



Issue Dec. 12, 2019

PROCEDURE MANUAL FOR DESIGN & CONSTRUCTION

Introduction

The Architect's Basic Services are described in Owner's (Ascension Parish School Board, hereinafter APSB) AIA® Document B101TM – 2017 Standard Form of Agreement Between Owner and Architect, as amended by Owner (hereinafter referred to as AIA B101) and as further described herein. Basic services shall include the usual and customary services of the Architect and Consultants retained by Architect and as defined in the AIA B101. Requirements set forth in AIA B101 may be repeated in this document and are included for clarity and continuity of this document. Where these requirements are included herein, either verbatim or paraphrased, in the event of a discrepancy the AIA B101 language shall govern for those requirements. This document expands upon AIA B101 by including additional detail regarding requirements.

The Owner may designate a Project Manager or Program Manager 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. Communications, preferably in writing, should be directed to the Project Manager unless noted otherwise.

Owner's review of Design Phase submittals is limited to verification of compliance with Owner's programmatic requirements including Educational Specifications, Design Standards, and Master Security Plan, and to confirm Architect is fulfilling contractual requirements. Design review, technical review, verification of code-compliance, verification of compliance with Owner's programmatic requirements, interdisciplinary coordination and quality control of documents remain the responsibility of the Architect.

Submittals shall be formally transmitted to Owner's Project Manager for review and approval, in accordance with the approved Design Phase Schedule. All submittals and associated correspondences should reference the project name and project number assigned by Owner. Owner will review submittals and return written review comments for inclusion in the design or for further study or discussion. Each comment requires a response and resolution by the Architect or Architect's Consultant. All substantial issues must be resolved to the Owner's satisfaction. Architect shall not proceed to any subsequent phase until written review comments are received from Project Manager and until authorized by the Project Manager in writing to so proceed.

INITIAL SUBMITTALS

Professional Liability Verification

Per AIA B101 Section 2.5.8 the Architect shall submit a current certificate of insurance for the Architect's professional liability and other insurances, demonstrating compliance with requirements of AIA B101 Section 2.5, prior to commencement of services.

Design Phase Schedule

Per AIA B101 Section 3.1.3, the Architect shall submit, for review and approval, a Design Phase schedule for the performance of the Architect's services. The schedule shall include specific milestones for design submittals based on the design phases

identified in the contract, and include appropriate durations for Owner reviews. The schedule, once approved by the Owner, shall be followed to the fullest extent possible. This schedule is to be updated and integrated into the overall Project Schedule as part of Program Confirmation Phase work.

Any requests for extensions in the established Design Phase Schedule for a particular design phase deadline shall be delivered to the Project Manager fourteen (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. Per AIA B101 Section 12.4 liquidated damages will be assessed if the Construction Documents Phase submittal is submitted after the due date agreed-upon in the Design Phase Schedule.

CONSULTANTS RETAINED BY ARCHITECT

The Architect's Basic Services include usual and customary civil, structural, mechanical and electrical engineering services. Architect to provide qualified consultants for provision of such services and other services as determined by Architect as necessary for the Project, under agreement(s) complying with requirements of Architect's AIA B101 agreement. Selection of consultants is subject to Owner's approval.

CONSULTANTS RETAINED BY OWNER

If Architect and Owner agree the services of Consultants retained by Owner are required, the following paragraphs discuss 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. Architect agrees to coordinate and integrate services and information provided by these consultants into services and information provided by Architect.

Land Surveyor

Survey data shall be provided by Owner when required for the project. The Architect will inform the Owner as to what survey data is required. The Owner will provide a professional topographic land survey, based on the Architect's requirements, where such survey information can be obtained through non-destructive processes. The Architect shall review the physical site characteristics as documented by the topographical survey and incorporate and accommodate such information into the Project's design.

Geotechnical Engineer

Geotechnical investigation data shall be provided by Owner when required for the project. The Architect shall provide the Owner recommended minimum number, general location, and depth of required soil borings, and identify any other requirements of the investigation. The investigation 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 incorporate and accommodate such information into the Project's design. The Architect shall include a copy of the original Geotechnical Report in the bidding documents.

Environmental Engineer

Environmental engineering services shall be provided by Owner when required for the project. The Owner will provide any available environmental 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.

Food Service Consultant

The Owner shall provide a 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.

