

PROCEDURE MANUAL FOR DESIGN & CONSTRUCTION

New Schools and Additions

The Architect's Basic Services consist of the phases described in the AIAB101-2007 Standard Form of Agreement Between Owner and Architect (Hereafter referred to as AIA B101) Document and as further described herein. Requirements set forth in AIA B101 may be duplicated in this document, and are included for clarity and continuity of this document. Where these requirements are included herein, either verbatim or paraphrased, AIA B101 and the Supplementary Conditions shall be considered to be the overriding documents for those requirements. This document expands upon AIA B101 and the supplementary conditions by including additional detail and added requirements. The Owner (APSB) may designate a Program or Project Manager who may be designated as the Owner's Representative. The terms APSB, Owner, Project Manager, Program Manager, and Owner's Representative shall be considered synonymous wherever used in this document. Basic services shall include the normal services of the Architect and normal complementary or supplementary services of his Consultants. Review Documents of each phase shall be submitted to the Project Manager for their review. Architect shall not proceed to any subsequent phases until the requisite written comments are received and until authorized by the Project Manager in writing to so proceed.

The established Project (Design) Schedule, once agreed upon via Work Order or other Contractual Form, shall be followed to the fullest extent possible. All A/E requests for extensions in the established Project Schedule for a particular design phase deadline shall be delivered to the Project Manager 14 calendar days prior to the previously agreed upon design phase deadline. Requests for design time extensions must include a description as to why the additional time is needed and the amount of additional time requested. Liquidated damages will be assessed at each Phase Submittal Date that is agreed upon in the Work Order, Project Schedule or other Contractual Agreement. The Damages will be deducted from the A/E fee amount for the phase submittal that is late.

PROGRAM/SCOPE CONFIRMATION PHASE

1.0 General

The Completed Program/Scope Document consists of the Design Program, Site Analysis, Budget Analysis, Time Schedule and Outside Consultant Reports and shall be submitted to the Project Manager for review and thereafter only the Project Manager shall have the authority to alter the Program Document. Any authorization by the Project Manager to alter the Completed Program Document shall be in writing.

Existing Conditions Analysis (If applicable)

The Architect shall conduct a site inspection to determine the existing conditions of the facility to be renovated and prepare a detailed analysis. The Existing Conditions Analysis shall consider and report on the following facility characteristics (where appropriate for the type of repair / alteration):

- a) Floor plan
- b) Structural System
- c) Mechanical System
- d) Electrical System
- e) Utilities
- f) Environmental Impacts

Each facility characteristic shall be identified and analyzed to determine its ability to support the proposed project. Where an element is inadequate, an estimate shall be made by the Architect to determine the cost and schedule impact to the project.

1.1 Design Program

The Architect shall review the Educational Specifications provided by the Project Manager, meet with the Project Manager to determine more detailed program requirements for the project and complete the Design Program to the satisfaction of the Owner.

The Completed Program shall consist of the following elements:

- a) Space Requirements
- b) Functional Adjacencies
- c) Code Analysis
- d) Proposed Building Systems
- e) Preliminary Estimate of Construction Cost

1.2 Site Analysis

The Architect shall provide their opinion as to the ability of the site to support the proposed facility. The Architect may use an owner provided site study (if available) as well as his own knowledge and experience to verify and coordinate the following items:

- a) Zoning
- b) Drainage
- c) Sewer
- d) Traffic
- e) Soils
- f) Environmental
- g) Potable Water Capacities (pressure tests)
- h) Fire Protection Capacities (pressure tests)
- i) Power
- j) Gas
- k) Telephone
- l) Cable Television

Each site characteristic shall be identified and analyzed to determine its ability to support the proposed project. Where an element is inadequate, an estimate shall be made by the Architect to determine the cost and schedule impact to the project. If the Architect becomes aware of a problematic issue that requires the owner's attention or action, the architect will notify the owner's representative and recommend a course of action.

1.3 Budget Analysis

Based on the final building design program and site analysis, the Architect shall provide his professional opinion as to whether the Owner's Budget for construction are realistic for the project. The opinion shall include at least three current examples of recent bid results for projects of similar size and scope.

1.4 Project Time Schedule

Based on the design program and the findings in the site analysis, the Architect shall update the project time schedule. The schedule shall include specific milestones for design submittals based on the design phases identified in the contract, Project Manager reviews, bidding, construction, Owner installed equipment and owner occupancy.

1.5 Outside Consultant Coordination

If and when the services of additional outside consultants are required, the following paragraphs describe the responsibilities of each and their relationship to the Owner and Architect. The Owner will contract directly with, and pay directly for the services of, these consultants.

