

2014

# Design Review Group Process Guide

Georgia State Financing and Investment  
Commission

*This Guide has been prepared to provide Fast, Friendly and Easy guidance to Design Professionals using the GSFIC Design Professional Contracts. This Guide along with the State Construction Manual and ongoing communication with the assigned GSFIC Project Manager and Authorized Representative of the Using Agency will result in projects being completed on time, on budget and of the highest quality. This is the goal of the Construction Division- GSFIC*



Construction Division  
2<sup>nd</sup> Floor 270 Washington Street  
Atlanta, Georgia 30334  
[www.gsfic.ga.gov](http://www.gsfic.ga.gov)

1/31/2014



## TABLE OF CONTENTS

### SECTION ONE: Definitions

#### 1.1 PURPOSE AND INTENT

#### 1.2 DEFINITIONS

#### 1.3 ABBREVIATIONS

#### 1.4 NEW TERMINOLOGY

### SECTION TWO: Design Process

#### 2.1 PURPOSE AND INTENT

#### 2.2 PRE-DESIGN (Items generally required BEFORE design starts)

- 2.2.1 Commitment Letter from Using Agency
- 2.2.2 Plat of Boundary Line Survey from Using Agency
- 2.2.3 Site Investigations Report
- 2.2.4 Subsurface Geotechnical Report Furnished to Bidders
- 2.2.5 GEPA Evaluation
- 2.2.6 Hazardous Materials
- 2.2.7 Water Wells
- 2.2.8 Space Standards
- 2.2.9 Energy Efficiency and Sustainable Construction Standards for State Buildings

#### 2.3 DRAWINGS

- 2.3.1 Plot Plan
- 2.3.2 Erosion, Sedimentation & Pollution Control Plan
- 2.3.3 Specialty Electrical System One Line Diagrams
- 2.3.4 Construction Fencing
- 2.3.5 Fencing at Storm water Ponds

#### 2.4 SPECIFICATIONS

- 2.4.1 Project Manual Arrangement and Supplementary General Requirements
- 2.4.2 Precision and Adequacy
- 2.4.3 Options
- 2.4.4 Performance Specifications
- 2.4.5 Trade Names
- 2.4.6 Warranties and Guarantees
- 2.4.7 Carpet Testing
- 2.4.8 HVAC and Systems Start-up and Testing
- 2.4.9 Pre-installation Meetings
- 2.4.10 Sole Source Justification

#### 2.5 COORDINATION OF WORK

- 2.5.1 Work "By Others"
- 2.5.2 Power Utility Coordination
- 2.5.3 State of Georgia Telecommunications Guidelines
- 2.5.4 Utility Connection Fees

## **2.6 INSPECTIONS AND TESTING REQUIRMENTS IN SPECIFICATIONS**

- 2.6.1** General
- 2.6.2** Authorities Having Jurisdiction
- 2.6.3** Building Official, Special Inspections and Required Code Inspections
- 2.6.4** State Fire Marshal Inspections
  - 2.6.4.1** Fire Alarm System Testing Requirements
  - 2.6.4.2** Fire Alarm System Design and the Georgia Accessibility Code/ADAAG
  - 2.6.4.3** Fire Sprinkler System Testing and Inspection requirements
- 2.6.5** Other Regulatory Agency Inspections
- 2.6.6** Building Commissioning
- 2.6.7** Special Inspections
- 2.6.8** Carpet Specifications and Manufacturer's Certifications
  - 2.6.8.1** Carpet Specifications
  - 2.6.8.2** Carpet Construction Testing
- 2.6.9** BMP Testing

## **2.7 MISCELLANEOUS REQUIREMENTS**

- 2.7.1** Loose Equipment and Furnishings

## **2.8 PROCUREMENT ELEMENTS**

### **SECTION THREE: Design Review Process**

#### **3.1 PURPOSE AND INTENT**

#### **3.2 REVIEW AGENCIES**

- 3.2.1** Using Agency
- 3.2.2** GSFIC Construction Services – Design Review Group
- 3.2.3** State Fire Marshal
- 3.2.4** State Telecommunications Guidelines (GSFIC)
- 3.2.5** Georgia Department of Natural Resources (DNR)
- 3.2.6** Other Agencies
- 3.2.7** Transmittal Letter

#### **3.3 REVIEW PROCEDURES**

- 3.3.1** Using Agency
- 3.3.2** State Fire Marshal
  - 3.3.2.1** Specific Requirements for Construction Permit (Site Preparation Only)
  - 3.3.2.2** Specific Requirements for Construction Permit (Building Shell Only)
  - 3.3.2.3** Construction Permit (Final)
  - 3.3.2.4** Fire Sprinkler Systems Design/Shop Drawing Review
  - 3.3.2.5** Fire Alarm System Review
- 3.3.3** Telecommunications Reviews
- 3.3.4** GSFIC Constructability, and Code Compliance Reviews-General
  - 3.3.4.1** Design-Bid-Build (DBB) Delivery Method
  - 3.3.4.2** Construction Manager at Risk (CM/GC) and Design-Build

#### **3.4 ADDITIONAL SUBMITTALS**

- 3.4.1** Required Submittals
- 3.4.2** Supplemental Submittals

**SECTION FOUR: Construction Process**

**4.1 PURPOSE AND INTENT**

**4.2 CONSTRUCTION PHASE DEFINED**

**4.3 COMMUNICATION CHANNELS**

**4.4 EVALUATIONS OF THE WORK BY DESIGN PROFESSIONAL AND CONSULTANTS**

**4.4.1 Required Code Inspections**

4.4.1.1 General Construction

4.4.1.2 Electrical and Telecommunications Inspections

4.4.1.3 Fire Alarm System Inspections

4.4.1.4 Mechanical Inspections

4.4.1.5 Plumbing Inspections

4.4.1.6 Fuel Gas Inspections

4.4.1.7 Fire Sprinkler System Inspections.

**4.4.2 Special Inspections**

4.4.2.1 Special Inspections - General

4.4.2.2 Final Report of Special Inspections

**4.4.3 Other Tests and Inspections**

**4.5 CHANGE ORDERS**

**4.6 NOTICES OF NON-COMPLIANCE**

**4.7 REQUESTS FOR INFORMATION (RFI)**

**4.8 SHOP DRAWINGS AND SUBMITTALS**

**4.9 APPROVAL OF SUBSTITUTE PRODUCTS (CM/GC AND DESIGN-BUILD)**

**SECTION FIVE: Appendices**

**APPENDIX A Sole Source Justification**

**APPENDIX B Check List of Utilities**

*Note: This Process Guide is continually reviewed by the Design Review Group, Construction Services Department, and GSFIC Construction Division. Any suggestions or comments on items contained within or suggested additions may be addressed to Manager, Design Review Group.*

## SECTION ONE: Definitions and Abbreviations

### 1.1 PURPOSE AND INTENT

Definitions of significant terms used in this guide are given below. These definitions are intended to be consistent with the definitions given in the various contracts used by the Georgia State Financing and Investment Commission (GSFIC). Abbreviations used in this guide are also defined below for convenience

### 1.2 DEFINITIONS

- Commitment Letter. An inter-agency agreement between the GSFIC and a Using Agency defining the commitment to finance and administer the development of the project.
- Construction Professional. As used in the State Construction Manual, this is another name for the General Contractor (Design-Bid-Build delivery), Construction Manager/General Contractor -CM/GC (Construction Management delivery) or the Design-Builder (Design-Build delivery).
- Design Professional. The lead Design Professional in Responsible Charge is generally selected by the Using Agency for the production of construction documents (drawings and specifications) and the supervision of the construction of the project.
- Design Professional Contract. The agreement between the Owner and the Design Professional which defines the scope of services of the Design Professional during the duration of the project. The Design Professional Contract may be executed first with the Using Agency then “assigned” to the Construction Division, GSFIC for continuation and completion of the project.
- Owner. The term “Owner” means the entity of State government that has entered into the Contract with the Design Professional. In some projects, the Design Professional will be engaged by the Using Agency for the design phase and then the contract is assigned to the GSFIC for the construction phase.
- Special Inspections. Special Inspections is the monitoring of the materials and workmanship critical to the integrity of the building structure as required by the International Building Code. It is a review of the work of the contractors and their employees to ensure that the approved plans and specifications are being followed and that relevant codes and referenced standards are being observed. The Special Inspection process is a requirement of the Contract Administration phase of the Design Professional Contract.
- Using Agency. The state agency for which the project is being constructed.

### 1.3 ABBREVIATIONS

The following abbreviations are commonly used in the contract, guidelines and other documents used by the Georgia State Financing and Investment Commission.

- BMP- Best Management Practices (Erosion, Sedimentation, Pollution Control)
- CCO Component Change Order
- CCS – Construction Compliance Specialist (GSFIC position)
- CD - Construction Documents (Change Order)
- CM/GC Construction Manager at Risk delivery method
- DB - Design-Builder (Delivery Method)
- DBB Design-Bid-Build delivery method

- DP - Design Professional
- EER - Environmental Effects Report (GEPA)
- GEPA – Georgia Environmental Policy Act
- GSFIC – Georgia State Financing and Investment Commission
- GMP- Guaranteed Maximum Price (Change Order)
- LIA - Local Issuing Authority (Land Disturbance Permitting)

#### 1.4 NEW TERMINOLOGY

All GSFIC contracts, guidelines, policies and forms were revised beginning in 2002 with the development of the State Construction Manual. Below is a list of key terms and nomenclature amended from the pre-2002 versions of these documents.

OLD TERM	NEW TERM
Architect	Design Professional
General Contractor	Contractor or Construction Professional
Construction Manager	CM/GC or Construction Professional
Construction Schedule	Construction Progress Schedule/ Overall Progress Schedule
General Conditions	General Requirements
Special Conditions (Section F)	Supplemental General Requirements
Periodical Estimate	Application for Payment
Order of Condemnation	Notice of Non-Compliance
Site Memorandum	Site Investigations Report
Budget Certificate	Statement of Probable Construction Cost
Final Certificate	Certificate of Material Completion
N/A	Certificate of Final Completion
Resident Engineer Inspector	Contract Compliance Specialist

## **SECTION TWO: Design Process**

### **2.1 PURPOSE AND INTENT**

SECTION TWO outlines those items of work that normally are required prior to and during the design of projects. Items have been grouped by category to provide easy reference. However, the Design Professional is still responsible to comply with all requirements of the Design Professional Contract as further explained or described in this Section.

### **2.2 PRE-DESIGN** (Items generally required before or concurrently with design start)

#### **2.2.1 GSFIC Commitment Letter**

If the project is funded by bonds, a Commitment Letter (inter-agency agreement) is required prior to commencement of any work. If the Using Agency desires to begin work in advance of a Commitment Letter, special authorization is required from GSFIC if such costs are to be reimbursed through future bond proceeds.

#### **2.2.2. Plat of Boundary Line Survey from Using Agency**

The Owner or Using Agency shall furnish complete information to the Design Professional regarding the legal boundaries, use and restrictions of the Project Site. The Owner is also responsible for ensuring legal title to the Project Site. Such information may be provided by a Plat of Boundary Line Survey or substitute information if a current Plan is deemed not necessary and the Design Professional concurs.

The Plat of Boundary Line Survey and supporting documents are reviewed by the State Properties Commission (SPC). A real properties record (RPR) number is assigned by the SPC and this number is shown on the Plat of Boundary Line Survey.

#### **2.2.3 Site Investigations Report**

The Site Investigations Report is a geotechnical investigation of the subsurface and its purpose is two-fold. First, the Design Professional relies on this information to design the foundations and related elements of the project structure. Second, if adverse subsurface conditions exist (rock, unsuitable soil, etc.), it is the Owner's policy that the Design Professional quantify these conditions to the extent practical and include this work in the bid specifications (or Component Construction Documents for CM/GC, Design-Build Delivery) along with specification of unit prices for adjusting the actual quantities at the conclusion of the work. This work is then administered under the "Force Account" procedures but the Owner realizes a "bid price" for the bulk of unsuitable material and only the adjustments to actual quantities are paid or credited at the established unit prices.

The Design Professional engages the Geotechnical Engineer following the procedures of Special Inspections and Testing (See 2.6.7). The Site Investigations Report is Form GSFIC-CS-406 and information from this Report is then provided in the Design Professional's Statement of Probable Construction Cost – Form GSFIC-CS-407. These Forms are available from the GSFIC Project Manager. The Design Professional shall engage the Geotechnical Engineer after the building site is selected and confirmed. The Geotechnical report and Stage One Statement of the Soil Engineer shall be completed immediately following the site selection. The services of the Geotechnical Engineer shall include attendance at design meetings which have any impact on the building and site designs. The Geotechnical Engineer's attendance will assure boring locations

are correct and allow discussion on recommendations from the Geotechnical report.

For Design-Bid-Build Delivery, the information about addressing unsuitable subsurface conditions is provided to the Owner's Project Manager for inclusion in the Supplementary General Requirements prior to issuance of bid documents. For CM/GC and Design-Build Delivery, if the Construction Contract has not been awarded, this process is the same. But if the CM/GC or Design-Build contract has been awarded, then this information shall be communicated by Bulletin to the Construction Professional and the Owner shall incorporate this into the Contract by Change Order.

Again, the intent is to "bid" the specified estimated amount of unsuitable material and then to "adjust" the final cost based on specified unit prices. The Construction Professional (and subcontractors) are not to estimate or assume in their cost any unforeseen or adverse subsurface condition other than as specified by the Design Professional in the Contract Documents as a result of the Site Investigations Report and Survey of Building Site Conditions (e.g. utilities, foundations, etc.).

The Site Investigations Report (Stage One and Stage Two statements) must be completed prior to the preparation of any Component Change Order or Guaranteed Maximum Price Change Order which would involve site grading or otherwise be affected by this report.

