THE
Martha Retreat
Guest House

PROJECT SPECIFICATIONS

RELEASED FOR CONSTRUCTION

12/08/2023

HISTORICAL CONCEPTS
ARCHITECTURE & PLANNING

SECTION 01100 - SUMMARY AND DEFINITIONS

1. Project Information:
    A. Project: Martha Retreat Guest House
    B. Project Location: Miccosukee Rd. Parcel ID: 1534200010000, Tallahassee, FL 32309
    C. Owner: Martha Frances Plantation, LLC
    D. Architect: Historical Concepts, L.L.C., 414 Bill Kennedy Way SE, Suite 301, PH: (678) 325-6665,
    E. Structural Engineer: Stability Engineering, 1376 Church St. Suite 200, Decatur, GA 30030
    F. Civil Engineer: N/A
    G. Electrical Engineer: Applied Research and Design, Inc. 2623 S. Blairstone Rd., Tallahassee, FL 32301, PH: (850)668-6324
    H. Landscape Architect: Don Hooten, 414 Bill Kennedy Way SE, Suite 203A, Atlanta, GA 30316, PH: (404) 373-9816, FAX: (404) 373-7446, EMAIL: don@hootenlanddesign.com
    I. Interior Designer: Christine Hughes Interior Design, 739 Plymouth Ave, SE, Grand Rapids, MI 49506 PH: (773) 480-7192

2. Construction Documents: The Construction Documents for this Project include, but may not be limited to, drawings, specifications, addenda and other items per Section 01250 - Contract Modification Procedure.

3. Codes: Includes all federal, state, and local laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the work.

4. Structural Construction Documents are provided by Structural Engineer under separate cover.

5. Electrical Construction Documents are being provided by Electrical Engineer under separate Cover.

6. Interior Construction Documents are being provided by Interior Designer under separate cover.

END OF SECTION

SECTION 01110 - GENERAL RESPONSIBILITIES

1. Execution of the Work:

    A. Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Construction Documents.

    B. The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures for coordinating all portions of the Work under the Contract, unless the Construction Documents give other specific instructions concerning these matters. Contractor shall also be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Work.

    C. The Contractor shall be solely responsible for the coordination and distribution of all work, including all work to be performed by the subcontractors. All work to be executed by the Contractor and the Contractor's subcontractors must be performed in a workmanlike manner.

    D. The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its subcontractors. All work shall be completed by skilled tradesmen. The Contractor shall be responsible for ensuring that Contractor, Contractor's employees, and Contractor's subcontractors are suitably trained for and familiar with the performance of their respective trades. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them. The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work.

    E. Because the Construction Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Construction Documents relative to that portion of the Work, as well as the information furnished by the Owner. Written dimensions on drawings govern scale measurements, which should not be utilized. Larger scale drawings govern smaller scale drawings. Features completely shown govern repetitive features shown in outline.

    F. The Contractor shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and

construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Construction Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a Request For Information per Section 01340 - Requests For Information.

G. The Contractor shall similarly ensure that all subcontractors carefully study and compare the various Construction Documents relative to their respective scopes of work. The subcontractors shall inspect work in place and shall promptly report to the Contractor any errors, inconsistencies, omissions, nonconformance to the Construction Documents and any deficiencies in the work that are not consistent with industry standards or best practices. Subsequently, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a Request For Information per Section 01340 - Requests For Information.

H. Conflicts between the Construction Documents and any applicable Codes shall not relieve the Contractor of the responsibility to comply with all legal requirements. Compliance with minimum Code requirements does not relieve the Contractor of the responsibility to provide work in conformance with the intent of the Construction Documents.

I. If the Contractor or the Contractor's subcontractors fail to carefully study and compare the various Construction Documents relative to the progress of the Work, the Contractor shall be responsible to the Owner for such costs and damages as would have been avoided if the Contractor had performed such obligations.

J. The Contractor and the Contractor's subcontractors shall supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Each party is fully responsible for the prevention of damage caused by their work to the work of others. As such, the damaging party is fully responsible for the repair of damage caused by their work to the work of others.

K. Subcontractors shall be responsible to inspect any work of another subcontractor that may affect his own work, and shall immediately report to the Contractor any deficiencies that would result in a reduction of the industry standards or best practices for the trade to be applied, or he shall be deemed to have accepted such work as correct and fit. Any defect or errors covered or rendered inaccessible by a subcontractor's work will become the responsibility of the Contractor.

L. Except in the case of minor changes in the Work authorized by the Architect, the Contractor may make substitutions only with the consent of the Owner, after

evaluation by the Architect per Section 01630 - Product Substitution Procedures. Contractor assumes all responsibility for substitutions made without the consent of the Owner and Architect.

2. Standards:

   A. Unless the Construction Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Construction Documents. Such standards are made a part of the Construction Documents by reference.

   B. Comply with standards in effect as of date of the Construction Documents, unless otherwise indicated.

   C. Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Construction Documents. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

   D. Where abbreviations and acronyms are used in Specifications or other Construction Documents, they shall mean the recognized name of the standards and regulations per Section 01420 - References.

   E. If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.

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

3. Warranty:

   A. The Contractor warrants that the Work will conform to the requirements of the Construction Documents and will be free from defects, except for those inherent in the quality of the Work the Construction Documents require or permit. Work, materials or equipment not conforming to these requirements may be considered defective.

   B. Construction defects include, but are not limited to, all work that:

i. Does not conform to applicable Codes
ii. Causes physical damage to the Project or real property
iii. Is not completed in accordance with the standards of care, industry standards or best practices of the respective trades
iv. Represents an unreasonable risk of injury to a person or property
v. Does not conform to the Construction Documents

C. All materials shall be applied in strict conformance with appropriate manufacturer's recommendations, specifications and installation instructions, including any manufacturer recommended alternates to achieve the highest possible performance. In the event of overlapping instructions, Contractor shall comply with the most stringent.

D. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

END OF SECTION

SECTION 01210 – ALLOWANCES

1. Certain requirements of the work related to each allowance are shown and specified in Construction Documents. The allowance has been established in lieu of additional requirements.

2. As requested by the Owner, obtain and submit proposals for the work of each allowance for use in making final selections. Submit a substantiated survey of quantities of materials, with reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins. Purchase products and systems as specifically selected (in writing) by the Owner. The Owner reserves the right to establish the actual quantity of work-in-place by an independent quantity survey, measure, or count.

3. Allowance amounts have been established by the Architect and Interior Designer, based on Owner's input, as part of the construction pricing. The assigned allowance amounts are indicated below.

DESCRIPTION	ALLOWANCE
Plumbing Fixtures	$23,000
Decorative Electrical Fixtures	$15,500
Cabinet Finish Hardware	$2,000
Appliances	$11,000
Bath Accessories	$5,200
Bath and Shower Enclosures	$6,000
Door Hardware	$14,500
Window & Shutter Hardware	$8,400

UNFIXED. ALLOWANCES * See finish floor plan for assumed locations of each floor material			
Countertops	$15/s.f. (wood) $90/s.f. (man-made stone) $125/s.f. (natural stone)	Lighting Control System	TBD – verify selection with Owner
Flooring	$15/s.f. (wood) $7/s.f. (stone – thin set) $18/s.f. (stone – mud bed)	Audio/ Visual System	TBD – verify selection with Owner
Tile	TBD per interior designer pattern		

NOTE: Allowances indicated for material only include direct costs to the Contractor. They include taxes (in the case of materials) and delivery to the job site but do not include overhead and profit, unloading materials, storage, cost of tools, installation, etc. except where indicated.

END OF SECTION

SECTION 01250 - MODIFICATION REQUEST PROCEDURES

1. Design Modification Requests by the Architect or Owner that do not require modification of the contract sum or duration shall be coordinated between the Architect and Owner and shall be issued to the Contractor by the Architect in writing.

2. Design Modification Requests by the Architect or Owner that may require modification of the contract sum or duration shall be issued to the Contractor by the Architect as follows:

    A. Architect shall issue to Contractor a detailed Request For Proposal outlining the proposed modification. Supplemental or revised drawings and specifications may be provided by Architect as needed.

    B. Contractor shall review the Request For Proposal and provide to Owner and Architect a clear written description of any required modifications to the contract sum and duration to accommodate the modification request. Supplemental information shall be provided by the Contractor to the Owner and Architect as requested to facilitate the clear understanding of the proposed modifications to the contract sum and duration.

    C. Upon approval of the modified contract sum and duration, Contractor is to issue a Change Order per Section 01290 - Payment Procedures for written approval by the Architect and Owner. Contractor shall not proceed with proposed changes until a fully executed Change Order has been received.

3. Modification Requests by the Contractor: If latent or unforeseen circumstances require modifications to the contract sum or duration, the Contractor may submit a written Request For Modification to the Owner and Architect as follows:

    A. The Request For Modification shall include clear itemizations of the proposed modifications to the contract sum and duration. In addition, the Request For Modification shall include a description of the circumstances justifying the requested modifications. Supplemental information shall be provided by the Contractor to the Owner and Architect as requested to facilitate the clear understanding of the proposed modifications to the contract sum and duration.

    B. Upon approval of the Request For Modification, Contractor shall issue a Change Order per Section 01290 - Payment Procedures for written approval by the Architect and Owner. Contractor shall not proceed with proposed changes until a fully executed Change Order has been received.

4. Allowance Modifications: Allowance modifications shall be per Section 01210 - Allowances.

END OF SECTION

SECTION 01290 - PAYMENT PROCEDURES

1. Specific terms regarding pre-construction retainer or initial deposit, periodic payment request procedures and retainage amounts to be deducted from applications for payment during construction shall be negotiated between the Contractor and the Owner and documented in the agreement for construction.

2. Contractor shall prepare a schedule of values allocating the entire contract sum to the various portions of the work. This schedule shall be used as a basis for reviewing the Contractor's periodic Applications for Payment and should follow AIA Documents G702 and G703 or similar.

3. For the Owner to approve payment for any amounts exceeding the contract sum stated in the construction agreement (for both stipulated sum and cost of the work formats), all changes to the contract sum must be documented in writing. For any change in the scope of work, the Contractor shall prepare a written change order for the Owner to approve, prior to incurring any expenditure. AIA Document G701 or similar format should be used to process change orders. In the event that firm prices cannot be determined in advance, proposals for estimates should be submitted for review and approval by the Owner. Any factors that would affect the final price of the change order should be clearly stated in writing, along with a best estimate of the possible price variance.

4. At the time progress payments are requested by the Contractor, as a condition of approval of payment for work for the current period, Contractor is required to submit to the Owner a Waiver of Lien in a form that has been accepted in advance by the Owner and the Owner's lending institution if applicable. Documentation from subcontractors shall be clearly marked as to scope of work and shall match to the schedule of values used in each periodic application for payment.

5. Insurance: All bonding and insurance requirements shall be coordinated with the Owner prior to beginning construction.

END OF SECTION

SECTION 01330 - SHOP DRAWINGS, PRODUCT DATA AND SAMPLE SUBMITTALS

1. Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor, sub-contractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

2. Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

3. Samples are physical examples that illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

4. The Contractor shall perform no portion of the Work for which the Construction Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been reviewed by the Architect and/or Owner.

5. Contractor shall review for compliance with the Construction Documents, approve and submit to the Architect shop drawings, product data, samples and similar submittals required by the Construction Documents in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors.

6. By submitting Shop Drawings, Product Data, Samples or similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Construction Documents. Submittals made to the Architect without prior review and approval from the Contractor may be returned to the Contractor without review or comment.

7. The Architect will review and take appropriate action upon the Contractor's submittals, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Construction Documents. Review of such submittals is not conducted for the purpose of determining the accuracy or completeness or other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor. The Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of any construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

8. Submittal Processing Time: Provide all submittals to Architect to allow for adequate time for review, including time for re-submittals as may be required, so as not to delay or otherwise interrupt the construction schedule for the Project.

    A. Allow 10 business days from receipt of each submittal or shop drawing or re-submittal for review by Architect. Allow additional time if coordination with subsequent submittals is required.

    B. No extension of the Contract time will be authorized because of failure to transmit submittals or Shop Drawings enough in advance of the work to permit processing, including re-submittals.

9. The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Architect on previous submittals. In the absence of such written notice, the Architect's approval of a resubmission shall not apply to such revisions.

10. The following list contains those Shop Drawings, Product Data, Samples or similar submittals which shall be submitted to the Architect and/or Owner for review. Other matters may require communication with the Architect or Owner; however, the following items are specifically required:

Shop Drawings:

A. Manufactured floor and ceiling framing layout
B. Manufactured roof truss layout
C. Exterior doors and windows
D. Interior doors and windows
E. HVAC equipment, duct layout, boot size and locations. Other items to include are, but not limited to, location of secondary condensate drain lines and exhaust vent penetrations.
F. Fire protection systems
G. Interior and exterior cabinetry

Product Data, Samples or similar submittals:

A. Exterior finish materials panels
B. HVAC registers and grilles
C. Interior wood flooring panels
D. Roofing finish material

END OF SECTION

SECTION 01335 - OWNER SELECTIONS

1. All requests for Owner Selections are to be coordinated by Contractor so as to allow the Owner reasonable time to make selections without affecting the overall schedule of the Work. Owner Selections are to be made based upon finished samples provided by the Contractor. Samples should be sized to adequately convey to Owner overall material appearance, including potential material color and finish fluctuations.

2. The responsibilities of the Owner within these specifications may be fulfilled by an Owner's Representative if such a representative is indicated in writing to the Contractor by the Owner.

3. As requested by the Owner, Contractor shall obtain and submit alternate materials for each submittal for use in making final selections.

4. Contractor shall provide to Owner a clear indication of selection costs and how they relate to allowance amount, if applicable. Costs of selections varying from the Construction Documents shall be clearly indicated to the Owner at the time of submittal for review.

5. The following is a list of selections to be made by the Owner. Owner may wish to consider additional items; however, the following selections are specifically required:

    A. Brick material and layout
    B. Stone material and layout
    C. Mortar color and finish
    D. Cabinet finish hardware
    E. Paint color and finish
    F. Deck finish
    G. Roofing color
    H. Countertop material
    I. Tile material and layout
    J. Interior stone
    K. Door hardware
    L. Window hardware
    M. Plumbing fixtures
    N. Floor material, color and finish
    O. Wall material, color and finish
    P. Electrical fixtures
    Q. Electrical switches, receptacles and covers
    R. Bath accessories
    S. Appliances
    T. Water Heating System
    U. Pool Equipment

END OF SECTION

SECTION 01340 - REQUESTS FOR INFORMATION

1. Requests For Information shall be defined as documents submitted by the Contractor requesting clarification of a portion of the Construction Documents, hereinafter referred to as an RFI.

2. Contractor shall carefully study the Construction Documents to ensure that information sufficient for interpretation of requirements of the Construction Documents is not included. Should the Contractor be unable to determine from the Construction Documents the exact material, process, or system to be installed; or if a conflict is identified between elements of the construction; or a discrepancy or conflict in description is discovered, the Contractor shall request that the Architect make an interpretation of the requirements of the Construction Documents to resolve such matters.

3. Submission of RFI's shall be prepared and submitted on a form provided or approved by the Architect. Each RFI shall be given a discrete, consecutive number.

4. RFI's from subcontractors and material suppliers shall be submitted through and reviewed by the Contractor. RFI's submitted directly by sub-contractors or material suppliers to the Architect will be returned unanswered to the Contractor.

5. The RFI shall not be used for the following purposes:

    A. To request approval of submittals (refer to Section 01330 - Shop Drawings, Project Data And Sample Submittals)

    B. To request changes that involve modifications to the contract amount or duration (refer to Section 01250 - Modification Request Procedures)

    C. To request different methods, other than what is specifically outlined in the Construction Documents and Specifications, of performing the work (refer to Section 01100 - Summary And Definitions)

6. In the event the Contractor believes that a clarification by the Architect results in modified cost or time, the Contractor shall not proceed with the work indicated by the RFI until authorized to proceed by Owner and Architect as outlined in Section 01250 - Contract Modification Procedures.

7. Architect shall return RFIs to Contractor within 5 working days of receipt. RFIs received after 12:00 noon EST shall be considered received on the next regular working day for the purpose of establishing the start of the 5 day response period. Contractor to coordinate submittal of RFIs so that allowable response period does not negatively alter construction timeline.

END OF SECTION

SECTION 01400 - QUALITY CONTROL

1. The General Contractor shall provide a superintendent for the Project who shall coordinate and manage the activities of all workers and subcontractors on the job site. No work shall be performed on the job site by Contractor's or subcontractor's personnel without the presence of the superintendent.

END OF SECTION

SECTION 01420 - REFERENCES

1. Unless the Construction Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Construction Documents. Such standards are made a part of the Construction Documents by reference. Standards referenced in Construction Documents or in governing regulations have precedence over non-referenced standards, insofar as different standards may contain overlapping or conflicting requirements. Comply with standards in effect as of date of Construction Documents, unless otherwise indicated. When a drawing references "or equal" as an option, the optional material selection must meet a recognized governing industry standard and be approved in writing by the Architect.

