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Approved with Conditions

Date: 06/26/13

PROJECT MANUAL FOR:

ALFOND RESIDENCE

RENOVATIONS + ADDITION

143 Vaughan Street

Portland, Maine 04101

ISSUED FOR CONSTRUCTION

MAY 6, 2013

Scott Simons Architects

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PART A – SPECIFICATIONS

General Conditions – 01 00 00

Drawings and specifications are intended to provide the basis for a completely finished project suitable for the intended use of the Owner. Anything not expressly set forth but which is reasonably implied or necessary for proper performance of this work shall be included. A general description of the project is as follows:

The work includes but is not limited to; a new two story addition with green vegetated room. Renovation to lower level (basement) for fitness room, storage and full bath, first floor kitchen and breakfast area, second floor master bath and guest bath and third floor guest bathroom. High performance windows and doors and durable materials and finishes are proposed. Walls and roofs will be super insulated.

The Architect encourages at all times the suggestions of the Contractor for modification and changes in the specifications, details, materials and or methods when such changes are warranted. However, any and all such changes including any discrepancies in the contract documents shall be discussed and authorized before implementation. Such work shall be done in accordance with the Architect's instructions. Contractor shall be responsible for all costs relating to failure to comply with this requirement.

Prior to submitting his estimate the Contractor shall examine the site and become familiar with all conditions pertaining to the work, and to have verified the drawings.

Prior to ordering material, or performing work, the Contractor shall verify all measurements and be responsible for the correctness of same. Any discrepancies found between actual dimensions and measurements indicated on the drawings shall be reviewed with the owner and Architect before proceeding with the work.

All work shall conform to all applicable Codes, Ordinances and regulations. The Contractor shall be responsible for scheduling, coordinating, obtaining and paying for all permits, sign-offs, approvals, and the Certificate of Occupancy.

The Contractor shall provide manufacturer's product literature and maintenance data for materials necessary for proper operation by Owner. Provide samples for items exposed to view when requested by Architect. Provide specific shop drawings, mock-ups, extra stock, certifications, warranties, and other submittals specified.

The Contractor shall provide a full one-year warranty for all work of this Contract, a two-year labor warranty for the roof installation, and a minimum ten-year product warranty for the roofing materials.

Whenever possible, use locally made/manufactured, environmentally friendly (green), low VOC materials and finishes. Products that perform well and have high-recycled content or other sustainable qualities should be given first consideration.

It is the Owner's intent to start construction as soon as possible (early May), with completion by early to mid-September, 2013. The owner has a wedding party scheduled in their home on September 28th; all work should be 100% complete before that date. The Contractor shall submit during pricing an estimated schedule for completion of work.

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Allowances / Alternates – 01 20 00

Allowance #1 – Provide $500 allowance for miscellaneous toilet, bath & laundry accessories (toilet paper towel bars and robe hooks). Installed by GC.

Alternate #1 – Provide and install ERV (Energy Recovery Ventilation), "air to air exchanger". Mechanical Contractor to properly size unit as required for proper ventilation throughout new and existing construction. Install in compliance with ASHRAE STD 62.2.z

Alternate #2 – **Provide** complete solar hot water system with storage tank, fully operable, and in full compliance with all code and other requirements. Connect to existing heating system. Design and installation of solar hot water system is by ReVision Energy. Coordinate all work with Fortunat Mueller at ReVision Energy, 207-221-6342.

Selective Site and Building Demolition – 02 40 00

Demolish and remove existing trees along driveway, coordinate full scope with owner.

Demolish and remove portion of existing concrete foundation as required for connection and alignment of new slab on grade and concrete frostwalls at new addition.

Demolish and remove existing siding and sheathing as required to frame new walls. See demolition plans for locations and additional information.

Demolish and remove existing siding, air barrier, windows, doors and roofing as required for new work. See demolition plans for additional information

Demolish and remove portion of existing wood deck (all decking material), railing system and sub-structure as required for new decking and railing system.

Except for items or materials indicated to be reused, salvaged, reinstalled, donated or otherwise indicated to remain, demolished materials shall become the Contractor's property and shall be removed from the site.

Comply with governing EPA notification regulations before starting selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.

Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete Work within limitations of governing regulations and as follows:

a. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. To minimize disturbance of adjacent surfaces, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
b. Return elements of construction and surfaces to remain to condition existing before start of selective demolition operations.

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Promptly patch and repair holes and damaged surfaces caused to adjacent construction by selective demol

Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials. Resto patched areas and extend finish restoration into adjoining construction to remain in a manner that elimin patching and refinishing.

Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.

Coordinate Interruption of utility services with owner. Indicate how long utility services will be interrupted. Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.

1. Owner will arrange to shut off indicated services/systems when requested by Contractor.
2. Contractor shall arrange to shut off indicated utilities with utility companies.
3. If services/systems are required to be removed, relocated, or abandoned, before proceeding with selective demolition provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.

Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished. See structural drawings for additional information.

Cast-In-Place Concrete – 03 30 00

Note: Reference the Construction Drawings for additional information.

Footings, foundation walls, and slabs shall be installed in accordance with specifications and requirements listed on structural drawings.

Contact Architect after placement of footings, before setting final heights of foundation walls and finish floor heights, to verify actual grades and heights. Architect will make a site visit if needed to verify final grades before proceeding. Maintain minimum frost depths for bottom of footing, as required.

Provide concrete foundation walls as shown on the Construction drawings. Provide formwork materials complying with ACI 347, of sufficient stability to withstand pressure of placed concrete.

Provide smooth finish for exposed form surfaces and tops of same that are not an integral part of the adjacent floor surface.

Provide openings in formwork to accommodate the work of other trades. Accurately place and secure support items built into forms. Position, support, and secure reinforcement against displacement. Locate and support with metal anchors, runners, bolsters, spacers and hangers as required. Set wire ties so ends are directed into concrete, not toward exposed concrete.

Note: Where foundation walls rest directly on ledge, step the footings as required and pin directly to the ledge rock with #4 re-bars, 2'-6" long @ min. 4'-0" o.c. Drill and epoxy or grout into ledge with minimum embed 6".

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Stone Assemblies – 04 40 00

Provide monolithic stonewalls, monolithic stone steps and stone paving as shown on Architectural drawir priced as "Freshwater Pearl" granite (Contact Freshwater Stone, Orland, Maine, 207.469.6331). Stone shall be installed with tight joints. Mortar shall be natural color, standard mortar with Portland cement (ASTM C150), sand (ASTM C144), and coarse aggregate for grout (ASTM C33). Mortar shall be raked deep and recessed from the front face of the stone to give the appearance of dry set stonework.

Provide +/- 2" thick stone veneers at exterior concrete retaining walls as shown on drawings. Stone shall be "Freshwater Pearl" granite or equivalent, Install with tight joints. Mortar shall be natural color, standard mortar with Portland cement (ASTM C150), sand (ASTM C144), and coarse aggregate for grout (ASTM C33). Mortar shall be raked deep and recessed from the front face of the stone to give the appearance of dry set stonework.

Provide 12" x 8" x length as shown on drawings, stone slab steps, at locations shown on A101 and A102. Stone shall be "Freshwater Pearl" granite or equivalent, Install with tight joints. Riser shall be no greater then 7 ¾", space equally as erquired to match existing/new grading.

Dry brush all masonry work at the end of each day's work. Clean stone immediately following installation using clean water and stiff bristled non-metal brushes. Provide protective coverings as required to prevent damage to stonework.

