep (floor leveler),adhesive and tack strips | Owner | Contractor |
| Bathroom Accessories | Contractor | Contractor |
| Television Conduit System with Pull | Contractor | Contractor |
| Television Wiring | Owner | Owner |
| Fire Alarm System Conduit | Contractor | Contractor |
| Fire Alarm Wiring | Contractor | Contractor |
| Telephone Conduit System with Pull | Contractor | Contractor |
| Telephone Wiring | Owner | Contractor |
| Card Holder (Back of Guest Room Door) | Owner | Contractor |
| Hardware and Keys | Contractor | Contractor |
| Doors | Contractor | Contractor |
| Painting & Staining | Contractor | Contractor |
| Room Numbers | Owner | Contractor |
| Night Registration Window | Contractor | Contractor |
| Lockers | Owner | Contractor |
| Safety Deposit Boxes | Contractor | Contractor |

| | | |
|---|---|---|
| Full Height Dressing Mirrors | Owner | Contractor |
| | | |
| Suite Cabinetry | Contractor | Contractor |
| Plumbing and Electrical @ Guest Room Wet Bar | Contractor | Contractor |
| Freezer/Rfg. At Prep. Storage | Owner | Contractor |
| Microwave at Guest Room Wet Bar | Owner | Contractor |
| Refrigerator at Guest Room Wet Bar | Owner | Contractor |
| Ice Machines | Owner | Contractor |
| All Rough-In and Hook-Up of Owner Furnished Equipment (U.N.O.) | Contractor | Contractor |
| Wood Shelves in Storage Room & Laundry Room | Contractor | Contractor |
| Registration Desk | Contractor | Contractor |
| Front Desk Equipment | Owner | Owner |
| Fire Extinguishers | Contractor | Contractor |
| Vending Machine | Owner | Contractor |
| Door Plaques | Owner | Contractor |
| Irrigation Sleeves | Contractor | Contractor |
| Landscaping & Irrigation | Contractor | Contractor |
| Area Signs (Comfort Suites) | Owner | Contractor |
| Washers / Dryers | Owner | Contractor |
| Handicapped Parking Signage | Contractor | Contractor |
| Resilient Base | Contractor | Contractor |
| Wall Corner Guards | Contractor | Contractor |
| Thru-Wall HVAC Units | Contractor | Contractor |
| Guestroom Entry & Remote Electric Locks (Ilco Brand) | Contractor | Contractor |
| Janitor Sign Package | Owner | Contractor |
| Site & Pool Signage | Owner | Contractor |
| Flag Pole | Contractor | Contractor |
| Security System/Camera | Contractor | Contractor |
| Stamped Concrete at Porte Cochere & Pool | Contractor | Contractor |
| Ceramic Tile in Lobby 18" x 18" | Contractor | Contractor |
| Ceramic Tile in Guest Rooms 8" x 8" | Contractor | Contractor |
| Granite Window Sills | Contractor | Contractor |
| Tub Surrounds at Full Height man-made marble | Contractor | Contractor |
| Building Permits | Contractor | Contractor |
| Tap & Impact Fees | Contractor | Contractor |
| Testing Fees | Contractor | Contractor |
| All millwork per plans | Contractor | Contractor |
| Gypsum Board at Guest Room Ceilings | Contractor | Contractor |
| Indoor Pool & Equipment | Contractor | Contractor |

**PART 2 - PRODUCTS** (Not applicable).

**PART 3 - EXECUTION** (Not applicable).

**END OF SECTION 01010**

# SECTION 01020 - ALLOWANCES

## PART 1 - GENERAL

### RELATED DOCUMENTS:

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to work of this section.

### DESCRIPTION OF REQUIREMENTS:

This section includes furnishing materials and installation of materials as defined herein under "Allowance".

Product Allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts. Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum and not in the allowance.

Comprehensive Allowances shall include the total cost to the Contractor including overhead for products, installation, service, or other work directed by the Architect. Contractor's profit shall be included in the Contract Sum and not in the allowance. The cost of work performed under a Comprehensive Allowance shall be determined in accordance with the procedures set forth for Change Orders excluding Contractor's profit.

The Allowances shall be:

A. Lobby Floor Tile $3.00 per square foot (Product Allowance)
B. Landscaping & Irrigation System: $50,500.00 (Comprehensive Allowance)
C. Interior in-ground swimming pool as shown on plans: $55,000.00 (Comprehensive Allowance)
D. Guest Bath Floor & Base Tile: $3.00 per square foot (Product Allowance)
E. Public Toilets Floor & Base Tile: $5.00 per square foot (Product Allowance)
F. Pool Area Floor & Wall Tile: $3.25 per square foot (Product Allowance)
G. Pantry Area Floor & Base Tile: $2.25 per square foot (Product Allowance)
H. Entertainment Cabinet @ Breakfast Area: $12,000 (Comprehensive Allowance)
I. Art Glass @ Breakfast Area/Corridor: (Product Allowance)

The Contractor shall assist the Owner in obtaining bids for the materials covered by allowances and shall contract for such materials with the material bidder selected by the Owner.

All unused portions of allowances shall be refunded to the Owner by an appropriate change order.

END OF SECTION 01020

# SECTION 01040 - PROJECT COORDINATION

## PART 1 - GENERAL

### RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to work of this section.

### DESCRIPTION OF WORK:

Unless otherwise agreed to in writing with the Owner, the General Contractor together with their selected Subcontractors shall include all items listed below as a part of their work and shall not rely upon the Architect or Owner to provide any product or work except where explicitly stated, in order to provide a completed product. Contractor shall perform all preparatory work and integral work items necessary to complete the work as contracted. Contractor shall include all cleaning, temporary equipment and accessories as itemized below in order to complete the work as contracted.

Minimum administrative and supervisory requirements necessary for coordination of work on the project include but are not necessarily limited to the following:

Coordination with all sub-contractors and Prime Contractor.
Commencing with preparation work, relocation or hook-up to utilities at the appropriate stages.
Means and methods of construction.
Lead and coordination at meetings.
Administrative and supervisory personnel.
Prompt ordering of critical, long-lead items.
Notification of anticipated construction problems immediately.
Advance Notification of utility shut downs.
Safety, barricades, signs and protection of the public.
Surveys, records or reports.
Limitations for use of site.
Special reports.
General installation provisions.
Cleaning and protection.
Conservation and salvage.

Contractor shall provide a field superintendent that will be ultimately responsible for all coordination, construction methods, communication and field decisions. This job superintendent shall be on site during all working hours, unless otherwise accepted to the contrary by the Owner.

### COORDINATION AND MEETINGS:

General: Contractor shall prepare a brief written memorandum for construction meetings and special coordination activities. Include such items as required notices, requirements and reports. Distribute this memorandum to the Architect, Owner and other entities performing work at the project site. Prepare similar memorandum for separate contractors where interfacing of their work is required.

## SURVEYS AND RECORDS/REPORTS:

General: Working from lines and levels established by the property survey, establish and maintain bench marks and other dependable markers. Establish bench marks and markers to set lines and levels for work at each story of construction and elsewhere as needed to properly locate each element of the project. Calculate and measure required dimensions as shown within recognized tolerances. Drawings shall not be scaled to determine dimensions. Advise entities performing work, of marked lines and levels provided for their use.

Survey Procedures: Before proceeding with the layout of actual work, verify the layout information shown on the drawings, in relation to the property survey, location of surrounding structures, and existing benchmarks. Notify the Architect of any discrepancies immediately. As work proceeds, check every major element for line, level and plumb. Maintain a surveyor's log or record book of such checks; make this log or record book available for the Architect or Engineer's reference. Record deviations from required lines and levels, and advise the Architect or Engineer promptly upon detection of deviations that exceed indicated or recognized tolerances. Record deviations which are accepted, and not corrected, on record drawings.

## LIMITATIONS ON USE OF THE SITES:

General: Limitations on site usage as well as specific requirements that impact site utilization are indicated on the drawings and by other contract documents, and are consistent with previous construction activities in locality of Project. In addition to these limitations and requirements the Contractor shall administer allocation of available space equitably among entities needing both access and space so as to produce the best overall efficiency in performance of the total work of the project. Schedule deliveries so as to minimize space and time requirements for storage of materials and equipment on site.

Contractors shall provide temporary storage of items that need to be stored under cover, or under controlled conditions in a separate temporary structure, and not within the existing building areas.

## SPECIAL REPORTS:

General: Submit special reports directly to the Owner within two days of an occurrence. Submit a copy of the report to the Architect/Engineer and other entities that are affected by the occurrence.

Reporting Unusual Events: When an event of an unusual and significant nature occurs at the site, the Prime Contractor shall prepare and submit a special report. List chain of events, persons participating, response by the Contractor's personnel, an evaluation of the results or effects and similar pertinent information. Advise the Owner in advance when such events are known or predictable.

Reporting Accidents: Contractor shall prepare and submit reports of significant accidents, at site and anywhere else work is in progress. Record and document data and actions. For this purpose, a significant accident is defined to include events where personal injury is sustained, or property loss of substance is sustained, or where the event posed a significant threat of loss or personal injury. Submit a copy of all accidents to Owner and Architect/Engineer.

## PART 2 - PRODUCTS (Not Applicable).

## PART 3 - EXECUTION

## GENERAL INSTALLATION PROVISIONS:

Pre-Installation Conferences: Contractor shall hold a preinstallation meeting at the project site approximately 72 hours (3 calendar days) before installation of each unit of work which requires coordination with other work. Installer and representatives of the manufacturers and fabricators who are involved in or affected by that unit of work, and with its coordination or integration with other work that has preceded or will follow shall attend this meeting. Advise the Architect/Engineer of scheduled meeting dates for their attendance.

Refer to each specification section for required pre-installation conferences, including concrete, roof work and overhead cranes.

Installer's Inspection of Conditions: The Installer of each major unit of work, or Prime Contractor, shall inspect the substrate to receive the work and conditions under which the work is to be performed. Do not proceed with the work until unsatisfactory conditions are properly prepared.

Recheck measurements and dimensions of the work, as an integral step of starting each installation.

Install each unit-of-work during weather conditions and project status which will ensure the best possible results in coordination with the entire work. Isolate each unit of work from incompatible work as necessary to prevent deterioration.

Coordinate enclosure of the work with required inspections and tests, so as to minimize the necessity of uncovering the work for that purpose.

Mounting Heights: Where mounting heights are not indicated, mount individual units of work at industry recognized standard mounting heights for the particular application indicated. Refer questionable mounting height choices to the Architect/Engineer for final decision.

## CLEANING AND PROTECTION:

General: During handling and installation of work at the project site, clean and protect work in progress and adjoining work at the basis of continuous maintenance. Contractor shall ensure that protective covering is on installed work where it is required to ensure freedom from damage or deterioration at time of substantial completion.

Clean and perform maintenance on installed work as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

Limiting Exposures of Work: To the extent possible through reasonable control and protection methods, prime contractor shall supervise performance of the work in such a manner and by such means which will ensure that none of the work, whether completed or in progress, or existing conditions which are to remain after construction will be subjected to harmful, dangerous, damaging or otherwise deleterious exposure during the construction period. Such exposures include, where applicable, but not by way of limitation the following:

Excessive static or dynamic loading.
Excessive internal or external pressures.
Excessively high or low temperatures.
Thermal shock.
Excessive Vibration.
Excessively high or low humidity.
Air contamination or pollution.

Water or ice.
Solvents.
Chemicals.
Light.
Radiation.
Puncture.
Abrasion.
Heavy traffic.
Soiling.
Combustion.
Electrical current.
High speed operation, improper lubrication, unusual wear
Incompatible interface.
Destructive testing.
Misalignment.
Excessive weathering.
Unprotected storage.
Improper shipping or handling.
Theft.
Vandalism.

END OF SECTION 01040

# SECTION 01045 - CUTTING AND PATCHING

## PART 1 - GENERAL

### RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to work of this section.

### DESCRIPTION OF REQUIREMENTS:

Definition: "Cutting and patching" includes cutting into existing construction to provide for the installation or performance of other work and subsequent fitting and patching required to restore surfaces to their original condition.

"Cutting and patching" is performed for coordination of the work, to uncover work for access or inspection, to obtain samples for testing, to permit alterations to be performed or for other similar purposes.