#### **2.2.4** Subsurface Geotechnical Report Furnished to Bidders

The Geotechnical investigations and reports obtained by the Design Professional are not intended for distribution to prospective contractors and subcontractors. However, it is the policy of the GSFIC that such information, if requested, should be made available with appropriate reservations. The following specimen language shall therefore be included in the specifications as applicable:

"Subsurface Investigation Report:

1. Soil and subsurface investigations were conducted at the site, the results of which are found in a report dated *{insert date of report}* prepared by *{insert name and address of investigating firm}*.
2. Reference: A copy of the report will be available to bidders at the office of the Design Professional [*show name and address*] between 8:00 a.m. and 5:00 p.m., Monday through Friday.
3. Copies: Bidders will be furnished copies of the report at the cost of reproduction, postage, and handling, upon written request to the Design Professional. Such requests, accompanied by check for \$*{insert amount}*, shall be in the following form:

"Please forward a copy of the Subsurface Investigation Report for [*insert Project Number and Name*]. In consideration for furnishing the report, the contracting firm herein named releases the [*insert name of Using Agency*], the Georgia State Financing and Investment Commission, and [*insert name of design professional*] from any responsibility or obligation for the accuracy or completeness of work performed under the contract resulting from assumptions based on use of such report."

4. Status: The Subsurface Investigation Report is not a part of the contract documents.
5. Interpretation: Data concerning subsurface materials or conditions which are based upon soundings, test pits, test borings, or other means, have been



obtained by the Design Professional for its use in designing the project. The accuracy or completeness of the data is not guaranteed; and therefore, the Construction Professional shall not rely on this information without independent verification. Neither the *[insert name of Using Agency]*, the Georgia State Financing and Investment Commission, nor Design Professional will be responsible in any way for additional compensation except as provided in the General Requirements Section – Changes due to Subsurface or Other Unforeseen Conditions.”

## 2.2.5 GEPA Evaluation

The Georgia Environmental Policy Act (GEPA) is a state law designed to help state agencies conduct their projects "with awareness that they are stewards of air, land, water, plants, animals and environmental, historical and cultural resources." This is accomplished by completing environmental evaluations of each project or "proposed government action" as prescribed by the Act.

The first step in the GEPA evaluation process is for the Using Agency to make a determination the proposed project qualifies as a “Proposed Governmental Action” under the Act. Most all State capital projects will fall under this requirement.

The second step in the GEPA evaluation process is for the Design Professional and Using Agency to determine if the proposed Project “could significantly adversely affect the quality of the environment.” The GEPA Guidelines, referenced below, provide a convenient check list and discussion on making this determination. Upon completion of this step, the Using Agency then determines whether or not a GEFA “Environmental Effects Report” is required.

The third step is preparation of the Environmental Effects Report (EER). The EER will require a joint effort of the Design Professional and Using Agency and must address the following:

- The environmental impact of the Project
- Alternatives to the Project, including “no action”
- Any adverse environmental effects which cannot be avoided
- Mitigation measures proposed to avoid or minimize the adverse impact of the Project
- The relationship between the value of the short term uses of the environment involved in the Project and the maintenance and enhancement of its long-term value.
- The effect of the Project on the quality and quantity of water supply
- The effect of the Project on the energy use or energy production.
- Any beneficial aspects of the Project, both short-term and long-term, and its economic advantages and disadvantages.

For descriptive guidelines on complying with GEPA, see the below website:

[http://www.georgiaepd.org/Files\\_PDF/techguide/pcb/GEPA\\_Guidelines.pdf](http://www.georgiaepd.org/Files_PDF/techguide/pcb/GEPA_Guidelines.pdf)

This link to “The Georgia Environmental Policy Act Guidelines” is further clarified as follows:

- The term “Responsible Government Official” shall mean the Using Agency Director or authorized representative of the Using Agency. The Construction Division, GSFIC shall not act in this capacity but will assist in the coordination of required documentation and review.
- The environmental considerations described in the EPD Guidelines relate to the Site Evaluation and Planning Services and Schematic Design Services- a part of Basic Services of the Design Professional.

- The requirements to comply with GEPA and prepare an Environmental Effects Report/GEPA Evaluation are not to be confused with an Environmental Site Assessment (ESA) which is a separate study conducted at the time of site selection (See State Construction Manual Chapter 2.3 Section C8).
- An Environmental Site Assessment (ESA) if available is valuable information to the Design Professional when preparing the Environmental Effects Report/GEPA Evaluation.

For Projects constructed for the Georgia Board of Regents (BOR), the Design Professional shall consult with the BOR Program Manager and/or the BOR Director of Environmental Affairs. For BOR Projects, see also:

<http://www.usg.edu/ehs/guidelines/gepa.phtml>

#### **2.2.6 Hazardous Materials**

If the Design Professional designs any work which will involve the use or handling of hazardous materials such as flammable and combustible liquids, welding gases, fuel gas, dry cleaning fluids, and liquefied petroleum, the Design Professional MUST obtain copies of the regulations of the Hazardous Materials Division of the Office of the State Fire Marshal in order to design, specify, and supervise accordingly.

<http://www.gainsurance.org/FireMarshal/Rules%20and%20Regulations.aspx>

#### **2.2.7 Water Wells**

The Water Wells Standards Act of 1985 (O.C.G.A. 12-5-120 *et seq.*) provides standards for siting, constructing, operating, maintaining, and abandoning wells and boreholes. The Act requires that individual and non-public wells must be located as far removed from known or potential sources of pollutants as possible. Licensing requirements for drilling contractors are established by the Act, as well a State Water Well Standards Advisory Council. The Council is authorized to adopt and amend rules and regulations that are reasonable to govern the licensing of well contractors. Compliance with the Water Wells Standards Act is required for all activities that utilize well water and are enforceable under Georgia law. Notify the Owner's Project Manager if a well is to be drilled. The Design Professional will be required to contact the Department of Natural Resources and obtain all information and requirements to comply with the aforesaid law.

[http://www.gaepd.org/Documents/rules\\_exist.html](http://www.gaepd.org/Documents/rules_exist.html)

#### **2.2.8 Space Standards**

The Georgia State Properties Commission has developed guidelines for allocation of net assignable space for various needs and tasks. These guidelines and instructions may be found at link below. In addition, Using Agencies may also have published guidelines on both design and space allocation standards. Compliance with such guidelines will be required for Agency review of each design phase. The Design Professional shall acquire and review such guidelines and standards to incorporate into the design. Any questions regarding compliance or interpretation of these guidelines should be addressed to the Using Agency.

[www.gspc.georgia.gov](http://www.gspc.georgia.gov).

**2.2.9 Energy Efficiency and Sustainable Construction Standards for State Buildings**  
**2.2.9.1 Applicability**

The provisions of these Standards shall apply to the construction, rehabilitation and maintenance of state-funded facilities that meet any one of the following criteria:

- 1) New construction building projects exceeding 10,000 square feet;
- 2) A renovation project that is more than 50 percent of the replacement value of the facility<sup>1</sup> ;
- 3) A change in occupancy;
- 4) Any roof replacement project exceeding 10,000 square feet; or 5) a commercial interior tenant fit-out project exceeding 10,000 square feet of leasable area where the state is intended to be the lessor of such property.

Exception : Any building, regardless of size, that does not have conditioned space as defined by ASHRAE or a state owned building that is on the historical registry or any local, county or municipal building.

<sup>1</sup> As determined by the Department of Administrative Services Risk Management Division.

**2.2.9.2 Effective Date**

The Act shall become effective on July 1, 2010, and shall apply to design agreements for major facilities projects entered into on or after such date.

**2.2.9.3 Mandatory Requirements**

1) Commissioning: A professional engineer, design professional, or commissioning agent shall certify that the building project's systems for heating, ventilating, air conditioning, energy conservation, and water conservation are installed and working properly to ensure that each building project performs according to the building's overall environmental design intent and operational objectives.

2) Water-Use Reduction: All major facility projects shall be designed, constructed, and commissioned or modeled to achieve a 15 percent reduction in water use when compared to water use based on plumbing fixture selection in accordance with the Energy Policy Act of 1992. The Water-Use Reduction requirement should be taken into consideration with the Governor's Water Conservation Challenge. The Challenge commits all state agencies and authorities in Georgia to implement practices that help reduce water usage by 5% over the next two years and 2% annually thereafter through the year 2020. Reductions will be calculated on a per square foot basis, using fiscal year 2007 as the baseline. Many of these reductions have already been superseded by the 2012 State Amendment to the IPC with a 20% reduction in water closet gal/flush to 1.28 gpf and a 50% reduction in urinal to 0.5 gpf. Also restrictions were put on showerheads, sink faucets and lavatory faucets for the first time.

3) Georgia-based Materials & Products: All major facility projects shall include Georgia products such that not less than 10 percent of all building materials used in a project are harvested, extracted, or manufactured in the State of Georgia where such products are commercially available. The following sections of the Official Code of Georgia Annotated (O.C.G.A) contain laws referencing the

purchase of Georgia products. Additional information regarding these laws may be obtained through the Department of Administrative Services.

50-5-[60-61] "Preference for Georgia Supplies, materials, equipment and agriculture products."

50-5-62 "Preference for Local Sellers of Georgia Products"

50-5-63 "Preference for Georgia Forest Products"

#### **2.2.9.4 Rating System**

Georgia Peach Green Building Rating System establishes a rating and recognition program for building designs that exceed the minimum standards established in the Energy Efficiency and Sustainable Construction Act. The rating system is outlined at the link below under the heading "Publications".

<http://www.dca.ga.gov/development/ConstructionCodes/index.asp>

### **2.3 DRAWINGS**

#### **2.3.1 Plot Plan**

The working drawings of the Construction Documents must include a Plot Plan designated as such on the drawing and consisting of ONE sheet only. All proposed work, including utilities and buildings, shall be sited on the Plot Plan to scale.

The Plot Plan shall be referenced to a Plat of Boundary Line Survey, if available, or substitute information regarding the proposed Project property as provided by the Owner and Using Agency. In the absence of a current Plat of Boundary Line Survey of the Project site, the Design Professional must concur that the substitute property information provided by the Owner is sufficient to properly identify, locate and layout the proposed Project.

The Owner and Using Agency are responsible to ensure the proposed Project site is delineated by the Design Professional on the Plot Plan and has proper title vested in the State of Georgia.

The Design Professional shall ensure the "work limits" lines shown on the Plot Plan do not extend beyond the property lines of the Using Agency as shown on the Plat of Boundary Line Survey or substitute property information. No work of the Construction Professional (including storing of materials or staging of any work) shall be permitted beyond the perimeter of the property except as to such easements, licenses, permits, or rights-of-way that have been obtained by the Using Agency and are shown on the property information and on the Plot Plan.

#### Certificate of Design Professional.

There must be written on the Plot Plan a Certificate of the Design Professional in the following language:

#### **CERTIFICATE OF DESIGN PROFESSIONAL**

"I certify (a) that this plot plan is correct and that it delineates the true, complete, and existing physical conditions on the site as described in the Survey of Building Site Conditions obtained by the Design Professional and as of the date of the present certificate, (b) that it shows boundaries and distances which appear on the property information (Plat of Boundary Line Survey or substitute documents) provided by the Using Agency, (c) that no portion of the work shown on this plot plan extends beyond the boundaries of the site as described on the aforesaid property information

except the following [insert the word "NONE" or insert a description of each exception including: (1) acknowledge receipt of copy of easement, rights-of-way, permit or license, and (2) acknowledge receipt of written consent of the Owner as, for example: "Laying of sewer line across property of John Doe pursuant to grant of rights-of-way dated (insert date) (copy of which grant of rights-of-way has been furnished to the Design Professional by the Using Agency) and accordance with written consent of the Owner dated (insert date)," or, as for another example: "Grading on the property of Richard Roe pursuant to grant of easement dated 11-10-06 (copy of which grant of easement has been furnished to the Design Professional by the Using Agency) and in accordance with written consent of the Owner dated 01-01-09"], (d) I certify that there is no work of any description required for completion of the Project which does not lie within the scope and boundaries of the Project and of any easements, licenses, permits, or rights-of-way listed hereinabove, and (e) I also certify that in the design of the work I have taken into consideration all restrictions, covenants, controls, easements, and rights-of-way shown on the Plat of Survey of Building Site Conditions."

### **2.3.2 Erosion, Sedimentation & Pollution Control Plan**

Refer to the Georgia State Soil and Water Conservation Commission website below. At Documents; Plan Review Checklist – Stand Alone Projects. This Checklist provides information on completing the Erosion, Sedimentation & Pollution Control plans and the required certifications required of the Design Professional or Consultant preparing the plans.

[www.gaswcc.georgia.gov](http://www.gaswcc.georgia.gov)

### **2.3.3 Specialty Electrical System One Line Diagrams (i.e. Fire Alarm, etc.)**

When a project includes a fire alarm, security, or audio-visual system, a one-line diagram shall be provided on the drawings. The one-line diagram shall be complete with all devices, panels, and other required equipment.

### **2.3.4 Construction Fencing**

Construction fences are required on all projects administered by GSFIC for liability and loss prevention purposes. A minimum six foot high chain link fence and gates shall be shown within the limits of construction.

### **2.3.5 Fencing at Storm water Ponds**

Permanent fencing at storm water detention or retention ponds is not required.