Security Consultant

The Owner may provide an independent security consultant for selected projects. Whether Owner assigns a security consultant or not, Architect to ensure all plans and specifications comply with the Owner's Master Security Plan. Architect to meet with Project Manager and security consultant (if one is assigned) to review requirements and ensure compliance.

Testing Laboratory

The Owner shall provide an independent Testing Laboratory to perform tests, inspections and approvals of the Work as recommended in writing by the Architect. Architect shall confirm all necessary testing and advise Owner in writing as soon as practicable after award of the construction contract.

Other Consultants or Services

Other consultants or services may be provided by Owner, if Owner agrees provision of such services is necessary for the project. Such consultants or services may include the following:

- Landscape design
- Structural inspection services
- Fire protection system testing services
- HVAC test & balance services
- Water pressure and flow test services
- Other testing services

PROGRAM CONFIRMATION PHASE

Per AIA B101 Section 3.2, the Architect shall submit a Program Confirmation Document consisting of the Existing Facilities Conditions Analysis (if applicable and required by Project Manager), Design Program, Site Analysis, Budget Analysis, Project Schedule and a Preliminary Design. The Program Confirmation Document shall be submitted to the Project Manager for review and approval. Once approved by Owner, only the Project Manager shall have the authority to alter the Program Confirmation Document. Any authorization by the Project Manager to alter the approved Program Confirmation Document shall be in writing.

1.0 Existing Facilities Condition Analysis

(Only when required by Owner – intended for renovations and/or additions to existing facilities):

The Architect shall thoroughly investigate existing conditions of the facility to be renovated or altered and prepare a detailed analysis. The Existing Facilities Conditions Analysis shall consider and report on the following facility characteristics (as appropriate for the type of renovation and/or addition intended by the project):

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

Each existing facility characteristic shall be identified and analyzed to determine its ability to support the proposed project. Where an element is inadequate, the Architect shall recommend a remedy and determine the cost and schedule impact of the recommended remedy for consideration by the Owner.

1.1 Design Program

The Architect shall identify applicable zoning, codes and regulations, review the Owner's preliminary Program information, Owner's Educational Specifications, Owner's Design Standards and Owner's Master Security Plan (all 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 Design Program shall address the following elements:

- a) Space Requirements
- b) Functional Adjacencies
- c) Campus Security Analysis
- d) Preliminary Code Analysis
- e) Proposed Building Systems

1.2 Site Analysis

The Architect shall provide an opinion as to the ability of the site to support the proposed facility. The Architect may use an Owner-provided site study (if available). For projects involving existing or new fire sprinkler systems, upon request from Architect and when required, the Owner will provide pressure and flow tests of existing water services. Architect to verify and coordinate the following items:

- a) Zoning
- b) Drainage and storm water retention requirements, if any

- c) Flood Zone verification and finish floor elevation requirements
- d) Sewer
- e) Traffic/Parking
- f) Soils
- g) Environmental
- h) Potable Water Capacities (pressure and flow tests)
- i) Fire Protection Capacities (pressure and flow tests)
- j) Power
- k) Gas
- l) Telephone
- m) Cable Television
- n) Internet service

Each site characteristic shall be identified and analyzed to determine its ability to support the proposed project. Where an element is inadequate, the Architect shall recommend a remedy and determine the cost and schedule impact of the recommended remedy for consideration by the Owner.

1.3 Budget Analysis

Based on the final building design program and site or existing facilities conditions analysis, the Architect shall provide a preliminary estimate of probable construction cost with no contingency included, and Architect's professional opinion as to whether the Owner's Budget for construction is adequate for the project. The opinion shall include at least three examples of recent bid results for projects of similar size and scope.

1.4 Project Schedule

Based on the Design Program and the findings in the site and/or existing facilities conditions analysis, the Architect shall update the Design Phase Schedule and incorporate it into an overall Project Schedule. The overall Project Schedule shall include appropriate durations for permit review, bidding, construction, inspections, installation of Owner-provided equipment, move-in and final occupancy. Coordinate with Project Manager as required to include in the Project Schedule any special milestones such as Holidays, standardized testing periods, start-of-school date, etc.

1.5 Preliminary Design

Based upon the Program Confirmation Document, the Architect shall prepare a preliminary design for the project. The Preliminary Design shall consist of drawings and other documents including a site plan, if appropriate, and preliminary building and site plans illustrating the scale and relationship of the project's components. Drawings shall be appropriately scaled.

