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 sections, apply to work of this section.

PROJECT/WORK IDENTIFICATION:

General: Project name is "UV Light Disinfection Assembly Lions Water Treatment Plant", LaPlace, Louisiana on Contract Documents prepared by C. J. Savoie Consulting Engineers, Inc. Drawings and Specifications are dated November 2014.

Contract Documents: Indicate the work of the Contract and related requirements and conditions that have an impact on the project. Related requirements and conditions that are indicated on the Contract Documents include, but are not necessarily limited to the following:

Existing site conditions.

Work performed prior to work under this Contract.

Work to be performed concurrently by the Owner.

Requirements for partial Owner occupancy prior to substantial completion of the Contract Work.

Summary by References: Work of the Contract can be summarized by references to the Contract, General Conditions, Supplementary Conditions, Specification Sections, 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.

Abbreviated Written Summary: Briefly and without force and effect upon the Contract Documents, the work of the Contract can be summarized as follows: The work shall include all labor, materials and equipment required for the construction of a 150 square foot ultra violet disinfection cmu block wall building facility located at the lions water plant. construction to include: concrete slab, roofing truss, standing seam metal roof, doors and frame, uv reactors with control panels, flow meter, piping, fittings, valves, electrical, wiring, painting, grading, earthwork and tie-ins to the existing lions water plant distribution piping and all appurtenances necessary to complete the project in accordance with the plans, specifications and all applicable state and local building codes.

CONTRACTOR USE OF PREMISES:

Use of the Site: Confine operations at the site to the areas permitted under Contract. Portions of the site beyond areas on which work is indicated are not to be disturbed. Conform to set rules and regulations affecting the work or any part of the work.

OWNER OCCUPANCY:

Partial Owner Occupancy: The Owner reserves the right to place and install equipment as necessary in completed areas of the building and to occupy such completed areas prior to substantial completion, provided that such occupancy does not substantially interfere with completion of the work. Such placing of equipment and partial occupancy shall not constitute acceptance of the work or any part of the work.

COORDINATION:

General: The work of this Contract includes coordination of the entire work of the project, including preparation of general coordination drawings, diagrams and schedules, and control of site utilization, from beginning of construction activity through project close-out and warranty periods.

END OF SECTION 01010

SECTION 01027 – APPLICATION FOR PAYMENT

PART 1 – GENERAL

RELATED DOCUMENTS

Drawings and General Provisions, of Contract, including General and Supplementary Conditions and other Division – 1 Specification sections, apply to this section.

SUMMARY

This Section specifies administrative and procedural requirements governing the Contractor's Application for Payment.

Coordinate the Schedule of Values and Applications for Payment with the Contractor's Construction Schedule, List of Subcontracts, and Submittal Schedule.

The Contractor's Construction Schedule and Submittal Schedule are included in Section "Submittals".

APPLICATIONS FOR PAYMENT:

Each application for Payment shall be consistent with previous applications and payments as certified by the Engineer and paid for by the Owner.

The initial Application for Payment, the Application for Payment at time of Substantial Completion, and the final Application for Payment involve additional requirements.

Payment Application Times: Progress Applications shall be made monthly to the project Engineer for approval within the first 5 days of each month. The Engineer shall check the application and submit to the Owner within 10 days if the application is in accordance with the work performed. If not, then the application shall be returned to the Contractor for re-submittal.

Application Preparation: Submit a complete application with all required information to reduce research time. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions have been made. A 5 percent retainage shall be withheld for all projects exceeding a project bid cost of $500,000.00 and a 10 percent retainage shall be withheld for all projects in which the project bid cost is less than $500,000.00 in accordance with the State of Louisiana revised Statutes Title 38.

Include amounts of Change Orders and Construction Change Directives issued prior to the last day of the construction period covered by the application.

Transmittal: Submit 3 executed copies of each Application for Payment to the Engineer one copy shall be complete, including waivers of lien and similar attachments, when required. Transmit each copy with a transmittal form listing attachments, and recording appropriate information related to the application in a manner acceptable to the Engineer.

Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit an Application for Payment for 100 percent of the contract including all Change Orders less 5 percent of that amount to be held as retainage for 45 days from the date of acceptance of Substantial Completion.

Administrative actions and submittals that shall proceed or coincide with this application include:

Occupancy permits and similar approvals.
Warranties (guarantees) and maintenance agreements.
Test/adjust/balance records.
Maintenance instructions.
Meter readings.
Start-up performance reports.
Change-over information related to Owner's occupancy, use operations and maintenance.
Final cleaning.
Application for reduction of retainage, and consent of surety.
Advice on shifting insurance coverage.
Final progress photographs.
List of incomplete work, recognized as exceptions to Engineer's Certificate of Substantial Completion.

Final Payment Application: Administrative actions and submittals which must precede or coincide with submittal of the final payment Application for Payment include the following:

Completion of Project closeout requirements.
Completion of items specified for completion after Substantial Completion.
Assurance that unsettled claims will be settled.
Assurance that work not complete and accepted will be completed without undue delay.
Transmittal of required Project construction records to Owner.
Certified property survey.
Proof that taxes, fees and similar obligations have been paid.
Removal of temporary facilities and services.
Removal of surplus materials, rubbish and similar elements.
Change of door locks to Owner's access.

END OF SECTION 01027

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.

SUMMARY:

This Section: specifies administrative and supervisory requirements necessary for Project coordination including, but not necessarily limited to:

Coordination.
Administrative and supervisory personnel.
General installation provisions.
Cleaning and protection.

Field engineering is included in Section "Field Engineering".

Progress meetings, coordination meetings and pre-installation conferences are included in Section "Project Meetings".

Requirements for the Contractor's Construction Schedule are included in Section "Submittals".

COORDINATION:

Coordination: Coordinate construction activities included under various Sections of these Specifications to assure efficient and orderly installation of each part the Work. Coordinate construction operations included under different Sections of the Specifications that are dependent upon each other for proper installation, connection, and operation.

Where installation of one part of the Work is dependent on installation of other components, either before or after its own installation, schedule construction activities in the sequence required to obtain the best results.

Where availability of space is limited, coordinate installation of different components to assure maximum accessibility for required maintenance, service and repair.

Make adequate provisions to accommodate items scheduled for later installation.

Where necessary, prepare memoranda for distribution to each party involved outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.

Prepare similar memoranda for the Owner and separate Contractors where coordination of their work is required.

Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

Preparation of schedules.
Installation and removal of temporary facilities.
Delivery and processing of submittals.
Progress meetings.
Project Close-out activities.

Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.

SUBMITTALS:

Coordination Drawings: Prepare and submit coordination Drawings where close and careful coordination is required for installation of products and materials fabricated off-site by separate entities, and where limited space availability necessitates maximum utilization of space for efficient installation of different components.