## **2.4 SPECIFICATIONS**

### **2.4.1 Project Manual Arrangement and Supplementary General Requirements**

The Specifications when completed shall be bound and edge taped. Front Cover of the specification must bear the signatures and seals of all consultants and the Design Professional. The arrangement of the Specification book shall be as follows:

1. GSFIC Form of Contract (or actual contract if CM/GC)
2. General Requirements
3. GSFIC Supplementary General Requirements (see below)
4. Design Professional's Trade/Technical Specifications with no duplication of the General Requirements

General Requirements are provided by the GSFIC Project Manager. Supplementary General Requirements is a section of the Contract Documents which amend or add to the General Requirements. Supplementary General

Requirements are prepared by the Design Professional with input from the Using Agency and Owner. The Supplementary General Requirements will be issued to you for inclusion in the Project Manual prior to final printing and binding. The Supplementary General Requirements include items that address:

- a) Special Conditions such as unit pricing or inclusion in bid for unsuitable soil, rock and ground water and similar potential changed conditions.
- b) Special security, access and scheduling requirements required by the Using Agency at the project site.
- c) Any special changes required of the General Requirements for this specific project.
- d) Any other special or unique conditions on this project other than technical specifications and drawing information.

#### **2.4.2 Precision and Adequacy**

##### Precision:

The Design Professional shall designate completely, definitely, and clearly the methods and materials for construction such that the Construction Professional can suitably and adequately prepare estimates and can obtain subcontractor and trade contractor/supplier bids.

##### Manufacturer's Recommendations.

When the Design Professional references a manufacturer's published recommendations as part of the specification, he must have a copy of the printed recommendations available for use by the Construction Professional and review by the Owner. References to such recommendations in the specifications shall include the name of the manufacturer and date of the publication. If there has been no publication of the recommendations, then the Design Professional is obliged to designate completely, definitely, and clearly the methods and materials for installation that are recommended.

If the Design Professional has specified a "manufacturer's recommendations" are part of the specifications in respect to installation of the product or system, it is required that copies of this document be furnished to the Owner for Owner's use in providing to the Project Manager and Contract Compliance Specialist during the construction phase. In recognition of the fact the Construction Professional is allowed to choose from any one of the multiple specified manufacturers (See Trade Names below), this requirement for furnishing the actual manufacturer's recommendations for the product/system selected can be placed on the Construction Professional as a required submittal.

The Design Professional shall carefully review any references to manufacturer's recommendations to ensure there is no conflict or disclaimer that would create a conflict with any other provision of the Contract Documents including warranty.

#### **2.4.3 Options**

As a general rule "Options" should not be provided in the trade sections of the contract documents. Do not confuse "Options" with "Alternates" which may be provided in the bid documents (Design-Bid-Build) or in the Component Change Order Documents (CM/GC and Design-Build) to which the Owner makes the final decision. In the event the Design Professional intends to provide two or more "Options" for the Construction Professional on a specific item of the work, all such "Options" must be fully defined with definite, complete and accurate descriptions as with any other portion of the work.

#### 2.4.4 Performance Specifications

The Design Professional is required to design the project and to designate completely, definitely, and clearly the Work that the Construction Professional is to perform. In most cases this will mean the specification of product or manufacturer names and model numbers (three required). However, as in the case of control systems, the Design Professional will define the performance of the system without the designation of individual members of the system. In the event the Design Professional uses this method, great care must be taken to insure that the Design Professional meets his obligation of the responsibility for design.

The Design Professional shall indicate in the Construction Documents when particular shop drawings will require the seal of a specialty consultant or where "Performance specifications" requiring design services to be performed by the Construction Professional are being proposed. The Design Professional shall not require the Construction Professional to provide professional services that constitute the practice of architecture or engineering in the Construction Documents except as may be required to complete the design intent as expressed by performance specifications requiring the seal of a specialty consultant; or, unless the Construction Professional requires such services to carry out responsibilities for construction means, methods, techniques, sequences, and procedures. If professional design services or certifications related to systems, materials, or equipment are specifically required of the Construction Professional by the Contract Documents, the Design Professional will specify all performance and design criteria that such services must satisfy. In any event, the Design Professional remains the designer of record for the Project and must certify compliance with all provisions of the Contract Documents.

Additionally, in the case of Fire Sprinkler and Fire Alarm Systems requiring the additional review and approval by a regulatory agency, these performance specifications, if used, and the subsequent shop drawings with the seal of a specialty consultant will also require the formal review from the applicable regulatory agency (See Section 3).

#### 2.4.5 Trade Names

Where practical, the Design Professional should designate the physical properties of materials, products, or equipment and, where possible, use an ASTM number, a Commercial Standard, a Federal Specification number, or any recognized designation. Alternatively, the Design Professional may utilize manufacturer's trade names and model numbers to specify the material, product or equipment.

When specifying trade names and model numbers, it is the policy of the Owner to promote competition among manufacturers and suppliers. When specifying trade names or brand names to identify parts and components of the Work, the Design Professional shall specify a minimum of three products that fulfill the design requirements and level of quality, such designations then become the only authorized and acceptable products for that element of the work. Under no circumstance should the Design Professional include the words "or equal" in any specification or drawing.

It is further the policy of the Owner that during the bidding phase of Design-Bid-Build projects and during the preconstruction phase of CM/GC and Design-Build projects preceding the GMP Change Order, the Design Professional shall consider additional products of manufacturers as requested by bidders or Construction Professionals (See Section 4.9), which products after approval then become part of the specifications. After award of the Construction Agreement (Design-Bid-Build) or execution of the GMP Change Order (CM/GC, Design-Build), no further substitutions of specified products are allowable.

#### **2.4.6 Warranties and Guarantees**

The Design Professional is cautioned to not include any language in the trade sections regarding warranties and guarantees that would diminish conflict or be confused with the provisions of the Construction Agreement (Section 6 Part 5 Correction of Work after Material Completion). The only circumstance where the Design Professional would include a warranty or guarantee provision in the trade sections of the specifications is where an “extended” warranty is desired. An “extended” warranty would be any guarantee that extends beyond a period of five years following the date of Material Completion. Extended warranty requirements most often relate to HVAC and Electrical equipment, refrigeration, roof systems, paint and coatings, and similar items.

Such extended warranties shall be provided by the Construction Professional to the Design Professional and Owner as part of the Documents and Deliverables required at Material Completion and shall provide for the direct enforcement by the Owner.

#### **2.4.7 Carpet Testing**

Carpet Testing is not included in the General Requirements and must be specified by the Design Professional in the trade sections as more fully described in Section 2.6.8.

#### **2.4.8 HVAC and Systems Start-up and Testing**

The Design Professional must carefully coordinate the provisions in trade specifications regarding system start-up, testing, training of staff and related services. The General Requirements provide the general obligations of the Construction Professional. The trade specifications may expand and further clarify this General Requirement but must not conflict or diminish the effect of this Section.

The design should utilize the latest SMACNA hvac systems duct design manual. The duct shall be sized in accordance with ASHRAE manual D duct design (equal friction, static regain, or t-design). Design should take into consideration good flow to negate minimum damper adjustment during the test and balance phase, and avoid high velocity and friction factors which could increase operating costs.

The Test and Balance (TAB) requirements of the specifications shall include 100% of the HVAC controls and equipment. Cubic feet per minute (CFM) shall be measured at the diffusers, grills, across coils and along with the Wet Bulb/Dry Bulb temperatures. Note, recommended velocity ranges should not be exceeded.

Further, if a Commissioning Authority is engaged on this Project, the duties and responsibilities of the Commissioning Authority may not reduce, alter or conflict with the basic requirements of the General Requirements of the Construction Contract and the Basic Services of the Design Professional.

#### **2.4.9 Pre-installation Meetings**

Special meetings with the Construction Professional, Design Professional and applicable subcontractors, suppliers and design consultants may be called by the Construction Professional as he deems appropriate. However, it is in the Owner's and Design Professional's interest to require certain pre-installation meetings for specialty trades to promote quality assurance, coordinate inspections and avoid delays. Accordingly, the Design Professional shall provide requirements within the trade sections of the Specifications for mandatory pre-installation meetings for the following general areas of work:

- Concrete



- Roofing
- Waterproofing
- Steel
- Masonry
- Storefront / Curtain wall / Glazing
- Special Construction
- Any Phased Work
- Other trade and specialty systems as deemed necessary by Design Professional or Using Agency

#### **2.4.10 Sole Source Justification**

State Purchasing regulations require that sole source or sole brand procurement, be justified in one of three manners. The required form is located in Appendix A of this Process Guide.

## **2.5 COORDINATION OF WORK**

### **2.5.1 Work “By Others”**

As a general rule, the Design Professional shall show no work on the drawings or specifications that is to be performed by anyone other than the Construction Professional. Exceptions to this rule may include the following:

- a) Work to be performed by public and private utility companies to enter the Project work limits and connect to the Project. Note: Such authorization may require a Revocable License Agreement issued by the Owner to the respective utility company and specific work limits for this utility company shall be clearly delineated on the Revocable License Agreement and the drawings.
- b) Any “Separate Contracts” for work contracted by the Owner pursuant to a scope item of the Program which is not practical or desired to be performed by the Construction Professional (e.g. Communications equipment, existing campus-wide security and energy management systems, etc.).
- c) Installation of any “Owner Procured” Furniture, Fixtures and Equipment if such installation is scheduled prior to the Material Completion Date (not recommended).
- d) Work performed, or being performed, by a previous phase of the Project. In such case, the work should be completed prior to the commencement of construction on the subsequent Project and the drawings should reflect the “as completed” conditions.

### **2.5.2 Power Utility Coordination**

The Design Professional shall consult with the Using Agency to determine the initial parameters regarding provision of electrical utility service. Depending on the projected service loads of the Project, location of the Project in Georgia and existence of current electrical service agreements and utility infrastructure at the Project site, the choice of electrical power may be provided by:

- Georgia Power Company
- Local EMC
- Municipal Power Company
- Existing Using Agency Distribution System

In most major projects, a “negotiation” must take place between the Owner and the respective utility provider to determine the agreement as to any infrastructure and metering costs associated with the construction of the utility’s facilities to service the Project (including provision of temporary construction power). In

most cases, the utility company will provide all of its work at no cost in return for the future revenues from energy consumption by the Using Agency.

After an initial agreement has been finalized for the provision of electrical service to the Project, the Design Professional's Electrical Engineer shall then communicate with the applicable power utility for the coordination of required service and connections. Provision of any required primary feeder system, service transformers, and metering requirements shall then be described in the contract documents with definition of who performs (utility or Construction Professional).

When the primary distribution system is privately owned and maintained by a campus system, the Design Professional shall at a minimum contact and meet with the physical plant office, presenting a site plan and calculations including anticipated connected and demand loads before construction documents are completed.

When the public utility is Georgia Power Company, it is recommended their current edition "Blue-Book" be reviewed. An electronic copy can be found at

<https://aande.georgiapower.com/ElectricServiceMeteringBook.aspx>

### **2.5.3 State of Georgia Telecommunications Guidelines**

The current State of Georgia Telecommunications Guidelines (GTG), formerly known as the State of Georgia Telecommunications Design Manual (GTDM), shall be followed for the design and implementation of "Information Transport Systems" as described in the GTG. The manual may be found at the link below. Ensure if any work is to be performed as a "Separate Contract" with the Owner or Using Agency, specific language in the Specifications must describe the intended coordination.

[http://gsfic.georgia.gov/sites/gsfic.georgia.gov/files/imported/vgn/images/portal/cit\\_1210/61/43/170441522Telecommunications%20Guideline%203.31.2011.pdf](http://gsfic.georgia.gov/sites/gsfic.georgia.gov/files/imported/vgn/images/portal/cit_1210/61/43/170441522Telecommunications%20Guideline%203.31.2011.pdf)

### **2.5.4 Utility Connection Fees**

Most projects require connection to municipal and private utilities with required permit fees, tap-in fees, water meter fees, etc. The Contract Documents should address the payment of these fees to avoid any confusion or delay to the project. As a general rule, the Construction Professional should be required by the Contract Documents to "arrange for and pay" the required fees to complete the utility connections. The Design Professional shall determine the cost of such fee for each specific utility connection and include this information on the Contract Documents either (a) On the drawings, (b) In the technical specifications or (c) In the Supplementary General Requirements – preferred. In the case of Design-Bid-Build projects, this will allow all bidders to include this amount in their bids and avoid multiple contacts to the utility companies.

As an alternative, the costs of utility connections could be specified as "by the Owner" but that is not recommended for coordination and risk of delay reasons.

In the event the utility connection is a significant cost (e.g. \$75,000+); the Design Professional shall consult with the Owner to determine the best method to address this item. The GSFIC Project Manager shall be made aware of impact fees as soon as possible. This matter shall be addressed on a case-to case basis.

In the event utility connections are not available at the property boundary, the Design Professional shall consult with the Owner to determine the best method to address this item.

## **2.6 INSPECTIONS AND TESTING REQUIREMENTS IN SPECIFICATIONS**

### **2.6.1 General**

This Section of the Process Guide highlights subjects pertaining to specific inspection or testing requirements to conform to codes or GSFIC policy but is not inclusive of all prudent inspection and testing requirements as may be required or recommended by the Design Professional. The Design Professional shall ensure the specifications adequately provide information on all such required inspections and testing to be performed during the Construction Phase and/or comply with requirements directly as required. Specifications shall coordinate with the language provided in the General Requirements of the Construction Agreements entitled "Inspections of Work" and "Testing." These referenced sections define terms of how inspections and testing is performed and who is responsible for costs and retesting.

### **2.6.2 Authorities Having Jurisdiction**

Generally, local code enforcing authorities have no purview on state projects. Exceptions include specific areas where the State regulatory agency has delegated code enforcement to a local jurisdiction such as with Land Disturbance Permitting and Food Service Permitting. In order to avoid problems during the construction phase, the Design Professional should avoid using the term "Authority Having Jurisdiction" in specifications but specifically name the proper authority such as: the State Fire Marshal, the Department of Labor, the Department of Human Resources, or in the event no authority has jurisdiction, the Design Professional.