1.6 Program Confirmation Document Submittal

One hardcopy and one digital copy of the Program Confirmation Document including Preliminary Design drawings shall be submitted to the Project Manager for review and approval. The hardcopy 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 and drawings may be full-sized or 11" x 17" folded to fit in binder. Digital copy shall be in PDF format on a flash drive. Content to match exactly between hardcopy and digital versions.

1.7 Review of Program Completion Document and Preliminary Design Submittal

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. A revised submittal may be required by the Project Manager to document satisfactory resolution of Owner’s comments.

After the Program Completion Document and Preliminary Design submittal has been approved by APSB, the Architect will be notified, in writing, to begin preparation of the Schematic Design Phase submittal.

S C H E M A T I C D E S I G N P H A S E

Per AIA B101 Section 3.2.5. and based on the Owner’ s approval of the Program Completion Document and Preliminary Design submittal, the Architect shall prepare Schematic Design Phase submittal as outlined herein, and as required by the Project Manager, for the Owner’s review and approval.

2.0 General

Provide drawings and other documents including a site plan and preliminary building plans, sections and elevations, illustrating in greater detail the scale and relationship of the project’s components. Schematic Design documents should 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

Provide the investigation and development of design concepts that respond to the approved program requirements, and seek optimal utilization of the site. Include a tabulation of areas, identifying each space using approved room names/numbers. The tabulation shall indicate the Net Assignable Square Feet (NASF) of all spaces. Applicable requirements from Owner’s Master Security Plan are to be considered and incorporated into the design.

2.2 Structural Design/Documentation

Provide recommendations regarding basic structural materials and systems, analyses, and development of conceptual design solutions for a structural system with a proposed column grid layout.

2.3 Civil Design/Documentation

Provide 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, including retention requirements, if any
- d) Off-site Storm Water Drainage Improvements
- e) Paving & Grading, including finish floor elevation requirements
- f) Site signage
- g) Vehicular, Bus, Bicycle and Pedestrian access to the site.

2.4 Mechanical Design/Documentation

Provide 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. Pressure and flow test results from Program Completion Phase are to be evaluated by Architect to ensure that adequate potable and fire water pressure and flow quantities are available for all buildings included in the project and for other existing buildings on the site, if any.
- f) Special Mechanical Systems
- g) General Space Requirements for Mechanical Equipment

2.5 Electrical Design/Documentation

Provide 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) Interior and Site Lighting (types of fixtures, illumination levels, color temperature, color rendering index, etc.)
- c) Any required Special Systems such as CATV/CCTV Distribution, Fire Alarm, Intercom/Paging, Lightning Protection, Security, Telecommunications/Data Distribution including WiFi system.
- d) Electrical Equipment Room Space, Quantity, Location, and Environment requirements for all of the above
- e) List Energy Conservation Measures considered during design, and identify those measures to be implemented by the design.

2.6 Outline Specifications

Provide outline specifications to adequately describe the building design and selection of building systems and materials. Specifications format and content shall align with the current APSB Design Standards.

2.7 Detailed Code Analysis

Provide 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 updated as required throughout the duration of the project.

2.8 Preliminary Estimate of Probable Construction Cost

Provide the Architect's Estimate of the Cost of the Work prepared in accordance with AIA B101 Section 6.3. The Architect's Estimate of the Cost of the Work shall be based on current area, volume or similar conceptual estimating techniques and shall not include any contingency. Should changes to the design become required at any time in order to remain within the Owner's Budget, applicable design documents shall be revised as required to correspond to the approved Owner's Budget with no additional charge to the Owner.

2.9 Submittals

One hardcopy and one digital copy of the Schematic Design Document submittal shall be submitted to the Project Manager for review. The hardcopy document shall be 8 1/2" x 11" format documents shall be bound in a three-ring binder with tabs dividing the program elements. 11" x 17" documents may be folded and bound to fit. Drawings shall be scaled drawings on large-format sheets, bound. Digital copy shall be in PDF format on a flash drive. Content to match exactly between hardcopy and digital versions.

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 Construction Cost
- d) Mechanical Design Narrative
- e) Electrical Design Narrative
- f) Civil Design Narrative
- g) Product Data such as catalog specification sheets (cutsheets) of major design elements and equipment. This information is required to be included in this Schematic Design Phase submittal only when Design Development Phase submittal has been waived by Owner.
- h) Energy Code Compliance Report. This report is required to be included in this Schematic Design Phase submittal only when Design Development Phase submittal has been waived by Owner.

