

SECTION 01011 - SUMMARY OF THE WORK

PART 1 - GENERAL

RELATED DOCUMENTS:

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

PROJECT/WORK IDENTIFICATION:

General: Project name is "**Clemmons First Baptist Church Narthex Additions**", located at 3530 Clemmons Road, Clemmons, NC, as shown on Contract Documents prepared by Ramsay Burgin Smith Architects, Inc. Drawings and Specifications are dated August 2017.

Prime Contracts, in the context used in this Section, are single prime with separate subcontracts that represent significant elements of work that are performed concurrently with and in close coordination with work performed on the project under other prime contracts. Prime contracts for this project include the following:

Contract for General Work including the work associated with Architectural, , minor Heating, Ventilating and Air Conditioning, and Electrical, subcontracts required to complete the new addition of the building for its intended use and function.

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 and restrictions on use of the site.

Work to be performed by Owner, probably occurring during construction.

Other work to be performed concurrently by the Owner including: Furnishing, Equipment, Telephone, and cabling.

Work to be performed subsequent to work under these prime Contracts.

Items to be installed by prime contractors, which will be furnished by the Owner.

Allowances. - See section 01020.

Unit Prices. – See section 01026.

Alternates. – See Section 01030.

PROJECT COMPLETION: Prime Contractors shall deliver to the Owner from the Notice to Proceed, a completed building with related HVAC, and electrical systems functioning, as designed and specified for its intended use as a Church Entrance Foyer and Narthex.

Construction Durati.on: 180 Calendar days (6 Months).

LIQUIDATED DAMAGES shall be assessed and levied against each Prime Contractor not attaining substantial completion of their respective contractual work in the amount of time indicated above. The

damage amount applicable to each Contractor shall be as listed below and shall begin the day following the scheduled date of substantial completion above (plus any written, approved extensions) and continue until final acceptance is obtained.

Each day following the intended substantial completion date for work not found substantially complete will be subject to damage assessment at the following rate:

GENERAL CONST. WORK ---- \$100.00 per calendar day
(including all work of all trades for the total project completion)

Submittal of proposals constitutes acknowledgement by the General Contractor that time is of the essence to the Owner and of material value equal to the damage amounts listed above. These amounts are pre-established equitable values required to recover the losses incurred by the Owner for failure to have complete use of the new Church Narthex addition by the required completion date.

Each subcontractor shall be responsible for reviewing the General Contractor's initial construction schedule and report any unacceptable scheduling. Failure by the subprime Contractor to report objections within 30 days to the General Contractor (with copy to Architect) after issuance of initial schedule constitutes acceptance of the schedule.

The General Contractor shall accept clerical responsibility for reporting any delays due to extremes in weather or due to deviations from the established construction schedule which unduly exposes the Contractor to possible liquidated damages. These reports are required to be submitted to the Architect on a monthly basis coinciding with the Contractor's monthly application for payments. Failure to report delays constitutes agreement, by the General Contractor, that no time extension is forthcoming for each applicable month at the end of the project completion date.

NOTE: Reporting of delays does not guarantee Owner or Architect agreement that delays are acceptable or justified.

The completion date includes normal bad weather days. See Supplementary Conditions for definition of a bad weather day and the allowance for numbers of bad weather days included as "normal" within the contract base bid.

No time delays will be allowed for Change Orders; however, Change Orders may include extensions to the contract completion date

ARCHITECTURAL WORK includes work that is primarily architectural, structural and civil in nature plus work traditionally recognized as general construction, including demolition of existing where required, and new construction. It also includes both administrative and coordination responsibilities.

Pay for all permits required, including any water, sewer, and gas tap and government and utility fees; sales, consumer and use taxes for the proper execution of the work. (Note all utility services are already established for the church)

Demolition of the original church exterior wall including windows and doors to make way for new construction and selective demolition of room finishes and ceilings as required to install new construction.

Steeple Installation - Removal of the existing roof steeple, cleaning and repairing the steeple and setting it in the new construction roof structure.

Exterior site work – Demolition of sidewalk and steps to make way for new construction, ornamental aluminum ramp railings and step railings, excavation, grading, backfilling, concrete sidewalk paving, and regressing and landscaping.

Foundations - Grade beam and spread footings and strip perimeter wall footings.

Foundation walls - Below grade, grout filled reinforced CMU Floor framing - Slab-on-grade.

Roof framing – Steel framing and metal decking.

Exterior walls – Modular brick veneer over 6” metal stud framing with batt insulation with 5/8” exterior fiberglass faced gypsum wall sheathing with EIFS finish typical, small sections Hardie Board clad exterior walls
Roofing –Asphalt shingles to match existing roof shingles and TPO Single ply roofing.
Windows – Aluminum storefront framing and insulated glass with integral mutin grids.
Exterior doors – Aluminum storefront doors and painted HM doors and frames
Exterior Finishes – Prefinished aluminum gutters, downspouts and metal wrapped fascia board and copings.
Interior walls - metal studs/ gypsum bd. partitions typical.
Interior ceilings:Painted gypsum board and suspended acoustical ceiling tiles and grid.
Interior doors - Flush solid core wood and hollow metal doors.
Interior Finishes – LVT floor tile and wood base throughout, Painted Gypsum board walls and wood casing and trim.

Temporary facilities related to general (architectural) work as specified in the "Temporary Facilities" section of these specifications.

Typically, work described on drawing Sheets C1.0-C1.2 (3 sheets); A1 through A6.1 (8 Sheets), S0.1 through S4.1 (7 Sheets), and Instructions to Bidders, General Conditions, Supplementary General Conditions and Specification Divisions 1 thru 12 and Division 14 represents Architectural Work.

NOTE: Mechanical work is shown on Architectural plans

Complete drawings and specifications are included in bid package to assist General Contractor in including coordination costs of his work as it relates to other prime subcontracts and to assist in determining how other trades work effects Architectural Work bidding. Only specifically noted work by General Contractor on, E1 through E3 (3 sheets), is part of Architectural Work.

HEATING, VENTILATING AND AIR CONDITIONING WORK (subcontract to General Work) includes the piped/ducted portion of the heating, ventilating and air conditioning system as well as the temperature control system. Work under this prime contract includes but is not necessarily limited to the following:

Minor rearrangement of existing ductwork.
Addition of ductless mini-split HVAC unit.

See Architectural drawings for Mechanical work.

), .

ELECTRICAL WORK (subcontract to General Work) includes work necessary for electrical power distribution and lighting and includes but is not necessarily limited to the following:

Demolition of existing Church entrance foyer area electrical work.
New electrical panel.
Power distribution including disconnect switches, panelboards, raceways, wiring, outlets.
Electrical lighting system.
Emergency lighting exit illumination system.
Cable/telephone conduit system.
Grounding system.
Relocated Steeple lightning protection system extension

Temporary facilities related to electrical work as specified in the "Temporary Facilities" section of these specifications.

Typically, described on drawing sheets E-1 through E-3 (3 Sheets) and Instructions to Bidders, General Conditions, Supplementary General Conditions and Specification Division 1 represent basis of Electrical Work.

Complete drawings and specifications are included in bid package to assist Electrical Subcontractor in including coordination costs of his work as it relates to the work of other trades. Only specifically noted work by Electrical Contractor on Sheets C1.0 – C1.2 (3 sheets), A1.1 through A6.1 (8 Sheets); S0.1 through S4.1 (7 Sheets); and specifications Division 1 thru 14 is part of Electrical Work.

DEFINITION OF THE EXTENT OF PRIME CONTRACT WORK: The extent of the work of the Prime Contract is indicated in the Contract Documents. General names and terminology on the drawings and in the specifications controls the determination of which prime subcontract includes a specific element of required work, except where no other more specific definition is contained in the Contract Documents.

The final extent and demarcation of the subcontract work is the sole responsibility of the Prime General Contractor.

All work indicated in the Contract Documents is the responsibility of the General Contractor. The General Contractor will assign prime subcontractors to execute certain sections of the work. The General Contractor will coordinate the work of all subcontractors and have contractual agreements with each responsible entity. If it becomes necessary to refer to the contract documents to determine which subcontract includes a specific element of required work, begin by referring to the Subcontracts; then, if a determination cannot be made from the Subcontracts, refer, in the following order, to the Supplementary Conditions, this section of the Specifications, followed by the other Division-1 sections and finally with the Drawings and other sections of the Specifications.

Summary by References: Work of the Contract can be summarized by reference to the Prime Contract, General Conditions, Supplementary Conditions, Specification sections, Drawings, Addenda and Modifications to Contract Documents issued subsequent to the initial printing of this Project Manual, and including but not necessarily limited to printed material reference by any of these. It is recognized that the work of the Prime Contract is unavoidably affected or influenced by governing regulations, natural phenomenon, including weather conditions, and other forces outside the contract documents.

PRIME CONTRACTORS USE OF PREMISES:

General: During the entire construction period the Prime Contractor and subcontractors jointly shall have the use of the area in front of the Church for construction operations, excluding use of the Sanctuary and Education wing beside the existing church building. Parking for Church staff and church visitors during the week and congregation on Sundays and special events must be maintained.

Grading and site work on adjacent property (other than the front yard of the property owned by Clemmons First Baptist Church) shall be prohibited.

The site is defined as the front yard of the property owned by Clemmons First Baptist Church Building at 3530 Clemmons Road, Clemmons, NC.

Specific work activities as drawn and/or specified are allowed as required beyond the site lines; however, limit time to minimum required to perform work.

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 required are not to be disturbed. Conform to site rules and regulations affecting the work while engaged in project construction.

Do not unreasonably encumber the site with materials of equipment. Confine stockpiling of materials and location of storage sheds to minimum areas.

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.

Blasting or open fires will not be permitted within the building enclosure or on the premises as further specified.

BUILDING USAGE AND SECURITY:

General: The Contract for the General Work includes maintaining security and safety during the construction process; however, all Prime Contractors are accountable for conducting their work in a safe, responsible manner that will provide a safe environment for all workers.

ALTERATIONS AND COORDINATION:

General: The Contract for General Work includes coordination of the entire work of the project, including subcontractors work, preparation of general coordination drawings, diagrams and schedules and control of site utilization from the beginning of construction activity through project closeout and warranty period.