2. It is the Contractor's responsibility to be knowledgeable of the industry standards applicable to work and materials performed and installed in this project. If a copy of a standard is required for field use, the contractor shall contact the organization below to obtain the Standard for site use.

3. Abbreviations: Where abbreviations or acronyms are used in Construction Documents, they mean the well-recognized name of entity in building construction industry; refer uncertainties to "Encyclopedia of Associations" by Gale Research Co. or the following listing:

   ABBREVIATION AND FULL NAME

   ACI - American Concrete Institute
   AF&PA - American Forest & Paper Association
   AISC- American Institute of Steel Constructions
   ANSI - American National Standards Institute
   APA - American Plywood Association
   ASHRAE- American Society of Heating, Refrigerating, and Air-Conditioning Engineers
   ASTM - American Society for Testing Materials
   AWI - Architectural Woodwork Institute
   AWC - American Wood Council
   AWS- American Welding Society
   AWPA - American Wood Protection Association
   BIA - Brick Institute of America
   HPMA - Hardwood Plywood Materials Association
   MPI - Master Painters Institute
   NFPA - National Forest Products Association
   NLGA - National Lumber Grade Authority
   NRCA - National Roofing Contractor Association
   NSA - National Slate Association
   NWFA – National Wood Flooring Association
   OSHA- Occupational Safety and Health Association

SMACNA - Sheet Metal & Air Conditioning Contractors National Association
SPIB - Southern Pine Inspection Bureau
SRCA - Slate Roofing Contractors Association
TCNA - Tile Council of North America
WDMA - Window & Door Manufacturers Association
WRCLA - Western Red Cedar Lumber Association

END OF SECTION

SECTION 01500 - TEMPORARY FACILITIES

1. The Contractor shall, at the Contractor's expense, install, operate, protect and maintain the respective temporary services as hereafter described during the entire course of the project. Temporary facilities and services shall comply with all applicable federal, state and local codes and requirements. Upon completion of work, all temporary facilities shall be removed from the site and the site shall be properly cleaned and graded, restored to new condition. The temporary services and facilities shall include:

    A. Temporary Electricity: Contractor to provide and install temporary power for construction site. Connect to existing power service without disrupting local service requirements. Power feeder service characteristics shall be compatible with the service from which it is taken. Size, type and loading shall be per requirements as established by the Code having jurisdiction over the Project. The contractor shall provide main service disconnect and over-current protection at a convenient location in accordance with Code. The Contractor shall provide power outlets for construction operations, with branch wiring and distribution boxes located as necessary and shall provide flexible power cords as required. Provide and install distribution equipment, wiring and outlets to provide single phase branch circuits for power and lighting.

    B. Temporary Heating, Cooling, and Ventilation: Contractor to provide and install temporary heating, cooling and ventilation for construction site. Contractor to maintain system during construction, while exercising measures to conserve energy. Ventilate enclosed areas to assist cure of materials, to dissipate humidity and to prevent accumulation of dust, fumes, vapors or gases. Supplement with temporary fan units as required to maintain clean air for construction operation.

    C. Temporary Lighting: Contractor to provide and install temporary lighting for construction site. Provide and install temporary lighting in all work areas sufficient to maintain a lighting level during working hours not less than the lighting level required by OSHA standards. As permanent lighting facilities are completed, they may be used in lieu of temporary facilities provided lighting levels are maintained at levels acceptable by OSHA standards.

    D. Temporary Telephone: Contractor to provide reliable communications with Project superintendent, who shall be available to Owner and Architect at all times during normal construction hours.

    E. Temporary Water: Contractor to provide and install temporary water for construction site. Connect to an existing water source for construction operations. Provide drinking water from an approved, safe source of satisfactory type in sanitary bottle/stands or drinking fountain which shall be available at all times to all workers at the site.

F. Construction Facilities: Field offices and sheds shall be portable or mobile buildings, or buildings constructed with floors raised above the ground, securely fixed to foundations, with steps and landings at entrance doors. Structurally sound, secure, weather tight enclosures for office and storage spaces shall be maintained during progress of work and removed at completion of work. Size of field offices and sheds shall depend on contractor's needs. Install appropriate fire extinguisher. HVAC shall be adequate to maintain comfortable conditions.

G. Sanitary Facilities: Existing facilities shall not be used. Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees as will comply with laws and regulations. Temporary toilet facilities may consist of portable toilets. Toilet facilities shall be kept supplied and clean and in sanitary condition until the completion of the work and then shall be removed from the site.

H. Vehicular Access and Parking: Construct and maintain temporary roads accessing public thoroughfares to serve construction area. Arrange parking areas to accommodate construction personnel. Do not allow vehicle parking on existing pavement. When site space is not adequate provide additional off-site parking.

I. Temporary Barriers and Enclosures: The contractor shall provide barriers necessary to prevent damage to existing site features, facilities and adjacent properties from construction operations and demolition.

J. Temporary Controls: This work shall consist of the application of temporary measures throughout the life of the project to control erosion and siltation. Such measures shall include, but are not limited to, the use of berms, dikes, dams, sediment basins, fiber mats, silt fences, straw bales, washed gravel or crushed stone, mulch, grasses, slope drains, temporary seeding and other methods. Temporary erosion and siltation control measures as described herein, shall be applied to erodible material exposed by any activity associated with the construction and consistent with state and local control standard.

K. First Aid: Provide and maintain a completely equipped first aid kit at a centrally located area of the site, in a clean and orderly conditional which shall be available at all times to all workers at the site.

END OF SECTION

SECTION 01600 - PRODUCT REQUIREMENTS

1. All materials shall be delivered, stored, and installed in strict accordance with Code and the manufacturer's written instructions or Material's Institute Standards. Where the manufacturer's written instructions are strictly followed, the manufacturer shall be responsible for the performance of their product. All items not specifically mentioned but required by the manufacturer or material institute standard to make the work complete and operational shall be included.

END OF SECTION

SECTION 01630 - PRODUCT SUBSTITUTION PROCEDURES

1. Contractor to investigate proposed substitutions to determine that they are equal or superior in all respects to products specified. Contractor to investigate any modifications to installation or existing construction as may be required for substituted products and present such findings, including cost adjustments if necessary, to Client and Architect for written approval.

2. Requests For Substitutions must be submitted to Owner and Architect to allow for adequate time for review, including time for any requested supplemental information as required for approval, so as not to delay or otherwise interrupt the construction schedule for the Project.

3. Substitutions of materials must be approved in writing by the Architect and Owner. Do not proceed with any Owner or Architect requested changes or substitutions without first coordinating with and obtaining written approval from the other.

4. Coordinate installation of accepted substitutions into the work so as to be complete in all respects.

END OF SECTION

SECTION 01640 - OWNER FURNISHED PRODUCTS

1. Contractor is not responsible for products furnished by the Owner that are damaged prior to opening or receiving.

2. Additional work and/or costs required to install owner furnished products will be presented to the Owner for written approval prior to installation.

END OF SECTION

SECTION 01740 - CLEANING

1. Construction site to be in a clean and orderly condition throughout the construction process. Clean interior spaces prior to the start of finish painting and the application of other finishes.

2. At the conclusion of construction, the project shall be properly cleaned to new condition. This should include, but not be limited to; cleaning the interior and exterior glass, surfaces exposed to view, remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surface areas, sweep and mop all tiled surfaces, etc. Replace filters of operating equipment. Clean equipment and fixtures to a sanitary and like new condition. Clean exterior such as debris from roof, gutters, landscape areas, driveways and walks, etc. Remove all waste and surplus materials.

END OF SECTION

SECTION 01760 - PROTECTING INSTALLED CONSTRUCTION

1. Contractor to protect all installed construction. If products or materials come with a protective coating, contractor shall maintain protective coating until construction is complete. Contractor shall replace, at Contractor's expense, any items that become defective or damaged due to construction activities.

END OF SECTION

SECTION 02000 - SITE GENERAL

1. Contractor shall adhere to sub-grade preparation and earthwork recommendations as outlined in the Geotech Engineering Report for Miccosukee Rd. Parcel ID: 1534200010000, Tallahassee, FL for Matt Thornton, provided by Southeast GeoGroup, dated December, 2023.

2. Satisfactory soil materials are defined as those complying with ASTM D 2487 soil classification groups GC, GP, GM, SM, GW, SW, and SP. See soil classifications at the end of this section.

3. Unsatisfactory soil materials are defined as those complying with ASTM D 2487 soil classification groups ML, MH, CL, CH, OL, OH, and PT. See soil classifications at the end of this section.

CH	Inorganic clays of high density
CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
GC	Clayey gravels, gravel-sand-silt mixtures
GM	Silty gravels-sand-silt mixtures
GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
GW	Well graded gravels, gravel-sand mixtures, little or no fines
MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
OH	Organic clays of medium to high plasticity, organic silts
OL	Organic silts and organic silty clays of low plasticity
PT	Peat and other highly organic soils
SM	Silty sands, sand-silt mixtures
SP	Poorly graded sands, gravelly sands, little or no fines
SW	Well graded sands, gravelly sands, little or no fines

END OF SECTION

SECTION 02200 - SITE PREPARATION

1. Contractor shall stake out with strings on the site all work including structures, paving and site improvements for review by the Architect, Landscape Architect and Owner. This layout shall be approved in writing by the Owner before clearing, demolition or other site work begins.

END OF SECTION

SECTION 02220 - SITE DEMOLITION

1. Provide all labor, materials and equipment to perform the required location and demolition of any existing abandoned utilities and structures which interfere with the proposed construction.

2. Contractor is responsible to ensure that site demolition work is being performed in strict compliance with all Code requirements.

3. Contractor is responsible for the protection of site improvements, utilities and construction not to be demolished. Damage caused to site improvements, utilities and construction outside the scope of demolition is to be repaired, at no additional expense to the Owner, to same condition as prior to damage from demolition.

END OF SECTION

SECTION 02230 - SITE CLEARING

1. The area of clearing shall be maintained within the limits shown on the appropriate site plans.

2. Contractor shall install construction fences as indicated on the site plan or as requested to protect trees or existing structures which are to remain. No materials shall be stored, no work shall be performed, and the grade shall not in any way be disturbed within the fenced area. Park vehicles and store materials only where indicated. Restrictions around existing trees to remain for duration of construction.

3. No grubbing should occur on site due to possible damage to feeder and hip roots of existing trees.

4. Use a licensed arborist for tree damage repair. Replace damaged trees that cannot be restored to full growth, as determined by arborist, unless otherwise acceptable to the Owner.

5. Provide temporary fences, barricades, coverings, or other protections to preserve existing items indicated to remain and to prevent injury or damage to person or property. Apply protections to adjacent properties as required.

6. Conduct site clearing operations to ensure minimum interference with roads and other adjacent occupied or used facilities. Do not close or obstruct roads or other occupied or used facilities without permission from Owner, or if off Owner's property from authorities having jurisdiction.

7. Remove trees, shrubs, grass, and other vegetation, improvements, or obstructions as indicated on the appropriate site plans unless specifically identified to be relocated.

8. For slab foundations, Contractor to run ditch witch around building perimeter 2' from footing to a depth of 24" prior to clearing or excavating in order to prevent root tear out during excavation. Do not root prune if foundation is pier system or foundation wall.

9. Dispose of removed and demolished items off Owner's property in accordance with applicable garbage, refuse or weeds ordinances. Do not burn materials on site unless specifically allowed in writing by Owner and authorities having jurisdiction.

END OF SECTION

SECTION 02240 - DEWATERING

1. At all times during construction provide, place and maintain ample means and devices with which to remove promptly all water entering trenches and other excavations. Keep excavations dry until the structures, pipes and appurtenances to be built therein have been completed and backfilled.

2. Dispose of all water pumped or drained from the work without interference with other work, traffic or injury to public or private property. Prevent siltation of storm water facilities or receiving waterways.

END OF SECTION

SECTION 02250 - SHORING AND UNDERPINNING

1. Existing footings, foundations, pile caps, grade beams, retaining walls or other improvements which may be affected by excavation operations shall be shored or underpinned per Code and best industry practices to protect against settlement and lateral movement.

2. Provide necessary materials and precautions per Code and industry best practices to hold back earth at excavations and as required to prevent cave-ins and earth sloughs.

END OF SECTION

SECTION 02310 - GRADING

1. Preparation: Carefully remove loam and topsoil to be incorporated in the finished work and store separate from the other excavated material. Failure to isolate loam and topsoil from the other excavations shall require that said soils not be used as topsoil.

2. Rough Grading: Prepare ground surface to receive grading by removing vegetation, debris, unsatisfactory soil materials, and obstruction. Scarify as required so that fill material will bond with existing surface. Grade areas indicated, including adjacent transition areas, with uniform levels or slopes between finish elevations. Shape surface of areas to within 0.10' above or below anticipated finish elevations, compacted as required.

3. Finish Grading: All areas to be dragged and smoothed after placement of finish grade. Finish grade material shall utilize stockpiled topsoil. Slope finished grade away from buildings at a minimum of ¼" per foot (2%) to provide positive drainage away from building and all areas below building.

4. Grade Maintenance: Erect silt fencing and hay bales, or other forms of erosion control as necessary to protect grade and fill. Repair and re-establish grades in settled, eroded, rutted, or otherwise damaged areas. In damaged compacted areas, scarify surface, reshape, and compact to required density prior to further construction.

5. Disposal: Transport acceptable excess excavated material to designated soil storage areas on the site, stockpile, or spread as directed. Remove and properly dispose of unacceptable excavated material, trash, and debris from the site.

END OF SECTION

SECTION 02315 - EXCAVATION

1. Carry out the excavation, dewatering, shoring and underpinning as indicated in Sections 02240 and 02250 and in such manner as to eliminate any possibility of undermining or disturbing the foundations of any existing structure or any work previously completed. The use of explosives is not permitted.

2. Excavate all foundation walls and footings to elevations indicated in the construction documents. Contractor to ensure that all foundations, footings and slabs bear on surfaces meeting or exceeding bearing capacities per Section 02000 - Site General.

3. Excavate an additional 18" minimum clearance around perimeter of all foundation walls to provide for proper drainage and waterproofing assembly.

END OF SECTION

SECTION 02316 - BACKFILLING

1. Correct any part of the trench bottom excavated below the specified grade with approved materials and thoroughly compact.

2. Complete all backfilling to the dimensions and levels shown on the construction documents. Where excavated material or any portion thereof is deemed unsuitable for backfilling material, procure and place approved select borrow materials.

3. Backfill as promptly as is consistent with non-damage to the installed structures. Do not place saturated or frozen material in the backfill.

4. No material shall be placed or compacted when it is too wet or frozen or when the sub-grade or previously placed material is too wet or frozen.

5. Backfill material to be used from the excavations shall be of such nature that after it has been placed and properly compacted, it will make a dense, stable fill. It shall not contain vegetation, masses of roots, stones over 2-inches in diameter, or porous matter and shall not be saturated. Organic matter shall not exceed minor quantities and shall be well distributed.

END OF SECTION

SECTION 02362 - TERMITE CONTROL

1. Termite treatment shall be provided by a licensed professional pest control operator and placed beneath all new work to include, but not limited to, footings, slabs, walks, etc.

2. Treatments shall not be made when soil is frozen or excessively wet.

3. Manufacturer's written warranty shall be submitted to the Owner upon completion certifying that treatment will prevent infestation and damage by termites for a period of 5 (five) year, signed by a licensed professional pest control operator and manufacturer of material.

4. Post signs in areas of application warning workers that soil poisoning has been applied. Remove signs when areas are covered by other construction.

END OF SECTION

SECTION 02500 - UTILITY SERVICES

1. Provide all labor, materials and equipment required for the complete and safe installation of all utility services, such as electricity, water, gas and oil, sanitary sewerage and communications.

2. Coordinate requirements with local utility providers.

3. All utilities shall be located underground from street to building, unless otherwise directed by Architect.

END OF SECTION

SECTION 02620 - FOUNDATION AND RETAINING WALL DRAINAGE

1. Install a minimum 4" structural perforated Polyvinyl Chloride (PVC) drain pipe in compliance with ASTM D2729 with a positive outflow around all exterior basement walls, continuous footings and retaining walls. Installation to include all pipe, bends, reducers, adapters, couplings, collars, and joint materials as required for a complete and operational installation.

    A. Drain pipe shall be embedded in a minimum 12" deep loose gravel fill and wrapped with an appropriate geo-technical fabric to prevent silt buildup.

    B. Drain pipe shall include necessary cleanouts to provide access for cleaning purposes to entire system. Coordinate with landscaping to provide cleanouts in locations as inconspicuous as possible.

    C. Provide maximum 1/4" screening at termination of drain pipe to prevent intrusion by animals.

2. Provide protection/drainage compound board in conjunction with membrane waterproofing per Section 07110 - Membrane Waterproofing.

3. Comply with manufacturer's written instructions for installation of all drainage systems and materials.

4. Contractor to test, and repair as required, all foundation drainage systems for proper operation prior to covering.

END OF SECTION

SECTION 02750 - CONCRETE PAVING AND WALKS

1. See Landscape Construction Documents provided by Landscape Architect. Construction Documents prepared by the Landscape Architect supersede requirements provided herein in the event that there are conflicting details or specifications.