### **2.6.3 Building Official, Special Inspections and Required Code Inspections**

For most State agencies and authorities, there is no designated "Building Official" as defined in the International Building Code with Georgia Amendments; and, with some exceptions, State construction projects do not fall under the jurisdiction of local counties and cities. Accordingly, city and county building departments including their respective permitting and inspection services are not engaged nor perform any services on State construction projects.

The Design Professional with his consultants shall perform as part of Construction Administration services all "required inspections" as listed and more fully described in the applicable Building Codes as stated in the Design Professional Contract as "Building Official," "Authority Having Jurisdiction," or "Required" inspections - regardless of whether or not a "Building Official" has been designated by the Using Agency. The intent of this provision of the Design Professional Contract is to ensure these original Codes referenced inspections are in fact performed even though the Georgia Amendments to said codes have eliminated certain sections where these "Building Official inspections" were described. The Design Professional shall have no additional powers of a "Building Official" including "interpretations" of the codes.

The Design Professional shall coordinate all "Special Inspections" as required by the code. See also other "Special Inspections" in Section 2.6.7. All required code inspections and record keeping services of the Design Professional shall be a part of Evaluations of the Work and Basic Services of this Contract.

## 2.6.4 State Fire Marshal Inspections

The General Requirements of the Construction Agreements, specified under the Section entitled “Inspection of Work”, describes the requirements for Fire Marshal Inspections. These requirements place the responsibility on the Construction Professional to request inspections at specified intervals. These requests are made directly to the State Fire Marshal in writing with notice also to the Owner and Design Professional. Generally no further specification language is required by the Design Professional on this subject except as described below.

### 2.6.4.1 Fire Alarm System Testing Requirements

The National Fire Alarm Code, NFPA 72-2002, Sections 10.4.1.1, 10.4.1.2.1.1, and 10.4.1.2.1.4 requires Initial Acceptance Testing for new systems and Functional Testing for existing system additions or modifications. The Design Professional shall include in the specifications a requirement for the Construction Professional and Fire Protection Trade/Subcontractor to complete and execute the *Inspection and Testing Form* (Figure 10.6.2.3 of the referenced Code Sections). No other forms or affidavits are acceptable. Further, ensure all specification language on this topic is coordinated with the General Requirements provisions titled “Inspections of the Work” and “Fire Marshal Inspections.”

Note, in the event the Owner intends to engage a separate firm to perform Building Commissioning, such contract shall specifically exclude commissioning of the fire alarm system due to the extensive requirements and comprehensive methods already prescribed by NFPA 72 Chapter 10 as a Code minimum.

### 2.6.4.2 Fire Alarm System Design and the Georgia Accessibility Code/ ADAAG

The installed Fire Alarm System shall meet the current requirements of the Georgia Accessibility Code and Americans with Disabilities Act (ADA) in addition to the National Fire Alarm Code (NFPA 72). If the Georgia Accessibility Code or ADA Accessibility Guidelines (ADAAG) exception of “equivalent facilitation” is being used for deviations by the Design Professional\*, a detailed description and calculations shall be provided to the Office of the State Fire Marshal (See Section 3.3.2.5 below) to clearly show evidence of providing substantially equivalent or greater access to and usability of the facility.

\*Note: If the Fire Alarm System Design is specified as a “Performance Specification”, the Design Professional must comply with this requirement of the Process Guide and Code and carefully coordinate the “approval” of any “equivalent facilitation” proposed by the Construction Professional and Trade Contractor with the Owner and State Fire Marshal in preparing the required design and shop drawings

### 2.6.4.3 Fire Sprinkler System Testing and Inspection requirements

The Standard for Installation of Sprinkler Systems, NFPA 13, 2010 edition, requires system acceptance tests for new systems and modifications to existing systems. NFPA 13, chapter 16, System Acceptance, indicates the acceptance requirements and documents needed for the fire sprinkler systems. NFPA 13, chapter 18, System Inspecting, Testing and Maintenance references NFPA 25 for further details on procedures. NFPA 25, the Standard for the Inspection, Testing and Maintenance of Water Based Fire Protection Systems, 2011 edition, provides the testing requirements for water based fire protection systems. The Rules and Regulations of the Safety Fire Commissioner Chapter 120-3-3, Rules and Regulations for the State Minimum Fire Safety Standards, provides modifications to the NFPA standards and provides specific tagging instructions/requirements for new or existing fire sprinkler systems. NFPA 24, the Standard for the Installation of Underground Private Fire Service Mains and their

Appurtenances, 2010 edition, chapter 10, and section 10.10 indicated the acceptance tests required for the underground fire supply piping

#### **2.6.5 Other Regulatory Agency Inspections.**

The General Requirements of the Construction Agreements do not specify instructions to the Construction Professional on requesting and scheduling other inspections from applicable regulatory agencies. The Design Professional therefore must include language in the trade sections of the Specifications describing the procedures for requesting, scheduling and conducting any inspections as required by applicable regulatory agencies. Contact your GSFIC Project Manager for a copy of Form GSFIC-CS-410 Regulatory Agency Approval Checklist for a list of typical items requiring regulatory agency review and approval.

#### **2.6.6 Building Commissioning**

The General Requirements of the Construction Agreements include language requiring the coordination of the Construction Professional with a Commissioning Authority (if engaged). A Commissioning Authority may be engaged by the Owner either as a direct contract, a part of the Construction Professional agreement or as an additional service to the Design Professional. In any event, the engagement of a Commissioning Authority will not reduce or eliminate any requirement of the Construction Professional and Design Professional to perform, inspect or verify completion of any of the building systems as required by the General Requirements (*See Construction Agreements Section 6 "Operation of Building Systems", "Operation and Maintenance Training" and other references to equipment start up and operation*) and any normal and customary requirements placed in the Specifications by the Design Professional.

Please see the Energy Efficiency and Sustainable Construction Act of 2008 (codified in O.C.G.A. § 50-8-18) and the GSFIC Commissioning Guide for State of Georgia requirements for commissioning. The Act becomes effective July 1, 2010 and requires basic commissioning on all new buildings, most renovation projects, and most roof replacements.

#### **2.6.7 Special Inspections**

This Section describes the responsibilities of the Design Professional in administering the Special Inspections Program. Note that on Design-Build delivery methods, the Owner, not the Design Professional, engages these services. On all other delivery methods, the Design Professional administers this Program. The Design Professional shall carefully review the General Requirement's language pertaining to "Inspections of the Work" and supplement this language in the trade specifications, where required, to accommodate the requirements of the Special Inspections Program.

The requirements contained within the *International Building Code Chapter 17 - Structural Tests and Special Inspection with Georgia Amendments* will be strictly enforced on all projects. If the Design Professional contends that specific Special Inspections are not warranted, he shall petition the Owner (Attn: GSFIC Project Manager) in writing providing sufficient justification to review such request. All decisions to waive specific requirements of Chapter 17 shall be confirmed by the Owner in writing to the Design Professional.

The Design Professional is contractually obligated to fulfill the role of the Building Official in respect to code required and special inspections. The Design Professional shall:

#### Prepare the Special Inspection Program.

With the assistance of the Structural Engineer of Record, the Design Professional shall prepare and submit to the Owner during completion of Construction Documents (See Section 3.3.4 Submittals) the [Statement of Special Inspections](#), which shall include the [Schedule of Special Inspection Services](#). These documents shall list items for which Special Inspection is required. They should also list the Special Inspector, his agents and their duties. For additional assistance see [GSFIC Special Inspection Guidelines](#). (Go to Link below)

<http://gsfic.georgia.gov/documents/special-inspections-guidelines>

#### Engage the Special Inspector(s).

Except for projects utilizing a Design-Build delivery system, to which the Owner engages the Special Inspection Services, the Design Professional is responsible for engaging the Special Inspector(s), its agents and any testing agencies required for the Special Inspection Program.

Refer to Sections 1 and 3 of the Design Professional contract and [GSFIC GUIDELINES FOR DESIGN PROFESSIONALS FOR SELECTING SPECIAL INSPECTIONS, MATERIAL TESTING, GEOTECHNICAL, AND/OR RELATED SERVICES](#)

(Go to Link below)

<http://gsfic.georgia.gov/sites/gsfic.georgia.gov/files/GuidelinesDesignProfessionals.pdf>

## 2.6.8 Carpet Specification and Manufacturer's Certifications

### **Carpet Flame Spread and Surface Burning Characteristics:**

In preparing the carpet specifications the DESIGN PROFESSIONAL shall ensure that carpet and carpet-like interior floor finishes shall comply with ASTM D 2859, *Standard Test Method for Flammability of Finished Textile Floor Covering Materials* and NFPA 253, *Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source* (which is also ASTM E 648).

Carpet that is used on surfaces other than the floor shall meet the requirements for surface burning characteristic tests in accordance with ASTM E 84, *Standard Method of Test of Surface Burning Characteristics of Building Materials* (which is also NFPA 255).

The CONTRACTOR shall obtain results for the above mentioned tests from the carpet manufacturer and be ready to present these results when requested.

### **Carpet Construction**

Testing for conformity with *Carpet Construction Specifications* shall include tests for carpet density, gauge, pile yarn weight, pile thickness, total thickness and fiber identification and shall be in accordance with subsection 2.6.8.1.

#### 2.6.8.1 Manufacturer Certification

It is our policy that all carpet delivered to the site shall be tested prior to being installed. The following is specimen language the DESIGN PROFESSIONAL is to include in the trade section for carpeting to define carpet testing:

#### TESTING OF CARPET

1. In order to prove compliance with the carpet construction specifications prescribed in the contract documents, the carpet shall be tested by an independent carpet-testing laboratory selected by the Design Professional. The CONTRACTOR shall notify the DESIGN

PROFESSIONAL when the carpet has been suitably stored at the job site. The CONTRACTOR shall remove a test sample from the carpet as selected by the Design Professional. The test sample for compliance with the carpet construction shall be one piece of carpet measuring either (a) six or one-half feet by twelve feet or (b) seven feet by seven feet. The test sample shall be accompanied by . . .

(1) An affidavit of an officer of the manufacturer of the carpet in accordance with the specimen prescribed herein below.

(2) A satisfactory report of investigation of surface burning characteristics as prescribed herein below.

The DESIGN PROFESSIONAL shall deliver the test sample to the testing laboratory selected for testing for compliance with the carpet construction specifications. Neither the installation of the carpet nor any preparatory operations for the aforesaid installation shall proceed until (a) the results of the test on the carpet construction have been received from the testing laboratory and approved in writing by the DESIGN PROFESSIONAL and (b) a satisfactory report from the Southwest Research Institute, 6220 Culebra Road, San Antonio, Texas, 78228<sup>1</sup>, Commercial Testing Company Inc., 1215 South Hamilton Street, PO Box 985, Dalton, Georgia 30720, or other approved organization has been delivered to the DESIGN PROFESSIONAL by the CONTRACTOR as prescribed herein below. The CONTRACTOR shall allow forty days from the date of delivery of (a) the test sample, (b) the affidavit, and (c) the report of investigation by him to the DESIGN PROFESSIONAL for the receipt of the results of the tests for compliance with carpet construction specifications. The CONTRACTOR shall provide a sufficient amount of carpeting (a) to allow for the specified testing of carpet and (b) for carpet installation.

2. Simultaneously with delivery of the above-mentioned test sample to the DESIGN PROFESSIONAL and prior to (a) installation of any carpet or (b) performance of preparatory operations for the installation of the carpet, the CONTRACTOR shall furnish a satisfactory report of investigation of surface burning characteristics of the carpet on flame spread and smoke density performed in accordance with the most current edition of the E84 test. The report of investigation of surface burning characteristics (a) must show compliance with ASTM-E-84-xxa, and (b) there must be contained in the report a description of the materials subjected to the ASTM-E-84-xxa, test procedure which description shall be identical to the carpet construction specifications contained in the contract documents for the carpet of the manufacturer whose product was approved by the DESIGN PROFESSIONAL. *Note*; xxa indicates current year i.e. for the year 2014 it would be ASTM-E-84-14a.

3. The affidavit of the officer [an affidavit of the manufacturer's representative will not suffice] of the manufacturer of the carpet shall conform to the following specimen:

SPECIMEN AFFIDAVIT OF CARPET MANUFACTURER

I hereby certify under penalty of false swearing that the carpet delivered to [Insert the project number and the name of the project] on or about [Insert the date] by the manufacturer, [Insert the name of the manufacturer], complies with the following carpet construction specifications: [Insert the complete carpet construction specifications (NOTE TO MANUFACTURER: The specifications must be absolutely in conformity with the carpet construction specifications in the contract documents for the project)] and that the materials of the aforesaid carpet are of the following description: [Insert a complete description of the materials (NOTE TO THE MANUFACTURER: The description must be absolutely in conformity with the materials specified for the carpet in the contract documents for the project)].

This \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

JOHN DOE MANUFACTURING COMPANY

---

<sup>1</sup> Or from Commercial Testing Co., Inc., 407 Central Avenue, P. O. Box 94, Dalton, Ga. 30720

By: \_\_\_\_\_  
(Signed)  
Title: \_\_\_\_\_

Sworn to and subscribed to before me, the undersigned authority, having authority to administer oaths.

This \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
(Seal of Notary Public)

Notary Public

4. Smoke density and flame spread criteria as prescribed in the bidding documents are not [repeat NOT] "carpet construction specifications." Therefore, the DESIGN PROFESSIONAL shall not [repeat NOT] include flame spread and smoke density testing of the sample he submits to the laboratory. The flame spread criterion for the present project is . . .

\_\_\_\_\_  
*[Insert the CLASS]*

The smoke density criterion as approved by the State Fire Marshal for the present project is . . .

\_\_\_\_\_  
*[Insert the NUMBER]*

To be "satisfactory" a report of investigation of surface burning characteristics must indicate that the carpet meets or exceeds each of the above criteria.

