

THE STATE OF CONNECTICUT  
DEPARTMENT OF HOUSING (DOH)  
COMMUNITY DEVELOPMENT BLOCK GRANT DISASTER RECOVERY PROGRAM (CDBG-DR)

OWNER OCCUPIED REHABILITATION AND REBUILDING PROGRAM (OORR)

**HAZARDOUS MATERIAL ABATEMENT  
NEW FOUNDATIONS, ADDITION  
ELEVATE EXISTING RESIDENCE  
CAPOZZO RESIDENCE  
60 COSEY BEACH AVENUE  
EAST HAVEN, CONNECTICUT 06512**

## **ADDENDUM NO. 1129-2**

Date: August 17, 2015

Application No. 1129  
LAA Project No. 1524-23

This Addendum forms part of the Contract Documents and amends the original Bidding Documents dated July 22, 2015, only in the following particulars. Original provisions of the Contract Documents shall remain in effect except as specifically amended by this Addendum.

Bidders shall consider amendments and the resulting cost differences shall be included in all bids.

Acknowledge receipt of this Addendum in the space provided on the Bid Proposal Form. Failure to do so may subject the bidder to disqualification.

### **A. SPECIFICATIONS**

The following specification sections are issued with this Addendum:

1. Section 222326 – Plumbing HVAC Electrical General Requirements
2. Section 224000 – Plumbing Performance Specification
3. Section 230000 – HVAC Performance Specification
4. Section 260000 – Electrical Performance Specification

Revise page numbers in Table of Contents to suit these sections.

### **B. DRAWINGS**

1. Dwg. AD-101-Demolition Keyed Notes, revise note D19 to read: **Existing floor structure to remain and be elevated. Remove existing batt and rigid insulation.**
2. Dwg. A-101-Basement Plan, At North end, revise ceiling note to read: **New vinyl faced gypsum wallboard and R-30 insulation throughout underside of structure.**

3. Dwg. A-101-Basement Plan - Revise note at new exterior door to read: **New 3-0 x 7-0 x 1/3/4" HM door and HM frame.**
4. Dwg. A-201- Revise Elevation West to **Elevation East.**
5. Dwg. A-202- Revise Elevation East to **Elevation West.**

END OF ADDENDUM 1129-2

Attachments: Spec. Section 222326 (2 pages)  
Spec. Section 224000 (3 pages)  
Spec. Section 230000 (2 pages)  
Spec. Section 260000 (2 pages)

## **SECTION 222326 – PLUMBING-HVAC-ELECTRICAL GENERAL REQUIREMENTS**

### **PART 1 - GENERAL**

#### **1.1 GENERAL PLBG. HVAC. ELECT. REQUIREMENTS**

- A. Refer to Division 01 for General Requirements applicable to all work.
- B. It is the intent that the Contractor provide complete Plumbing, HVAC and Electrical systems in accordance with the applicable specification section, all local and state codes and municipal requirements, Utility Company requirements and good engineering practice.
- C. It is the intent of the specifications to call for completed work tested and ready for operation, provide all engineering, materials, equipment and labor necessary to complete the work outlined within this document. Any apparatus, appliance, material, work or any incidental accessories necessary to make the work complete and perfect in all respects as well as ready for operation as determined by good trade practice, even if not particularly specified, shall be furnished, delivered and installed complete as part of the Contract Work and without any additional cost to the Owner.
- D. The Contractor shall be responsible for arranging for inspections by the authority having jurisdiction. The contractor shall be responsible for being available for inspections by the authority having jurisdiction.
- E. The following definitions apply:
  - 1. Furnish: The term “furnish” is used to mean, “supply and deliver to the project site ready for unloading, unpacking, assembly, installation and similar operations”.
  - 2. Install: The term “install” is used to describe operations at a project site including the actual, “unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations”.
  - 3. Provide: The term “provide” is used to mean, “to furnish and install completely and ready for the intended usage”.
  - 4. Remove: The term “remove” is used to mean, “to disconnect from its present position and take away from the premises and to dispose of in a legal manner”.
  - 5. Substitutions: The term “substitutions” is used to mean, “requests for change in products, materials, equipment and methods of construction required by contract documents proposed by the contractor after award of the contract”.
- F. Provide all access doors in walls and floors at all automatic valves and other apparatus and equipment requiring periodic service and inspection. Coordinate type and location with architect for approval.
- G. Provide seismic restraints for all mechanical equipment and piping specified herein in accordance with 2003 International Building Code with 2005 Connecticut Supplements and all local codes.