Show the interrelationship of components shown on separate Shop Drawings.

Indicate required installation sequences.

Comply with requirements contained in Section "Submittals".

Refer to Division – 15 Section "Basic Mechanical Requirements," and Division – 16 Section "Basic Electrical Requirements" for specific coordination Drawing requirements for mechanical and electrical installations.

Staff Names: Within 15 days of Notice to Proceed, submit a list of the Contractor's principal staff assignments, including the Superintendent and other personnel in attendance at the site: identify individuals, their duties and responsibilities: list their addresses and telephone numbers.

Post copies of the list in the Project meeting room, the temporary field office, and each temporary telephone.

PART 2 – PRODUCTS (Not Applicable).

PART 3 – EXECUTION

GENERAL INSTALLATION PROVISIONS:

Inspection of Conditions: Require installer of each major component to inspect both the substrate and conditions under which work will be performed. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to installer.

Manufacturer's Instructions: Comply with manufacturer's instructions and recommendations to extent these are more explicit or more stringent than requirements indicated contained in Contract Documents.

Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.

Provide attachment and connection devices and methods necessary for securing work. Secure Work true to line and level. Allow for expansion and building movement.

Visual Effects: Provide uniform joint widths in exposed Work. Arrange joints in exposed Work to obtain the best visual effects. Refer questionable choices to the Architect for final decision.

Recheck Measurements and dimensions of the work before starting each installation.

Install Each Component during weather conditions and project status that will ensure the best possible results. Isolate each part of the completed construction for incompatible material as necessary to prevent deterioration.

Coordinate Temporary Enclosure with required inspections and tests, to minimize necessity of uncovering completed construction for that purpose.

Mounting Heights: Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for particular application indicated. Refer questionable mounting height decisions to the Engineer for final decision.

CLEANING AND PROTECTION:

During handling and installation clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

Clean and maintain completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

Limiting Exposures: Supervise construction activities to ensure that no part of the construction, completed or in progress is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to, the following:

Excessive static or dynamic loading.
Excessive internal or external pressures.
Excessively high or low temperatures.
Thermal shock.
Excessively high or low humidity.
Air contamination or pollution.
Water or ice.
Solvents.
Chemicals.
Light.
Puncture.
Abrasion.
Heavy traffic.
Soiling, staining, and corrosion.
Bacteria.
Rodent and insect infestation.
Combustion.
Electrical Current.
High Speed operation.
Improper lubrication.
Unusual wear and other misuse.
Contact between incompatible materials.
Destructive testing.
Misalignment.
Excessive weathering.
Unprotected storage.
Improper shipping or handling.
Theft.
Vandalism.

END OF SECTION 01040

SECTION 01050 – FIELD ENGINEERING

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 this section.

SUMMARY

General: This Section specifies administrative and procedural requirements for field-engineering services, including, but not necessarily limited to, the following:

Land survey work.

SUBMITTALS

Certificates: Submit a certificate signed by the Land Surveyor or Professional Engineer certifying that the location and elevation of improvements comply with the Contract Documents.

Final Property Survey: Submit 10 copies of the final property survey.

Project Record Documents: Submit a record of work performed and record survey data as required under provisions of Sections "Submittals" and "Project Closeout".

QUALITY ASSURANCE

The Project Engineer shall provide control points for site location and one elevation. The Contractor shall be responsible for all construction surveying including layout work, elevations and profiling for sewer and drainage facility installations.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION

EXAMINATION

The Contractor shall:

Verify layout information shown on the Drawings, in relation to the property survey and existing benchmarks before proceeding to layout the work. Locate and protect existing benchmarks and control points. Preserve permanent reference points during construction.

Do not change or relocate benchmarks or control points without prior written

approval. Promptly report lost or destroyed reference points, or requirements to relocate reference points because of necessary changes in grades or locations.

Promptly replace lost or destroyed project control points. Base replacements on the original survey control points.

Establish and maintain a minimum of two permanent benchmarks on the site, referenced to data established by survey control points.

Existing utilities and equipment: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction.

Prior to construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer and water service piping.

PERFORMANCE

The Contractor shall:

Working from lines and levels established by the property survey, establish benchmarks and markers to set lines and levels at each story of construction and elsewhere as needed to properly locate each element of the Project. Calculate and measure required dimensions within indicated or recognized tolerances. Do not scale Drawings to determine dimensions.

Advise entities engaged in construction activities, of marked lines and levels provided for their use.

As construction proceeds, check every major element for line, level and plumb.

Record deviations from required lines and levels, and advise the Engineer when deviations that exceed indicated or recognized tolerances are detected. On Project Record Drawings, record deviations that are accepted and not corrected.

On completion of foundation wall, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimension, locations, angles and elevations, of construction and sitework.

Site Improvements: Locate and lay out site improvements, including pavements, stakes for grading, fill and topsoil placement, utility slopes and invert elevations by instrumentation and similar appropriate means.

Building Lines and Levels: Locate and lay out batter boards for structures, building foundations, column grids and locations, floor levels and control lines and levels required for mechanical and electrical work.

Existing Utilities: Furnish information necessary to adjust, move or relocate existing structures, utility poles, lines services or other appurtenances located in, or affected by construction. Coordinate with local authorities having jurisdiction.

END OF SECTION 01050

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.

DEFINITIONS:

General Explanation: A substantial amount of specification language constitutes definitions for terms found in other Contract Documents, including the drawings which must be recognized as diagrammatic in nature and not completely descriptive of requirements indicated thereon. Certain terms used in the Contract Documents are defined generally in this article. Definitions and explanations of this section are not necessarily either complete or exclusive, but are general for the work to extent not stated more explicitly in another provision of the Contract Documents.

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

Indicated: The term "Indicated" is a cross-reference to details, notes or schedules on the drawings, to other paragraphs or schedules in the specifications, and to similar means of recording requirements in the Contract Documents. Where terms such as "shown," "noted," "scheduled," and "specified" are used in lieu of "indicated," it is for purpose of helping reader locate cross-reference, and no limitation of location is intended except as specifically noted.

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 Architect/Engineer," etc. However, no such implied meaning will be interpreted to extend Architect's/Engineer's responsibility into Contractor's area of construction supervision.

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

Project Site: The space available to Contractor for performance of the work, either exclusively or in conjunction with others performing other work as part of the project. The

extent of project site is shown on the drawings, and may or may not be identical with description of the land upon which project is to be built.

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

Install: Except as otherwise defined in greater detail, term "install" is used to describe operations at project site including 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, term "provide" means furnish and install, complete and ready for intended use, as applicable in each instance.

Installer: The entity (person or firm) engaged by the Contractor or its subcontractor of sub-subcontractor for the performance of a particular unit of work at the project site, including installation, erection, application and similar required operations. It is a general requirement that such entities (Installers) be expert in operations they are engaged to perform.