**NOTE:** GSFIC will not process any carpet invoice prior to receipt of favorable test results.

#### **2.6.9 BMP Testing**

The Design Professional shall ensure the required testing of BMP's as stipulated in the Erosion Control Checklist (including requirements for testing within seven (7) days of installation) are incorporated into the trade specifications and are part of the Design Professional's evaluation of the Work or Special Inspections. See Section 2.3.2

### **2.7 MISCELLANEOUS REQUIREMENTS**

#### **2.7.1 Loose Equipment and Furnishings**

Unless otherwise stipulated in the Program (Exhibit A to Design Professional Contract), as a general rule, the Design Professional is only required to design and specify in the Construction Documents "Fixed Equipment" and furnishings that require structural or fixed utility connections to the building.

"Loose Equipment" is defined as such items as furniture, artwork, administrative equipment, maintenance equipment etc., that can be delivered to a dock and placed in the building by operating personnel.

There are practical exceptions to this general rule:

- Kitchen equipment is both fixed and loose. It may be advisable to procure such equipment (except expendables) through one source (contractor or vendor).
- Fixed equipment such as laboratory, kitchen, and maintenance equipment can be procured by the agency as loose equipment then



connected and installed to the facility by the building contractor or separate contractor provided that arrangements are coordinated in the both the Design and Construction Documents for such installation.

- Loose equipment can be included in the Construction Documents and provided to the agency at Material Completion of the project, but generally the cost will be higher due to inability to exercise discounts on State-wide contracts and the Construction Professional's overhead and profit.

## 2.8 PROCUREMENT ELEMENTS

The Procurement Process is an integral part of the work to be completed by the Design Professional. Procurement elements and requirements are found in all phases of the selected procurement method. The DP's involvement depends on the type of construction delivery used. Procurement principles are key throughout the work for example whether assisting in the negotiations for a component change order under a CM/GC contract or considering and making a recommendation as to the validity of a change order request if using the design-bid-build process and engaged to perform construction administration.

<b>Procurement-Inclusive Phases where DP Involvement Occurs</b>	
Phase 1:	Planning – Need Identification/Pre-Solicitation Assistance
Phase 2:	Advertisement – Solicitation Preparation/Solicitation Process
Phase 3:	Contracting – Evaluation/Award
Phase 4:	Contract Administration
Phase 5:	Closeout

In those cases where pre-qualification is desired, the DP may be required to work with the Procurement Representative to develop, include and monitor all approved criteria that will appear in the project manual.

### GSFIC Used Project Delivery Options

(Reference Section 3.0 – Project Implementation of the State Construction Manual)

### Design-Bid-Build (DBB)

- (1) PM hands off to Bid Manager
- (2) Bid Manager manages the bid process

(3) DP Assists in Pre-Bid Conferences

(4) DP Prepares Bid Addenda for Procurement Distribution/Management

(5) DP Attends and Records Bid Opening

(6) DP Provides Minutes

### Construction Manager/General Contractor (CM/GC)

1. The DP will work with the CM/GC to incorporate design suggestions.
2. The DP will prepare priced design packages that will be used to construct certain critical elements of the work.
3. The Owner with DP assistance will use an early award construction packages process for the component change orders (CCO) e.g., Site Foundation, Steel, GMP, and Construction Documents.
4. The DP will provide project specific info for the CM/GC solicitation document.

5. The DP will help the owner coordinate bid addenda.
6. The DP may participate as resource for CM Selection.

#### Design-Build (D-B)

1. The DP will be asked to prepare design criteria for the project.
2. The DP may be asked to participate in D-B firms' selection process.
3. The DP will participate in D-B firm negotiation process as needed.

**Note: Each of the standard contracts used by GSFIC will make specific reference to procurement methods and expectations to be satisfied by the Design Professional. Please reference your contract and contact the Procurement Services Director if you have questions about the intent or implementation of any pertinent clause.**

### **SECTION THREE: Design Review Process**

#### **3.1 PURPOSE AND INTENT**

Section Three describes the Design Review Process and information about required submittals. Projected review time frames shall be correlated with the Preliminary Design and Construction Schedule of the Design Professional Contract. For CM/GC and Design-Build delivery methods, this schedule is then eventually incorporated into Overall Project Schedule prepared by the Construction Professional. It is critically important review time frames are accurately represented in the Overall Construction Schedule to avoid potential of a delay claim.

Comments made during the GSFIC reviews must be addressed by the Design Professional. The intent is that all comments are closed before a Design/Bid/Build Advertisement for Bid, RFQ for Best Value delivery method or any component change order for the GM/GC delivery method.

#### **3.2 REVIEW AGENCIES**

##### **3.2.1 Using Agency**

Throughout the design process and at the completion of each major design phase, the Design Professional shall obtain the approval of the Using Agency. Such review and approval shall be in addition to other agency review requirements as described in this section and in the Design Professional Contract. The primary purpose and scope of Using Agency review shall be to confirm acceptability of the design as interpreted from the Program and any special design criteria as established by the Using Agency.

##### **3.2.2 GSFIC Construction Services - Design Review Group**

The Design Review Group within GSFIC's Construction Services Division performs Constructability and Code Compliance reviews of all projects prior to (a) Advertisement for bids (Design-Bid-Build) or (b) Issuance of a Notice to Proceed for Construction Phase Services (CM/GC or Design-Build). *Constructability* reviews check for conformance with GSFIC policies and guidelines, completeness, coordination of documents and code compliance.

Design review services are in addition to Using Agency review. It should be noted that Design Review Group review is not a substitute nor should it replace the Design Professionals' standard Quality Assurance/Quality Control responsibilities.

### **3.2.3 State Fire Marshal**

The Office of the Insurance and Safety Fire Commissioner (State Fire Marshal) reviews all State projects for compliance with Life Safety Codes and issues all construction permits on State projects. The State Fire Marshal delegates review of certain State projects to the GSFIC; however, all transmittals and issuance of permits flow through the Office of the Insurance and Safety Fire Commissioner. The areas of review include: Overall compliance with the applicable Life Safety and related adopted NFPA Codes, Fire Sprinkler Systems and Fire Alarm Systems (including ADA equivalencies).

### **3.2.4 State Telecommunications Guidelines (GSFIC)**

The GSFIC Construction Services Division, Design Review Group performs all plans reviews for Information Transport Systems as described in the current State of Georgia Telecommunications Guidelines (GTG), formerly known as the State of Georgia Telecommunications Design Manual (GTDM).

### **3.2.5 Georgia Department of Natural Resources (DNR)**

There are multiple environmental compliance requirements on most capital projects. Contact your GSFIC Project Manager for assistance in identifying and coordinating requirements for:

- Georgia Environmental Policy Act (GEPA) evaluations
- Erosion, Sedimentation & Pollution Control Plan
- Notice of Intent – Land Disturbance Permits
- National Pollution Discharge Elimination Systems (NPDES) Permits
- Air Quality Permits
- Underground Storage Tanks

Additional “environmental” requirements and guidelines may be found at the Georgia Soil and Water Conservation Commission, and Georgia Environmental Facilities Authority sites below

[www.gaswcc.ga.gov](http://www.gaswcc.ga.gov) and [www.gefa.org](http://www.gefa.org)

### **3.2.6 Other Agencies**

Contact your GSFIC Project Manager or GSFIC Construction Services for assistance in identifying other required regulatory agencies. Form GSFIC-CS-410 has been prepared to assist Design Professionals with this information; however, it remains the primary responsibility of the Design Professional to comply with all regulatory rules, codes and regulations pertaining to the Project.

### **3.2.7 Transmittal Letter**

All submittals shall be accompanied by a Transmittal Letter including the GSFIC project name and number, the name of the Using Agency, the identification of the submittal (e.g. Design Development, GMP, etc.), the action requested, and the Design Professional’s name, e-mail address and phone number. All Transmittal Letters (less enclosure) should also be copied to the GSFIC Project Manager.

## **3.3 REVIEW PROCEDURES**

### **3.3.1 Using Agency**

The Using Agency must review and approve all design to ascertain compliance with the Owner/Using Agency’s Program and any special design criteria as established by the Using Agency. Review times vary from agency to agency

and the Design Professional must coordinate with the Using Agency Project Representative or GSFIC Project Manager the notice requirements and projected review times for each phase of design. Be aware of potential delays in scheduling executive or board approval of major documents due to meeting and travel schedules of the agency officials.

In order to expedite the review process, it is customary for the Design Professional to initiate the review process concurrently with all applicable review agencies. This is particularly important in the CM/GC and Design-Build delivery method in regards to prompt processing of Component Change Order Construction Documents.

### 3.3.2 State Fire Marshal

For all State projects, the State Fire Marshal's Office is responsible for the review of construction documents for compliance with state minimum standards for fire safety, life safety, and accessibility, issuing Construction Permits and issuing Certificates of Occupancy for those types of buildings listed in O.C.G.A. § 25-2-13. Further, the State Fire Marshal's Office has deputized some members of the GSFIC Design Review Group to review plans and specifications and issue Construction Permits for State projects; however, all submissions and transmittal letters must be directed to the State Fire Marshal's Office.

The Design Professional must incorporate all conditions of approval on the construction permit into the project manual within thirty days of the date on the permit.

As a service to Design Professionals, the State Fire Marshal's Office will perform preliminary Fire Marshal reviews of schematic plans and issue written comments to assist in the completion of design. This is encouraged for large or complex projects to avoid delays in issuing the final approval and construction permits. Design Professionals should submit two sets of schematic plans to the State Fire Marshal's Office with a 354 Plans Transmittal Letter and mark the request as "Preliminary Review". Drawings submitted for a preliminary review are not required to be signed and sealed.

For the design/bid/build delivery method, the Design Professional should submit two sets of 100% complete construction documents with a 354 Plans transmittal Letter to the State Fire Marshal's Office. For CM/GC and Design-Build delivery methods, if site grading and other construction phase services are to commence in advance of the completed construction documents, the State Fire Marshal's Office will consider the issuance of two intermediate construction permits:

- Authorization to Begin Site Grading and Foundation/Utility Operations Letter
- Shell Only Construction Permit

When the construction documents are 100% complete, request a Construction Permit (Final) from the State Fire Marshal's Office. Note: The State Fire Marshal's Office issues Construction Permits only for new buildings and new additions to existing buildings. Contract documents for renovations and build-outs of existing buildings are reviewed and stamped approved, but Construction Permits are NOT issued.

#### State Fire Marshal Submittal Instructions

##### Authorization to Begin Subsurface Site Approval Letter

- Submit two sets of signed and sealed civil drawings and Life Safety plans (see 3.3.2.1 for minimum requirements) with a 354 Plans Transmittal Letter.

- Submit adequate building elevations and sections to review project (not required to be signed and sealed)

Shell Only Approval Letter

- Submit two sets of signed and sealed Civil, Structural and Life Safety plans (see 3.3.2.2 for minimum requirements) with a 354 Plans Transmittal Letter.
- Submit adequate building elevations and sections to review project (not required to be signed and sealed)

Construction Permit (Final)

- Submit two sets of 100% complete construction documents (see 3.3.2.3 for requirements) with a 354 Plans Transmittal Letter.

All contract documents must be submitted to the State Fire Marshal's Office at the address below. All submitted documents are forwarded from the Fire Marshal's Office to Deputized State Inspectors at GSFIC Design Review Group for review and then sent back to the Fire Marshal's Office for distribution and filing. One set of approved contract documents will be mailed to the Architect of record. Reminder: State law requires that a complete set of approved plans and specifications be maintained on the construction site. Submit all documents to:

State Fire Marshal  
Two Martin Luther King, Jr. Drive  
West Tower, Suite 920  
Atlanta, Georgia 30334

For further information, visit

<http://www.inscomm.state.ga.us/>

The time required for review will vary due to the size and complexity of the project; however, projects will be reviewed within a maximum of thirty (30) business days.

Reminder: During the Construction Phase of a project, the State Fire Marshal is required to review and approve the shop drawings for the fire sprinkler system. Regardless of whether or not the fire sprinkler system is fully designed in the Construction Documents or issued as a Performance Specification for final design by the Fire Protection trade/sub-contractor, the State of Georgia Fire Protection and Safety Code requires the submission of final shop drawings and other design information by the trade/sub-contractor.

**3.3.2.1** Minimum submittal requirements for Authorization to Begin Site Grading and Foundation/Utility Operations Letter

(Note: Work authorized by this letter is limited to demolition, site grading, utility excavation/installation/relocation, foundation excavation and related site preparation work.)

1. Signed and sealed 100% complete civil drawings and specifications.
2. Signed and sealed Life Safety Plan(s) to include the following:
  - Applicable codes and editions
  - Occupancy classification
  - Construction type and allowable square footage
  - Actual square footage per floor
  - Maximum travel distances
  - Common paths of travel (if any)
  - Dead-end corridors (if any)

- Occupant loads
  - Exit capacity and remoteness
  - Fire-ratings of any vertical opening enclosures, horizontal exits, occupancy separations, and fire walls
  - Fire wall locations and details (if any)
  - Smoke barriers (if any)
  - Communicating spaces (if any)
  - Fire separation distances and exterior wall fire-ratings (if required)
  - State if the building is sprinkled (NFPA 13 or 13R)
3. Submit adequate elevations and sections to review project (these drawings would be submitted for reference and not required to be signed and sealed)

The following statement shall be on the cover sheet of drawings submitted for a  
 - Authorization to Begin Site Grading and Foundation/Utility Operations Letter

“To the best of my knowledge, information and belief, the plans, specifications and addenda comply with the applicable building codes in effect at the time of issuance for construction.”

---

Signature of Design Professional Date

Note: For additions, include the same information for the existing structure.

**3.3.2.2 Minimum submittal requirements for Shell Only Construction Permit**

(Work authorized by the Shell Only Construction Permit is limited to foundations and superstructure work in addition to site preparation work (demolition, site grading, utility excavation/installation/relocation and related site preparation work).