2.10 Review of Schematic Design Phase submittal

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. A revised submittal may be required by the Project Manager to document satisfactory resolution of Owner’s comments.

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

DESIGN DEVELOPMENT PHASE

Per AIA B101 Section 3.3.1 and depending upon the project, the Owner may elect to waive the requirement for a separate Design Development Phase submittal and instead allow Design Development Phase submittal information to be combined with the Construction Document Phase submittal.

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 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 refinement 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 other appropriate elements.

3.0 General

During the preparation of the Design Development Documents, the Architect shall meet with the APSB Project Manager to determine specific and detailed requirements of all spaces in the proposed building and surrounding site requirements. The mechanical and electrical systems, including the Energy Management system, to serve the building shall be determined during this period and shall be described in the Design Development Documents. Applicable requirements from Owner’s Master Security Plan are to be refined and incorporated.

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 satisfactorily resolved in order for APSB to approve the Design Development Submittal.

3.1 Submittal Requirements

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

3.2 Drawings

The Design Development drawings shall be dated, show scale and orientation of drawing, and shall carry the name of the project, project number, and the name of the Architect and their Consultants.

The Design Development drawings shall include 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 information shall be included as applicable. The Code Compliance information must be reviewed and accepted by all applicable AHJ's prior to submittal of the Design Development Documents. The APSB Project Manager shall be included in any meetings and reviews with the applicable AHJ's.

The Design Development drawings shall be at the same scale as that to be used for the Construction Documents drawings. These drawings shall refine the design approved in the Schematic Design Phase. Drawings 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.

Proposed room name and numbering scheme shall be reviewed and approved by Project Manager, and shall not change once approved. Approved room names/numbers and computed net areas of rooms shall be shown on plans. 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. Plans shall include overall dimensions, be 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 and documents indicating, at a minimum, the following information:

3.3 Site Plan

Indicate property lines, streets, roads, sidewalks, accessible routes, curbs, curb cuts, building location, future additions, existing buildings, driveways, parking lot layout, walks, steps, ramps, fences, site signage, gates and walls. Show north arrow. Provide dimensions for all setbacks and where exterior wall/opening protection may be required. Approval of any required Zoning Variances associated with the project shall be documented.

3.4 Floor Plan(s)

- a) Dimensions: Provide overall building and additional basic room dimensions. Show north arrow and identify the drawing(s) scale.
- b) Room names and numbers, and cross references to enlarged plans (as applicable) and the Room Finish Schedule. The room numbering shall be finalized.

- c) Floors: Show floor elevations, ramps, and stairs
- d) Walls: Indicate existing and new walls. Show all fire-rated corridors, occupancy separations, area separation, shaft enclosures, etc.
- e) Doors: Door with door numbers and associated hardware schedules.
- f) 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.
- g) Toilet Rooms: Identify plumbing fixtures, stalls, accessories and cross-references to enlarged plans (as applicable).
- h) Stairs: Dimension of stairway enclosures and risers/treads in plan and section.
- i) Miscellaneous Items: Locate drinking fountains, folding partitions, fire extinguisher cabinets, elevators, etc.
- j) Signage and Wayfinding: show interior signage system and wayfinding elements, if any.
- k) Coordination Plan: Provide Consultant coordination plan(s) identifying general workstation layout with the associated electrical, tele/data and other specialized utility connection locations.
- l) Demolition Plan(s): On renovation/addition projects when substantial demolition occurs, provide a separate Demolition Plan clearly identifying the required Scope of Work and identifying measures to protect existing adjacent construction.

3.5 Roof Plan

Indicate drainage direction, crickets and skylights. Show drainage to roof drains, overflow drains, scuppers, etc. and all points of on-grade discharge. Identify roofing materials and minimum roof pitch. For roofs draining into gutters, show the gutters, expansion joints, collection boxes, downspouts and point of discharge. Identify the relative elevation of the roof drainage surfaces.

3.6 Exterior Elevations

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

3.7 Building Sections

Indicate 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. and coordinate the layout with all Consultants.

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

- a) Toilet Room Plans: Show plumbing fixtures, accessories, stall layout and handicap accessibility. Verify overall required plumbing fixture count with applicable AHJ and Project Manager, particularly on renovation and addition Projects.
- b) Other enlarged plans: show enlarged floor plans for any room and space with contents or configuration requiring detailed layout.
- c) Enlarged sections: show enlarged building or wall sections as required to properly illustrate design.