Testing Laboratory: An independent entity engaged to perform specific inspections or test for the work, either at project site or elsewhere; and to report and (if required) interpret results of those inspections or tests.

FORMAT AND SPECIFICATION EXPLANATIONS:

Specification Production: None of these explanations will be interpreted to modify substance of requirements. Portions of these specifications have been produced by Engineer's standard methods of editing master specifications, and may contain minor deviations from traditional writing formats. Such deviations are a normal result of this production technique, and no other meaning will be implied or permitted.

Format Explanation: The format of principal portions of these specifications can be described as follow; although other portions may not fully comply and no particular significance will be attached to such compliance or non-compliance:

Sections and Divisions: For convenience, basic unit of specification text is a "section", each unit of which is named and numbered. These are organized into related families of sections, and various families of sections are organized into "divisions", which are recognized as the present industry consensus on uniform organization and sequencing of specifications. The section title is not intended to limit meaning or content of section, nor to be fully descriptive of requirements specified therein, nor to be an integral part of text.

Each section of specifications has been subdivided into 3 (or less) "parts" for

uniformity and convenience (Part 1 – General, Part 2 - Products, and Part 3 – Execution). These do not limit the meaning of and are not an integral part of text, which specifies requirements.

Subordination of Text: Portions of specification text are subordinated to other portions in the following (traditional) manner (lowest level to highest):

Indented (from left margin) paragraphs and lines of text are subordinate to preceding text which is not indented, or which is indented by a lesser amount.

Paragraphs and lines of text are subordinate to subarticle titles, which are printed in upper/lower-case lettering.

Sub articles are subordinate to article titles, which are printed in upper-case lettering.

Subordination (if any) of certain sections (or portions of sections) to other sections is described within those sections.

Underscoring: Used strictly to assist reader of specification text in scanning text for key works in content (for quick recall). No emphasis on or relative importance of text is intended where underscoring is used.

Imperative Language: Used generally in specifications. Except as otherwise indicated, requirements expressed imperatively are to be performed by Contractor. For clarity of reading at certain locations, contrasting subjective language is used to describe responsibilities which must be fulfilled indirectly by Contractor, or when so noted, by others.

Section Numbering: Used to facilitate cross-references in Contract Documents. Sections are placed in project manual in numeric sequence; however, numbering sequence is not complete, and listing of sections at beginning of Project Manual must be consulted to determine numbers and names of specification sections in Contract Documents.

Page Numbering: Numbered independently for each section; recorded in listing of sections (Index or Table of Contents) in Project Manual. Section number is shown with page number at bottom of each page, to facilitate location of text in Project Manual.

Line Numbering: Provided on each page (either margin), strictly for purpose of facilitating subsequent references to specific text, for addenda, purchasing, subcontracting, modifications, change orders, and similar references.

Specification Content: Because of methods by which this project specifications has been produced, certain general characteristics of content, and conventions in use of language are explained as follows:

Specifying Methods: The techniques or methods of specifying to record requirements varies throughout text, and may include "prescriptive", "open generic-descriptive", "compliance with standards", "performance", "proprietary", or a combination of these. The method used for specifying one unit of work has no bearing on requirements for another unit of work.

Overlapping and Conflicting Requirements: Where compliance with 2 or more industry standards or sets of requirements is specified, and overlapping of those different standards or requirements establishes different or conflicting minimums or levels of quality, most stringent requirement (which is generally recognized to be also most costly) is intended and will be enforced, unless specifically detailed language written into the Contract Documents (not be way of reference to an industry standard) clearly indicates that a less stringent requirement is to be fulfilled. Refer apparently equal but different requirements, and uncertainties as to which level of quality is more stringent, to Engineer for a decision before proceeding.

Contractor's Options: Except for overlapping or conflicting requirements, where more than one set of requirements are specified for a particular unit of work, option is intended to be Contractor's regardless of whether specifically indicated as such.

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

Specialists; Assignments: In certain instances, specification text requires (or at least implies) that specific work be assigned to those units of work. These must be recognized as special requirements over which Contractor has no choice or option. These assignments must not be confused with (and are not intended to interfere with) normal application of regulations, union jurisdictions and similar conventions. One purpose of such assignments is to establish which party or entity involved in a specific unit of work is recognized as "expert" for indicated construction processes or operations. Nevertheless, final responsibility for fulfillment of entire set of requirements remains with Contractor.

Trades: Except as otherwise indicated, the use of titles such as "carpentry" in specification text, implies neither that the work must be performed by an accredited or unionized tradesperson of corresponding generic name (such as "carpenter"), nor that specified requirements apply exclusively to work by tradesperson of that corresponding generic name.

Abbreviations: The language of specifications and other Contract Documents is of the abbreviated type in certain instances, and implies words and meanings which will be appropriately interpreted. Actual word abbreviations of a self-explanatory nature have been included in texts. Specific abbreviations have been established, principally for lengthy technical terminology and primarily in conjunction with coordination of specification requirements with notations on drawings and in schedules. These are frequently defined in section at first instance of use. Trade association names and titles of general standards are frequently abbreviated. Singular works will be interpreted as plural and plural words will be interpreted as singular where applicable and where full context of the Contract Documents so indicates.

DRAWING SYMBOLS:

General: Except as otherwise indicated, graphic symbols used on 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.

M/E Drawings: Graphic symbols used on mechanical/electrical drawings are generally aligned with symbols recommended by ASHRAE, supplemented by more specific symbols where appropriate as recommended by other recognized technical associations including ASME, ASPE, IEEE, and similar organizations. Refer instances of uncertainty to Engineer for clarification before proceeding.

INDUSTRY STANDARDS:

General Applicability of Standards: Applicable standards of construction industry have same force and effect (and are made a part of Contract Documents by reference) as if copied directly into Contract Documents, or as if published copies were bound herewith.

Referenced standards (referenced directly in Contract Documents or by governing regulations) have precedence over non-referenced standards, which are recognized in industry for applicability to work.

Non-referenced standards recognized in the construction industry are hereby defined, except as otherwise limited in Contract Documents, to have direct applicability to the work, and will be so enforced for performance of the work.

Publication Dates: Except as otherwise indicated, where compliance with an industry standard is required, comply with standard in effect as of dated of Contract Documents.

Copies of Standards: Provide where needed for proper performance of the work; obtain directly from publication sources.