Cutting and patching performed during the manufacture of products, or during the initial fabrication, erection or installation processes is not considered to be "cutting and patching" under this definition. Drilling of holes to install fasteners and similar operations are also not considered to be "cutting and patching".

Contractor shall perform the cutting and patching required to complete the work, or shall subcontract such work for a complete job and final product.

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

Unless otherwise specified requirements of this section apply to mechanical and electrical work. Refer to Division-15 and Division-16 sections for additional requirements and limitations on cutting and patching of mechanical and electrical work.

### QUALITY ASSURANCE:

Requirements for Structural Work: Do not cut and patch structural work in a manner that would result in a reduction of load- carrying capacity or of load-deflection ration. Examples of products and assemblies include the following:

Structural Steel.
Cast-in-place Concrete Slabs, Columns, Walls or beams.
Structural Wood Columns, Beams, or Walls.
Miscellaneous structural metals, including lintels, equipment supports, stair systems and similar categories of work.
Miscellaneous Structural Concrete.
Foundation Construction.
Piping, ductwork, vessels and equipment.

Operational and Safety Limitations: Do not cut and patch operational elements or safety related components in a manner that would result in a reduction of their capacity to perform in the manner intended, including energy

performance, or that would result in increased maintenance, or decreased operational life or decreased safety.

Visual Requirements: Do not cut and patch work exposed on the building's exterior or in its occupied spaces in a manner that would, in the Architect/Engineer's opinion, result in lessening the building's aesthetic qualities. Do not cut and patch work in a manner that would result in substantial visual evidence of cut and patch work. Remove and replace work judged by the Owner and Architect/Engineer to be cut and patched in a visually unsatisfactory manner.

If possible retain the original installer or fabricator, or another recognized experienced and specialized firm to cut and patch the following categories of exposed work.

Processed concrete finishes.
Roofing.
Exterior insulation finish system.
Face Brick.
Preformed metal panels.

Acoustical ceilings.
Carpeting.
Gypsum Board.
Acoustical Panels.
HVAC enclosures, cabinets or covers.

## PART 2 - PRODUCTS

### MATERIALS:

General: Except as otherwise indicated, or as directed by the Architect/Engineer, use materials for cutting and patching that are identical to existing materials. If identical materials are not available, or cannot be used, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect. Use materials for cutting and patching that will result in equal-or-better performance characteristics.

## PART 3 - EXECUTION

### INSPECTION:

Before cutting, examine the surfaces to be cut and patched and the conditions under which the work is to be performed. If unsafe or otherwise unsatisfactory conditions are encountered, take corrective action before proceeding with the work.

Before the start of cutting work, meet at the work site with all parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict between the various trades. Coordinate layout of the work and resolve potential conflicts before proceeding with the work.

### PREPARATION:

Temporary Support: To prevent failure provide temporary support of work to be cut.

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

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

Take precautions not to cut existing pipe, conduit or duct serving the building or existing buildings, but scheduled to be relocated until provisions have been made to bypass them.

## PERFORMANCE:

General: Employ skilled workmen to perform cutting and patching work. Except as otherwise indicated or as approved by the Architect/Engineer, proceed with cutting and patching at the earliest feasible time and complete work without delay.

Cutting: Cut the work using methods that are least likely to damage work to be retained or adjoining work. Where possible review proposed procedures with the original installer; comply with original installer's recommendations.

In general, where cutting is required use hand of small power tools designed for sawing or grinding, not hammering and chopping. Cut through concrete and masonry using a cutting machine such as a carborundum saw or core drill to insure a neat hole. Cut holes and slots neatly to size required with minimum disturbance of adjacent work. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces. Temporarily cover openings when not in use.

Comply with requirements of applicable sections of Division 2 where cutting and patching requires excavating and backfilling.

By-pass utility services such as pipe and conduit, before cutting, where such utility services are shown or required to be removed, relocated or abandoned. Cut-off conduit and pipe in walls or partitions to be removed. After by-pass and cutting, cap, valve or plug and seal tight remaining portion of pipe and conduit to prevent entrance of moisture or other foreign matter.

Patching: Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the work.

Where feasible, inspect and test patched areas to demonstrate integrity of work.

Restore exposed finishes of patched areas and where necessary extend finish restoration into retained adjoining work in a manner which will eliminate evidence of patching and refinishing.

Where removal of walls or partitions extends one finished area into another finished area, patch and repair floor and wall surfaces in the new space to provide an even surface of uniform color and appearance. If necessary to achieve uniform color and appearance, remove existing floor and wall coverings and replace with new materials.

Where patch occurs in a smooth painted surface, extend final paint coat over entire unbroken surface containing patch, after patched area has received prime and base coat.

Patch, repair or rehang existing ceilings as necessary to provide an even plane surface of uniform appearance.

## CLEANING:

Thoroughly clean areas and spaces where work is performed or used as access to work. Remove completely point, mortar, oils, putty and items of similar nature. Thoroughly clean piping, conduit and similar features before painting or other finishing is applied. Restore damaged pipe covering to its original condition.

END OF SECTION 01045

# SECTION 01090 - DEFINITIONS AND STANDARDS

## PART 1 - GENERAL

### RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to work of this section.

### DESCRIPTION OF REQUIREMENTS:

General: This section specifies procedural and administrative requirements for compliance with governing regulations and codes and standards imposed upon the Work. These requirements include the obtaining permits, licenses, inspections, releases and similar documentation, as well as payments, statements and similar requirements associated with regulations, codes and standards.

> The term, "Regulations", is defined to include laws, statutes, ordinances and lawful orders issued by governing authorities, as well as those rules, conventions and agreements within the construction industry which effectively control the performance of the work regardless of whether they are lawfully imposed by governing authority or not.

Governing Regulations: Refer to General and Supplementary Conditions for requirements related to compliance with governing regulations.

### DEFINITIONS:

General Explanation: A substantial amount of specification language constitutes definitions of terms found in other contract documents, including the drawings. (Drawings are recognized as being diagrammatic in nature and not completely descriptive of the requirements indicated thereon). Certain terms used in contract documents are defined in this article. Definitions and explanations of this section are not necessarily either complete or exclusive, but are general for the Work to the extent that they are not stated more explicitly in another element of the contract documents.

General Requirements: The provisions or requirements of other Division-1 sections apply to entire work of the Contract and, where so indicated, to other elements which are included in the project.

Indicated: The term "indicated" is a cross-reference to graphic representations, notes or schedules on the Project Drawings. Where terms such as "shown," "noted," "scheduled," and "specified" are used in lieu of "indicated," it is for the purpose of helping the reader locate the cross-reference, and no limitation of location is intended except as specifically noted. Use of the words, "as specified" shall mean "as specified in the Project Specifications, or as specified on the Project Drawings".

Contractor or Prime Contractor: The term "Contractor" is defined as the entity that has a direct contract with the Owner, a document signed by both the Owner and the Contractor. The Contractor may otherwise perform work as a General Contractor, Sub- contractor, Sub-sub-contractor, or supplier. The Contractor shall act as an independent contactor except that he/she is responsible for coordination with the other Prime Contractors.

Directed, Requested, etc.: Where not otherwise explained, terms such as "directed," "requested," "authorized,"

"selected," "approved," "required," "accepted," and "permitted" mean "directed by Architect/Engineer," "requested by the Architect/Engineer," and similar phrases. However, no such implied meaning will be interpreted to extend Architect's/Engineer's responsibility into the Contractor's area of construction supervision.

Approve: Where used in conjunction with the Architect's/ Engineer's response to submittals, requests, applications, inquiries, reports and claims by the Contractor, the meaning of the term "approved" will be held to limitations of the Architect's/Engineer's responsibilities and duties as specified in General and Supplementary Conditions. In no case will the Architect/Engineer's approval be interpreted as a release of the Contractor from responsibilities to fulfill requirements of contract documents.

Project Site: The term "project site," is defined as the space available to the Contractor for performance of the Work, either exclusively or in conjunction with others performing other work as part of the project. The extent of the project site is shown on the drawings, and may or may not be identical with the description of the land upon which the project is to be built.

Furnish: Except as otherwise defined in greater detail, the term "furnish" is used to mean "supply and deliver to the project site, ready for unloading, unpacking, assembly, installation, and similar operations," as applicable in each instance.

Install: Except as otherwise defined in greater detail, the term "install" is used to describe operations at project site including the actual "unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing protecting, cleaning and similar operations," as applicable in each instance.

Provide: Except as otherwise defined in greater detail, the term "provide" means "to furnish and install, complete and ready for intended use," as applicable in each instance.

Installer: The term "installer" is defined as "the entity" (person or firm) engaged by the Contractor, its subcontractor or sub-subcontractor for performance of a particular unit of work at the project site, including installation, erection, application and similar required operations. It is a requirement that installers are experienced in the operations they are engaged to perform.

Testing Laboratories: The term "testing laboratory" is defined as an independent entity engaged to perform specific inspections or tests of the work, either at the project site or elsewhere, and to report, and (if required) interpret results of those inspections or tests. "Testing Engineer" shall be the designated manager of the testing laboratory.

Owner: The term "Owner" is defined as _____.

Architect: Whenever the term "Architect", is used, it shall refer to Richard Molenaar or his assigned representative, who by contract with the Owner is authorized to prepare all drawings and specifications for the new Hotel .

For the terms "discover, recognize, reasonably inferable, approved, knowledge, persistently discover," refer to the Section 00800, Supplementary General Conditions.

## DRAWING SYMBOLS:

General: Except as otherwise indicated, graphic symbols used on the drawings are those symbols recognized in the construction industry for purposes indicated. Where not otherwise noted, symbols are defined by "Architectural Graphic Standards," published by John Wiley & Sons, Inc., seventh edition.

Mechanical/Electrical Drawings: Graphic symbols used on mechanical and electrical drawings are generally aligned with symbols recommended by ASHRAE. Where appropriate, these symbols are supplemented by more specific

symbols as recommended by other technical associations including ASME, ASPE, IEEE and similar organizations. Refer instances of uncertainty to the Architect/Engineer for clarification before proceeding.

## INDUSTRY STANDARDS:

Applicability of Standards: Except where more explicit or stringent requirements are written into the contract documents, applicable construction industry standards have the same force and effect as if bound into or copied directly into the contract documents. Such industry standards are made a part of the contract documents by reference. Individual specification sections indicate which codes and standards the Contractor must keep available at the project site for reference.

Referenced standards (standards referenced directly in the contract documents) take precedence over non-referenced standards that are recognized in the industry for applicability to the Work.

Non-referenced Standards: Except as otherwise limited by the contract documents, non-referenced standards recognized in the construction industry are defined as having direct applicability to the Work and will be enforced for the performance of the Work. The decision as to whether an industry code or standard is applicable to the Work, or as to which of several standards are applicable, is the sole responsibility of the Architect/Engineer.

Publication Dates: Except as otherwise indicated, where compliance with an industry standard is required, comply with standard in effect as of date of contract documents.

Updated Standards: At the request of the Architect/Engineer, Contractor or governing authority, submit a change order proposal where an applicable industry code or standard has been revised and reissued after the date of the contract documents and before the performance of the work affected. The Architect/Engineer will decide whether to issue the change order to proceed with the updated standard.

Conflicting Requirements: Where compliance with two or more standards is specified, and where these standards establish different or conflicting requirements for minimum quantities or quality levels, the most stringent requirement will be enforced, unless the contract documents specifically indicate a less stringent requirement. Refer requirements that are different, but apparently equal, and uncertainties as to which quality level is more stringent to the Architect/Engineer for a decision before proceeding.

Minimum Quantities or Quality Levels: In every instance the quantity or quality level shown or specified is intended to be the minimum for the work to be provided or performed. Unless otherwise indicated, the actual work may either comply exactly, within specified tolerances, with the minimum quantity or quality specified, or may exceed that minimum within reasonable limits. In complying with these requirements, the indicated numeric values are either minimum or maximum values, as noted, or as appropriate for the context of the requirements. Refer instances of uncertainty to the Architect/Engineer for decision before proceeding.

Copies of Standards: The contract documents require that each entity performing work be experienced in that part of the work being performed. Each entity is also required to be familiar with industry standards applicable to that part of the work. Copies of applicable standards are not bound with the contract documents.