Provide exterior sealant for all exposed exterior stonework as recommended by manufacturers and as required to protect the stonework and masonry work from water penetration.

Structural Metal Framing / Metal Fabrications – 05 10 00

Provide structural steel as shown on the framing plans and structural drawings.

Provide Simpson hangers and connections as shown on the drawings and where required by framing plans to flush frame joists to girders.

Rough Carpentry – 06 10 00

Provide rough framing (floor joists, roof rafters and wall framing) according to structural framing plans and drawings as indicated.

Provide 2 x 4 and 2 x 6 wood frame interior partitions @ 16" o.c., and 2 x 6 wood frame exterior walls @ 24" o.c.. Frame all corners and intersecting walls to provide maximum insulation coverage. Verify framing requirements with structural drawings.

Provide Parallam (PSL), microlam or versalam (LVL) and TJI built-up headers, beams and rafters as noted on the structural framing plans and details.

Provide 1/2" exterior sheathing by ZIP System wall sheathing at all exterior walls, 5/8" exterior T&G sheathing by ZIP System roof sheathing at all roofs, and 3/4" T&G plywood or OSB sub-flooring (glued) at all floors, unless noted otherwise on drawings.

Provide wood blocking throughout house as required for millwork, cabinetry and toilet accessories in all bathrooms and per structural drawings. Review all locations with owner/architect before installing drywall.

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Provide 2x non-toxic pressure treated wood framing, treated with sodium silicate, Timber Sil or equal. P locations as shown on drawings.

Finish Carpentry – 06 20 00

Provide only Clear Heartwood, Thermally Modified Yellow Poplar Lumber with solid paint finish, at exterior as described below and in the Construction Drawings. All Yellow Poplar lumber shall be free from sound, unsound and milling defects on all four faces and all four edges. Thermally modified lumber shall be Cambia by Northland Forest Products (Kingston, NH, 866-960-9663) or approved equal.

- **Exterior door and window casing at existing beveled siding, Type A (Window & door type A, B, E & F)-** Provide +/- 5/4x4 wood trim, size and finish to match existing (VIF), per building elevations and details. (See Painting, Section 09 90 00).
- **Exterior door and window casing at shiplap siding, Type B & C -** Provide 5/4 x 3 (1" x 2 ½") wood trim, with 1" profile exposed, returning into window and door opening, per building elevations and details. Finish to match existing trim color (Off-white, VIF), (See Painting, Section 09 90 00).
- **Provide** 5/4 x 3 (1" x 2 ½") or size specified on drawings, wood trim and corner boards, with solid paint finish, as shown on the drawings. (See Painting, Section 09900).

Provide only Clear Heartwood, Premium Grade IPE boards with transparent finish at exterior as described below. All IPE boards shall be free from sound, unsound and milling defects on all four faces and all four edges.

- **Wood Decking** - Provide 1x4 nominal IPE pre-grooved wood decking with concealed fasteners, at all Porches, exterior stair treads and stair risers, at standard random lengths complying with applicable grading rules.
- **Typical Guardrail System** - Provide 5/4 x 4 and 5/4 x8 ipe wood cap/handrail over 2x4 IPE horizontal support over 5/4 x 4 ipe wood vertical supports (balusters), at all Porch and exterior guardrail systems and as shown on drawings. Vertical wood supports (balusters) shall be centered on gap between 1x4 wood decking, typical (space +/- 3 ¾" on center). Provide Clear Heartwood, Premium Grade with transparent finish.
- **Provide** 1x4 nominal IPE tongue and groove wood boards over ¾" exterior grade plywood at counter / top over outdoor storage, typical. Provide 5/4 x 4 IPE edge around top as required to align with cap at handrail/guardrail system.
- **Provide** 1 ½" diameter solid ipe wood handrail at all exterior stairs as shown on drawings.
- **Wood Ceiling** - Provide 1x4 nominal IPE wood boards, spaced +/- ¼", at exterior ceiling above Lower Entry 001.

Provide only NELMA Grade D & Better Select Eastern White Pine boards or clear select poplar wood boards with solid painted finish (See Painting, Section 09900) at Interior as described below and as shown on the drawings. All standing and running trim shall be Premium grade as defined by AWI Architectural Woodwork Standards.

- Window and door casings: ¾" x 2 ½", one piece, flat with single reveal (see detail 2/A501).
- Base moldings: 1x4, one piece, flat.
- Custom and stock profiles of moldings (see architectural drawings).
- Existing windows & doors in lower revel rooms (basement): Provide 1x solid wood trim and sill.

Provide wood ceilings per drawings (Mudroom 103, Breakfast Room 104 and Kitchen 105 - above office area). 1x4 tongue and groove, finish or No. 1 grade VG (vertical grain) Douglas Fir boards with transparent finish. All wood ceilings shall be installed over 1 x 3 strapping @ 12" on center.

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Stair ST1 (lower level to floor 1): Provide new stair, handrail and guardrail per the following. Treads a thick bamboo with Amber transparent finish; Bamboo shall be Plyboo amber prefinished, edge grain, by S approved equal. Guardrail shall be 1 ½" x 1 ½", finish or No. 1 grade VG Douglas Fir boards with transp on center. Handrail shall be 1 ½" diameter, finish or No. 1 grade VG Douglas Fir, fastened to vertical wo with stainless steel wall brackets by Julius Blum or approved equal.

Stair ST2 (floor 1 to floor 2): Provide new stair treads, risers and handrail as required to extend existing stair and railing as shown on first floor plan A101. Intent is to match dimension, material and finish of existing stair and railing to remain.

Provide custom wall paneling at Bath 008, Master Bath 202 and Bath 302 per the following. Provide 2" x ¾" solid Mahogany battens, clear heartwood, over ¾" plywood with solid mahogany veneer, with transparent finish. See detail 15/A502 for additional information.

Provide custom interior doors at Master Bath 202 per the following. Provide 2" x ¾" solid Mahogany battens, clear heartwood with transparent finish, over ¾" sanded acrylic (3Form or equal). See detail 14/A502 for additional information.

Custom exterior fence and sliding gate 101A at Entry Patio 101 is by owner, but work shall be coordinated by GC. Custom gate shall be constructed using clear Western Red Cedar or approved equal and painted to match trim color on house. Provide custom square lattice infill panel to match existing lattice under Entry Porch 102 (see photo 4/A201).

Custom exterior fence along edge of property is by owner, but work shall be coordinated by GC. Remove existing fence along property line and prep for new fence by owner. New fence is intended to match existing fence.

Provide custom exterior swing gate 011A at Outdoor Storage 011. Custom gate shall be constructed using siding type "C" on both sides over pressure treated wood lumber. Provide heavy duty pivot hinge and stainless steel latch / lock.

Interior Architectural Woodwork – 06 40 00

Provide custom millwork in Mudroom 002, Multiple Closets, Bath 008, Mudroom 103, Breakfast Room 104, Kitchen 105, Dining Room 106, Master Bath 202, Walk-in Closet 203 and Bath 302, and as indicated on floor plans and interior elevations.

All grading for Interior Architectural Woodwork shall follow AWI Architectural Woodwork Standards. All solid wood trim, wood cabinetry and wood paneling shall be Premium Grade.