2. Where indicated on the appropriate plan, provide paving and automobile parking consisting of a 4" thick, 3000 psi concrete slab on sub-grade compacted to 98 percent density.

3. Provide saw-cut type control joints at 20' o.c., unless indicated otherwise on the drawings.

4. Provide premolded expansion joints abutting curbs, walks and other fixed objects and at 60' o.c. maximum, unless indicated otherwise on the drawings.

5. Provide finish by drawing a fine-hair broom across concrete surface, perpendicular to line of traffic. Repeat operation if required to provide a fine line texture. On inclined slab surfaces, provide a coarse, non-slip finish by scoring surface with a stiff-bristled broom, perpendicular to line of traffic.

6. Provide all tooling necessary for a clean, neat appearance to all paving edging and joints.

END OF SECTION

SECTION 02782 - BRICK PAVERS

1. See Landscape Construction Documents provided by Landscape Architect. Construction Documents prepared by the Landscape Architect supersede requirements provided herein in the event that there are conflicting details or specifications.

2. Contractor to provide brick pavers of the size and specification as indicated. Provide mock-up for Owner, Interior Designer, and Architect for review.

    A. ASTM C216 Face Brick, Grade SW, Type FBA, size 2 3/4”H x 4”D x 8 1/2”L as manufactured by Old Carolina Brick Company, 475 Majolica Road, Salisbury, NC 28147, (704) 636-8850. Confirm color options with Owner, Interior Designer, and Architect. At a minimum provide mock-ups of Savannah Grey, Georgetowne, and Seabrook.

3. Portland Cement Joint Application: Install brick pavers over well compacted ground and 6" minimum dense graded aggregate. Brick pavers shall be laid into a 1" minimum mortar setting bed and leveled. All joints shall be filled completely with mortar to form uniform joints indicated on drawings, if none indicated form 3/8" joints. Maintain proper joint alignment, keeping lines straight and true. Cut paving units with masonry saw to fit adjacent structures. Joints to be scraped smooth and flush with mason's trowel and brushed with soft, long bristled brush or smooth burlap sack. Bricks are not to be cleaned with acid or other brick cleaner.

    A. Graded aggregate for base: ASTM C33 concrete aggregates with a fineness module of 2.25

    B. Mortar setting bed and joints: Type "S" mortar unless otherwise indicated on drawings. All mortar exposed to view shall be mixed with pigmented mortar mix "Savannah Ivory" as manufactured by Blue Circle. Substitute pigmented mortar mix must produce a "white to light color range", and be approved by Architect based on constructed sample.

4. Sand Joint Application: Install brick pavers over well compacted ground and 6" minimum dense graded aggregate base. Brick pavers shall be laid into a 1" minimum sand leveling bed and leveled. All joints shall be filled completely with mason's sand to form uniform joints as indicated on drawings, if none indicated form 3/8" joints. Maintain proper joint alignment, keeping lines straight and true. Cut paving units with masonry saw to fit adjacent structures. Sweep clean mason sand into joints.

    A. Graded aggregate for base: ASTM C33 concrete aggregates with a fineness module of 2.25

    B. Sand leveling bed: ASTM C33 clean masonry aggregate

    C. Sand for joints: ASTM C144 clean masonry aggregate

5. Provide edging as indicated in landscape drawings. Install edging prior to placing masonry paving units.

6. Refer to landscape plans for indication of mortared or mortarless joints. If none indicated, verify joint style with Architect prior to installation of pavers.

7. Install pavers in pattern indicated on drawings. If none indicated, verify pattern with Architect prior to installation of pavers.

8. Submittals: Construct 4' x 4' sample panel of selected brick and mortar for approval by Architect and Owner. Allow 4 (four) days of curing before observation by the Architect or Owner.

END OF SECTION

SECTION 02900 - LANDSCAPING

1. See Landscape Construction Documents provided by Landscape Architect under separate cover. Construction Documents prepared by the Landscape Architect supersede requirements provided herein in the event that there are conflicting details or specifications.

2. Landscaping scope includes, but may not be limited to, unit pavers, retaining walls, lawns and grasses, exterior plants and irrigation outside the footprint of the building or buildings and is not detailed or specified in Construction Documents provided by the Architect.

END OF SECTION

SECTION 03300 - CAST-IN-PLACE CONCRETE

1. See Structural Construction Documents provided by Structural Engineer. Construction Documents prepared by the Structural Engineer supersede requirements provided herein in the event that there are conflicting details or specifications.

2. Contractor shall review construction documents and provide labor and materials pertaining to concrete and foundations as required in said documents and as specified herein, while complying with all applicable building codes.

3. Reinforcing Steel for all concrete work shall be per Section 03310 - Reinforcing Steel and as indicated in drawings.

4. All slabs under building areas shall be over minimum 15 mil ASTM E1745 Class A polyolefin sheet vapor barrier over 4" minimum base course consisting of clean graded gravel, compacted sand fill, crushed stone or crushed blast-furnace slag passing a 2 inch sleeve. Vapor barrier is to be installed continuous with all laps, penetrations or damage sealed per the manufacturer's installation instructions and ASTM E1643.

5. An acceptable alternate means to encapsulate crawl spaces with vapor barrier and omission of rat slab is to install the CleanSpace 20mil vapor barrier as part of the crawl space encapsulation system provided by Basement Systems. Follow manufacturer's installation instructions.

6. All slabs to receive a finish floor shall be acclimated, tested, prepared and treated per the finish flooring manufacturer and recognized industry standard for the selected flooring type.

7. Thicken, turndown or otherwise form slab as indicated in drawings. Reinforce slab per Section 03310 - Reinforcing Steel and as indicated in drawings.

8. Slabs should not exceed 20 feet in any dimension without saw-cut type control joints.

9. Manufactured galvanized steel tongue and groove key joints shall be utilized as required at all cold joints formed by extended delays between pours within the same slab.

10. Provide premolded expansion joints abutting curbs, walks and other fixed objects and at 60' o.c. maximum, unless specifically indicated otherwise on the drawings.

11. Protect all concrete from physical damage or reduced strength due to weather extremes during mixing, placement, and curing. Concrete should be cured as recommended by ACI to achieve maximum strength. Comply with ACI 305 "Hot Weather Concrete" and ACI 306 "Cold Weather Concrete" as applicable.

END OF SECTION

SECTION 03310 - REINFORCING STEEL

1. See Structural Construction Documents provided by Structural Engineer. Construction Documents prepared by the Structural Engineer supersede requirements provided herein in the event that there are conflicting details or specifications.

END OF SECTION

SECTION 04060 - MORTAR AND MASONRY GROUT

1. See Structural Construction Documents provided by Structural Engineer. Construction Documents prepared by the Structural Engineer supersede requirements provided herein in the event that there are conflicting details or specifications.

2. Mortar joints shall be 3/8" thick, finished to produce a flush form. Adjustments to joint thickness may be required to suit modular size of final masonry unit selection.

END OF SECTION

SECTION 04080 - MASONRY ANCHORAGE AND REINFORCEMENT

1. See Structural Construction Documents provided by Structural Engineer. Construction Documents prepared by the Structural Engineer supersede requirements provided herein in the event that there are conflicting details or specifications.

2. Install corrosion-resistant metal masonry ties per 2020 FBC Residential R606.3.4 and in strict conformance with manufacturer's written installation instructions.

    A. Masonry anchorage over cast concrete or wood base: 316 Stainless Steel HB-213-2X Adjustable Veneer Anchor as manufactured by Hohmann & Barnard.

    B. Masonry anchorage over masonry unit base: 316 Stainless Steel 165-2X Adjustable Truss as manufactured by Hohmann & Barnard.

END OF SECTION

SECTION 04090 - MASONRY ACCESSORIES

1. See Structural Construction Documents provided by Structural Engineer. Construction Documents prepared by the Structural Engineer supersede requirements provided herein in the event that there are conflicting details or specifications.

2. Flashing: Minimum 16 ounce. copper sheet, job-formed and detailed to sizes and configurations shown in drawings and to meet industry best practices to achieve a watertight installation.

3. Weep holes: Weep holes are to be cotton wick type not less than 1/4" diameter. Weeps are to be laid in the mortar and of appropriate length to provide unobstructed drainage. Weeps are to be spaced at not more than 24” o.c. for brick and stone, and 32” o.c. for concrete masonry. Weeps are to be located as indicated in the drawings and, if not indicated in the drawings, at all wall flashings, door and window sill pans, relief angles, and at grade within masonry or stone veneer walls.

END OF SECTION

SECTION 04800 - CONCRETE MASONRY UNIT (CMU) ASSEMBLIES

1. See Structural Construction Documents provided by Structural Engineer. Construction Documents prepared by the Structural Engineer supersede requirements provided herein in the event that there are conflicting details or specifications.

2. Standard width of mortar joints for both horizontal and vertical joints shall be 3/8". Joints shall have a full mortar coverage.

3. Lay CMU plumb with all courses level using appropriate corner blocks at corners, window and door jambs.

4. Reinforcing mesh shall be installed in every second course of all masonry unit walls, and in the three courses immediately above all openings and shall extend 2' beyond each side of opening.

    A. Reinforcing mesh to be 316 Stainless Steel 120 Truss-Mesh Standard Weight joint reinforcement as manufactured by Hohmann & Barnard.

END OF SECTION

SECTION 04810 - FINISH MASONRY UNIT (BRICK) ASSEMBLIES

1. Standards: Comply with recommendations of Brick Institute of America (BIA).

2. Submittals: Construct 4'x4' sample panels of Owner selected brick masonry with selected pigmented mortar for final approval by Owner. Allow the sample panel to cure for 4 (four) days prior to review and approval by Owner.

3. Brick Materials: Provide brick units of the size and specification as indicated. Provide mock-up for Owner, Interior Designer, and Architect for review.

    A. ASTM C216 Face Brick, Grade SW, Type FBA, size 2 3/4”H x 4”D x 8 1/2”L as manufactured by Old Carolina Brick Company, 475 Majolica Road, Salisbury, NC 28147, (704) 636-8850. Confirm color options with Owner, Interior Designer, and Architect. At a minimum provide mock-ups of Savannah Grey, Georgetowne, and Seabrook.

4. Mortar Materials: Mortar shall be Type "S" in accordance with ASTM C270, with a specified compressive strength of 3000 psi at 28 days. Provide mock-up for Owner and Architect for review.

    A. Brick Mortar Color: "Savannah Ivory" as manufactured by Blue Circle, or approved equal achieving a white to light color range.

    B. Brick Mortar Pattern: Mortar joints shall be 3/8" thick, and scraped flush with a mason's trowel and brushed with a soft, long-bristle brush to achieve a flush finish. Bricks are not to be cleaned with acid or other brick cleaner, rather wipe droppings with burlap as the work progresses.

5. Installation Pattern: Install masonry units in the bond pattern indicated, or if none is indicated, in running bond. Avoid the use (by proper layout) of less-than-half-size units.

6. Brick Veneer Anchors per Section 04080 - MASONRY ANCHORAGE AND REINFORCEMENT.

7. Cold-Weather Protection: Do not use frozen materials or build on frozen subgrade or setting beds. Heat materials to provide mortar and grout temperatures between 40 and 120 deg F. Protect brick masonry work against freezing for a minimum of 24 hours after installation.

9. Weep holes: Brick veneer weep holes are to be cotton wick type not less than 1/4" diameter. Weeps are to be laid in the mortar at no more than 24” o.c. and of appropriate length to provide unobstructed drainage. Weeps are to be located as indicated in the drawings and, if not indicated in the drawings, at all wall flashings, door and window sill pans, relief angles, and at grade within masonry veneer walls.

END OF SECTION

SECTION 05120 - STRUCTURAL STEEL

1. See Structural Construction Documents provided by Structural Engineer. Construction Documents prepared by the Structural Engineer supersede requirements provided herein in the event that there are conflicting details or specifications.

2. Apply one (1) shop coat of paint after cleaning off all rust, scale and foreign matter. Surfaces shall be dry and clean at time of paint application. Do not paint steel that will receive spray applied fireproofing.

3. Shop drawings shall be submitted in accordance with Section 01330 - Submittals and in accordance with "Code of Standard Practice" by the AISC:

    A. Indicate all shop erection details including cuts, copes, connections, holes, bolts, welds and preparation required such as bevels, testing and backup bars.

    B. Indicate all welds, both shop and field, by AWS "Welding Symbols", A2.0, latest edition.

    C. Provide minimum 1/8" scale erection plans and piece drawings.

    D. Contractor shall check shop drawings prior to submittal to Architect. Shop drawings received by Architect unchecked by Contractor will be rejected. Fabrication shall not begin until both erection and piece shop drawings have been approved by Architect.

4. Prior to erection, Contractor to check alignment, elevations and locations of all anchor bolts. Report to Architect all gross errors and proposed correcting methods prior to proceeding with corrections and base plate setting.

5. Immediately after erection, spot paint field connections and abraded places with the same paint used for shop coat. Touch up galvanized material with cold galvanizing compound.

END OF SECTION

SECTION 06090 - WOOD AND PLASTIC FASTENINGS

1. See Structural Construction Documents provided by Structural Engineer. Construction Documents prepared by the Structural Engineer supersede requirements provided herein in the event that there are conflicting details or specifications.

2. Built up lumber (multiple members) must be fastened together to act as one unit to resist applied load

3. Verify that the dimensions of the supporting member are sufficient to receive the specified fasteners.

4. Unless otherwise noted in the manufacturer's written installation specifications, bolts, screws, and/or nails shall not be combined.

5. Contractor is to verify that material or finish of fasteners, and any additional materials required to prepare fasteners for intended use, is compatible and non-corrosive with materials to receive fastener.

6. A fastener that splits the wood will not carry the allowable load. Evaluate splits to determine if the connection will perform as required. Pre-bore holes if it is determined the wood is conducive to splitting, refer the manufacturer's recommendation for pre-bore diameter for both nails and screws.

7. Top flange hangers may cause unevenness. Plan accordingly with face mount hangers when possible, or rout beam or subfloor to accommodate. Any changes to connections specifically called for in the drawings require approval from Architect.

END OF SECTION

SECTION 06100 - ROUGH CARPENTRY

1. See Structural Construction Documents provided by Structural Engineer. Construction Documents prepared by the Structural Engineer supersede requirements provided herein in the event that there are conflicting details or specifications.

2. Contractor shall review Construction Documents and provide all labor and materials pertaining to carpentry work as required in said documents, while complying with all applicable Codes.

3. Over and above direct carpentry work, the work under this section includes the supervision of the construction work and coordination of all trades for the full duration of the Project. It is the responsibility of the Contractor to verify and coordinate framing to avoid conflicts with all future trades including, but not limited to, mechanical, electrical and plumbing.

4. Coordinate framing with interior elevation to ensure that adequate blocking is in place to receive all finish materials to include, but not limited to, wall finishes, standing and running trim, cabinetry, moldings, and bath accessories.

5. All wood members used for ceiling construction to be #2 SYP or #2 DF.

6. Wood Preservative Treated Lumber: All framing, whether or not indicated on the drawings, to come in contact with concrete or masonry, to be exposed to weather, in contact with earth or when used as support members for decks, porches or balconies shall be treated with preservative by the pressure process.

    A. Preservative treated lumber to comply with AWPA U1-08 and utilize waterborne preservatives acceptable to authorities having jurisdiction and containing no arsenic or chromium.

    B. All treated lumber to be painted or otherwise finished shall be kiln dried after preservative treatment to a moisture content of no greater than 15%.

    C. Members with loose knots, checks greater than 1 1/8" wide, warped, or which are otherwise obviously deformed shall be culled out.

    D. No woodwork or framing exposed in the interior of the building shall be preservative treated.

7. Studs and joists cut to install plumbing and/or wiring shall be reinforced by adding metal or wood structural reinforcing to strengthen member back to its original capacity and maintain structural integrity. Holes bored shall not be larger than 1/3 the depth and not closer than 2" to the top or bottom of the joist.

8. Where framing materials are to be exposed to view or to receive finish materials, fastener selection criteria shall include products that will not impede installation of finish material or be exposed to view.

9. Bolts for wood construction shall be ASTM A-307. Bolt holes in wood shall be a minimum of 1/32" to a maximum of 1/16" larger than the bold diameter. A metal plate, metal strap, or washer not less than a standard cut washer shall be between the wood and the bolt head and between the wood and the nut. The threaded portion of bolts subject to wood bearing shall be kept to a practical minimum.

10. Install and secure rough carpentry work to comply with recommendations of the American Wood Council (AWC) and the American Forest and Paper Association (AF&PA) unless otherwise indicated. For sheathing, underlayment and other products not covered in above standards, comply with recommendations of manufacturer of product involved for use intended. Set carpentry work to required levels and lines, with members plumb and true and cut to fit.

END OF SECTION

SECTION 06160 - SHEATHING

1. See Structural Construction Documents provided by Structural Engineer. Construction Documents prepared by the Structural Engineer supersede requirements provided herein in the event that there are conflicting details or specifications.

2. Exterior wall sheathing shall be continuous through floor systems with joints centered on rim-boards or not within 24" of top or floor plate to resist wind loads (sheathing joints shall not align with joints within framing, such as between studs and plates or wall plates and floor plates). Horizontal sheathing joints between framing shall be blocked and edge nailed.