Where copies of standards are needed for proper performance of the Work, the Contractor is required to obtain such copies directly from the publication source.

Although certain copies of standards needed for enforcement of the requirements may be required submittals, the Architect/Engineer reserves the right to require the Contractor to submit additional copies of these standards as necessary for enforcement of requirements.

Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. The following acronyms or abbreviations as referenced in contract documents are defined to mean the associated names. Both names and addresses are subject to change, and are believed to be, but are not assured to be, accurate and up-to-date as of date of contract documents:

AA Aluminum Association
818 Connecticut Ave. NW; Washington DC 20006;
202/862-5100

AABC Associated Air Balance Council
1518 K Street, NW, Suite 503
Washington, DC 20005; 202/737-0202

AAMA American Architectural Manufacturers Association
2700 River Road, Suite 118; Des Plaines, IL;
312/699-7310

AAN American Association of Nurserymen
1250 Eye Street, NW; Suite 500; Washington, DC 20005
202/789-2900

AASHTO American Association of State Highway & Transportation Officials
444 North Capitol St.; Washington, DC 20001;
202/624-5800

AATCC American Association of Textile Chemists and Colorists
P.O. Box 12215; Research Triangle Park, NC 27709;
919/549-8141

ACI American Concrete Institute
P. O. Box 19150
Detroit, MI 48219; 313/532-2600

ACIL American Council of Independent Laboratories
1725 K Street, NW
Washington, DC 20006; 202/887-5872

ACPA American Concrete Pipe Association
8320 Old Courthouse Rd
Vienna, VA 22180; 703/821-1990

ACS Acoustical Society of America
335 East 45th Street
New York, NY 10017; 212/661-9404

ADC Air Diffusion Council
230 N. Michigan Ave.; Suite 1200
Chicago, IL 60611; 312/372-9800

AGA American Gas Association

1515 Wilson Blvd.; Arlington, VA 22209; 703/841-8400

AHA American Hardboard Association
877-B Wilmette Road; Palatine,IL 60067;
312/934-8800

AHAM Association of Home Appliance Manufacturers
20 N Wacker Dr.; Chicago, IL 60606; 312/984-5800

AI Asphalt Institute
Asphalt Inst. Bldg.; College Park, MD 20740;
301/227-4258

AIA American Institute of Architects
1735 New York Ave.NW;Washington,DC 20006;
202/626-7300

A.I.I. American Insurance Institute
85 John Street; New York, NY 10038; 212/669-0400

AIHA American Industrial Hygiene Association
475 Wolf Ledges Parkway; Akron, OH 44311; 216/762-2794

AISC American Institute of Steel Construction
400 N. Michigan Ave.; 8th Floor; Chicago, IL 60611;
312/670-2400

AISI American Iron and Steel Institute
1000 16th St., NW; Washington, DC 20036; 202/452-7100

AITC American Institute of Timber Construction
333 W. Hampden Ave.; Englewood, CO 80110; 303/76l-3212

ALI Associated Laboratories, Inc.
Eight Brush Street; Pontiac, MI 48053; 313/335-6114

ALSC American Lumber Standards Committee
P.O. Box 210; Germantown, MD 20874; 301/972-1700

AMCA Ais Movement and Control Association
30 W. University Dr.; Arlington Heights, IL 60004;
312/394-0150

ANSI American National Standards Institute
655 Fifteenth Street, NW,Suite300;
Washington, DC 20015; (202) 639-4090

APA American Plywood Association
P.O. Box 11700; Tacoma, WA 98411; 206/565-6600

A.P.A. American Parquet Association
1650 Union National Plaza; Little Rock, AR 72201;

501/375-5561

API American Petroleum Institute
1220 L Street, NW; Washington, DC 20005
202/682-8000

ARI Air Conditioning and Refrigeration Institute
1501 Wilson Blvd.; Arlington, VA 22209; 703/524-8800

ARMA Asphalt Roofing Manufacturers Association
6288 Montrose Road
Rockville, MD 20852; 301/231-9050

ASC Adhesive and Sealant Council
1600 Wilson Blvd.; Suite 910; Arlington, VA 22209;
703/841-1112

ASHRAE American Society of Heating, Refrigerating & Air-Conditioning Engineers
1791 Tullie Circle, NE; Atlanta, GA 30329; 404/636-8400

ASME American Society of Mechanical Engineers
345 East 47th St.; New York, NY 10017; 212/705-7722

ASPE American Society of Plumbing Engineers
15233 Ventura Blvd.; Sherman Oaks, CA 91403;
213/783-4845

ASSE American Society of Sanitary Engineers
P.O. Box 40362; Bay Village, OH 44140; 216/835-3040

ASTM ASTM
1916 Race St.; Philadelphia, PA 19103; 215/299-5400

AWI Architectural Woodwork Institute
2310 S. Walter Reed Dr.; Arlington, VA 22206;
703/671-9100

AWPA American Wood-Preservers' Association
P.O. Box 849; Stevensville, MD 21666; 301/643-4163

AWPB American Wood Preservers Bureau
P.O. Box 6085; 2772 S. Randolph Street;
Arlington, VA 22206; 703/931-8180

AWS American Welding Society
P.O. Box 351040; 550 Le Jeune Rd., NW; Miami, FL 33135
305/443-9353

AWWA American Water Works Association
6666 W. Quincy Ave., Denver, CO 80235; 303/794-7711

BANC Brick Association of North Carolina
P.O. Box 6305; Greensboro, NC 27415; 919/273-5566

BHMA Builders' Hardware Manufacturers Association
60 East 42nd St., Room 511; New York, NY 10165;
212/682-8142

BIA Brick Institute of America
11490 Commerce Park Drive, Suite 300;
Reston, VA 22091; 703/620-0010

BIFMA Business and Institutional Furniture Manufacturer's Association
2335 Burton St., S.E.; Grand Rapids, MI 49506;
616/243-1681

CAUS Color Association of the United States
343 Lexington Avenue; New York, NY; 10016
212/683-9531

CAGI Compressed Air and Gas Institute
c/o Thomas Associates, Inc.
1230 Keith Building; Cleveland, OH 44115; 216/241-7333

CBM Certified Ballast Manufacturers Association
Hanna Building, Suite 772; 1422 Euclid Avenue;
Cleveland, OH 44115; 216/241-0711

CDA Copper Development Association
Box 1840; Greenwich Office Part 2; Greenwich, CT 06836
203/625-8210

CGA Compressed Gas Association
1235 Jefferson Davis Highway; Arlington, VA 22202
703/979-0900

CISPI Cast Iron Soil Pipe Institute
1499 Chain Bridge Rd.; Suite 203; McLean, VA 22101;
703/827-9177

CLPA California Lathing and Plastering Association
25332 Narbonne, Suite 170; Lomita, CA 90717
213/539-6080

CRI Carpet and Rug Institute
Box 2048; Dalton, GA 30720; 404/278-3176

CRSI Concrete Reinforcing Steel Institute
933 Plum Grove Road; Schaumburg, IL 60195;
312/490-1700

CTI Ceramic Tile Institute

700 N. Virgil Ave.; Los Angeles, CA 90029; 213/660-1911

DHI Door and Hardware Institute
7711 Old Springhouse Rd.; McLean, VA 22102; 703/556-3990

DLPA Decorative Laminate Products Association (Formerly the National Association of Plastic Fabricators)
Hulman Building; 20th Floor; 120 West Second Street; Dayton, OH 45402; 513/228-1041

ECSA Exchange Carriers Standards Association
Four Century Drive, 3rd Floor; Parsippany, NJ 07054; 201/538-6111

EIA Electronic Industries Association
2001 Eye St., NW; Washington, DC 20006; 202/457-4900

EIMA Exterior Insulation Manufacturers Association
P.O. Box 75037; Washington, DC 20013; 202/783-6582

ETL ETL Testing Laboratories, Inc.
P.O. Box 2040; Route 11, Industrial Park; Courtland, NY 13045; 607/753-6711

FCI Fluid Controls Institute
P.O. Box 9036; Morristown, NJ 07960; 201/829-0990

FGMA Flat Glass Marketing Association
White Lakes Professional Bldg; 3310 Harrison; Topeka, KS 66611; 913/266-7013

FM Factory Mutual System
1151 Boston-Providence Turnpike; Norwood, MA 02062
617/762-4300

FTI Facing Tile Institute
c/o Box 8880; Canton, OH 44711 216/488-1211

GA Gypsum Association
1603 Orrington Ave.; Evanston; IL 60201; 312/491-1744

HEI Heat Exchange Institute
1230 Keith Building; Cleveland, OH 44115; 216/241-7333

HI Hydronics Institute
P.O.Box218;35 Russo Place;Berkeley Heights,NJ 07922
201/464-8200

HMA Hardwood Manufacturers Association
805 Sterick Building; Memphis, TN 38103 901/525-8221

ICEA Insulated Cable Engineers Association, Inc.
P.O. Box P; South Yarmouth, MA 02664; 617/394-4424

IEC International Electrotechnical Commission (Available from ANSI)
655 Fifteenth Street, NW, Suite 300;
Washington, DC 20015; 202/639-4090

IEEE Institute of Electrical and Electronic Engineers, Inc.
345 E. 47th St.; New York, NY 10017; 212/705-7926

IES Illuminating Engineering Society of North America
345 E. 47th Street; New York, NY 10017; 212/705-7926

IGCC Insulating Glass Certification Council
Route 11; Industrial Park; Cortland, NY 13045
607/753-6711

ILI Indiana Limestone Institute of America
Stone City Bank Bldg.; Suite 400; Bedford, IN 47421;
812/275-4426

IMSA International Municipal Signal Association
P.O. Box 8249; Fort Worth, TX 76112; 817/429-8638

IRI Industrial Risk Insurers
85 Woodland St.; Hartford, CT 06102; 203/525-2601

ISA Instrument Society of America
P.O. Box 12277; 67 Alexander Drive;
Research Triangle Park, NC 27709; 919/549-8411

LPI Lightning Protection Institute
P.O. Box 406; 48 N. Ayer Street; Harvard, IL 60033;
815/943-7211

MBMA Metal Building Manufacturer's Association
1230 Keith Bldg; Cleveland, OH 44115; 216/241-7333

MCA Mechanical Contractors Association of America
5410 Grosvenor Lane; Suite 120; Bethesda, MD 20814;
301/897-0770

MIA Marble Institute of America
33505 State St.; Farmington, MI 48024; 313/746-5558

ML/SFA Metal Lath/Steel Framing Association
221 N. LaSalle St., Suite 2026; Chicago, IL 60601;
312/346-1600

MSS Manufacturers Standardization Society of the Valve and Fittings Industry
127 Park Street, NE; Vienna, VA 22180; 703/281-6613

NAAMM National Association of Architectural Metal Mfrs.
221 N. La Salle St.; Chicago, IL 60601; 312/346-1600

NAPF National Association of Plastic Fabricators (Now DLPA)

NBGQA National Building Granite Quarries Association
c/o H.E. Fletcher Co.; West Chelmsford, MA 08163

NBHA National Builders Hardware Association (Now Part of DHI)
711 Old Springhouse Rd.; McLean, VA 22101; 703/556-3990

NCMA National Cement Masonry Association
P.O. Box 781; Herndon, VA 22070; 703/435-4900

NCRPM National Council on Radiation Protection and Measurement
7910 Woodmont Ave.; Suite 1016; Bethesda, MD 20814;
301/657-2652

NEC National Electrical Code (by NFPA)

NECA National Electrical Contractors Association
7315 Wisconsin Ave.; Bethesda, MD 20814; 301/657-3110

NEII National Elevator Industry, Inc.
600 Third Ave.; New York, NY 10016; 212/986-1545

NEMA National Electrical Manufacturers Association
2101 L St., NW, Suite 300;
Washington, D. C. 20037; 202/457-8400

NFPA National Fire Protection Association
Batterymarch Park, Quincy, MA 02269; 617/770-3000

N.F.P.A. National Forest Products Association
1619 Massachusetts Ave., NW; Washington, DC 20036
202/797-5800

NHLA National Hardwood Lumber Association
P.O. Box 34518; Memphis, TN 38184; 901/377-1818