Abbreviations and Names: 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
AAMA	Architectural Aluminum Manufacturers Association 35 E. Wacker Dr.; Chicago, IL 60601; 312/782-8256
AAN	American Association of Nurserymen 230 Southern Bldg.; Washington, DC 20005; 202/737-4060
AASHTO	American Association of State Highway & Transportation Officials 444 North Capital; 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 Box 19150 Redford Stat.; Detroit, MI 48219; 313/532-2600
ACIL	American Council of Independent Laboratories 1725 K St., NW; Washington, DC 20006; 202/659-3766
ADC	Air Diffusion Council 435 N. Michigan Ave.; Chicago, IL 60611; 312/527-5494
AGA	American Gas Association 1515 Wilson Blvd.; Arlington, VA 22209; 703-841-8400
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; 301/277-4258
AIA	American Institute of Architects 1735 New York Ave., NW; Washington, DC 20006; 202/626-7474
A.I.A.	American Insurance Association 85 John St.; New York, NY 10038; 212/433-4400
AISC	American Institute of Steel Construction 400 N. Michigan Ave.; 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; 303/761-3212
AMCA	Air Movement and Control Association 30 W. University Dr.; Arlington Heights, IL 60004; 312/394-0150
ANSI	American National Standards Institute 25 West 43rd St., 4th Floor; New York, NY 10036; 212/642-4900
APA	American Plywood Association P. O. Box 11700; Tacoma, WA 98411; 206/565-6600
ARI	Air Conditioning and Refrigeration Institute 1815 N. Fort Myer Dr.; Arlington, VA 22209; 703/524-8800
ASC	Adhesive and Sealant Council 1600 Wilson Blvd.; Arlington, VA 22209; 703/841-1112
ASHRAE	American Society of Heating, Refrigerating & Air-Conditioning Engineers 1791 Tullie Cir., NE; Atlanta, GA 30329; 404/636-8400
ASME	American Society of Mechanical Engineers 345 E. 47th St.; New York NY 10017; 212/644-7722
ASPE	American Society of Plumbing Engineers 15233 Ventura Blvd.; Sherman Oaks, CA 91403; 213/783-4845
ASEE	American Society of Sanitary Engineering P. O. Box 9712; Bay Village, OH 44140; 216/835-3040
ASTM	American Society for Testing and Materials 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 7735 Old Georgetown Rd.; Bethesda, MD 20014; 301/652-2109
AWPB	American Wood Preservers Bureau 2772 S. Randolph St.; Arlington, VA 22206: 703/931-8180

AWS	American Welding Society 550 LeJune Rd.; Miami, FL 33135; 305/642-7090
AWWA	American Water Works Association 6666 W. Quincy Ave.; Denver, CO 80235; 0-303/794-7711
BHMA	Builder's Hardware Manufacturers Association (c/o TGAM) 60 E. 42nd St., Rm. 1807; New York, NY 10017; 212/682-8142
BIA	Brick Institute of America 1750 Old Meadow Rd.; McLean, VA 22101; 703/893-4010
CDA	Copper Development Association 405 Lexington Ave.; New York, NY 10017; 212/953-7300
CE	Corps of Engineers (U. S. Dept. of the Army) Washington, DC 20315
CISPI	Cast Iron Soil Pipe Institute 1499 Chain Bridge Rd.; McLean, VA 22101; 703/827-9177
CRSI	Concrete Reinforcing Steel Institute 180 N. LaSalle St.; Chicago, IL 60601; 312/372-5059
CS	Commercial Standard of NBS (U. S. Dept. of Commerce) Government Printing Office; Washington, DC 20402
DHI	Door and Hardware Institute 1815 N. Ft. Myer Dr.; Arlington, VA 22209; 703/527-2060
EIA	Electronic Industries Association 2001 Eye St., NW; Washington, DC 20006; 202/457-4900
FAA	Federal Aviation Administration (U. S. Dept. of Transportation) 800 Independence Ave.; SW; Washington, DC 20590
FCC	Federal Communications Commission 1919 M St., NW; Washington, DC 20554; 202/632-7000
FCI	Fluid Controls Institute P. O. Box 3854; Tequesta, FL 33458; 305/746-6466
FGMA	Flat Glass Marketing Association 3310 Harrison; Topeka, KS 6611; 913/266-7013
FHA	Federal Housing Administration (U. S. Dept. of HUD) 451 – 7th St., SW; Washington, DC 20201

FM	Factory Mutual Engineering Corp. 1151 Boston-Providence Turnpike; Norwood, MA 02062; 617/762-4300
FS	Federal Specification (General Services Admin.) Bldg. 197, Washington Navy Yard, SE; Washington, DC 20407
FTI	Facing Tile Institute Box 8880; Canton, OH 44711; 216/488-1211
GA	Gypsum Association 1603 Orrington Ave.; Evanston, IL 60201; 312/491-1744
HPMA	Hardwood Plywood Manufacturers Association P. O. Box 2789; Reston, VA 22090; 703/435-2900
IES	Illuminating Engineering Society of North America 345 E. 47th St.; New York, NY 10017; 212/644-7926
ILI	Indiana Limestone Institute of America Stone City Bank Bldg.; Bedford, IN 47421; 812/275-4426
IRI	Industrial Risk Insurers 85 Woodland St.; Hartford, CT 06102; 203/525-2601
MCAA	Mechanical Contractors Association of America 5530 Wisconsin Ave.; Washington, DC 20015; 202/654-7960
MIA	Marble Institute of America 33505 State St.; Farmington, MI 48024; 313/476-5558
MIL	Military Standardization Documents (U.S. Dept. of Defense) Naval Publications and Forms Center 5801 Tabor Ave.; Philadelphia, PA 19120
MLSFA	Metal Lath/Steel Framing Association 221 N. LaSalle St.; Chicago, IL 60601; 312/346-1600
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry 5203 Leesburg Pike; Falls Church, VA 22041; 702/998-7996
NAAMM	The National Association of Architectural Metal Mfrs. 221 N. LaSalle St.; Chicago, IL 60601; 312/346-1600
NAPF	National Association of Plastic Fabricators 1701 N. St., NW; Washington, DC 20036; 202/656-8874

NBGQA	National Building Granite Quarries Association 202 S. Third Ave.; Cold Spring, MN 55107
NBS	National Bureau of Standards (U. S. Dept. of Commerce) Gaithersburg, MD 20234
NCMA	National Concrete Masonry Association P. O. Box 781; Herndon, VA 22070; 703/435-4900
NEC	National Electrical Code (by NFPA)
NECA	National Electrical Contractors Association 7315 Wisconsin Ave.; Washington, DC 20014; 202/657-3110
NEII	National Elevator Industry, Inc. 600 Third Ave.; New York, NY 10016; 212/986-1545
NEMA	National Electrical Manufacturers Association 2101 L St., NW; Washington, DC 20037; 202/457-8400
NEPA	National Fire Protection Association 470 Atlantic Ave.; Boston, MA 02210; 617/482-8755
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 38104: 901/377-1818
NPA	National Particleboard Association 2306 Perkins Pl.; Silver Spring, MD 20910; 301/587-2204
NSF	National Sanitation Foundation 3475 Plymouth Rd.; Ann Arbor, MI 48106; 313/769-8010
NSSEA	National School Supply & Equipment Association 1500 Wilson Blvd.; Arlington, VA 22209; 703/524-8819
NTMA	The National Terrazzo and Mosaic Association 3166 Des Plaines Ave.; Des Plaines, IL 60018; 312/635-7744
NWMA	National Wood Manufacturers Association 205 W. Touhy Ave.; Park Ridge, IL 60068; 312/823-6747
OSHA	Occupational Safety Health Administration (U.S. Dept. of Labor) Government Printing Office; Washington, DC 20402