END OF SECTION

SECTION 06201 - EXTERIOR FINISH CARPENTRY

1. Comply with applicable requirements of "Architectural Woodwork Quality Standards" by AWI.

2. Comply with all delivery, acclimation, storage and installation instructions for exterior siding and trim materials as recommended by WRCLA for sizes and use indicated.

3. All exterior finish carpentry shall be primed on all 6 sides (including cuts) with priming material as recommended by the appropriate industry standards for the selected trim material and finish.

4. Standing and running trim and cornerboards to be Western Red Cedar 'A Clear' or better, manufactured to sizes, pattern and thicknesses indicated on drawings using solid pieces of lumber with no finger jointing.

    A. All trim to be seasoned to a moisture content between 10-15%.

    B. All trim surfaces are to be worked to a smooth finish, and all edges are to be square. No rounded edges.

    C. Verify that all trim protrudes beyond adjacent siding.

    D. Unless specifically directed otherwise in the drawings, install trim with all fasteners and flashing in accordance with industry standards and recommendations of WRCLA.

5. An acceptable synthetic alternate for all exterior trim indicated as wood to be TruExterior synthetic material as manufactured by BORAL Building Products.

    A. Synthetic trim materials must be delivered, prepared and stored in accordance with manufacturer's written recommendations.

    B. Synthetic trim materials must be worked to size and profiles as indicated in the drawings.

    C. Synthetic materials must be installed on solid substrate. Where blocking is required, all blocking must be solid.

    D. Azek is an approved synthetic alternate for custom profiles and columns. Contractor is to submit a substitution request for Architect to review, specifying proposed locations where it is to be used, per Section 06130 – Product Substitution Procedures.

6. Vertical board and batten to be Western Red Cedar 'No. 2 and Better Clear', manufactured to sizes, pattern and thicknesses indicated on drawings using solid pieces of lumber with no finger jointing.

    A. Unless otherwise noted on drawings, nominal size to be 1x12 boards with 1x2 battens.

    B. Work all exposed surfaces smooth and all edges square. No rounded edges.

    C. Board and batten walls are to be laid out symmetrically and adjusted accordingly so as to avoid battens partially interrupted by door and window trim.

    D. Install board and batten siding with all fasteners and flashing in accordance with industry standards and recommendations of WRCLA.

    E. Vertical board and batten shall be installed over Slicker Classic 6mm Rainscreen as manufactured by Benjamin Opdyke. Follow all manufacturer written instruction for delivery, storage, installation, and protection of rainscreen.

7. Wood porch decking shall be preservative treated nominal 5/4 x 4 T&G Clear Select Sapele.

    A. Follow all specifications for preservative treated lumber in Section 06100 - Rough Carpentry.

    B. Secure with concealed fasteners of size, type and length per industry standards for decking material. Care must be taken so as not to damage waterproofing that may be detailed within porch system. Do not use split boards.

    C. Protect installed decking from any subsequent environmental or construction damage.

    D. Porch Finish:

        i. Finish specifically designed for the intended use is to be selected by the Owner per Section 01335 – Owner Selections based upon samples at the site.

        ii. Prior to the application of porch finish, any damaged decking or sub-surface conditions are to be repaired or replaced.

        iii. Follow all instructions from the selected finish manufacturer regarding, but not limited to, surface preparation, delivery and application.

E. Following the application of porch finish, protect porch and finish from subsequent damage for the duration of the Project.

8. Porch ceilings to be T&G Clear Select Pine manufactured to sizes, pattern and thicknesses indicated on drawings.

    A. All exposed porch ceiling material surfaces are to be worked to a smooth finish, and all edges are to be square. No rounded edges.

    B. Unless specifically noted otherwise on the drawings, porch ceilings to run parallel to wall of house with mitered condition at wrapping porches.

9. An acceptable synthetic alternate for porch ceilings indicated as wood to be TruExterior synthetic material as manufactured by BORAL Building Products.

    A. Synthetic trim materials must be delivered, prepared and stored in accordance with manufacturer's written recommendations.

    B. Synthetic trim materials must be worked to size and profiles as indicated in the drawings.

    C. Synthetic materials must be installed on solid substrate. Where blocking is required, all blocking must be solid.

    D. All exposed porch ceiling material surfaces are to be worked to a smooth finish, and all edges are to be square. No rounded edges.

    E. Unless specifically noted otherwise on the drawings, porch ceilings to run parallel to wall of house with mitered condition at wrapping porches.

10. Install finish carpentry work plumb, level, true and straight with no distortions. Shim as required using concealed shims. Scribe cut and finish carpentry items to fit adjoining work. Anchor finish carpentry work securely to supports and substrates, using concealed fasteners and blind nailing where possible. Use fine finishing nails for exposed nailing except as indicated, countersunk and filled flush with finished surface.

11. Install standing and running trim and porch ceilings with minimum number of joints possible, using full-length pieces for maximum length of lumber available. Prime all sides and any cuts exposing raw material prior to installation. Cope at returns and lock-miter at corners to produce tight fitting and secure joints. Use scarf joints for end-to-end joints or as recommended by the manufacturer if synthetic.

END OF SECTION

SECTION 06202 - INTERIOR FINISH CARPENTRY

1. Contractor is to assume a complete millwork package as implied by the specifications and drawings to include, but not limited to, interior wood trim for door and window casings, baseboards, molding strips, crowns, chair rails, wall paneling systems, shelving, interior wood walls and ceilings, interior stair railings, newels, balusters and risers.

2. Comply with quality standards specified herein and as outlined in "Architectural Woodwork Quality Standards" by AWI to achieve 'Custom Grade' material quality and installation.

3. Board paneling material to be coordinated with intended finish as indicated below:

    A. Board paneling to receive an opaque paint finish shall be Surfaced 'Select And Better' Poplar of size, spacing, orientation, and profile as indicated in the drawings.

    B. Board paneling to receive a clear or semi-transparent finish shall be Surfaced 'Select And Better' Cypress of size, spacing, orientation, and profile as indicated in the drawings.

4. Board paneling to be butt boards unless specifically noted otherwise in the drawings.

5. Board Paneling is to be installed over plywood backing or gypsum board unless specifically noted otherwise in the drawings.

6. Interior Standing and Running Trim material to be coordinated with intended finish as indicated below:

    A. Interior standing and running trim to receive an opaque paint finish shall be Surfaced 'Select And Better' Poplar of size and spacing as indicated in the drawing.

    B. Interior standing and running trim to receive a clear or semi-transparent finish shall be Surfaced 'Select And Better' Cypress of size and spacing as indicated in the drawings.

8. Do not proceed with installation of any interior finish carpentry until successfully conditioning the enclosed environment and materials as follows:

    A. Structure must be sealed from weather and conditioned for a minimum of one week (7 days) to achieve a stable temperature and humidity of spaces to levels planned for occupancy.

B. All interior finish carpentry must be stored, spaced for complete ventilation, within the acclimated space for a minimum of one week (7 days) prior to installation to achieve stable temperature and moisture content within conditioned environment. Verify, by probe, that material has achieved a stable moisture content before proceeding with any installation.

9. Coordinate work with applicable mechanical and electrical trades at rough-in. Verify adequacy of backing and support framing. Verify that mechanical, electrical, plumbing and building items affecting work of this section are placed and ready to receive this work.

10. Set and secure materials and components in place, plumb and level with concealed fasteners unless specifically noted otherwise in the drawings.

11. Scribe work abutting other components with minimum gaps. Maximum gap tolerance is 1/32" Do not use additional overlay trim to conceal larger gaps.

12. Wood Flooring: See Section 09640 - Wood Flooring

13. On-Site Finish: See Section 09910 - Painting And Staining

END OF SECTION

SECTION 06401 - EXTERIOR ARCHITECTURAL WOODWORK

Exterior Shutters:

1. Exterior shutters shall be fabricated from kiln-dried 'No. 2 and Better Clear' Western Red Cedar to sizes and styles specified herein and indicated in the drawings.

2. All wood members shall be Surfaced Four Sides (S4S), free of planer skips, saw marks or surface splinters. All hand contact edges shall be rounded, chamfered, or edge-shaped smooth to the touch. Shutter faces shall be sanded smooth and flush.

3. Shutters and shutter hardware shall be designed for actual operation, suitable for use in both open and closed positions. Shutters shall be constructed in a manner to allow final field trim to proper size for such purpose.

4. Acceptable alternate shutters are solid synthetic shutters as manufactured by New Horizon Shutters, 7259 Spa Road, N. Charleston, SC 29418, (843) 797-7762. Additional alternates may be acceptable, but must be presented for approval per Section 01630 - Product Substitution Procedures.

5. Shutters shall be louvered style as indicated in the drawings.

    A. Stiles and Rails shall be constructed of full 1 1/2" thick material.

    B. Stiles shall be full 4" in width. Head rail and intermediate (lock) rails shall be full 4" in width. Foot rail shall be full 5 1/2" in width. Top edge of intermediate (lock) rails on shutters shall align with bottom edge of lock rails on window.

    C. Stiles and rails to be constructed with blind mortise and tenon joints, utilizing 'wet use' adhesives and dowels. All surfaces, including dowels, to be finished flush and smooth.

    D. Louvers shall be fixed and constructed of full 1/2" thick material with rounded leading and trailing edges. Louvers are to be mortised into stiles at 60 degree angle with leading and trailing edge of louvers no closer than 1/8" from faces of stiles. Louvers are to be evenly spaced so as to block horizontal visual access, and to avoid partial louvers between rails.

6. Shutters shall be installed with hardware as manufactured by Coastal Bronze, https://www.coastalhardware.com, or approved equal. Shutter hardware to be sized to allow for complete operation of shutter in both open and closed position. See window details for more information.

    A. Shutter hinge: Active Band Hinges-Arch (sized per shutter) with Pintle-Heavy

B. Shutter bolts: 5” Surface Slide Bolt

C. Shutter dogs: Rat Tail Shutter Dog

D. Finger Pull: Shutter Ring, 2” diameter

7. All additional hardware such as hinges for double folding shutters and holdbacks shall match other hardware in terms of style, material and finish.

8. Provide 16 ounce copper flashing at top edge of each shutter panel, whether wood or synthetic.

END OF SECTION

SECTION 06402 - CABINETRY AND COUNTERTOPS

Cabinetry:

1. This section covers cabinetry custom manufactured to a design for a particular function or project. Cabinetry includes, but is not limited to, all kitchen, laundry and bath cabinetry, built-in cabinetry and/or bookcases as shown in the drawings.

2. All work within this section, including material and hardware selection, fabrication, and installation, shall be performed in accordance with Architectural Woodwork Institute (AWI) Quality Standards, latest edition, to achieve 'Custom Grade' quality.

3. All cabinetry shall be Flush Inset with Face Frame of size, configuration and panel style per drawings, unless noted otherwise in the drawings.

4. Cabinet material to be coordinated with intended finish as indicated below:

    A. All exposed or semi-exposed cabinet members to receive an opaque paint finish shall be Surfaced 'Select and Better' Poplar. Cabinet boxes shall be 3/4" birch plywood.

    B. All exposed or semi-exposed cabinet members to receive a clear or semi-transparent finish shall be of a wood species selected by the Owner. Cabinet boxes shall be 3/4" wood species to be selected by Owner.

5. Additional cabinetry not specified herein or indicated in the drawings shall be of similar design and style as adjacent cabinetry within the same space.

6. Provide all concealed cabinet hardware and accessory materials required for complete operation of cabinetry. Comply with ANSI/BHMA A156.9 "American National Standard for Cabinet Hardware."

7. Where loading capacities permit, drawers and pull-out shelves in base cabinets shall have under mount anti-slam metal rolling glides with tracks.

8. Provide all exposed cabinet hardware as selected by Owner per Section 01340 - Owner Selections.

9. Contractor to submit all cabinet shop drawings per Section 01330 - Shop Drawings, Product Data And Sample Submittals to the Architect for approval prior to any cabinet construction.

10. Contractor shall verify all appliance and plumbing fixture selections with Owner and provide full cut sheets to cabinet manufacturer prior to preparation of shop drawings.

11. Contractor and cabinet manufacturer shall verify all necessary field dimensions prior to preparation of shop drawings.

12. Prior to cabinetry installation, condition woodwork to average prevailing humidity conditions in installation areas.

13. Install cabinetry level, plumb, true and straight. Shim as required with concealed shims. Install without distortion so doors and drawers fit openings properly and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide smooth and unencumbered operation

14. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting. Scribe and cut woodwork to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.

15. Anchor cabinet units securely in place with concealed (when doors and drawers are closed) fasteners, anchored into structural support members of wall construction. Comply with manufacturer's instructions and recommendations for support of units

Stone Countertops:

16. Install stone countertops of material, finish and edge treatment as selected by Owner per Section 01335 - Owner Selections at all locations unless specifically noted otherwise in the drawings.

17. All stone countertops to be 1 1/4" thick, unless specifically noted otherwise in the drawings. Confirm selection with Owner and Interior Designer.

18. Obtain each variety of stone from a single quarry with resources to provide materials of consistent quality in appearance and physical properties.

19. Verify dimensions of all construction to receive stone countertops by field measurement prior to fabrication.

20. Verify selections of all fixtures, appliances and other accessories interfacing with stone countertops for special requirements prior to fabrication.

21. Stone countertops to comply with the following requirements:

    A. Granite: ASTM C615

    B. Marble: ASTM C503

    C. Serpentine: ASTM C1526

    D. Slate: ASTM C629 II Interior, with a fine, even grain from clear, sound stock.

22. Fabricate stone countertops with no joint whenever possible, when not possible provide for maximum 1/16" joints at locations of minimal visual and functional impact. Any joints are to be filled flush with appropriate sealant for intended use of color and texture to match final countertop finish.

23. Attach stone countertops securely to base units with water-cleanable epoxy adhesive as recommended by countertop manufacturer.

24. Complete cutouts not furnished in shop. Mask areas of countertops adjacent to cutouts to prevent damage while cutting. Use power saws with diamond blades to cut stone. Make cutouts to accurately fit items to be installed, and at right angles to finished surfaces.

25. Clean countertops as work progresses. Remove adhesive, grout, mortar, and sealant smears immediately.

26. Provide colorless, stain-resistant sealer that does not affect color or physical properties of stone surfaces, as recommended by stone producer for application intended.

27. Clean countertops not less than six days after completion of sealant installation using clean water and soft rags. Do not use wire brushes, acid-type cleaning agents, cleaning compounds with caustic or harsh fillers, or other materials or methods that could damage stone.

28. Provide protection for stone countertops from damage during the duration of construction.

END OF SECTION

SECTION 07115 – FOUNDATION BITUMINOUS DAMP PROOFING

1. Cold-applied, cut-back asphalt damp proofing is to be provided at the exterior face of all below grade uninhabited spaces in contact with earthwork or other backfill. Damp proofing is to be provided with protection/drainage course as recommended by manufacturer to achieve the best possible performance.

    A. Trowel Coats: ASTM D4586, Type I, Class 1, fibered.

    B. Brush and Spray Coats: ASTM D4479, Type I, fibered.

2. Clean substrates of projections and substances detrimental to work; fill voids, seal joints, and apply bond breakers if any, as recommended by prime material manufacturer.

3. Comply with manufacturer's written preparation and installation instructions unless more stringent requirements are indicated or required by Project conditions to ensure satisfactory performance of damp proofing.

    A. On Concrete Foundations: Apply 2 brush or spray coats at not less than 1.25 gal./100 sq. ft. for first coat and 1 gal./100 sq. ft. for second coat, or 1 trowel coat at not less than 4 gal./100 sq. ft..

    B. On Unparged Masonry Foundation Wall: Apply primer and 1 trowel coat at not less than 4 gal./100 sq. ft..

    C. On Unexposed Face of Concrete Retaining Walls: Apply 1 brush or spray coat at not less than 1.25 gal./sq. ft..

    D. On Unexposed Face of Masonry Retaining Walls: Apply primer and 1 brush or spray coat at not less than 1.25 gal./100 sq. ft..

4. Apply damp proofing from finished grade line to top of footing, extend over top of footing, and down a minimum of 6" over outside face of footing.

5. Extend 12" onto intersecting walls and footing, but do not extend onto surfaces exposed to view when Project is completed.

6. Install flashing and corner protection stripping at internal and external corners, changes in plane, construction joints, cracks and as required to protect integrity of damp proofing by embedding an 8-inch wide strip of asphalt-coated glass fabric in a heavy coat of damp proofing.

7. Whether or not indicated on the drawings, install protection course as recommended by the damp proofing manufacturer over completed and cured damp proofing. Comply

with damp proofing material manufacturer's written recommendations for attaching protection course.

END OF SECTION

SECTION 07210 - INSULATION

1. As part of a complete system to meet the Building Thermal Envelope requirements of Chapters 3 and 4 - Climate Zone 2A, of the 2020 Florida Building Code - Residential, Contractor shall provide the following insulation.

    A. Vapor permeable (open cell) polyisocyanurate spray-type insulation in all exterior walls and attics.
    B. Vapor impermeable (closed cell) polyisocyanurate spray-type insulation in areas as required to achieve r-values per code (depth less than 10.25”).

