

The State of Connecticut
Department of Housing (DOH)
Community Development Block Grant Disaster Recovery Program
(CDBG-DR)

Owner Occupied Rehabilitation and Rebuilding Program (OORR)

BID PACKAGE

For

Rehabilitation/Reconstruction work to:

Mobilio Residence

Basement Rehabilitation

167 Pleasant View Road

Derby, CT 06418

Prepared by:

Capital Studio Architects, LLC.

1379 Main Street, East Hartford, CT 06108

860.289.3262

Project #: 2028

CSA Project # 1347-16



Project # 2028

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Section 1

Section 1

ADVERTISEMENT FOR BIDS

Project #2028

The State of Connecticut Department of Housing (DOH) is seeking proposals through a Request for Proposal (RFP) process for the rehabilitation, reconstruction and/or mitigation of residential structures damaged by Superstorm Sandy in compliance with all applicable local, federal, and state statutory requirements with special attention paid to requirements for Community Development Block Grants under the United States Department of Housing and Urban Development (“HUD”) Disaster Recovery grant program.

Separated sealed bids for **Project #2028, Mobilio Residence Basement Rehabilitation, 167 Pleasant View Road, Derby, CT 06418** will be received by Capital Studio Architects, LLC. located at 1379 Main Street, East Hartford, CT 06108 until **2:00 o'clock PM on Tuesday, July 01, 2014.**

A Mandatory Walk Through will be held at the Project Site located at **167 Pleasant View Road, Derby, CT 06418 at 9:00 o'clock AM on Friday, June 20, 2014.**

The Information to Bidders, Form of Bid, Form of Contract, Plans, Specifications, and Form of Bid Bond, Performance and Payment Bond or Security, and other contract documents may be examined on the Department of Housing Hurricane Sandy Recover website at www.ct.gov/doh/ and click on the “Hurricane Sandy” link on the right, or <http://www.ct.gov/doh/cwp/view.asp?a=4513&Q=530630>

If you wish to purchase a hard copy of the Bid Documents, please contact the office of Capital Studio Architects, LLC. located at 1379 Main Street, East Hartford, CT 06108, or by telephone at 860-289-3262. A nonrefundable payment in the form a check in the amount of \$25.00 is required for each set.

DOH reserves the right to waive any informalities or to reject any or all bids.

Each bidder must deposit with his bid, security in the amount, form and subject to the conditions provided in the Information to Bidders.

Attention to bidders is particularly called to the requirements as to conditions of employment to be observed and minimum wages rates to be paid under the contract (if applicable), Section 3, Segregated Facilities, Section 109 and E. O. 11246.

No bidder may withdraw his bid within 30 calendar days after the actual date of the bid opening thereof.

INFORMATION FOR BIDDERS

Receipt and Opening of Bids:

The State of Connecticut Department of Housing (herein called the "DOH"), invites bids on the form attached. Bids will be received by DOH at the office of David Holmes, Project Manager at Capital Studio Architects, LLC. located at 1379 Main Street, East Hartford, CT 06108, until **2:00 o'clock PM on Tuesday, July 01, 2014**

The envelopes containing the bids must be sealed, addressed to David Holmes, Project Manager at Capital Studio Architects, LLC. and designated as bid for **Project #2028, Mobilio Residence Basement Rehabilitation, 167 Pleasant View Road, Derby, CT 06418**

DOH may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement there considered. NO bidder may withdraw a bid within 30 days after the actual date of the opening thereof.

Mandatory Walk Through: All bidders must attend a mandatory walk through of the property designated above. The date and time of the walk through is set for **9:00 o'clock AM on Friday, June 20, 2014.**

Preparation of Bids:

Each bid must be submitted on the prescribed form and accompanied by Certification by Bidder Regarding Equal Employment Opportunity, Form HUD-950.1, and Certification of Bidder Regarding Section 3 and Segregated Facilities. All blank spaces for bid process must be filled in, in ink or typewritten, in both words and figures, and the foregoing Certifications must be fully completed and executed when submitted.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, his/her address, and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in the bid form.

Subcontracts: The bidder is specifically advised that any person, for, or other party to whom it is proposed to award a subcontract under this contract:

1. Must be acceptable to the DOH after verification by the State of the current eligibility status; and,
2. Must submit Form HUD-950.2, Certification by Proposed Subcontractor Regarding Equal Employment Opportunity and Certification of Proposed Subcontractor Regarding Section 3 and Segregated Facilities. Approval of the proposed subcontractor award cannot be given by the DOH unless and until the proposed subcontractor has submitted the Certifications and/or other evidence showing that it has fully complied with any reporting requirements to which it is or was subject. Although the bidder is not required to attach such Certifications by proposed subcontractors to his/her bid, the bidder is here advised of this requirement so that appropriate action can be taken to prevent subsequent delay in subcontract awards.

Method of Bidding: DOH invites the following bid(s):

Qualifications of Bidder: The DOH may make such investigations as he/she deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the DOH all such information and date for this purpose as the DOH may request. The DOH reserves the right to reject any bid if the evidence submitted by, or

investigation of, such bidder fails to satisfy the DOH that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Conditional bids will not be accepted. The State's set Contractor Prequalifications are available at the Department of Housing's Hurricane Sandy Recovers website www.ct.gov/doh/ and click on the "Hurricane Sandy" link.

Conditions of Work: Each bidder must inform him/herself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his/her obligation to furnish all material and labor necessary to carry out the provision of his/her contract. Insofar as possible the contractor, in carrying out the work, must employ such methods or means as will not cause any interruption of or interference with the work of any other contractor.

Addenda and Interpretations: No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally.

Every request for such interpretation should be in writing addressed to: David Holmes, Project Manager at Capital Studio Architects, LLC. located at 1379 Main Street, East Hartford, CT 06108 and, to be given consideration, must be received at least three days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instruction will be in the form of written addenda to the specifications which, if issued, will be forwarded by electronic mail and posted on DOH's Hurricane Sandy website to all prospective bidders (at the respective email addresses furnished for such purposes), not later than two days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his/her bid as submitted. All addenda so issued shall become part of the contract documents.

Performance and Payment Bonds: A performance and payment bond will be required of the successful bidder (contractor) for 100 percent of the contract price on contracts over \$100,000.

Notice of Special Conditions: Attention is particularly called to those parts of the contract documents and specifications which deal with the following:

1. Inspection and testing of materials
2. Insurance requirements
3. Wage rates (if applicable)
4. State allowances

Laws and Regulations: The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

Method of Award-Lowest Qualified Bidder: If at the time this contract is to be awarded, the lowest base bid submitted by a responsible bidder does not exceed the amount of funds then estimated by the DOH as available to finance the contract; the contract will be awarded on the base bid only. If such bid exceeds such amount, the DOH may reject all bids or may award the contract on the base bid combined with such deductible alternatives applied in numerical order in which they are listed in the Form of Bids, as produces a net amount which is within the available funds.

If the homeowner wishes to select a prequalified bidding contractor other than the lowest and most responsible bidder, said owner is responsible for paying the difference between the lowest bidder and their chosen bidder from their own financing.

Obligation of Bidder: At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect of his/her bid.

Safety Standards and Accident Prevention: With respect to all work performed under this contract, the contractor shall:

1. Comply with the safety standards provision of applicable laws, building and construction codes and the “Manual of Accident Prevention in Construction” published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Section 1518 as published in the “Federal Register,” Volume 36, No 75, Saturday, April 17, 1971.
2. Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) who may be injured on the job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctor’s care.

Contract Progress Schedule: Each bid shall be accompanied by a Contract Progress Schedule. Such Schedule shall list the bidder’s timetable for completion of the contract.

ALTERNATE PROPOSALS

The undersigned bidder further proposes and agrees that should any or all of the following Alternates be accepted and included in the Contract, the amount of the Base Bid, as heretofore stated, shall be adjusted by the amount stated for each Alternate, or Unit Price. All materials and workmanship shall be in strict accordance with the Drawings and Specifications and shall be in-place prices.

<u>Alternates</u>	<u>Unit Price</u>	<u>Unit Measure</u>
No. ___ _____ \$	No. ___ _____	\$/ f
No. ___ _____ \$	No. ___ _____	\$/ f
No. ___ _____ \$	No. ___ _____	\$/ f
No. ___ _____ \$	No. ___ _____	\$/ f
No. ___ _____ \$	No. ___ _____	\$/ f
No. ___ _____ \$	No. ___ _____	\$/ f
No. ___ _____ \$	No. ___ _____	\$/ f
No. ___ _____ \$	No. ___ _____	\$/ f
No. ___ _____ \$	No. ___ _____	\$/ f

The undersigned agrees to commence the work on a date to be specified in the contract and to complete such work within **60** consecutive calendar days.

The undersigned agrees that if within the period of thirty (30) days after the opening of bids, or when extended to the next work day immediately following said period, notice of the acceptance of this bid shall be mailed, or delivered to him/her at the business address given below, or at any time thereafter before this bid is withdrawn, will within fifteen (15) days thereafter deliver to the DOH, where directed, a contract properly executed in such number of counterparts as may be required by said DOH, on the forms annexed, with such changes therein as shall have been made by DOH, prior to the time named for delivery of this proposal, together with an executed Completion Assurance Agreement with a Letter of Credit in a form satisfactory to the DOH and a letter indicating those Small/Minority Business Enterprises that will perform work and/or provide materials, equipment or services as part of the contract.

In submitting this bid, it is understood that the right is reserved by the abovementioned DOH to reject any and all bids; and it is agreed that this bid may not be withdrawn for a period of thirty (30) days from the date of bid opening or until the next work day immediately following said period if such period ends on a weekend or a State holiday.

Attached hereto is an affidavit, in proof that the undersigned has not entered into any collusion with any person in respect to this proposal, or any other proposal, or the submitting of proposals for the above Project. Also attached is a statement of contractor's qualifications, Certification of Bidder Regarding Equal Employment Opportunity, and Segregated Facilities.

Acknowledgement of Bidder

I, THE UNDERSIGNED AS AN AUTHORIZED OFFICER OF:

(Company Name)

(Date)

(Address)

(Telephone)

(City/State/Zip)

(Fax No.)

(FEIN)

I HEREBY SUBMIT THE FOLLOWING PRICES FOR THE PROJECT IDENTIFIED ABOVE: (Indicate in words and numerals)

BASE BID PRICE: Cost _____

AMOUNT IN WORDS: _____

(Signature)

(Date)

(Printed Name)

(Title/Position)

(Email address) _____

FORM OF NON-COLLUSIVE AFFIDAVIT
AFFIDAVIT

State of _____)

County of _____)

_____, being first duly sworn, deposes and says:

That he/she is, _____ the party making the foregoing proposal for bid, that such proposal or bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any bidder or person, to put in a sham bid or to refrain from bidding, and has not, in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or of any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against DOH or any person interested in the proposed contract, and that all statements in said proposal for bid are true.

Project No. _____

Location _____

Signature

Name and Title

Date

(Signature should be notarized.)

BIDDER'S CERTIFICATION OF ELIGIBILITY

By the submission of this bid, the bidder certifies that to the best of its knowledge and belief, neither it, nor any person or firm which has an interest in the bidder's firm, nor any of the bidder's subcontractors, is ineligible to:

- (1) Be awarded contracts by any agency of the United States Government or HUD; or,
- (2) Participate in HUD programs pursuant to 24 CFR part 24.