MISCELLANEOUS PROVISIONS:

Mechanical/Electrical Requirements of General Work:

General: Except as otherwise indicated comply with applicable requirements of Division-15 sections for mechanical provisions within units of general (Division 2-14) work. Except as otherwise indicated, comply with applicable requirements of Division-16 sections for electrical provisions within units of general (Divisions 2-14) work.

Electrical Requirements: Except as otherwise indicated, comply with applicable provisions of the National Electric Code (NEC) and standards by the National Electrical Manufacturer's Association (NEMA) for electrical components of general work. Provide Underwriter's Laboratories listed and labeled products where applicable.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION

(SEE SCHEDULE OF DRAWINGS AT END OF THIS SECTION)

SCHEDULE OF DRAWINGS

C1.0	COVER SHEET
C1.1	APPENDIX B
C1.2	LIFE SAFETY PLAN
A1.1	FLOOR PLAN – PLAN NOTES & FINISH SCHEDULE
A1.2	FLOOR PLAN – PLAN NOTES & FINISH SCHEDULE
A2.1	FLOOR PLAN – PLAN NOTES & FINISH SCHEDULE
A3.1	ELEVATIONS – WINDOW SCHEDULE
A4.1	BUILDING SECTIONS
A5.1	WALL SECTIONS
A5.2	WALL SECTIONS
A6.1	DOORS-SCHEDULES, ELEVATIONS & DETAILS
S0.1	GENERAL NOTES
S0.2	GENERAL NOTES & ABBREVIATION
S1.1	FOUNDATION & FRAMNG PLANS & SECTIONS
S2.1.	COLUMN SCHEDULE, FOUNDATION SECTIONS & DETAILS
S3.1	FRAMING SECTIONS & DETAILS
S3.2	FRAMING SECTIONS & DETAILS
S4.1	BRACED FRAME ELEVATIONS, SECTIONS & DETAILS
E-1	SCHEDULES AND DEMOLITION PLANS
E-2	LIGHTING AND POWER
E2.1	RISER AND DETAILS

Note Mechanical work is included on Architectural Plans

END OF SECTION 1011

SECTION 01015 – APPLICABLE CODES

PART 1 - GENERAL

DESCRIPTION:

All parts of the Work shall be installed in accordance with the most current editions of the following Codes and Regulations:

1. NC Building Code/IBC 2012 edition
2. NC Plumbing Code/current edition
3. NC Mechanical Code and ASHRAE Guide/current edition
4. National Electrical Code /current edition
5. Forsyth County Department of Environmental Health.
6. Occupational Safety and Health Act
7. ADA: ICC A1171-2009

In addition to the above listed Codes Regulations, and Ordinances, such other specific Codes, Regulations, and Ordinances as may be listed elsewhere in the various Sections of these Specifications will apply.

Local Codes, Regulations, and Ordinances as they may apply shall take precedence over the above listed Codes.

Where the Drawings and/or Specifications may be in conflict with the Authorities having jurisdiction, the more stringent requirements shall prevail.

Refer to General Conditions of these Specifications for the Contractor's responsibilities under the Applicable Codes, Regulations and Ordinances.

END OF SECTION 01015

SECTION 01020 - ALLOWANCES

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 handling and processing allowances.

Selected materials and equipment, and in some cases, their installation are shown and specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. Additional requirements, if necessary, will be issued by Change Order.

Types of allowances required include the following:

- Lump sum allowances.
- Unit-cost allowances.
- Contingency allowance.

Procedures for submitting and handling Change Orders are included in Section "Change Order Procedures."

Use of allowances for inspection and testing agencies (those included as part of contractor's base bid cost and those that are not) are included in Section "Quality Control Services."

SELECTION AND PURCHASE

At the earliest feasible date after Contract award, advise the Architect of the date when the final selection and purchase of each product or system described by an allowance must be completed in order to avoid delay in performance of the Work.

When requested by the Architect, obtain proposals for each allowance for use in making final selections; include recommendations that are relevant to performance of the Work.

Purchase products and systems as selected by the Architect from the designated supplier.

SUBMITTALS

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

Submit invoices or delivery slips to indicate actual quantities of materials delivered to the site for use in fulfillment of each allowance.

CONTINGENCY ALLOWANCES

Use the contingency allowance only as directed for the Owner's purposes, and only by Change Orders which designate amounts to be charged to the allowance.

The Contractor's related costs for products or equipment ordered by the Owner under the contingency allowance, including delivery, installation, taxes, insurance, equipment rental, and similar costs are not part of the Contract Sum. **However, no costs for Performance Bonds and Contractor's Insurance can be added to Change Orders using Contingency Allowance funds until the original contract sum for which the bonds and insurances have been written for has been exceeded.**

Change Orders authorizing use of funds from the contingency allowance will include the Contractor's related costs and reasonable overhead and profit margins (see Supplementary General Conditions).

At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

UNUSED MATERIALS

Return unused materials to the manufacturer or supplier for credit to the Owner, after installation has been completed and accepted.

Where it is not economically feasible to return unused material for credit and when requested by the Architect, prepare unused material for the Owner's storage, and deliver to the Owner's storage space as directed. Otherwise, disposal of excess material is the Contractor's responsibility.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

INSPECTION

Inspect products covered by an allowance promptly upon delivery for damage or defects.

PREPARATION

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

SCHEDULE OF ALLOWANCES:

NOTE: ALLOWANCES LISTED BELOW ARE TO BE INCLUDED IN THE G.C'S BASE BID.

GENERAL CONTRACT:

General Contingency Allowance \$ 20,000.00

Brick Allowances \$ 00.00

No allowance is included. Contractor shall provide matching brick from the existing Sanctuary Building. All special shapes and solid bricks noted or detailed on drawings shall be included in base bid price.

Hardware Allowance \$ 10,000.00

Allowance will be used to cover the cost of the hardware components specified in Section 08700. The hardware installation cost should be part of base bid work costs.

Undercut and Compacted Structural Fill Allowance 20 cubic yards
of undercut and fill

NOTE: See Form of Proposal for unit pricing to be used to compute this allowance value.

This unit price must also include cost of hauling undercut soil from site and hauling structural quality soil to site.

Note: This unit price will be paid on the exact size of the hole required to be filled. No additional allowance will be paid for factors associated with the fill to compact fill volumes.

Testing costs to determine if soil is structural quality shall be part of the unit cost or otherwise part of general contractor's base bid.

Testing costs to determine the quality of the compacted refill work shall be paid for by Owner out of the Testing Allowance.

Testing Allowance \$ 5,000.00

END OF SECTION 01020

SECTION 01026 - UNIT PRICES

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 unit prices.

A unit price is an amount proposed by Bidders and stated on the Bid Form as a price per unit of measurement for materials or services that will be added to or deducted from the Contract Sum by Change Order in the event the estimated quantities of Work required by the Contract Documents are increased or decreased.

Unit prices include all necessary material, overhead, profit and applicable taxes.

Refer to individual Specification Sections for construction activities requiring the establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.

Schedule: A "Unit Price" section is included as part of the "Form of Proposal" and as applicable to each prime contract **must be completed as part of the bid**. Specification Sections referenced in the Schedule contain requirements for materials and methods described under each unit price.

The Owner reserves the right to reject the Contractor's measurement of work-in-place that involves use of established unit prices, and to have this Work measured by an independent surveyor acceptable to the Contractor at the Owner's expense.

PART 2 – PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

UNIT PRICE SCHEDULE

Unit prices are for complete work and no profit or overhead shall be added or deducted when applying unit prices. No work described on the drawings or specifications is to be bid as a unit price. Unit price costs will be used only for additional work the owner may want to include in the work by change order.

UNIT COST #1: Undercut and Fill including compacted refill from off site borrow, per cubic yard.

20 Cubic Yds. to be included in Base bid.

Note: This unit price will be paid on the exact size of the hole required to be filled. No additional allowance will be paid for factors associated with the fill to compacted fill volumes.

Testing costs to determine if soil is structural quality shall be part of the unit cost or otherwise part of general contractor's base bid.

Testing costs to determine the quality of the compacted refill work shall be paid for by Owner out of the Testing Allowance.

"Undercut" does not include base bid costs for the removal of top soil to the depth encountered.

Fill does not include the base bid costs elevating of the site with compacted fill to the grade elevation points called on the Grading plan.

END OF SECTION 01026

SECTION 01027 - APPLICATIONS 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 Applications for Payment.

This Section specifies administrative and procedural requirements governing each prime Contractor's Applications 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".

SCHEDULE OF VALUES

Coordinate preparation of the Schedule of Values with preparation of the Contractor's Construction Schedule.

Each prime Contractor shall coordinate preparation of its Schedule of Values for its part of the Work with preparation of the Contractors' Construction Schedule.

Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:

- Contractor's construction schedule.
- Application for Payment form.
- List of subcontractors.
- Schedule of allowances.
- List of products.
- List of principal suppliers and fabricators.

Submit the Schedule of Values to the Architect at the earliest feasible date, but in no case later than 7 days before the date scheduled for submittal of the initial Application for Payment.

Format and Content: Use the Project Manual Table of Contents as a guide to establish the format for the Schedule of Values.

Identification: Include the following Project identification on the Schedule of Values:

- Project name and location.
- Name of the Architect.
- Contractor's name and address.
- Date of submittal.

Arrange the Schedule of Values in a tabular form with separate columns to indicate the following for each item listed:

- Generic name.
- Related Specification Section.
- Dollar value.
- Percentage of Contract Sum to the nearest one-tenth percent, adjusted to total 100 percent.

Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Break principal subcontract amounts down into several line items.

G.C. Mechanical, Plumbing, HVAC, subcontract work shall be broken down into subcategory line items of work with a breakdown for "materials" and "labor" for each item.

Round amounts off to the nearest whole dollar; the total shall equal the Contract Sum.

Margins of Cost: Temporary facilities and other major cost items that are not direct cost of actual work-in-place shall be shown as separate line items in the Schedule of Values as general overhead expense.

APPLICATIONS FOR PAYMENT

Each Application for Payment shall be consistent with previous applications and payments as certified by the Architect 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 (Unless listed otherwise in the Owner-Contractor Agreement): The date for each progress payment is the 15th day of each month. The period of construction Work covered by each Application for Payment is the period ending 15 days prior to the date for each progress payment and starting the day following the end of the preceding period.