1.5.1 Geotechnical Engineer

The Owner shall contract directly with and pay for the services of the geotechnical engineer. The Architect and responsible sub-consultants shall assist the Owner in soliciting proposals from licensed geotechnical engineers to provide a Geotechnical Report outlining existing site soil conditions and foundation recommendations. The Architect shall provide the Owner recommended minimum number, general location, and depth of the borings. The report may include, but is not limited to, test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, seismic evaluation, ground corrosion tests and resistivity tests, including necessary operations for anticipating subsoil conditions, with written reports and appropriate recommendations. The Architect along with his structural engineer shall interpret the Geotechnical Report and factor the recommendations into the overall building design. The Architect shall include a copy of the original Geotechnical Report in the bidding documents. The Architect and responsible sub-consultants shall review all of the results to ensure that the Contractor is in compliance with the contract documents. The Architect shall notify the Owner and Contractor immediately of any non-conforming test results.

1.5.2 Site Survey

Survey data shall be provided by Owner if and when both parties agree that survey data is required to complete the design contract. When required, the Architect will inform the Owner as to what data is needed. The owner will

provide a professional land survey, based on the Architect's recommendations, where such can be obtained through non-destructive processes. The Architect shall review the physical site characteristics as documented by the topographical survey and determine the design, cost and schedule impact to the project.

1.5.3 Environmental Engineer

The Owner shall contract for and coordinate the services of an Environmental Engineer when required by site conditions. The owner will provide any available studies to the Architect. The Architect shall include in the Site Analysis the conclusions of the environmental engineering study and reflect the cost impact of any mitigation requirements in the budget analysis.

1.5.4 Food Service Consultant

The Owner shall contract directly, with and pay for the services of, the Food Service Consultant when required for the project. The owner will hire the Food Service Consultant to work with the Architect to incorporate food service design including, but not limited to, kitchen layout and schedules into the project documents. The Architect shall assist the Owner in working with the Food Service Consultant. The Architect shall have input to the food service design with regards to architectural elements, space planning, and overall integration into the project design.

1.5.5 Other Consultants

The owner shall contract directly with and pay for the services of any other consultants that may be required including the following:

- a) Structural Inspection Services
- b) Fire Protection system testing services
- c) HVAC Test & Balance services
- d) Other testing services

1.6 Submittals

Three copies of the Program Document shall be submitted to the Project Manager. The document shall be in 8 1/2" x 11" format and bound in a three ring binder with tabs dividing the program elements. Copies of surveys or other drawings may be 11" x 17" folded and bound to fit. In addition, furnish the Program Document electronically in PDF format on CD/DVD.

SCHEMATIC DESIGN PHASE

2.0 General

Based on the Owner's approval of the preliminary design, the Architect shall prepare Schematic Design Documents as outlined in this manual, and as required by the Project Manager, for the Owner's approval. The Schematic Design Documents shall consist of drawings and other documents including a site plan, if appropriate, and preliminary building plans, sections and elevations, and may include some combination of study models, perspective sketches, or digital

modeling. Preliminary selections of major building systems and construction materials shall be noted on the drawings or described in writing.

2.1 Architectural Design/Documentation

Services during the Schematic Design Phase shall consist of the investigation and development of design concepts that respond to the program requirements, and seek optimal utilization of the site.

2.2 Structural Design/Documentation

Services during the Schematic Design Phase shall consist of recommendations regarding basic structural materials and systems, analyses, and development of conceptual design solutions for a structural system with a proposed grid layout.

2.3 Civil Design/Documentation

Consideration of alternate materials and systems and development of conceptual design solutions for

- a) On-site utility systems
- b) Off-site utilities work
- c) On-site Storm Water Drainage Systems
- d) Off-site Storm Water Drainage Improvements
- e) Paving & Grading
- f) Vehicular & Bus Access to the site.

2.4 Mechanical Design/Documentation

Consideration of alternate materials and systems and development of conceptual design solutions for:

- a) Energy Source(s)
- b) Energy Conservation
- c) Heating and Ventilation and Air-conditioning
- d) Plumbing
- e) Fire Protection. Flow tests on projects containing sprinkler installations shall be performed during the schematic design phase of projects to insure that adequate water pressure and flow quantities are available for all buildings included in the project. If these services are required for the project, the Architect shall notify the Owner and the Owner will contract for, and pay for, the Flow Tests.
- f) Special Mechanical Systems
- g) General Space Requirements for Mechanical Equipment.
- h) Consultation with the APSB Energy Coordinator will be required to establish that proposed systems will integrate into existing System-wide programs / systems.

2.5 Electrical Design/Documentation

Narrative defining consideration of alternate systems, recommendations regarding basic electrical materials, systems and equipment, analyses, and development of conceptual design solutions for:

- a) Power Service and Distribution
- b) Lighting (types of fixtures, illumination levels, color temperature, CRF, CRI, etc.)

- c) Any required Special Systems such as CATV/CCTV Distribution, Fire Alarm, Intercom/Paging, Lightning Protection, Security, Telecommunications Distribution
- d) Electrical Equipment Room Space, Quantity, Location, and Environment Allocations for all of the above
- e) Outline Plans and Specifications that include the items in this list
- f) List Energy Conservation Measures that will be considered

2.6 Specifications

The Architect shall prepare outline specifications to adequately describe the building design and selection of building systems and materials. Specifications format shall align with the APSB Design Standards.