(Name of Bidder)

(Address)

BY: _____

Title: _____

NOTE: This certification is a material representation of fact upon which reliance is placed when making award. If it is later determined that the bidder knowingly rendered an erroneous certification, the contract may be terminated for default, and the bidder may be debarred or suspended from participation in HUD programs and other Federal programs.

CERTIFICATION OF GENERAL BIDDERS ON CDBG-DR CONSTRUCTION PROJECTS

I. CERTIFICATION REGARDING HEALTH AND SAFETY

The undersigned hereby certifies that he/she is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work; that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least ten hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee

II. CERTIFICATION REGARDING NON-COLLUSION AND DEBARMENT

The undersigned further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies that neither he/she nor any firm, corporation, partnership or association in which he/she has a substantial interest is designated as an ineligible contractor by the Comptroller General of the United States pursuant to Section 5.6 (b) of the Regulations of the Secretary of Labor, Part 5 (29 CFR, Part 5), or pursuant to Section 3 (a) of the Davis-Bacon Act, as amended (40 USC 276a). The undersigned further certifies that said undersigned is not presently debarred from doing public construction work in the State of Connecticut.

Date: _____

Name of General Bidder

By _____

Signature

Print name and title

Business Address

Street Address City and State

OSHA-10 OSHA-10

CERTIFICATION OF SUB- BIDDERS (IF ANY) ON CDBG-DR CONSTRUCTION PROJECTS

I. CERTIFICATION REGARDING HEALTH AND SAFETY

The undersigned hereby certifies that he/she is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work; that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least ten hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee

II. CERTIFICATION REGARDING NON-COLLUSION AND DEBARMENT

The undersigned further certifies under penalties of perjury that this subbid is in all responses bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the “person” shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies that neither he/she nor any firm, corporation, partnership or association in which he/she has a substantial interest is designated as an ineligible contractor by the Comptroller General of the United States pursuant to Section 5.6 (b) of the Regulations of the Secretary of Labor, Part 5 (29 CFR, Part 5), or pursuant to Section 3 (a) of the Davis-Bacon Act, as amended (40 USC 276a). The undersigned further certifies that said undersigned is not presently debarred from doing public construction work in the State of Connecticut.

Date _____

Name of Sub-bidder

By _____

Signature

Print Name and Title

Business Name

Street Address, City and State

SUBCONTRACTOR IDENTIFICATION

(Provide additional forms for more subcontractors, as needed.)

This form is a part of your bid package and must be submitted along with the itemized and formal bid forms at the time of the bid opening. Failure to submit a completed document could result in the disqualification of your bid.

Name of Subcontractor: _____

Address: _____

Trade: _____

Hourly Wage: \$_____ Full Contract Price: \$_____

Federal Tax# or SSN #: _____

Male Owned Business _____ Female Owned Business _____

Is he/she of Hispanic or Latino ethnicity? Yes _____ No _____

Race: (Please check one)

- White
- Black/African American
- Asian/Pacific American
- American Indian/Alaskan Native
- Hasidic Jew

Name of Subcontractor: _____

Address: _____

Trade: _____

Hourly Wage: \$_____ Full Contract Price: \$_____

Federal Tax# or SSN #: _____

Male Owned Business _____ Female Owned Business _____

Is he/she of Hispanic or Latino ethnicity? Yes _____ No _____

Race: (Please check one)

- White
- Black/African American
- Asian/Pacific American
- American Indian/Alaskan Native
- Hasidic Jew

Name of Subcontractor: _____

Address: _____

Trade: _____

Hourly Wage: \$_____ Full Contract Price: \$_____

Federal Tax# or SSN #: _____

Male Owned Business _____ Female Owned Business _____

Is he/she of Hispanic or Latino ethnicity? Yes _____ No _____

Race: (Please check one)

- White
- Black/African American
- Asian/Pacific American
- American Indian/Alaskan Native
- Hasidic Jew

Contractor's Signature

Date

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246 (30 F R 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION OF BIDDER

Name and address of Bidder (include zip code)

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.
 YES NO
2. Compliance reports were required to be filed in connection with such contract or subcontract.
 YES NO
3. Bidder has filed all compliance reports due under applicable instructions, including SF.100.
 YES NO NOT REQUIRED
4. Have you ever seen or are you being considered for sanction due to violation of Executive Order 11246, as amended?
 YES NO
5. No segregated facilities will be maintained.

NAME AND TITLE OF SIGNER (Please type.)

SIGNATURE

DATE

Green Building Standards Checklist

HUD CPD Green Building Retrofit Checklist

The CPD Green Retrofit Checklist promotes energy efficiency and green building practices for residential retrofit projects. Grantees must follow the checklist in its entirety and apply all measures within the Checklist to the extent applicable to the particular building type being retrofitted. The phrase “when replacing” in the Checklist refers to the mandatory replacement with specified green improvements, products, and fixtures only when replacing those systems during the normal course of the retrofit.

WATER AND ENERGY CONSERVATION MEASURES

N/A

Water-Conserving Fixtures

Install or retrofit water conserving fixtures in any unit and common facility, use the following specifications: Toilets-- 1.28 gpf; Urinals-- 0.5 gpf; Showerheads-- 2.0 gpm; Kitchen faucets-- 2.0 gpm; and Bathroom faucets-- 1.5gpm. [gpf = gallons per flush; gpm = gallons per minute]

N/A

ENERGY STAR Appliances

Install ENERGY STAR-labeled clothes washers, dishwashers, and refrigerators, if these appliance categories are provided in units or common areas.

N/A

Air Sealing: Building Envelope

Seal all accessible gaps and penetrations in the building envelope. If applicable, use low VOC caulk or foam.

N/A

Insulation: Attic (if applicable to building type)

For attics with closed floor cavities directly above the conditioned space, blow in insulation per manufacturer's specifications to a minimum density of 3.5 Lbs. per cubic foot (CF). For attics with open floor cavities directly above the conditioned space, install insulation to meet or exceed IECC levels.

N/A

Insulation: Flooring (if applicable to building type)

Install \geq R-19 insulation in contact with the subfloor in buildings with floor systems over vented crawl spaces. Install a 6-mil vapor barrier in contact with 100% of the floor of the crawl space (the ground), overlapping seams and piers at least 6 inches.

N/A

Duct Sealing (if applicable to building type)

In buildings with ducted forced-air heating and cooling systems, seal all penetrations of the air distribution system to reduce leakage in order to meet or exceed ENERGY STAR for Homes' duct leakage standard.

N/A

Air Barrier System

Ensure continuous unbroken air barrier surrounding all conditioned space and dwelling units. Align insulation completely and continuously with the air barrier.

N/A

Radiant Barriers: Roofing

When replacing or making a substantial repair to the roof, use radiant barrier sheathing or other radiant barrier material; if economically feasible, also use cool roofing materials.

- N/A** **Windows**
When replacing windows, install geographically appropriate ENERGY STAR rated windows.
- N/A** **Sizing of Heating and Cooling Equipment**
When replacing, size heating and cooling equipment in accordance with the Air Conditioning Contractors of America (ACCA) Manuals, Parts J and S, or 2012 ASHRAE Handbook--HVAC Systems and Equipment or most recent edition.
- N/A** **Domestic Hot Water Systems**
When replacing domestic water heating system(s), ensure the system(s) meet or exceed the efficiency requirements of ENERGY STAR for Homes' Reference Design. Insulate pipes by at least R-4.
- N/A** **Efficient Lighting: Interior Units**
Follow the guidance appropriate for the project type: install the ENERGY STAR Advanced Lighting Package (ALP); **OR** follow the ENERGY STAR MFHR program guidelines, which require that 80% of installed lighting fixtures within units must be ENERGY STAR-qualified or have ENERGY STAR-qualified lamps installed; **OR** when replacing, new fixtures and ceiling fans must meet or exceed ENERGY STAR efficiency levels.
- N/A** **Efficient Lighting: Common Areas and Emergency Lighting** (if applicable to building type)
Follow the guidance appropriate for the project type: use ENERGY STAR-labeled fixtures or any equivalent high-performance lighting fixtures and bulbs in all common areas; **OR** when replacing, new common space and emergency lighting fixtures must meet or exceed ENERGY STAR efficiency levels. For emergency lighting, if installing new or replacing, all exist signs shall meet or exceed LED efficiency levels and conform to local building codes.
- N/A** **Efficient Lighting: Exterior**
Follow the guidance appropriate for the project type: install ENERGY STAR-qualified fixtures or LEDs with a minimum efficacy of 45 lumens/watt; **OR** follow the ENERGY STAR MFHR program guidelines, which require that 80% of outdoor lighting fixtures must be ENERGY STAR-qualified or have ENERGY STAR-qualified lamps installed; **OR** when replacing, install ENERGY STAR compact fluorescents or LEDs with a minimum efficacy of 45 lumens/watt.

INDOOR AIR QUALITY

- N/A** **Air Ventilation: Single Family and Multifamily** (three stories or fewer)
Install an in-unit ventilation system capable of providing adequate fresh air per ASHRAE 62.2 requirements.
- N/A** **Air Ventilation: Multifamily** (four stories or more)
Install apartment ventilation systems that satisfy ASHRAE 62.2 for all dwelling units and common area ventilation systems that satisfy ASHRAE 62.1 requirements. If economically feasible, consider heat/energy recovery for 100% of corridor air supply.
- N/A** **Composite Wood Products that Emit Low/No Formaldehyde**

Composite wood products must be certified compliant with California 93120. If using a composite wood product that does not comply with California 93120, all exposed edges and sides must be sealed with low-VOC sealants.

- | | |
|-----|--|
| X | <p>Environmentally Preferable Flooring</p> <p>When replacing flooring, use environmentally preferable flooring, including the FloorScore certification. Any carpet products used must meet the Carpet and Rug Institute's Green Label or Green Label Plus certification for carpet, pad, and carpet adhesives.</p> |
| X | <p>Low/No VOC Paints and Primers</p> <p>All interior paints and primers must be less than or equal to the following VOC levels: Flats--50 g/L; Non-flats--50 g/L; Floor--100 g/L. [g/L = grams per liter; levels are based on a combination of the Master Painters Institute (MPI) and GreenSeal standards.]</p> |
| X | <p>Low/No VOC Adhesives and Sealants</p> <p>All adhesives must comply with Rule 1168 of the South Coast Air Quality Management District. All caulks and sealants must comply with regulation 8, rule 51, of the Bay Area Air Quality Management District.</p> |
| N/A | <p>Clothes Dryer Exhaust</p> <p>Vent clothes dryers directly to the outdoors using rigid-type duct work.</p> |
| X | <p>Mold Inspection and Remediation</p> <p>Inspect the interior and exterior of the building for evidence of moisture problems. Document the extent and location of the problems, and implement the proposed repairs according to the Moisture section of the EPA Healthy Indoor Environment Protocols for Home Energy Upgrades.</p> |
| N/A | <p>Combustion Equipment</p> <p>When installing new space and water-heating equipment, specify power-vented or direct vent combustion equipment.</p> |
| N/A | <p>Mold Prevention: Water Heaters</p> <p>Provide adequate drainage for water heaters that includes drains or catch pans with drains piped to the exterior of the dwelling.</p> |
| X | <p>Mold Prevention: Surfaces</p> <p>When replacing or repairing bathrooms, kitchens, and laundry rooms, use materials that have durable, cleanable surfaces.</p> |
| X | <p>Mold Prevention: Tub and Shower Enclosures</p> <p>When replacing or repairing tub and/or shower enclosures, use non-paper-faced backing materials such as cement board, fiber cement board, or equivalent in bathrooms.</p> |
| N/A | <p>Integrated Pest Management</p> <p>Seal all wall, floor, and joint penetrations with low-VOC caulking or other appropriate sealing methods to prevent pest entry. [If applicable, provide training to multifamily buildings staff.]</p> |
| N/A | <p>Lead-Safe Work Practices</p> |

For properties built before 1978, if the project will involve disturbing painted surfaces or cleaning up lead contaminated dust or soil, use certified renovation or lead abatement contractors and workers using lead-safe work practices and clearance examinations consistent with the more stringent of EPA's Renovation, Repair, and Painting Rule and HUD's Lead Safe Housing Rule.