Payment Application Forms: Use AIA Document G 702 and Continuation Sheets G 703 as the form for Application for Payment.

Application Preparation: Complete every entry on the form, including notarization and execution by person authorized to sign legal documents on behalf of the Owner. Incomplete applications will be returned without action.

Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions have been made.

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

Payments requested for stored materials or major pieces of equipment will be paid from actual invoice costs documented with applications. Submit "Amendment to Protect Stored Materials" (sample attached at the end of this Section 01027) on Bonding Company letterhead with application for payment.

Provide Contractor's certification listing all sales tax paid by the contractor or his subcontractors itemized per county of sale for purchases made toward the construction of this project.

Transmittal: Submit 4 executed copies of each Application for Payment to the Architect by means ensuring receipt within 24 hours; all copies shall be complete.

Transmit each copy with a transmittal form listing attachments, and recording appropriate information related to the application in a manner acceptable to the Architect.

Waivers of Mechanics Lien: With Final Application for Payment, submit waivers of mechanics lien from every entity who may lawfully be entitled to file a mechanics lien arising out of the Contract, and related to the Work covered by the payment.

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

Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of the first Application for Payment include the following:

- List of subcontractors.
- List of principal suppliers and fabricators.
- Schedule of Values.
- Contractor's Construction Schedule (preliminary if not final).
- List of Contractor's staff assignments.
- Initial progress report.
- Copies of authorizations and licenses from governing authorities for performance of the Work.
- Certificates of insurance and insurance policies (Part of Owner-Contractor Agreement documents).
- Performance and payment bonds (Part of Owner-Contractor Agreement documents).
- Data needed to acquire Owner's insurance (Part of Owner-Contractor Agreement documents).

Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit an Application for Payment; this application shall reflect any Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

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.
- Start-up performance reports.
- Changeover information related to Owner's occupancy, use, operation and maintenance.
- Final cleaning.
- Application for reduction of retainage, and consent of surety.
- Advice on shifting insurance coverages.
- List of incomplete Work, recognized as exceptions to Architect's Certificate of Substantial Completion.
- Change of door locks to Owner's access.

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 all punch list items.
- 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.
- Proof that taxes, fees and similar obligations have been paid.
- Removal of temporary facilities and services.
- Removal of surplus materials, rubbish and similar elements.
- Submit three copies of "Consent of Surety for Final Payment" (AIA G707)

Submit three copies of "Release of Liens" from prime contractor and all major subcontractors and suppliers (AIA G706A)
Submit three copies of "Affidavit of Payment of Debts and Claims" (AIA G706A)

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION (Not Applicable).

END OF SECTION 01027

AMENDMENT TO PROTECT STORED MATERIALS

(Below is the outline form letter required by the Architect prior to recommending to the Owner payments for materials stored off site.)

COMPANY LETTER HEAD

CURRENT DATE

Ramsay Burgin Smith Architect, Inc.
225 North Main Street, Suite 225
Salisbury, North Carolina 28144

Subj: Clemmons First Baptist Church
Narthex Addition
Clemmons, NC

Dear Sirs:

This letter represents consent from **LIST NAME OF BONDING COMPANY** allowing Ramsay Burgin Smith Architects, Inc. to release payment to **LIST NAME OF CONTRACTOR** all materials claimed on applications for payment as stored materials for the above referenced project, Clemmons First Baptist Church Narthex Addition, Clemmons, NC. This applies to materials whether stored on or off site.

The bonding company does not require the Owner or Architect to inventory or monitor inventory for said stored materials.

The bonding company also acknowledges that, in the event of contractor default, bond coverage includes all costs and expenses for recovery or repurchase of these paid stored materials as well as all normal bond obligations and responsibilities applicable toward project completion.

Very truly yours,

**AUTHORIZED SIGNATURE, SIGNEE'S TITLE
SIGNEE'S COMPANY NAME**

XXX/xx

APPLICABLE OR DESIRED COPIES

Attachment: Power of Attorney statement

**STATE AND COUNTY SALES/USE TAX STATEMENT
And Certification**

Contractor: _____	Sales Taxes Paid from _____	Sheet # _____
	To _____	
Project Name: _____	Payment Application # _____	

Invoice #	Invoice Date	Vendor	Vendor Address	Type of Materials	TL. Amt. of Invoice	NC Tax	CTY Tax	Total Taxes

We certify that the above listing includes all materials purchased by us and incorporated into the above referenced project for the period stated, became a permanent part of the project, and that the sales tax shown has been paid. The above represents a complete listing of these sales taxes paid for the application number.

SWORN AND SUBSCRIBED BEFORE ME THIS _____ BY: _____

NOTARY PUBLIC _____ TITLE _____

MY COMMISSION EXPIRES: _____

SECTION 01030 - ALTERNATES

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 Alternates.

Definition: An Alternate is an amount proposed by Bidders and stated on the Bid Form for certain construction activities defined in the Bidding Requirements that may be added to or deducted from Base Bid amount if the Owner decides to accept a corresponding change in either the amount of construction to be completed, or in the products, materials, equipment, systems or installation methods described in Contract Documents.

Coordination: Coordinate related Work and modify or adjust adjacent Work as necessary to ensure that Work affected by each accepted Alternate is complete and fully integrated into the project.

Notification: Immediately following the award of the Contract, prepare and distribute to each party involved, notification of the status of each Alternate. Indicate whether Alternates have been accepted, rejected or deferred for consideration at a later date. Include a complete description of negotiated modifications to Alternates.

Schedule: A "Schedule of Alternates" is included at the end of this Section. Specification Sections referenced in the Schedule contain requirements for materials and methods necessary to achieve the Work described under each Alternate.

Include as part of each Alternate, miscellaneous devices, accessory objects and similar items incidental to or required for a complete installation whether or not mentioned as part of the Alternate.

PART 2 - PRODUCTS

PART 3 - EXECUTION

SCHEDULE OF ALTERNATES:

Base Bid work includes building the new Narthex complete as indicated on the drawings.

ALTERNATE #1 DELETE PERFORMANCE AND PAYMENT BONDS

Provide the cost to be deducted for the base bid to omit providing the 100% Performance and Payment Bonds associated with the project.

END OF SECTION 01030

SECTION 01041 - 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:

Maximum administrative and supervisory requirements necessary for coordination of work on the project to be fulfilled by the General Contractor including but are not necessarily limited to the following:

- Coordination and meetings.
- Administrative and supervisory personnel.
- Surveys and records or reports.
- Special reports.
- General installation provisions.
- Cleaning and protection.
- Conservation and salvage.

These coordination requirements must be participated in by each prime subcontractor where applicable, even though certain items of work may be assigned to a specific subcontractor, and even though the Contractor for General Work may be assigned certain general work for overall coordination purposes.

COORDINATION AND MEETINGS:

Coordination Drawings: the General Contractor shall prepare their related coordination drawings where work by separate entities requires fabrication off-site of products and materials which must accurately interface. Coordination drawings shall indicate how work shown by separate shop drawings will interface and shall indicate installation sequence. Comply with all requirements of the "Submittals" section.

Weekly and Monthly Coordination Meetings: The Contractor for General Work shall schedule and hold weekly and monthly general project coordination meetings at regularly scheduled times that are convenient for the attendance of other sub contractors and other parties involved. Required attendance at the weekly meetings shall include the general contractor and every other entity identified as being currently involved the coordination or planning for the work of the entire project. Conduct meetings in a manner that resolve coordination problems. The General Contractor shall preside at each meeting, and shall record meeting results. The General Contractor shall distribute copies of the meeting result to everyone in attendance and to others affected by the decisions and actions resulting from each meeting. Monthly meetings shall include, in addition to those attendees of the weekly meetings, the Architect, the Architect's consulting team members, and the Owner (or his representative(s)).

At the option of the General Contractor, monthly coordination meetings may be held integrally with monthly progress meetings as specified in section "Application for Payments".

ADMINISTRATIVE/SUPERVISORY PERSONNEL:

General: In addition to a General Superintendent and other administrative and supervisory personnel required for performance of the work, each prime subcontractor shall provide specific coordinating personnel as reasonably required for interfacing work with other work of total project.

Project Coordinator: The General Contractor shall provide a Project Coordinator, who is experienced in administration and supervision of building construction, including mechanical, plumbing, and electrical work. This Project Coordinator is hereby authorized to act as the coordinator of interfaces between the work of the subcontractors. For the purpose of this provision, "interface" is defined to include scheduling and sequencing of work, sharing of access to work spaces, installations, protection of each other's work, cutting and patching, tolerances, cleaning, selections for compatibility, preparation of coordination drawings, inspection, tests and temporary facilities and services.

Submittals of Staff Names, Duties: Within 15 days of Notice to Proceed the general contractor shall submit a listing of Contractor's principal staff assignments and consultants, naming persons and listing their addresses and telephone numbers.

SURVEYS AND RECORDS/REPORTS:

General: Working from lines and levels established by the property survey, the Contractor for General Work shall establish and maintain benchmarks and other dependable markers. These bench marks and markers are established to set lines and levels for work at each story of construction and elsewhere as needed to properly locate each element of the project. Each prime contractor shall 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, the general contractor shall verify the layout information shown on the drawings, in relation to the property area and existing benchmarks. As the work proceeds, check every major element for line, level and plumb. The general Contractor and each subcontractor shall record deviations, which are accepted, not corrected, on record drawings.

LIMITATIONS ON USE OF THE SITE:

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

SPECIAL REPORTS:

General: Submit special reports directly to the Architect and other entities affected by the occurrence.

Reporting Unusual Events: When an event of an unusual and significant nature occurs at the site, the General Contractor shall prepare and submit a special report. The report shall list chain of events, persons participating, the response by the Contractor's personnel and by the personnel of the other subcontractors, an evaluation of the results or effects, and similar pertinent information. It is the responsibility of the General Contractor to advise the Architect in advance date, when such events are known or predictable.

Reporting Accident: The general 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.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION

GENERAL INSTALLATION PROVISIONS:

Installer's Inspection of Conditions: The general contractor involved shall require the Installer of each major unit of work to inspect the substrate to receive the work and the conditions under which the work is to be performed. The Installer shall report all unsatisfactory conditions in writing to the prime Contractor. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.

Manufacturer's Instructions: Where installations include manufactured products; comply with the manufacturer's applicable instructions and recommendations for installation, to the extent that these instructions and recommendations are more explicit or more stringent than requirements indicated in the contract documents.