2.7 Detailed Code Analysis

The Architect shall prepare a detailed code analysis of the proposed building based on the applicable codes. The project will be permitted in the parish of Ascension and will be subject to all local, state and federal AHJ's (Authority Having Jurisdiction) applicable codes and ordinances. The Code Analysis shall be continually updated throughout the duration of the project.

2.8 Preliminary Estimate of Construction Cost

The Architect shall submit to the Owner an Architect's Estimate of the Cost of the Work prepared in accordance with AIA B101. The Architect's Estimate of the Cost of the Work shall be based on current area, volume or similar conceptual estimating techniques.

2.9 Submittals

Three copies of the Schematic Design Document shall be submitted to the Project Manager for review All 8 1/2" x 11" format documents shall be bound in a three ring binder with tabs dividing the program elements. Drawings shall be scaled drawings on full size bond paper and bound. In addition, furnish the documents electronically in PDF format on CD/DVD. The submittal shall include the following:

- a) Drawings
 - Overall Site Plan
 - Floor Plans
 - Exterior Elevations
 - Preliminary Building and Wall Sections
 - Exterior Perspective Sketches
- b) Outline Specifications
- c) Statement of Probable Cost
- d) Mechanical Design Narrative
- e) Electrical Design Narrative
- f) Civil Design Narrative
- g) Catalog specification sheets (Cut Sheets) of major design elements and equipment. Cut sheets are required in Schematic Design Phase when there is no Design Development Phase.
- h) Energy Code Compliance Report. This report is only required in Schematic Design Phase when there is no Design Development Phase.

DESIGN DEVELOPMENT PHASE

3.0 General

The Design Development Phase will only be used if required by the Owner. Based on the Owner's approval of the Schematic Design Documents, and on the Owner's authorization of any adjustments in the Project requirements, and the Owner's Budget for the Cost of the work, the Architect shall prepare Design Development Documents for the Owner's approval. The Design Development Documents shall illustrate and describe the development of the approved Schematic Design Documents and shall consist of drawings and other documents including plans, sections, elevations, typical construction details, and diagrammatic layouts of building systems to fix and describe the size and character of the Project as to architectural, structural, mechanical and electrical systems and such other elements as may be appropriate. The Design Development Documents shall also include outline specifications that identify major materials and systems and establish in general their quality levels.

During the preparation of the Design Development Drawings, the Architect will meet with the APSB Department of Planning and Construction to determine specific and detailed requirements of all spaces in the proposed building and surrounding site requirements. The mechanical and electrical systems to serve the building shall be determined during this period and shall be described in the Design Development Documents.

The Architect's study and analysis during this phase shall be in such detail that all data is sufficient to begin construction drawings, when so directed. All substantial design decisions and budget confirmation shall be resolved for APSB to approve the Design Development Submittal.

3.1 SUBMITTAL REQUIREMENTS

In addition to that required in the Schematic Design Submittal, the following shall, as a minimum, be provided as part of the Design Development submittal. The Architect may submit additional information as appropriate.

3.2 Drawings

All drawings submitted to the APSB shall be dated, show scale and orientation of drawing, and shall carry the title of the project and the Architect and their Consultants. Each project is given an official title and project number, which must be used with consistency on all documents.

Include in the Drawings, a Code Compliance information sheet identifying Occupancy Type and Construction Type including allowable and actual calculations in sufficient detail to support the specific design. Additional Code excerpts shall be included as applicable. The Code Compliance must be reviewed and accepted by all AHJ's prior to submittal of the Design Development to the School Board. The APSB project manager shall be included in these reviews with the local Building Review Department.

Design Development drawings shall be at the same scale as that to be used for the Construction Documents drawings. These drawings shall develop the design approved in the Schematic Design Phase. They shall show all room and space uses, including location of items of fixed equipment and major pieces of movable equipment whether Owner or Contractor supplied. Basic structural, mechanical and electrical systems shall be determined and shown on the drawings. Program room numbers and computed net areas of rooms shall be shown. Elevations and sections shall be developed to a degree that illustrates the range of materials, final appearance and nature of the structure of the building. Drawings shall include major control dimensions and enough other dimensions to determine all room sizes. The site plan shall show necessary utility lines and connections.

The following information should be included in Design Development Submittal Documents for Code review purposes. Plans should include overall dimensions, drawn to scale, and should be of sufficient clarity to indicate fully the development of the projects' location, nature and extent of the work proposed.

Provide Design Development drawings indicating, at a minimum, the following technical information:

3.3 Site Plan

Show property lines, streets, roads, sidewalks, accessible routes, curbs, curb cuts, building location, future additions, existing buildings, driveways, parking lot layout, walks, steps, ramps, fences, gates and walls. Show north arrow. Provide dimensions for all setbacks and where exterior wall/opening protection may be required. Any required associated Variance shall be granted.

3.4 Floor Plan(s)

Dimensions: Provide overall building and additional basic room dimensions. Show north arrow and identify the drawing(s) scale.