NKCA National Kitchen Cabinet Association
P.O. Box 6830; Falls Church, VA 22046; 703/237-7580

NOFMA National Oak Flooring Manufacturers Association
804 Sterick Bldg.; Memphis, TN 38013; 901/526-5016

NPA National Particleboard Association
18928 Premier Court, Gaithersburg, MD 20879;
301/670-0604

NPCA National Paint and Coating Association

1500 Rhode Island Avenue, N.W.; Washington, DC 20005;
202/462-6272

NRCA National Roofing Contractors Association
8600 Bryn Mawr Ave.; Chicago, IL 60631; 312/693-0700

NSF National Sanitation Foundation
P.O. Box 1468; 3475 Plymouth Rd.; Ann Arbor, MI 48106;
313/769-8010

NSSEA National School Supply and Equipment Association
1500 Wilson Blvd.; Arlington, VA 22209; 703/524-8819

NTMA National Terrazzo and Mosaic Association
3166 Des Plaines Ave.; Suite 24; Des Plaines, IL 60018;
312/635-7744

NWMA National Woodwork Manufacturers Association (Now NWWDA)

NWWDA National Wood Window and Door Association
(Formerly NWMA)
205 West Touhy Avenue; Park Ridge, IL 60068;
312/823-6747

PCI Prestressed Concrete Institute
20 N. Wells St.; Chicago, IL 60606; 312/346-4071

PDI Plumbing and Drainage Institute (c/o Austin O.Roche,Jr.)
5342 Blvd. Pl.; Indianapolis, IN 46208; 317/251-5298

PEI Porcelain Enamel Institute
1911 N. Fort Myer; Arlington, VA 22209; 703/527-5257

RFCI Resilient Floor Covering Institute
966 Hungerford Drive; Suite 12-B; Rockville, MD 20805;
301/340-8580

RIS Redwood Inspection Service
591 Redwood Highway; Suite 3100; Mill Valley, CA 94941;
415/381-1304

RMA Rubber Manufacturers Association
1400 K Street, NW; Washington, DC 20005 202/682-4800

SAMA Scientific Apparatus Makers Association
1101 16th St., NW; Washington, DC 20036; 202/223-1360

SDI Steel Deck Institute
P.O. Box 3812; St. Louis, MO 63122; 314/965-1741

S.D.I. Steel Door Institute
(c/o A.P. Wherry and Associates, Inc.)

14600 Detroit Avenue; Cleveland, OH 44107; 216/266-7700

SGCC Safety Glazing Certification Council
Route 11; Industrial Park; Cortland Park, NY 13045;
607/753-6711

SHLMA Southern Hardwood Lumber Manufacturers Association
(Now HMA)

SIGMA Sealed Insulating Glass Manufacturers Association
111 E. Wacker Dr.; Chicago, IL 60601; 312/644-6610

SJI Steel Joist Institute
1205 48th Street, North; Suite A;
Myrtle Beach, SC 29577; 803/449-0487

SMACNA Sheet Metal & Air Conditioning Contractors' National
Association
P.O. Box 70; Merrifield, VA 22116; 703/790-9890

SPIB Southern Pine Inspection Bureau
4709 Scenic Hgy.; Pensacola, FL 32504; 904/434-2611

SPRI Single Ply Roofing Institute
1800 Pickwick Avenue; Glenview, IL 60025; 312/724-7700

SSPC Steel Structures Painting Council
4400 5th Avenue; Pittsburgh, PA 15213; 412/578-3327

SWI Steel Window Institute (c/o Thomas Associates, Inc.)
1230 Keith Bldg, Cleveland, OH 44115; 216/241-7333

TCA Tile Council of America
P.O. Box 326; Princeton, NJ 08540; 609/921-7050

TIMA Thermal Insulation Manufacturers Association
7 Kirby Plaza; Mt. Kisco, NY 10549; 914/241-2284

TPI Truss Plate Institute
583 D'Onofrio Drive; Suite 200; Madison, WI 53719
608/833-5900

UL Underwriters Laboratories
333 Pfingsten Rd.; Northbrook, IL 60062; 312/272-8800

WCLIB West Coast Lumber Inspection Bureau
P.O. Box 23145; Portland, OR 97223; 503/639-0651

WIC Woodwork Institute of California
P.O. Box 11428; Fresno, CA 93773; 209/233-9035

WRI Wire Reinforcement Institute
8361 A Greensboro Drive; McLean, VA 22102; 703/790-9790

WSC Water Systems Council
221 N. LaSalle St.; Chicago, IL 60601; 312/346-1600

WSFI Wood and Synthetic Flooring Institute
4415 West Harrison Street; Suite 242 C;
Hillside, IL 60162; 312/449-2933

WWPA Western Wood Products Association
1500 Yeon Blg.; Portland, OR 97204; 503/224-3930

W.W.P.A. Woven Wire Products Association
2515 N. Nordica Ave.; Chicago, IL 60635; 312/637-1359

Federal Government Agencies: The names and titles of federal government standard or specification producing agencies are frequently abbreviated. The following acronyms or abbreviations as referenced in the contract documents indicate the names of standard or specification producing agencies of the federal government. Names and addresses are subject to change but are believed to be, but are not assured to be, accurate and up-to-date as of the date of the contract documents.

CE Corps of Engineers
(US Dept. of the Army); Chief of Engineers - Referral;
Washington, DC 20314; 202/693-6456

CFR Code of Federal Regulations
Available from the Government Printing Office;
North Capitol Street between G and H Streets, NW;
Washington, DC 20402; 202/783-3238;
(Material is usually first published in the Federal Register)

CPSC Consumer Product Safety Commission
1111 Eighth Street, NW; Washington, DC 20207;
202/634-7700

CS Commercial Standard (U.S. Dept. of Commerce)
Government Printing Office; Washington, DC 20402;
202/377-2000

DOC Department of Commerce
14th Street and Constitution Avenue, NW;
Washington, DC 20230; 202/377-2000

DOT Department of Transportation
400 Seventh Street, NW; Washington, DC 20590;
202/426-4000

EPA Environmental Protection Agency
401 M Street, SW; Washington, DC 20460; 202/829-3535

FAA Federal Aviation Administration
(U.S. Dept. of Transportation)

800 Independence Avenue, SW; Washington, DC 20590;
202/426-4000

FCC Federal Communications Commission
1919 M Street, NW; Washington, DC 20554; 202/632-7000

FHA Federal Housing Administration
(U.S. Dept. of Housing and Urban Development)
451 Seventh Street, SW; Washington, DC 20201
202/755-5995

FS Federal Specification
(General Services Administration)
Specifications Unit (WFSIS); 7th and D Streets, NW;
Washington, DC 20406; 202/472-2205 or 472-2140

GSA General Services Administration
F Street and 18th Street, NW; Washington, DC 20405;
202/655-4000

MIL Military Standardization Documents
(U.S. Dept. of Defense)
Naval Publications and Forms Center; 5801 Tabor Avenue;
Philadelphia, PA 19120

NBS National Bureau of Standards
(U.S. Dept. of Commerce)
Gaithersburg, MD 20234; 301/921-1000

OSHA Occupational Safety and Health Administration
(U.S. Dept. of Labor)
Government Printing Office; Washington, DC 20402;
202/783-3238

PS Product Standard of NBS
(U.S. Dept. of Commerce)
Government Printing Office; Washington, DC 20402;
202/783-3238

REA Rural Electrification Administration
(U.S. Dept. of Agriculture)
14th Street and Independence Avenue, SW;
Washington, DC 20250; 202/382-1255

USDA U.S. Department of Agriculture
Independence Avenue between 12th & 14th Streets, NW;
Washington, DC 20250; 202/447-4929

USPS U.S. Postal Service
475 L'Enfant Plaza, SW; Washington, DC 20260;
202/245-4000

GOVERNING REGULATIONS/AUTHORITIES:

General: The procedure followed by the Architect/Engineer has been to contact governing authorities where necessary to obtain information needed for the purpose of preparing contract documents; recognizing that such information may or may not be of significance in relation to the Contractor's responsibilities for performing the Work. Contact governing authorities directly for necessary information and decisions having a bearing on performance of the Work.

Copies of Correspondence: During the preparation of the contract documents, the Architect/Engineer maintained a file of correspondence with governing authorities. This file is available at the Architect's/Engineer's office for reference by bidders/contractors. The Architect/Engineer will provide, if requested, copies of such applicable correspondence at the cost of reproduction.

Attached Copies: Certain items of correspondence are believed to include information which is generally applicable to performance of the Work. These items have been reproduced and included in the Project Manual at the end of this section, as follows:

Copies of Regulations: Obtain copies of the following regulations and retain at the project site during the Contract Time, available for reference by parties at the site who have a reasonable need for such reference.

Trade Union Jurisdictions: The Contractor shall maintain, and shall require prime subcontractors to maintain, complete current information on jurisdictional matters, regulations actions and pending actions, as applicable to the Work. Discuss new developments at appropriate project meetings at the earliest feasible dates. Record information of relevance along with the action agreed upon. The manner in which contract documents have been organized and subdivided is not intended to be an indication of jurisdictional or trade union agreements. Assign and subcontract the work, and employ tradesmen and laborers, in a manner which will not unduly risk jurisdictional disputes of a kind which could result in conflicts, delays, claims and losses in the performance of the Work.

**SUBMITTALS:**

Permits, Licenses and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence and records established in conjunction with compliance with standards and regulations bearing upon performance of the work.

**PART 2 - PRODUCTS** (Not Applicable)

**PART 3 - EXECUTION** (Not Applicable)

**END OF SECTION 01090**

# SECTION 01310 - SCHEDULES, REPORTS, PAYMENTS

## PART 1 - GENERAL:

### RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to work of this section.

### COORDINATION:

The General Contractor shall provide the arena for all subcontractors to list and submit all reports and activities required by provisions of this section and other sections, so as to provide consistency and logical coordination between the reports. The Contractor shall maintain coordination and correlation between separate reports by updating the Architect/Engineer at WEEKLY time intervals.

### PROGRESS SCHEDULE:

Bar-Chart Schedule: Contractor(s) shall adhere to project schedule and lists of deadlines and dates included at the end of this section and as required to sequence or complete the various components of the work. The Contractor(s) shall then prepare and submit a bar-chart type progress schedule for their work component(s) not more than 7 days after the date established for commencement of the work. On the schedule, indicate a time bar for each category or unit of work to be performed on or off-site, properly sequenced and coordinated with other elements of work. Show completion of the work sufficiently in advance of the date established for substantial completion of the work.

Resubmit updated charts as necessary to accurately reflect to progess of the work, or as requested by Owner or Architect.

### SUBMITTAL SCHEDULE:

General: Immediately after the development and acceptance of the fully developed progress schedule, prepare a complete schedule of work-related submittals. Submit this schedule within 10 days of the date required for establishment of progress schedule. Correlate this submittal schedule with the listing of principal subcontractors, as required by the General Conditions, and with the "listing of products" or "procurement schedule" as specified in "Products and Substitutions" sections and elsewhere in contract documents.

### PROGRESS MEETINGS, REPORTING:

General: In addition to specific coordination and pre- installation meetings for each element of work, and other regular project meetings held for other purposes, the General Contractor shall hold a general progress meeting, on an average basis of every other week, or more frequently as required by the General Contractor or Owner. Progress meeting shall be held in the offices of the General Contractor until such time that facilities are made available on-site. The sub-contractor(s) shall make the arrangements for all meetings and use of the General Contractor's offices with the General Contractor.

Each Sub-contractor that is then involved in planning, coordination or performance of work, shall be properly represented at each meeting. The General Contractor shall review each entity's present and future needs including

interface requirements, time, sequences, deliveries, access, site utilization, temporary facilities and services, hours of work, hazards and risks, housekeeping, change orders, and documentation of information for payment requests. Parties shall discuss whether each element of current work is ahead of schedule, on time, or behind schedule in relation with updated progress schedule. Determine how behind-schedule work will be expedited, and secure commitments from entities involved in doing so. Discuss whether schedule revisions are required to ensure that current work and subsequent work will be completed within Contract Time. Review everything of significance which could affect progress of the work.

Initial Progress Meeting: Schedule initial progress meeting, recognized as "Pre-Construction Meeting", for a date not more than 5 days after date of commencement of the work. Use it as an organizational meeting, and review responsibilities and personnel assignments.