- H. Provide shut-off duty valves at each branch connection to supply mains at supply connection, to each piece of equipment and elsewhere as indicated.
- I. Provide drain valves at low points in mains, risers, branch lines and elsewhere as required for system drainage.
- J. Provide pressure-reducing valves on hot water generators and elsewhere as required to regulate system pressure.
- K. Furnish motor starters and disconnects for all mechanical equipment to electrician for installation and wiring as required.

## 1.2 SUBMITTALS

- A. Provide shop drawings and product data for the following:
  - 1. Plumbing fixtures, equipment, piping, valves and accessories.
  - 2. HVAC equipment.
  - 3. Insulation
  - 4. Scaled ductwork drawings and detail system layout drawings at 1/4" = 1'0" minimum.
  - 5. Electrical equipment including service panels, wiring devices, light fixtures, fire alarm devices.
  - 6. Certification by the contractor that any substitution of specified equipment or materials proposed is equal to or better than in every significant respect required by the contract documents and that it will perform adequately in the application intended. Include the contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of the substitution to perform adequately.

## 1.3 GUARANTEES

- A. The Contractor shall guarantee all material and workmanship under these specifications and the contract for a period of one (1) year from the date of Substantial Completion. During this guarantee period, all defects developing through faulty equipment, materials or workmanship shall be corrected or replaced immediately by the Contractor without expense to the Owner. Such repairs or replacements shall be made to the Architect's and Engineer's satisfaction.
- B. Contractor shall provide name, address and phone number of all contractors, subcontractors and associated equipment manufacturers/ vendors they provided.

END OF SECTION 222326

**ADDENDUM NO. 1129-02**

## **SECTION 224000 PLUMBING PERFORMANCE SPECIFICATION**

### 1.1 DESCRIPTION OF PLUMBING SCOPE

- A. Plumbing scope of work shall include but is not limited to the following:
1. Relocate existing domestic water heater from current location to new mechanical room on first floor. See Architectural plans. Disconnect all gas and domestic water piping from water heater and cap for reuse. Provide new exhaust discharge.
  2. Disconnect gas piping from existing air handling unit, domestic ranges and clothes dryer (if applicable). Cap piping for reuse.
  3. Disconnect existing domestic water and sanitary waste piping below first floor from plumbing fixtures. Cap piping for reuse.
  4. Relocate and reconnect existing bathroom plumbing fixtures where indicated.
  5. Existing sanitary waste, vent, and domestic water piping above first floor to remain.
  6. Relocate or replace existing gas meter from current location to a location above the flood plain. Location of gas meter shall be in accordance with Utility Company, the Owner and Architect. Coordinate reconnection of gas service to relocated meter with Utility Company.
  7. Provide new domestic water meter. Meter shall be located in a water meter pit in accordance with Utility Company requirements. Coordinate location of the meter pit, and installation details with Utility Company.
  8. Provide new domestic water line from the meter pit to the existing domestic water main in the residence. Coordinate with Utility Company connection of the water main from the street to new water meter.
  9. Provide new condensate drain system for relocated air handling unit.
  10. After building is lifted to its new location, reconnect gas piping to relocated furnace and domestic water heater, kitchen ranges and clothes dryer (if applicable).
  11. After building is raised, reconnect existing domestic cold and hot water to relocated domestic water heater, and to first floor fixtures.
  12. After building is lifted to its new location, reconnect sanitary main (s) from below first floor to below grade to existing below grade sanitary main in the street. Provide new piping and/or lining from curb to street main as required by the Utility Company. Verify requirements with Utility Company before submitting bid.
  13. Provide any new piping, fittings and insulation in accordance with the requirements of this specification.

### 1.2 PLUMBING SYSTEM – GENERAL REQUIREMENTS

- A. Pipe Threads: ASME B1.20.1 for factory-threaded pipe and pipe fittings.
- B. Comply with applicable codes for installation of backflow prevention devices.
- C. All new work and alterations to existing plumbing systems shall be designed in accordance with the latest editions of the International Building Code, the International Plumbing Code and all

local, state and federal codes and requirements, and shall conform to requirements of the Utility Company and municipality having jurisdiction.