2. Contractor shall provide Thermal Barrier and/or Ignition Barrier to polyisocyanurate spray-type insulation per SECTION R316 FOAM PLASTIC of the 2020 Florida Building Code Residential.

3. Contractor shall provide all energy efficiency forms and calculations as required by local and state government agencies having jurisdiction over the Project to acquire building permits.

4. Whether or not required to meet applicable energy codes, contractor shall install insulation to meet the following minimum requirements:

    A. Exterior Walls: per Code.
    B. Crawl Space Walls (below grade): required per Code without insulation at exposed floor system.
    C. Exposed Floor System (above crawl space or basement): not required per Code with insulation at Crawl Space Walls.
    D. Cathedral Ceilings: per Code.

5. Contractor to install fiberglass batt insulation specifically indicated for sound attenuation in interior walls/ceilings at the following locations:

    A. Floor/ceiling structures between habitable spaces.

    B. Wall structure around any bedroom, bath or powder room.

    C. Wall structure around any laundry or utility room.

6. Do not install insulation over wet or damp substrates. Do not install insulation when temperature is outside acceptable ranges as recommended by manufacturer.

7. Follow all manufacturer's written recommendations for preparation, delivery, storage, installation, cleanup and protection of insulation.

END OF SECTION

SECTION 07250 - WEATHER BARRIERS

1. Install DuPont Tyvek weather barriers appropriate for finish material on exterior face of all vertical substrate in strict accordance with the manufacturer's installation instructions. Installation shall also include all accessories including, but not limited to, fasteners, tapes and caulk as recommended by the weather barrier manufacturer to facilitate the complete and coordinated weather protection of all edge conditions and penetrations. In the event of discrepancies between the manufacturer's installation instructions and those specified herein, the most strict shall apply.

2. Appropriate DuPont Tyvek Weather Barrier for finish materials include:

    A. Wood Board And Batten: DuPont Tyvek HomeWrap.

    B. Masonry Or Stone: DuPont Tyvek HomeWrap. Refer to Section 04080 - Masonry Anchorage And Reinforcement for coordination with brick or stone veneer anchors.

3. Provide all weather barriers produced by a single manufacturer.

4. Follow all manufacturer's written recommendations and suggestions for delivery, storage, installation, repair and protection of weather barrier and all accessories including mechanical fasteners, tapes and sealants.

5. It is the strong recommendation and the preferred application by the manufacturer that the weather barrier be installed after the walls and roof have been sheathed and the step flashings and kickout flashings have been installed, but BEFORE the windows and doors have been set. If the weather barrier installation must vary from this recommended installation order, refer to alternate installation instructions as provided by weather barrier manufacturer.

6. Exposure to UV shall not exceed 120 days.If a longer exposure is anticipated, the Tyvek CommercialWrap is an acceptable alternative to provide a 270 day window of exposure.

7. Start weather barrier installation at a building corner leaving 6-12" extended beyond corner to overlap.

8. Install weather barrier in a horizontal manner starting at the lower portion of the wall surface. Maintain weather barrier plumb and level. Weather barrier is to be installed and secured tight and smooth to the substrate with no wrinkles or creases.

9. Extend bottom roll edge over sill plate interface 2" to 3" minimum. Seal bottom edge of weather barrier with sealant or tape recommended by weather barrier manufacturer. Shingle weather barrier over back edge of thru-wall flashings and seal weather barrier with sealant or tape. Ensure weeps are not blocked.

10. Subsequent layers shall overlap lower layers a minimum of 6" horizontally in a shingled manner.

11. Extend weather barrier completely over doors and windows openings.

12. After weather barrier is installed refer to the weather barrier manufacturers Flashing Systems Installation Guidelines and the door and window manufacturers installation instructions to prepare and flash doors and windows. In the event of discrepancies between installation instructions, the most strict shall apply.

13. Attach weather barrier to studs through exterior sheathing. Secure weather barrier using manufacturer recommended fasteners, spaced 12-18 inches vertically and horizontally. Do not fasten within 9" of rough opening headers. Recommended fasteners include:

    A. DuPont Tyvek Wrap Cap nails

    B. DuPont Tyvek Wrap Cap screws

    C. DuPont Tyvek Wrap Cap Staples for Stinger

    D. 1.0 inch minimum crown staples (except when installing DuPont Tyvek over foam sheathing)

14. Tape or seal all vertical and horizontal seams and all terminations including, but not limited to, roof-wall interfaces and sill plates with methods and products specified in the manufacturers installation instructions

15. Repair all tears and/or cuts in the installed weather barrier as specified in the manufacturers installation instructions. All damages to the installed weather barrier or accessories resulting from subsequent construction are to be repaired according to the manufacturers installation instructions.

END OF SECTION

SECTION 07318 - WOOD SHINGLE ROOFING

1. Wood Shingles: Certilast Number 1 (100% edge grain), Blue Label, Western Red Cedar shingles, 24" length.

2. Fasteners: Do not use electrogalvanized fasteners. Each shingle shall be installed with (2) ring shank nails for better withdrawal resistance. Fasteners shall be long enough to penetrate into solid wood sheathing a minimum of ¾".

3. Flashing: Provide all flashings including, but not limited to, eave, valley, ridge, cap and penetration flashings per Section 07620 - Sheet Metal Flashing And Trim, and in accordance with details and recommendations of the Wood Shingle and Wood Shake section of "The NRCA Roofing and Waterproofing Manual" and the Cedar Shake & Shingle Bureau. Where conflicting requirements may be encountered, the most strict is to be utilized.

4. Roof Sheathing Protection/Underlayment: Provide a roof protection/underlayment membrane on all sheathing to be covered with finish roofing material prior to (under) the installation of Wood Shingle Ventilation system specified within this section.

    A. Perimeter Protection: Grace Ultra (high temperature) self-adhering, self-sealing waterproofing as manufactured by Grace Construction Products prior to (under) felt underlayment at the locations specified below:

        i. All roof slopes of 4:12 or less

        ii. 24" minimum inside exterior wall line at all roof perimeters

        iii. At all valleys and ridges to extend 18" minimum along each face

        iv. At all changes in slope to extend 18" minimum at each slope

        v. Do not apply over entire roof sheathing.

    B. Roofing Underlayment: Felt underlayment to be ASTM D226, No. 30 type II, asphalt saturated organic felt, non- perforated. Apply each layer of underlayment horizontally starting at the bottom, lapping succeeding courses not less than 2". Cut underlayment short at roof edges if visible from below.

5. Wood Shingle Ventilation: Shingles are to be installed in accordance with the "Continuous Ventilation Product" method as shown in the drawings and as detailed in the "CS&SB New Roof Construction Manual".

    A. Continuous ventilation product shall be Cedar Breather Ventilated Underlayment as manufactured by Benjamin Obdyke. Follow all manufacturer written instructions for delivery, storage, installation and protection.

6. Install shingles, beginning at lower end with a double layer starter course, projecting shingles 1 ½” beyond sheathing. Space adjoining shingles 1/4” to 1/2" apart, nailing each shake with two nails spaced 3/4" from edge of shake and 1-1/2" above butt line of subsequent course. Stagger edge joints a minimum of 1- 1/2" in succeeding courses.

7. Install shingles to provide weather exposure as indicated, or 7” exposure if not noted otherwise. Cut and fit shingles at ridges and edges to provide maximum weather protection.

8. Hip and Ridge Configuration: All shake/shingle hips and ridges shall be of alternate overlap type applied at the same exposure as field of roof and with nails long enough to penetrate into sheathing at least ¾”. Install a strip of felt, eave protection material or metal over hip or ridge under the ridge or hip cap. If longer or shorter ridge cap is used, adjust exposure accordingly. Provide ridge vents.

9. Valley Configuration: All valleys shall utilize the “open” configuration. Shingles shall not be applied with their grain parallel to the valley centerline and those extending into the valley should be cut at the correct angle.

10. Preferred shingle roofing indicated as wood to be synthetic shake roofing tiles as manufactured by Brava Roofing.

    A. Shake roofing tiles and accessories must be delivered, prepared and stored in accordance with manufacturer's written recommendations.

    B. Shake Field Tile of varying widths, with a 10” exposure and 3/8” space between tiles.

    C. Synthetic materials must be installed on solid substrate. Where blocking is required, all blocking must be solid.

    D. Install fasteners, flashing, ventilation, roofing protection and underlayments per manufacturer recommendations.

    E. Follow manufacturer’s installation instructions for low slope roofs, defined as less than 4:12. Do not use on roofs < 3:12 slope.

    F. All valleys shall utilize the “closed” configuration.

END OF SECTION

SECTION 07610 - SHEET METAL ROOF

1. Provide and install complete metal roof system in accordance with all Codes and manufacturer's instructions. Include all panels, trims, flashing, sealants, fasteners and any other items as required by the manufacturer to ensure a complete and watertight installation.

2. Proceed with installation only when all roof penetration locations have been finalized, and existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

3. Sheet metal roof to be Maxima 2 with 180° fold 2" standing seam as manufactured by McElroy Metals.

    A. Panel Width: 16"

    B. Panel Profile: Flat Pan with no shoulders or striations

    C. Panel Material: 24 gauge steel

    D. Panel Finish: Kynar 500

    E. Color to be approved by Architect and Owner per Section 01335 – Owner Selections based upon sample panel at site.

4. Roofing material shall be continuous from the ridge to the eave without intermediate seams.

5. Roof Sheathing Protection/Underlayment: Provide a roof protection/underlayment membrane on all sheathing to be covered with finish roofing material.

    A. Grace Ultra (high temperature) self-adhering, self-sealing waterproofing as manufactured by Grace Construction Products prior to (under) felt underlayment at the locations specified below:

        i. All roof slopes of 3:12 or less

        ii. 24" minimum inside exterior wall line at all roof perimeters

        iii. At all valleys and ridges to extend 18" minimum along each face

        iv. At all changes in slope to extend 18" minimum at each slope

6. Felt underlayment to be ASTM D226, No. 30 type, asphalt saturated organic felt, non-perforated. Apply each layer of underlayment horizontally starting at the bottom, lapping succeeding courses not less than 2". Cut underlayment short at roof edges if

visible from below. **Review all flashing accessory profiles with architect prior to installing per Section 07620 – Sheet Metal Flashing and Trim.**

7. Follow all manufacturer's written requirements and recommendations for delivery, storage, preparation of substrates, installation, cleanup and protection of sheet metal roofing and underlayment. Where recommended fasteners may penetrate substrates and be visible from below, Contractor is to modify fasteners to conceal from view.

8. Comply with all written recommendations and requirements by roofing system manufacturer for storage, substrate selection and preparation, installation, cleanup and protection of roofing system.

9. Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions.

END OF SECTION

SECTION 07620 - SHEET METAL FLASHING AND TRIM

1. Contractor is to provide and install all sheet metal flashing and accessory materials including, but not limited to, fasteners, reglets, solder, welding rods, protective coatings, separators and sealants, as required to ensure a complete, watertight and non-corrosive installation.

2. Water infiltration barriers, including sheet metal flashing, are to be installed only by personnel sufficiently trained to install complete and watertight flashing systems in accordance with the drawings and specifications of this Project, manufacturer's written installation instructions and best industry practices. In the event of discrepancies between any of these instructions, the most strict shall apply.

3. Custom fabricated sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of the item indicated.

    A. Review all flashing accessory profiles with architect prior to installing, including drip edges and ridges.

4. Contractor is to coordinate the installation of all sheet metal flashing and trim systems with adjoining construction per best industry practices to ensure a complete, watertight and non-corrosive installation between adjoining construction.

5. Provide ASTM B370-09 copper flashing, minimum 16 ounce, Temper H00 and H01, from cold-rolled sheet material.

    A. Fasteners to be copper, hardware bronze or Series 316 stainless steel fasteners not less than 7/8" long, barbed with large heads.

    B. Sealing tape to be pressure-sensitive, 100 percent solids, polyisobutylene compound sealing tape with release paper backing. Provide permanently elastic, non-sag, nontoxic, non-staining tape.

    C. Elastomeric sealant to be ASTM C920, elastomeric polyurethane polymer sealant of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.

    D. Butyl sealant to be ASTM C1311, single-component, solvent-release butyl rubber sealant, polyisobutylene plasticized, heavy bodied for hook-type expansion joints with limited movement.

    E. Epoxy seam sealer to be two-part, non-corrosive, aluminum seam-cementing compound.

F. Bituminous coating to be cold-applied asphalt mastic, SSPC-Paint 12, compound for 15 mil dry film thickness per coat.

6. Flashing to be job-formed to sizes and configurations as shown on drawings and as directed by industry standards.

7. Fabricate or provide manufactured half-round hanging gutters to cross section and locations as indicated in the drawings. Provide gutters complete with end pieces, outlet tubes, and other accessories as required . Fabricate in minimum 96-inch long sections. Furnish flat-stock gutter spacers and gutter brackets from the same metal as gutters, of size recommended by SMACNA but not less than twice the gutter thickness. Fabricate or provide factory expansion joints, expansion joint covers, gutter bead reinforcing bars and gutter accessories from same metal as gutters.

   A. Material to be minimum 16ounce/sq. ft. copper.

   B. Provide continuous removable leaf screen with sheet metal frame and hardware cloth screen.

   C. Fabricate or provide manufactured round downspouts or rain chains of the same material as gutters, complete with mitered elbows or as shown on drawings. Furnish with metal hangers, from same material as downspouts, and anchors.

8. Fabricate sheet metal without excessive oil canning, buckling and tool marks and true to line and levels indicated, with exposed edges folded back to form hems.

9. Provide for thermal expansion of running sheet metal work by overlaps of expansion joints in fabricated work. Where required for water tight construction, provide hooked flanges filled with polyisobutylene mastic for 1-inch embedment of flanges. Space joints at intervals of not more than 24 feet. Conceal expansion provisions where possible.

10. Form non-expansion but movable joints in metal to accommodate elastomeric sealant to comply with SMACNA recommendations.

11. Flat-lock seam solder with type solder and flux recommended by manufacturer. Clean surfaces to be soldered, removing oils and foreign matter. Pre tin edges of sheets to be soldered to a width of 1 1/2" except where pre tinned surface would show in finished work.

12. Coat backside of fabricated sheet metal with bituminous coating where required to separate metals from corrosives substrates, including cementitious materials, wood or other absorbent materials; or provide other permanent separation.

13. Anchor work in place with non-corrosive fasteners, adhesives, setting compounds, tapes and other materials and devices as recommended by manufacturer of each

material or system. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, non- corrosive metal, and in thickness not less than that of metal being secured.

END OF SECTION

SECTION 07650 – SELF ADHERED FLEXIBLE FLASHING

1. Contractor is to provide and install all self-adhered flexible flashing and accessory materials in coordination with, but not limited to, weather barriers, fasteners and weatherization tapes as required to ensure a complete, watertight and non-corrosive installation.

2. Weather infiltration barriers, including self-adhered flexible flashings, are to be installed only by personnel sufficiently trained to install complete and watertight flashing systems in accordance with the Construction Documents, manufacturer's written installation instructions and best industry practices.

3. Self-adhered flashings shall comply with AAMA 711 and ICC Acceptance Criteria 148.

4. The Contractor is responsible for ensuring the self-adhered flexible flashing is compatible with all adjoining construction materials and products including, but not limited to, sealants, sheathing, doors, windows, and rigid flashings.

5. Contractor to provide and install all BUTYL BASED self-adhered flexible flashing as shown in the drawings and specified herein, as manufactured by one of the following:

    A. Grace Vycor PRO - Minimum width for door/window installations shall be 9".

    B. Dupont StraightFlash - Minimum width for door/window installations shall be 9"

    C. Dupont FlexWrap NF - This item to be used only for door and window sub-sill (pan) flashing. Minimum width for 2x4 and 2x6 framing shall be 9". The use of this product does not negate the requirement for sloped installation with a back dam.

6. ASPHALT based self-adhered flashings are NOT PERMITTED.

7. Self-adhered flexible flashing shall be used for NON-ROOF applications only.

8. Self-adhered flexible flashing shall be installed over a dry surface free from dirt, oils, lubricants, and other debris as required by the manufacturer's installation instructions.

9. Self-adhered flashing must be continuously supported by the substrate and must not span or bridge joints, gaps, or voids in excess of 1/4".

10. All self-adhered flexible flashing installed horizontally shall include termination sealant or other mechanical fastening method as required by the flexible flashing manufacturer to secure the top edge of the flashing.

END OF SECTION

SECTION 07920 - JOINT SEALERS

1. Provide elastomeric joint sealants that establish and maintain watertight and airtight continuous interior and exterior seals without staining or deteriorating joint substrates.

2. Joint sealants, backings, and other related materials are to be compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.

3. Provide single-component, non-sag, chemically curing elastomeric sealant of base polymer as recommended by manufacturer for intended conditions of service and application complying with ASTM C920 requirements.

4. Provide color of exposed joint sealers to match adjacent surfaces.

5. Where elastomeric sealants are to come in repeated contact with food, provide products that comply with 21 CFR 177.2600.