Schedule Updating: Immediately following each progress meeting, where revisions to progress schedule have been made or recognized, the Contractor shall revise progress schedule.

Pre-installation conferences shall be held at the project site, and shall be coordinated by the General Contractor.

The General Contractor shall record and distribute meeting notes for all progress meetings and pre-installation conferences.

## CONDITION APPRAISAL REPORT:

General: **Prior to construction, and Contractor's initial Application for Payment,** Contractor shall prepare a Condition Appraisal Report to the Owner and the Architect. The report shall document as a matter of record the existing condition of the project area and work in place which could reasonably be susceptible to damage or disturbance as a result of the construction. The report shall also indicate the Contractor's recommendations for protection of the in-place construction components.

**Unless otherwise stated herein, the extent of the Condition Appraisal shall be determined by the Contractor as deemed necessary to protect himself and the Owner against future claims of property damage and personal injury by anyone.**

## SCHEDULE OF VALUES:

General: Contractor shall prepare the schedule of values, as required by the General Conditions, in conjunction with the preparation of the progress schedule. Correlate the preparation of schedule of values and the progress schedule. Correlate preparation of schedule of values and progress schedule. Correlate line items with other administrative schedules and forms required for the work, including the progress schedule, payment request form, listing of subcontractors, schedule of allowances, schedule of alternates listing of products and principal suppliers and fabricators, and schedule of submittals. Provide breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of payment requests and progress reports.

Breakdown principal subcontract amounts into several line items.

Material/Fabrication Values: For each unit of work where payment requests will be made on account of materials or equipment purchased, fabricated, delivered, but not yet installed, show "initial value" for payment request and "value added" for subsequent stage or stages of completion on that unit of work.

Unit Cost Allowances: Show the line item value as a product of the unit cost x measured quantity as estimated from the best indication in the Contact Documents. Approved changes in the work on unit cost

items shall be recorded for each unit cost allowance as a product of the unit cost x measured quantity actually constructed. Provide separate columns in the application for payment which record a total of unit quantities constructed to date, and unit quantities requested on each application for payment.

## PAYMENT REQUESTS:

General: Except as otherwise indicated, the progress payment cycle is to be regular. Contractor's application must be consistent with previous applications and payments. Certain applications for payment, such as the initial application, the application at substantial completion, and the final payment application involve additional requirements.

Waivers of Lien: For each payment application, submit waivers of lien from every entity (including Contractor) who could lawfully and possibly file a lien in excess of $100 arising out of the Contract, and related to work covered by the payment. Submit partial waivers for the amount requested prior to deduction or retainage on each item. When the application shows completion of an item, submit final or full waivers. Owner reserves the right to designate which entities involved in the work must submit waivers.

Waiver Delays: Each progress payment must be submitted with Contractor's waiver for period of construction covered by application. At the Contractor's option, each progress payment may be submitted with waivers from the subcontractors, or sub- contractors and suppliers for the previous period of construction covered by previous application. The final payment application must be submitted together with or preceded by final or complete waivers from every entity involved with performance of the work covered by the previous payment request.

Waiver Forms: Submit waivers on forms, and executed in a manner, acceptable to Owner.

Payment Application Times: The "date" for each progress "payment" is as indicated in Owner-Contractor Agreement or, if none is indicated therein, it is the 15th day of each month. The period of construction work covered by each payment request is the period indicated in Owner-Contractor Agreement or, if none is indicated therein, it is period ending 15 days prior to date for each progress payment, and starting day following end of preceding period.

The "date" for each progress "payment" to sub-contractors and suppliers is as indicated in Owner-Contractor Agreement or, if none is indicated therein, Contractor shall make payment to sub-contractors and suppliers no later than seven (7) days after receiving payment from the Owner.

Payment Applications Forms: AIA Document G702 and Continuation Sheets; available from "Publications, a Division of the AIA Service Corporation", 1735 New York Ave., NW, Washington, DC 20006 (also available at most local AIA chapter offices). Continuation form, showing a breakdown of values, must be used. At least one submittal shall be made on the original AIA form, published and distributed by the AIA Service Corporation.

Application Preparation: Except as otherwise indicated, complete every entry provided for on the form, including notarization and execution by authorized persons. Incomplete applications will be returned by Architect/Engineer without action. Entries must match current data of schedule of values and progress schedule and report. Listing must include amounts of change orders issued prior to last day of the "period of construction" covered by application.

Initial Payment Application: Unless otherwise required, the principal administrative actions and submittals which must precede or coincide with submittal of first payment application can be summarized as follows, but not necessarily by way of limitation:

Schedule of Values for Project Components - building, site, site utilities (overall format to be used)
Listing of subcontractors and principal suppliers and fabricators.

Progress schedule (preliminary if not final).
Schedule of principal products.
Condition Appraisal Report for surrounding buildings and site.
Performance and/or payment bonds (if required).
Evidence satisfactory to Owner that Contractor's insurance coverages have been secured.
Initial progress report, including report of pre-construction meeting.
Schedule of unit prices.

Application at Time of Substantial Completion: Following issuance of Architect's or Engineer's final "certificate of substantial completion," and also in part as applicable to prior certificates on portions of completed work as designated, a "special" payment application may be prepared and submitted by Contractor. The principal administrative actions and submittals which must proceed or coincide with such special applications can be summarized as follows, not necessarily by way of limitation:

Occupancy permits and similar approvals or certifications by governing authorities and franchised services, assuring Owner's full access and use of completed work.

Warranties (guarantees), maintenance agreements and similar provisions of contract documents.

Test/adjust/balance records, maintenance instructions, meter readings, start-up performance reports, and similar change- over information germane to Owner's occupancy, use, operation and maintenance of completed work.

Final cleaning of the work.

Application for reduction (if any) of retainage, and consent of surety.

Advice to Owner on coordination of shifting insurance coverages, including proof of extended coverages as required.

Final progress photographs, where required.

Listing of Contractor's incomplete work, recognized as exceptions to Architect's/Engineer's certificate of substantial completion.

Final Condition Appraisal Report from Contractor.

Record Shop Drawings as requested by Owner for Owner's File.

For Final Payment Application refer to Section 01700, project Closeout.

Application Transmittal: Submit 3 copies of each payment application, one copy of which is completed with waivers of lien and similar attachments. Transmit each copy with a transmittal form listing those attachments, and recording appropriate information related to application in a manner acceptable to Architect/Engineer. Transmit to Architect/Engineer by means of ensuring receipt within 24 hours.

**PART 2 - PRODUCTS (Not Applicable)**

**PART 3 - EXECUTION (Not Applicable)**

**END OF SECTION 01310**

# SECTION 01340 - SHOP DRAWINGS AND SAMPLES

## PART 1 - GENERAL

### RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to work of this section.

### DESCRIPTION OF REQUIREMENTS:

General: This section specifies procedural requirements for non- administrative submittals including shop drawings, product data, samples and other miscellaneous work-related submittals. Shop drawings, product data, samples and other work-related submittals are required to amplify, expand and coordinate the information contained in the Contract Documents.

Shop drawings are technical drawings and data that have been specially prepared for this project, including but not limited to the following items:

- Fabrication and installation drawings.
- Setting diagrams.
- Shopwork manufacturing instructions.
- Templates.
- Patterns.
- Coordination drawings (for use on-site).
- Schedules.
- Design mix formulas.
- Contractor's engineering calculations.

Standard information prepared without specific reference to a project is not considered to be shop drawings.

Product data includes standard printed information on manufactured products that has not been specially-prepared for this project, including but not limited to the following items:

- Manufacturer's product specifications and installation
- Standard color charts.
- Catalog cuts.
- Roughing-in diagram and templates.
- Standard wiring diagrams.
- Printed performance curves.
- Operational range diagrams.
- Mill reports.
- Standard product operating and maintenance manuals.
- Pre-engineered calculations.
- Existing test reports demonstrating product performance.

Samples are physical examples of work, including but not limited to the following items:

- Partial sections of manufactured or fabricated work.
- Small cuts or containers of materials.
- Complete units of repetitively-used materials.

Swatches showing color, texture and pattern.
Prefinished products.
Color range sets.
Units of work to be used for independent inspection and testing.

Mock-ups are special forms of samples, which are too large or otherwise inconvenient for handling in the manner specified for transmittal of sample submittals.

Miscellaneous submittals are work-related, non-administrative submittals that do not fit in the three previous categories, including, but not limited to the following:

Specially-prepared and standard printed warranties.
Maintenance agreements.
Workmanship bonds.
Survey data and reports.
Project photographs.
Testing and certification reports.
Record drawings.
Field measurement data.
Operating and maintenance manuals.
Keys and other security protection devices.
Maintenance tools and spare parts.
Overrun stock.

## RELATED WORK:

Refer to all other sections within this specification as each section will have specific requirements that relate to this section.

Refer to other Division-1 sections and other contract documents for specifications on administrative, non-work-related submittals. Such submittals include, but are not limited to the following items:

Permits.
Payment applications.
Performance and payment bonds.
Insurance certificates.
Inspection and test reports.
Schedule of values.
Progress reports.
Listing of subcontractors.

## SUBMITTAL PROCEDURES:

General: Refer to the General Conditions for basic procedures for submittal handling:

Coordination: Coordinate the preparation and processing of submittals with the performance of the work. Coordinate each separate submittal with other submittals and related activities such as testing, purchasing, fabrication, delivery and similar activities that require sequential activity.

Coordinate the submittal of different units of interrelated work so that one submittal will not be delayed by the Architect need to review a related submittal. The Architect reserves the right to withhold action on any

submittal requiring coordination with other submittals until related submittals are forthcoming.

Note that the specification has been pre-editted to include only those items specifically required for visual inspection and verification. The Architect reserves the right to reject and disallow all work related to a specific product when the contractor fails to submit per the specification. Any work that is a result of this failure shall be corrected at no expense to the Owner and shall have no effect on the Contract Time. The onus is therefore on the contractor to ensure that all submittals are made to the Architect.

Scheduling: In each appropriate administrative submittal, such as the progress schedule, show the principal work- related submittals and time requirements for coordination of submittal activity with related work.

Coordination of Submittal Times: Prepare and transmit each submittal to the Architect/Engineer sufficiently in advance of the scheduled performance of related work and other applicable activities. Transmit different kinds of submittals for the same unit of work so that processing will not be delayed by the Architect's need to review submittals concurrently for coordination.

Review Time: Allow sufficient time so that the installation will not be delayed as a result of the time required to properly process submittals, including time for resubmittal, if necessary. Advise the Architect on each submittal, as to whether processing time is critical to the progress of the work, and if the work would be expedited if processing time could be shortened.

Allow approximately one week for the Architect's initial processing of each submittal. Allow a longer time period where processing must be delayed for coordination with subsequent submittals. The Architect will attempt to process the submittals in a shorter period of time when possible. The Architect will advise the Contractor promptly when it is determined that a submittal being processed must be delayed for coordination.

Allow one week for reprocessing each submittal.

No extension of time will be authorized because of the Contractor's failure to transmit submittals to the Architect/Engineer sufficiently in advance of the work: plan ahead!

Submittal Preparation: The Architect shall submit to the Contractor the standard office form which is to be attached to each submittal. A set of these copies shall be given to the Contractor prior to the first submittal. Complete the entire left section of each sheet, using separate sheets for work of differing divisions or sections.

Submittal of Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from the Contractor to the Architect, and to other destinations as indicated, by use of a transmittal form. Submittals received from sources other than the Contractor will be returned to the sender "without action".

Shop Drawings: Information required on shop drawings includes, dimensions, identification of specific products and materials which are included in the work, compliance with specified standards and notations of coordination requirements with other work. Provide special notation of dimensions that have been established by field measurement. Highlight, encircle or otherwise indicate deviations from the contract documents on the shop drawings.

Do not permit shop drawings copies without an appropriate final "Action" marking by the Architect/Engineer to be used in connection with the work.

Preparation: Submit newly prepared information, drawn to accurate scale on sheets not less than 8-1/2" x 11"; except for actual pattern or template type drawings, the maximum sheet size shall not exceed 36" x 48". Indicate the name of the firm that prepared each shop drawing and provide appropriate project identification

in the title block. Provide a space not less than 20 sq. in. beside the title block for marking the record of the review process and the Architect/Engineer's "Action" marking.