3.10 Kitchens

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

3.11 Schedules

Provide a preliminary Room Finish Schedule with associated finish information.

- a) Provide preliminary Door and Window schedules indicating required fire ratings and hardware groups.
- b) Provide preliminary Door and Window Types drawings including frames.
- c) Provide list of items, equipment or furnishings required to be provided by Owner.

3.12 Wall/Partition Types and Rated Assemblies

Provide typical wall/partition types including a legend identifying the materials used and required fire/acoustic rating as applicable. Properly cross reference wall/partition types to the plans and sections.

3.13 Structural Notes

Provide structural design outline to include the following:

- a) Live Loads: Floor, stairs, corridors, roof, snow, earthquake and wind.
- b) Dead Loads: Material weight, mechanical and electrical weight, wet-pipe or dry-pipe fire sprinkler system, and soil bearing pressure.
- c) Materials Strength: Concrete, masonry, steel and wood.
- d) Provide Foundation design criteria based on Geotechnical Investigation Report.

3.14 Structural Foundation Plans

Provide foundation plans including piling plans and schedules and details as appropriate.

3.15 Structural Framing Plans

Provide framing plans addressing elevated floor, wall and roof construction, including schedules as appropriate.

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.
- f) Roof layout drawing indicating intake and exhaust louver location and orientations relative to plumbing vents.
- g) The Mechanical System, including controls by an Energy Management System that will properly integrate into existing APSB district-wide Energy Management programs / systems.

3.17 Plumbing Drawings

- a) Updated narrative document of the proposed plumbing system.

- b) Scaled 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) Preliminary plumbing fixture schedule.
- g) Location, sizes and types of backflow preventers, boilers, water heaters, heat exchangers, etc. where required.
- h) Plumbing fixture-count calculation sheet, incorporating existing plumbing fixtures if applicable.
- i) Indicate location of main utility connections
- j) Proposed janitors closet location and mop sink fixtures at each floor.
- k) Roof layout drawing indicating any plumbing-related roof penetrations.
- l) Fire Protection components including fire pumps, backflow preventers, risers, standpipes, etc.

3.18 Electrical Drawings

- a) Updated narrative description of the proposed Electrical system.
- b) Identify proposed electrical room/closet areas.
- c) Identify main electrical feed location and type of service, indicating any exterior transformers required.
- d) Identify and locate proposed electrical transformers, panels and sub-panels, indicating type and size at each location.
- e) Show lighting fixture layout, type and count.
- f) Fire Alarm components including main panel and sub-panel types and locations.

3.19 Specifications

Based on the approved Outline Specifications from the Schematic Design Phase submittal, provide complete technical specification sections as required for all proposed materials, equipment, furnishings and assemblies. Specifications format and content shall align with the current APSB Design Standards. Clearly identify any specification or items proposed that vary from the requirements and standards stated in this Manual, APSB Design Standards or the Building Program. Comply with State law which prohibits the Architect from closing specifications on any item in the specification except as provided for in L.R.S. 38:2290-2296 and in L.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.

3.20 Product Data

Provide product data and technical information such as catalog cutsheets for all major design elements, mechanical system components, light fixtures, plumbing fixtures, and any other element requested by Project Manager. If the Design Development Phase Submittal is not required by the Owner, product data shall be included with the Schematic Design Submittal.

3.21 Detailed Code Analysis

Provide updated and more-detailed code analysis of the proposed building based on the refined design and applicable codes. During Design Development Phase, the Architect shall review the proposed project with all required AHJ's, and a recap of the AHJ's comments and the Architect's responses shall be included as part of the

Design Development Phase submittal. All substantial code issues shall be satisfactorily resolved before proceeding to the Construction Document phase.

3.22 Tabulation of Areas

Provide updated tabulation of areas of the proposed building, identifying each space using approved room names/numbers. The tabulation shall indicate the Net Assignable Square Feet (NASF) of all spaces.

3.23 Estimate of Probable Construction Cost

Provide updated Estimate of the Cost of the Work based on Design Development documentation prepared in accordance with AIA B101 Section 6.3. Should changes to the design become required at any time in order to remain within the Owner's Budget, applicable design documents shall be revised as required to correspond to the approved Owner's Budget with no additional charge to the Owner.