Room: Room names and numbers, and cross references to enlarged plans (as applicable) and the Room Finish Schedule. The room numbering shall be finalized.

Floors: Show floor elevations, ramps, and stairs

Walls: Indicate existing and new walls. Show all fire rated corridors, occupancy separations, area separation, shaft enclosures, etc.

Doors: Door with door numbers and associated hardware schedules.

Curtainwall, Storefront, Windows and Glazing: Accurately identify the proper framing system required to support the design application. Indicate any fire rated assemblies. Identify overall glazed opening sizes, particularly of operable vents.

Toilet Rooms: Identify plumbing fixtures, stalls, accessories and cross-references to enlarged plans (as applicable).

Stairs: Dimension of stairway enclosures and risers/treads in plan and section.

Miscellaneous Items: Locate drinking fountains, folding partitions, fire extinguisher cabinets, elevators, etc.

Code Compliance Plan: see Appendix A.

Coordination Plan: Provide Consultant coordination plan(s) identifying general workstation layout with the associated electrical, tele/data and other specialized utility connection locations.

Demolition Plan(s): On remodel/addition projects when substantial demolition occurs, provide a Demolition Plan clearly identifying the Scope of Work.

The Designer shall review the Owner's Master Security Plan to understand APSB Security concepts. These concepts must be incorporated into the Schematic floor plan. Entry control points and safe rooms must be accounted for.

3.5 Roof Plan

Show drainage direction, crickets and skylights. Show drainage to roof drains, overflow drains, scuppers, etc. and all points of on-grade discharge. Identify roofing materials, minimum roof pitch. On surface mounted gutters, show the gutters, collection boxes, downspouts and point of discharge. Identify the relative elevation of the roof drainage surfaces.

3.6 Exterior Elevations

Show floor elevations, finish grades and vertical dimensions of the building elements, floors, ceilings, and openings. Show roof slope, door and window locations. Indicate all materials and, on addition Projects, graphically differentiate between existing and new.

3.7 Building Sections

Show vertical dimensions relating to floor, ceiling, roof height and openings. Note and indicate all materials and extent of the fire rated assemblies. Stair and Elevator Section(s): Show vertical/horizontal dimensions and hand/guardrail design.

3.8 Reflected Ceiling Plan

Indicate ceiling materials. Show proposed ceiling, lighting, grilles/registers, acoustic panels, access panels, etc. locations: coordinate the layout with all Consultants.

3.9 Enlarged Floor Plan(s) and Section(s) (as applicable)

Toilet Room Plans: Show plumbing fixtures, accessories, stall layout and handicap accessibility. Verify plumbing fixture count with local Code Official and Owner's Representative, particularly on renovation and addition Project.

3.10 Kitchens

Provide a commercial kitchen equipment plan and schedule when applicable. Coordinate with owners Food Service Consultant.

3.11 Schedules

Develop profiles for doors, windows and associated frames including a preliminary Door Schedule with required ratings and hardware groups. Provide a Room Finish Schedule.

3.12 Wall/Partition Types and Rated Assemblies

Provide a legend identifying the materials used and fire/acoustic rating as applicable. Properly cross reference to the plans and sections.

3.13 Structural Notes

Outline to include the following:

Live Loads: Floor, stairs, corridors, roof, snow, earthquake and wind.

Dead Loads: Material weight, mechanical and electrical weight, wet-pipe or dry-pipe fire sprinkler system, and soil bearing pressure.

Materials Strength: Concrete, masonry, steel and wood.

Provide Foundation design based on Soils Report.

3.14 Structural Schematics

Provide Foundation Plan and Structural Plan that include floor, roof and wall construction.

3.15 Technical Design Development Drawings

3.16 Mechanical Drawings (see additional requirements in APSB Design Standards)

a. Updated narrative description of the proposed HVAC system.

b. Scaled plans of each floor, showing layout of ductwork and main lines, equipment locations, typical heating and cooling devices.

c. Mechanical yard and main mechanical-room drawings, showing locations and sizes of chillers, boilers, AHU(s), fans, pumps, compressors, heat exchangers, etc.

d. Update HVAC load calculations

e. Provide sufficient accessibility to all equipment and devices for future maintenance staff access. Provide System schematics showing all system components and control devices and "detailed" sequence of operation.

g. Roof layout drawing indicating intake and exhaust louver location and orientations relative to plumbing vents.

h. The Mechanical System shall include HVAC Controls. The Specifications must require compatibility with the Owner's existing Control System.

3.17 Plumbing Drawings

a. Updated narrative document.

- b. Plans of each floor, noting fixture locations and types. Indicate routing of Main distribution lines with sizes.
- c. General arrangement of all piping systems (domestic water, hot water, gas, sewer, storm, and Fire Protection).
- d. Location and sizes of all water, sanitary sewer, primary & overflow storm drain and sprinkler piping as necessary.
- e. Location of all floor drains, roof drains and floor sinks in toilet rooms, mechanical rooms etc.
- f. Tentative fixture schedule.
- g. Location, sizes and types of boilers, water heaters, heat exchangers, etc. where required.
- h. Provide a fixture-count calculation sheet.
- i. Location of main utility connections
- j. Proposed janitors closet location and mop sink fixtures at each floor.
- k. Roof layout drawing indicating any possible roof penetrations.