Inspect each item of materials or equipment immediately prior to installation. Reject damaged and defective items.

Provide attachment and connection devices and methods for securing work properly. Secure work true to line and level, and within recognized tolerances. Allow expansion and building movement. Provide uniform joint width in exposed work. Arrange joints in exposed work to obtain the best visual effect. Refer questionable visual-effect choices to the Architect/Engineer for final decision.

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.

Enclosure of the Work: The general contractor shall coordinate the closing-in of the work with required inspections and tests, so as to minimize the necessity of uncovering 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 for final decision.

CLEANING AND PROTECTION:

General: During handling and installation of work at the project site, the general contractor, with the assistance of the subcontractors shall clean and protect work in progress and adjoining work in the basis of continuous maintenance. Apply protective covering on installed work where it is required to ensure freedom from damage or deterioration at the 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 Exposure of Work: To the extent possible through reasonable control and protection methods, the general 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, will be subjected to harmful, dangerous, damaging or otherwise deleterious exposure during the construction period.

END OF SECTION 01041

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 this Section.

SUMMARY

This Section specifies administrative and procedural requirements for cutting and patching.

Refer to other Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.

Requirements of this Section apply to mechanical and electrical installations. Refer to Division-15 and Division-16 Sections for other requirements and limitations applicable to cutting and patching mechanical and electrical installations.

QUALITY ASSURANCE

Requirements for Structural Work: Do not cut and patch structural elements in a manner that would reduce their load-carrying capacity or load-deflection ratio.

Obtain approval of the cutting and patching proposal before cutting and patching the following structural elements:

- Foundation construction.
- Bearing and retaining walls.
- Structural concrete.
- Structural steel.
- Lintels.
- Structural decking.
- Miscellaneous structural metals.
- Equipment supports.
- Piping, ductwork, vessels and equipment.

Operational and Safety Limitations: Do not cut and patch operating elements or safety related components in a manner that would result in reducing their capacity to perform as intended, or result in increased maintenance, or decreased operational life or safety.

Visual Requirements: Do not cut and patch construction exposed on the exterior or in occupied spaces, in a manner that would, in the Architect's opinion, reduce the building's aesthetic qualities, or result in visual evidence of cutting and patching. Remove and replace Work cut and patched in a visually unsatisfactory manner.

If possible retain the original installer or fabricator to cut and patch the following categories of exposed Work, or if it is not possible to engage the original installer or fabricator, engage another recognized experienced and specialized firm:

Plaster

Millwork
Roofing and Roof Flashing
HVAC enclosures, cabinets or covers.
Electrical panels and motor controls

PART 2 - PRODUCTS

MATERIALS

Use materials that are identical to existing materials.

PART 3 - EXECUTION

INSPECTION

Before cutting existing surfaces, examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed. Take corrective action before proceeding, if unsafe or unsatisfactory conditions are encountered.

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

PREPARATION

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

PERFORMANCE

General: Employ skilled workmen to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.

Cut existing construction to provide for installation of other components or performance of other construction activities and the subsequent fitting and patching required to restore surfaces to their original condition.

In general, where cutting is required use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots neatly to size required with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.

To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.

Cut through concrete and masonry using a cutting machine such as a carborundum saw or diamond core drill.

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

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

Patching: Patch with durable seams that are as invisible as possible. Comply with specified tolerances.

Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.

CLEANING

Thoroughly clean areas and spaces where cutting and patching is performed or used as access. Remove completely paint, 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 01095 - REFERENCE STANDARDS AND DEFINITIONS

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.

DEFINITIONS

General: Basic Contract definitions are included in the General Conditions.

Indicated: The term "indicated" refers to graphic representations, notes, or schedules on the Drawings, other paragraphs or schedules in the Specifications, and similar requirements in the Contract Documents. Where terms such as "shown," "noted," "scheduled," and "specified" are used, it is to help the reader locate the reference; no limitation on location is intended.

Directed: Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean "directed by the Architect," "requested by the Architect," and similar phrases.

Approve: The term "approved," where used in conjunction with the Architect's action on the Contractor's submittals, applications, and requests, is limited to the Architect's duties and responsibilities as stated in General and Supplementary Conditions.

Regulation: The term "Regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.

Furnish: The term "furnish" is used to mean "supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations."

Install: 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."

Provide: The term "provide" means "to furnish and install, complete and ready for the intended use."

Installer: An "Installer" is the Contractor or an entity engaged by the Contractor, either as an employee, subcontractor, or sub-subcontractor, for performance of a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged to perform.

The term "experienced" when used with the term "Installer" means having a minimum of 5 previous Projects similar in size and scope to this Project, being familiar with the precautions required, and having complied with requirements of the authority having jurisdiction.

Assignment of Specialists: Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in the operations to be performed. The specialists must be engaged for those activities, and assignments are requirements over which the Contractor has no choice or option. Nevertheless, the ultimate responsibility for fulfilling Contract requirements remains with the Contractor.

This requirement shall not be interpreted to conflict with enforcement of building codes and similar regulations governing the Work. It is also not intended to interfere with local trade union jurisdictional settlements and similar conventions.

Testing Laboratories: A "testing laboratory" is an independent entity engaged to perform specific inspections or tests, either at the Project Site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.

SPECIFICATION FORMAT AND CONTENT EXPLANATION

Specification Format: These Specifications are organized into Divisions and Sections based on the Construction Specifications Institute's 16-Division format and MASTERFORMAT numbering system.

Specification Content: This Specification uses certain conventions in the use of language and the intended meaning of certain terms, words, and phrases when used in particular situations or circumstances. These conventions are explained as follows:

Abbreviated Language: Language used in Specifications and other Contract Documents is the abbreviated type. Implied words and meanings will be appropriately interpreted. Singular words will be interpreted as plural and plural words interpreted as singular where applicable and the full context of the Contract Documents so indicates.

Imperative and streamlined language is used generally in the Specifications. Requirements expressed in the imperative mood are to be performed by the Contractor. At certain locations in the text, for clarity, subjective language is used to describe responsibilities that must be fulfilled indirectly by the Contractor, or by others when so noted.

INDUSTRY STANDARDS

Applicability of Standards: Except where the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents. Such standards are made a part of the Contract Documents by reference.

Publication Dates: Where the date of issue of a referenced standard is not specified, comply with the standard in effect as of date of Contract Documents.

Conflicting Requirements: Where compliance with two or more standards is specified, and the standards establish different or conflicting requirements for minimum quantities or quality levels, refer requirements that are different, but apparently equal, and uncertainties to the Architect for a decision before proceeding.

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

Copies of Standards: Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to that entity's construction activity. Copies of applicable standards are not bound with the Contract Documents.

Where copies of standards are needed for performance of a required construction activity, the Contractor shall obtain copies directly from the publication source.

Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the Specifications or other Contract Documents, they mean the recognized name of the trade association, standards generating organization, authority having jurisdiction, or other entity applicable to the context of the text provision. Refer to the "Encyclopedia of Associations," published by Gale Research Co., available in most libraries.

GOVERNING REGULATIONS/AUTHORITIES

The Architect has contacted authorities having jurisdiction where necessary to obtain information necessary for preparation of Contract Documents; that information may or may not be of significance to the Contractor. Contact authorities having jurisdiction directly for information and decisions having a bearing on 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 01095

SECTION 01200 - PROJECT MEETINGS

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 project meetings including but not limited to:

- Pre-Construction Conference.
- Coordination Meetings.
- Progress Meetings.

Construction schedules are specified in another Division-1 Section.

PRE-CONSTRUCTION CONFERENCE

Schedule a pre-construction conference and organizational meeting at the Project site or other convenient location no later than 15 days after execution of the Agreement and prior to commencement of construction activities. Conduct the meeting to review responsibilities and personnel assignments.

Attendees: The Owner, Architect and their consultants, the Contractor and its superintendent, major subcontractors, manufacturers, suppliers and other concerned parties shall each be represented at the conference by persons familiar with and authorized to conclude matters relating to the Work.

Agenda: Discuss items of significance that could affect progress including such topics as:

- Tentative construction schedule.
- Critical Work sequencing.
- Designation of responsible personnel.
- Procedures for processing field decisions and Change Orders.
- Procedures for processing Applications for Payment.
- Submittal of Shop Drawings, Product Data and Samples.
- Preparation of record documents.
- Use of the premises.
- Office, Work and storage areas.
- Equipment deliveries and priorities.
- Safety procedures.
- First aid.
- Security.
- Housekeeping.
- Working hours.

COORDINATION MEETINGS

Conduct Project coordination meetings at regularly scheduled times convenient for all parties involved. Project coordination meetings are in addition to specific meetings held for other purposes, such as regular progress meetings and special pre-installation meetings.

Request representation at each meeting by every party currently involved in coordination or planning for the construction activities involved.

Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

PROGRESS MEETINGS

Conduct progress meetings at the Project site at regularly scheduled intervals. Notify the Owner and Architect of scheduled meeting dates. Coordinate dates of meetings with preparation of the payment request.

Attendees: In addition to representatives of the Owner and Architect, each subcontractor, supplier or other entity concerned with current progress or involved in planning, coordination or performance of future activities shall be represented at these meetings by persons familiar with the Project and authorized to conclude matters relating to progress.

Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the current status of the Project.

Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

Review the present and future needs of each entity present, including such items as:

- Interface requirements.
- Time.
- Sequences.
- Deliveries.
- Off-site fabrication problems.
- Access.
- Site utilization.
- Temporary facilities and services.
- Hours of Work.
- Hazards and risks.
- Housekeeping.
- Quality and Work standards.
- Change Orders.
- Documentation of information for payment requests.

Reporting: No later than 3 days after each progress meeting date, distribute copies of minutes of the meeting to each party present and to other parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.

Schedule Updating: Revise the construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue the revised schedule concurrently with the report of each meeting.

END OF SECTION 01200

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.
- Shop Drawings.
- Product Data.
- Samples.

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

- Permits.
- Applications for 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, other submittals and 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 Architect 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 resubmittals.

Allow two weeks for initial review. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. The Architect 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 Architect 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 Contractor's review and approval markings and the action taken.

Include the following information on the label for processing and recording action taken.