- D. All new sanitary waste piping and vent piping shall be PVC, or shall match existing piping. All new sanitary waste and vent piping shall be leak tested in accordance with local and state codes. Prior to bidding, verify any special requirements for sanitary street connections with Utility Company and/or municipality having jurisdiction.
- E. All new domestic water supply piping shall be type L cooper with copper or brass fittings for all mains and risers, or shall match existing. Type K copper or AWWA approved polypropylene piping shall be used where required for underground or under slab piping.
- F. All new domestic water piping shall be cleaned, sterilized and leak tested in accordance with the local health department regulations and local or state codes.
- G. New insulation for all domestic hot and cold water piping shall be as follows. All domestic hot water piping shall be 1" thick fiberglass piping with jacket. Cold water piping shall be installed with 1/2" thick foam Armaflex self-sealing pipe insulation with vapor barrier jacket.
- H. Install all piping systems in such a manner to avoid pipe freezing. Provide not only piping insulation, but building insulation between cold surfaces and piping as well. Piping shall never be installed in spaces where potential pipe freezing can occur. Contact the Architect and Engineer immediately if such condition occurs. The pipes shall always be located on the warm side of the building insulation.
- I. Provide heat trace on all domestic water pipes installed in areas exposed to freezing temperatures. The heat trace to be self-regulating temperature cable system by Raychem..
- J. Provide new gas piping as required. Provide gas cocks and shut- off valve at each terminal. Gas piping shall be Schedule 40 black steel and sized in accordance with the requirements of the International Mechanical Code and NFPA 54. Leak test all piping in accordance with utility requirements, local and state codes.
- K. Provide 2 anti-siphon freeze proof hose bibs at the exterior of the building spaced no farther than 80 feet apart. The final locations of all the hose bibs shall be approved by the Architect and Owner prior to installation. Hose bib: Woodford model 25 with metal handle, automatic draining with anti-siphon vacuum breaker. Provide with ASSE Standard 1019B approved, 3/4" inlet and outlet one piece valve plunger to control both flow and drain functions. Exterior finishes to be chrome plated. Coordinate hydrant selection with wall thickness. All piping to the hose bib shall be 1/2" minimum and when three or more hose bibs are connected to the same supply branch line, a 1" branch line shall be used. Hose bib piping shall be installed so that all piping in installed on the warm side of the building insulation.

- L. Provide condensate drain to the relocated air handler. The drains shall be type L copper for the first 15 feet of the pipe, then can be converted to PVC for the remainder of the waste water run. Run condensate discharge to the sanitary waste system. Provide special fittings as required for indirect waste discharge.

END OF SECTION 224000

**ADDENDUM NO. 1129-02**

## **SECTION 23000 HVAC PERFORMANCE SPECIFICATION**

### **1.1 DESCRIPTION OF HVAC SCOPE**

- A. HVAC scope of work shall include but is not limited to the following:
  - 1. Relocate existing air handling unit from basement location to new mechanical room located on the first floor. See Architectural Drawings. Disconnect existing ductwork. Disconnect existing refrigerant piping and cap for reuse. Reconnect existing exhaust and intake piping.
  - 2. Remove existing ductwork located below first floor in its entirety. Replace with new ductwork.
  - 3. Replace existing duct insulation on ductwork below first floor, and provide new metal jacket around insulation. Waterproof all seams, joints, etc.
  - 4. Relocate existing air conditioning condensing unit to a location above the flood plain. Coordinate with Owner and Architect for new location. Disconnect existing refrigerant piping and cap for reuse.
  - 5. Reconnect existing refrigerant piping to the relocated air handling unit and to the relocated condensing unit. Replace or repair existing piping, and add piping if required.
  - 6. Provide condensate drain, piping as required. (Refer to Section 22400 "Plumbing Performance Specifications").
  - 7. All toilet exhaust fans and dryer vents shall remain in place and be reused.