PCI	Prestressed Concrete Institute 20 N. Wacker Dr.; Chicago, IL 60606; 312/346-4071
PDI	Plumbing and Drainage Institute 5342 Blvd. P1; Indianapolis, IN 46208; 317/251-5298
PEI	Porcelain Enamel Institute 1911 N. Fort Myer; Arlington, VA 22209; 703/527-5257
PS	Product Standard of NBS (U.S. Dept. of Commerce) Government Printing Office; Washington, DC 20402
RFCI	Resilient Floor Covering Institute 1030 15th St., NW; Washington, DC 20005; 202/833-2635
RIS	Redwood Inspection Service (Grading Rules) 627 Montgomery; San Francisco, CA 9411
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 712 Lakewood Cnt. N.; Cleveland, OH 44107; 216/226-7700
SHLMA	Southern Hardwood Lumber Manufacturers Association 805 Sterick Bldg.; Memphis, TN 38103; 901/525-8221
SIGMA	Sealed Insulating Glass Manufacturers Association 111 E. Wacker Dr.; Chicago, IL 60601; 312/644-6610
SJI	Steel Joist Institute 1703 Parham Rd.; Richmond, VA 23229; 804/288-3071
SMACNA	Sheet Metal & Air Conditioning Contractors' National Assoc. 8224 Old Courthouse Rd.; Vienna, VA 22180; 703/790-9890
SPIB	Southern Pine Inspection Bureau (Grading Rules) 4709 Scenic Hwy.; Pensacola, FL 32504; 904/434-2611
SSPC	Steel Structures Painting Council 4400 5th Ave.; Pittsburgh, PA 15213: 412/578-3327
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 2400 E. Devon Ave.; Des Plains, IL 60018; 312/635-7700
UL	Underwriters Laboratories 333 Pfingsten Rd.; Northbrook, IL 60062; 312/272-8800
WCLB	West Coast Lumber Inspection Bureau (Grading Rules) P. O. Box 2315; Portland, OR 97223; 503/639-0651
WIC	Woodwork Institute of California 1833 Broadway; Fresno, CA 93773; 209/233-9035
WRI	Wire Reinforcement Institute 7900 Westpark Dr.; McLean, VA 22102; 703/790-9790
WSFI	Wood and Synthetic Floor Institute 2400 E. Devon Ave.; Des Plaines, IL 60018; 312/635-7700
WWPA	Western Wood Products Association (Grading Rules) 1500 Yeon Bldg.; Portland, OR 97204; 503/224-3930
W.W.P.A.	Woven Wire Products Association 108 W. Lake St.; Chicago, IL 60601; 312/332-6502

GOVERNING REGULATIONS / AUTHORITIES:

General: The procedure followed by 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 Contractor's responsibilities for performing the work. Contract governing authorities directly for necessary information and decisions having a bearing on performance of the work.

SUBMITTALS:

Permits, Licenses and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, released, 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 01300 – SUBMITTALS

PART 1 – GENERAL

RELATED DOCUMENTS

Drawings and General Provisions of Contract, including General and Supplementary Conditions and other Division – 1 Specification sections, apply to this section.

SUMMARY

This Section specifies administrative and procedural requirements for submittals required for performance of the Work, including:

Contractor's construction schedule.
Submittal schedule.
Daily construction reports.
Shop Drawings.
Product Data.
Samples.

Administrative Submittals: Refer to other Divisions – 1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to:

Permits.
Applications and payment.
Performance and payment bonds.
Insurance certificates.
List of Subcontractors.

The Schedule of Values submittal is included in Section "Applications for Payment."

Inspection and test reports are included in Section "Quality Control Services."

SUBMITTAL PROCEDURES

Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.

Coordinate each submittal with fabrication, purchasing, testing, delivery, and other submittal related activities that require sequential activity.

Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.

The Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for re-submittal.

Allow two weeks for initial review. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. The Engineer will promptly advise the Contractor when a submittal being processed must be delayed for coordination.

If an intermediate submittal is necessary, process the same as the initial submittal.

Allow two weeks for reprocessing each submittal.

No extension of Contract Time will be authorized because of failure to transmit submittals to the Engineer sufficiently in advance of the Work to permit processing.

Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.

Provide a space approximately 4" x 5" on the label or beside the title block on Shop Drawings to record the Engineer's review and approval markings and the action taken.

Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to Engineer using a transmittal form. Submittals received from sources other than the Contractor will be returned without action.

On the transmittal record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

CONTRACTOR'S CONSTRUCTION SCHEDULE

Schedule: Prepare a Contractor's construction schedule. Submit within 30 days of the date established for "Commencement of the Work".

Work Stages: Indicate important stages of construction for each major portion of the Work, including testing and installation.

DAILY CONSTRUCTION REPORTS

Prepare a daily construction report, recording the following information concerning events at the site; and submit duplicate copies to the Engineer at weekly intervals:

List of subcontractors at the site.
Approximate count of personnel at the site.
High and low temperatures, general weather conditions.
Accidents and unusual events.
Meetings and significant decisions.
Stoppages, delays, shortages, losses.
Equipment or system tests and start-ups.
Substantial Completions authorized.

SHOP DRAWINGS

Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.

Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include the following information:

Dimensions.
Identification of products and materials included.
Compliance with specified standards.
Notation of coordination requirements.
Notation of dimensions established by field measurement.

Sheet Size: Except for templates, patterns and similar full-size Drawings, submit Shop Drawings on sheets at least 8-1/2" x 11" but no larger than 36" x 48".

Initial Submittal: Submit one correctable translucent reproducible print and three blue- or black-line prints for the Engineer's review; the reproducible print will be returned.

Final Submittal: Submit 3 blue- or black-line prints; submit 5 prints where required for maintenance manuals. 2 prints will be retained; the remainder will be returned.

One of the prints returned shall be marked-up and maintained as a "Record Document".

Do not use Shop Drawings without an appropriate final stamp indicating action taken in connection with construction.

Coordination drawings are a special type of Shop Drawing that show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or function as intended.

Preparation of coordination Drawings is specified in section "Project Coordination" and may include components previously shown in detail on Shop Drawings or Product Data.