Project name.
Date.
Name and address of Contractor.
Name and address of subcontractor.
Name and address of supplier.
Name of manufacturer.
Drawing number and detail references, as appropriate.

Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to Architect 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.

Submittals may be transmitted to architect via electronic submittal form.

CONTRACTOR'S CONSTRUCTION SCHEDULE

Bar-Chart Schedule: Prepare a fully developed, horizontal bar-chart type Contractor's construction schedule. Submit within 30 days of the date established for "Commencement of the Work".

Provide a separate time bar for each significant construction activity. Provide a continuous vertical line to identify the first working day of each week. Use the same breakdown of units of the Work as indicated in the "Schedule of Values."

SHOP DRAWINGS

Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise clearly indicate deviations from the Contract Documents. SEE General Conditions, Article 3, concerning field measurements and shop drawing submittals. 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 that are transmitted to the Architect or Engineer for review that have obviously not been checked by the contractor will be returned to the contractor for his prior review and mark-up.

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.

Electronic Submittal is preferred. Submittals with more than 10 sheets need to be sent in printed form to the Architect. For large plans , send electronically in full size format.

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 two prints for the Architect's review; a print will be returned.

Final Submittal: Submit, 2 prints will be retained; the remainder will be returned.

NOTE: 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.

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.

Application of testing agency labels and seals.

Notation of dimensions verified by field measurement.

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 5 copies of each required submittal. The Architect will retain two, 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 Architect's Sample. Include the following:

- Generic description of the Sample.
- Sample source.
- Product name or name of 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 Architect's mark indicating selection and other action.

Note that the architect must see all samples of products that required a color selection together at one time. No decision can be made on any color product without first seeing the full range of color choices that must be made. No delay may be claimed for satisfying that requirement.

Submittals: Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation and similar characteristics, submit four sets; two 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.

ARCHITECT'S ACTION

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

Compliance with specified characteristics is the Contractor's responsibility.

Action Stamp: The Architect 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 "Approved," 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.

Final-But-Restricted Release: When submittals are marked "Approved as Noted," that part of the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance.

Returned for Resubmittal: When submittal is marked "Not Approved, Revise and Resubmit," do not proceed with that part of the Work covered by the submittal, including purchasing, fabrication, delivery, 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.

NOTE: Do not permit submittals marked "Not Approved, Revise and Resubmit" 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 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 this Section.

SUMMARY

This Section specifies administrative and procedural requirements for quality control services.

Quality control services include inspections and tests and related actions including reports, performed by independent agencies, governing authorities, and the Contractor. They do not include Contract enforcement activities performed by the Architect.

Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with Contract Document requirements.

Requirements of this Section relate to customized fabrication and installation procedures, not production of standard products.

Specific quality control requirements for individual construction activities are specified in the Sections that specify those activities. Those requirements, including inspections and tests, cover production of standard products as well as customized fabrication and installation procedures.

Inspections, test and related actions specified are not intended to limit the Contractor's quality control procedures that facilitate compliance with Contract Document requirements.

Requirements for the Contractor to provide quality control services required by the Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

RESPONSIBILITIES

Contractor Responsibilities: The Contractor shall provide inspections, tests and similar quality control services, specified in individual Specification Sections and required by governing authorities, except where they are specifically indicated to be the Owner's responsibility, or are provided by another identified entity; these services include those specified to be performed by an independent agency and not by the Contractor. **Costs for these services shall be included in the Contract Sum.**

The Contractor shall employ and pay by testing allowance an independent agency, approved by the Owner/Architect, to perform specified quality control services. This includes testing the work of all prime sub contractors in testing their miscellaneous trenches for the required compaction.

The Contractor will pay for soil testing including proof rolls, compaction tests for foundations and structural fill, pipe trenches and structural fill material analysis, foundation rebar placement review and concrete testing by utilizing the testing Testing Allowance and send copies of the reports and the invoices to the Architect and Owner

Retesting: The Contractor is responsible for retesting where results of required inspections, tests or similar services prove unsatisfactory and do not indicate compliance with Contract Document requirements, regardless of whether the original test was the Contractor's responsibility.

Cost of retesting construction revised or replaced by the Contractor is the Contractor's responsibility, where required tests were performed on original construction.

Associated Services: The Contractor shall cooperate with agencies performing required inspections, tests and similar services and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include but are not limited to:

Providing access to the Work and furnishing incidental labor and facilities necessary to facilitate inspections and tests.

Taking adequate quantity/s of representative samples of materials that require testing or assisting the agency in taking samples.

Providing facilities for storage and curing of test samples, and delivery of samples to testing laboratories.

Providing the agency with a preliminary design mix proposed for use for materials mixes that require control by the testing agency.

Security and protection of samples and test equipment at the Project site.

Duties of the Testing Agency: The independent testing agency engaged to perform inspections, sampling and testing of materials and construction specified in individual Specification Sections shall cooperate with the Architect and Contractor in performance of its duties, and shall provide qualified personnel to perform required inspections and tests.

The agency shall notify the Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.

The agency is not authorized to release, revoke, alter or enlarge requirements of the Contract Documents, or approve or accept any portion of the Work.

The agency shall not perform any duties of the Contractor.

The agency shall promptly conduct the work requested on site and efficiently utilize their hourly fee.

Coordination: The Contractor and each agency engaged to perform inspections, tests and similar services shall coordinate the sequence of activities to accommodate required services with a minimum of delay. In addition to Contractor and each agency shall coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.

The Contractor is responsible for scheduling times for inspections, tests, taking samples and similar activities.

SUBMITTALS

The independent testing agency shall submit a certified written report of each inspection, test or similar service, to the Architect, 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 architect, structural engineer Local inspection department and 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:

Date of issue.

Project title and number.
Name, address and telephone number of testing agency.
Dates and locations of samples and tests or inspections.
Names of individuals making the inspection or test.
Designation of the Work and test method.
Identification of product and Specification Section.
Complete inspection or test data.
Test results and an interpretation of test results.
Ambient conditions at the time of sample taking and testing.
Comments or professional opinion as to whether inspected or tested Work complies with
Contract Document requirements.
Name and signature of laboratory inspector.
Recommendations on retesting.
**Designation upon whether service was provided (paid for) by the Contractor or Owner.
(Retesting by G.C)**

QUALITY ASSURANCE

Qualification for Service Agencies: Engage inspection and testing 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 specialize in the types of inspections and tests to be performed.

Each independent inspection and testing agency engaged on the Project shall be authorized by authorities having jurisdiction to operate in the State in which the Project is located.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION

REPAIR AND PROTECTION

General: Upon completion of inspection, testing, sample-taking and similar services, repair damaged construction and restore substrates and finishes to eliminate deficiencies, including deficiencies in visual qualities of exposed finishes. Comply with Contract Document requirements for "Cutting and Patching."

Protect construction exposed by or for quality control service activities, and protect repaired construction.

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 01501 - TEMPORARY FACILITIES.

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of each prime 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, protection and temporary storage shed.

Division of Responsibilities:

General: Each prime subcontractor is specifically assigned certain responsibilities for temporary services and facilities to be used by other prime contractors, and other entities at the site. The General Contractor is responsible for providing temporary services and facilities that are not related to other prime contractors' normal work and are not specifically assigned otherwise by the Architect.

Except as otherwise indicated, each prime subcontractor is responsible for the following:

Installation, operation, maintenance and removal of each temporary service or facility usually recognized as related to its own normal scope of work, and the costs and use charges associated with each service or facility.

Plug-in electric power cords and extension cords, and supplementary plug-in task lighting and special lighting necessary exclusively for its own work.

Storage and fabrication sheds necessary for its own work.

Specialized or unusual hoisting requirements.

Collection and disposal of its own hazardous, dangerous, unsanitary or otherwise harmful waste material.

Construction aids and miscellaneous services and facilities necessary for its own work.

The Contractor for General Work is responsible for the following:

Temporary jobsite phone service, superintendent cell phone, and jobsite email service.

Temporary storm piping, dewatering and drainage.

Temporary field office.

Temporary roads and paving.

Temporary toilets, including disposable supplies.

Temporary enclosure of the building.

Temporary heat.

Minimum required emergency fire protection.

Project identification and temporary signs.

General collection and disposal of wastes.

Barricades, warning signs.

Environmental protection.

General project Construction Aids and Miscellaneous Services and Facilities.

Project Sign (see sign layout at the end of this section)

The Subcontractor for Plumbing is responsible for the following: GC is responsible for temporary water.

Piped temporary water service from the Owner's existing water service.

The Subcontractor for Heating and Refrigeration Work is responsible for the following: None, GC responsible for temporary heat.

The Subcontractor for Electrical Work is responsible for the following:

Temporary electric power service and distribution.

Temporary lighting.

Assuring that existing church building maintains continuous power during demolition/construction.

Use Charges:

No cost or usage charges for temporary services or facilities are chargeable to the Owner or Architect. Prime contractor's cost or use charges for temporary services or facilities will not be accepted as a basis of claims for a change-order extra.

Water Service Use Charges: G.C. may utilize owner's existing water on site . The Contractor for General Work will exercise reasonable control over water use in an effort to conserve water. PC to pipe water supply as needed from existing building meter. Electric Power Service Use Charges: The Contractor for General Work shall pay electric power service use charges, whether metered or otherwise, for electricity used by all entities authorized to be at or to perform work at the project site. The Contractor for General Work may exercise reasonable control over power use in an effort to conserve energy.

Other entities using temporary services and facilities may include, but are not limited to the following:

Other nonprime contractors.

The Owner's work forces.

Occupants of the Project.

The Architect/Engineer.

Testing agencies.

Personnel of governing agencies.

QUALITY ASSURANCE:

Regulations: Each contractor shall comply with 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 and state requirements for permits, testing and inspection.

Health and safety regulations. (OSHA)

Utility company regulations and recommendations governing temporary utility services.

Fire Department rules and recommendations.

Police and Rescue Squad recommendations.

Environmental protection regulations governing use of water and energy, and control of dust, noise and other nuisances. (NCDEQ)

JOB CONDITIONS:

General: Each contractor shall provide each temporary service and facility ready for use at each location, when first needed to avoid delays in performance of work. Maintain, expand as required, and modify 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.

Heat and Humidity control: The Contractor must be aware that the unconditioned atmosphere inside the building produces extremely wet conditions in warm damp weather which causes condensation to form on cool interior surfaces. Temperature and humidity controls will be required to maintain newly installed finishes.