3.18 Electrical Drawings

- a. Updated narrative description of the Electrical system.
- b. Identify proposed electrical room/closet areas.
- c. Identify main electrical feed type of service and location.
- d. Identify and locate proposed electrical sub-panel locations, type and size at each floor.
- e. Tentative lighting fixture layout, type and count.
- f. Show electrical service and electrical panel location(s).
- g. Show light fixtures layout.

3.19 Specification Outline

The APSB is very concerned that lighting design is accomplished in a maintainable and efficient manner: use of an excessive number of fixtures and/or different types of fixtures/lamps is not acceptable.

Describe structural, mechanical and electrical systems including fire protection. Establish specification sections for principle materials and finishes.

All Floor Plans and Room Finish Schedules shall the approved room numbers. Room numbers shall be assigned by the Architect and reviewed by the Owner's Representative.

3.20 Technical Specifications

A specification (based on Schematic Design Phase outline) listing the major components of the design is required including a description of the items of equipment that will be required to be furnished by the Contractor and a list of equipment furnished by the Owner. The Architect shall provide a list of materials or equipment items that are being proposed that vary from the requirements and standards stated in this Manual, APSB Design Standards or the Building Program. Product data and technical information shall be provided for materials and systems recently developed, requiring specific performance criteria, review with the Owner's Representative. Provide major mechanical system component, lighting fixture and plumbing fixture product information.

3.21 Tabulation of Areas

The Architect shall prepare a tabulation of areas (updated from Schematic Design Phase). The tabulation shall indicate the Net Assignable Square Feet (NASF) of all spaces. Programmed spaces shall identify Building Program room name.

3.22 Cost Estimate

The Architect shall update the Architect's estimate of the Cost of the Work based on the Design Development Documents. Appropriate amounts for contingency and inflation shall be included in the Architect's Estimate to reflect anticipated condition at the time of bidding. When the Owner employs an independent Cost Consultant (CC), the Architect shall review the Cost Consultant's reports and notify the Owner in writing if the Architect takes exception to any item or items in said reports. These cost issues will be discussed and resolved with the Owner and Cost Consultant. The documents shall be revised as required to correspond to the Owner's Budget with no additional charge to the Owner.

3.23 Energy Code Compliance Report

The Architect shall prepare a report describing energy considerations and recommendations including building operations cost projections. Report shall demonstrate compliance with the applicable energy codes for the project. These shall be reviewed with the Owner's Representative. If the Design Development Phase is not required by the Owner, this report shall be included with the Schematic Design Submittal.

3.24 REVIEWS

A formal APSB review is made after the Design Development Submittal has been presented. The APSB DPC will critically examine this submission, other representatives of the using departments, Facilities Services, Environmental Health and Safety, and other Administrative and Academic personnel to ensure that all requirements of the Building Program have been satisfied. The Owner may also perform, or have a consultant perform, a constructability review. Written and/or "redlined" drawing comments will be assembled by APSB then transmitted to the Architect for inclusion in the design or for further study or discussion. Each comment requires a response and resolution by the Architect or their Consultant. All substantial issues must be resolved to the Owner's satisfaction: a revised Design Development Submittal may be required.

The Architect's Estimate will be reviewed at this time to determine that the estimated construction cost is within the Owner's Budget. If the Architect's estimated costs exceed the Owner's Budget, the Architect will be required to make changes to reduce the cost.

The Architect shall review the drawings with all required AHJ's. Copies of the governmental agency's review comments and the Architect's responses shall be provided to APSB. All substantial issues shall be resolved before proceeding to the Construction Document phase.

After the Design Development submittal has been approved by APSB, the Architect will be notified, in writing, to begin preparation of the Construction Documents.

CONSTRUCTION DOCUMENT PHASE

4.0 General

Based on the Owner's approval of the Design Development Documents , and on the Owner's authorization of any adjustments in the Project requirements and the Owner's Budget for the Cost of the Work, the Architect shall prepare Construction Documents for the Owner 's approval, and other State and Local Regulatory Agencies as required by law. The Construction Documents shall illustrate and describe the further development of the approved Design Development Documents and shall consist of Drawings and Specifications setting forth in detail the quality levels of materials and systems and other requirements for the construction of the Work, the following documents bearing the Architect's seal and those of his consultants, all sufficiently complete and clear to define the quantity and quality of the work to bid and build the Project:

4.1 Drawings

Provide dimensioned plans, elevations, sections, details and schedules of all architectural, civil, landscaping, structural, mechanical, electrical, food service and other equipment and interior design work required for the Project.