X

Radon Testing and Mitigation (if applicable based on building location)

For buildings in EPA Radon Zone 1 or 2, test for radon using the current edition of American Association of Radon Scientists and Technologists (AARST)'s Protocols for Radon Measurement in Homes Standard for Single-Family Housing or Duplexes, or AARST's Protocol for Conducting Radon and Radon Decay Product Measurements in Multifamily Buildings. To install radon mitigation systems in buildings with radon level of 4 pCi/L or more, use ASTM E 2121 for single-family housing or duplexes, or AARST's Radon Mitigation Standards for Multifamily Buildings. For new construction, use AARST's Reducing Radon in New Construction of 1 & 2 Family Dwellings and Townhouses, or ASTM E 1465.

Section 2

Section 2

General Conditions

1. The purpose of this HUD and DOH sponsored 0% interest loan Owner Occupied Rehabilitation and Rebuilding program is to make good faith efforts to assist qualified property owners in making repairs to their property damaged by Superstorm Sandy. Eligible repairs include code, health and safety compliance modifications, including but not limited to building envelope and energy efficiency upgrades (See Green Building Standards).
2. In the event that the homeowner is dissatisfied with the work performed although the work has been completed to industry standards, approved by the local municipality's code enforcement officials and approved by the DOH or its agent, the homeowner's approval will be overridden, full payment will be issued to the contractor and the project will be officially closed.
3. The owner is responsible for removal or relocation from the respective work areas the following, including but not necessarily limited to: personal belongings, window treatments, small furniture, fixtures, area carpets, interior and exterior plants. The contractor will be responsible for covering and protecting large furniture unable to be removed from the respective work areas.
4. The Contractor, unless otherwise specified, shall provide all labor, materials, tools, equipment, and related items required for the erection and completion of all work indicated in this project manual and as may be inferred, implied or otherwise necessary for the proper execution of the work.
5. The Contractor shall pay all necessary taxes, fees, and permits necessary to complete all of his work as detailed on the attached scope of work.
6. The premises herein shall be occupied during the course of the construction work.
7. All rehabilitation, alterations, repairs, or extensions shall be in compliance with all applicable codes of the Municipality, HUD requirements or compliance with the latest edition of the International Building Code, which ever applies and is the more strict. All electrical, heating, and plumbing work shall comply with the rules and regulations of the National, State and Local Codes. Before commencing work, contractors and/or subcontractors shall obtain all necessary permits.
8. The Contractor certifies that he has familiarized himself with the requirements of the specifications and plans and understands the extent and character of the work to be done, and inspected the premises and given his full attention to any and all areas with which he might become specifically involved. He must familiarize himself with all conditions relating to and affecting his work and bid.
9. The selected Contractor must, prior to contract signing, supply the DOH and the Owner with the original certificates of insurance in accordance with the following insurance requirements:
 - A. Contractor shall procure and maintain for the duration of the Agreement the following types of insurance, in amounts no less than the stated limits, against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder:
 - 1) Workers' Compensation Insurance: The Contractor shall maintain full and complete Workers' Compensation Insurance for all of its employees and those of its subcontractors engaged in work on the premises, in accordance with the local and state laws governing the same, in the minimum amounts of \$100,000 each accident, \$500,000 disease – Policy limit, \$100,000 disease – each employee.
 - 2) General Liability Insurance: The Contractor shall furnish evidence of a comprehensive general liability insurance coverage with a combined single limit for bodily injury, death, and property damage in the amount of \$1,000,000 per occurrence, naming the Owner and the State as additional insured. This shall cover the use of all equipment, hoists and vehicles on the Premises not covered by any automobile liability policy. If the Contractor has a "claims-made" policy, then the following additional requirements apply: (a) the policy must provide a retroactive date which must be on or before the execution date of this Agreement and (b) the extended reporting period may not be less than five (5) years following the Construction Completion Date.
 - 3) Automobile Liability: The Contractor shall furnish evidence of Automobile Liability insurance with minimum limits of \$1,000,000 per occurrence, combined single limit for bodily injury and property damage liability. This shall include owned vehicles, non-owned vehicles and employee non-ownership.
 - 4) Cargo Insurance: The Contractor shall furnish evidence of all-risk cargo insurance, with a minimum limit of \$_____ per occurrence when the project involves raising a structure above the Base Flood Elevation.
 - 5) Builders Risk: The Contractor shall maintain Builder's Risk (fire and extended coverage) insurance providing coverage for the entire work at the project site, including all work in place, all materials stored at the building site, foundations and building equipment. Coverage shall be on a completed value form basis in an amount equal to the projected value of the project. The Contractor agrees to endorse the State of Connecticut and the Owner as Loss Payees.

B. Additional Insurance Provisions

- 1) Each of the Owner and the State of Connecticut Department of Housing, and their successors and assigns, as their interests may appear, shall be named as an Additional Insured on the Commercial General Liability policy.
 - 2) Described insurance shall be primary coverage and Applicant and Applicant's insurer shall have no right of subrogation recovery or subrogation against the State of Connecticut.
 - 3) Applicant shall assume any and all deductibles in the described insurance policies.
 - 4) Without limiting Applicant's obligation to procure and maintain insurance for the duration identified in (A) above, each insurance policy shall not be suspended, voided, cancelled or reduced except after thirty (30) days prior written notice by certified mail has been given to the State of Connecticut, with the exception that a ten (10) day prior written notice by certified mail for non-payment of premium is acceptable.
 - 5) Each policy shall be issued by an Insurance Company licensed to do business by Connecticut Department of Insurance and having a minimum Best Rating of A- or equivalent or as otherwise approved by the State.
10. DOH and its agents must be notified prior to start of work of any subcontractor to be paid for work on the job who is different from the subcontractor identified in original bid proposal.
 11. Working times for the project shall be Monday through Friday 8 am to 5 pm (EST). Contractors must request permission from owner and be in compliance with local municipal ordinances prior to working longer hours or weekends.
 12. All materials shall be new and of acceptable quality. The Contractor shall submit proof of purchase of warrantee items at closeout. The property Owner shall select all colors, models, etc. as per scope of work. All materials and work must be applied in accordance with the applicable manufacturer's latest instructions and specifications, and in accordance with Federal prohibitions against the use of lead paint.
 13. All manufacturers' warranties are to be extended to the property Owner free and clear of all liens. Unless otherwise specified, all labor, material, and workmanship provided by the Contractor shall be guaranteed by the Contractor, including that of subcontractors, for a one (1) year period from the date of the Final Payment. This guarantee shall be in addition to and not in limitation of, in lieu of, or modify and other guarantee that is due the property Owner from any manufacturer.
 14. The Contractor shall repair or replace all work, materials and equipment which are found to be defective during construction and the guarantee period. Repair shall include all damage to surrounding work caused by the failure and/or necessary for the repair or replacement of the defect. All repairs and replacements shall be performed at no additional expense to the Owner and shall be completed promptly after the Contractor receives notice of the defect.
 15. The Contractor shall take all necessary measures and precautions to protect the surroundings from damage occurring due to performance of the work. All areas and surfaces of the existing building which are affected by the execution of the new work (removals, demolition, repairs etc.) shall be patched and restored to either match the existing adjacent conditions or to match the new work, whichever is applicable. If such damage occurs it will be repaired by the Contractor at no cost to the Owner. Contractor shall provide all temporary shoring, bracing and other construction (interior and exterior) required to perform the work of this contract.
 16. The Contractor shall dispose of all debris and remove all material resulting from his work in accordance with local and State law. The Contractor shall police and maintain a clean and safe job site daily. He shall reinstall accessories taken down and clean up all scrap around the project and remove fingerprints. All on-site maintenance relating to the performance of the work shall be the responsibility of the Contractor until the Certificate of Completion is issued. The project shall be maintained in a habitable and safe condition daily if the project is to remain occupied.
 17. Materials and products not otherwise specified in these documents shall be to match building standards and existing conditions, provided such items are in compliance with all applicable codes. Such codes set the minimum standards to be achieved.
 18. All work shall be neat and accurate and done in a manner in accordance with customary trade practices. **The Contractor, at a minimum, shall leave the premises broom clean and orderly after each working day and shall keep the premises free from accumulation of materials and rubbish by disposing of such debris in an onsite disposal container (provided by the contractor) or removed by vehicle in accordance with all applicable state and local regulations.** At the completion of the project the Contractor shall remove all excess materials from the site. Any surplus material agreed to be left for the owner shall be stored neatly by the contractor in a location directed by the owner free from weather, spoilage or pilferage.
 19. The Contractor shall coordinate any work which interfaces with other Contractors or with the operations of the Owner. The Contractor shall take all necessary precautions to prevent fire, bodily injury, damage to property and any other calamities that may arise which pose a threat to life, limb property.
 20. The Contractor shall not make any changes to the scope of work unless a change order is processed and fully executed by the DOH.