Do not reproduce contract documents or copy standard printed information as the basis of shop drawings.

Submittal: Provide one correctable translucent reproducible print and three blue-line or black-line prints; the reproducible print will be returned. Architect shall retain a copy from the reproducible sheets for himself.

Product Data: General information required specifically as product data includes manufacturer's standard printed recommendations for application and use, compliance with recognized standards of trade associations and testing agencies, and the application of their labels and seals (if any), special notation of dimensions which have been verified by way of field measurement, and special coordination requirements for interfacing the material, product or system with other work.

Whereas manufacturer, fabricator or similar entity shown on the product data submittal is a firm listed on the Owner's preferred vendor listing, mark the Architect/Engineer's copies with "Owner`s List" notation.

## ARCHITECT'S ACTION:

General: Except for submittals for the record and similar purposes, where action and return on submittals is required or requested, the Architect will review each submittal, mark with appropriate "Action", and where possible return within 2 weeks of receipt. Where the submittal must be held for coordination the Architect/Engineer will so advise the Contractor without delay.

Retain shop drawings in the field that are marked with the Architects/Engineers stamp of acceptance or approval.

## PART 2 - PRODUCTS (Not Applicable),

## PART 3 - EXECUTION (Not Applicable).

**END OF SECTION 01340**

# SECTION 01400 - QUALITY CONTROL SERVICES

## PART 1 - GENERAL

### RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to work of this section.

### DESCRIPTION OF REQUIREMENTS:

General: Required inspection and testing services are intended to assist in the determination of probable compliance of the work with requirements specified of indicated. These required services do not relieve the Contractor of responsibility for compliance with these requirements or for compliance with requirements of the contract documents. The contractor shall coordinate the request for inspection and testing services with the Construction Coordinator and the Architect/Engineer for all testing and inspection.

Definitions: The requirements of this section relate primarily to customized fabrication and installation procedures, not to the production of standard products. Quality control services include inspections and tests and related actions including reports, performed by independent agencies and governing authorities, as well as directly by the Contractor. These services do not include Contract enforcement activities Construction Observation/Contract Administration performed directly by the Architect or Engineer.

Specific quality control requirements for individual units of work are specified in the section of these specifications that specify the individual element of the work. These requirements, including inspections and tests, cover both production of standard products, and fabrication of customized work. These requirements also cover quality control of the installation procedures.

Inspections, tests and related actions specified in this section and elsewhere in the contract documents are not intended to limit the Contractor's own quality control procedures which facilitate overall compliance with requirements of the contract documents.

Requirements for the Contractor to provide quality control services as required by the Architect/Engineer, the Owner, governing authorities or other authorized entities are not limited by the provisions of this section.

### RESPONSIBILITIES:

Contractor Responsibilities: Except where they are specifically indicated as being the Owner's responsibility, or where they are to be provided by another identified entity, inspections, tests and similar quality control services are each separate Contractor's responsibility; these services also include those specified to be performed by an independent agency and not directly by the Contractor. Costs for these services shall be included in the Contract Sum.

The Owner through the Architect/Engineer will engage and pay an independent agency, testing laboratory or other qualified firm to perform quality control services specified as being the Owner's responsibility.

Retest Responsibility: Where results of required inspections, tests or similar services prove unsatisfactory and do not indicate compliance of related work with the requirements of the contract documents, then retests are the responsibility of the Contractor, regardless of whether the original test was the Contractor's responsibility, or paid for by the Contractor. Retest the work revised or replaced by the Contractor is the Contractor's responsibility, where required tests were performed on original work.

Responsibility for Associated Services: Each Contractor is required to cooperate with the independent agencies performing required inspections, tests and similar services. Provide such auxiliary services as are reasonably requested. Notify the testing agency sufficiently in advance of operations to permit assignment of personnel. These auxiliary services include but are not necessarily limited to the following:

Providing access to the work.
Taking samples or assistance with taking samples.
Delivery of samples to test laboratories.
Security and protection of samples and test equipment at the project site.

Coordination: The Contractor and each independent agency engaged to perform inspections, tests and similar services for the project shall coordinate the sequence of their activities so as to accommodate required services with a minimum of delay in the progress of the work. In addition to Contractor and each independent testing agency shall coordinate their work so as to avoid the necessity of removing the replacing work to accommodate inspections and tests. The Contractor is responsible for scheduling times for inspections, tests, taking of samples and similar activities.

## QUALITY ASSURANCE:

Qualification for Service Agencies: Except as otherwise indicated, engage inspection and test service agencies, including independent testing laboratories, which are prequalified as complying with "Recommended Requirements for Independent Laboratory Qualification" by the American Council of Independent Laboratories, and which are recognized in the industry as specialized in the types of inspections and tests to be performed.

## SUBMITTALS:

General: Refer to Division-1 section on "Submittals" for the general requirements on submittals. Submit a certified written report of each inspection, test or similar service, directly to the Architect/Engineer, in duplicate, unless the Contractor is responsible for the service. If the Contractor is responsible for the service, submit a certified written report of each inspection, test or similar service through the Contractor, in duplicate. Submit additional copies of each written report directly to the governing authority, when the authority so directs.

Report Data: Written reports of each inspection, test or similar service shall include, but not be limited to the following:

Name of testing agency or test laboratory.
Dates and locations of samples and tests or inspections.
Names of individuals making the inspection or test.
Designation of the work and test method.
Complete inspection or test data.
Test results.
Interpretations of test results.
Notation of significant ambient conditions at the time of sample-taking and testing.
Comments or professional opinion as to whether inspected or tested work complies with requirements of the contract
documents.
Recommendations on retesting, if applicable.

## PART 2 - PRODUCTS (Not Applicable).

## PART 3 - EXECUTION

### REPAIR AND PROTECTION:

General: Upon completion of inspection, testing, sample-taking and similar services performed on the work, repair damaged work and restore substrates and finishes to eliminate deficiencies, including deficiencies in the visual qualities of exposed finishes. Comply with the contract document requirements for "Cutting and Patching". Protect work exposed by or for quality control service activities, and protect repaired work. Repair and protection is the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.

END OF SECTION 01400

# SECTION 01500 - TEMPORARY FACILITIES

## PART 1 - GENERAL

### RELATED DOCUMENTS:

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to work of this section.

### DESCRIPTION OF REQUIREMENTS:

This section specifies administrative and procedural requirements for temporary services and facilities, including such items as temporary utility services, temporary construction and support facilities, and project security and protection.

Temporary Walls: Construct temporary walls that are required to secure or protect areas of the work.

Use Charges: No cost or usage charges for temporary services or facilities are chargeable to the Owner or Architect. Verify all charges and other fees with the City of Olive Branch and local utilities. Refer to Section 01010, on permits required. Cost or use charges for temporary services or facilities will not be accepted as a basis for claims for a change-order extra.

Temporary utility services required for use at the project site and are to be paid for by the Contractor to include but are not limited to the following:

Water service and distribution.
Temporary electric power and light as needed.
Telephone service: contractor shall obtain separate line.

Provide adequate utility capacity at each stage of construction. Prior to availability of temporary utilities at the site, provide trucked-in services for start-up of construction operations.

Temporary construction and support facilities required for the project include but not limited to the following:

Temporary heat, as necessary, as determined by the contractor.
Sanitary facilities.
Portable Toilets.
Temporary enclosures.
Temporary exit doors.
Temporary Hoists and Cranes.
First aid station.
Project identification, bulletin boards and signs.
Waste disposal services.
Rodent and pest control.
Construction aids and miscellaneous general services and facilities.

Security and protection facilities and services required for the project include but are not limited to the following:

Temporary fire protection.
Barricades, warning signs, lights.
Environmental protection.

Signage.
Site Fence.

## QUALITY ASSURANCE:

1. Regulations: Comply with requirements of local laws and regulations governing construction and local industry standards, in the installation and maintenance of temporary services and facilities, including but not limited to the following:

Building Codes, including local requirements for permits, testing and inspection.
Health and safety regulations.
Utility company regulations and recommendations governing temporary utility services.
Police and Fire Department rules and recommendations.
Police and Rescue Squad recommendations.
Environmental protection regulations governing use of water and energy, and the control of dust, noise and other nuisances.

In addition, comply with "Environmental Impact" commitments the Owner or previous Owners of the site may have made to secure approval to proceed with construction of the project.

2. Pre-construction Meeting: Refer to Section 03310 and other sections, for pre-construction meeting requirements.

3. Standards: Comply with the requirements of NFPA Code 241, "Building Construction and Demolition Operations", the ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition", and the NECA National Joint Guideline NJG-6 "Temporary Job Utilities and Services".

Refer to "Guidelines for Bid Conditions for Temporary Job Utilities and Services", as prepared jointly by AGC and ASC for industry recommendations.

Trade Jurisdictions: The assigned responsibilities for the installation and operation of temporary utilities are not intended to interfere with the normal application of trade regulations and union jurisdictions applicable to the work.

## SUBMITTALS:

Reports and Permits: During progress of the work, submit copies of reports and permits required by governing authorities, or necessary for installation and efficient operation of temporary services and facilities.

Submit copies of reports of tests, inspections, meter readings and similar procedures performed on temporary utilities before, during and after performance of the work. Submit copies of permits, easements and similar documentation necessary for the installation, use and operation of temporary utility services. Reports and permits required for the use of temporary utility services and their use include but are not limited to the following:

Temporary heat.
Ventilation.
Temporary electric power and light.

## JOB CONDITIONS:

General: Contractor shall provide temporary service at each strategic location, when the service or facility is first needed to avoid delay in performance of the work. Maintain, expand as required and modify temporary services and facilities as needed throughout the progress of the Work. Do not remove until services or facilities are no longer needed, or are replaced by the authorized use of completed permanent facilities.

With the establishment of the job progress schedule, establish a schedule for the implementation and termination of service for each temporary utility. At the earliest feasible time, and when acceptable to the Construction Manager, change over from the use of temporary utility service to the use of the permanent service, to enable removal of the temporary utility and to eliminate possible interference with completion of the work.

Conditions of Use: Operate temporary services and facilities in a safe and efficient manner. Do not overload temporary services or facilities, and do not permit them to interfere with the progress of the work. Do not allow unsanitary conditions, public nuisances or hazardous conditions to develop or persist on the site.

Temporary Utilities: Do not permit the freezing of pipes, flooding or the contamination of water sources.

Temporary Construction and Support Facilities: Maintain temporary facilities in such a manner as to prevent discomfort to other contractors' employees and users. Take necessary fire prevention measures. Maintain temporary support facilities in a sanitary manner so as to avoid health problems and other deleterious effects.

Security and Protection: Maintain site security and protection facilities in a safe, lawful and publicly acceptable manner. Take necessary measures to prevent erosion of the site.

## PART 2- PRODUCTS:

## MATERIALS AND EQUIPMENT:

General: Contractor shall provide new materials and equipment for temporary services and facilities as required; used materials and equipment that are undamaged in serviceable condition may be used, if acceptable to the Architect/Engineer. Provide only materials and equipment that are recognized as being suitable for the intended use, by compliance with appropriate standards.

Temporary Utilities: When the local utility company provides only a portion of the temporary utility, provide the remainder with matching, compatible materials and equipment. Comply with the utility company's recommendations.

Water Hoses: Where shut-off nozzles are used at the water hose discharge, provide heavy-duty abrasion-resistant hoses with a pressure rating greater than the maximum pressure of the water distribution system.

Non-potable water is not at all permitted on site.

Electrical Service: Coordinate with the all trades the use of all temporary service, hook up and capacities. Comply with applicable NEMA, NECA and UL standards and governing regulations for materials and layout of temporary electric service.

Voltage Differences: Provide identification warning signs at power outlets which are other than 110-120 volt power. Provide polarized outlets for plug-in type outlets, to prevent insertion of 110-120 volt plugs into higher voltage outlets.

Ground-Fault Protection: Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button and pilot light, for plug-in connection of power tools and equipment.

Electrical Power Cords: Use only grounded extension cords; use "hard-service" cords where exposed to abrasion and traffic. Use single lengths or use waterproof connectors to connect separate lengths of electric cords, if single lengths will not reach areas of work.