Submit coordination Drawings for integration of different construction elements. Show sequences and relationships of separate components to avoid conflicts in use of space.

PRODUCT DATA

Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams and performance curves. Where Product data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings".

Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:

Manufacturer's printed recommendations.
Compliance with recognized trade association standards.
Compliance with recognized testing agency standards.
Notation of dimensions verified by field measurements.
Notation of coordination requirements.

Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.

Preliminary Submittal: Submit a preliminary single copy of Product Data where selection of options is required.

Submittals: Submit 4 copies of each required submittal; submit 8 copies where required for maintenance manuals. The Engineer will retain one, and will return the others marked with action taken and corrections or modifications required.

Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.

Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.

Do not proceed with installation until an applicable copy of Product Data applicable is in the installer's possession.

Do not permit use of unmarked copies of Product Data in connection with construction.

SAMPLES

Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture and pattern.

Mount, display, or package Samples in the manner specified to facilitate review of qualities indicated. Prepare Samples to match the Engineer's Sample. Include the following:

Generic description of the Sample.
Sample Source.
Product name or name Manufacturer.
Compliance with recognized standards.
Availability and delivery time.

Submit Samples for review of kind, color, pattern, and texture, for a final check of these characteristics with other elements, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed.

Where variation in color, pattern, texture or other characteristics are inherent in the material or product represented, submit multiple units (not less than 3), that show approximate limits of the variations.

Refer to other Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation and similar construction characteristics.

Preliminary Submittals: Where Samples are for selection of color, pattern, texture or similar characteristics from a range of standard choices, submit a full set of choices for the material or product.

Preliminary submittals will be reviewed and returned with the Engineer's mark indicating selection and other action.

Submittals: Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation similar characteristics, submit 3 sets; one will be returned marked with the action taken.

Maintain sets of Samples, as returned, at the Project site, for quality comparisons throughout the course of construction.

Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.

Sample sets may be used to obtain final acceptance of the construction associated with each set.

Distribution of Samples: Prepare and distribute additional sets to subcontractors, manufacturers, fabricators, suppliers, installers, and others as required for performance of the Work. Show distribution on transmittal forms.

Field Samples specified in individual Sections are special types of Samples. Field Samples are full-size examples erected on site to illustrate finishes, coatings, or finish materials and to establish the standard by which the Work will be judged.

Comply with submittal requirements to the fullest extent possible. Process transmittal forms to provide a record of activity.

ENGINEER'S ACTION

Except for submittals for record, information or similar purposes, where action and return is required or requested, the Engineer will review each submittal, mark to indicate action taken, and return promptly.

Compliance with specified characteristics is the Contractor's responsibility.

Action Stamp: The Engineer will stamp each submittal with a uniform self-explanatory action stamp. The stamp will be appropriately marked, as follows, to indicate the action taken:

Final Unrestricted Release: Where submittals are marked "No Exceptions Taken," that part of the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents.

Final Unrestricted Release: Where submittals are marked "Make Corrections Noted," that part of the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents; final acceptance will depend upon that compliance with the corrections as noted.

Returned for Re-submittal: When submittal is marked "Amend & Resubmit", do not proceed with that part of the Work covered by the submittal, including purchasing, fabrication, deliver, or other activity. Revise or prepare a new submittal in accordance with the notations; resubmit without delay. Repeat if necessary to obtain a different action mark.

Returned for Re-submittal: When submittal is marked "Rejected – See Remarks", do not proceed with that part of the Work covered by the submittal, including purchasing, fabrication, deliver, or other activity. This item has been rejected you must contact Engineer.

Do not permit submittals marked "Amend & Resubmit or Rejected" to be used at the Project site, or elsewhere where Work is in progress.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION 01300

SECTION 01631 – PRODUCTS, WARRANTIES AND SUBSTITUTIONS

PART 1 – GENERAL

RELATED DOCUMENTS:

Drawings and General Provisions of Contract, including General and Supplementary Conditions and other Division – 1 Specifications sections, apply to work of this section.

DESCRIPTION OF REQUIREMENTS:

Definitions: "Products" is defined to include purchased items for incorporation into the work, regardless of whether specifically purchased for project or taken from Contractor's stock of previously purchased products. "Materials" is defined as products which must be substantially cut, shaped, worked, mixed, finished, refined or otherwise fabricated, processed, installed or applied to form units of work. "Equipment" is defined as products with operational parts, regardless of whether motorized or manually operated, and particularly including products with service connections (wiring, piping, etc.). Definitions in this paragraph are not intended to negate the meaning of other terms used in Contract Documents, including "specialties, " "systems," "structure," "finishes," "accessories," "furnishings," "special construction," and similar terms, which are self-explanatory and have recognized meanings in the construction industry.

Substitutions: The requirements for substitutions do not apply to specified Contractor options on products and construction methods. Revisions to Contract Documents, where requested by Owner or Engineer are "changes" not "substitutions." Requested substitutions during bidding period, which have been accepted prior to Contract Date, are included in Contract Documents and are not subject to requirements for substitutions as specified herein. Contractor's determination of and compliance with governing regulations and orders issued by governing authorities do not constitute "substitutions;" and do not constitute a basis for change orders, except as provided for in contract Documents. Otherwise, Contractor's request for changes in products, materials and methods of construction required by Contract Documents are considered requests for "substitutions," and are subject to requirements hereof.

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

QUALITY ASSURANCE:

Source Limitations: To the greatest extent possible, provide products, materials and equipment of a singular generic kind and from a single source.

Compatibility of Options: Where more than one choice is available as options for Contractor's selection of a product of material, select an option, which is compatible with

other products and materials already selected (which may have been from among options for those other products and materials). Total compatibility among options is not assured by limitations within Contract Documents, but must be provided by Contractor. Compatibility is a basic general requirement of product-material selections.

SUBMITTALS:

Request for Substitutions: Submit 2 copies, fully identified for product or method being replaced by substitution, including related specification section and drawing number (s), and fully documented to show compliance with requirements for substitutions. Include product data/drawings, description of methods, samples where applicable, Contractor's detailed comparison of significant qualities between specified item and proposed substitution, statement of effect on construction time and coordination with other affected work, cost information or proposal, and Contractor's statement to the effect that proposed substitution will result in overall work equal-to-or-better-than work originally indicated.

PRODUCT DELIVERY – STORAGE HANDLING:

General: Deliver, handle and store products in accordance with manufacturer's recommendations and by methods and means, which will prevent damage, deterioration, and loss including theft. Control delivery schedules to minimize long term, storage of products at site and over crowding of construction spaces. In particular, provide delivery/installation coordination to ensure minimum holding or storage times for products recognized to be flammable, hazardous, easily damaged, or sensitive to deterioration, theft and other sources of loss.