4.2 Technical Specifications

Specifications shall include identification of the materials, processes or systems to be incorporated in the work. Specifications format shall align with the APSB Design Standards. Comply with state law which prohibits the Architect from closing specifications on any item in the specification except as provided for in R.S. 38:2290-2296 and in R.S. 38:2290(A). Any reason for closing specifications as provided for by law shall be brought to the attention of the Project Manager in writing for review.

4.3 Bidding and Construction Contract Forms

The Project Manager will furnish the following items, which the Architect must include in the bid documents: Advertisement for Bids, Instructions to Bidders, , Supplementary Conditions, , Non-Collusion Affidavit, and other forms used by the Owner. If required by the Owner, the Architect shall include instructions and applicable forms for tax exemption. The Architect shall include in the contract documents AIA A101 (2007) Standard Form of Agreement Between Owner and Contractor, AIA A201 (2007) General Conditions of the Contract for Construction, AIA A310 (2010) Bid Bond Form, AIA A312 (2010) Performance Bond and Payment Bond Form. Architect shall utilize the Louisiana Uniform Public Work Bid Form and edit for the project requirements and submit a draft to the Owner for review.

4.4 Architect's Estimate of Construction Cost

The Architect shall submit to the Project Manager and User Agency an updated Architect's Estimate of Construction Cost breakdown based on the APSB Design Standards format with back-up material.

4.5 Energy Code Compliance / Conservation Analysis

The Architect shall update and verify the Energy Code Compliance / Conservation Analysis and Energy Usage Analysis prepared in the Design Development Phase.

4.6 Design Calculations

The Architect shall submit one bound copy, and in PDF format on CD/DVD, of all design calculations on the Project for the Owner's file. The Project Manager will not review or comment on the design calculations for engineering integrity. This shall be the sole responsibility of the Architect. Said calculations shall not be hand written. All calculations shall be by type written or in the form of computer printouts. Calculations shall include, but not be limited to, the following:

- a) Structural
- b) Pile capacities
- c) Wind loading
- d) Storm drainage
- e) Mechanical loads
- f) Energy code compliance calculations
- g) Fire protection
- h) Plumbing loads
- i) Electrical power loads
- j) Lighting calculations

4.7 Submittals

Three copies of the Contract Documents shall be submitted to the Project Manager for review. All 8 1/2" x 11" format documents shall be bound in a three ring binder with tabs dividing the program elements. Drawings shall be scaled drawings on full size bond paper and bound. In addition, furnish the documents electronically in PDF format on CD/DVD.

4.8 Security

The Designer shall ensure that the Plans and specifications meet the intent of the Owner's Master Security Plan. Conduct a meeting with the Owner's Representative and the Owner's Security Consultant to ensure that all requirements of the security plan are properly incorporated into the plans and specifications.

BIDDING AND NEGOTIATION PHASE

5.0 General

Once the Architect has incorporated the Owner's review comments into the Construction Documents, the Architect shall request "Permission to Advertise" the project for bids. In this request, the Architect shall update the Board on the status of the plans, specifications, project schedule, Architect's estimate of probable cost and the permit comments.

5.1 Permit Approvals

The Architect shall file documents required for approval of governmental authorities having jurisdiction (AHJ) over the Project, which typically includes, but is not limited to, the following:

- Office of the State Fire Marshal
- Ascension Parish Government Building Department where applicable
- Department of Health and Hospitals where applicable
- City Government Permit Official where applicable
- Any other governmental entity having jurisdiction over the project

Prior to advertising for bids, the Architect shall update the Owner as to the status of review by all AHJ's. At this time, the owner may choose to proceed without these comments or wait until these comments are received. The Architect will provide transmittals indicating the date that he applied to these authorities. If comments of the authorities having jurisdiction are available prior to the printing of bid documents, the Architect shall incorporate the necessary changes into the bid documents. If the comments are not available, the Architect will incorporate the permit comments via addenda or by means described in the construction contract.

5.2 Final Architect's Estimate of Construction Cost

The Architect shall submit to the Project Manager an updated Architect's Estimate of Construction Cost based on the APSB Design Standards format with back-up material within thirty (30) days prior to the first date of advertisement for bids.

5.3 Professional Liability Verification

The Architect shall submit a current certificate of insurance for the Architect's professional liability insurance, demonstrating compliance with AIA B101 Supplementary Conditions Article 12.2, prior to services being provided under this contract.

5.4 Distribution of Plans

The Architect shall be responsible for the furnishing and distributing of copies of Construction Documents, full size drawings unless otherwise indicated, to the following:

- (1) All Contractors licensed in accordance with State law who desire to bid the Project, subject to deposit requirements as provided for in the Advertisement for Bids
- (2) Recognized construction trade organizations maintaining plan rooms as directed by the Project Manager
- (3) The Owner (Two (2) full size and two (2) ½ size drawing sets, total four (4) sets of documents.)
- (4) Owner Consultants
- (5) Other State agencies and regulating authorities as required or directed by the Project Manager.

Plan deposits shall not be excessive and shall be subject to Project Manager's approval.