3.24 Energy Code Compliance Report

Provide a report describing energy considerations and recommendations including building operations cost projections. Report shall demonstrate compliance with the applicable energy codes for the project. The Energy Code Compliance / Conservation Analysis and Energy Usage Analysis report shall be reviewed with the Project Manager. If the Design Development Phase Submittal is not required by the Owner, this report shall be included with the Schematic Design Submittal.

3.25 Review of Design Development Phase submittal

The APSB Department of Planning and Construction, along with other representatives of the using departments, Facilities Services, Environmental Health and Safety, and other Administrative and Academic personnel will review the Design Development Phase submittal to ensure that all requirements of the Building Program have been satisfied. The Owner may also perform, or have a consultant perform, a constructability or cost 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. A revised submittal may be required by the Project Manager to document satisfactory resolution of Owner's comments.

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

Per AIA B101 Section 3.4 and 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 review and approval, and for formal review and approval of applicable AHJ's as required by law.

4.0 General

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 specifications shall be bound

into a Project Manual that includes Owner's front-end documents described herein. The Construction Documents shall bear the seal of the Architect and the Architect's Consultants, and be sufficiently complete and clear to define the quantity and quality of the Work as required to publicly bid and build the Project. Assemble drawings and Project Manual into Bidding Documents package.

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 and content shall align with the current 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 L.R.S. 38:2290-2296 and in L.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 APSB standard front-end documents for the Project Manual, which the Architect shall include in the bidding documents:

- a) Advertisement for Bids;
- b) Instructions to Bidders;
- c) AIA Document A201™–2017, General Conditions of the Contract for Construction as amended by Owner (hereinafter AIA A201); and
- d) AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor (where the basis of payment is a Stipulated Sum) as amended by Owner, without its Exhibit A (hereinafter AIA A101).

In addition, the Architect shall include in the bid document Program Manual the following blank forms for use by Bidders:

- e) Louisiana Uniform Public Work Bid Form, current issue, edited for the Project's requirements;
- f) AIA Document A310™–2010 Bid Bond Form;
- g) AIA document A312™ –2010 Performance Bond and Payment Bond Form;
- h) Owner's Attestation Clause form;
- i) Owner's Verification of Employees affidavit; and
- j) Owner's Non-Collusion affidavit.

If Owner elects tax-exemption for the Project, the Architect shall also include instructions and applicable forms for tax exemption.

4.4 Estimate of Probable Construction Cost

Provide Architect's Estimate of the Cost of the Work prepared in accordance with AIA B101 Section 6.3. Should changes to the design become required at any time in order to remain within the Owner's Budget, applicable design documents shall be revised as required to correspond to the approved Owner's Budget with no additional charge to the Owner.

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 flash drive, of all design calculations on the Project for the Owner's records. The Owner 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

One hardcopy and one digital copy of the Construction Documents shall be submitted to the Project Manager for review. The hardcopy document shall be in 8 1/2" x 11" format bound in a three-ring binder with tabs dividing the program elements. Drawings shall be scaled drawings on full size bond paper and bound. Digital copy shall be in PDF format on flash drive. Content to match exactly between hardcopy and digital versions.

4.8 Review of Construction Document submittal

Written and/or "redlined" drawing comments will be assembled by APSB then transmitted to the Architect for inclusion in the construction documents or for further study or discussion. A revised submittal may be required by the Project Manager to document satisfactory resolution of Owner's comments.

After the Construction Document submittal has been approved by APSB, the Architect will be notified, in writing, to complete assembly of the final Bidding Documents.

PROCUREMENT PHASE

Per AIA B101 Section 3.5 the Architect shall assist the Owner as required during the Procurement Phase.

5.0 General

After the Architect has incorporated the Owner's review comments into the Construction Documents, the Architect shall request "Permission to Advertise" the project for bids.

The Architect shall also formally designate the Louisiana State contractor's license classification(s) required of prospective bidders.

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:

- a) Office of the Louisiana State Fire Marshal;
- b) Ascension Parish Government Building Department where applicable;
- c) Louisiana Department of Health and Hospitals where applicable;
- d) City Government Permit Official where applicable;
- e) 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 AHJ comments or wait until AHJ comments are received. The Architect will provide transmittals indicating the date that Architect 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 Contract Documents.