WARRANTIES (GUARANTEES):

Categories of Specific Warranties: Warranties on the owner are in several categories, including those of General Conditions, and including (but not necessarily limited to) the following specific categories related to individual units of work specified in sections of Divisions 2 through 16 of these specifications:

Special Project Warranty (Guarantee): A warranty specifically written and signed by Contractor for a defined portion of the work; and, where required, countersigned by subcontractor, installer, manufacturer or other entity engaged by Contractor.

Specified Product Warranty: A warranty which is required by Contract Documents, to be provided for a manufactured product incorporated into the work; regardless of whether manufacturer has published warranty without regard for specific incorporation of product into the Work or has written and executed warranty as a direct result of Contract Document requirements.

Coincidental Product Warranty: A warranty which is not specifically required by Contract Documents (other than as specified in this Section); but which is available on a product incorporated into the work, by virtue of the fact that manufacturer or product has published warranty in connection with purchases and uses of product without regard for specific applications except as otherwise limited by terms of warranty.

Refer to individual sections or Divisions - 2 through 16 for the determination of units of work, which are required to be specifically or individually warranted, and for the specific requirements and terms of those warranties (or guarantees).

General Limitations: It is recognized that specific warranties are intended primarily to protect Owner against failure of the work to perform as required, and against deficient, defective and faulty materials and workmanship, regardless of sources. Except as otherwise indicated, specific warranties do not cover failures in the work which result from: 1) Unusual and abnormal phenomena of the elements, 2) The Owner's misuse, maltreatment or improper maintenance of the work, 3) Vandalism after time of substantial completion, or 4) Insurrection or acts of aggression including war.

Related Damages and Losses: In connection with Contractor's correction of warranted work which has failed, remove and replace other work of project which as been damaged as a result of such failure, or must be removed and replaced to provide access for correction of warranted work.

> Consequential Damages: Except as otherwise indicated or required by governing regulations, special project warranties and product warranties are not extended to cover damage to building contents (other than work of Contract) which occurs as a result of failure of warranted work.

Reinstatement of Warranty Period: Except as otherwise indicated, when work covered by a special project warranty of product warranty has failed and has been corrected by replacement or restoration, reinstate warranty by written endorsement for the following time period, starting on date of acceptance of replaced or restored work.

> A period of time ending upon date original warranty would have expired if there had been no failure, but not less than half of original warranty period of time.

Replacement Cost, Obligations: Except as otherwise indicated, costs of replacing or restoring failing warranted units or products is Contractor's obligation, without regard for whether Owner has already benefited from use through a portion of anticipated useful service lives.

Rejection of Warranties: Owner reserves the right, at time of substantial completion or thereafter, to reject coincidental product warranties submitted by Contractor, which in opinion of Owner tend to detract form or confuse interpretation of requirements of Contract Documents.

Contractor's Procurement Obligations: Do not purchase, subcontract for, or allow others to purchase or sub-subcontract for materials or units of work for project where a special project warranty, specified product warranty, certification or similar commitment is required, until it has been determined that entities required to countersign such commitments are willing to do so.

Specific Warranty Forms: Where a special project warranty (Guarantee) or Specified product warranty is required, prepare a written document to contain terms and appropriate identification, ready for execution by required parties. Submit draft to Owner (through Engineer) for approval prior to final executions.

PART 2 – PRODUCTS

GENRAL PRODUCT COMPLIANCES:

General: The compliance requirements, for individual products as indicated in Contract Documents, are multiple in nature and may include generic, descriptive, proprietary, performance, prescriptive, compliance with standards, compliance with codes, conformance with graphic details and other similar forms and methods of indicating requirements, all of which must be complied with. Also "allowances" and similar provisions of Contract Documents will have a bearing on selection process.

Procedures for Selecting Products: Contractor's options for selecting products are limited by Contract Document requirements, and governing regulations, and are not controlled by industry traditions or procedures experienced by Contractor on previous construction projects. Required procedures include, but are not necessarily limited to, the following for various indicated methods of specifying:

Single Product/Manufacturer Name: Provide product indicated, except advise Engineer before proceeding, where known that named product is not a feasible or acceptable selection.

Two or More Product/Manufacturer Names: Provide one of the named products, at Contractor's option; but excluding products which do not comply with requirements. Do not provide or offer to provide and unnamed product.

"Or Equal": Where named products in specifications text are accompanied by the term "or equal," or other language of similar effect, comply with those Contract Document provisions concerning "substitutions" for obtaining Engineer's approval (or change order) to provide unnamed product.

"Named": Except as otherwise indicated, is defined to mean manufacturer's name for product, as recorded in published product literature, of latest issue as of date of Contract Documents. Refer requests to use products of a later (or earlier) model to Engineer for acceptance before proceeding.

Standard, Codes and Regulations: Where compliance with an imposed standard, code or regulation is required, selection from among products, which comply with requirements including those standards, codes and regulations, is Contractor's option.

Performance Requirements: Provide products, which comply with specific performances indicated, and which are recommended by manufacturer (in published product literature or by individual certification) for application indicated.

Overall performance of a product is implied where product is specified for specific performances.

Prescriptive Requirements: Provide products which have been produced in accordance with prescriptive requirements, using specified ingredients and components, and complying with specified requirements for mixing, fabricating, curing finishing, testing and similar operations in manufacturing process.

Visual Matching: Where matching of an established sample is required, final judgement of whether a product proposed by Contractor matches sample satisfactorily is Engineer's judgement. Where no product within specified cost category is available, which matches sample satisfactorily and complies with requirements, comply with Contract Document provisions concerning, "substitutions" and "change orders" for selection of a matching product outside established cost category or not complying with requirements.

Visual Selection: Except as otherwise indicated, where specified product requirements include "...as selected from manufacturer's standard colors, patterns, textures..." or words of similar effect, the selection of manufacturer and basic product (complying with requirements) is Contractor's option and subsequent selection of color, pattern and texture is Engineer's selection. Where specified product requirements include "...as industry..." or words to that effect, selection of product (complying with requirements, and within established cost category) is Engineer's selection, including designation of manufacturer where necessary to obtain desired color, pattern or texture.

SUBSTITUTIONS:

Conditions: No substitutions whatever will be allowed after bids are received.

Work-Related Submittals: Contractor's submittal of, and Engineer's acceptance of, shop drawings, product data or samples which indicate work not complying with requirements of Contract Documents, does not constitute an acceptable and valid request for, nor approval of, a substitution.

GENERAL PRODUCT REQUIREMENT:

General: Provide products which comply with requirements, and which are undamaged and unused at time of installation, and which are complete with accessories, trim, finish, safety guards and other devices and details needed for a complete installation and for intended use and effect.

Standard Products: Where available, provide standard products of types which have been produced and used previously and successfully on other projects and in similar applications.