### **1.2 DUCTWORK**

- A. For all new ductwork required, provide galvanized steel supply and return air ductwork with vapor barrier, exterior blanket insulation. The contractor shall size all ductwork. Ductwork mains shall be designed for a maximum velocity of 750 feet per minute and a maximum static pressure of 0.08 in. wc. per 100 feet of duct. Branch ducts shall be sized for a maximum velocity of 500 feet per minute. The return air system shall be ducted with internal noise attenuation lining for the first 10 feet of the ductwork minimum from unit

### **1.3 DUCTWORK INSULATION SYSTEM**

- A. Insulation thickness shall be in accordance with latest edition of ASHRAE 90.2: except ductwork insulation shall not be less than 1 1/2" thick fiberglass with vapor barrier. All insulation materials, adhesives, coatings, and other accessories shall have flame spread ratings of 25 or less, and smoke developed ratings of 50 or less as tested by ASTM E84 (NFP A 255) method. All insulation materials shall be installed in accordance with the manufacturer's recommendations and in accordance with the latest edition of SMACNA and ASHRAE standards. Duct risers, within the conditioned space walls, and terminating at air outlets, do not require exterior duct insulation.
- B. Provide aluminum jacket around exterior ductwork. Waterproof all joints and seams.

1.4 REFRIGERANT PIPING

- A. For all new refrigerant piping required, provide ASTM B 280, ARC copper tubing. If fittings are required, provide wrought copper fittings. All joints shall be soldered. Verify that distance between fan coil unit and condensing unit does not exceed manufacturer's recommended distance.
- B. Provide minimum 3/4" elastomeric insulation, Armaflex or equal on all refrigerant piping.

END OF SECTION 230000

**ADDENDUM NO. 1129-02**

## **SECTION 264000 ELECTRICAL PERFORMANCE SPECIFICATION**

### 1.1 DESCRIPTION OF ELECTRICAL SCOPE

A. Electrical scope of work shall include but is not limited to the following:

1. Disconnect existing overhead electrical service from existing electrical meter.
2. Disconnect existing overhead telephone and cable TV services from existing structure.
3. Disconnect electrical connections to existing HVAC equipment, condensing unit, and domestic water heater, and circulation pump (if applicable).
4. After building is lifted to its new location, reconnect electrical service to existing electrical meter.
5. After building is lifted to its new location, reconnect the telephone and cable TV services to existing structure.
6. After building is lifted to its new location, reconnect electrical connections to relocated HVAC equipment, condensing unit, domestic water heater and circulation pump (if applicable).
7. Remove and make safe all electrical devices and wiring below the flood plain. Any electrical wiring located below the first floor shall be raised to above the flood plain, or rewired as required.
8. All existing CATV jacks shall remain.
9. All existing power receptacles shall remain.

### 1.2 GENERAL ELECTRICAL REQUIREMENTS.

- A. All electrical work shall be in complete conformance with the National Electric Code, and all local, state and utility codes, regulations and requirements.
- B. Coordinate with all utility companies having jurisdiction for exact requirements.

### 1.3 WIRING

- A. All new wiring for power distribution and general lighting throughout the building shall be in non-metallic (Type NM) cable.
- B. All new exterior wiring shall be in rigid galvanized steel conduit or PVC.

### 1.2 ELECTRICAL DISTRIBUTION SYSTEM

- A. Arc fault type circuit breakers shall be installed in all bedrooms.

- B. Provide surge suppression system for the electrical service, telephone service and CATV service.

### 1.3 LIGHTING AND CONTROLS

- A. In renovated areas: Lighting fixtures shall be provided under an allowance for lighting fixtures which will be coordinated with the Architect and Owner.
- B. In renovated areas: Lighting controls shall be a combination of wall rocker switches . Light switches shall be Lutron “Decora” style.

### 1.4 RECEPTACLES

- A. In renovated areas: Provide receptacles with cover-plates according to National Electrical Code “NEC 2011” sections 210.52, including but not limited to; bed rooms, living room, family room, dining room, kitchen, exercise room including equipment, bathrooms, powder rooms, mechanical room, work shop, laundry room and equipment, garage, and at each exterior door.
- B. All receptacles in bathrooms, powder rooms, and kitchen shall be GFCI protected.
- C. All receptacles located on the exterior of the residence shall be weather proof listed “While-In Use” and GFCI protected.
- D. Receptacles shall be Lutron “Decora” style.

### 1.5 FIRE ALARM SYSTEM

- A. The fire alarm system shall consist of 120V smoke detectors in each bedroom and where indicated.
- B. Provide combination smoke and CO detectors outside of each bedroom.
- C. All of the smoke and heat detectors shall be interconnected such that all devices will go into notification mode when activated.

END OF SECTION 264000

**ADDENDUM NO. 1129-02**