1. Signed and sealed 100% complete civil drawings and specifications
2. Signed and sealed 100% complete structural drawings and specifications
3. Signed and sealed Life Safety Plan(s) to include the following:
  - Applicable codes and editions
  - Occupancy classification
  - Construction type and allowable square footage
  - Actual square footage per floor
  - Maximum travel distances
  - Common paths of travel (if any)
  - Dead-end corridors (if any)
  - Occupant loads
  - Exit capacity and remoteness
  - Fire-ratings of any vertical opening enclosures, horizontal exits, occupancy separations
  - Fire wall locations and details (if any)
  - Smoke barriers (if any)
  - Communicating spaces (if any)
  - Fire separation distances and exterior wall fire-ratings (if required)
  - State if the building is sprinkled (NFPA 13 or 13R)
3. Smoke control analysis (atriums)
4. Life safety evaluation (smoke-protected assembly seating)
5. Submit adequate elevations and sections to review project (these drawings would be submitted for reference)

The following statement shall be on the cover sheet of drawings submitted for a  
 Shell Only Construction Permit

“To the best of my knowledge, information and belief, the plans, specifications and addenda comply with the applicable building codes in effect at the time of issuance for construction.”

---

Signature of Design Professional

Date

Note: For additions, include the same information for the existing structure.

### 3.3.2.3 Minimum submittal requirements for Construction Permit (Final)

1. Signed and sealed 100% complete contract documents (drawings and specifications). All drawings must be labeled as 100% complete.

Reminder: Requests for a Construction Permit (Final) is required of all projects regardless of the delivery method.

The following statement shall be on the cover sheet of drawings submitted for a Construction Permit (Final).

“To the best of my knowledge, information and belief, the plans, specifications and addenda comply with the applicable building codes in effect at the time of issuance for construction.”

---

Signature of Design Professional

Date

### 3.3.2.4 Fire Sprinkler Systems Design/Shop Drawing Review

The State of Georgia Fire Protection and Safety Codes requires the trade/sub-contractor who installs the work to hold a Certificate of Competency (CC) as issued by the State Fire Marshal’s Office. This requirement is stated in the General Requirements of the Construction Documents but may be repeated in the trade section of the specifications for emphasis. The Codes further require the submission of shop drawings and related documentation from the trade/sub-contractor for water based fire protection systems, if specified, regardless of whether or not such systems were fully designed by the Design Professional. The submission of these documents must be sent under transmittal of [Form 354S](#). This requirement is not stated in the General Requirements and must be provided by the Design Professional in the trade specifications.

Specifically, the Design Professional shall include language in the trade specification for water-based fire protection systems that provides for:

- The Certificate of Competency of the fire sprinkler trade/sub-contractor shall be submitted to the Construction Professional, Design Professional and Owner as required by the General Requirements.
- The fire sprinkler trade/sub-contractor shall submit the required documentation and obtain approval directly from the State Fire Marshal’s Office for all work related to the water-based fire protection system. This submittal shall be made within 30 days after the Notice to Proceed is issued to the Construction Contractor.
- Submittal shall consist of a minimum of three sets of sealed shop drawings, hydraulic calculations, technical data, and Owner’s Information Certificate along with a completed Transmittal Letter on Fire Marshal [Form 354S](#) to:

State Fire Marshal  
Two Martin Luther King, Jr. Drive  
West Tower, Suite 920  
Atlanta, Georgia 30334

- After approval by the State Fire Marshal's Office, the fire sprinkler trade/sub-contractor shall then submit the approved documents to the Construction Professional and Design Professional for final review and approval as a regular Shop Drawing submittal.
- Fire sprinkler system design requirements are dictated by NFPA 13, the Standard for the Installation of Sprinkler Systems, 2010 edition, and the Georgia Amendments found in The Rules and Regulations of the Safety Fire Commissioner chapter 120-3-3, Rules and Regulations for the State Minimum Fire Safety Standards. In NFPA 13, chapter 14, there is a detailed description of the required information concerning "working drawings and hydraulic calculations" that must be included in the design and submittal of drawings. The Georgia Amendments include additional requirements as well. The "Owners Certificate" found in NFPA 13, figure A.14.1(b) is one of the additional requirements.
- Note, the Design Professional cannot make any changes to the shop drawing submittal approved by the State Fire Marshal that would adversely affect or compromise said approval. In the event any such conflicts occur (e.g. conflict of sprinkler grid with ceiling/lighting grid), the Design Professional, Owner and Construction Professional should confer and discuss possible remedies to such situation which may include a revision and re-submission of the documents by the trade/sub-contractor.

#### **3.3.2.5 Fire Alarm System Review**

If the Fire Alarm System is shown on the Construction Documents as a Performance Specification, Shop Drawings, when submitted by the Construction Professional shall be submitted for review to the State Fire Marshal as an addendum to original submittal for the using a Form [354A Transmittal Letter](#). The Design Professional shall include instructions to the Construction Professional in the specific trade section

#### **3.3.3 Telecommunications Reviews**

The GSFIC Construction Services Division, Design Review Group performs all plans reviews for telecommunications systems. (Go to Link below)

[http://gsfic.georgia.gov/sites/gsfic.georgia.gov/files/imported/vgn/images/portal/cit\\_1210/61/43/170441522Telecommunications%20Guideline%203.31.2011.pdf](http://gsfic.georgia.gov/sites/gsfic.georgia.gov/files/imported/vgn/images/portal/cit_1210/61/43/170441522Telecommunications%20Guideline%203.31.2011.pdf)

#### **3.3.4. GSFIC Constructability and Code Compliance Reviews- General**

All projects, in which the construction phase will be administered by GSFIC, are required to have Constructability and Code Compliance reviews. Specific requirements for the three project delivery methods; Design-Bid-Build, CM/GC, and Design Build, are addressed below. Review comments will be sent directly to the Design Professional with copies to the GSFIC Project Manager, GSFIC Project Executive and the GSFIC project files via the e-Builder program.

GSFIC utilizes the construction management software program e-Builder as its solution to manage the entire project lifecycle; the program provides GSFIC with a central tracking and controls system. GSFIC uses all of the e-Builder modules to enable more efficient cost controls, process automation, document controls, bidding, and reporting. A broad range of stakeholders that include vendors, architects, engineers, and contractors are now able to collaborate on GSFIC projects with the e-Builder system. By enabling a system that's fully web-based and easy to navigate GSFIC can now mitigate project issues, eliminate redundant data entry, and provide logical workflows that improve customer service. The e-Builder system provides faster access to information that allows



clients to view specific projects and monitor their progress. This standardizes, and automates budget approvals, changes, commitments, consulting, construction pay applications, invoices, change orders, all project related documents and capital data. This standardized system will ensure that GSFIC can continuously monitor and measure processes and performance to address and improve problem areas that might develop. A project account is automatically set up for every project on the GSFIC design review e-Builder program portal at the onset of the design review process. The design professional is required to upload electronic drawings and specifications to this site in a logical sequence of events in the construction process.

<https://app.e-builder.net/www/index.aspx?ReturnUrl=%2fda2%2fHome%2findex.aspx>

For all projects where BIM is required it will be in addition to all current design submission requirements set forth in the design professionals contract and the design review process guide. Such projects shall comply with the requirements of the GSFIC BIM Guide located at the GSFIC website (see link below).

[http://gsfic.georgia.gov/sites/gsfic.georgia.gov/files/related\\_files/document/GSFIC%20BIM%20Guide%205.pdf](http://gsfic.georgia.gov/sites/gsfic.georgia.gov/files/related_files/document/GSFIC%20BIM%20Guide%205.pdf)

Although acquisition of the required NPDES and Land Disturbance Permits are the responsibility of the Construction Professional and issued through the Department of Natural Resources and Local Issuing Authority, the design documents including the Erosion, Sedimentation & Pollution Control Plan must comply with all applicable regulatory requirements. The GSFIC Design Review Group will provide advance review of this documentation during the design phase. All such requirements must be completed at the completion of final Construction Documents.

To facilitate response from the Design Professional, an electronic version of the GSFIC Comment Review Form will be sent via the e-Builder program, and the Design Professional is required to provide a written response to each comment indicating how each comment is to be addressed in the final construction documents. Review comments are color coded as follows:

**BLACK** text indicates a constructability issue, incomplete, or incorrect item.

**BLUE** text indicates a code related comment.

**RED** text indicates a critical comment.

On the Comment Review Form, the Design Professional shall provide his responses only in the column labeled: "DP Responses". GSFIC requests that Design Professionals clearly identify where changes have or will be made in the construction documents (i.e., drawing and detail number, or specification section and Section). Responses to Schematic Design Documents and Design Development Documents may refer to the incorporation of such changes in the final Construction Documents (or CCO/GMP Construction Documents) but otherwise such responses as "will comply" are not acceptable.

GSFIC requests the Design Professional return the completed Comment Review Form promptly to the Design Review Group. Responses to items that are deemed to be unacceptable to the Design Review Group will be highlighted in YELLOW and noted as OPEN.

After review of the final Construction Documents (including CCO/GMP Construction Documents) and the Design Professional's incorporation of such comments in revised drawings and specifications, the Design Review Group will

perform a Back Check to confirm final review. Once all outstanding comments have been addressed, GSFIC will notify the Design Professional in writing that the Back Check review process is complete and that final construction documents can be distributed.

**Submittal Requirements for Constructability and Code Compliance reviews:**

All project submittals, including geotechnical reports, hydrology study, etc., are uploaded electronically through the web portal based e-Builder program. Contact the Design Review Group or the GSFIC Project Manager for login information and instructions. Hard copy submittals with a letter of transmittal shall be addressed to:

Construction Services - Design Review Group  
Attention: Administrative Assistant  
Georgia State Financing and Investment Commission  
Construction Division - Second Floor  
270 Washington Street  
Atlanta, GA 30334

Plans are limited to a maximum 30"x42" dimension. The weight of bound plans should not exceed a maximum weight of twenty pounds per volume.

Specific guidelines on GSFIC Review procedures for each delivery type are provided below:

**3.3.4.1 Design-Bid-Build (DBB) Delivery Method**

General. The DBB Delivery Method requires complete approval of documents prior to the advertisement for bids for general contractors. Accordingly, the completion of all design and program requirements, regulatory agency requirements, Using Agency final reviews and other matters are of utmost importance. Refer to Form GSFIC-CS-411 Construction Documents Completion Checklist available from the GSFIC Project Manager for further details.

**Schematic Design Documents Review.**

1. A project account is automatically set up for every project on GSFIC Design Review e-Builder program portal at the onset of the design review process. The design professional is required to upload electronic drawings and specifications and may be asked, based on size and complexity of project to submit 1 hard copy set of drawings and specifications to the design review group for each phase of the project.
2. Submit 2 sets of drawings to the State Fire Marshal's Office for Life Safety /Accessibility Preliminary Review.
3. Submit drawings as required to other applicable Regulatory Agencies (See Section 2.6.5)

**Design Development Documents Review.**

1. A project account is automatically set up for every project on GSFIC Design Review e-Builder program portal at the onset of the design review process. The design professional is required to upload electronic drawings and specifications and may be asked, based on size and complexity of project to submit 1 hard copy set of drawings

and specifications to the design review group for each phase of the project.

2. Submit Form GSFIC-CS-406 Site Investigations Report.
3. Submit Environmental Effects Report (EER) or statement if not applicable (See Section 2.2.5).
4. Submit drawings as required to other applicable Regulatory Agencies (See Section 2.6.5)

#### Construction Documents

1. A project account is automatically set up for every project on GSFIC Design Review e-Builder program portal at the onset of the design review process. The design professional is required to upload electronic drawings and specifications and simultaneously submit 1 hard copy set of drawings and specifications to the design review group for each phase of the project.
2. Submit 2 sets of sealed drawings and specifications to the State Fire Marshal's Office for Life Safety / Accessibility Review
3. Submit drawings as required to other applicable Regulatory Agencies (See Form GSFIC-CS-410) and specifically documents required to attain the Land Disturbance permits (Erosion, Sedimentation and Pollution Control Plan) through Department of Natural Resources.
4. Submit Statement of Special Inspections Form GSFIC-CS-432 with attached proposed Schedule of Special Inspection Services (See Section 2.6.7).

#### Back Check of Construction Documents

1. A project account is automatically set up for every project on GSFIC Design Review e-Builder program portal at the onset of the design review process. The design professional is required to upload electronic drawings and specifications and simultaneously submit 1 hard copy set of drawings and specifications to the design review group for each phase of the project. Corrected drawings, specifications and response to GSFIC Design Review Group review comments shall be included.

*NOTE: Contact the lead reviewer at GSFIC Design Review Group for approval to submit only the corrected pages in lieu of complete sets of drawings and specifications.*

*Please Note: If all comments made during the Construction Document review have not been satisfactorily addressed after a Back Check review a meeting may be called at the GSFIC office. Attendance will be required by the Design Professional and all consulting engineers with outstanding comments.*

#### Bid Documents

After satisfactory completion of the Back Check, the Design Professional shall prepare and submit the final Bid Documents. The GSFIC requires one set of Contract (Bid) Documents signed and sealed by the Design Professional and all major consultants. An additional set may be required by the Using Agency.

Drawings must be fully completed, all references to "Not for Construction" removed, Specifications bound and edge taped. Front Cover of the specification must bear the signatures and seals of all consultants and the Design Professional. All drawings must be sealed and signed by all engineering disciplines.

Refer to Form GSFIC-CS-411 CONSTRUCTION DOCUMENTS COMPLETION CHECKLIST which is provided to the Design Professional by the GSFIC Project Manager after approval of the Construction Documents under cover of Form Letter GSFIC-CS-421. These documents provide specific information on preparation of Bid Documents to include:

- Alternates
- Supplementary General Requirements
- Correlation Review
- Property Matters
- Budget
- Bidding Procedures

The final Bid Document set for GSFIC shall be delivered to the GSFIC Project Manager, Project Management Group, Construction Services Department. The GSFIC Project Manager shall then complete requirements for transmittal of Project to the Procurement Department for the bidding and award phase.