5.2 **Final Estimate of Probable Construction Cost**

Architect to update Estimate of the Cost of the Work based upon final design, Owner's final review comments and AHJ plan review comments, if any.

5.3 **Professional Liability Verification**

Prior to commencement of procurement phase the Architect shall confirm the initial insurance certificate(s) provided at commencement of services remain current, or provide current certificate(s).

5.4 **Distribution of Bidding Documents**

Per AIA B101 Section 3.5.2 the Architect shall be responsible for the furnishing and distributing of copies of Bidding Documents (including full size drawings unless otherwise indicated) to the following:

- a) All prospective bidders, subject to plan deposit requirements as provided for in the Advertisement for Bids and Instructions to Bidders;
- b) Recognized construction trade organizations maintaining plan rooms as directed by the Project Manager;
- c) The Owner [One (1) full-sized and one (1) half-sized drawing sets; and one (1) digital copy in PDF format on flash drive. Content to match exactly between hardcopy and digital versions.];
- d) Consultants retained by Owner, if any;
- e) Other local or 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.

In addition, Architect to provide complete Bidding Documents electronically in PDF format suitable for uploading to Owner's online bidding platform, and shall assist Owner as required to ensure Bidding Documents are properly uploaded and available for download from the Owner's online bidding platform.

5.5 **Substitution Requests, Addenda, Pre-bid Conference, and Bid Opening**

The Architect shall consider requests for substitutions submitted by bidders prior to Bid Due Date, 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 respond to questions posed by bidders, and 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 Program Confirmation 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. Schedule the pre-bid conference far enough in advance of bid due date to allow assembly and issuance of Addenda. Consult with Project Manager to determine if attendance at pre-bid conference is mandatory or optional for prospective bidders.

Unless waived by the Project Manager, the Architect shall assist the Owner in bidding the Project by attending the Owner's public bid opening, participating in bid review and making written award recommendation to the Owner.

CONSTRUCTION ADMINISTRATION PHASE

Per AIA B101 Section 3.6 the Architect shall provide administration of the Construction Phase as set forth in the AIA B101, the AIA A201, and as described herein and elsewhere in the Construction Documents.

6.0 General

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 determination of the apparent low bidder, the Architect shall assist the Owner in collection, review and approval of required post-bid submittals including, but not limited to, executed versions of the following:

- a) Owner's Attestation Clause form;
- b) Owner's Verification of Employees affidavit;
- c) Owner's Non-Collusion affidavit;
- d) AIA document A312™ -2010 Performance Bond and Payment Bonds;
- e) Contractor's Insurance Certificates per Article 11 of AIA A201; and
- f) Any other documentation required by Owner or Architect.

Once reviewed and approved, if requested by Owner, the Architect shall edit and publish the Owner's standard AIA A101 contract, solicit Contractor's execution, and submit along with the foregoing documents to the Owner for the Owner's approval and contract execution.

To facilitate editing, the Owner may furnish the AIA A101 standard contract in Microsoft™ Word format for importation into Architect's AIA Contract Document editing software. Owner may elect to have the AIA A101 published by others, in which case Architect shall review and approve the published Contract.

The Architect shall furnish to the Contractor a reasonable number of hardcopy sets and/or a scan of the final Construction Documents required to construct the project.

Prior to commencement of any Work, the Architect shall review and approve in writing all Preconstruction submittals required by AIA A201 Section 3.22. Such submittals are due, at latest, at the Preconstruction Conference. Architect to review and approve such submittals as quickly as possible to allow Work on the site to commence.

6.1 Tests, Inspections and Approvals

As soon as practicable after award of the Contract the Architect shall confirm, in writing, requirements for the type and number of tests, inspections and approvals required for the Project, for the Project Manager's review and use in securing Testing Laboratory services.

6.2 Notices, Reports & Meetings

6.2.1 Pre-Construction Conference

After the execution of the Construction Contract the Project Manager will issue a written Notice to Proceed to the Contractor and will notify the Architect to arrange for and conduct a Preconstruction Conference. The Architect shall prepare meeting minutes and distribute to all participants within three (3) business days of the conference.

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 attend such meetings. It shall be the principal purpose of these meetings 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 all participants within three (3) business days of the meeting.

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 transmitted to the Project Manager and Contractor within three (3) business 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 the Architect. 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. Architect and Owner shall review draft of Application for Payment at each monthly Progress Meeting, discuss review comments with Contractor, and review corrected, finalized Application for Payment once submitted. Review and certification shall occur in accordance with Article 3.6.3 of the AIA B101.