21. The Owner may cancel this contract within three days of signing and not be liable to the Contractor or DOH. Should the Owner opt to cancel they must sign and send a Notice of Cancellation to DOH, otherwise DOH shall issue a Notice to Proceed authorizing the contractor to commence with the proposed improvements.
22. The Contractor shall commence work under this contract within 15 work days of the date of the notice to proceed and complete work within **60** calendar days of the notice to proceed.
23. If the Contractor is delayed at any time in the progress of the work by any act or neglect of the Owner or by any employee of the Owner, or by any separate Contractor employed by the Owner, or by changes ordered in the work or by labor disputes, fire, unusual delay in delivery of materials, transportation, adverse weather conditions not reasonably anticipatable, unavoidable casualties, or any cause beyond the Contractor's control, or by delay authorized by the Owner pending arbitration, or by any other cause which justifies the delay, the contract time may be extended by Change Order for such reasonable time as may be agreed upon by all parties. It shall be the responsibility of the Contractor to request and document in writing such extensions within three (3) work days.
24. In the event that the Contractor does not commence or pursue the work as hereinafter stated, then DOH shall have the right to terminate this agreement and to hire a successor Contractor to perform the work. Any such termination shall be by certified mail to the address noted in this agreement, and shall be effective as of the date of mailing. Payments by the DOH/Owner in the event of termination shall be as follows:
25. The successor Contractor shall first be paid and then the terminated Contractor. Payments to the terminated Contractor shall be limited both as to those funds remaining after payment to the successor Contractor but shall not exceed the value of the work actually performed by the terminated Contractor. Further, should the total cost for work performed under this contract exceed the amount stated in this agreement due to the Contractor's termination, then the Owner shall have a cause of action against the terminated Contractor for any such additional cost.
26. If, through any cause, the Contractor shall fail to fulfill in a timely and proper manner his obligations under this Contract, or if the Contractor shall violate any of the covenants, agreements, or stipulations of this Contract, DOH shall, thereupon, have the right to terminate this Contract by giving written notice to the Contractor of such termination and specifying the effective date of such termination. In such event, all unfinished work required by the Contractor under this Contract shall, at the option of the DOH, be completed or not.
27. **Payments**
 - 1) DOH/Homeowner shall pay the Contractor the price as provided in this contract.
 - 2) DOH shall make progress payments approximately every 30 days as the work proceeds, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer. DOH may, subject to written determination and approval of the Contracting Officer, make more frequent payments to contractors which are qualified small businesses.
 - 3) Before the first progress payment under this contract, the Contractor shall furnish, in such detail as requested by the Contracting Officer, a breakdown of the total contract price showing the amount included therein for each principal category of the work, which shall substantiate the payment amount requested in order to provide a basis for determining progress payments. The breakdown shall be approved by the Contracting Officer and must be acceptable to DOH. The values and quantities employed in making up this breakdown are for determining the amount of progress payments and shall not be construed as a basis for additions to or deductions from the contract price. The Contractor shall prorate its overhead and profit over the construction period of the contract.
 - 4) The Contractor shall submit, on AIA forms provided by DOH, periodic estimates showing the value of the work performed during each period based upon the approved breakdown of the contract price. Such estimates shall be submitted not later than 14 days in advance of the date set for payment and are subject to correction and revision as required. The estimates must be approved by the Contracting Officer with the concurrence of the Architect prior to payment. If the contract covers more than one project, the Contractor shall furnish a separate progress payment estimate for each.
 - 5) Along with each request for progress payments and the required estimates, the Contractor shall furnish lien waivers and labor releases as good and sufficient evidence that the premises are free from all liens, damages, and anything chargeable to said contractor.
 - 6) Except as otherwise provided in State law, DOH shall retain five (5) percent of the amount of progress payments until completion and acceptance of all work under the contract; except, that if upon completion of 50 percent of the work, the Contracting Officer, after consulting with the Architect, determines that the Contractor's performance and progress are satisfactory, DOH may make the remaining payments in full for the work subsequently completed. If the Contracting Officer subsequently determines that the Contractor's performance and progress are unsatisfactory, DOH shall reinstate the five (5) percent retainage until such time as the Contracting Officer determines that performance and progress are satisfactory. Retainage will be released 90 days after project completion.
 - 7) The Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration when computing progress payments. Material delivered to the Contractor at locations other than the site may also be taken into consideration if the Contractor furnishes satisfactory evidence that (1) it has acquired title to such material; (2) the material is properly stored in a bonded warehouse, storage yard, or similar suitable place as may be approved by the Contracting Officer; (3) the material is insured to cover its full value; and (4) the material will be used to perform this contract. Before any progress payment which includes delivered material is made, the Contractor shall furnish such documentation as the Contracting Officer may require to assure the protection of DOH's/Homeowner's interest in such materials. The Contractor shall remain responsible for such stored material notwithstanding the transfer of title to the Homeowner.
 - 8) All material and work covered by progress payments made shall, at the time of payment become the sole property of the Homeowner, but this shall not be construed as (1) relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or, (2) waiving the right of DOH/Homeowner to require the fulfillment of all of the terms of the contract. In the event the work of the Contractor has been damaged by other contractors or persons other than employees of DOH in the course of their employment, the Contractor shall restore such damaged work without cost to DOH/Homeowner and to seek redress for its damage only from those who directly caused it.

- 9) DOH shall make the final payment due the Contractor under this contract after (1) completion and final acceptance of all work; and (2) presentation of release of all claims against DOH/Homeowner arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. Each such exception shall embrace no more than one claim, the basis and scope of which shall be clearly defined. The amounts for such excepted claims shall not be included in the request for final payment. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned.
 - 10) Prior to making any payment, the Contracting Officer may require the Contractor to furnish receipts or other evidence of payment from all persons performing work and supplying material to the Contractor, if the Contracting Officer determines such evidence is necessary to substantiate claimed costs.
 - 11) DOH shall not; (1) determine or adjust any claims for payment or disputes arising there under between the Contractor and its subcontractors or material suppliers; or, (2) withhold any moneys for the protection of the subcontractors or material suppliers. The failure or refusal of DOH to withhold moneys from the Contractor shall in nowise impair the obligations of any surety or sureties under any bonds furnished under this contract.
28. Disputes
- 1) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to the contract. A claim arising under the contract, unlike a claim relating to the contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim. The submission may be converted to a claim by complying with the requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
 - 2) Except for disputes arising under the clauses entitled Labor Standards - Davis Bacon and Related Acts, herein, all disputes arising under or relating to this contract, including any claims for damages for the alleged breach thereof which are not disposed of by agreement, shall be resolved under this clause.
 - 3) All claims by the Contractor shall be made in writing and submitted to the Contracting Officer for a written decision.
 - 4) A claim by the Homeowner against the Contractor shall be subject to a written decision by the Contracting Officer.
 - 5) The Contracting Officer shall, within calendar 60 (unless otherwise indicated) days after receipt of the request, decide the claim or notify the Contractor of the date by which the decision will be made.
 - 6) The Contracting Officer's decision shall be final unless the Contractor (1) appeals in writing to a higher level in DOH in accordance with DOH's policy and procedures, (2) refers the appeal to an independent mediator or arbitrator, or (3) files suit in a court of competent jurisdiction. Such appeal must be made within (30 unless otherwise indicated) calendar days after receipt of the Contracting Officer's decision.
 - 7) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.
29. The Contractor will not discriminate against any employee or applicant for employment because of race, color, creed, religion, sex, sexual preference, national origin, or mental or physical disability during the performance of this agreement. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, in all employment practices such as the following: employment upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship, without regard to their race, color, creed, religion, sex, sexual preference, national origin or mental or physical disability. This provision will be inserted in all subcontracts, if any, for work covered by this agreement.
30. Equal Employment Opportunity (EEO) Clause
- During the performance of this contract, the Contractor agrees as follows:
- 1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and the employees are treated during employment without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
 - 2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
 - 3) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
 - 4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
 - 5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
 - 6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by the rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- 7) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event a Contractor becomes involved in, or is threatened with litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.
31. In the event of the Contractor's noncompliance with this equal opportunity clause or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further contracts in accordance with procedures authorized in Presidential Executive Order 11246, or by rule, regulations, or order of the Secretary of Labor or as provided by law.
32. The following applies to all contracts of \$10,000,000.00 or more: SECTION 402 VETERANS OF THE VIETNAM ERA. AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VEITNAM ERA. The Contractor will not discriminate against any employee or applicant for employment because he or she is a disabled veteran of the Vietnam era in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veteran status in all employment practices such as the following: employment upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship.
33. No officer, employee or member of the Governing Body of the Municipality shall have any financial interest, direct or indirect, in this contract or the proceeds of this loan.
34. DOH retains the right to reject any or all bids or any part of any bid in part or in whole if deemed to be in the best interest of the project.
35. Substitutions of materials from that specified are only allowed on an approved/equal basis. The Contractor must submit written documentation of the substitute item or material for approval by the Owner and Program prior to making such substitution. Any items or material substituted by the Contractor without prior written approval of the Owner and Program will at the Contractor's expense be replaced if it is determined not to be equal to the item or material specified. Any surrounding, adjoining, or dependent items affected by replacement of the unequal substituted material shall also be replaced, reworked, and reinstalled at no cost to the Owner.
36. Bids shall contain prices for general categories of work and/or items as specified on the provided bid sheets. In the case of a mathematical error by the Contractor, the correct sum of the individual line items in the cost summary shall be the Contractor's bid.
37. All bids shall remain in effect for thirty (30) calendar days.
38. The Owner will supply all necessary power required by the Contractor at no additional cost to complete his work. Power shall be limited to the use of existing outlets and shall not exceed the existing capacity of the system. Power required over the capacity of the existing electrical system shall be the responsibility of the Contractor. Heating during construction shall be supplied by the Owner.
39. If any unseen or unknown asbestos related conditions arise during the work the Contractor shall stop all work immediately and notify the DOH of such.
40. OTHER PROVISIONS – LEAD BASED PAINT

For properties built before 1978, if the project will involve disturbing painted surfaces or cleaning up lead contaminated dust or soil, use certified renovation or lead abatement contractors and workers using lead-safe work practices and clearance examinations consistent with the more stringent of EPA's Renovation, Repair, and Painting Rule and HUD's Lead Safe Housing Rule. The Contractor shall comply with the requirements concerning lead-based paint contained in the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846) as implemented by 24 CFR Part 35 and EPA's Repair Renovation, and Painting Rule at 40 CFR.80 Subpart E.

Any and all rehabilitation work under this Agreement will comply with the requirements of the Federal Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4831) which prohibits the use of lead-based paint in residential structures constructed or rehabilitated with Federal Assistance in any form.

The construction or rehabilitation of residential structures with assistance provided under this contract is subject to the final regulations "Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally owned Residential Property and Housing Receiving Federal Assistance." The regulation is at 24 CFR part 35. It implements sections 1012 and 1013 of the Residential Lead-Based Paint Hazard Reduction Act of 1992, Title X, of the Housing and Community Development Act of 1992. Sections 1012 and 1013 amend the Lead-Based Paint Poisoning Prevention Act of 1971.

Beginning April 22, 2010, the Contractor is required to have a certificate from a 6 hour EPA/HUD RRP lead remediation course.

41. The Contractor shall comply with the provisions of the immigration Reform and Control Act of 1986 effective and enforceable as of June 6, 1987 which Act makes unlawful the hiring for employment or subcontracting individuals failing to provide documentation of legal eligibility to work in the United States. The Contractor shall hold DOH, its agents and the Homeowner harmless for the failure to comply with the provisions of said Act.

Section 3

SECTION 00900
SPECIAL CONDITIONS

1. SPECIAL CONDITIONS DEFINITIONS

A. Where the Specifications refer to Owner, any interpretation shall be meant to reference the person which holds possession of the Property. Any reference to the DOH this shall be construed to mean the Connecticut Department of Housing, 505 Hudson Street, Hartford, CT 06106. Its designated agent shall be referred to as the "Contracting Officer" in these specifications.

2. BIDDING REQUIREMENTS

A. Contractor shall contact the DOH regarding site visit questions. Contact should be by the telephone to:

Ms. Joy Okafor, Grants and Contracts Specialist
CDBG-Disaster Recovery Program
Connecticut Department of Housing
505 Hudson Street
Hartford, CT 06106
(860) 270-8156

B. Architectural questions on specifications and drawings are to be addressed to:

Mr. David Holmes
Capital Studio Architects, LLC
1379 Main Street
East Hartford, CT 06108
Tel: (860) 289-3262
Fax: (860) 289-3163
Email: dholmes@capitalstudio.net

3. SALES TAX

A. The DOH is exempt from Connecticut Sales Tax. Other fees accessed by the State of Connecticut may be passed through to the contractor.