Lamps and Light Fixtures: General contractor shall provide general service incandescent lamps of wattage indicated or required for adequate illumination. Protect lamps with guard cages or tempered glass enclosures, where fixtures are exposed to breakage by construction operations. Provide exterior fixtures where fixtures are exposed to the weather or moisture.

Temporary Construction and Support Facilities: Provide facilities that can be maintained properly throughout their use at the project site.

Heating Units: Provide temporary heating units that have been tested and labeled by UL, FM or another recognized trade association related to the fuel being consumed.

Temporary Offices and Similar Construction: For temporary offices, fabrication shops, storage sheds and similar construction, provide either standard prefabricated or mobile units or the equivalent job-built construction. Provide insulated, weathertight units, heated or air-conditioned where indicated, lockable entrances, operable windows, roofing, foundations adequate for normal loading, including wind loads, serviceable finishes, and mechanical and electrical equipment necessary to achieve ambient conditions indicated.

Hoists, Cranes and Material Lifts: Each Contractor is responsible for their own mechanisms for vertical transport of equipment, materials and employees for the duration of the Project.

Self-Contained Toilet Units: Provide single-occupant self- contained toilet units of the chemical, aerated recirculation, or combustion type, properly vented and fully enclosed with a glass fiber reinforced polyester shell or similar non- absorbent material.

Tarpaulins: Provide waterproof, fire-resistant, UL labeled tarpaulins with a flame-spread rating of 15 or less. For temporary enclosures where work is being or will be performed, provide translucent tarpaulins made of nylon reinforced laminated polyethylene to admit the maximum amount of daylight and reduce the need for temporary lighting.

First Aid Supplies: Comply with governing regulations and recognized recommendations within the construction industry.

Drinking Water: Provide potable water approved by local health authorities. Where well water must be used, comply with local health authorities recommendations for type and frequency of testing water for potability.

Security and Protection Facilities. Provide as required:

Fire Extinguishers: Provide Type "A" fire extinguishers for temporary offices and similar spaces where there is minimal danger of electrical or grease-oil-flammable liquid fires. In other locations provide type "ABC" dry chemical extinguishers, or a combination of several extinguishers of NFPA recommended types for the exposures in each case.

Plywood: For fences and vision barriers, provide exterior types, minimum 1/2" thick plywood, prime and finish painted. For safety barriers, sidewalk bridges and similar direct-contact uses, provide minimum 5/8" thick exterior plywood, prime and finish painted.

Open-Mesh Fencing: Provide No. 11-gage galvanizing chain link fabric fencing 6 feet high with galvanized barbed wire top strand and galvanized steel pipe posts, 1-1/2" I.D. for line posts, and 2-1/2" I.D. for corner posts.

TEMPORARY SIGNAGE:

Temporary Signage: Professionally made and painted, weatherproof, temporary signage shall be provided to orient, instruct and warn city employees, the public and workers of hazards, temporary entrances and other conditions. Letters and numbers on any given sign shall be at least 4" in height. These signs shall be installed and moved on a daily basis if necessary. Under this contract, at a minimum provide one of the following signs at various locations on the project site.

AUTHORIZED PERSONNEL ONLY
CONSTRUCTION ZONE

Architect and Owner shall identify locations. Contractor shall provide installation and reinstallation.

Job Sign: Provide a project sign that includes the name of the Owner, Architect, and General Contractor. Architect shall provide a basic layout for sign painter. Sign shall be painted on 4' by 8' sheet of plywood, mounted to the ground as required. Contractor shall include all preparation and erection costs. No other signage shall be allowed on the site for purposes of advertising alone. Contractor shall provide a job information sign.

## PART 3- EXECUTION

### INSTALLATION, GENERAL:

General: Use qualified tradesmen for installation of temporary
services and facilities. Locate temporary services and facilities where they will serve the entire project adequately and result in minimum interference with the performance of the Work.

Relocate, modify and extend services and facilities as required during the course of work so as to accommodate the entire work of the project.

Temporary Electric Power Service: Install as necessary, with service and grounding in compliance with the National Electric Code (NFPA 70). Include necessary meters, transformers, overload protected disconnect and main distribution switch gear.

Power Distribution System: Provide circuits of adequate size and proper characteristics for each use. In general run wiring overhead, and rise vertically where wiring will be at least exposed to damage from construction operations. Provide rigid steel conduit or equivalent raceways for wiring which must be exposed on grade, floors, decks or other areas of possible damage or abuse.

Provide overload-protected disconnect switch for each temporary circuit and each temporary lighting circuit, located at the power distribution center.

For power hand tools and task lighting, provide temporary 4- gang outlets at each floor level, spaced so that a 100 foot extension cord can reach each area of work. Provide a separate 110-120 Volt, 20 Amp circuit for each 4-gang outlet (4 outlets per circuit).

Temporary Lighting: Provide local switching of temporary lighting, spaced to allow lighting to be turned off in patterns

to conserve energy and retain light suitable for work-in-progress, access traffic, security check and project lock-up.

Install and operate temporary lighting that will fulfill security and protection requirements, without the necessity of operating the entire temporary lighting system.

Temporary Telephones: Arrange for the local telephone company to install temporary service to the project, for local calls only. Provide service of the type and capacity indicated in other Division-1 sections.

Sewers and Drainage: If existing sewers are available for temporary drainage near the site prior to completion of permanent sewers, provide temporary connections to remove effluent that can be lawfully discharged into the sewers. If existing sewers cannot be used for discharge, provide drainage ditches, dry wells, waste stabilization ponds and similar discharge facilities to remove effluent that can be lawfully discharged in that manner. If neither existing sewers nor drainage facilities can be lawfully used for discharge of effluent, provide containers to remove and dispose of effluent off the site in a lawful manner.

Connect temporary sewers to the municipal sewer systems in the manner directed by the sewer department officials, located at the site.

## TEMPORARY CONSTRUCTION AND SUPPORT FACILITIES INSTALLATION:

General: Provide a job office at the site acceptable to the Architect and the Owner. Job office shall have a heated/air conditioned office, with table and chairs for at least 6 people.

Temporary Heat: If required for the work, provide temporary heat where indicated or needed for performance of the Work, curing or drying of recently installed work or protection of work in place from adverse effects of low temperatures or high humidity. Select facilities known to be safe and without deleterious effect upon the work in place or being installed. Coordinate with ventilation requirements to produce the indicated ambient condition required and to minimize the consumption of fuel or energy.

Maintain a minimum temperature of 45°F (7°C) in permanently enclosed portions of the building and areas where finished work has been installed.

Heating Facilities: Except where conditions make it necessary to use another system, and where use of the permanent heating system is available and authorized, provide properly vented self- contained LP gas or fuel oil heaters with individual space thermostatic control for temporary heat.

Limit use of gasoline-burning space heaters to the indirect- fired type, located outside the building space or space being heated. Use gasoline-burning space heaters only where the specified system for temporary heating cannot be used.

Do not use open burning or salamander type heating units where prohibited by governing regulations, or when combustible materials are located in or near the space being heated, or when the work installed or being installed includes work which will be exposed to view in the completed project.

Collection and Disposal of Wastes: Establish a system for daily collection and disposal of waste materials from construction areas and elsewhere on the site. Enforce requirements strictly. Do not hold collected materials at the site longer than 7 days during normal weather or 3 days when the daily temperature is expected to rise above 80°F (27°C). Handle waste materials that are hazardous, dangerous, or unsanitary separately from other inert waste by containerizing appropriately. Dispose of waste material in a lawful manner.

Storing of waste on site, burying or burning of waste materials on the site will not be permitted.

Washing waste materials down sewers or into waterways will not be permitted.

Provide rodent proof containers located on each floor level of construction work, to encourage depositing of garbage and similar wastes by construction personnel.

Construction Aids and Miscellaneous Services and Facilities:

General: Design, construct, and maintain construction aids and miscellaneous general services and facilities as needed to accommodate performance of the work. Construction aids and miscellaneous general services and facilities include, but are not limited to the following:

Temporary stairs and ladders.
Temporary hoists, cranes and lifts.
Guardrails and barriers.
Covered walkways.
Walkways.

## SECURITY AND PROTECTION FACILITIES INSTALLATION:

General: Provide a reasonably neat and uniform appearance in security and protection facilities acceptable to the Architect and Owner. If conditions get unacceptable the Architect shall have the final say as to what is "acceptable and reasonable".

Except for utilization of permanent fire protection facilities, as soon as available in each area, do not change over from use of temporary security and protection facilities to use of permanent facilities until substantial completion, or for longer periods of time as requested by the Architect.

Temporary Fire Protection: Until fire protection needs may be fulfilled by permanent facilities, install and maintain temporary fire protection facilities of the types needed to adequately protect against reasonably predictable and controllable fire losses. Comply with the applicable recommendations of NFPA Standard 10 "Standard for Portable Fire Extinguishers". Locate fire extinguishers where they are most convenient and effective for their intended purpose, but provide not less than one extinguisher on each floor at or near each usable stairwell. Store combustible materials in containers in recognized fire-safe locations.

Develop and supervise an overall fire prevention and first-aid fire protection program for personnel at the project site. Review needs with the local fire department officials and establish procedures to be followed. Instruct personnel in methods and procedures to be followed. Post warnings and information and enforce strict discipline. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire protection facilities, stairways and other access routes for fighting fires. Prohibit smoking in hazardous fire exposure areas. Provide supervision of welding operations, combustion type temporary heating units, and similar sources of ignition for possible fires.

Where temporary water outlets are available, provide hoses of sufficient length to reach construction areas. Hang hoses with a warning sign, to the effect that hoses are for fire protection purposes and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

Permanent Fire Protection: At the earliest feasible date in each area of the project, complete installation of the permanent fire protection facility, including connected services, and place into operation and use. Instruct key personnel at the site on how to use facilities which may not be self-explanatory.

Barricades, Warning Signs and Lights: Comply with recognized standards and code requirements for the erection of substantial, structurally adequate barricades where needed to prevent accidents and losses. Paint with appropriate

colors, graphics and warning signs to inform personnel at the site and the public, of the hazard being protected against. Provide lighting where appropriate and needed, including flashing red lights where appropriate.

Environmental Protection: Provide general protection facilities, operate temporary facilities, conduct construction activities, and enforce strict discipline for personnel on the site in ways and by methods that comply with environmental regulations, and that minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result from the performance of work at the site. Avoid the use of tools and equipment which produce harmful noise. Restrict the use of noise making tools and equipment to hours of use that will minimize noise complaints from persons or firms near the project site.

Termination and Removal: Unless the Architect or Owner requests that it be maintained for a longer period of time, remove each temporary service and facility promptly when the need for it or a substantial portion of it has ended, or when it has been replaced by the authorized use of a permanent facility, or no later than substantial completion. Complete, or, if necessary, restore permanent work which may have been delayed because of interference with the temporary service or facility. Repair damaged work, clean exposed surfaces and replace work which cannot be satisfactorily repaired.

END OF SECTION 01500

# SECTION 01631 - PRODUCTS AND SUBSTITUTIONS

## PART 1 - GENERAL

### RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to work of this section.

### DESCRIPTION OF REQUIREMENTS:

Definitions:

Substitutions: The Contractor's requests for changes in the products, materials, equipment and methods of construction required by the contract documents are considered requests for "substitutions", and are subject to the requirements specified herein. All substitutions shall be made through the "Substitution Request Form" only.

Substitutions shall only be considered during the bidding phase and in accordance with the limits defined in the General Conditions. Once a contract is signed, substitutions shall not be considered except if proposed by the Owner/Architect or under unusual circumstances.

All requests for "substitution' or "approved equal" shall be strictly followed by submittal of the "Substitution Request form", included within this section, and at the beginning of this specification. It shall be the contractor's responsibility to ensure that the substitute product is equal to that specified, or to state any differences on the form. Substitutions shall be reviewed by the Architect during the bidding phase of the project.

Revisions to the contract documents, where requested by the Owner, Architect or Engineer are considered as "changes" not substitutions.

Standards: Refer to Division-1 section "Definitions and Standards" for the applicability of industry standards to the products specified for the project, and for the acronyms used in the text of the specification sections.