6. Provide sealant backings of material and type that are non-staining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

7. Provide ASTM C 1330 cylindrical sealant backings, any type as approved by joint sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

8. Provide primer material as recommended by joint sealant manufacturer where required for adhesion of sealant to joint substrates. Verify through field tests that primer does not stain, surface alter or otherwise degrade substrate materials.

9. Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

10. Comply with joint sealant manufacturer's written installation instruction for products and applications indicated, unless more stringent requirements apply. Comply with recommendations in ASTM C1193 for use of joint sealants as applicable to materials, applications and conditions indicated.

11. Clean off excess sealant or sealant smears adjacent to joints as the work progresses by methods and with cleaning materials approved by manufacturer of joint sealants and of products in which joints occur.

12. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage as time of Substantial Completion. If damage or deterioration occurs, Contractor to cut out and remove damaged or deteriorated joint sealants and repair so installations with repaired areas are indistinguishable from original work.

END OF SECTION

SECTION 08212 - DOORS

1. All exterior doors, transoms and sidelights shall meet all structural and performance requirements as set forth in the 2020 Florida Building Code Residential or the requirements of authorities having jurisdiction, whichever is more strict.

2. All interior and exterior doors, transoms, and sidelights are to be installed only by personnel sufficiently trained to install complete door systems in accordance with the drawings and specifications of this Project and in conformance with the manufacturer's written installation instructions and best industry practices. In the event of discrepancies between any of these instructions, the most strict shall apply.

3. Contractor shall provide shop drawings for all doors, transoms and sidelites per Section 10330 - Shop Drawings, Product Data and Samples to Architect for review prior to ordering or fabrication.

4. Contractor is to provide and install all exterior and interior doors, transoms, and sidelites and accessory materials including, but not limited to, rigid & flexible flashings, fasteners, millwork, joint sealers, paints, and coatings as required by the manufacturer and best industry practices to ensure a complete, watertight and non-corrosive installation.

5. Quality standards for doors of stock design and construction to comply with WDMA I.S.6A, "Industry Standard for Wood Stile and Rail Doors."

6. Quality standards for doors of special design and construction to comply with “Architectural Woodwork Quality Standards" by AWI to achieve 'Custom Grade' material quality and installation.

7. Interior doors to be minimum 1 3/4" thick of size and panel configuration as indicated in the drawings. Door material to be coordinated with intended finish as indicated below:

    A. Door Panels to receive an opaque paint finish shall be Surfaced 'Select And Better' poplar.

    B. Door Panels to receive a clear or semi-transparent finish shall be White Oak or as approved by Owner and Interior Designer.

8. Interior door jambs to be constructed of 5/4 material, minimum.

9. Interior transoms and sidelites to match adjacent doors in materials, profile and quality of construction unless specifically noted otherwise.

10. Contractor to coordinate with finish hardware as selected by Owner and machine interior doors as necessary for selected hardware.

A. All interior pocket doors are to be provided with groove on bottom edge of door to accept concealed guide angle secured to floor. No visible slide guides are allowed.

11. All interior doors and/or cased openings shall be provided with a threshold as indicated. If applicable condition is not referenced below, consult Architect for clarification.

    A. For doorways/cased openings between two spaces with the same material running in the same direction, continue the flooring through the opening.

    B. For doorways/cased openings between two spaces with the same material but running in different directions, provide a single piece of matching material that is the same width as the jamb/jamb extensions.

    C. For swing doorways between two spaces with different materials, use a single piece of material that matches the finish of the space on the opposite side of the swing direction (exposed side).

    D. For pocket doorways between two spaces with different materials, use two pieces of material that match the finish of the adjacent rooms and align the joint with the center of the pocket door.

    E. For doors/cased openings between two spaces with tile and carpet, see Section 09310 – TILE.

12. Exterior doors, transoms and sidelites are to be of size and configurations as shown in the drawings and specified herein. Exterior doors, transoms and sidelites shall be provided by the same manufacturer.

    A. Manufacturer: TBD. Builder to provide architect 2 custom door shop options for review and approval.

    B. Material: 2 ¼" thick Exterior Grade Mahogany

    C. Exterior Color: To be selected by Owner and Interior Designer

    D. Divided Lite Configuration: Simulated Divided Lite with Spacer (SDLS)

        a. Spacer Color: Dark Bronze (or similar)

    E. Muntin Bar Size and Profile: 7/8" Ovolo (interior) and 7/8" Putty (exterior)

    F. Glaze exterior doors, transoms and sidelites with insulated Low-E glass units, tempered as required by applicable Codes.

13. Exterior doors, transoms and sidelites shall be flashed in accordance with the door manufacturer's written installation instructions. Written installation instructions shall be provided by the door manufacturer for each door.

14. Hardware for exterior doors to be selected by Owner and Interior Designer from manufacturer's available options unless specifically noted otherwise in the Construction Documents. Contractor to coordinate with finish hardware as selected and machine specialty exterior doors as necessary.

15. Exterior doors, transoms and sidelites are to match adjacent doors in profile and quality of construction unless specifically detailed otherwise in the Construction Documents.

16. Exterior doors to receive opaque finish shall be primed by the manufacturer or immediately upon installation and potential exposure to weather.

17. Specialty exterior doors, transoms and sidelites shall be flashed in accordance with the door manufacturer's written installation instructions to provide a complete and watertight installation and structural performance in accordance with all applicable Codes. Written installation instructions shall be provided by the door manufacturer for each door.

18. Specialty exterior doors, transoms and sidelites are to match adjacent doors in profile and quality of construction unless specifically detailed otherwise in the Construction Documents.

19. Screened doors to be minimum 1 3/4" thick exterior mahogany of size and patterns as indicated in the drawings.

20. Screened doors to be full mortise and tenon construction, assembled with "wet use" adhesives.

21. Screen shall be High Transparency fiberglass mesh type, gray in color or as directed by Owner.

22. Contractor to coordinate with finish hardware as selected by Owner and Interior Designer and machine screen doors as necessary for selected hardware.

23. Contractor is to provide construction hinges and hardware as necessary with same configuration as the final selections for all interior and exterior doors, transoms, sidelights and screen doors. Proceed with installation of final hardware only after all painting operations are completed.

24. Contractor shall install all hardware items in accordance with manufacturer's written installation instructions.

25. All doors to have impact rated material and construction as an option.

26. Bulkhead door to basement shall be BILCO Classic Series Steel Sided doors. Sized per drawings. Basement door shall have flow-coated and baked- on factory prime finish and shall be furnished complete with hardware assembly bolts and anchors for securing to masonry. Installation shall be in accordance with manufacturer's instructions.

END OF SECTION

SECTION 08550 - WINDOWS

1. All windows, transoms and sidelights shall meet all structural and performance requirements as set forth in the 2020 Florida Building Code Residential or the requirements of authorities having jurisdiction, whichever is more strict.

2. All windows, transoms, and sidelights are to be installed only by personnel sufficiently trained to install complete systems in accordance with the drawings and specifications of this Project and in strict conformance with the manufacturer's written installation instructions, ASTM E2112, and best industry practices. In the event of discrepancies between any of these instructions, the most strict shall apply.

3. Contractor is to provide and install all windows, transoms, and sidelites and accessory materials including, but not limited to, rigid & flexible flashings, fasteners, millwork, joint sealers, paints, and coatings as required by the manufacturer and best industry practices to ensure a complete, watertight and non-corrosive installation.

4. Contractor shall provide shop drawings for all windows, transoms and sidelites per Section 10330 - Shop Drawings, Product Data and Samples to Architect for review prior to ordering or fabrication.

5. Windows, transoms and sidelites are to be of size and configurations as shown in the drawings and specified herein. Windows, transoms and sidelites shall be provided by the same manufacturer.

    A. Manufacturer: Marvin Windows and Doors

    B. Material: Clad (Next Gen)

    C. Exterior Color: TBD

    D. Divided Lite Configuration: Simulated Divided Lite with Spacer (SDLS)

        a. Spacer Color: Dark Bronze (or similar)

    E. Muntin Bar Size and Profile: 7/8" Ovolo (interior) and 7/8” Putty (exterior)

    F. Insect Screening: Factory-installed full screen Hi-Tran (high transparency) fiberglass mesh for windows selected by Owner and Interior Designer

6. Windows, transoms and sidelites to be provided with Low-E gas filled glass units. Glazing is to be tempered where required by Code.

7. Windows shall be manufactured with sealants that accept paint. Architect is to be notified if available sealants will not accept paint. If available sealants do not accept paint, then sealants shall be color matched to selected finish colors.

8. All wood windows to receive an opaque finish shall be primed by the manufacturer prior to delivery.

    A. Primer Color: To be coordinated with Owner approved finish color.

9. Hardware for windows to be selected by Owner from manufacturer's available options unless specifically noted otherwise in the Construction Documents.

10. Contractor is to provide construction hinges and hardware as necessary with same configuration as the final selections. Proceed with installation of final hardware only after all painting operations are completed.

11. Contractor shall install all hardware items in accordance with manufacturer's written instructions.

END OF SECTION

SECTION 09220 - PLASTER

1. Contractor shall provide all materials, labor and equipment necessary to complete the system of plaster as shown on drawings and/or described herein.

2. Contractor shall provide qualified workers, trained and experienced for not less than 3 years in installing 3-coat (scratch, brown and finish coats) plaster applications similar in scope and detail to that required on this Project.

3. Deliver all materials in original unopened packages, containers or bundles with manufacturer's labels intact and legible.

4. Store materials inside, under cover and in manner to keep them dry, protected from freezing and inclement weather, direct sunlight, surface contamination, aging, corrosion, and damage from construction traffic and other causes. Remove wet, frozen, or deteriorated materials from site.

5. Do not use frozen materials in plaster mixes. Do not apply plaster to frozen surfaces or surfaces containing frost. Do not apply plaster when ambient temperature is outside of temperature range recommended by manufacturer.

6. Contractor shall prepare 4'x4' sample panels at Project site demonstrating detail, finish and color for Owner, Architect, and Interior Designer approval prior to proceeding with installation. Maintain approved sample panel on Project site for duration of plaster installation for comparison purposes.

7. Contractor shall provide and install ANSI A108.11 5//8" gypsum board at all interior locations indicated to receive plaster finish.

    A. Follow manufacturer's written instructions and recommendations for bonding agents, material selections, and installation for intended use and substrates.

    B. Tape all joints using self adhesive mesh tape. Fill tapered joints with basecoat to level finish.

    C. Sink all nail or screw heads and cover with a small square of mesh tape.

8. Contractor shall install a 3/8" nominal thickness 3-coat venetian finish plaster as approved by Owner, Architect, and Interior Designer based on site samples in location and pattern as indicated on drawings and in accordance.

    A. First Layer: White plaster basecoat applied directly to gypsum board.

    B. Second Layer: Tinted plaster basecoat with a Level 5 finish.

C. Third Layer: Tinted plaster finish coat. Allowed manufacturers include: Chateau Dominque P1 fine grain lime plaster. Substitutions will be considered per the Product Substitutions Procedures Section.

D. All corners and leading edges to have corner beads and/or reinforcing to match profiles shown in the drawings and to protect against cracking.

9. Protect plaster coats from uneven and excessive evaporation during hot, dry weather. Maintain moist conditions by fogging mist, do not saturate. Moist cure scratch and brown coats frequently to maintain uniform moisture. If base coats are installed on Thursdays or Fridays, provisions must be made for adequate curing over the weekend.

10. Upon completion of plaster work, remove temporary protection and enclosure of other work. Promptly remove plaster from door frames, windows, and other surfaces which are not to be plastered. Repair floors, walls and other surfaces which may have been stained, marred or otherwise damaged during plaster work. Remove unused materials, containers and equipment and clean grounds of plaster debris.

11. Provide final protection and maintain conditions, in a manner suitable to Contractor that ensures that plaster work will be without damage or deterioration at time of Substantial Completion.

END OF SECTION

SECTION 09250 - GYPSUM BOARD

1. This section includes interior gypsum board and tile backing panels.

2. Contractor shall provide and install 1/2" thick gypsum board at walls and 5/8" thick gypsum board at ceilings or as indicated in drawings and in accordance with ASTM C1396/C1396M. Edges shall be tapered unless otherwise noted.

    A. Regular Gypsum Board shall be installed at all vertical surfaces and ceilings unless otherwise indicated.

    B. Moisture & Mold Resistant Gypsum Board shall be installed in wet or humid areas, such as bathrooms and other areas subject to high levels of periodic moisture and humidity.

    C. Type X Gypsum Board shall be installed where fire resistant assemblies are required by Code.

3. Contractor shall provide and install ANSI A108.11 1/2" cementitious backer units at all interior locations indicated to receive tile or stucco finish.

    A. At all wet areas such as showers, baths, pool areas or saunas, install cementitious backer units over ASTM D-226, No. 30 type, asphalt saturated non perforated organic felt.

    B. Follow manufacturer's written instructions and recommendations for material selections and installation for intended use and substrates.

4. Contractor shall provide and install standard non-ferrous trim accessories, including corner bead and edge trim of beaded type with face flanges for concealment in joint compound in accordance with ASTM C1047.

5. Contractor to provide and install factory-prepackaged joint treatment products and paper reinforcing tape complying with ASTM C475 and ASTM C840.

6. Contractor shall install gypsum board with glue and screws at 12" o.c. maximum or as recommended by the Gypsum Association, whichever is more strict. Standard level of finish as outlined below unless specifically approved otherwise by the Owner:

    A. Habitable spaces at all levels: Level 4 finish

    B. Non-accessible Attic or Plenum spaces: Level 1 finish

    C. Garage spaces: Level 4 finish

END OF SECTION

SECTION 09310 - TILE

1. Tile Allowance: Per Section 01210 - Allowances the costs of handling and installation are not covered by the allowance.

2. Contractor shall furnish tile, grout, trim units and other accessories as required for a complete tile installation to match approved samples per Section 01335 - Owner Selections.

3. Contractor shall provide tile or marble thresholds at all transitions between tile and carpet flooring to match approved sample per Section 01340 - Owner Selections.

4. Contractor shall comply with ANSI A108/A118/A/A136.1 tile and material selection standards for intended applications and substrate conditions in conjunction with "Handbook For Ceramic Tile Installation" as published by TCNA.

5. Contractor shall install cementitious tile backer board in accordance with Section 09250 - Gypsum Board.

6. Contractor to follow manufacturer's written instructions for setting materials for intended applications and substrate conditions.

7. Contractor shall not proceed with interior tile or brick work until building has been conditioned for a period of at least seven days, maintaining an ambient temperature and relative humidity planned for building occupants.

END OF SECTION

SECTION 09638 - STONE FLOORING

1. Stone Flooring Allowance: Per Section 01210 - Allowances the costs of handling and installation are not covered by the allowance.

2. Contractor to provide stone flooring, grout, trim units and all other accessories as required for a complete stone flooring installation to match approved samples per Section 01335 - Owner Selections.

3. Deliver materials, other than bulk materials, in original unopened packages, containers or bundles with manufacturer's labels intact and legible. Store and protect materials in accordance with manufacturer's or supplier's written instructions.

4. Interior stone flooring to be installed over a 1" minimum mortar setting bed over cleavage membrane of ASTM D226, No. 15 type, asphalt saturated non- perforated organic felt.

5. Exterior stone flooring to be selected by Landscape Architect and mock-up as approved by Owner. Install over a 1" minimum mortar setting bed over Enkadrain 3615R Drainage Mat as manufactured by BonarBuilt or approved equal.

    A. Mortar setting bed and joints to be type "S" mortar unless otherwise indicated on drawings. All mortar exposed to view shall be mixed with pigmented mortar mix to match Owner's approved sample.

6. Install stone flooring in patterns and joints to match the approved samples for each location. Maintain proper joint alignment, keeping lines straight and true. Cut paving units with masonry saw to fit adjacent construction. Joints to be finished to match approved samples.

7. Do not proceed with interior stone flooring installation until building is enclosed and humidity has been stabilized to level anticipated for sustained occupancy.

8. Following installation of stone flooring, Contractor shall protect completed work as necessary during remainder of construction period to ensure that stone flooring will be without damage or deterioration at time of substantial completion.

END OF SECTION

SECTION 09640 - WOOD FLOORING

1. Wood Flooring Allowance: Per Section 01210 - Allowances the costs of handling and installation are not covered by the allowance.

2. Contractor to provide all materials, tools and qualified labor as required to complete the wood flooring installation, including finishing and incorporation of potential wood HVAC registers, in all areas indicated on the drawings and to match approved samples per Section 01335 - Owner Selections.

3. Contractor shall provide mockups to verify each Owner selection per Section 01334 - Owner Selections

    A. Mockups shall be of adequate size to fully convey aesthetic qualities of completed wood floor, 4'x4' minimum.

    B. Clearly identify all materials and processes required to duplicate mockup.

    C. Maintain approved sample panel on Project site for duration of wood flooring installation for comparison purposes.

4. Substrates to receive wood flooring are to be examined carefully for cracks, ridges, depressions, scale, moisture and foreign deposits that might interfere with a complete installation meeting best industry practices. Proceed with installation only after unsatisfactory conditions have been corrected.