4. INSURANCE

A. No insurance shall be terminated by the Contractor without a ten (10) day notice to the DOH.

B. All insurance companies shall be licensed and registered in the State of Connecticut.

5. INTERPRETATIONS OF DRAWINGS

A. Any questions or disagreements arising as to the true intent of this specification or the drawings, or the kind and quality of work required thereby, shall be decided by the Architect, whose interpretations thereof shall be final, conclusive, and binding on all parties.

B. In the case of disagreement between drawings and specifications, or within either document itself, the better quality, greater quantity, or more costly work shall be included in the contract price, and the matter referred to the Architect's attention for decision and/or adjustment.

C. If the disagreement between the drawings and specification cannot be resolved through either A. or B. above, the specifications shall take precedence over the drawings.

6. VISITING THE SITE

A. Before submitting his final proposal, the Contractor shall examine the site of the proposed work to determine the existing conditions that may affect his work, as he will be held responsible for any assumptions made by him in regard thereto.

7. CONTRACTOR'S PROPOSAL

A. The Contractor's proposal and bid must cover all items on the drawings and in the specifications exactly as drawn and specified.

B. Proposals and bids that do not conform to drawings and specifications will not be accepted.

8. SUBSTITUTIONS

A. Substitutions of equipment or materials other than those indicated on the drawings or in the specifications, shall be limited to those approved in advance, in writing, by the Architect.

9. SUB-CONTRACTORS

A. All sub-contractors shall be subject to approval of the DOH and listed on the Form of Bid.

B. When requested by the DOH, the prospective contractors should submit a list with names, addresses, and telephone numbers of similar type projects previously completed.

10. LAWS, ORDINANCES, PERMITS AND FEES

A. The Contractor shall give all necessary notices, obtain all permits and pay for governmental taxes, fees, and other costs in connection with his work; file all necessary plans, prepare all documents and obtain all necessary approvals of the Governmental departments having jurisdiction; obtain all required Certificates of Inspection for his work and deliver to the Architect before request for acceptance and final payment for the work. The DOH is NOT exempt from paying Building Permit Fees to the City of Derby. The Contractor shall include for any and all State of Connecticut Department of Environmental Protection Permits in addition to all Local Permits.

11. APPROVALS

A. The materials, workmanship, design and arrangement of all work installed under the contract shall be subject to the approval of the Architect. If material or equipment is installed before it is approved, the contractor shall be liable for the removal and replacement, at no extra charge to the owner, if, in the opinion of the Architect, the material or equipment does not meet the intent of the drawings and specifications.

B. The words "approved equal" shall be understood to apply only to those items of equipment and material approved in advance by the Architect.

C. Equipment and materials that do not conform to the specifications or the previous paragraph will not be approved.

12. NON-SEGREGATED FACILITIES

A. By signing the bid, the bidder certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, or under his control, where segregated facilities are maintained. He certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The bidder agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this Contract. As used in this certification, the term "segregated facilities" mean any waiting room, work areas, restrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom or otherwise. He further agrees that (except where he has obtained identical certification from proposed sub-contractors for specific time periods) he will obtain identical certification from proposed sub-contractors prior to the award of sub-contracts exceeding \$10,000.00, which are not exempt from the provisions of the Equal Opportunity Clause; that he will retain such certifications in his files; that he will forward a notice to his proposed sub-contractors as provided in the Instruction to Bidders

13. JOB MEETINGS

A. The contractor and others concerned with the project whose presence is necessary as determined by the DOH and/or the Architect shall attend job meetings when requested for the purpose of discussing and expediting the prosecution of the work.

B. The schedule for meetings will be established by the DOH and/or the Architect.

C. The proceedings of these meetings will be recorded by the DOH and/or the Architect; the contractor will be furnished a copy for his use and distribution as required.

14. DRAWINGS

A. Drawings are generally schematic and may differ to some degree from field conditions. Specifically, certain drawings may be opposite hand from actual conditions and/or requirements. All dimensions are \pm . The contractor shall ascertain for himself the actual field conditions and shall be fully responsible for the indicated, specified and required work as designated and/or implied.

15. SCHEDULE OF THE WORK

A. The project area is tenant occupied. All work shall be carried out in such a manner so as to cause minimal interference with the use of the project by the tenant.

B. Other work in progress concurrently with work under this contract shall be affected by the performance of this contract. Conformance with this provision shall be the responsibility of this contractor.

C. The standard working hours shall be from 8:00 a.m., until 4:30 p.m., Monday through Friday. The Contractor shall confirm working hours with the Owner prior to starting the work. Holidays shall include those observed by the DOH and the State of Connecticut.

D. The contractor shall at all times, maintain the fire integrity of the structures and shall maintain, free and clear all exitways.

E. The Contractor is required to submit to the Architect, for approval, prior to commencement of the work, a Project Schedule which identifies the time frame and sequence of construction. The Contractor is to provide an updated Project Schedule with each Application for Payment.

F. The Contractor must provide the DOH 48 hrs. notice prior to the start of work so the owner may provide notice to the tenants.

16. MATERIALS AND EQUIPMENT

A. New materials and equipment installed into existing work shall be compatible with the existing work.

B. The contractor shall advise the Architect before ordering and/or installing any materials and equipment if he disputes those items and/or methods specified, otherwise he shall take full responsibility for their performance and suitability.

17. STORAGE OF MATERIALS

A. Storage space for materials and equipment is limited, Property Owner must approve in advance the locations of stored materials and/or dumpster(s).

B. Equipment and materials stored on the project site is the full responsibility of the contractor.

18. TEMPORARY FACILITIES

A. The contractor shall provide and maintain an adequate office at the project sites at his discretion. If provided, it shall be located as directed by the Owner. It shall be kept clean, have adequate light and ventilation.

B. The contractor shall provide and maintain telephone service for his own use. No telephone service is available at the sites.

19. TEMPORARY SERVICE

A. The contractor may connect to water available at the project without payment to the Owner.

B. The contractor may connect to electrical available at the project without payment to the Owner.

C. Fixtures, or other modifications, shall be the responsibility of the contractor.

20. SANITARY FACILITIES

A. Sanitary facilities are not available at the project site. The Contractor shall provide temporary facilities at the site for his workers, at his own expense. Coordinate final locations with the DOH project representative.

21. DEMOLITION

- A. This work includes the furnishing of all labor, materials, equipment and services necessary for, and reasonable incidental to, completion of all Demolition, as required for the installation of the work, whether or not listed below.
- B. The Contractor shall be confirm with Property Owner if a dumpster shall be permitted to remain on site for the purpose of disposal of demolished materials and debris. Final location of the dumpster to be coordinated with the Property Owner.

22. SALVABLE MATERIALS

- A. NO SALVABLE MATERIALS.

23. SHOP DRAWINGS AND SUBMITTALS

- A. Prior to delivery of materials and equipment to the project site, submit five (5) copies of Shop Drawings or Submittals of each item for approval by the Architect.
- B. Submittals shall consist of manufacturer's scale drawings, cuts or catalogs, including descriptive literature and complete characteristics of equipment showing dimensions, capacity, code compliance, motor and drive and testing, all as required for this project.
- C. Architect may designate submittal of physical samples for approval on items where actual color, texture or other characteristics might not be adequately described by drawing or written material.

24. PROTECTION OF WORK AND PROPERTY

- A. The contractor shall be responsible for the maintenance and protection of all equipment, materials and tools, supplied by him and stored or installed on the job site, from loss or damage of all causes, until final acceptance by the DOH.
- B. The contractor shall be responsible for the protection of any finished work of other trades or existing buildings and tenant's property and damage or defacement by his operation and must remedy any such injury at his own expense.
- C. It shall be the Contractor's responsibility to protect all parts of the existing site, all trees, roads, streets, sidewalks, driveways, plantings, landscaping, lawns and curbs against damage caused by trucks, etc., driving over them. If they are damaged, the Contractor without cost to the Owner shall replace them.
- D. The building is owner occupied. The Contractor shall take the necessary precautions to protect work areas and debris from potential dangers. Clear paths of egress must be maintained from the building at all times.

25. ACCESSIBILITY

- A. The Contractor shall install all work so that all parts required and readily accessible for inspection, operation, maintenance and repair. Minor deviations from the drawings may be made to accomplish this, but changes of magnitude shall not be made without prior written approval from the Architect.

26. SCAFFOLDING, RIGGING, HOISTING

- A. The Contractor shall provide all scaffolding, rigging, hoisting and services necessary for erection and delivery into the premises for all equipment and materials furnished, and remove same from premises when no longer required.
- B. The Contractor shall coordinate in advance with the Owner the methods and locations for lifting of materials to the roof. The Contractor cannot assume that any existing site fixture can be temporarily removed or relocated during this construction process, this can only be discussed with the Owner after bids have been awarded.

27. GUARANTEE PERIOD

- A. Refer to specific Sections of this project manual for warranty and guarantee periods.

28. FINAL PAYMENT REQUIREMENTS

- A. Final Payment will not be approved until all items as outlined in Section 01700 have been completed.
- B. All guarantees and warranties for new materials shall commence at date of written Final Acceptance of the Work, by the DOH, or its designated agent.
- C. Upon completion of the project, the roofing manufacturer shall provide installation and material inspection warranties and certification of the roof system.

29. CLEAN UP

- A. Project shall be cleaned daily or as required to keep project area free from rubbish and debris. Burning of rubbish shall not be allowed. All debris shall be removed from the site and deposited legally off-site.
- B. Final clean up shall include all debris, stains, and other defacement caused by the work.

30. LIQUIDATED DAMAGES

- A. In case of failure on the part of the contractor to complete the work within the time fixed in the Contract, or any extension thereof, the Contractor shall pay to the DOH as fixed, agreed and liquidated damages the sum of \$250.00 for each calendar day of delay.

31. HAZARDOUS MATERIALS

- A. A hazardous material report has been completed by Eagle Environmental; this report is available within these Specifications, please refer to this report for handling, removal and disposal of all hazardous materials. It is the intention that this project's Scope of Work be completed in coordination with any hazardous materials encountered and be done within the quantities allowed, as specified by state and local authorities regulating abatement of these materials. If the Contractor suspects that certain building materials may contain hazardous materials, he shall notify the Architect in writing and the Architect will have the suspect materials tested.

32. CHANGE ORDERS

- A. For all change orders, the general contractor shall be allowed 10% for overhead, above the direct costs and 5% for profit, above the direct costs to be calculated at 15% total above direct costs, for work performed by the general contractor.
- B. For all change orders, the sub-contractors shall be allowed 10% for overhead, above the direct costs and 5% for profit, above the direct costs to be calculated at 15% total above direct costs, for work performed by the sub-contractor.
- C. For all change orders, the general contractor shall be allowed 5% for overhead, above the direct costs and 2-1/2% for profit, above the direct costs to be calculated at 7-1/2% total above direct costs, for work performed by the sub-contractor.