Provide custom countertops and backsplash/panel in Bath 008, Breakfast Room 104, Kitchen 105, Master Bath 202 and Bath 302 per the following:

- **Bath 008 & Bath 302**: Provide +/-1" thick, 100% recycled glass countertop over custom vanity and at existing window sill (verify size in field), with slightly eased edges. Provide pricing for the following two options.
  1. Bio-Glass by Coverings Etc, 800-720-7814. Color to be Oriental Jade Natural.
  2. Glacier Glass by Form Function Custom LLC, 978-432-1093. Color to be Jade with polished top surface and edges.
- **Breakfast Room 104 & Kitchen 105**: Provide 2" thick concrete countertops, typical. Color to be determined by owner, architect and interior designer during construction. Provide two integral concrete sinks with integral drain boards as shown on 1/A101. Provide pricing from Scott Chasse at Stone Craft, Gorham, Maine, (207)-591-7711.
- **Kitchen 105**: Provide +/- 5/8" thick, 100% recycled glass panel/backsplash above countertop and below wall cabinet at Kitchen 105 as shown on elevation 3/A501. See above (Bath 008 & Bath 302) for additional info.
- **Kitchen 105**: Provide Satin stainless steel panel, +/- 1/16" thick, above stove/range up to ceiling as shown on elevation 3/A501.

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- **Kitchen 105**: Provide 2" thick bamboo butcher-block countertop, with end grain facing up surface as shown on A101 and 3/A501.
- **Master Bath 202 & Shower 205**: Provide 2" thick concrete countertop over custom vanit seat. Color to be determined by owner, architect and interior designer during construction. for additional information. Provide pricing from Scott Chasse at Stone Craft, Gorham, Maine, (207)-591-7711.

Provide custom millwork, cabinetry and shelving in Mudroom 002, Bath 008, Mudroom 103, Breakfast Room 104, Kitchen 105, Master Bath 202, Walk-in Closet 203 and Bath 302 per the following:

- All cabinetry, open storage cubbies and shelving shall be custom built using bamboo architectural plywood with transparent finish to match the following criteria.
  a. Bamboo architectural plywood shall be ¾" typical, amber edge grain, 3 ply, by Smith & Fong Plyboo.
  b. Exposed edges shall be finished to match.
  c. All doors and drawers to be full overlay.
  d. All drawers to have dovetail faces and full extension under mount self-closing glides "quiet".
  e. Typical base cabinets shall have (3) sliding drawers behind swing door unless noted otherwise. Interior drawers shall have 1" x 4" cutout in drawer front for pull.
  f. All boxes for drawers and cabinets shall be built using Baltic birch plywood "europly" with exposed edges sealed. All cabinet doors, drawer fronts, side panels, open cabinets and storage boxes, etc. that are exposed to view shall be constructed using bamboo architectural plywood as indicated in item A above.
- Drawer cabinet pulls shall be item 221-C, satin stainless steel finish, +/- 8" wide typical, by Linnea Architectural Hardware. Install drawer pulls flush with top of drawer front and centered.
- Door cabinet pulls shall be item 221-E, satin stainless steel finish, +/- 3" tall typical (unless noted otherwise), by Linnea Architectural Hardware. Install door pulls on vertical edge of door, flush with top of door at base cabinet and flush with bottom of door at wall cabinets.
- Door cabinet pulls on large pantry type doors (Elevation 1 & 4/A501) shall be item 221-A, satin stainless steel finish, +/- 20" tall typical (unless noted otherwise), by Linnea Architectural Hardware. Install door pulls on vertical edge of door, centered at 3'-0" AFF.
- Coat hooks in Mudroom 002 & 103 shall be provided by owner and installed by GC.
- Provide custom pull-out racks for hanging wine glasses (stemware) in kitchen 105 (see elevation 1/A501).
- See section 11 31 00 for Residential Kitchen Appliances.
- Provide Double waste bin pull-out, Kessebohmer by Hafele, Item #502.56.880, and two waste bins by Hafele, Item #503.88.711, or equal for trash and recycling in kitchen island.
- Provide (2) base cabinet storage pull-out unit with 3 baskets, Kessebohmer by Hafele, Item #545.48.862. Install one under each kitchen sink.
- Top of vanity countertop shall be installed at 34" above finished floor, typical.
- Provide drawer dividers in kitchen drawers as shown on A501.
- Provide pull-out drawer/door with large custom hamper in Walk-In Closet 203 as shown on elevation 6/A502.
- Provide open shelving recessed in existing niche (old pass-thru window between kitchen and butlers pantry) in existing wall between kitchen countertop surface and office desk surface. Provide adjustable shelves.
- Provide magnetic child safety locks on all doors and drawers at base cabinets thru-out (except at Bath 008 & 302). Provide submittal for review by owner & Architect prior to purchase and install.

Provide five 12" deep shelves on heavy duty standards and brackets at Closet 003 and 004. Shelves shall be birch veneer on ¾" plywood. Provide blocking in wall as required.

Provide 14" deep shelf with closet rod below at closet 007. Shelf shall be birch veneer on ¾" plywood with 1 x 2 solid maple nosing. Closet rods to be 1-1/4" diameter brushed stainless steel rods with stainless steel escutcheons on either end. Provide blocking in wall as required.

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Dampproofing – 07 10 00

Provide cold-applied asphalt dampproofing at exterior face of lower level foundation walls under the addi as manufactured by Karnak, Celotex, or approved equal. Install in strict conformance with manufacturer

Thermal Insulation – 07 21 00

Provide 4" rigid XPS insulation, 2 layers of 2" rigid with seams staggered, taped and sealed, under new floor slabs.

Provide 1 ½" rigid XPS insulation, taped and sealed, between 2x2 sleepers at existing and new concrete slab on grade in the lower level (basement), see A301.

Provide 3 ½" rigid XPS insulation, taped and sealed at interior face of concrete foundation walls at lower level (basement), see A301.

Provide minimum 3 1/2" of dense packed blown-in cellulose insulation or minimum 3 1/2" acoustical batt insulation at new interior walls and floors of all bathrooms and bedrooms.

Provide minimum 7" of blown-in dense packed cellulose insulation at all exterior walls. Insulation to be NU.WOOL cellulose Insulation, CEL-PAK cellulose Insulation, or approved equal. Frame corners and intersecting walls to provide maximum insulation coverage.

Provide Closed Cell spray-foam insulation within floor and ceiling assembly around any and all voids between framing members and door and window rough openings. See A301 for additional information and locations. Provide minimum 5" Closed Cell spray-foam insulation at ceiling / roof cavity above Breakfast Room 104.

Provide Tapered rigid XPS insulation, minimum 2", slope ¼" per 1'-0", at new roof above Breakfast Room 105, see A301.

Below Grade Vapor Retarder – 07 26 16

Provide Stego Wrap, 10 mil thick vapor retarder by Stego Industries LLC or approved equal.

Vapor retarder system shall be installed continuous under all slabs in strict accordance with the manufacturer's printed instructions. Wrap vapor retarder up vertical face of wall and extend over top of wall, to outside face and seal for capillary break. Tape all seams as recommended by manufacturer.

Air Barriers – 07 27 00

Provide integral air barrier over sheathing by ZIP System, at wall and roof sheathing. Install in accordance with manufacturers instructions and recommendations. Provide ZIP System tape for all edges, seams, intersections and at all window and door head, jamb and sill.