### QUALITY ASSURANCE:

Source Limitations: To the fullest extent possible, provide
products of the same generic kind, from a single source, for each unit of work, wherever options are available to the contractor.

When it is discovered that specified products are available only from sources that do not or cannot produce an adequate quantity to complete project requirements in a timely manner, consult with the Architect for a determination of what product qualities are most important before proceeding. The Architect will designate those qualities, such as visual, structural, durability, or compatibility, that are most important. When the Architect's determination has been made, select products from those sources that produce products that possess the most important qualities, to the fullest extent possible.

Compatibility of Options: Compatibility of products is a basic requirement of product selection. When the Contractor is given the option of selecting between two or more products for use on the project, the product selected must be compatible with other products previously selected, even if the products previously selected were also Contractor options. The complete compatibility between the various choices available to the Contractor is not assured by the various requirements of the Contract documents, but must be provided by the Contractor.

## SUBMITTALS:

Substitution Request Submittal:

Requests for Substitutions: During the bidding phase, submit each request for substitution, using the "Substitution Request Form" furnished within this specification. Contractor shall fill out form completely: in each request identify the product or fabrication or installation method to be replaced by the substitution; include related specification section and drawing numbers, and complete documentation showing compliance with the requirements for substitutions.

It is in the best interest of the submitting contractor to attach a list of projects built in the State of Mississippi or Tennessee where the proposed product has been previously installed. Include a contact name and date of construction whenever possible.

Substitution requests shall be received by the Architect no later that five (5) days prior to bid due date as established by Owner. Contractor shall include a stamped, self-addressed envelope with the form, if a written response is requested from the Architect. Approvals shall otherwise be indicated in addendum form, but only if accepted.

## PART 2 - PRODUCTS

NOT USED

## PART 3 - EXECUTION

NOT USED:

**END OF SECTION 01631**

COMFORT SUITES

SECTION 01700 - PROJECT CLOSEOUT

## PART 1 - GENERAL

### RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to work of this section.

### DESCRIPTION OF REQUIREMENTS:

Definitions: Project closeout is the term used to describe certain collective project requirements, indicating completion of the Work, or a specific portion of the work, that is to be fulfilled near the end of the Contract time in preparation for final acceptance and occupancy of the Work by the Owner, as well as final payment to the Contractor and the normal termination of the Contract.

Specific requirements for individual units of work are included in the appropriate sections in Divisions 2 through 16.

Time of closeout is directly related to "Substantial Completion" and shall be 30 days after Substantial Completion except where noted otherwise.

### PREREQUISITES TO SUBSTANTIAL COMPLETION:

General: Contractor shall complete the following before requesting the Architect's inspection for certification of substantial completion, either for the entire Work or for portions of the Work. List known exceptions in the request. For a precise, contractual definition of "Substantial Completion", refer to the 'General Conditions of the Contract', AIA document A 201. The following information is in addition, but not in lieu of, the definitions and requirement as set for in document A201.

If substantial completion is to be requested prior to the final payment request, indicate the portion of the Work yet to be 100 % complete, item by item, and indicate the value of incomplete work, and reasons for the Work being incomplete. This shall be included on a separate document(s), and shall be included along with payment request.

Include supporting documentation for completion as indicated in these contract documents.

Submit a statement showing an accounting of changes to the Contract Sum.
Advise Owner of pending insurance change-over requirements.

Submit specific warranties, workmanship/maintenance bonds, maintenance agreements, final certifications and similar documents.

Obtain and submit releases enabling Owner's full, unrestricted use of the Work and access to services and utilities. Where required, include occupancy permits, operating certificates and similar releases.

Submit record drawings, maintenance manuals, final project photographs, damage or settlement survey, property survey, and similar final record information.

Deliver tools, spare parts, extra stocks of material and similar physical items to the Owner.

Make the final change-over of locks and transmit the keys to the Owner. Advise the Owner's personnel of the change-over in security provisions.

Complete start-up testing of systems, and instruction of the Owner's operating and maintenance personnel. Discontinue or change over and remove temporary facilities and services from the project site, along with construction tools and facilities, mock-ups, and similar elements.

Complete final cleaning up requirements, including touch-up painting of marred surfaces.

Touch-up and otherwise repair and restore marred exposed finishes.

Inspection Procedures: Upon receipt of Contractor's request for inspection, the Architect/Engineer will either proceed with inspection or advise Contractor of unfulfilled prerequisites.

Note that the responsibility is on the contractor to ensure that the work is complete, and that minor "touch ups" are performed prior to inspection by Architect for "punch list" items. It is not the desire of the Architect to create a document the size of the specification.

Following the initial inspection, the Architect/Engineer will either prepare the certificate of substantial completion, or will advise Contractor of work which must be performed before the certificate will be issued. The Architect/Engineer will repeat the inspection when requested and when assured that the Work has been substantially completed.

Results of the completed inspection will form the initial "punch-list" for final acceptance.

SUBSTANTIAL COMPLETION FOR VARIOUS PHASES OF COMPLETED WORK

At the request of the General Contractor, for each or any major portion of the phased work that has been substantially completed and is ready for the Owner's use, the Architect will perform a "Punch List" for that segment of the work. After the Substantial Completion date, the Owner may choose to occupy part or all of the facility, therefore it is in the Contractor's best interest to advise the Architect that the punch list is requested, with a minimum of one week's notice, and that the work is ready for occupancy, including all walls, floors, ceilings, roof, mechanical equipment, electrical equipment, finishes, equipment and other items as specified.

The Architect shall not review or assemble a punch list at any area of work where there are a variety of incomplete items to be performed, where there is no heat or electricity, where the space is not fully enclosed, where finishes have not been installed or other similar situations.

**PREREQUISITES TO FINAL ACCEPTANCE:**

General: Complete the following before requesting the Architect/Engineer's final inspection for certification of final acceptance, and final payment as required by the General Conditions. List known exceptions, if any, in request:

Submit the final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.

Submit an updated final statement, accounting for final additional changes to the Contract Sum.

Submit a 'Sworn Construction Statement'.

Submit a certified copy of the Architect/Engineer's final punch-list of itemized work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance and has been

endorsed and dated by the Architect/Engineer.

Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of substantial completion, or else when the Owner took possession of and responsibility for corresponding elements of the Work.

Submit consent of surety.

Submit a final liquidated damages settlement statement, acceptable to Owner.

Submit evidence of final, continuing insurance coverage complying with insurance requirements.

Reinspection Procedure: The Architect/Engineer will reinspect the Work upon receipt of the Contractor's notice that the work, including punch-list items resulting from earlier inspections, has been completed, except for these items whose completion has been delayed because of circumstances that are acceptable to the Architect/Engineer.

Upon completion of reinspection, the Architect/Engineer will either prepare a certificate of final acceptance, or will advise the Contractor of work that is incomplete or of obligations that have not been fulfilled, but are required for final acceptance.

If necessary, the reinspection procedure will be repeated.

## RECORD DOCUMENT SUBMITTALS:

General: Specific requirements for record documents are indicated in the individual sections of these specifications. Other requirements are indicated in the General Conditions. General submittal requirements are indicated in "submittals" sections.

Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for the Architect/Engineer's reference during normal working hours.

Record Drawings: Maintain a record set of blue or black line white-prints of contract drawings and shop drawings in a clean, undamaged condition. Mark-up the set of record documents to show the actual installation where the installed work varies substantially from the work as originally shown. Mark whichever drawing is most capable of showing the actual "field" condition fully and accurately; however, where shop drawings are used for mark-up, record a cross-reference at the corresponding location on the working drawings. Give particular attention to concealed work that would be difficult to measure and record at a later date.

Mark record sets with red erasable pencil and, where feasible, use other colors to distinguish between variations in separate categories of work.

Mark-up new information which is known to be important to the Owner, but for some reason was not shown on either contract drawings or shop drawings.

Note related change-order number where applicable.

Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on cover of each set.

Record Specifications: Maintain one complete copy of the Project Manual, including specifications and addenda, and one copy of other written construction documents such as change orders and similar modifications issued in printed form during construction. Mark these documents to show substantial variations in the actual work performed in

comparison with the text of the specifications and modifications as issued. Give particular attention to substitutions, selection of options and similar information on work where it is concealed or cannot otherwise be readily discerned at a later date by direct observation. Note related record drawing information and product data, where applicable.

Upon completion of the Work, submit record specifications to the Architect for the Owner's records.

Record Product Data: Maintain one copy of each product data submittal. Mark these documents to show significant variations in the actual Work performed in comparison with the submitted information. Include both variations in the products as delivered to the site, and variations from the manufacturer's instructions and recommendations for installation. Give particular attention to concealed products and portions of the Work which cannot otherwise be readily discerned at a later date by direct observation. Note related change orders and mark-up of record drawings and specifications.

Upon Completion of mark-up, submit complete set of record product data to the Architect/Engineer for the Owner's records.

Record Samples Submitted: Immediately prior to date or dates of substantial completion, the Contractor will meet at the site with the Architect/Engineer and the Owner's personnel, if desired, to determine which, if any, of the submitted samples that have been maintained by the Contractor during progress of the Work, are to be transmitted to the Owner for record purposes. Comply with delivery to the Owner's sample storage space.

Miscellaneous Record Submittals: Refer to other sections of these specifications for requirements of miscellaneous record- keeping and submittals in connection with the actual performance of the Work. Immediately prior to the date or dates of substantial completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Architect/Engineer for the Owner's records.

Maintenance Manuals: Organize operating and maintenance data into suitable sets of manageable size. Bind data into individual binders properly identified and indexed. Bind each set of data in a heavy-duty 2-inch, 3-ring vinyl-covered binder, with pocket folders for folded sheet information. Mark the appropriate identification on both front and spine of each binder.

Include the following types of information in operation and maintenance manuals:

Emergency instructions.
Spare parts listing.
Copies of warranties.
Wiring diagrams.
Recommended "turn-around" cycles.
Inspection procedures.
Shop drawings and product data.

## PART 2 - PRODUCTS (Not Applicable)

## PART 3 - EXECUTION

## CLOSEOUT PROCEDURES:

General Operating and Maintenance Instructions: Arrange for each installer of operating equipment and other work that requires regular or continuing maintenance, to meet at the site with the Owners personnel to provide necessary basic instruction in the proper operation and maintenance of the entire Work. Where installers are not experienced in the required procedures, include instruction by the manufacturer's representatives.

As part of this instruction provide a detailed review of the following items(where applicable for each prime contractor):

Maintenance manuals
Record documents
Spare parts and materials
Tools
Lubricants
Fuels
Identification systems
Control sequences
Hazards
Cleaning
Warranties, bonds, maintenance agreements and similar continuing commitments.

As part of this instruction for operating equipment demonstrate the following procedures:

Start-up
Shut-down
Emergency operations
Noise and vibration adjustments
Safety procedures
Economy and efficiency adjustments
Effective and energy utilization

## FINAL CLEANING:

General: Special cleaning requirements for specific units of Work are included in the appropriate sections of Divisions 2 through 16. General Cleaning during the regular progress of the Work is required by the General Conditions and is included under section "Temporary Facilities".

Cleaning: Provide final cleaning of the Work at the time indicated. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit of work to the condition expected from a normal, commercial building cleaning and maintenance program. Comply with the manufacturer's instructions for operations.

Complete the following cleaning operations before requesting the Architect's inspection for certification of substantial completion.

Remove labels which are not required as permanent labels.

Clean transparent materials, including mirrors and glass in doors and windows, to a polished condition. Remove putty and other substances which are noticeable as vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.

Clean exposed exterior and interim hard-surfaced finishes to a dust-free condition, free of dust, stains, films and similar noticeable distracting substances. Restore reflective surfaces to their original reflective condition. Leave concrete floors broom clean. Vacuum carpeted surfaces.

Wipe surfaces of mechanical and electrical equipment clean. Remove excess lubrication and other substances. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps.

Removal of Protection: Except as otherwise indicated or requested by the Construction Manager or Architect, remove temporary protection devices and facilities which were installed during the course of the work to protect previously completed work during the remainder of the construction period.

Compliance: Comply with safety standards and governing regulations for cleaning operations. Do not burn waste materials at the site. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile or other harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner.

END OF SECTION 01700