33. BUILDER'S RISK INSURANCE

- A. Item 36B of HUD General Conditions, Form 5370-A refers to Builder's Risk Insurance. It has been determined that the Builder's Risk Insurance is not required on this project.

34. OSHA REGULATIONS

- A. The contractor shall comply with all applicable State and Federal OSHA regulations.
- B. The contractor shall submit to the owner, a copy of the OSHA ten (10) hour construction safety and health card for each employee.
- C. The contractor shall maintain any and all required OSHA materials, on site, at all times.

35. CONTRACT PERIOD

- A. The Contract period will be Sixty (60) consecutive calendar days from day of "Notice to Proceed" until day of "Substantial Completion".

36. GENERAL CONDITIONS

- A. In the event a conflict between the Special Conditions and the General Conditions located in Section 2 of these Specifications occurs, the General Conditions shall take precedence.

END OF SECTION 00900

SECTION 01200
SUMMARY OF THE WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including General and Special Conditions, and Division 1 Specification sections, apply to work specified in this section.

1.2 SUMMARY OF THE WORK

- A. The scope of this contract, Community Development Block Grant Disaster Recovery for the Owner Occupied Recovery and Rehabilitation Program for the Connecticut Department of Housing, **Application No. 2028** located at 167 Pleasant View Road, Derby, CT 06418
- B. Verbal Summary of the Work: Without force and effect on the requirements of the Contract Documents, the Base Bid work includes, but is not limited to the following:

1. Selective basement demolition.
2. Removal of existing wood panel board wall finish, crown molding, base wood trim and door trims.
3. Removal of existing wood doors and bi-fold doors, including hardware.
4. Replacing deteriorated wall bottom plates and wood studs.
5. Removal of exist. furring strips.
6. Removal and salvaging of existing plumbing fixtures, as required for drywall replacement in bathroom.
7. Installation of new 1/2" GWB to be primed and painted.
8. Installation of new wood doors, bi-fold doors and door casings as well as hardware.
9. Installation of new wood base trim and crown molding.
10. Installation of new carpet and padding.
11. Mold and Water Remediation. Refer to Specification Section 02092

1.3 EXISTING CONDITIONS

- A. This project includes work which is affected by existing conditions. Existing conditions which may affect the Work may be discovered during the progress of the Work. Make adjustments in the work as required accommodating existing conditions. Where products are to be installed in existing construction, perform cutting, removal of old products (if applicable), installation of new products, rebuilding of adjacent construction, and other operations as required.
1. The Architect will issue prompt instructions when unanticipated conditions are encountered.
 2. If unanticipated conditions are such as to impose a hardship on the Contractor as interpreted by the Architect, such as faulty structure which must be rebuilt, the Architect shall issue the appropriate change orders for approval by the DOH.
 3. Make adjustments in the Work, other than those described in two above, without additional compensation.

- B. The Drawings do not attempt to show every item of existing work to be demolished and every item of repair required to existing surfaces. Perform work required to remove existing materials which are not to be saved and to restore existing surfaces to like-new condition.
1. If possible, repairs shall be indistinguishable from adjacent sound surfaces. Where it is impossible to achieve repairs which are indistinguishable from adjacent sound surfaces, notify the Architect, and proceed according to the Architect's instructions.

1.4 - USE OF PREMISES

- A. The following are in addition to requirements of the General and Special Conditions governing the Contractor's use of the premises.
1. Assume full responsibility for protection and storage of products stored on the premises.
 2. The Contractor shall have use of the premises between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. It is during these hours that all work must take place. Additional hours must be approved in advance by the Owner.
 3. The Contractor shall not have use of the premises on holidays which the DOH is closed.
 4. The Contractor will have access to specific project site in accordance with the approved project schedule.
 5. Work on the building will not be allowed without providing the tenant 48 hour prior notice.

1.5 - REFERENCE STANDARDS

- A. Unless date is listed, reference to standard specifications shall mean latest edition of such specification legally adopted and published at the date the Contract is executed.
- B. Reference to technical society or organization is made in the project manual according to the following abbreviations:

A.A.M.A.	American Architectural Manufacturers Association
A.C.I.	American Concrete Institute
A.I.A.	American Institute of Architects
A.I.E.E.	American Institute of Electrical Engineers
A.I.S.C.	American Institute of Steel Construction A.I.T.C. American Institute of Timber Construction
A.F.P.A.	American Forest & Paper Association
A.N.S.I.	American National Standards Institute
A.P.A.	American Plywood Association
A.R.M.A.	Ashphalt Roofing Manufacturer's Association
A.S.H.R.A.E.	American Society of Heating, Refrigeration, and Air Conditioning Engineers
A.S.M.E.	American Society of Mechanical Engineers
A.S.T.M.	American Society of Testing Materials
A.W.I.	American Woodwork Institute
A.W.P.I.	American Wood Preservers Institute
A.W.S.	American Welding Society
A.W.W.A.	American Water Works Association

B.O.C.A.	Building Officials and Code Administrators International	
C.H.F.A.	Connecticut Housing Finance Authority	
C.P.S.C.	Consumer Products Safety Commission	
C.S.I.	Construction Specification Institute	
D.O.H.	Department of Housing	
E.E.I.	Edison Electric Institute	
Form 812	Connecticut State Department of Transportation Standard Specifications for Roads, Bridges, and Incidental Construction	
F.M.	Factory Mutual	
F.S.	Federal Specification	
H.U.D.	U.S. Department of Housing and Urban	Development
I.E.S.	Illuminating Engineers Society	
I.S.D.S.I.	Insulated Steel Door Systems Institute	
N.A.A.M.M.	National Association of Architectural Metal	Manufacturers
N.B.F.U.	National Board of Fire Underwriters	
N.B.S.	National Bureau of Standards	
N.E.C.	National Electric Code	
N.E.M.A.	National Electrical Manufacturers Association	
N.F.P.A.	National Fire Protection Association	
O.S.H.A.	Occupational Safety and Health Administration	
S.D.I.	Steel Deck Institute	
S.I.G.M.A.	Sealed Insulating Glass Manufacturer's	Association
S.J.I.	Steel Joist Institute	
S.M.A.C.N.A.	Sheetmetal and Air Conditioning Contractors National Association, Inc.	
S.S.P.C.	Steel Structures Painting Council	
U.L.	Underwriters Laboratories, Inc.	
W.W.P.A.	Western Wood Products Association	

1.6 – FINAL PAYMENT REQUIREMENTS

- A. Final Payment will not be approved until all items as outlined in Section 01700 have been completed.
- B. All guarantees and warranties for new materials shall commence at date of written Final Acceptance of the Work, by the DOH, or its designated agent.
- C. Upon completion of the project, the roofing manufacturer shall provide installation and material inspection warranties and certification of the roof system.

1.7 - GENERAL INFORMATION

- A. The DOH is a governmental agency, and as such, **pays no sales tax**. The Contractor shall assume that materials purchased for the use on this project shall not be taxed. The appropriate information and tax exemption number will be given to the successful bidder.

1.8 - SCHEDULE

- A. Refer to Form of Contract for completion date.

PART 2 - PRODUCTS

NOT USED

The State of Connecticut
Department of Housing (DOH)
Community Development Block Grant
Disaster Recovery Program (CDBG-DR)
DOH Occupied Rehabilitation and Rebuilding Program (OORR)

Bid Package for
Mobilio Residence
167 Pleasant View Road
Derby, CT 06418
Project #2028

PART 3 - EXECUTION

NOT USED

END OF SECTION 01200

SECTION 01270

UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for Unit Prices.
- B. Refer to other specification sections for specific requirements for this work.
- C. Enter Unit Price amounts on the enclosed Bid Form.

1.2 DEFINITIONS

- A. Unit price is an amount proposed by bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: Refer to individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A list of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

- A. Refer to drawings for details and locations for Unit Price work.

3.1 LIST OF UNIT PRICES

A. Unit Price No. 1 – 2x4 Wood Studs

1. Condition –Existing wood studs may be deteriorated and need to be replaced.
2. Description – Provide new 2x4 wood studs per Section 06100 of these specifications.
3. Unit of measure – Per square linear foot.

B. Unit Price No. 1 – 2x4 Pressure Treated Wood Bottom Plate

1. Condition –Existing wood bottom plates may be deteriorated and need to be replaced.
2. Description – Provide new 2x4 pressure treated wood bottom plates per Section 06100 of these specifications.
3. Unit of measure – Per square linear foot.

END OF SECTION 01270

SECTION 01300
DEMOLITION

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions, and Division 1 Specification sections, apply to work specified in this section.

1.2 - GENERAL REQUIREMENTS

- A. "Demolition" denotes razing and removal of materials or portions of existing structures, installations and obstructions shown on Drawings or specified to be removed from the site, and includes taking possession of and removing from the site, all material, equipment and debris resulting from demolition work except as otherwise specified herein. Burning of materials on the site will not be permitted.
- B. Upon completion remove all tools, equipment, temporary structures (if any) and installations and rubbish of every sort. Leave site in a level and orderly condition and the surrounding area in a broom-clean condition.
- C. It is the responsibility of the Contractor to coordinate any demolition work with any general construction work and the work of other trades. The demolition work must be phased accordingly.
- D. Provide any temporary weather protection which may be required as a result of demolition work.

1.3 - EXISTING PUBLIC SPACES

- A. Protect existing services indicated to remain on the site. Replace and/or repair services damaged as a result of demolition work, at no expense to the Owner.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.1 - SCOPE

- A. Portions of structures, installations and obstructions to be demolished are as shown on the Contract Drawings and, in general but not necessarily limited to, those items as listed below:
1. Removal of existing wood panel wall finish.
 2. Removal of existing wood cabinetry and seating.
 3. Removal of existing wood doors, bi-fold doors and hardware.
 4. Removal of existing wood base trim, crown molding and door casings.
 5. Removal of and salvaging of existing plumbing fixtures for reinstallation.
 6. Removal of all debris and adhesive from existing concrete floor.

B. Demolition work shall not be limited to the above listing. The removal, relocation, or replacement of any item(s) by a trade as may be required (1) to complete the indicated scope of work or (2) to accomplish the intended result may require demolition work not specifically listed or shown on the Drawings. All such requirements shall be considered part of this work.

.2 - PROTECTION

A. It shall be the Contractor's responsibility to protect all parts of the existing site, all trees, roads, streets, sidewalks, driveways, plantings, landscaping, lawns and curbs against damage caused by trucks, etc., driving over them. If they are damaged, the Contractor without cost to the Owner shall replace them.

B. Do not close or obstruct means of egress in connection with the work. Materials and debris shall not be placed or stored in egress paths. Conduct operations so as to interfere as little as possible with normal activities.

END OF SECTION 01300

SECTION 01400
SUBMITTALS

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions, and Division 1 Specification sections, apply to work specified in this section.

1.2 - RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Substitutions and product options are indicated in Section 00900 of the Special Conditions.
- B. Materials and methods requiring submittals are listed, where applicable, within each respective section of this specification.