5. Do not proceed with installation of any interior wood flooring, to include subflooring and sleepers in the case of slab construction, until successfully conditioning the enclosed environment and materials as follows:

    A. Structure must be sealed from weather and conditioned for a minimum of one week (7 days) to achieve a stable temperature and humidity of spaces to levels planned for occupancy.

    B. All wood flooring must be stored, spaced for complete ventilation, within the acclimated space for a minimum of one week (7 days) prior to installation to achieve stable temperature and moisture content within conditioned environment. Verify, by probe, that wood has achieved a stable moisture content before proceeding with any installation.

    C. Plywood subflooring and sleepers for wood flooring over concrete slabs must be acclimated as instructed above.

    D. All slabs to receive sleepers and/or wood subfloor or finish flooring shall be acclimated, tested, and treated per the Wood Flooring Installation Guidelines

and Methods as published by the National Wood Flooring Association (NWFA) prior to the installation of any sleepers, sub-flooring or finish flooring.

6. After acclimation period and flooring installation, Contractor shall maintain stable humidity and temperatures planned for building occupants for duration of construction.

7. Contractor to install and finish wood flooring in accordance with NWFA's installation guidelines, as shown in the drawings and as required to match Owner's approved mockups.

    A. Contractor shall avoid the use of any flooring material in length less than 4 times the width of the flooring material except at the installation perimeter. (Example: 4” width boards shall not be less than 16” long, 8” width boards shall not be less than 32” long)

8. Hardwood flooring to comply with NOFMA's "Official Flooring Grading Rules" for species, grade and cut.

9. Softwood flooring to comply with WCLIB "Standard 17 Grading Rules For West Coast Lumber" for species, grade and cut.

10. Following completion of installation and finish of wood flooring, Contractor shall protect completed wood flooring as necessary during remainder of construction period to ensure that flooring and finish will be without damage or deterioration at time of substantial completion.

END OF SECTION

SECTION 09650 - RESILIENT FLOORING

1. Contractor to provide all materials, tools and qualified labor as required to complete the resilient flooring installation in all areas indicated on the drawings and to match approved samples per Section 01335 - Owner Selections.

2. Substrates to receive resilient flooring are to be examined carefully for cracks, ridges, depressions, scale, moisture and foreign deposits that might interfere with a complete installation meeting best industry practices. Proceed with installation only after unsatisfactory conditions have been corrected.

3. Do not proceed with installation of any interior resilient flooring until successfully conditioning the enclosed environment and materials as follows:

    A. Structure must be sealed from weather and conditioned for a minimum of one week (7 days) to achieve stable temperature and humidity of spaces to levels planned for occupancy.

    B. Substrate to receive wood flooring must achieve stable temperature and moisture content within conditioned environment.

4. Resilient flooring to be delivered, stored and installed per manufacturer's or supplier's written recommendations and in compliance with best industry practices.

5. After acclimation period and flooring installation, Contractor shall maintain stable humidity and temperatures planned for building occupants for duration of construction.

6. Following completion of installation of resilient flooring, Contractor shall protect completed flooring as necessary during remainder of construction period to ensure that flooring will be without damage or deterioration at time of substantial completion.

END OF SECTION

SECTION 09680 - CARPETING

1. Contractor to provide all materials, tools and qualified labor as required to complete the carpet installation in all areas indicated on the drawings and to match approved samples per Section 01335 - Owner Selections.

2. Carpeting Allowance: Per Section 01210 - Allowances the costs of handling and installation are not covered by the allowance.

3. Carpet, padding and all accessories shall be delivered, stored, installed and protected following installation per best industry practices and according to the Carpet Installation Standard as published by the Carpet And Rug Institute (CRI), whichever is more strict.

    A. Provide Stretch-In Installation with all accessories and utilizing all methods as outlined by the CRI.

4. No carpet shall be delivered to Project until substrate and installation environment are prepared per the requirements of the CRI to receive carpet.

5. Carpet installer shall return to installation at time convenient to Owner and occupants, approximately 6 months after occupancy, to inspect carpet and, at no additional cost to the Owner, repair wrinkles, faulty seams or other faults in product or installation.

END OF SECTION

SECTION 09710 - INTERIOR BRICK FLOORING

1. Contractor to provide all materials, tools and qualified labor as required to complete the interior brick flooring installation in all areas indicated on the drawings and to match approved samples per Section 01335 - Owner Selections.

2. Contractor shall provide mockups to verify each Owner selection per Section 01335 - Owner Selections

    A. Mockups shall be of adequate size to fully convey aesthetic qualities of completed brick flooring, 4'x4' minimum.

    B. Clearly identify all materials and processes required to duplicate mockup.

    C. Maintain approved sample panel on Project site for duration of brick flooring installation for comparison purposes. If appropriate, approved sample can be incorporated into finished product.

3. Contractor to provide solid brick units of the size and specification as indicated.

    A. ASTM C216 Face Brick, Grade SW, Type FBA, size 2 3/4”H x 4”D x 8 1/2”L as manufactured by Old Carolina Brick Company, 475 Majolica Road, Salisbury, NC 28147, (704) 636-8850. Confirm color options with Owner, Interior Designer, and Architect. At a minimum provide mock-ups of Savannah Grey, Georgetowne, and Seabrook.

4. Install brick pavers in a 1" minimum mortar setting bed over cleavage membrane of ASTM D226, No. 15 type, asphalt saturated non-perforated organic felt.

    A. Mortar setting bed and joints to be type "S" mortar unless otherwise indicated on drawings.

    B. All mortar exposed to view shall be mixed with pigmented mortar mix "Savannah Ivory" as manufactured by Blue Circle. Substituted mortar pigment must produce a "white to light color range", and be approved by Architect and Interior Designer based on constructed sample.

5. Install brick pavers to patterns indicated in the drawings. All joints shall be filled completely with mortar to form uniform joints indicated in the drawings, if none indicated form 3/8" joints. Maintain proper joint alignment, keeping lines straight and true. Cut paving units with masonry saw to fit adjacent construction. Joints to be scraped smooth and flush with mason's trowel and brushed with soft, long bristled brush or smooth burlap sack. Bricks are not to be cleaned with acid or other brick cleaner.

6. Do not proceed with brick flooring installation until building is enclosed and humidity has been stabilized at approximate level anticipated for sustained occupancy.

7. Following installation of brick flooring, Contractor shall protect completed work as necessary during remainder of construction period to ensure that brick flooring will be without damage or deterioration at time of substantial completion.

END OF SECTION

SECTION 09751 - INTERIOR STONE FACING

1. Contractor shall install interior stone facing at locations as indicated in the drawings and to match Owner's samples per Section 01330 - Submittals. Owner to make final approval of materials based on actual samples of available material.

2. Comply with selection and installation recommendations contained in "Dimension Stone Design Manual", latest edition as published by the Marble Institute of America (MIA) and the following referenced standards:

    A. ASTM C503 - Standard Specification for marble dimension stone.

    B. ASTM C568 - Standard Specification for limestone dimension stone.

    C. ASTM C615 - Standard Specification for granite dimension stone.

    D. ASTM C629 - Standard Specification for slate dimension stone.

3. Obtain each type of stone from one quarry, extracted from a single bed of quarry stratum with consistent color range and texture, and complying with referenced ASTM standards and other references indicated.

4. Do not use stone units with chips, cracks, voids, stains or other defects visible in finished work.

5. Clean stone as recommended by referenced standard based on material type, finish and application.

6. Protect installed stone as necessary during remainder of construction period to ensure that stone will be without damage or deterioration at time of substantial completion.

END OF SECTION

SECTION 09910 - PAINTING AND STAINING

1. This section includes all labor, materials, tools and other equipment and services as required to complete all exterior and interior painting, staining and decorative finishes as indicated on finish schedules and to the full extent of the drawings and specifications. The work shall include, but not be limited to surface preparation of substrates as required for acceptance of painting, staining or decorative finish.

2. Unless otherwise noted, all work shall be performed per manufacturer's written recommendations and to meet all requirements set forth by the MPI (Master Painters Institute) to achieve a Premium Grade finish.

3. Paints, stains and decorative surface treatments are to be selected by the Owner per Section 01330 - Submittals.

4. Contractor shall provide mockups of all Owner selections with texture to simulate actual conditions, on representative samples of actual substrate to verify each Owner selection, and to completely demonstrate aesthetic effects and set quality standards for materials and execution.

    A. Mockups shall be of adequate size to fully convey aesthetic qualities of completed finish, 4'x4' minimum.

    B. Clearly identify all materials and processes required to duplicate mockup.

    C. Final selection will be made by Owner from mockups in field.

5. Deliver and store all painting materials in sealed, original labeled containers bearing manufacturer's name, brand name, type of paint or coating and color designation, standard compliance, materials content as well as mixing and/or reducing and application requirements in strict accordance with manufacturer and MPI requirements.

6. Unless specifically noted or pre-approved otherwise by Interior Designer, all paint shall be ready-mixed and pre-tinted. Re-mix all paint in containers prior to and during application to ensure break-up of lumps, complete dispersion of settled pigment, and color and gloss uniformity. Where thinner is used, addition shall not exceed manufacturer's recommendations.

7. Perform no painting or decorating work when the ambient air and substrate temperatures, relative humidity and dew point and substrate moisture content is below or above requirements for both interior and exterior work.

8. Do not paint or finish unless substrates are acceptable and all environmental conditions (heating, ventilation, lighting and completion of other subtrade work) are acceptable for applications of selected products.

9. Apply paint only to dry, clean, properly cured and prepared surfaces in areas where dust is no longer generated by construction activities such that airborne particles will not affect the quality of finished surfaces.

10. Painting coats specified are intended to cover surfaces completely when applied at proper consistency and in accordance with manufacturer's recommendations. Apply a minimum of four coats of paint where deep or bright colors are used to achieve satisfactory results.

11. Unless specifically required otherwise by substrate manufacturer or pre-approved by Architect, paint exterior surfaces in accordance with the following requirements:

    A. Exterior trim: Unless specifically indicated otherwise by substrate manufacturer, 1 coat Alkyd Primer under 2 finish coats minimum of Exterior Alkyd Enamel semi-gloss solid color with anti-mildew agent as recommended by manufacturer.

    B. Exterior siding: Prime coat as recommended by siding manufacturer under 2 coats minimum of Exterior Acrylic Latex flat solid color.

12. Unless specifically noted otherwise by substrate manufacturer or pre-approved by Architect, paint interior surfaces in accordance with the following requirements:

    A. Interior trim: 1 coat primer under 2 finish coats of Interior Alkyd Enamel semi-gloss solid color.

    B. Interior Gypsum Board: 1 coat gypsum board primer/sealer under 2 finish coats of Interior Latex as selected by Owner.

13. Unless specifically noted or pre-approved otherwise by Architect, paint mechanical / electrical equipment and related surfaces in accordance with the following requirements:

    A. In unfinished areas leave exposed conduits, piping, hangers, ductwork and other mechanical and electrical equipment in original finish. Do not paint over nameplates.

    B. Paint the inside of all ductwork where visible behind louvers, grilles and diffusers with primer and two coats of matt black (non-reflecting) paint.

    C. All roof vents or mechanical equipment exposed to view to be painted in accordance substrate requirements to match adjacent roofing color.

14. Protect all newly finished surfaces from elements, condensation and contamination until coatings are completely dry. Erect barriers or screens and post signs to warn of or limit or direct construction traffic.

15. Remove all spilled, splashed, splattered or over sprayed paint as work progresses. Remove waste and keep area free from any unnecessary accumulation of tools, equipment, surplus materials or debris.

16. Personnel responsible for original finish to repair or replace any finishes damaged or degraded due to subsequent construction activity to "like new" condition non-discernable from adjacent finish for Owner approval prior to substantial completion.

END OF SECTION

SECTION 10801 - BATH ACCESSORIES

1. Bath Accessories Allowance: Per Section 01210 - Allowances the costs of handling and installation are not covered by the allowance.

2. Contractor to provide all labor, materials, tools and other equipment and services as required to complete installation of all bath accessories as specified or supplied by Owner.

3. Owner or Interior Designer to provide Contractor with complete schedule of selected bath accessories prior to completion of framing. Contractor to coordinate all necessary framing or blocking requirements to accommodate selected accessories.

4. Unless locations are specifically noted in the drawings, Contractor to coordinate locations of all bath accessories with Owner.

END OF SECTION

SECTION 11451 - RESIDENTIAL APPLIANCES

1. Appliance Allowance: Per Section 01210 - Allowances the costs of handling and installation are not covered by the allowance. Appliance selection shall be made by Owner or Interior Designer.

2. Contractor shall review construction documents and provide all labor and materials pertaining to the equipment as selected by Owner. Extent and types of residential equipment required include, but may not be limited to, the following:

    A. Dish Washer
    B. Under-counter fridge drawers
    C. Under-counter ice maker
    D. Washer/Dryer
    E. Disposal
    *Note that floor plans indicate appliance quantities and locations.

3. Contractor shall install all residential equipment per manufacturer's written specifications, including any electrical and ventilation requirements. Contractor shall bring any conflicts restricting a manufacturer recommended installation to the attention of the Architect prior to installation.

END OF SECTION

SECTION 13854 – SMOKE/CARBON MONOXIDE ALARMS

1. Contractor shall install combination smoke/carbon monoxide alarms as directed by the Construction Documents and Code.

2. All smoke alarms including shall include an audible alarm and shall be listed and labeled in accordance with UL 217 and be installed and maintained in accordance with the manufacturer's written instructions, provisions of Code, and the household fire warning equipment provisions of NFPA 72.

3. All carbon monoxide detection systems shall include an audible alarm shall be listed and labeled in accordance with UL 2075 and be installed and maintained in accordance with the manufacturer's written instructions, provisions of Code, and NFPA 720.

4. Smoke/carbon monoxide alarms shall be installed as a permanent fixture of the building and shall receive their primary power from the building wiring, and when primary power is interrupted, shall receive power from a battery.

5. At a minimum, smoke/carbon monoxide alarms shall be installed at the following locations:

    A. In each sleeping room.

    B. Outside each separate sleeping area in the immediate vicinity of the bedrooms.

    C. On each additional story of the dwelling, including basements and habitable attics.

    D. Not less than 3' horizontally from the door or opening of a bathroom that contains a bathtub or shower.

END OF SECTION

SECTION 13900 - FIRE SUPPRESSION (Option)

1. A complete fire suppression system meeting National Fire Protection Association (NFPA) Standards 13, 13D and 13R shall be designed and installed as required by Code.

2. The complete fire suppression system design, including samples of all exposed fixtures and materials, is to be submitted to Architect for review prior to submittal to local officials for approval.

3. It is the Contractor's responsibility to submit the complete fire suppression system design, with all supporting documents and samples as required, for approval by the legal authorities having jurisdiction over the Project prior to any fabrication or installation.

4. Contractor is to coordinate the installation of fire suppression systems with all other systems within the project to ensure that is the complete and full operation of any system is not adversely affected. It is the Contractors responsibility to replace or repair any system so affected. No sprinkler piping is to be supported from any mechanical or electrical devices and/or equipment.

5. Installed fire suppression system is to be fully tested at completion to ensure the full operation of all components and systems as required.

6. Installed and tested fire suppression system is to be protected from damage for duration of construction. Any components or systems found not to be working at full capacity are to be replaced or repaired prior to substantial completion.

7. A complete care and maintenance catalog is to be furnished at the valve location, enclosed in a watertight container, and attached to the riser. Verbal instruction for operation, care and maintenance of the sprinkler installation are to be given to the Owner's maintenance representative by the installing Contractor's representative upon completion and/or activation of the system.

END OF SECTION

SECTION 15400 - PLUMBING

1. Appliance Allowance: Per Section 01210 - Allowances the costs of handling and installation are not covered by the allowance.

2. Plumbing items to be included in work include, but may not be limited to, soil waste, vent, connection to sewer lines, valves, traps, clean-outs, hose bibs, fixtures, floor drains, installation of hot and cold water lines and appliances. Contractor shall provide temporary and final water service.

3. All work shall conform with the 2020 Florida Building Code - Plumbing and the requirements of local authorities having jurisdiction over the Project.

4. Main water inlet shall be located in an easily accessible location and have a shut-off valve easily operable by the Owner without the use of secondary tool.

5. Main plumbing supply line to have FloLogic (www.flologic.com) or equal automatic shut-off system installed to minimize accidental flooding.

6. Plumbing service to be PVC with Cast Iron waste stacks and horizontal runs within all floor systems to abate noise. Supply pipes are to be copper or PEX. Coordinate with and obtain approval from Architect for locations of all roof vents.

7. Minimum water piping size shall be ½" except final connection to fixtures, which shall be the same as the fixture connection. Minimum supplies at showers to be 3/4". Make transitions at or after stop valves. Support piping to avoid sagging. Maximum support spacing shall be 6 feet.

8. All plumbing in unheated areas and crawl spaces are to be insulated with ½" Armaflex. All hot water piping shall be insulated except stop valve and final connection to fixture.

9. All plumbing fixtures and fittings to be selected by Owner.

10. Final connections to sinks, lavatories and water closets may be made with braided stainless steel flexible connectors. Plastic flexible connectors shall not be used.