Mold Control: The Contractor will be required to protect construction in progress from the development of conditions that will be favorable for mold to develop. Means of removing moisture from within building enclosure shall be the responsibility of the contractor as required to inhibit mold development within the project.

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

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

Temporary Construction and Support Facilities: Maintain temporary facilities in a manner to prevent discomfort to users. Take necessary fire prevention measures. Maintain temporary facilities in a sanitary manner so as to avoid health problems.

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

PART 2 - PRODUCTS

MATERIALS AND EQUIPMENT:

General: Each prime contractor shall provide new materials and equipment for temporary services and facilities; used materials and equipment that are substantially undamaged and in serviceable condition may be used, if acceptable to the Architect/Engineer. Provide only materials and equipment that are suitable for their intended use.

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

Electrical Service: Comply with applicable NEMA, NECA and UL standards and governing regulations for materials and layout of temporary electric service, including requirements included in Division-16 sections.

Voltage Differences: Provide identification-warning signs at power outlets 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 waterproof connectors to connect separate lengths, if single lengths will not reach work areas.

Lamps and Light Fixtures: Provide general service incandescent lamps of wattage indicated or required for adequate illumination. Provide exterior fixtures where fixtures are exposed to weather or moisture.

Temporary Construction and Support Facilities: Provide facilities that can be maintained properly throughout the course of 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 standard prefabricated or mobile units. Provide insulated, weather tight units, that are heated and air-conditioned, with 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.

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 glass fiber reinforced polyester shell or similar non-absorbent material.

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

Drinking Water: Provide potable water complying with local health authority requirements.

Sign Materials: For signs and directory boards, provide exterior type, Grade B-B High Density Concrete Form Overlay Plywood conforming to PS-1, of sizes and thicknesses indicated. Provide exterior grade acrylic-latex-base enamel for painting sign panels and applying graphics.

Security and Protection Facilities:

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

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 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 UTILITY INSTALLATION:

General: Engage the local utility company to install temporary service to the project, or to make connections to existing service. Arrange with the companies and existing users for an acceptable time when service can be interrupted, where necessary, to make connections for temporary services.

Water Service:

General: Install water service and distribution piping of sizes and pressures adequate for temporary construction purposes during the construction period and until permanent service is in use, including but not limited to the following uses:

- Construction processes.
- Drinking water.
- Sanitary facilities.
- Cleaning.

Obtain water service from the nearby water main of the local water authority, as permitted by the governing authority.

Temporary Electric Power Service:

General: Provide a weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics to accommodate performance of work during the construction period. Whenever an overhead floor or roof deck has been installed, install temporary lighting adequate to provide sufficient illumination for safe work and traffic conditions in every work area.

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

Install electric power service overhead except where underground service must be used to avoid construction conflicts or to comply with governing regulations.

Connect temporary service to the local electric power company main in the manner directed by company officials.

Provide temporary service with an automatic ground-fault interrupter feature, activated from the circuits of the system.

Power Distribution System: Provide circuits of adequate size and proper characteristics for each use.

Provide overload-protected disconnect switch for each temporary power 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 work area. Provide separate 110-120 Volt, 20 Amp circuit for each 4-gang outlet (4 outlets per circuit).

Temporary Lighting:

Provide not less than one 200-watt incandescent lamp per 500 sq. ft. of floor area, uniformly distributed, for general construction lighting, or illumination of a similar nature. In corridors and similar traffic areas provide one 100-watt incandescent lamp every 30 feet. In stairways and at ladder runs, provide one lamp every story, located to illuminate each landing and flight.

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

Temporary Telephones: Provide cell phone and Email access to project Superintendent

TEMPORARY CONSTRUCTION AND SUPPORT FACILITIES INSTALLATION:

General: Provide a neat and uniform appearance in temporary construction and support facilities acceptable to the Architect/Engineer and the Owner.

Locate field offices, storage and fabrication sheds and other facilities for easy access to the work. Position offices so that windows give the best possible view of construction activities.

Maintain field offices, storage and fabrication sheds, temporary sanitary facilities, waste collection and disposal system, and project identification and temporary signs until near substantial completion. Immediately prior to substantial completion remove these facilities. Personnel remaining at the site beyond substantial completion will be permitted to use certain permanent facilities, under restricted use conditions acceptable to the Owner.

Provide graveled path access to the construction and to the field office to allow passage to and from the office that doesn't require trudging thru the mud.

Temporary Heat:

General: Provide temporary heat where indicated or needed for proper 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 work in place or being installed. Coordinate with ventilation requirements to produce indicated ambient condition required and to minimize consumption of fuel or energy.

Maintain a minimum temperature of 45 deg.F (7 deg.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 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.

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

Field Offices:

General: The general contractor shall provide a temporary field office of sufficient size to accommodate required office personnel of all prime contractors at the project site with meeting space for 10 people.

Provide a vented space heater, capable of maintaining uniform indoor temperature of 68 deg.F (20 deg.C), and an air-conditioning unit capable of maintaining a maximum indoor temperature of 72 deg.F (24 deg.C).

Furnish with not less than a desk and chairs, a 4-drawer file cabinet, plan table and plan rack, conference table with 10 chairs.

Storage and Fabrication Sheds: Install storage and fabrication sheds, properly sized, furnished and equipped, as required to accommodate work. Comply with applicable provisions specified elsewhere for distribution and use of temporary utilities. Sheds may be open shelters or fully enclosed spaces, within the building construction area or elsewhere on the project site.

Temporary Roads and Paving:

General: To the fullest extent possible, locate temporary roads and paving for storage areas and temporary parking, in the same locations as permanent facilities for similar uses. To incorporate temporary paving provisions, review significant modifications of permanent paving requirements with the Architect for acceptance of the proposed improvements.

Coordinate development of temporary roads and paved areas with grading and the compaction of the sub grade, installation and stabilization of the sub base and installation of the base and finish courses

of permanent paving. Coordinate development in a manner that will minimize exposure of incomplete work to deterioration and the need to rework installations, that will provide adequate temporary roads and paving during the course of the work, and that will result in completion of permanent roads and paved areas in a manner that will be new in appearance and without damage or deterioration at the time of the Owner's occupancy.

Delay installation of the final course of permanent asphalt concrete paving in areas exposed to temporary use, until immediately before substantial completion. Coordinate with normal weather conditions to avoid unsatisfactory results.

Extend temporary roads and/or paving in and around the site construction area as necessary to accommodate the following:

- Delivery and storage of materials.
- Fabrication operations.
- Use of equipment, including truck cranes.
- Mock-ups.
- Testing operations.
- Administration and supervision.
- Safety and protection activities.

Temporary entrances shall be maintained with gravel to minimize dirt removal from site by construction equipment and vehicles.

Sanitary Facilities:

General: Sanitary facilities include temporary toilets, wash facilities and drinking water fixtures. Comply with governing regulations including safety and health codes for the type, number, location, operation and maintenance of fixtures and facilities; provide not less than specified requirements. Install in locations, which will best service the project's needs.

Supply and maintain toilet tissue, paper towels, paper cups and other disposable materials as appropriate for each facility. Provide covered waste containers for used material.

Toilets: Install self-contained toilet units or water and sewer connected temporary toilet facilities, to the extent permitted by governing regulations. Use of pit-type privies will not be permitted.

Wash Facilities: Install potable-water-supplied wash facilities at locations convenient to construction personnel involved in handling compounds and materials where wash-up is necessary to maintain a healthy, sanitary condition.

Responsibilities: The Contractor for General Work is responsible for temporary sanitary facilities and their maintenance, including disposable supplies.

Temporary Enclosure:

General: At the earliest practical time provide temporary enclosure of materials, equipment, work in progress and completed portions of work to provide protection to the Work and employees from effects of exposure, foul weather, other construction operations, and similar activities on the site.

Provide temporary enclosures where temporary heat is needed and permanent building enclosure is not yet completed, and there is no other provision for containment of temporary heat. Coordinate enclosures with ventilating and material drying or curing requirements to avoid dangerous conditions and adverse effects.

Enclosure: Install tarpaulins or equivalent materials securely, using a minimum of wood framing and combustible materials. Individual openings of 25 sq. ft. or less may be closed with plywood or similar materials.

Close openings through the floor or roof decks and other horizontal surfaces with substantial load-bearing wood-framed or similar construction.

Project Identification and Temporary Signs:

General: Prepare project identification and other temporary signs of the size and with graphic content indicated; install where indicated. Support on posts or framing of treated wood or steel. Maintain signs to properly inform the public and persons seeking entrance to the project. Do not permit installation of unauthorized signs that are visible outside the site.

Project Identification Signs: Engage an experienced sign painter to apply graphics in a neat professional manner. Comply with details and notations indicated on sketch of sign inserted after end of this section.

Collection and Disposal of Wastes:

General: 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 more than 7 days during normal weather or 3 days when the daily temperature is expected to rise above 80 deg.F (27 deg.C). Handle hazardous, dangerous, or unsanitary waste materials separately from other inert waste by containerizing appropriately. Dispose of waste material in a lawful manner.

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.

Construction Aids and Miscellaneous Services and Facilities:

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

Temporary stairs and ladders.
Guardrails and barriers.
Walkways.

Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate for performance of work. Cover finished permanent stairs exposed to occupants' use, with a durable protective covering of plywood or similar material so that finishes will undamaged at the time of acceptance.

Walkways: Install and maintain temporary walkways around construction work and to field offices, toilets and similar places. Construct walkways of washed, well-graded gravel 6" deep by 36" wide, or duckboard units 20" wide.

Responsibility: General construction aids and miscellaneous facilities required by the Contractor for General Work as well as other subcontractors are the responsibility of the Contractor for General Work. Construction aids and miscellaneous facilities required exclusively for each prime subcontractor are the responsibility of that contractor.

SECURITY AND PROTECTION FACILITIES INSTALLATION:

General: Provide a neat and uniform appearance in security and protection facilities acceptable to the Architect/Engineer and the Owner.

Barricades, Warning Signs:

General: Comply with recognized standards and code requirements for 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 for recognition of the facility, including flashing red lights where appropriate.