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Shingles and Shakes (asphalt shingles) – 07 31 00

Provide asphalt shingles, UL class 'A' "Architectural Grade", mineral-surfaced, self-sealing, laminated mu construction, fiberglass based. Shingle to comply with ASTM D 3018, Type 1 and ASTM D3161, Type 1 bearing UL Class 'A' external fire exposure label and UL 'Wind Resistant' label.

Exposure: 7 1/2",
Warranty: 50 year
Color: To be selected by owner and Architect from manufacturer's standard colors (Intent is to match existing)

Provide 16 oz. aluminum drip edge at roof edges as shown on building section A301. Color to be selected by owner and Architect from manufacturer's standard colors.

Provide 16 oz. aluminum sheet flashing @ all intersections with vertical walls, e.g. @ base of chimney, intersection of low roofs with exterior wall of house, etc. Maximum 2" exposure below siding allowed.

Provide minimum 40 mil. Self-adhesive rubberized asphalt membrane equal to ICE and WATER SHIELD by W. R. Grace Co., at all exterior window and door heads and sills, all roof to wall intersections and over entire surface at existing roof above Mudroom 103 & Breakfast 104.

Provide vent pipe flashing with standard flexible plastic devices to provide tight fit over pipe and positive drainage of water over shingles. Color to match roofing.

Modular Vegetative Green Roof System – 07 33 63

Furnish all labor, materials, tools, and equipment to unload, hoist and install GreenGrid® Vegetative Roofing System provided by Weston Solutions, Inc. (WESTON). The GreenGrid® System shall include modules, growth media and plants as specified on drawings or as directed by the Owner/Architect. This work shall also include installation of edge treatments, decorative pavers, decorative ballast, slip-sheet, and an irrigation system, if specified.

Submit an installation plan including but not limited to: waterproofing quality control, system delivery, and maintenance plan until GreenGrid® modular vegetative roof acceptance.

Submit manufacturer's shop drawings and product data for review by the Architect before ordering.

Provide GreenGrid® recommended and or approved plant mixes consisting of highly drought resistant grounds covers, conventional perennials and grasses, native forbs and grasses appropriate for the specific project system depth and details.

Provide GreenGrid® Modules. Size (L x W) is 2.0 ft. x 2.0 ft. (60.96 cm x 60.96 cm) Module outer diameter (OD) is ± ⅛ in [0.318 cm]), 4.25 inch depth (10.80 cm).

GreenGrid® Pre-Vegetated Modules: GreenGrid® modules shall be filled with plant species desired by the client and approved by WESTON/GreenGrid as suitable for vegetative roof application specific to this project and location. Plants shall be grown to various levels of maturity prior to delivery and installation.

Provide IPE wood deck pavers by GreenGrid® and as determined by owner. Standard Paver size is 2 ft. by 2 ft. (60.96 cm x 60.96 cm), and 1.5-inches (3.81 cm) in depth.

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Provide GreenGrid® Standard Edge Treatment: 0.040 inch (0.102 cm) coated or brushed aluminum (rec
24-gauge coated steel (recycled content 28 to 35%) for placement on viewable edge of modules. Color TE

Perform module installation only after appropriate waterproofing system, with the proper taper to allow f
installed, inspected, and approved. It is strongly recommended that these areas be leak tested prior to module installation to confirm water-tightness. Thoroughly sweep away all debris, foreign material, etc. from the waterproofing surface. Refer to Waterproofing System manufactures' recommendation toward acceptable slip-sheet protection fabric.

Installation contractor shall maintain the GreenGrid® modules for a period of at least 30 days after completion prior to acceptance from building owner. See manufacturer's requirements for 30-day maintenance period. Upon completion of the 30-day maintenance period, a written maintenance plan for the specific vegetative roof system shall be submitted to the building owner. A GreenGrid® Representative will be made available to go over this document.

Wood Siding – 07 46 23

Provide the following siding, coordinate location and quantity with building elevations, plans and details.

- **Siding Type "A" –** Existing beveled clapboard siding to remain, +/- 4" exposure, verify in field. Patch and replace existing siding as required for new work and as required to maintain smooth, uniform surface & finish. Use ½" x 6" Western Red Cedar, clear vertical grain bevel siding. Match existing exposure/coursing. Match existing finish.
- **Siding Type "B" –** ¾" x 4" shiplap siding installed horizontally. Align coursing with siding type "A". Provide 3½" exposure on face and ½" reveal, typical (see image below for intent). Provide only Clear Heartwood, Thermally Modified Yellow Poplar Lumber with solid paint finish, at exterior as described below and in the Construction Drawings. All Yellow Poplar lumber shall be free from sound, unsound and milling defects on all four faces and all four edges. Thermally modified lumber shall be Cambia by Northland Forest Products (Kingston, NH, 866-960-9663) or approved equal.
- **Siding Type "C" –** ¾" x 4" shiplap siding installed vertically. Match siding type "B".

Provide back priming at all siding and trim materials before installing.

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Provide Home Slicker, Sidewall Rainscreen by Benjamin Obdyke Incorporated, behind all siding. Follov instructions and recommendations during installation. Leave ¼" gap at top and bottom of siding for proj slicker screen (window screen material) over exposed ends as required to prevent insect and dirt build-up.

Membrane Roofing – 07 50 00

Provide EPDM membrane roofing by Carlisle or equal, over low-pitched roof at Breakfast Room 104 and under vegetated roof trays. Install layer of geotextile fabric or additiona l layer of EPDM roofing as required to maintain warranty. Install Tapered rigid XPS insulation, minimum 2", slope ¼" per 1'-0", as required to drain. Follow manufacturers written instructions and recommendations. Lap membrane roofing over metal drip edge at fascia, typical, per manufacturers Instructions.

Joint Sealant / Tape Flashing – 07 90 00

Provide gasketing (Sill Seal) at all sill plates.

Provide SIGA WIGLUV 230 permeable window flashing tape.

Provide flashing tape sill pan, SIGA WIGLUV 230 permeable window flashing tape. Turn up behind window and door to form end dams.

Doors and Frames – 08 10 00

All interior and exterior doors and frames shall be Premium grade per AWI Architectural Woodwork Standards.

Provide solid core exterior wood door with triple glazed tempered glass panel at exterior swing doors as shown on the drawings and window & door schedule. Provide semi-solid stain finish (color TBD by Owner/Architect) on exterior and transparent finish on interior. Exterior doors are by Window and Door manufacturer.

Provide exterior screen door as shown on the drawings. Provide solid wood door stile and rail with semi-solid stain finish (color TBD by Owner/Architect). Material and finish shall match windows and lift and slide doors (See Window and Door Schedule). Provide permanent black (Improved visibility) fiberglass screens, Full mortised latch set with brushed stainless steel finish and (3) heavy duty stainless steel invisible spring closer hinges, or approved equal. Invisible closer hinges are model #2181C by SOSS Door Hardware. Screen doors and hardware shall be by window and door manufacturer.

Provide 3 panel lift and slide door by window and door manufacturer See Window and Door Schedule), with multi-point locks, Low-E w/ argon insulating glass, and triple glazing. Refer to elevations (A201) and door and window schedule (A601) for additional information.

Provide the following details unless indicated otherwise in drawings:

- Provide doors with tempered glass as required by codes.
- Casing: to be installed by general contractor in field.
- Jamb extensions: see Finish Carpentry 06 20 00.

Submit manufacturer's shop drawings for review by the Architect before ordering doors.

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Provide 1-3/4" solid core wood, Interior Douglas fir (vertical grain) door with single flat panel and clear f drawings and door schedule. Door is Shaker Style door, Model 720FP by Simpson or approved equal.