The Design Professional will be contacted by the Procurement Department and furnished instructions for coordinating the bidding and award phase.

#### Addenda, Bulletins, Change Orders

After the Bid Documents have been completed, dated, stamped and sealed, all future changes must be confirmed by a published and numbered Addendum issued by the Design Professional. The GSFIC Procurement Department will provide specific instructions to the Design Professional (Form GSFIC-PS-303) regarding transmittal of Addenda to prospective bidders, the Using Agency and GSFIC.

Bidders may receive two types of addenda. Standard Addenda (identified as Standard Addenda A-1, Standard Addenda A-2, etc.) are issued only by the Owner and are reserved for making changes to the General Requirements, Supplementary General Requirements and Bid Requirements. Addenda (identified as Addendum No. 1, Addendum No. 2, etc.) are issued by the Design Professional and are used to (a) Correct discovered errors and omissions in the bid documents, (b) approve the addition of a manufacturer's product (see Paragraph 9 (d) Instructions to Bidders in the Contract Documents), or (c) to clarify items in the bidding documents.

Addenda must be approved by the GSFIC Project Manager prior to issuance to bidders. Depending on the nature of the correction or changed condition and its effect on the prior approval of the plans and specifications by the GSFIC, Using Agency and applicable regulatory agencies, both the GSFIC and Design Professional should carefully coordinate and communicate these activities to avoid a postponement of the proposed bid opening date.

Bidders must acknowledge receipt of all Standard Addenda and Addenda on their Proposal Form submitted at bid opening. Failure to acknowledge these addenda may result in rejection of their proposal. Accordingly, it is extremely important the Design Professional keeps an accurate record of all persons, firms and agencies who have received bidding documents (including GSFIC, Using agency, regulatory agencies, etc.) and that all parties receive copies of issued addenda.

During the bidding phase and prior to award of a construction contract, no bulletins or change orders are allowed. Any changes to the bidding documents are processed as (pre-bid) Addenda. In the event a further change is required in the bidding documents after bids are received but prior to award, such changes are processed as a (post-bid) Addenda

issued only to the GSFIC and specific party identified by the GSFIC (i.e. proposed General Contractor) and Using Agency.

Addenda:

1. Submit a copy of pre-bid addenda to the GSFIC Procurement Services Department ATTN: Bidding Manager at least 10 working days prior to the bid opening date. Review and approval by the GSFIC and Using Agency will be coordinated by the GSFIC Procurement Services Department. However, the Design Professional remains responsible to secure the approvals of any applicable regulatory agency which is a prerequisite to Owner approval.

Change Orders:

Change Orders are processed by the Owner after the award of a construction contract. The GSFIC Project Manager shall coordinate all internal reviews of Change Orders with the Design Review Group. However, the Design Professional remains responsible to secure the approvals of any applicable regulatory agency which is a prerequisite to Owner approval.

Bulletins:

Bulletins issued to the Construction Professional shall also be copied to the Owner addressed to the GSFIC Project Manager. Any questions regarding Bulletins will be addressed by the GSFIC Project Manager.

#### **3.3.4.2 Construction Manager at Risk (CM/GC) and Design-Build**

General. Both the CM/GC and Design-Build Delivery Methods provide for the commencement of construction services simultaneous with the completion of the design of the Project. Accordingly, the numbers and sequences of submittals for Owner, Using Agency and regulatory agency reviews are critically important to advancement of the Overall Project Schedule- one of the primary reasons for using this delivery method. However, it is important to point out the same level of review and approval is required by the Owner, Using Agency and applicable regulatory agencies as is provided under the Design-bid-build delivery method. In the Design-Build agreement, the Design Professional acts as the "Architect of Record" within the Design-Build agreement and coordinates review and approval of design documents accordingly.

Therefore, the Design Professional shall prepare and arrange for the Owner, Using Agency and applicable regulatory agency reviews of (1) Schematic Design, (2) Design Development and (3) Construction Documents as described and defined in the Design Professional Contract or Design-Build Contract. And in addition, the Design Professional shall prepare and arrange these same reviews for all separate construction documents prepared for (4) Component Change Orders and (5) the Guaranteed Maximum Price (GMP) Change Order.

The CM/GC and Design-Build delivery methods allow for the CM/GC to commence construction phase services and to eventually propose a GMP Change Order with partially complete documents. However, all documents provided to the Construction Professional for construction must be stamped and sealed by the Design Professional (even if incomplete). Further, these documents (CCO, GMP CO) must comply with all design and program requirements, regulatory agency requirements, Using Agency final reviews and other matters. Refer to Form GSFIC-CS-411 Construction Documents Completion Checklist available from the GSFIC Project Manager for further details. As a practicable matter, these reviews must be coordinated quickly and simultaneously with all parties to achieve the overall intent of the CM/GC or Design-Build delivery method and accelerated Overall Project Schedule.

#### Schematic Design Documents Review.

1. A project account is automatically set up for every project on GSFIC Design Review e-Builder program portal at the onset of the design review process. The design professional is required to upload electronic drawings and specifications and may be asked, based on size and complexity of project to submit 1 hard copy set of drawings and specifications to the design review group for each phase of the project.
2. Submit drawings as required to other applicable Regulatory Agencies (See Section 2.6.5)

#### Design Development Documents Review.

1. A project account is automatically set up for every project on GSFIC Design Review e-Builder program portal at the onset of the design review process. The design professional is required to upload electronic drawings and specifications and may be asked, based on size and complexity of project to submit 1 hard copy set of drawings and specifications to the design review group for each phase of the project.
2. Submit Form GSFIC-CS-406 Site Investigations Report.
3. Submit Environmental Effects Report (EER) or statement if not applicable.
4. Submit drawings as required to other applicable Regulatory Agencies (See Section 2.6.5)

#### Component Construction Documents (CCO Change Order Documents) and Guaranteed Maximum Price Construction Documents (GMP Change Order Documents):

1. A project account is automatically set up for every project on GSFIC Design Review e-Builder program portal at the onset of the design review process. The design professional is required to upload electronic drawings and specifications and simultaneously submit 1 hard copy set of drawings and specifications to the design review group for each phase of the project.
2. Refer to Section 3.3.2 of this Process Guide for the Fire Marshal submittal requirements.
3. Submit drawings as required to other applicable Regulatory Agencies (See Form GSFIC-CS-410) and specifically documents required to attain the Land Disturbance permits (Erosion, Sedimentation and Pollution Control Plan) through Department of Natural Resources
4. Submit Statement of Special Inspections Form GSFIC-CS-432 with attached proposed Schedule of Special Inspection Services (See Section 2.6.7).
5. 100% GMP construction documents must include all component change order drawings and all clouds must be removed.

#### Back Check of Construction Documents

1. A project account is automatically set up for every project on GSFIC Design Review e-Builder program portal at the onset of the design review process. The design professional is required to upload electronic drawings and specifications and simultaneously submit 1 hard copy set of drawings and specifications to the design review group for each phase of the project. Corrected drawings, specifications and response to GSFIC Design Review Group review comments shall be included.

*NOTE: Contact the lead reviewer at GSFIC Design Review Group for approval to submit only the corrected pages in lieu of complete sets of drawings and specifications.*

*If all comments made during the Construction Document review have not been satisfactorily addressed after a Back Check review a meeting may be called at the GSFIC office. Attendance will be required by the Design Professional and all consulting engineers with outstanding comments.*

#### Construction Documents (CD Change Order Documents)

1. A project account is automatically set up for every project on GSFIC Design Review e-Builder program portal at the onset of the design review process. The design professional is required to upload electronic drawings and specifications and simultaneously submit 1 hard copy set of drawings and specifications to the design review group for each phase of the project.
2. Submit 2 sets of sealed drawings and specifications to the State Fire Marshal's Office for Life Safety / Accessibility Review
3. Submit drawings as required to other applicable Regulatory Agencies (See Form GSFIC-CS-410) and specifically documents required to attain the Land Disturbance permits (Erosion, Sedimentation and Pollution Control Plan) through Department of Natural Resources.

#### Back Check of Construction Documents

1. A project account is automatically set up for every project on GSFIC Design Review e-Builder program portal at the onset of the design review process. The design professional is required to upload electronic drawings and specifications and simultaneously submit 1 hard copy set of drawings and specifications to the design review group for each phase of the project.

*Note: Contact the lead reviewer at GSFIC Design Review Group for approval to submit only the corrected pages in lieu of complete sets of drawings and specifications.*

*If all comments made during the Construction Document review have not been satisfactorily addressed after a Back Check review a meeting may be called at the GSFIC office. Attendance will be required by the Design Professional and all consulting engineers with outstanding comments.*

#### Addenda, Bulletins, Revised Drawings, Supplemental Drawings, Change Orders

In the CM/GC and Design-Build delivery methods, changes and additions to construction documents are incorporated into the respective agreements through bulletins, supplemental drawings and revised drawings which then are incorporated into subsequent Component Construction Documents, GMP Construction Documents and the final Construction Documents (CD Change Order).

Change Orders are generally only issued after execution of the GMP Change Order except in rare cases where a change is necessary to a Component Change Order.

In all cases where a change or addition is made to the construction documents being provided to the Construction Professional, such documents shall be provided to the Owner, Using Agency and applicable regulatory agency for review. The Design Professional and GSFIC Project

Manager shall coordinate the receipt and transmittal of such documents to the respective parties of the Owner, Using Agency and applicable regulatory agency to accomplish said review and, where required, approval by the appropriate parties.

#### Other Regulatory Agencies

The Design Professional shall refer to Form GSFIC-CS-410 Regulatory Agency Approval Checklist, available from the GSFIC Project Manager, in addition to a review of applicable codes and regulations to determine which additional regulatory agencies must review the Construction Documents. Each of these regulatory agencies may have a specific form and procedure for requesting and obtaining approval. Review times will vary according to the regulatory agency and complexity of the project. It is strongly advised to identify and contact each of the required regulatory agencies at the very start of a project to avert any potential delays to approval or start of construction. If any difficulties are encountered with regulatory agencies, the GSFIC Project Manager should be advised and consulted.

### **3.4 ADDITIONAL SUBMITTALS**

**3.4.1 Required Submittals-** In addition to the items outlined above, the Design Professional shall provide directly or make available to the Construction Professional any requirements for documentation or permit application required by a Regulatory Agency (*See Form GSFIC-CS-410*) as part of a permit application, plans approval or otherwise.

**3.4.2 Supplemental Submittals-** Additional submittals may be required to address specific questions or concerns during the Design Review Process. The applicable Regulatory Agencies or the GSFIC Design Review Group may request such information as deemed prudent and necessary for Owner review.

## **SECTION FOUR: Construction Process**

### **4.1 PURPOSE AND INTENT**

Section Four describes the processes required by GSFIC during the construction phase of a project. The purpose and intent of this section is to provide requirements which shall be made a part of the technical specifications and/or drawings. This section also includes information on GSFIC processes which the Design Professional shall adhere to during the construction phase of a project.

### **4.2 CONSTRUCTION PHASE DEFINED**

During the bidding phase, the Design Professional is engaged in reviewing and approving alternate products, issuing addenda and assisting the Owner in tabulation of bids.

For Design-Bid- Build Projects, the Construction Phase begins with the award of the Construction Contract, issuance of the Proceed Order (Notice to proceed) and authorization from the Owner to the Design Professional to commence Construction Phase Services.

For Construction Management (CM/GC) and Design-Build Projects, the Construction Phase begins with the issuance of the first Component Change Order (CCO) for construction phase services.

### **4.3 COMMUNICATION CHANNELS**

The Construction Professional is directed in the Construction Agreement regarding communications, meetings, submittals and teamwork/partnering with the Project Team consisting of the Owner, Using Agency, Design Professional and Construction



Professional. The Owner will assign a Project Manager to promote these teamwork objectives. It is critically important to the success of any project that the Design Professional, Construction Professional and Owner's representatives (Project Manager, Contract Compliance Specialist and Using Agency Authorized Representative) maintain and promote positive and effective communication (written, electronic and verbal) among the Project Team Members. The Owner's Project Manager should be copied on all communication and correspondence related to the Project.

#### **4.4 EVALUATIONS OF THE WORK BY DESIGN PROFESSIONAL AND CONSULTANTS**

The Design Professional Contract describes the services required of the Design Professional and Consultants during the Construction phase of the Project. The frequency and content of site evaluations of the work are the responsibility of the Design Professional and shall be performed as necessary to:

- Confirm the Work complies with the Contract Documents and applicable codes (including acceptance of written reports of inspections by regulatory agencies)
- Perform other inspections as stipulated in the Contract Documents
- Inspect Work prior to covering
- Certify Work for Applications for Payment
- Certify Work for Material Completion
- Certify Work for Final Completion.

The Design Professional Contract also provides that the Design Professional and consultants shall contact the Owner's Contract Compliance Specialist and CM/GC at each Site visit and shall maintain a log of all its visits by discipline; and that written reports of field observations and evaluations shall be provided to the Construction Professional and Owner within seven (7) days of any Site visit. A monthly summary report shall be provided to the Owner with copy to the Construction Professional.

##### **4.4.1 Required Code Inspections**

Building Official Inspections. In addition to regular site visits, evaluations and observation of the Work, the Design Professional shall perform inspections as identified in the applicable Building Codes as "Building Official," "Authority Having Jurisdiction," or "required" inspections. The Design Professional shall refer any requests for code variances to the Owner. The inspections performed by the Design Professional, or consultants, and coordinated by notification from the Construction Professional shall include (but not be limited to) all inspections required by the applicable codes and as further described below:

###### **4.4.1.1 General Construction:**

- Footing and Foundation inspection. Footing and foundation inspections shall be made after excavations for footings to be constructed are complete and any required reinforcing steel is in place.
- Concrete slab and under-floor inspection. Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the sub-floor.
- Frame inspection. Framing inspections shall be made after the roof deck or sheathing, all framing, fire-blocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.
- Lath and gypsum board inspection (Fire Rated Walls). Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or gypsum board joints and fasteners are taped and finished.