Continued Availability: Where additional amounts of a product, by nature of its application, are likely to be needed by Owner at a later date for maintenance and

repair or replacement work, provide a standard, domestically produced product which is likely to be available to Owner at such later date.

Nameplates: Except as otherwise indicated for required approval labels, and operating data, do not permanently attach or imprint manufacturer's or producer's nameplates or trademarks on exposed surfaces of products which will be exposed to view either in occupied spaces or on exterior of the work.

Labels: Locate required labels and stamps on a concealed surface or, where required for observation after installation, on an accessible surface which, in occupied spaces, is not conspicuous.

Equipment Nameplates: Provide permanent nameplate on each item of service-connected or power operated equipment. Indicate manufacturer, product name, model number, serial number capacity, speed, ratings and similar essential operating data. Locate nameplates on an easily accessed surface, which, in occupied spaces, is not conspicuous.

PART 3 – EXECUTION (Not Applicable)

END OF SECTION 01631

SECTION 01700 – PROJECT CLOSEOUT

PART 1 – GENERAL

RELATED DOCUMENTS

Drawings and General Provisions of Contract, including General and Supplementary Sections and other Division – 1 Specifications sections, apply to this section.

SUMMARY:

This Section specifies administrative and procedural requirements for project closeout, including but not limited to:

Inspection procedures.
Project record document submittal.
Operating and maintenance manual submittal.
Submittal of warranties.
Final Cleaning.
Closeout requirements for specific construction activities are included in the appropriate Sections in Division - 2 through 16.

SUBSTANTIAL COMPLETION:

Preliminary Procedures: Before, requesting inspection, for certification of Substantial Completion; complete the following. List exceptions in the request.

In the application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete. Include supporting documentation for completion as indicated in these Contract Documents and a statement, showing an accounting of changes to the Contract Sum.

If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the Work is not complete.

Advise Owner of pending insurance change-over requirements.

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

Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities; 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 stock, and similar items.

Make final change-over of permanent locks and transmit keys to the Owner. Advise the Owner's personnel of 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 from the site, along with construction tools, mock-ups, and similar elements.

Complete final clean up requirements, including touch-up painting.

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

Inspection Procedures: On receipt of a request for inspection, the Engineer will either proceed with inspection or advise the Contractor of unfilled requirements. The Engineer will prepare the Certificate of Substantial Completion following inspection, or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.

The Engineer will repeat inspection when requested and assured that the Work has been substantially completed.

Results of the completed inspection will form the basis (Punch List) of requirements for final acceptance.

FINAL ACCEPTANCE:

Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.

- Submit the final payment request with 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 certified copy of the Engineer's final inspection list (Punch List) of items to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance, and the list has been endorsed and dated by the Engineer.
- Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion, or when the Owner took possession of and responsibility for corresponding elements of the Work.
- Submit Affidavit of Payments of Debts and Claims.
- Submit Release of Liens.
- Submit Consent of Surety, to Final Payment.
- Submit a final liquidated damages settlement statement.
- Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- Submit one-year warranty – see copy of form at the end of this section.

Re-inspection Procedure: The Engineer will re-inspect the Work upon receipt of notice that the Work, including inspection list (Punch List) items from earlier inspections, has been completed, except items whose completion has been delayed because of circumstances acceptable to the Engineer.

RECORD DOCUMENT SUBMITTALS:

General: 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 Engineer's reference during normal working hours.

Record Drawings: Maintain a clean, undamaged set of blue or black line whiteprints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross reference at the corresponding location, on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.

Mark record sets with red erasable pencil; use other colors to distinguish between variations in separate categories of the Work.

Mark new information that is important to the Owner, but was not shown on Contract Drawings or Shop Drawings.

Note related Change Order numbers where applicable.

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

Record Specifications: Maintain one complete copy of the Project Manual including addenda, and one copy of other written construction documents such as Change Orders and modifications issued in printed form during construction. Mark these documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and modifications. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation. Note related record drawing information and Product Data.

Upon completion, of the Work submit record Specifications to the engineer for the Owner's records.

Record Product Data: Maintain one copy of each Product Data submittal. Mark these documents to show significant variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site, and from the manufacturer's installation instructions and recommendations. Give particular attention to concealed products and portions of the Work, which cannot otherwise be readily discerned later 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 Engineer for the Owner's records.

Record Sample Submitted: Immediately prior to the date or dates of Substantial Completion, the Contractor will meet at the site with the Engineer and the Owner's personnel to determine which of the submitted samples that have been maintained during progress of the Work are to be transmitted to the Owner for record purposes. Comply with delivery to the Owner's sample storage area.

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

Emergency instructions.
Spare parts list.
Copies of warranties.
Wiring diagrams.
Recommended "turn around" cycles.
Inspection procedures.
Shop Drawings and Product Data.
Fixture lamping schedule.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION

CLOSEOUT PROCEDURES:

Operating and Maintenance Instructions: Arrange for each installer of equipment that requires regular maintenance to meet with the Owner's personnel to provide instruction in proper operation and maintenance. If installers are not experienced in procedures, provide instruction by manufacturer's representatives. Include a detailed review of the following items:

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

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

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

FINAL CLEANING:

General: General cleaning during construction is required by the General Conditions and includes the site acceptable to the Owner and Engineer.

Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions.

Complete the following cleaning operations before requesting inspection for Certification of Substantial Completion.

Remove labels that are not permanent labels.

Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compound and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.

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

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

Clean the site, including landscape development areas, of rubbish, litter and other foreign substances. Sweep paved areas broom clean; remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even textured surface.

Removal of Protection: Remove temporary protection and facilities installed for protection of the Work during construction.

Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful or dangerous

materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner.

Where extra materials of value remaining after completion of associated Work have become the Owner's property, arrange for disposition of these materials as directed.

END OF SECTION 01700

ONE (1) YEAR GUARANTEE

STATE OF LOUISIANA, PARISH OF ST. JOHN THE BAPTIST

FROM: _____, CONTRACTOR

TO: _____, OWNER

RE: Contract entered into this _____ day of _____, 20____

between _____and the Owner for the

construction of _____.

KNOW ALL MEN BY THESE PRESENT:

The undersigned hereby certifies that all material and workmanship under the above contract for the _____ has been furnished and/or performed in accordance with the terms thereof and that said material and workmanship is guaranteed for a period of twelve (12) months from the date of Substantial Completion.

In witness whereof, the undersigned has signed and sealed this instrument this _____ day of _____ 20_____.

SIGNED _____

TITLE _____

CONTRACTOR _____

Personally before me appeared the undersigned, _____ who is known to me to be a project manager of the firm of _____ _____ who after being duly sworn stated on his oath that he had read the above statement and that the same is true and correct.

_____ NOTARY PUBLIC

This _____ day of _____, 20____

My Commission expires _____.