Provide 1-3/4" solid core wood, Interior Mahogany door with single tempered glass panel and clear finisl drawings and door schedule. Door shall be provided by exterior window and door manufacturer to matcl wood and finish on inside face of exterior windows and doors.

Provide custom wood doors at new opening between kitchen and dining room (door 106A), or salvage existing doors in basement and modify to fit new opening. Intent is that new doors shall match existing door (design, wood, color, etc) being removed and existing doors in the room which will remain.

Provide frameless glass door & sidelite, hinges, and hardware for Master Bath 202 and Bath 302, as shown on the interior elevation drawings and floor plans. Provide brushed stainless steel hardware and 12" tall stainless steel handle.

Provide frameless glass door & sidelite, hinges, and hardware as required to seal off shower for steam room in Bath 008, as shown on the interior elevation drawings and floor plans. Glazing shall extend full-height, floor to ceiling and be sealed at top, bottom and sides. Provide brushed stainless steel hardware and 12" tall stainless steel handle.

Windows – 08 50 00

For exterior windows and doors see Window and Door Schedule, General window and door notes and Window specifications listed on sheet A601. Exterior windows and doors shall be provided by Linwood Windows and Doors, 3 Gordon Drive, Rockland, ME 04841. Contact Richard Cohen at 207-701-1508.

A few decisions are list below which supersede the notes listed on sheet A601.

- Wood Species: Mahogany.
- Exterior Cladding: Wood (no aluminum cladding).
- Exterior Color: Similar to "driftwood gray", semi-solid stain. Provide samples for review and approval by Owner and Architect.
- Interior Color: Natural mahogany with a satin finish.
- Hardware: Oil rubbed bronze.

Submit manufacturer's shop drawings for review by the Architect before ordering windows.

Provide single pane glazed opening between Mudroom 103 and kitchen 105 as shown on the floor plan (A101), Intent is for glazed opening / window to match Window type "B" in Mudroom 103, size, wood and finish.

Provide frosted film for privacy, on existing window in Bath 008.

Door Hardware – 08 71 00

Provide finish hardware for all doors. All hardware to be oil rubbed bronze (US10B) unless noted otherwise. Install all doors in strict conformance with manufacturer's recommendations.

Note: Verify all keying requirements with owner before installation of all locksets.

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Provide the following hardware sets:

- H1 – Full mortised latch set with brushed stainless steel finish and (3) heavy duty spring hi door specification under Doors and Frames (section 08 10 00) above. Verify ha manufacturer.
- H2 – Entry Lockset **(by window manufacturer)**
  Door Stop: Sugatsune door stop DSD-02/L, Stainless Steel, 1 per door, floor mount
- H3 – Passage Set
  Knob: Emtek, Round Knob, forged brass (5111ROU), 1 pair
  Rose: Emtek, Neos Rosette, forged brass (5111ROU), 1 pair
  Passage Set: Emtek (see above), 1 each
  Hinge: Hager 700, 4 ½ x 4 ½, 3-knuckle, full mortise, flat button tips & matching plug, 1 ½ pair
  Door Stop: Sugatsune door stop DSD-02/L, Stainless Steel, 1 per door, floor mount
- H4 – Pocket Door Privacy Set
  Pocket Door Lock Trim: Linnea, PL160-Pocket Door Lock Trim, ORB-Oregon Bronze Finish
  Pocket Door Lock: Linnea, PLM4120-Mortice Lock, ORB-Oregon Bronze Finish
  Edge Pull: Linnea, EP200-Edge Pull, ORB-Oregon Bronze Finish, 1 per door
  Sliding door fittings and Track: Hafele Hawa Junior 80/B 940.80.002, 1 set
  Upper track: Hafele 407.56.886, clear anodized aluminum
  Guide rail: Hafele 940.41.130, black plastic, 1 each door
  Cover Cap: Hafele 940.80.020, 1 each
- H5 – Exterior Lock for Custom Door / Gate
  Handle / Pull: Linnea, 6200 or approved equal, 2 per door, SSS-Satin Stainless Steel
  Pivot Hinge: Heavy Duty Pivot Hinge, Stainless Steel
  Keyed Deadbolt: Emtek S50003, Square Deadbolt, Stainless Steel
- H6 – Exterior Hardware for Custom Sliding Gate
  Handle / Pull: Linnea, 6200 or approved equal, 2 per door, SSS-Satin Stainless Steel
  Door Lock: Stainless Steel
  Sliding door fittings and Track: Barn Door Hardware TBD
- H7 – Pocket Door Passage Set
  Flush Pull: Emtek, Round Flush Pull, 2211, both sides
  Edge Pull: Emtek, Edge Pull, 2221, 1 per door
  Sliding door fittings and Track: Hafele Hawa Junior 80/B 940.80.002, 1 set
  Upper track: Hafele 407.56.886, clear anodized aluminum
  Guide rail: Hafele 940.41.130, black plastic, 1 each door
  Cover Cap: Hafele 940.80.020, 1 each
- H8 – Passage Set (Flush)
  Knob: Emtek, Round Knob, forged brass (5111ROU), 1 pair
  Rose: Emtek, Neos Rosette, forged brass (5111ROU), 1 pair
  Passage Set: Emtek (see above), 1 each
  Hinge: SOSS #218, 4 total, concealed
  Door Stop: Sugatsune door stop DSD-02/L, Stainless Steel, 1 per door, floor mount

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Gypsum Board – 09 29 00

Provide 1/2" gypsum drywall (ASTM C 36) at interior walls, partitions, and ceilings, as called for on the

Provide gypsum drywall accessory materials of type and grade recommended by the manufacturer of the gypsum drywall panels as required by conditions.

Provide screw type as recommended by panel manufacturer.

Provide manufacturer's standard metal trim accessories, beaded type with face flanges for concealment in joint compound. Utilize corner beads at external corners. Utilize edge trim where edge of gypsum board would otherwise be exposed or semi-exposed; L-type for tight abutment at edges, otherwise U-type except special kerf-type where kerf is provided in adjoining work.

Apply joint tape and joint compound at joints, both directions, between gypsum boards. Apply compound at accessory flanges, penetrations, fastener heads and surface defects. Except as otherwise specified, apply compound in 2 or 3 coats (plus pre-filling of cracks where recommended by manufacturer); sand or sponge after last coat as recommended by manufacturer.

Provide 1/2" water resistant gypsum drywall (ASTM C 630) at bathrooms. Gypsum cement based products are not acceptable.

Provide 1/2" glass mesh mortar backer board (wonderboard) at shower walls.

Provide only stainless steel or high tensile strength aluminum fasteners.

Provide 6-mil polyethylene film waterproofing membrane behind wonderboard. Seal at all laps.
Treat joints and fastener heads in water-resistant face and cementitious tile backer boards using water resistant joint compound to comply with panel and water resistant joint compound manufacturer's directions. Use products by U.S. Gypsum, or equal.
Tape, finish, and sand in strict conformance with manufacturer's specifications.

Provide at the following locations: where drywall would normally be concealed from view in the finished work and surfaces to receive mechanically secured or adhesive applied finishes.
Level 3: tape at joints and interior angles embedded in joint compound; pre-fill of cracks if recommended by compound manufacturer; two layers of joint compound applied over tape, fastener heads and accessories, sanded or sponged as required after final two coats; surface free of excess joint compound, tool marks and ridges.