1.3 IDENTIFICATION

- A. Identify each submittal with the following information:
1. Date and revision date(s).
 2. Project title.
 3. The names of: Architect, Contractor, subcontractor supplier, manufacturer or separate detailer when pertinent.
 4. Identification of products, materials and finishes.
 5. Relation to adjacent structure or material.
 6. Field dimensions, clearly identified as such.
 7. The specification section number, and applicable standards, such as ASTM or FS number.
 8. Quantities.
 9. Blank spaces, 4" x 4 1/2" each, for the Architect's stamp, and Consultant's stamp where applicable.
 10. Identification of deviations from Contract Documents.
 11. Contractor's stamp, initials or signed, certifying to review of submittal, the verification of the field measurements and quantities, and compliance with Contract Documents.

- B. Accompany the submittals with a transmittal letter containing:

1. Date.
2. Project Title and H.U.D. number (where applicable).
3. Contractor's name and address.
4. The number and name of each item submitted.
5. Notification of deviations from Contract Documents.

1.4 - SHOP DRAWINGS

- A. Provide the following information, where applicable, on all shop drawings:
1. All necessary dimensions. Dimension work illustrated by shop drawings to fit actual field conditions.
 2. Sufficient detailing to show appearance, method of assembly or fabrication, and the

method of installation or erection.

3. Identification of details by reference to sheet and detail number shown on Contract Drawings.

1.5 - PRODUCT DATA

- A. Manufacturer's standard schematic drawings which are:
 1. Modified to delete any information which is not applicable to the Project.
 2. Supplemented to provide any additional information applicable to Project.
- B. Manufacturer's catalog sheets, brochures, diagrams schedules, performance charts, illustrations and other standard descriptive data.
 1. Clearly mark each copy to identify the pertinent materials, products, or models.
 2. Show dimensions and clearances required.
 3. Show performance characteristics and capacities.
 4. Show wiring diagrams and controls.
- C. Test reports performed by independent testing agencies for manufacturer. On test reports list:
 1. System, material or work tested.
 2. Test results and witnesses.
 3. Description of correction of faults.

1.6 - SAMPLES

- A. Samples shall be of sufficient size and quantity to clearly illustrate:
 1. Functional characteristics of product or material, with integrally related parts and attachment devices.
 2. Full range of color samples.
 3. After the review, approved samples may be used in construction of Project, where appropriate.

1.7 - SUBMISSION REQUIREMENTS

- A. Submit to the Architect all shop drawings, product data and samples required by the specification sections.
- B. Schedule submissions at least 10 working days before dates reviewed submittals will be needed.
- C. Submit six (6) bond copy prints of each shop drawing.
- D. Submit six (6) copies each of all product data.
- E. Submit two each of required samples unless a greater number is specified or requested by the Architect.
- F. Submit samples with delivery charges prepaid. Samples delivered in damaged condition may not be acceptable, and may have to be resubmitted, to Architect's discretion.
- G. The Architect may, at his discretion, request submittals in addition to those specified.

1.8 - RESUBMISSION REQUIREMENTS

A. Shop Drawings:

1. Revise the initial drawings as required by General Conditions, and resubmit as specified for initial submission.
2. Indicate on drawings any changes which have been made other than those requested by Architect.

B. Product data and Samples: Submit new data and samples as required for initial submission.

1.9 - ARCHITECT'S DUTIES

A. Architect's responsibilities for processing submittals are defined in General Conditions.

B. Architect is not responsible for verifying quantities, dimensions, field measurements, or coordination of work of different trades. Architect's review of submittals shall not be construed to include or imply any such verification.

1.10 - CONTRACTOR'S DUTIES

A. In addition to requirements of the General Conditions,

1. Contractor shall be responsible for obtaining and distributing prints of shop drawings after, as well as before final approval, to all parties, including, but not limited to the Housing Authority, H.U.D. (where applicable), subcontractors and suppliers.
2. Prints of approved shop drawings shall be made from sepia transparencies which carry the Architect's and Consultant's stamp of approval.
3. Begin no work which requires shop drawings and product data unless the approved and stamp shop drawings and product data are on file at the job site.

B. The Contractor shall submit one (1) Submittal Package, which shall include all items required to complete any type, which shall be the basis of all units completed for the contract period, subject to any design changes which may result out of execution of the work.

END OF SECTION 01400

SECTION 01500
CUTTING AND PATCHING

Part 1 - GENERAL

1.1 - RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions, and Division 1 Specification sections, apply to work specified in this section.

1.2 - DESCRIPTION

A. Definition: "Cutting and Patching" is hereby defined to include, but not necessarily limited to the cutting and patching of nominally completed and previously existing work, in order to accommodate the coordination of work, or the installation of other work, or to uncover other work for access or inspection, or to obtain samples for testing, or for similar purposes; and is defined to exclude integral cutting and patching during manufacturing, fabricating, erecting and installing process for individual units of work.

B. Demolition is recognized as an example of a related, but separate category of work, which may or may not also require cutting and patching as defined in this Section. Refer to Section 01300.

1.3 - QUALITY ASSURANCE

A. Requirements for Structural Work:

1. General: Do not cut and patch structural work in a manner resulting in a reduction of bearing capacity or load/deflection ratio.

2. Call for a structural inspection, and/or obtain the Architect's approval prior to cutting and patching any of the following:

- a. Bearing Walls.
- b. Structural decking and roof or floor systems.
- c. Exterior wall construction.
- d. Pressurized piping, vessels and equipment.

B. Visual requirements: Do not cut and patch work which is exposed on the exterior or exposed in occupied spaces of the building in a manner resulting in a reduction of visual qualities or resulting in substantial evidence of cutting and patching work, both as judged solely by the Architect. Remove and replace work judged by the Architect as having been cut and patched in a visually unsatisfactory manner.

1.4 - SUBMITTALS

A. Requests for Architect's Consent:

1. Prior to cutting and patching of structural elements, submit written request to the Architect for permission to proceed with cutting.
2. Should conditions of the Work, or schedule indicate a required change of materials or methods for cutting and patching, so notify the Architect and secure his written permission and the required Change Order prior to proceeding.
3. Cutting and patching of deteriorated materials listed in the Bid Form as Unit Prices, may proceed without the Architect's prior approval, however, the Contractor shall document the quantity, location and date of materials replaced. The Contractor shall be compensated for this additional work based on the unit price established and the quantities replaced pursuant to Change Orders, and in accordance with Item 2.2 of this Section.

B. Notices to the Architect:

1. Prior to cutting and patching performed pursuant to the Architect's instructions, submit cost estimate to the Architect. Secure the Architect's approval of cost estimates and type of reimbursement before proceeding with cutting and patching.
2. Submit written notice to the Architect designating the time the work will be uncovered, to provide for the Architect's observation.

C. Approval by the Architect to proceed with proposed cutting and patching does not waive the right to later require complete removal and replacement of work found to be cut and patched in an unsatisfactory manner.

Part 2 - PRODUCTS

2.1 - MATERIALS

A. For replacement of items removed, use identical materials to those being removed, or materials complying with the various Sections of these Specifications, as appropriate. The end result of the cutting and patching operation shall result in equal or better work than the work being cut and patched, in terms of performance characteristics and including visual effects where applicable.

2.2 - PAYMENT FOR COSTS

A. Perform cutting and patching needed to comply with the Contract Documents at no additional cost to the Owner. The Owner will reimburse the Contractor for cutting and patching performed pursuant to written Change Orders, after claim for such reimbursement is submitted by the Contractor, and approved in advance by the Architect.

PART 3 - EXECUTION

3.1 - INSPECTION

A. Inspection:

1. Inspect existing conditions, including elements subject to movement or damage during cutting and patching.
2. After uncovering the work, inspect conditions affecting installation of new work.

B. Discrepancies:

1. If uncovered conditions are not as anticipated, immediately notify the Architect and secure needed directions.
2. Do not proceed until unsatisfactory conditions are corrected.

3.2 - PREPARATION

- A. Provide adequate temporary support including, but not necessarily limited to shoring and bracing to maintain structural integrity of the Work. Do not endanger other work.
- B. Provide adequate protection of other work during cutting and patching, to prevent damage. Provide protection of the Work from adverse weather exposure.

3.3 CUTTING AND PATCHING

- A. Perform cutting and patching as required under pertinent other Sections of these Specifications.
- B. Employ skilled tradesmen to perform all cutting and patching. Proceed with cutting and patching at the earliest feasible time, in each instance, and perform the work promptly.
- C. Patch with seams which are durable and as invisible as possible. Perform fitting and adjusting of products to provide finished installation complying with the specified tolerances and finishes.
- D. Select systems that adequately resist racking and provide acceptable deflection under live and dead loads. Reinforce to prevent cracking. Inspect and test patched areas to demonstrate integrity of work.
- E. In all cases of repair and renovation, restore exposed finishes of patched areas and where necessary, extend finished restoration onto retained work adjoining, in a manner which eliminates evidence of patching.

END OF SECTION 01500

SECTION 01700
PROJECT CLOSEOUT

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions, and Division 1 Specification sections, apply to work specified in this section.

1.2 - GENERAL

- A. The following requirements supplement those of the General Conditions.

1.3 - CLEANING

- A. Hazard Control:
 - 1. Store all volatile wastes in covered non-flammable containers.
 - 2. Prevent accumulation of wastes, which create hazardous conditions.
 - 3. Provide adequate ventilation during use of volatile or noxious substances.
- B. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
 - 1. Do not burn or bury any rubbish and waste materials on project site.
 - 2. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in the storm or sanitary drains. Dispose of legally off the site.
 - 3. Do not dispose of wastes in streams or waterways.
 - 4. Dispose of demolition and waste materials, debris and rubbish legally off the site.
- C. During construction, in addition to cleaning required by the General Conditions, perform the following:
 - 1. Keep building, grounds, and public properties free from accumulations of waste materials and rubbish.
 - 2. Provide on-site containers for the collection of all waste materials, all debris and rubbish. Dispose of waste materials, debris and rubbish at reasonable intervals, legally off the site.
- D. At completion, for the purposes of final acceptance, in addition to leaving the work clean as required by General Conditions, perform the following:
 - 1. Clean site and clean up any debris or dirt off site, which resulted from work under this contract, and dispose of legally off the site.
 - 2. When workmen call back for "punch list" or guarantee work, clean up afterwards.

1.4 – PREREQUISITES TO SUBSTANTIAL COMPLETION

- A. General: Prior to requesting Certification Inspection for Substantial Completion, (for either entire work or portions thereof), complete the following and list know exceptions in the request.
- B. Submit written notice to Architect that Project, or a designated portion of Project, is complete, as required by General Conditions, and that the following items have been completed:
 - 1. Contract documents have been reviewed.
 - 2. Project has been inspected for compliance with Contract Documents.