The Architect shall process Contractor's finalized Applications for Payment within seven (7) calendar days from the time the finalized application is received 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.

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.

6.6 Shop Drawings and Submittals

The Architect shall review and approve Contractor's Submittal Schedule. 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.

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. The Architect shall monitor Change Order activity and advise Contractor to record Change Orders whenever required by State law.

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. The Architect shall acknowledge receipt of each contractor-generated Request for Information (RFI) within three (3) calendar days after receiving it. The written answer should be issued simultaneously with the acknowledgment but in no case more than ten (10) calendar 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.

CLOSE-OUT PHASE

Per AIA B101 Section 3.6.6 the Architect shall provide close-out services for the Construction Phase.

7.0 General

The Architect shall conduct inspections to determine date(s) of Substantial Completion, verify Contractor's list of Work requiring completion or correction, issue Certificate(s) of Substantial Completion, review and approve warranties required by the Contract Documents, and following satisfactory final inspection, issue final Certificate(s) of Payment.

7.1 Substantial Completion

Architect to comply with AIA A201 Section 9.8 for procedures relative to determining Substantial Completion.

The Architect shall require that warranties required by the Contract Documents are submitted prior to Substantial Completion and prior to establishing a punch list value for the Work that the warranty covers. The entire scheduled value for Work requiring a warranty will be added to the punch list valuation if warranty is not submitted prior to Substantial Completion.

7.2 Close-out Documents

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 collect, review, approve and forward to the Project Manager closeout documentation to include, but not limited to the following:

- a) Consent of surety for partial release of retainage or making final payment;
- b) Lien waivers;
- c) Warranties, operations manuals, maintenance manuals, training videos, keys and other close-out documents as required by the Contract Documents.
- d) Two sets of as-constructed Record Drawings (As-Builts), one PDF electronic set on flash drive and the other a set of prints made from the scanned files, for the Project Manager's files. The Architect shall require the Contractor annotate the as-built conditions in red ink. All Addenda, Supplemental Instructions and Change Order Drawings shall be incorporated neatly into this set. The Architect shall review the documents to ensure, to the best of Architect's ability, that the Contractor has included all changes.
- e) Complete electronic copy of all AutoCad (or compatible) files comprising the Construction Documents including any reference files, on a flash drive; and
- f) Complete electronic copy of all Project Manual files.

7.3 Final Inspection

The Architect shall monitor Contractor's progress on Work remaining to be completed and conduct final inspection(s) as required in order to certify Contractor's final Application for Payment. Should Contractor fail to complete outstanding Work within forty-five (45) days after Substantial Completion, Architect to notify Owner in writing that imposition of additional Liquidated Damages is commencing. In such case Architect shall continue monitoring progress of incomplete Work until such time that Work is complete.

WARRANTY PHASE

Per AIA B101 Section 3.7 the Architect shall provide Warranty Phase services following Contractor's achievement of Substantial Completion.

8.0 General

During the one-year warranty period, the Architect shall monitor the Project, advise Owner and Contractor of any Work detected that is not in accordance with Contract Documents, advise Owner and Contractor of any potential warranty claims detected or reported, investigate non-compliant Work and warranty claims to verify culpability and monitor Contractor's remedy of non-compliant Work and valid warranty claim items.

The one-year warranty period shall be extended for any portions of the Work completed after the date of Substantial Completion. This obligation shall survive acceptance of the Project as provided in the Contract Documents.

8.1 Assist Owner

During the one-year warranty period, upon request of Owner, the Architect shall provide assistance regarding operation of the facility, utilization of mechanical or electrical equipment or systems, Owner-training, or any other matter involving the facility for which Owner requires assistance.

8.2 Warranty Expiration Inspection

Approximately one month prior to expiration of the warranty period, Architect shall conduct an inspection of the Project to identify any Work requiring replacement or correction under terms of the warranty. Architect shall schedule this inspection well in advance to ensure attendance of Owner and Contractor.

8.3 Final Meeting with Owner

Immediately following the warranty expiration inspection, Architect shall meet with Owner to review outstanding warranty items, and to review facility operations and performance.

Satisfactory 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 monitor Contractor's remedy of non-compliant Work and correction of valid warranty claim items until completed to Owner's satisfaction, regardless of when such Work is identified.

End