Provide at the following locations: all gypsum drywall exposed to view and to receive paint or similar finishes. Level 4: tape at joint and interior angles embedded in joint compound; pre-fill of cracks if recommended by compound manufacturer; three separate layers of joint compound applied over tape, fastener heads and accessories, sanded or sponged as required after final two coats; surface free of excess joint compound, tool marks and ridges.

Floor and Wall Tile – 09 30 00

Includes ceramic tile, porcelain tile and stone tile. Provide only mildew-resistant silicone material.

Note: Contractor to include cost of purchase, delivery, and installation of all wall and floor tiles throughout. Use actual prices, not allowances.

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Provide all leveling and setting materials, adhesive, grouting materials and sealers including, but not Limited to the following:

A. Cement mortar and grout: ANSI A108.1
B. Dry-set mortar: ANSI A118.1
C. Latex-Portland cement mortar: ANSI A118.4
D. Organic tile adhesive: ANSI A 136.1; Type I water-resistant only.
E. Epoxy mortar: ANSI A118.3, TCA formula AAR-II
F. Latex grout: Factory blend of portland cement and latex additives.
G. Single-component sealants: ASTM C 920, Type S, Grade NS (NT for use in joints in non-traffic areas).

Provide installation and clean-up tile in accordance with applicable ANSI standards and manufacturers Instructions. Install in conformance with TCA's "Handbook for Ceramic Tile Installation", latest edition.

Provide the following floor tile, coordinate location and quantity with floor plans and finish schedule.

- **FL1 –** 12" x 24" x 1 ½" bluestone tile pavers with flamed finish. Install over sand bed and geotextile fabric. Install tiles in running bond with 6" offset.
- **FL2 –** 12" x 24" x 3/8" bluestone tiles with flamed finish. Install on mudset. Install tiles in running bond with 6" offset.
- **FL4 –** Porcelain floor tiles to be Royal Mosa, Romain-Terra Collection, 216RL – Brazilian Anthracite Textured. Pattern shall be TS-2 (40% - 4"x24", 60% - 6" x 24") at Bath 008 and Bath 302. Pattern shall be TS-8 (23% - 2" x 24", 43% - 4" x 24", 34% - 6" x 24") at Master Bath 202, Walk-in Closet 203, Toilet 204 and Shower 205. Grout color shall match tile. A sample is available in the architect's office for review, if necessary.
- **FL6** - Porcelain floor tiles to be Royal Mosa, Romain-Terra Collection, 216RL – Brazilian Anthracite Textured, Pattern TS-2 (40% - 4"x24", 60% - 6" x 24"). Grout color shall match tile. A sample is available in the architect's office for review, if necessary.

Provide the following Wall tile, coordinate location and quantity with floor plans, interior elevations and finish schedule.

- **WL4 –** Glass wall tiles to be Linear (BG1), color to be Reed, Textured surface, Glass Tile by Island Stone. Grout color shall be white. Install vertically and align with tiles on floor as best possible.
- **WL4 (Bath 206)** – 4" x 12" Porcelain wall tiles to be Royal Mosa, 10thirty Collection, 13010 – White Matt, or approved equal. Grout color shall match tile. A sample is available in the architect's office for review, if necessary.

Provide 12" square interlocking tile, Level Pebble (FP1), color to be PC-Medan Charcoal/Bali Black, Pebble Tile by Island Stone at shower floor Bath 008 and Bath 302. Grout to match tile color. A sample is available in the architect's office for review, if necessary. Shower floor to be mudset over membrane waterproofing or copper pan, as required.

Provide custom concrete slab in bath 206, under tub and toilet. New slab shall align with existing tile flooring. Coordinate extent with Owner, Architect and Interior Designer.

Wood Flooring – 09 64 00

Provide T&G wood flooring, end matched, with manufacturer's standard channeling on back face of each strip. Match existing wood species, direction and finish. See architectural drawings and finish schedule for extent.

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Provide standard random lengths complying with applicable grading rules. Do not proceed with installat been enclosed and are at the approximate humidity condition planned for occupancy. Condition wood fc (5) days prior to start of installation. At time of delivery, limit average moisture content of wood flooring maximum for any piece. At time of installation, all flooring must be between 8 and 12% moisture conter to concrete and/or plywood underlayment, in accordance with NOFMA recommendations.

Provide expansion space at walls and other obstructions and terminations of flooring, not less than 3/8" unless otherwise shown on the drawings. Lightly machine sand installed unfinished flooring to remove offsets and non-level conditions, ridges, cups, and marks which would be visible after finishing.

Provide finishing of wood floors in the field. Provide three coats clear, polyurethane coating (Benwood Polyurethane Finish Low Luster, or approved equal). Prepare finished sample 6" x 12" for review by the Architect before proceeding with staining and finishing of wood flooring. Burnish slightly, vacuum and tack between coats. Burnish final coat slightly. Protect all wood flooring and stair treads and risers as required throughout construction and until final occupancy or as otherwise directed by the Architect.

Provide wood threshold/transitions under doors as required by floor material changes.

Resilient Athletic Flooring / Walk-Off Matt – 09 65 66

Provide 8mm Everlast Sports Surfacing with NIKE Grind (Flooring Type FL3), a division of Ecore Commercial Flooring. Color shall be Zone Three, EL24Goin' for Gold/Grey. Coordinate location and quantity with floor plans and finish schedule. Product can be purchased thru Thomas Connors, ProSpec Solutions Inc. Westboro, MA, 781-589-1985 (cell).

Provide Cocoa Mat, with natural coco fibers and vinyl backing adjacent to and centered on entry door in mudroom 002 and Mudroom 103. Set cocoa mat flush with adjacent porcelain floor tile. There should be no cut floor tiles, only actual sizes. Size shall be approximately 3'-0" x 3'-0" at Mudroom 103 and 6'-0" x 3'-0" at Mudroom 002; Coordinate with layout of adjacent porcelain tile. Color to be Light Grey.

Painting and Coating – 09 90 00

Provide prime coat and at least two finish coats of paint, sanded between coats , to interior gypsum board wall surfaces wood window and door casings and base moldings.

- Ceilings: flat finish.
- Walls: eggshell finish
- Trim: semi-gloss finish

Use only best quality professional paint products by ICI, Benjamin Moore, Pratt and Lambert, or approved equal. Four interior colors may be selected.

Provide at least two finish coats of transparent finish, sanded between coats, to wood ceiling boards (Douglas fir) and wood wall paneling (Mahogany) unless noted otherwise on drawings.

Provide all yellow poplar board siding & trim boards by Cambia with two coats of Sikkens Log and Siding finish, applied as recommended by manufacturer. Back prime all siding, soffit boards, and exterior trim boards before installation.

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Provide all exterior IPE decking, guardrails, handrails and ceilings with two coats of transparent wood p stain) by Sikkens or approved equal, applied as recommended by manufacturer.

Install all paint products in strict conformance with manufacturer's recommendations. Prep all surfaces t clear finishes as recommended by product manufacturers.

Toilet, Bath and Laundry Accessories – 10 28 00

See Allowances / Alternates section 01 20 00 for Allowance.

Provide anchors, bolts, and other necessary anchorages, and attach accessories securely to walls and partitions in locations as shown or directed by Owner/Architect.