Storage: Where materials and equipment must be temporarily stored, prior to and during construction, and are of substantial value or are attractive for possible theft, provide a secure lockup. Enforce strict discipline in connection with the timing of installation and release of materials, so that the opportunity for theft and vandalism is minimized.

OPERATION, TERMINATION AND REMOVAL:

Supervision: Enforce strict discipline in the use of temporary services and facilities at the site. Limit availability of temporary services and facilities to essential and intended uses to minimize waste and abuse. Do not permit temporary installations to be abused or endangered. Do not allow hazardous, dangerous or unsanitary conditions to develop or persist on the site.

Maintenance: Operate and maintain temporary services and facilities in good operating condition throughout the time of use and until removal is authorized. Protect from damage by freezing temperatures and similar elements.

Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation and similar facilities on a 24-hour day basis where required to achieve indicated results in the work and avoid the possibility of damage to work or the temporary facilities.

Protection: Prevent water filled piping from freezing, by use of ground covers, insulation, by keeping drained or by temporary heating. Maintain distinct markers for underground lines. Protect from damage during excavation operations.

Termination and Removal: Unless the Architect/Engineer requests that it be maintained for a longer period of time, remove each temporary service and facility promptly when the need for it has ended, or when it has been replaced by authorized use of a permanent facility, or no later than the time of 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.

Materials and facilities that constitute temporary services and facilities are and remain the property of each contractor.

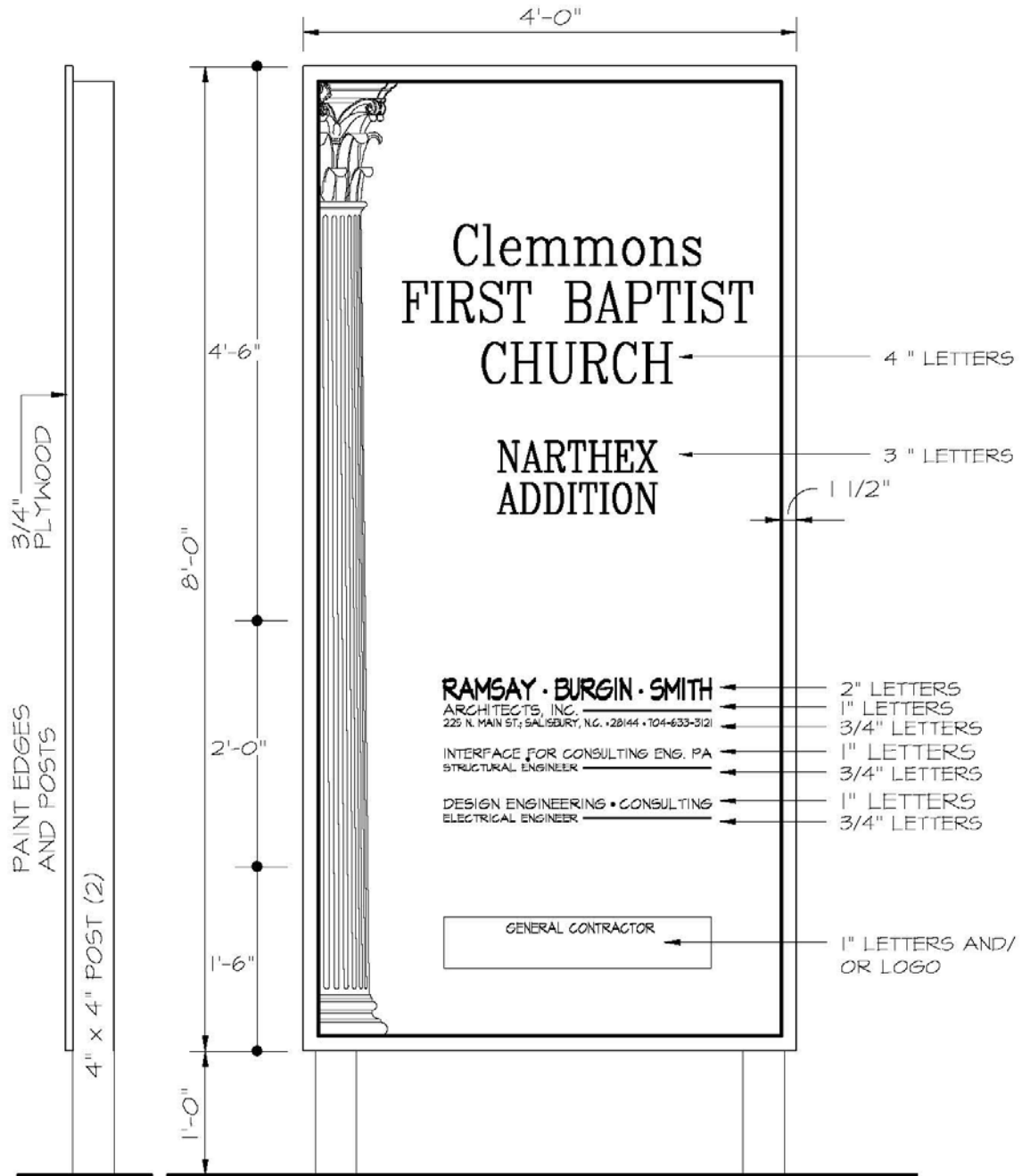
At substantial completion, clean and renovate permanent services and facilities that have been used to provide temporary services and facilities during the construction period, including but not limited to the following:

Replace air filters and clean the inside of ductwork and housings.

Replace significantly worn parts and parts that have been subject to unusual operating conditions.

Replace lamps in the lighting system that are burned out or dimmed by substantial hours of use.

END OF SECTION 01501



PROJECT SIGN

NOTE: SIGN COMPOSED OF: LT. GREY BACKGROUND W/ ROYAL BLUE LETTERING. 1 1/2" ACCENT BORDER SUBMIT SIGN LAYOUT AND COLORS BEFORE PAINTING OR CALL ARCHITECT FOR INSPECTION OF SIGN IN SHOP BEFORE FINISHING.

SECTION 01600 - MATERIALS AND EQUIPMENT

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 selection of products for use in the Project.

Single Prime Contracts: Provisions of this Section apply to the construction activities of each prime subcontractor.

The Contractor's Construction Schedule and the Schedule of Submittals are included under Section "Submittals."

Standards: Refer to Section "Definitions and Standards" for applicability of industry standards to products specified.

Administrative procedures for handling requests for substitutions made after award of the Contract are included under Section "Product Substitutions."

DEFINITIONS

Definitions used in this Article are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties," "systems," "structure," "finishes," "accessories," and similar terms. Such terms such are self-explanatory and have well recognized meanings in the construction industry.

"Products" are items purchased for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

"Named Products" are items identified by manufacturer's product name, including make or model designation, indicated in the manufacturer's published product literature, that is current as of the date of the Contract Documents.

"Materials" are products that are substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the Work.

"Equipment", is a product with operational parts, whether motorized or manually operated, that requires service connections such as wiring or piping.

QUALITY ASSURANCE

Source Limitations: To the fullest extent possible, provide products of the same kind, from a single source.

Compatibility of Options: When the Contractor is given the option of selecting between two or more products for use on the Project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.

Each prime Contractor is responsible for providing products and construction methods that are compatible with products and construction methods of other prime or separate Contractors.

If a dispute arises between prime Contractors over concurrently selectable, but incompatible products, the Architect will determine which products shall be retained and which are incompatible and must be replaced.

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

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

Equipment Nameplates: Provide a permanent nameplate on each item of service-connected or power-operated equipment. Locate on an easily accessible surface which is inconspicuous in occupied spaces. The nameplate shall contain the essential operating data and equipment characteristics.

PRODUCT DELIVERY, STORAGE, AND HANDLING

Deliver, store and handle products in accordance with the manufacturer's recommendations, using means and methods that will prevent damage, deterioration and loss, including theft.

Schedule delivery to minimize long-term storage at the site and to prevent overcrowding of construction spaces.

Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft and other losses.

Deliver products to the site in the manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting and installing.

Inspect products upon delivery to ensure compliance with the Contract Documents, and to ensure that products are undamaged and properly protected.

Store products at the site in a manner that will facilitate inspection and measurement of quantity or counting of units.

Store heavy materials away from the Project structure in a manner that will not endanger the supporting construction.

Store products subject to damage by the elements above ground, under cover in a weathertight enclosure, with ventilation adequate to prevent condensation. Maintain temperature and humidity within range required by manufacturer's instructions.

PART 2 - PRODUCTS

PRODUCT SELECTION

General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, unused at the time of installation.

Provide products complete with all accessories, trim, finish, safety guards and other devices and details needed for a complete installation and for the intended use and effect.

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

Product Selection Procedures: Product selection is governed by the Contract Documents and governing regulations, not by previous Project experience. Procedures governing product selection include the following:

Proprietary Specification Requirements: Where only a single product or manufacturer is named, provide the product indicated. No substitutions will be permitted.

Semiproprietary Specification Requirements: Where two or more products or manufacturers are named, provide one of the products indicated. No substitutions will be permitted.

Where products or manufacturers are specified by name, accompanied by the term "or equal," or "or approved equal" comply with the Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.

Non-Proprietary Specifications: When the Specifications list products or manufacturers that are available and may be incorporated in the Work, but do not restrict the Contractor to use of these products only, the Contractor may propose any available product that complies with Contract requirements. Comply with Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.

Descriptive Specification Requirements: Where Specifications describe a product or assembly, listing exact characteristics required, with or without use of a brand or trade name, provide a product or assembly that provides the characteristics and otherwise complies with Contract requirements.

Performance Specification Requirements: Where Specifications require compliance with performance requirements, provide products that comply with these requirements, and are recommended by the manufacturer for the application indicated. General overall performance of a product is implied where the product is specified for a specific application.

Manufacturer's recommendations may be contained in published product literature, or by the manufacturer's certification of performance.

Compliance with Standards, Codes and Regulations: Where the Specifications only require compliance with an imposed code, standard or regulation, select a product that complies with the standards, codes or regulations specified.

Visual Matching: Where Specifications require matching an established Sample, the Architect's decision will be final on whether a proposed product matches satisfactorily.

Where no product available within the specified category matches satisfactorily and also complies with other specified requirements, comply with provisions of the Contract Documents concerning "substitutions" for selection of a matching product in another product category, or for noncompliance with specified requirements.