5.5 Prior Approvals, Addenda, Pre-bid Conference, and Bid Opening

The Architect shall consider requests for substitutions, if the Bidding Documents permit substitutions, or as required by the applicable statutes and Owner Procedures, and shall prepare and distribute addenda identifying approved substitutions to all prospective bidders.

The Architect shall prepare and issue all addenda, in compliance with Louisiana law, as required to modify or clarify the Construction Documents. Items not included in the approved scope document and/or items previously rejected or not approved shall not be included in any addendum without the Project Manager's written approval.

The Architect shall assist the Owner in bidding the Project by organizing and conducting a pre-bid conference for prospective bidders.

Unless waived by the Project Manager, the Architect shall assist the Owner in bidding the Project by attending the Owner's bid opening and participate in bid review and recommendation to the Owner.

CONSTRUCTION ADMINISTRATION PHASE

6.0 General

The Architect shall provide administration of the Construction Contract as set forth in the AIA B101 Owner Architect Agreement and as described herein and in the Construction Documents. The Architect, as the representative of the Owner during the Construction Phase, shall advise and consult with the owner through the Project Manager and communicate all instructions to the Contractor in writing.

Upon bid award the Architect shall collect all pre-contract documents required by the specifications and contract, and all requirements necessary to execute the contract, to include, but not limited to, the following:

- a) Schedule of values
- b) Sub-contractor list
- c) Insurance certificates

The Architect shall prepare the contract and submit along with the foregoing documents to the Owner for the Owner's approval and execution.

6.1 Testing

The Architect shall make written recommendations for the Project Manager's review, for the type and number of tests required for the Project, upon award of the Construction Contract. The Owner will select, contract for and pay for such testing services as defined in the contract documents and recommended by the Architect. The Specifications for Testing must clearly state that the owner will not test fill material offsite. All Owner testing of materials (fill and concrete) will occur onsite. The Contractor shall be responsible for determining if off site fill meets the owner's specifications prior to hauling the fill to the site. The contractor may use his own testing lab to test at the pit. The contractor's decision to haul fill to the project site is at his own risk. The contractor shall be

responsible for removing from the site, any fill that he is not able to bring into compliance with the specifications.

6.2 Notices, Reports & Meetings

6.2.1 Pre-Construction Conference

After the execution of the Construction Contract the Project Manager will issue a Notice to Proceed to the Contractor and will notify the Architect to arrange for and conduct a pre-construction conference. The Architect shall furnish to the Contractor sets of the Construction Documents required to construct the project. The Architect shall prepare meeting minutes and distribute them to the Owner and Contractor within 5 calendar days.

6.2.2 Progress Meetings

The Architect shall instruct the Contractor to establish and conduct a regular schedule of progress meetings to be held on the job site each month, or frequency as agreed upon, throughout the construction period, and shall require attendance at the meetings by representatives of his principal Consultants. The Project Manager shall be notified of such meetings and will be represented. It shall be the principal purpose of these meetings, or conferences, to effect coordination, cooperation and assistance in every practical way to the end of maintaining progress of the project on schedule and completing the project within the contract time. The Architect shall prepare meeting minutes and distribute them to the Owner and Contractor within 5 calendar days.

6.2.3 Progress Reports

The Architect shall prepare and submit to the Project Manager and Contractor a periodic Status Report on the Project. The Architect's Status Report shall be submitted to the Project Manager monthly along with the Contractor's Certificate for Payment and Architect's Statement for Professional Services.

6.3 Site Observations

The Architect and his principal consultants shall visit the site at intervals appropriate to the stage of construction, or as otherwise required by the Project Manager, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine, in general, if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. Such visits by the Architect shall not be less than once per week when the work is in progress. On the basis of the Architect's on-site observations, he shall endeavor to guard the Owner against defects and deficiencies in the Work of the contractors.

A written report of each visit by the Architect to the Project shall be mailed to the Project Manager and Contractor within five (5) calendar days after each visit.

The Architect shall give prompt written notice to the Project Manager if the Architect becomes aware of any fault, defect, error, omission or inconsistency in the Project or in the Contract Documents.

6.4 Architect's Construction Administrator

The Architect agrees that his designated representatives on the construction project shall be qualified by training and experience to make decisions and interpretations of the Construction Documents and such interpretations shall be binding upon the Architect as if made by him. All such decisions shall be confirmed in writing immediately with copies to the Project Manager and Contractor conditioned that such decisions and interpretations shall not modify adversely the requirements of the contract documents.

6.5 Certificates of Payment

Based on observations at the site and on the Contractor's Applications for Payment, the Architect shall review and certify the amounts due the Contractor and shall issue Certificates in such amounts. Applications for payment shall be reviewed on a monthly basis and in accordance with Article 3.6 of the AIA B101 Owner/Architect Agreement.

No Certificate of Payment shall be issued until a schedule of values has been received from the Contractor.