11. Water heaters to be located as indicated on drawings. Units shall be tankless water heater system (Rinnai or equal) with small tank on a circulating pump for appliances further from the water heaters. Alternate: “Conservationist” as manufactured by A.O. Smith, or equal high-efficiency model. Units shall be sized in accordance with manufacturer’s suggestions, with minimum of 20 gallons per bedroom. Water Heaters shall conform to the minimum requirements detailed in ASHRAE 90.1

    a. Tank water heaters to be set in pans allowing minimum 6" clearance from water heater on all sides with two-inch high sidewalls. Pans are to have two

overflow drains at different levels and shall drain into the waste system. Consult plumber and Architect for alternate hot water system design.

12. Where hot water piping length exceeds 40 feet from water heater, provide 1/2" insulated hot water recirculating piping and pump.

13. Provide exterior hose bibs in locations as indicated on the construction drawings, and verified with Owner.

14. Provide capped ¾" stub-outs for connection to future irrigation systems. Stub outs shall be within the service yard. Irrigation system shall be designed and installed by landscaped contractor. Plumbing contractor shall coordinate with irrigation installers and provide branch connecting as required. Provide backflow prevention at irrigation system connection.

15. Drain Valves: Provide valves at bottom of system near grade as necessary so that the entire system can be drained. Obtain approval from the Owner for drain valve locations.

END OF SECTION

SECTION 15500 - HEATING, VENTILATING & AIR CONDITIONING

1. Work covered by this section includes all materials and labor for the following:

    A. All heating, ventilation and air conditioning systems.

    B. All exhaust systems including bathroom exhaust, kitchen hood exhaust, and dryer exhaust.

    C. All controls associated with the HVAC systems.

    D. All other components, ducts, piping, and accessories associated with the HVAC systems so as to constitute a complete system.

2. Requirements & Qualifications:

    A. All HVAC systems shall be designed by a qualified mechanical engineer or licensed mechanical Contractor.

    B. All mechanical work is to be designed and installed in accordance with recognized acceptable practices and standards to include, but not limited to, SMACNA, ASHRAE and NFPA.

    C. All mechanical work shall be in strict compliance with all national, state and local codes having authority including, but not limited to the International Residential Code, International Building Code, and the International Mechanical Code.

    D. Where geothermal systems are to be used, they shall be installed in accordance with standards and accepted installation practices of the International Ground Source Heat Pump Association (IGSHPA) as well as all state and local regulations pertaining to the installation. The Contractor must have an IGSHPA certified installer on the project.

    E. The Contractor shall perform computerized load calculations (Trane Trace, Carrier HAP, Elite CHVAC, or equivalent) or hand calculations (Manual J or equivalent) to determine proper equipment sizing requirements. Rule of thumb sizing of HVAC equipment is prohibited.

    F. The Contractor is responsible for providing a complete system including, but not limited to; ductwork, dampers, diffusers, grilles, return air system, thermostats, refrigerant piping, condensate piping, and all other equipment as required to constitute a complete system.

3. Design Details:

A. Conditioned Area: See Mechanical Layout Diagrams in Construction Drawings.

B. Zone Description: See Mechanical Layout Diagrams in Construction Drawings.

C. System Type: Heat Pump

D. Exhaust Vents: (See Mechanical Layout Diagrams for locations. Verify exhaust vents with final selections by Owner)

Guest House:

i. (5) Bathroom exhaust: 150 cfm each

E. Specialty Requirements:

i. Crawl Space conditioning and dehumidification (see Environmental Conditions below)

ii. Attic Space conditioning and dehumidification (see Environmental Conditions below)

4. Coordination of Design:

A. The Architect will provide conceptual mechanical diagrams in the Architectural Construction Drawings as a basis of design intent only. The Contractor shall consult these documents for coordination purposes, however, the Contractor assumes full responsibility for the design, implementation and performance of all HVAC systems and components.

B. All HVAC systems and components including, but not limited to, system zoning, system types, equipment location, ductwork routing, look and location of air devices, thermostat locations, and look and location of all roof penetrations shall be reviewed with the Architect prior to purchase or installation of any work.

C. Final HVAC design drawings are to be submitted for review by Architect. Architect's review of the final HVAC drawings is for aesthetic purposes only. The Contractor assumes full responsibility for the design, implementation and performance of all HVAC systems and components.

D. Contractor is to coordinate the final HVAC layouts with the Construction Documents including, but not limited to, framing layouts and details. Architect is to be notified if modifications required to implement the final HVAC design drawings will be at variance with the Construction Documents. **Contractor shall be responsible for any costs associated with relocation or re-work of**

un-coordinated HVAC items. All such work shall be performed without additional expense to the Owner.

E. In general, no vent shall be visible from front facing roofs. PVC hooked vents shall not be utilized. Coordinate with and obtain approval from Architect for locations of all roof vents.

5. Environmental Conditions:

   A. Living Space: 72F degrees maximum at 50% relative humidity during cooling period (summer), 68F degrees minimum at 50% relative humidity during warming period
   (winter).

   B. Crawl Space to be maintained within 15 degrees of living space temperature at maximum 50% relative humidity. No return air is allowed to circulate air from the crawl space into living space.

   C. Accessible Attic Space to be maintained within 15 degrees of living space temperature at maximum 50% relative humidity. No return air is allowed to circulate air from the accessible attic space into living space.

6. Equipment:

   A. All HVAC equipment shall be designated as "high efficiency" equipment. Where applicable, efficiencies for equipment to be used on this project shall exceed the current code required minimum SEER, EER, AFUE, & HSPF ratings.

   B. Where possible, all cooling systems shall be two-stage or variable speed systems. These systems shall include multi-stage or variable speed compressors and multi-stage or variable speed indoor fans.

   C. Provide each system with dedicated humidification or de-humidification as may be required to achieve and maintain specified climate conditions.

   D. Where natural gas or propane is used for central heating, the system shall be a high efficiency, closed combustion, direct vent type furnace.

   E. Where no gas is available for heating, heat pump systems with auxiliary electric heat strips shall be used. Heat pumps shall be wired so that the heat pump locks out when the defrost stage is initiated. The compressor and the electric heat strip shall not run simultaneously.

F. Where additional zoning is desired or required, a zone damper system with a full size bypass shall be provided to sub-divide single systems into multiple zones. All zone dampers shall be accessible for maintenance.

G. Provide each system with an energy recovery ventilator (ERV) to duct outside air into the occupied space.

H. Noise Control: Air handling units in attic shall be mounted on vibration isolation pads or suspended by hangers equipped with vibration isolating spring assembly to reduce the transmission of sound and vibration.

I. Where required, external condensing units or heat pumps are to be located on a platform above the flood elevation. The platform will be designed and installed by others, however, the mechanical Contractor shall review the location and details of the proposed platforms and report issues to the Architect prior to fabrication or installation.

7. Ductwork:

A. All main trunks and branches of ductwork shall be galvanized sheet steel and shall be installed in accordance with the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) Duct Construction Standards.

B. The use of fiberglass duct board is strictly prohibited.

C. All elbows shall have smooth, full-radius turns or airfoil turning vanes.

D. All branch ducts shall have manual volume dampers for balancing. All dampers shall be accessible. Coordinate with Architect where damper accessibility is an issue.

E. The maximum permitted length of flexible duct is 5'-0". All flexible duct shall run directly from a hard duct to a grille. Splicing of flexible duct is not permitted. Installation of duct plenums with long runs of flexible duct to create a "spider-box" is prohibited. Flexible duct shall be run in a way that does not create any crimps, bends, or pinches which deform the duct size and restrict airflow.

F. All supply and return ductwork shall be fully externally insulated. All ducts and duct insulation shall be sealed air-tight with an approved mastic. The use of tape to seal ducts and insulation is strictly prohibited.

G. Ductwork shall be hung securely so as to be free from rattles, vibrations, and movement when the system is in operation.

H. The Contractor shall route and install ductwork and utilize material in a manner in which will prevent noise from being transferred from equipment to the habitable spaces as well as to prevent noise being transmitted from one space to another through the ductwork.

8. Air Device Location - General:

A. Refer to conceptual mechanical diagrams in the Architectural Construction Drawings for desired air device locations.

B. Register and grilles shall be centered on or between Architectural elements such as windows or doors.

C. Air devices to be located on the wall shall be grilles located within the baseboard or integrated with wall trim whenever possible and made of like material and finish.

D. Air devices to be located in the floor shall match adjacent flooring material or trim unless noted otherwise.

E. Where possible, return air should be provided from every enclosed room (excluding closets and other small spaces).

9. Controls:

A. Provide a digital programmable thermostat with seven-day scheduling and at least four daily control periods.

B. Provide thermostats with remote temperature sensors. Remote temperature sensors to be located in the occupied zones while the controllable thermostats shall be located out of view. Location of control devices to be reviewed with the Architect.

C. Provide thermostats with integral humidistat. Thermostat shall be able to control system in de-humidification or humidification mode in addition to standard temperature control modes.

D. Provided thermostats/sensors compatible with the whole house control system. Control system provided by others. Coordinate with control system provider to ensure proper control of all HVAC equipment. Confirm this feature with Owner’s automation requirements.

10. Miscellaneous

A. Condensate drains: Provide a 3" deep auxiliary drain pan beneath air handling units to catch overflow condensate in the event of a clog of the primary line or

in the case of equipment failure. Route this secondary drain line to the exterior of the building and discharge in a conspicuous location. The discharge location of all primary and secondary condensate lines shall be reviewed with the Architect before installation.

B. All systems shall be tested, adjusted, and balanced at the completion of the project. Final airflows shall be within 10% of those indicated on the design documents.

C. Install construction filters and pre-filters (over return air grilles) during construction. Replace construction filters at completion of drywall work and again at completion of interior trim and again at beneficial occupancy. Primary filters shall be pleated type with a minimum 25% efficiency based on ASHRAE dust spot method of testing.

Prior to final acceptance, the Contractor or Mechanical Subcontractor shall prepare and furnish as-built drawings as well as operation and maintenance manuals for all HVAC systems. The Contractor should also include at least one full day to instruct the Owner in the proper operation and maintenance of all mechanical systems.

END OF SECTION

SECTION 16050 - ELECTRICAL

1. See Electrical Construction Documents provided by Electrical Engineer. Construction Documents prepared by the MEP Engineer supersede requirements provided herein in the event that there are conflicting details or specifications.

2. Decorative Fixture Allowance: Per Section 01210 – Allowances indicated for material only include direct costs to the Contractor. They include taxes (in the case of materials) and delivery to the job site but do not include overhead and profit, unloading materials, storage, cost of tools, installation, etc. except where indicated.

3. Lighting Control System Allowance: Per Section 01210 – Allowance for Lighting Control System is total cost to Client. Contractor to provide system layout for review and approval by Owner based upon Client's requirements.

4. Audio/Visual Control System Allowance: Per Section 01210 – Allowance for Audio/Visual Control System is total cost to Client. Contractor to provide system layout for review and approval by Owner based upon Client's requirements.

5. Contractor shall provide a complete electrical system, ready to use, complying with the International Electric Code 2012 and all local authorities having jurisdiction over the Project.

6. Whether or not shown in the Construction Drawings work covered by this section includes, but may not be limited to:

    A. Provide temporary and final electrical service.

    B. Install feeders, panel boards, branch circuit wiring, wall switches, receptacles, outlet boxes, plates, conduit and wiring as necessary.

    C. Coordination and installation of any requirements as needed for the addition of an emergency generator. Coordinate required performance specifications with Owner.

    D. Furnish and install complete wiring (including breakers) for motors, exhaust fans, pumps, and heat pumps, water heaters, etc.

    E. Furnish and install line voltage connections for heating and air conditioning equipment.

    F. Furnish and install all light fixtures, fans and appliances as selected by the Owner.

7. Service entrance conductors and equipment shall be of a capacity adequate to serve the calculated load (calculated by an electrician) in addition to several spare circuits

provided for future use. Service shall be underground from the utility company transformer. Contractor must verify meter base and transformer location with Architect and Owner prior to utility company site meeting.

8. Branch circuits for lighting and general use: At least two 15 amp circuits shall be provided to serve lighting and recessed outlets for the first 500 sf of gross floor area. Provide a minimum of one circuit for each additional 500 sf or fraction thereof. Provide individual branch circuit for any fixed appliances or equipment rated at more than 1400 watts, or the space specifically provided for such items. Provide a minimum of four (4) spare 15a circuit breakers; Panel shall have at least two (2) 2-pole spaces in addition to the spares. Provide typed labels at the breaker box indicating use and location of each circuit.

9. All receptacles shall be grounded. In addition, ground fault circuit interrupters shall be provided in all locations required by code and when called for on the electrical drawings.

10. Location of all wall switches, outlets, light fixtures etc: Coordinate with interior trim and elevation drawings prior to layout. Before wiring, electrical contractor shall temporarily tack-up boxes to framing in locations indicated on the drawings. Contractor shall then notify the Architect and Owner so that they may observe and approve all locations in a walk-through with the Contractor and electrical subcontractor before proceeding with the wiring. Costs of all required relocation shall be borne entirely by the Contractor should the Architect and Owner not be notified for electrical walk-through prior to final installation.

11. Outlets to be located in base, except at kitchen counters, appliances, and bath vanities; all wiring to be concealed.

12. Switches shall be toggle type, Leviton or equivalent. Dimmers shall be slide type. Banks of four (4) or more switches should be stacked 2-over-2 type switches. Submit samples of all switches and outlets to Owner for approval. Colors to be selected by Owner.

13. Electrical Fixtures: Provide and install light fixtures, ceiling fans, exhaust fans, smoke detectors, etc. as indicated in the drawings or as selected by Owner.

14. Provide wiring circuit for security system. Coordinate with security system provider who may be installing concurrently with the electrical installation.

15. Provide power for irrigation system control on a separate circuit. Irrigation system is to be designed by Landscape Architect or landscape subcontractor.

16. Cable TV Circuits: Provide cable TV outlets as indicated on the drawings.

17. Telephone Outlets: Provide conduits to outlet locations indicated on the drawings.

18. The Contractor shall be responsible for obtaining permits and inspections and final acceptance of the complete electrical installation by local authorities having jurisdiction over the Project.

END OF SECTION

SECTION 16670 - LIGHTNING PROTECTION (Option)

1. This section specifies the lightning protection system for buildings and structures less than 75 feet in height.

2. The Contractor shall furnish and install a complete lightning protection system with all the necessary components for a complete system.

3. The entire lightning protection system shall be manufactured and installed in accordance with Underwriters Laboratories, Inc. Pamphet no. UL96A Master Labeled Lightning Protection Systems.

4. Down conductor cable shall be concealed in the walls of the building, enclosed in PVC conduit from roof to grade.

5. Rooftop cable shall be concealed beneath the finished roof, with only air terminals visible.

6. Upon completion the Contractor shall furnish the Owner with the standard UL Master Label certificate.

7. Installation of systems shall be performed by fully qualified personnel having had a minimum of ten years experience installing these types of systems. They shall have been certified for installation by the Lightning Protection Institute and recognized Underwriters Laboratories as a Master Label Lightning Protection System installer.

8. The design of the system shall be performed by fully qualified personnel having had a minimum of five years experience on designing these types of systems. They shall have been certified for design by the Lightning Protection Institute.

9. All materials shall comply in weight, size, and composition with the following requirements based on the type of building or structure involved.

    A. National Fire Protection Association NFPA 780.

    B. Underwriters Laboratories UL 96.

10. All materials for this installation shall be Class 1 as defined by Underwriters Laboratories Inc. for use on structures less than 75 feet in height.

11. Copper shall be of grade ordinarily required for commercial electrical work, generally designated as being 98 percent conductivity when annealed.

12. Air Terminals:

A. Roof Air Terminals shall be of solid copper having a minimum diameter of 3/8" and a length of not less than 10 inches nor more than 24 inches. Wherever materials come in direct contact with aluminum surfaces, the air terminals shall be solid aluminum, 1/2" in diameter.

B. Chimney Air Terminals shall be solid copper having a minimum diameter of 3/8" and a length as required to extend 10 inches above top of chimney. Chimney terminals and components shall be hot dipped with lead coating a minimum of 1/16" thick, extending a minimum of 2 feet below top of chimney.

13. Conductors:

A. Main conductors shall be copper cable weighing not less than 187.5lbs per 1000 feet.

B. The size of any wire in the conductor not less than No. 17 AWG.

C. Minimum cross sectional area of 59,500 cir. mil.

14. Attachments: Fasteners shall be of suitable configuration for the intended application and of the same material as the conductor. Nails, screws, or bolts employed to secure the fasteners shall be of the same material as the fasteners or of a material which is as resistant to corrosion as that of the fasteners. Galvanized or plated steel nails, screws, or bolts are not acceptable.

15. Connections and Splices: Connectors and splices shall be of suitable configuration and type for the intended application and of the same material as the conductor.

16. Ground Rod Electrodes: Copper-clad steel ground rods; 1/2" minimum diameter , 9'-0" long.

17. The roofing contractor shall furnish and supply all waterproofing for the through-roof conduits or connections, in addition to all slip sheets, adhesives, etc. as maybe required by the roof manufacturer.

END OF SECTION
END OF CONTRACT SPECIFICATIONS