Residential Appliances – 11 31 00

Provide pricing for the following appliances and options (all appliances shall be purchased and Installed by the General Contractor):

- Refrigerator – 36" wide, Legacy Series by AGA, Model: AMLFDR20, Ivory
- Duel Fuel Range - Legacy Series by AGA, natural gas, model: Legacy 36" ALEG-36-DF, Ivory, classic handle
- Hood – legacy range vent hood by AGA, Model: AMCHD 36", Ivory. Vent straight up thru floor 2, 3 and roof at location where existing chimney was removed.
- Dishwasher – Legacy Series by AGA, Model: ALTTDW, Ivory.
- Wine Cooler – 24" Marvel Dual Zone Wine Cellar, Model # 6SDZE-BS-G, Ivory.
- Garbage Disposal – Provide Evolution Essential®, Evolution Series®, by Insinkerater. Locate under kitchen sink adjacent to exterior wall (not in island).
- Outdoor Grill – Viking Outdoor Ultra-Premium 100 Series Gas Grill, natural gas hook-up, 36", installed on exterior built-up wall. See A101 for location. Model: VGBQ 13603, Stainless Steel.

G.C. shall provide full product literature for Owner and Architect review and sign-off prior to purchasing appliances.

Plumbing – 22 00 00

Provide complete plumbing system as required to make the system fully operable and in full compliance with all code and other requirements. Work includes, but is not limited to, the following:

A. Connections to existing natural gas on-site. Conform to all requirements of authorities having jurisdiction.
B. Sanitary drainage system to connect to existing septic system.
C. Hot and cold water systems as required to connect to existing supply.
D. Plumbing fixtures as indicated.
E. Plumbing connections to all fixtures.
F. All piping, fittings, connections, accessories and incidental items necessary to complete the intended work and to assure full compliance with all code and other requirements.
G. Radon Piping – Connect to underslab piping per Maine Model Radon Standard (2006 ASTM 1465). This work is by owner, coordinated by GC.
H. Solar Hot Water system, see Alternates – 01 20 00.

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It is not the intent of Drawings or Specifications to detail or indicate all piping, fittings, hangers, or other
for complete installation. It is the Contractors responsibility to provide all items necessary for first class ir
compliance with all Code and other requirements.

Provide soil and waste pipe Schedule 40 PVC. Note: Provide only dark grey or black for vent pipes abov

Provide Type K Domestic water piping for all buried piping, installed with no joints.

Provide gas piping conforming to most stringent applicable AGA and Code requirements.

Provide clean-outs for all soil and waste piping with convenient access.

Provide all necessary valves, etc. as required by Code and specifications. No fittings shall be buried.

All tubing and piping shall be pressure tested before, during and after the concrete pour.

Provide pipe hangers and supports designed for purpose and of type and capacity required for particular location.

Provide sleeves for all piping penetrating concrete.

Provide all plumbing fixtures, sinks, faucets, shower components, etc. as required per the floor plans. Provide all connections and accessories required for complete installation.

Install hook-ups and connections for all appliances, in Kitchen and gas grill on Porch/Upper Deck 108.

Provide three exterior hose bibs with cold weather valves to be located by Owner & Architect.

Provide hard drawn Type L Domestic water piping for locations not buried.

Provide shut off valves for hot and cold water supplies to each fixture.

Provide chrome-plated valves, drains, piping, and escutcheon plates, for water closets and within vanities and cabinets where applicable.

Provide traps for all fixtures as required by code. Trap each fixture separately, keeping all trap screws below waterline. Vent each trap.

Pex tubing may be used in lieu of copper piping were allowed by code.

Provide Dow Styrofoam SM, 2 inches thick, minimum for all vertically oriented below grade insulation.

GC shall coordinate installation of passive radon reduction system. Provide single vent to roof. Coordinate location of vertical vent pipe with interior wall layout and existing plumbing shaft. Radon pipe size and location shall be installed per 2009 Maine Uniform Building and Energy Code. Installed by owner outside of this scope of work, coordinated by GC.

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Residential Plumbing Fixtures – 22 41 00

Purchase and Install the following Fixtures (Provide all accessories and components required for a comple

- **Toilet** (Typical Throughout) – Cube Invisi™ Series II Wall Hung Water Closet by Caroma, featuring 1.28/0.8 gpf dual flush system. Provide Cube Easy Close Seat (white). Provide wall hung carrier and in-wall tank, model #237061, and dual flush actuator Model # Invisi™ Series II Metal Rectangular Dual Flush Plate & Buttons (Satin finish).
- **Bathroom Sink Faucet** (Typical Throughout) – Kohler Devonshire widespread sink faucet with water saving aerator. Model: K-394-4-BN (brushed nickel).
- **Shower Thermostatic Valve & Trim** (Typical Throughout) – Stacked valve trim, Stillness, Model #K-T10941-4-BN (brushed nickel), by Kohler, with valve, Model #K-680-KS. Provide (2) sets of controls at Shower 205 in Master Bathroom.
- **Showerhead** (Typical Throughout) – 1.75 gpm multifunction showerhead, Purist, Model #K-997-BN (brushed nickel), with OBLO shower arm, Model #1020007-BN (brushed nickel) and flange/escutcheon, Model #1091248-BN, by Kohler. Provide (2) shower heads at Shower 205 in Master Bathroom.
- **Vanity at bath 206** – Vero washbasin, model # 032912..30, with Vero metal console (legs), +/ 49" wide, White porcelain with satin metal legs, by Duravit. Provide Metal console height adjustable +2", for furniture washbasin # 032912 (model # 003073). Provide Towel rail square tube 14 mm, chrome, for furniture washbasin # 032912 (model # 003034). Provide Design Siphon, model # 005036. GC shall confirm width will fit existing space prior to ordering.
- **Master Bath Sink** – Under-counter vanity basin, Bathroom Foster, Model # 033643-00 by Duravit, Color is 00 White Alpin.
- **Linear Channel Shower Drain** (at Master bath Shower 205) – Stainless Steel recessed channel shower drain with Tile grate design, QuARTz by ACO. Length to be determined by GC.
- **Kitchen Sink Faucet** – Kohler Cruette single-handle pull-down kitchen faucet, Model: K-R780-VS (Vibrant Stainless). Provide Low flow kit (model # 1167289) – reduces maximum flow to 1.5 gpm (5.7 L) at 60 psi (4.1 bar).
- **Water Filter / Beverage Faucet** – Zuvo Beverage Faucet Kit | Moorea Brushed Nickel, MODEL ZBF15BN, Or approved equal.
- **Steam Shower Unit** – Install in Bath 008

G.C. shall provide full product literature for owner and Architect review and sign-off prior to purchasing plumbing fixtures.

Heating System and Equipment – 23 50 00

Work includes, but is not limited to, the following:

A. Radiant heating system throughout lower level and first floor.
B. Thermostats and low voltage control wiring.
C. Bathroom ventilation fans and ductwork.
D. Exhaust system for gas range
E. ERV (Energy Recovery Ventilation) system, see Alternates – 01 20 00.

Provide new heating zones with in floor radiant heating as outlined below. Connect to existing heating system. Contractor to submit specifications and heat loss calculations for proposed mechanical equipment and system with bid proposal, for review by the Owner. Installation to meet or exceed industry standards. Provide zone layout as follows:

Zone 1: Mudroom 002, Closet 003 and Closet 004.
Zone 2: Bath 008 and Fitness Room 005.
Zone 3: Mudroom 103, Breakfast Room 104 and Kitchen 105.