Visual Selection: Where specified product requirements include the phrase "...as selected from manufacturer's standard colors, patterns, textures

Allowances: Refer to individual Specification Sections and "Allowance" provisions in Division-1 for allowances that control product selection, and for procedures required for processing such selections.

PART 3 - EXECUTION

INSTALLATION OF PRODUCTS

Comply with manufacturer's instructions and recommendations for installation of products in the applications indicated. Anchor each product securely in place, accurately located and aligned with other Work.

Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

END OF SECTION 01600

SECTION 01631 - PRODUCT 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 this Section.

SUMMARY

This Section specifies administrative and procedural requirements for handling requests for substitutions made after award of the Contract.

Single Prime Contracts: Provisions of this Section apply to the construction activities of each prime subcontractor.

The Contractor's Construction Schedule and the Schedule of Submittals are included under Section "Submittals."

Standards: Refer to Section "Definitions and Standards" for applicability of industry standards to products specified.

Procedural requirements governing the Contractor's selection of products and product options are included under Section "Materials and Equipment."

DEFINITIONS

Definitions used in this Article are not intended to change or modify the meaning of other terms used in the Contract Documents.

Substitutions: Requests for changes in products, materials, equipment, and methods of construction required by Contract Documents proposed by the Contractor after award of the Contract are considered requests for "substitutions." The following are not considered substitutions:

Substitutions requested by Bidders during the bidding period, and incorporated in a project addendum prior to award of Contract, are considered as included in the Contract Documents and are not subject to requirements specified in this Section for substitutions.

Revisions to Contract Documents requested by the Owner or Architect.

Specified options of products and construction methods included in Contract Documents.

SUBMITTALS

Substitution Request Submittal: Requests for substitution will be considered if received within 60 days after commencement of the Work. Requests received more than 60 days after commencement of the Work may be considered or rejected at the discretion of the Architect.

Submit 3 copies of each request for substitution for consideration. Submit requests in the form and in accordance with procedures required for Change Order proposals.

Identify the product, or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:

Product Data, including Drawings and descriptions of products, fabrication and installation procedures.

Samples, where applicable or requested.

A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include elements such as size, weight, durability, performance and visual effect.

Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate Contractors, that will become necessary to accommodate the proposed substitution.

A statement indicating the substitution's effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution.

Cost information, including a proposal of the net change, if any in the Contract Sum.

Certification by the Contractor that the substitution proposed is equal-to or better in every significant respect to that required by the Contract Documents, and that it will perform adequately in the application indicated. Include the Contractor's waiver of rights to additional payment or time, that may subsequently become necessary because of the failure of the substitution to perform adequately.

Architect's Action: Within one week of receipt of the request for substitution, the Architect will request additional information or documentation necessary for evaluation of the request. Within 2 weeks of receipt of the request, or one week of receipt of the additional information or documentation, whichever is later, the Architect will notify the Contractor of acceptance or rejection of the proposed substitution. If a decision on use of a proposed substitute cannot be made or obtained within the time allocated, use the product specified by name. Acceptance will be in the form of a Change Order.

PART 2 - PRODUCTS

SUBSTITUTIONS

Conditions: The Contractor's substitution request will be received and considered by the Architect when one or more of the following conditions are satisfied, as determined by the Architect; otherwise requests will be returned without action except to record noncompliance with these requirements.

Extensive revisions to Contract Documents are not required.

Proposed changes are in keeping with the general intent of Contract Documents.

The request is timely, fully documented and properly submitted.

The request is directly related to an "or equal" clause or similar language in the Contract Documents.

The specified product or method of construction cannot be provided within the Contract Time. The request will not be considered if the product or method cannot be provided as a result of failure to pursue the Work promptly or coordinate activities properly.

The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.

A substantial advantage is offered the Owner, in terms of cost, time, energy conservation or other considerations of merit, after deducting offsetting responsibilities the Owner may be required to bear. Additional responsibilities for the Owner may include additional compensation to the Architect for redesign and evaluation services, increased cost of other construction by the Owner or separate Contractors, and similar considerations.

The specified product or method of construction cannot be provided in a manner that is compatible with other materials, and where the Contractor certifies that the substitution will overcome the incompatibility.

The specified product or method of construction cannot be coordinated with other materials, and where the Contractor certifies that the proposed substitution can be coordinated.

The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provide the required warranty.

Where a proposed substitution involves more than one prime Contractor, each Contractor shall cooperate with the other Contractors involved to coordinate the Work, provide uniformity and consistency, and to assure compatibility of products.

The Contractor's submittal and Architect's acceptance of Shop Drawings, Product Data or Samples that relate to construction activities not complying with the Contract Documents does not constitute an acceptable or valid request for substitution, nor does it constitute approval.

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 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 that are 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"; therefore, the time of closeout may be either a single time period for the entire Work or a series of time periods for individual elements of the Work that have been certified as substantially complete at different dates. This time variation, if any, shall be applicable to the other provisions of this section.

PREREQUISITES TO SUBSTANTIAL COMPLETION:

General: 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.

In the progress payment request that coincides with, or is the first request following, the date substantial completion is claimed, show either 100% completion for the portion of the Work claimed as "substantially complete", or list incomplete items, the value of incomplete work, and reasons for the Work being incomplete.

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, damage or settlement 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 will either proceed with inspection or advise Contractor of unfulfilled prerequisites.

Following the initial inspection, the Architect 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 will repeat the inspection when requested and when assured that the Work has been substantially completed.

Note requirements of General Conditions, Article 9 and Supplementary Conditions, Article 9 clause 9.8.6.

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

Punch lists will be completed by the contractor within 30 days of receipt. Unless items on the list are specifically excluded by the architect, Liquidated damages shall be reapplied for work not completed in the 30 days indicated above.

PREREQUISITES TO FINAL ACCEPTANCE:

General: Complete the following before requesting the Architect'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 certified copy of the Architect's final punch list of itemized work signed off as or corrected, stating that each item has been completed or otherwise resolved for acceptance and has been endorsed and dated by the Architect.

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 three copies of the Consent of Surety for Final Payment, Contractor's Affidavit of Payment of Debts and Claims; Release of Liens (from each major subcontractor and material supplier.)

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

Submit an accounting of all sales tax (both State and County) spent on materials used on the project.

Reinspection Procedure: The Architect 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.

Upon completion of reinspection, the Architect 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.

Note requirements of General Conditions, Article 9 and Supplementary Conditions, Article 9 clause 9.8.6.

The Architect and the Owner will consider the project complete when the contractor(s) have no further need to be in the building due to project completion items, punch list items, or malfunctioning operational troubles and the project is accepted as complete. At that point, the one year warranty quality assurance phase shall be the govern the on site activities of the contractor(s).

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'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.

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 for the Owner's records.

Maintenance Manuals: Organize operating and maintenance data into 2 separate 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:

- List of Contractors and major subcontractors names, addresses, phone numbers and contact person.
- Copies of color schedules, hardware schedules.
- Floor or wall finish cleaning instructions from manufacturers.
- Product warranties
- Subcontractor warranties
- Shop drawings and product data.
- Emergency instructions.
- Spare parts listing.
- Copies of warranties.
- Wiring diagrams.
- Recommended "turn-around" cycles.
- Inspection procedures.

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:

- 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 (horizontal and vertical) 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 interior, 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.

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

Removal of Protection: Except as otherwise indicated or requested by the 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.

Compliances: 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.

Where extra materials of value remaining after completion of associated work have become the Owner's property, dispose of these to the Owner's best advantage as directed.

END OF SECTION 01700

SECTION 01740 - WARRANTIES AND BONDS

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.

The warranty period for this project is one **(1) year** unless more is indicated in the individual sections of this specification. Nothing implied by this warranty period exempts the Owner from other warranty rights that he may possess.

SUMMARY

This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturers standard warranties on products and special warranties.

Refer to the General Conditions for terms of the Contractor's special warranty of workmanship and materials.

General closeout requirements are included in Section "Project Closeout."

Specific requirements for warranties for the Work and products and installation that are specified to be warranted, are included in the individual Sections of Divisions-2 through -16.

Certifications and other commitments and agreements for continuing services to Owner are specified elsewhere in the Contract Documents.

Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

Single Prime Contracts: The General Contractor is responsible for warranties for the entire project. Each prime subcontractor is responsible for warranties related to its own prime subcontract for the duration indicated above.

See attached Contractor's General Warranty/Certification to be submitted by the General Contractor and the following subcontractors:

Plumbing, Mechanical, and Electrical.

DEFINITIONS

Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.

Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

WARRANTY REQUIREMENTS

Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.

Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.

Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.

Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, right and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.

Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.

SUBMITTALS

Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Architect's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.

When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect within fifteen days of completion of that designated portion of the Work.

When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner through the Architect for approval prior to final execution.

Refer to individual Sections of Divisions-2 through -16 for specific content requirements, and particular requirements for submittal of special warranties.

PART 2 - PRODUCTS (NOT APPLICABLE).

PART 3 - EXECUTION

Additional requirements for warranties and bonds on products and installation are found in their applicable sections of the specifications.

END OF SECTION 01740

(On Company Letterhead)

CONTRACTOR'S GENERAL WARRANTY/CERTIFICATION

(Name of Project)

(Address)

(Name of Contract)

The undersigned Contractor hereby warrants, in accordance with the applicable provisions and terms set forth in the Contract Documents, all materials and workmanship incorporated in the (name of contract) contract for (name of project) located in (project address) against any and all defects due to faulty materials or workmanship or negligence for a period of **12 months**, or such longer periods as set forth in the Contract Documents, from the effective date of this warranty.

Date of Substantial Completion: _____

This Warranty shall be binding where defects occur due to normal usage conditions and does not cover willful or malicious damage, damage caused by acts of God or other casualty beyond the control of the Contractor.

This Warranty shall be in addition to other warranties and guarantees set forth in the Contract Documents, and shall not act to constitute a waiver of additional protection of the Owner afforded, where applicable, by consumer protection and product liability provisions of law, and these stipulations shall not constitute waiver of any additional rights or remedies available to the Owner under the law.

The undersigned Contractor also hereby certifies that to the best of his/her knowledge, information and belief, no asbestos, lead or other hazardous materials have been utilized in this project.

Signed: _____

(Corporate Seal)Name: _____

Title: _____

Date: _____

Subscribed and sworn before me this
____ day of _____, 20____.

(Notary Public)