The Architect shall process contractor applications for payment within five (5) calendar days from the time the certified application is received by the Architect from the Contractor. The Architect shall submit the original signed copies to the Project Manager with copies to the Contractor. If a certificate is held up or adjusted for any reason, written notice stating the reasons for the delay or adjustment must be given to the Contractor and Project Manager within five (5) calendar days. It is the intent of the Project Manager that the certificates be thoroughly reviewed by the Architect prior to the monthly progress meeting and adjusted accordingly at the meeting in order to expedite the payment process.

The Architect shall not include any amount of money in the certification for payment that was not included in the original contract value or in a previously executed change order or change directive. Sums of money that are part of change orders that are "in the process of being signed" will be added to the next application for payment following the receipt by the owner of a fully executed (signed by all parties) change order. The same applies to change directive billings that have not been reviewed, approved and processed in a change order.

6.6 Shop Drawings and Submittals

The Architect shall promptly review and approve or take other appropriate action upon the Contractor's submittals such as shop drawings, Product Data and samples and other submissions of the Contractor, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Architect shall forward a copy of each "Approved" or "Approved as Noted" submittal to the Owner at the same time the submittal is distributed to the Contractor. Provide cut sheets for any major design elements that have not been previously submitted or for those that have been revised since being provided in the SD or DD phase.

6.7 Change Orders

Only with the authorization of the Project Manager, shall the Architect prepare Change Orders and Construction Change Directives for the Owner's approval and execution in accordance with the Contract Documents. The Architect shall obtain from the Contractor his estimate of cost and time changes in accordance with the Contract Documents for the Change Order, review and approve same, and submit it to the Project Manager for review and approval before any changes are made in the Contract.

6.8 Supplemental Instructions

The Architect shall use AIA Form G710 Architect's Supplemental Instructions form to document changes in the work that do not include time or cost changes to the Construction Contract. Provide copies of same to the Owner.

6.9 Contractors Request for Information

The Architect shall review and respond to requests for information about the Contract Documents. The Architect shall set forth in the Contract Documents the requirements for requests for information. Requests for information shall include, at a minimum, a detailed written statement that indicates the specific Drawings or Specifications in need of clarification and the nature of the clarification requested. The Architect shall acknowledge receipt of each contractor generated Request for Information (RFI) within three (3) days after receiving it. The written answer should be issued simultaneously with the acknowledgment but in no case more than ten days after receipt of the RFI. Architect shall keep a log and copies of all RFI's and make same available to the owner at progress meetings or as requested by the owner.

6.10 Construction Closeout

6.10.1 Substantial Completion

Architect to comply with Article 3.6.6 of AIA B101 Owner/ Architect Agreement and AIA A-201 General Conditions and Supplementary Conditions for procedures relative to issuing substantial completion.

The Architect shall require that warranties and guarantees are in hand prior to establishing a punch list value for the work that requires the warranty or guarantee. In-complete work for which the warranty has not been provided shall constitute withholding the entire value of this item on the punch list.

6.10.2 Close-out Documents

After acceptance of the Project by the Owner, the Architect shall prepare and furnish to the Project Manager a written summary of all required closeout documents in the format, and containing information, as required by the Project Manager. Architect shall receive, review, and forward to the Project Manager closeout documentation to include, but not limited to the following:

- (1) Guarantees, warranties, operations manuals, maintenance manuals, keys and other close-out documents as required by the Contract Documents.

- Architect shall obtain a written receipt for these and forward same to the Project Manager, together with copies of all guarantees and warranties.
- (2) Two sets of Record Drawings (As-Builts), one set on CD and the other a set of prints made from the CD, for the Project Manager's files. The Architect shall require the Contractor (in the Construction Documents) annotate the as-built conditions in red ink by hand. All Addenda, Supplemental Instructions and Change Order Drawings shall be stapled neatly into this set.
 - (3) Electronic version of the Record Drawings shall be in an AutoCAD compatible format and in pdf format on CD/DVD. The Architect shall review the documents to ensure, to the best of his ability, that the contractor has included all changes.
 - (4) Architect shall inspect and approve completion of "punch-list" items remaining after acceptance and shall certify final payment to the Contractor.

6.11 One-Year Correction/Warranty Period Phase

Upon request of the Owner, and within 30 days prior to the expiration of one year from the date of Substantial Completion, the Architect shall, without additional compensation, conduct a meeting with the Owner to review the facility operations and performance.

Compliance with the foregoing will constitute completion of the Architect's basic services for compensation purposes for each assigned Project, however the Architect shall be required to follow up on items to be corrected during the one-year correction period for the Project. The Architect shall arrange and conduct an inspection of the Project prior to expiration of the one-year correction period. The Architect shall inform the Owner and the Contractor of any items to be corrected and shall inspect the Project until the correction work is completed.

The Architect shall be responsible for reporting any work found not to be in accordance with the Contract Documents for a period of one (1) year from the date of the recording of the Substantial Completion of each assigned Project. The one-year period shall be extended for any portions of the Work completed after the date of recording the Substantial Completion. This obligation shall survive acceptance of the Project as provided in the Contract Documents.