Inspection of joints and penetrations in fire-resistance-rated assemblies shall be inspected prior to concealing.

- Energy efficiency inspections. Inspections shall be made to determine compliance with Section 713 of the International Building Code with Georgia Amendments Chapter 13 and shall include, but not be limited to, inspections for: envelope insulation *R* and *U* value, duct system *R* value, and HVAC and water-heating equipment efficiency.

- Special Inspections. The Design Professional shall verify the required special inspections as required by Section 1704 of the International Building Code with Georgia Amendments (see Section 1.1.2.5 of the General Requirement – Construction Agreement) review and assimilate the final report of special inspections with the Design Professional's Certificate of Material Completion.

**4.4.1.2** Electrical and Telecommunications Inspections. Inspections shall be made of electrical and telecommunications systems to confirm compliance with the National Electrical Code with Georgia Amendments (NFPA 70) and include but are not limited to:

- Underground Inspection: Electrical and telecommunication systems after underground components are installed and bedded in trenches or ditches and prior to placement of backfill.

- In-Slab Rough-in: Electrical and telecommunication systems installed in slabs prior to placement of concrete.

- Wall and Ceiling Rough-in: Electrical and telecommunication systems installed in walls and above ceilings prior to cover-up.

- Power Distribution Equipment: Electrical switchgear, switchboards, distribution panels, branch circuit panels, automatic transfer switches, dry-type transformers, and motor control centers after all components are in-place but before covers are installed.

- Wiring Devices and Methods: Electrical feeder and branch circuit wiring, devices, and device operation.

- Emergency Systems: Electrical emergency systems and device operation.

- Lighting control systems: Lighting control systems and device operation.

- Labeling: Electrical system identification and warning labeling.

**4.4.1.3** Fire Alarm System Inspections. Testing and inspection of completed systems shall be performed in compliance with NFPA 72, National Fire Alarm Code, and NFPA 101, Life Safety Code, per the most current adopted State of Georgia edition and amendment(s). Prior to requesting final approval of the installation, the *installing contractor*, shall furnish a written statement stating that the system has been installed in accordance with approved plans and tested in accordance with the manufacturer's specifications and the appropriate NFPA requirements. Completion of NFPA 72 form "**Record of Completion**" shall be submitted along with the written statement. Testing and inspection of the system for final approval shall be conducted in the presence of the owner, or his representative(s), and the Design Professional to verify compliant installation.

**4.4.1.4** Mechanical Inspections. Required inspections shall be made of mechanical systems to confirm compliance with the International

Mechanical Code with Georgia Amendments and include but are not limited to:

- Underground Inspections: after underground piping is installed and bedded in trenches or ditches and prior to placement of backfill.
- Rough-in Inspection: After walls, floors, roof framing, fire blocking, bracing, ductwork, piping, and other components of the mechanical system to be concealed in the completed structure are complete prior to installation of wall or ceiling membranes.
- Pressure Tests: Witness all required pressure testing of below grade and above grade piping.

**4.4.1.5 Plumbing Inspections**. Required inspections shall be made of plumbing systems to confirm compliance with the International Plumbing Code with Georgia Amendments and include but are not limited to:

- Underground Inspection: After underground piping is installed and bedded in trenches or ditches and prior to placement of backfill.
- Rough-in Inspection and testing: After walls, floors, roof framing, fire blocking, draft-stopping, bracing, sanitary, storm, and water distribution piping, and other components of the plumbing system to be concealed in the completed structure are complete prior to installation of wall and ceiling membranes.
- Pressure Tests: Witness all required pressure testing of below grade and above grade piping.

**4.4.1.6 Fuel Gas Inspections**. Required inspections shall be made of Fuel Gas systems to confirm compliance with the International Fuel Gas Code with Georgia Amendments and include but are not limited to:

- Underground Inspection: After underground piping is installed and bedded in trenches or ditches and prior to placement of backfill.
- Rough-in Inspection and testing: After walls, floors, roof framing, fire blocking, draft-stopping, bracing, and other components of the fuel gas piping system are complete prior to installation of wall or ceiling membranes.
- Pressure Tests: Witness all required pressure testing of below grade and above grade piping.

**4.4.1.7 Fire Sprinkler System Inspections**. Testing and inspection of completed systems shall be performed in compliance with NFPA 13, NFPA 25 and NFPA 101, Life Safety Code, per the most current adopted State of Georgia edition and amendment(s). Prior to requesting final approval of the installation, the *installing contractor*, shall furnish a written statement stating that the system has been installed in accordance with approved plans and tested in accordance with the manufacturer's specifications and the appropriate NFPA requirements. Completion of Hydrostatic Test papers shall be submitted along with the written statement. Testing and inspection of the system for final approval shall be conducted in the presence of the owner, or his representative(s), and the Design Professional to verify compliant installation.

## 4.4.2 SPECIAL INSPECTIONS

**4.4.2.1** Special Inspections (General): Refer to Section 2.6.7 and see [GSFIC Special Inspection Guidelines](#) for guidance on coordinating Special Inspections during the Construction Phase. The Design Professional is responsible for managing and coordinating the efforts of the various Special Inspectors or agents. The Design Professional may designate a single Special Inspector to oversee the process on his behalf; however the Design Professional remains the primary contact for GSFIC and is responsible for the collection and distribution of required forms and reports.

**4.4.2.2** Final Report of Special Inspections: Prior to issuing the Design Professional's Certificate of Material Completion, the Design Professional shall obtain and review the Final Report of Special Inspections.

## 4.4.3 OTHER TESTS AND INSPECTIONS

The Design Professional shall ensure all other tests and inspections as required by the Contract Documents, applicable codes and other requirements are performed. Examples include:

- Carpet Testing (See Section 2.6.8.2)
- BMP Installation within seven (7) days after initial construction operations (Erosion, Sedimentation & Pollution Control Plan)
- HVAC Test and Balance

## 4.5 CHANGE ORDERS

All Change Orders are issued by the Owner using the GSFIC "Two Step" process. Requests for Change Orders may be initiated by the Design Professional, Construction Professional or Owner. Change Orders are used to amend the Construction Agreement whenever there is a changed condition as to the Contract Documents (scope), Contract Time (Material Completion Date) or Contract Sum (compensation).

Most commonly, such change orders fall under one of these three categories:

1. Governmental -Changes in applicable codes or requirements of regulatory agencies.
2. Errors and Omissions – Defects in the plans and specifications
3. Unforeseen job site conditions – Hidden or subsurface conditions not discernible to the Construction Professional at contract execution

Change Orders are also issued to provide for interim payment of a Force Account Authorization or to confirm final contract adjustments for "allowances". Most common "allowances" are in respect to unsuitable soils, pile foundations, rock removal and similar sub-surface (indeterminate quantity items).

Change Orders are also issued to confirm settlement of a Claim, for acceptance of a Non-Compliance Order and other matters.

It is the policy of the Owner to issue Change Orders promptly for any bone-fide cause. Change Order requests should not be delayed, deferred or "grouped". The Design Professional is required to provide the necessary design documents for each Change Order and to recommend to the Owner as to the adjustments to

the Construction Agreement (including cost and any time extension) are reasonable and appropriate.

#### **4.6 NOTICES OF NON-COMPLIANCE**

The Design Professional issues Notices of Non-Compliance whenever the work deviates from the Construction Documents. As a practical matter, such observations and documentation of contract deviations are noted on field reports from periodic inspections and in most cases are resolved timely by the Construction Professional. The more formal "Notice of Non-Compliance" should be used whenever the scope of the deviation is significant, may result in further damage or safety concern, represents a significant cost impact to the Owner or similar concern where it is in all parties interests to notify, document and follow-through with required corrections.

Notices of Non-Compliance are also issued by the Design Professional if the Construction Professional falls behind schedule or fails to complete a plan of corrective action regarding a breach of the schedule.

Finally, the inspections for Material Completion resulting in a "Punch list" are all conformed to a final Notice of Non-Compliance.

If the Construction Professional fails to correct a Notice of Non-Compliance within the stipulated correction period, the Design Professional may recommend and the Owner may reduce the amount in question from the Construction Professional's Application for Payment.

#### **4.7 REQUESTS FOR INFORMATION (RFI)**

In accordance with the Construction Agreements, the Construction Professional may request clarification for any item of the Construction Documents. Requests for Information must be promptly addressed by the Design Professional within the time stipulated in both the Design Professional and Construction Agreements to avoid exposing the Owner to claims for delay. Periodic meeting with the Owner, Design Professional and Construction Professional (OAC Meetings) should have the RFI Submittal Log as a standing agenda item.

If an RFI discloses the need for a Change Order, the Design Professional shall promptly notify the Owner's Project Manager to commence the Change Order Process.

#### **4.8 SHOP DRAWINGS AND SUBMITTALS**

The Construction Professional is required to submit a Shop Drawing and Submittal Schedule for review and approval by the Design Professional as one of the Pre-construction requirements. Once approved, the Shop Drawing and Submittal Schedule must be closely administered by both Construction Professional and Design Professional.

Show Drawings are not to be used to correct errors or omission in the contract documents. If an error or omission exists, a Change Order should be used to correct the deficiency.

Any element of the work that the Design Professional issues as a "Performance Specification" requiring the stamp and seal of a specialty design architect or engineer must be carefully reviewed during the Shop Drawing Submittal Process. The Design Professional remains responsible for the complete design of the project and certification at Material Completion all work has been constructed in accordance with the Construction Documents and in accordance with all applicable and designated codes. This requirement applies additionally to

elements of the fire alarm and fire sprinkler systems which require pre-approval from the State Fire Marshal.

#### **4.9 APPROVAL OF SUBSTITUTE PRODUCTS (CM/GC AND DESIGN-BUILD)**

On CM/GC and Design-Build Projects, if proposed Trade Contractors and Trade Suppliers request authorization to propose and install products of manufactures different from those described in the approved plans and specifications (Component Construction Documents or GMP Change Order Documents), the Design Professional shall coordinate with the Construction Professional to approve substitute products as follows:

- a. During CM/GC procurement of a Component. If bidders (Trade Contractors/Trade Suppliers) to the CM/GC request a substitute product, the CM/GC shall coordinate the Request for Information (RFI) to the Design Professional the result of which shall be communicated to all prospective bidders. If approved, the Design Professional shall include this additional product in the final Construction Documents.
- b. During CM/GC procurement of the Work after GMP but before Construction Documents Change Order. If bidders (Trade Contractors/Trade Suppliers) to the CM/GC request a substitute product, the CM/GC shall coordinate the request of this information in an RFI to the Design Professional the result of which shall be communicated to all prospective bidders for that element of the Work. If approved, the Design Professional shall include this additional product in the final Construction Documents.
- c. After execution of the Construction Documents Change Order. Requests by the CM/GC for a substitute product will be reviewed by the Design Professional and if approved will be confirmed by a Change Order to the CM/GC Contract.

APPENDIX A Sole Source Justification Form



## GSFIC - Sole Source Justification Form

**Return Completed Form To:** Georgia State Financing and Investment Commission – Construction Division

Attention: Procurement Services, Second Floor -- 270 Washington Street -- Atlanta, Georgia 30334

NOTICE: State Purchasing regulations require that sole source or sole brand procurement, be justified in one of three manners. Please place an “X” in the box below that best applies to your purchase and attach this form to your purchase requisition. Be sure that your requisition has a complete description of the item or item’s including brand name, model number and distributor, or vendor.

**Select One:**

This is a purchase of repairs involving hidden damage; the vendor must disassemble the item before cost of repairs may be determined.

This is a purchase requiring performance compatibility with existing commodities and/or services.

Explain the compatibility requirement:

This is a sole source based on performance specifications (*NOTE: Brand name, design, or specification requirements are not acceptable.*)

**What is the unique performance requirement?**

**Why is this feature necessary?**

**What other sources were checked?**

**In what way did the other sources not meet performance requirements?**

**Is the product requested available from more than one dealer, distributor, or vendor?**

Yes  No

<b>Design Professional Representative (Name &amp; Title)</b>		<b>Date</b>
Company/Print Name/Title:		
Authorized Signature:		
Phone Number:	E Mail Address:	
<b>GSFIC Construction Director Approval: Sign and Date</b>		<b>Date</b>
<b>Procurement Director Approval: Sign and Date</b>		<b>Date</b>

**Attachment: Supporting Correspondence**

# Schematic Design Check List of Utilities

(To Accompany Schematic Design Documents)

Project Number \_\_\_\_\_ Date: \_\_\_\_\_

Project Name \_\_\_\_\_ Institution \_\_\_\_\_

Architect \_\_\_\_\_

NOTE: ALL SPACES MUST BE COMPLETED	Communications Copper	Communications Fiber	Electric	Water	Sanitary Sewer	Storm Sewer	H.W. or Stream	Chilled Water
Who owns utility lines on campus?								
Does Utility exist where shown on plans?								
If not, when will Utility be installed and by whom?								
Is point of project connection to Utility off Regents=s property?***								
Must Utility be moved out of way of building?								
Who will move Utility?								
Is existing Utility adequate (of sufficient capacity) for project—see below								

\*\*\* Such as in adjacent right-of-way, on private property, etc.

Remarks:

Approved:

\_\_\_\_\_  
President’s Designee:

\_\_\_\_\_  
Director of Plant Operations:

\_\_\_\_\_  
Architect

\_\_\_\_\_  
Date