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Provide Hot water radiant flooring in wood framed floor areas listed above. Set PEX tubing in Warmboa see A302 for additional information.

Provide & Install ducted exhaust fan and hood mounted from ceiling above Kitchen cooktop.

It is not the intent of Drawings or Specifications to detail or indicate all controls, ducting, piping, wiring, fittings, hangers or other accessories necessary for complete installation. It is Contractor's responsibility to provide all items necessary for first class installation in full compliance with all Code and other requirements.

Provide Bathroom ventilation fans and ductwork and exhaust system for gas range in full compliance with ASHRAE STD 62.2.

Electrical – 26 00 00

Entire electrical scope shall be priced as part of this work. General Contractor shall coordinate schedule of this work with other trades.

Provide and Install interior and exterior light fixtures as selected and referenced in the following section (Lighting 26 50 00), refer to Electrical / lighting plans and lighting schedule for coordination. All light fixtures to be supplied and installed by electrical contractor. Type O light fixtures are to be installed in Concrete retaining walls, this work should be coordinated with concrete subcontractor.

Provide all feeders, meter boxes, isolated panel boards, branch circuit wiring, switches, receptacles, outlet boxes, plates, conduits, wire and accessories.

Provide devices and fixtures as located on plans.

Provide direct-wired connections for all appliances.

Provide hook-ups and installation for the following and additional items as indicated on the drawings: Refer to following section for additional information.

A. Gas range
B. Refrigerator
C. Dishwasher
D. Relocate existing Alarm system.
E. Vent Hood for range
F. Wine cooler

Provide and install wiring, boxes, jacks and accessories for the following and additional items as indicated on the drawings:

A. Cable TV
B. Telephones
C. Data outlets, as shown on the electrical plans, connected to cable line.
D. Security system control panels by Owner.

Provide hard-wired smoke detectors and carbon monoxide detectors per code connected to alarm system.

Provide outlet boxes in plastic or metal, except metal where ganged 3 or more.

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Provide dimmable toggle and duplex receptacles switches Decora by Lutron in white. Switch covers shall steel or similar.

Provide Ground Fault Interrupter Circuits (GFI on drawings), as indicated and in all locations as requirec

Install wiring underground for exterior lighting as shown on the Construction Drawings. Location to be coordinated on site with General Contractor, Electrical Contractor, owner, Architect and Landscape Architect prior to construction.

Provide generator, transfer box and all wiring associated with generator. Provide underground piping for propane and all associated connections required to make the generator fully functional. Generator shall be sized to accommodate all electrical systems and utilities.

Note: It is not the intent of Drawings or Specifications to detail or indicate all wiring, conduit, connections or other accessories necessary for a complete installation. It is the Contractor's responsibility to provide all items necessary for a complete first class installation in compliance with all Code and other requirements.

Provide doorbell at Entry Porch 102.

Sound system with speakers recessed in ceiling and/or wall, by owner. GC shall coordinate.

Lighting – 26 50 00

Purchase and Install the following Lighting Fixtures (Provide all accessories and components required for a complete installation):

- A – 4" RECESSED LED DOWNLIGHT, GWB CEILING – COOPER LIGHTING- H455TUNVD010-EL405830-TL400WH
- A1 – 4" RECESSED LED DOWNLIGHT, GWB CEILING – COOPER LIGHTING- H455TUNVD010-EL405830-TL402WHS
- B- LINEAR LED LIGHT – BRUCK - 138504MC/ 4-2-138520MC-P70437-24V-138510
- C- EXTERIOR WALL SCONCE – COOPER LIGHTING- ICVW1G
- D- LINEAR CLOSET LIGHT - COOPER LIGHTING- WN217R
- E- SURFACE MOUNT ADJUSTABLE FLOOD LIGHT – HKZX16-A
- F- SURFACE MOUNT CEILING LIGHT – BEGA L6637
- F1- SURFACE MOUNT CEILING LIGHT – TBD
- G- WALL WASH ART LIGHT – LIGHTOLIER – USL4-4' ULTRA
- H- 4" RECESSED LED DOWNLIGHT - COOPER LIGHTING- H455TUNVD010-EL405830-TL400SN
- H1- 4" RECESSED LED DOWNLIGHT - COOPER LIGHTING- H455TUNVD010-EL405830-TL400SNS
- J- PENDANT LIGHT – BRUCK – 222-370-MC-MP (BLACK TEXTURE)
- K- WALL SCONCE – BEGA – L8653
- L- PENDANT LIGHT - BEGA – L5252
- M- UNDER CABINET LED LIGHT – COOPER – HALO HU10
- N- EXHAUST FAN – PANASONIC - WhisperGreen FV-08VKS2 – HUMIDISTAT CONTROLLED SWITCH – GC VERIFY COORDINATION WITH DUCTING PRIOR TO ORDER
- O- RECESSED STEP LIGHT – BEGA – 2287P
- P – SURFACE MOUNT WALL SCONCE – HUBBARDTON FORGE – 30-7286-SL-20-G34
- Q- IN GROUND EXTERIOR LIGHT – TBD (UPLIGHT FOR TREE)

Electrical contractor to coordinate downlight housings required based on location (wet listed, touching insulation, etc).

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 06/26/13

Provide all lamping as required for light fixtures to be fully operational.

G.C. shall provide full product literature for owner and Architect review and sign-off prior to purchasing.

Earthwork – 31 00 00

The Contractor shall provide all site work, ledge removal, excavation, site drainage, back-filling, erosion control, etc. as required for a complete and finished project.

All trees and shrubs within the construction area shall be removed as required.

Provide erosion and sedimentation controls as required, including hay bales, stakes, and hay mulch, erosion control matting, filter fabric, and temporary seeding as required. Comply with all codes and regulations.

Provide temporary fencing and/or barricades as required to protect the excavated areas during construction. Protect existing trees to remain from physical damage. Unsuitable material, such as clay, shall be removed from the site and replaced with clean, sandy gravel or other suitable material.

Provide perimeter foundation drains around entire perimeter of new foundation and under-slab drains under slab on grade, using 4" diam. perforated PVC pipe, ANSI/ASTM D 2729. Slope @ min. 1/4" per foot. Cover with 6" crushed stone and filter fabric, Mirafi 140N, or equal. Backfill with clean, sandy gravel as required. Test lines before back filling to insure free flow. Remove obstructions, replace damaged components, and retest system until satisfactory. All pipe connections shall be glued.

Ledge removal shall be done on a time and material basis. Include unit cost per cubic yard to remove ledge in proposal. Ledge removal determination to be made with the Owner and Architect before starting, based on Contractor's estimate and opinion of probable quantities.

Exterior Improvements – 32 00 00

Provide rough grading; finish grading, loam and seed or ground covers (as called for on the floor plans) for entire area of site disturbed by construction operations. Reuse stockpiled loam wherever possible, provided it complies with specifications.

Do not remove any topsoil from the site. Bring in additional loam as required to achieve minimum 6" sandy loam or loam soil as defined by the USDA Soil Conservation Service, Soil Classification System, with a pH value range of 6.0 to 6.5.

Extent of lawn area: only as required to cover disturbed areas. Grass seed shall be a standard grade seed from the most recent year's crop, dry and free of mold. Mixture as follows:

Pennlawn Creeping, Red Fescue	50%
Kentucky 31, Tall Fescue	30%
Common Perennial, Ryegrass	10%
Red Top	10%

Utilities – 33 00 00 - Not Applicable

END OF SPECIFICATIONS