3. Work has been completed in accordance with Contract Documents and ready for inspection.
 4. Equipment and systems have been tested in presence of Owner's representative and are operational.
 5. Submission to the owner all required operating manuals, warranties and documentation.
 6. Request that Architect review the work completed.
 7. Submit payment request showing 100% completion for portion of work claimed as "substantially complete", or list the incomplete items, value of incomplete items, time to complete those items and reason for the incompleteness. Include supporting documents as required.
 8. Removal from the project site temporary facilities and services, along with construction tools and mock-ups.
- C. Inspection Procedures: Upon receipt of the Contractor's request for Substantial Completion Certification Inspection, the Architect will either proceed with the inspection or advise the Contractor of prerequisites not fulfilled. Following initial inspection, the Architect will note Substantial Completion or advise Contractor of work that must be performed and repeat inspection when requested and assured that work has been substantially completed. Results of completed inspection will form initial "punch-list" for final acceptance.
- D. Re-inspection Procedures: The Architect will re-inspect work upon receipt of notice from the Contractor that the work has been completed. The Architect will bill the owner directly for punch list items not accepted after the second inspection and requiring additional inspection. The dollar amount is to be agreed to with the owner. This amount is to be deducted from final payment to Contractor.
- E. When the Architect certifies that the Work is substantially complete, the Contractor shall immediately do the following:
1. Obtain Certificate of Occupancy, if required.
 2. Prepare and submit Closeout documents.

1.5 – PREREQUISITES TO FINAL ACCEPTANCE

- A. Prior to requesting Final Inspection for Certification of Final Acceptance and Final Payment as required by the General Conditions the following items must have been completed and/or submitted to the Owner or Owner's Representative:
1. Record Documents and related record information as outlined below.
 2. Submit final payment request with final releases and supporting documentation not previously submitted and accepted.
 3. Submit copy of final punch-list of itemized work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance.
 4. Deliver tools, spare parts, extra stocks of materials, and similar physical items.
 5. Operation and Maintenance Data.
 6. The guarantees, warranties and bonds.
 7. Parts and Maintenance Materials.
 8. Complete final clean-up requirements, including touch-up painting of marred surfaces.
 9. Evidence of Compliance with requirements of governing authorities, including:
 - a. Certificate of Occupancy, if required.
- B. Send Closeout submittals to Owner with transmittal letter in duplicate containing the following:

1. Date
2. Project title and number.
3. Contractor's name and address.
4. Certification that each Project Record Document, as submitted is complete and accurate.
5. Signature of the Contractor, or his authorized representative.

1.6 - RECORD DOCUMENTS

- A. As work progresses prepare and maintain record documents as specified below, including amendment and change order drawings, these shall be referred to as "Record Documents." Do not use record documents for construction purposes; protect from deterioration. The Contractor shall keep an up to date copy of all documents and have accessible to the Architect for reference during working hours. Upon completion of project turn record documents over to Owner.
1. Record Drawings: Maintain one (1) print set of contract drawings in clean, undamaged condition, with mark-up of actual installations which vary from the work as originally shown. Give particular attention to concealed work, which would be difficult to measure and record at a later date.
 2. Record Specifications: Maintain one (1) copy with mark-up of variations in actual work from that specified. Give particular attention to substitutions, option selections, etc.
 3. Record Shop Drawings: This includes Product Data, Certifications and Laboratory Test Reports: Maintain one (1) copy of each approved shop drawing and product data submittal, certification or report. Show all shop drawing items on the Record Drawings where the shop drawing item caused a change in the contract documents.

1.7 – OPERATION AND MAINTENANCE MANUALS

- A. Provide operation and maintenance manuals for each system or piece of equipment specified. Organize information into binder form with a table of contents and tabbed sections. The cover of the binder should read "Operations and Maintenance Manual" it should list the name of the project and project number and date of completion. The Manual's contents should include, but not be limited to the following:
1. Description of each system.
 2. Installation instructions.
 3. Maintenance instructions.
 4. Emergency instructions and safety requirements.
 5. Corrected shop drawings.
 6. Approved product data and system test procedure.
 7. Copies of approved certifications and laboratory test reports.
 8. Copies of Warranties.
 9. Parts list, including source of supply.
 10. Name, Address, and Phone number of each subcontractor who installed equipment and local system representative.

PART 2 - PRODUCTS
NOT USED

PART 3 - EXECUTION
NOT USED

END OF SECTION 01700

SECTION 020920
MOLD AND WATER REMEDIATION

PART 1 GENERAL

1.1 BACKGROUND

- A. A Mold and Moisture Assessment was conducted by Eagle Environmental, Inc. (Eagle) in the areas of the building scheduled for renovation at 167 Pleasant View Road in Derby, Connecticut. The Mold and Moisture Assessment was performed in response to water intrusion into the building during Storm Sandy (Event).
- B. Mold and water remediation and general renovation work is being performed to repair specific areas of the structure impacted during the Event.
- C. The work is being performed under the State of Connecticut Department of Housing Community Development Block Grant - Disaster Recovery Program (Program). Mold and moisture testing has identified materials that contain microbial growth and/or are holding high levels of moisture as a result of Storm Sandy. The work covered in this section includes the minimum procedures that shall be employed during the remediation of microbial and moisture impacted building materials.
- D. Information obtained through the site visits was used as the basis for this mold and moisture remediation specification. The scope of work was developed from this information based on site condition at the time of the site visits.

1.2 GENERAL PROVISIONS

- A. The work covered in this section includes the procedures that shall be employed during the remediation of mold and water impact at the Site.
- B. The goal of this remediation is to clean and disinfect or remove and dispose of water and/or mold impacted materials from areas of proposed renovation or repair work at the Site and in conjunction with planned renovation and repair work.
- C. The surfaces and/or areas requiring microbial and water remediation within the basement of the structure include the following:
 - 1. Impacted gypsum wall board and associated wood framing and furring strips
 - 2. Impacted wood paneling
 - 3. Impacted wood doors, baseboards and miscellaneous trim components
 - 4. Impacted wood cabinetry, bar and settee
 - 5. Impacted concrete and ceramic tile floors
 - 6. Impacted carpet on stair system

1.3 RELATED DOCUMENTS

- A. Drawings and General Provisions of the Owner Contractor Agreement and the General

Conditions of the contract apply to this Section.

- B. Architect's Plans and Specifications
- C. Environmental Assessment Report Dated May 27, 2014

1.4 PROJECT DESCRIPTION

- A. Coordinate the work of this Specification with the General Contractor and the Owner and Eagle Environmental, Inc. (Architect's Representative).
- B. The work to be performed by the Remediation Contractor includes:
 - 1. Remediation of water impacted building materials throughout the basement.
 - 2. Disinfect all remaining surfaces including but not limited to studs, wall plates, framing, concrete floors concrete walls, miscellaneous non-moveable items, toilet, shower stall, with an appropriate biocide and/or antimicrobial. Antimicrobials and/or biocides used in the remediation should be listed in the Environmental Protection Agency (EPA) Federal Insecticide, Fungicide, and Rodenticide FIFRA database and used in strict accordance with the manufacturer's recommendations
 - 3. Drying all surfaces to within two points of the "dry standard" determined by the Architect's Representative.
 - 4. All work shall be done in accordance with the recommendations of the Institute of Inspection, Cleaning, and Restoration Certification (IICRC) S-500, Standard and Reference Guide for Professional Water Damage Restoration – Third Edition, the IICRC S-520, Standard and Reference Guide for Professional Mold Remediation – Second Edition, and the Connecticut Department of Public Health, Guidance for Mold Abatement Contractors.

1.5 SCOPE OF WORK

- A. Observations and data obtained during the site visits represent conditions during that time span only. Moisture content, fungal ecology, moisture content of building materials, and psychometric variables are intrinsically dynamic and can vary dramatically and impact the scope of work. The Remediation Contractor shall verify conditions and quantities prior to submitting bid.
- B. The work specified herein shall be the removal, cleanup and remediation of water impacted materials by persons who are knowledgeable, qualified, and trained in the cleaning, removal, treatment, handling, and disposal of these materials (Remediation Contractor).
- C. The Remediation Contractor shall have a "Competent Person" in control on the job site at all times during the microbial remediation. This person must comply with this specification and the standards set forth in the Institute of Inspection, Cleaning, and Restoration Certification (IICRC) S-500, Standard and Reference Guide for Professional Water Damage Restoration – Third Edition, the IICRC S-520, Standard and Reference Guide for Professional Mold Remediation – Second Edition, and the Connecticut Department of Public Health, Guidance for Mold Abatement Contractors.
- D. Deviations from this Specification require the written approval of the Architect's

Representative.

- E. Any damage caused during the performance of remediation activities shall be repaired by the Remediation Contractor (e.g., paint peeled off by barrier tape, nail holes, water damage, broken glass, etc.) will be the sole responsibility of the Remediation Contractor. The Remediation Contractor is responsible for protecting all objects in work areas that are permanent fixtures or too large to remove (except those which will be removed as part of the remediation or renovation such as roofing materials).
- F. The Remediation Contractor shall be responsible for the following general requirements:
 - 1. Obtain all approvals and permits, and submit all notifications as required.
 - 2. Provide, erect, and maintain all bracing, barricades, and warning signs.
 - 3. Unless otherwise specified, all debris resulting from remediation shall become the property of the Remediation Contractor and shall be removed from the premises.
 - 4. Materials to be reused shall be cleaned and removed with the utmost care to prevent damage of any kind. All material to be reused shall be stored as directed.
 - 5. If signs of water damage or mold growth are revealed during remediation then contact the Architect's Representative for direction of how to proceed;
 - 6. Remove and dispose of all stained, damaged, wet, or moldy materials exposed by the work of this project;
 - 7. Disinfect all newly exposed substrates; and,
 - 8. Materials not scheduled for reuse shall be removed from the site and disposed of in accordance with all applicable Federal, State and Local requirements.
- G. It shall be the responsibility of the Remediation Contractor to protect and preserve in operating condition all utilities traversing the building and site. Damage to any utility due to work under this Contract shall be repaired to the satisfaction of the Architect at no cost to the Owner.

1.6 EXEMPTIONS

- A. Any deviation from these specifications requires the written approval and authorization from Architect's Representative.

1.7 QUALITY ASSURANCE

- A. The Remediation Contractor shall be responsible for maintaining compliance with the requirements of this specification section. If at any time during the course of the work, conditions arise that will affect the successful completion of this project and are not specifically addressed in this section, the Remediation Contractor shall immediately notify the Architect or Architect's representative.
- B. Applicable Codes
 - 1. The Remediation Contractor shall be solely responsible for conducting this project and

supervising all work in a manner that will be in conformance with all federal, state and local regulations. This includes all local building codes.

C. Description of Work

1. The Remediation Contractor shall supply all labor, materials, equipment, services, insurance, and incidentals, which are necessary or required to perform the work in accordance with applicable governmental regulations and these specifications.
2. The remediation work shall include the removal and/or cleaning of the following:
 - a. Removal and disposal of all gypsum wall board, trim, furring strips (where present) and associated fasteners from the basement finish space and bathroom.
 - b. Removal and disposal of all wood paneling and associated fasteners.
 - c. Removal and disposal of wood bar and settee.
 - d. Removal and disposal of all wood doors.
 - e. Removal and disposal of carpet from basement stair system.
 - f. Removal and disposal of all wood cabinets
 - g. Removal and disposal of ceramic floor tile and mud set from bathroom.
 - h. Removal and decontamination of toilet and shower surround. Save for re-use.
 - i. Decontamination of all exposed surfaces including but not limited to wood framing, floors, walls, ceilings, miscellaneous fixed items.
 - j. Dry all surfaces scheduled to remain in accordance with this Specification.
 - k. Treat wood framing with anti-microbial sealant.
 - l. Work area preparation:
 - 1) Isolate work areas from adjacent indoor areas with critical barriers
 - 2) Establish airlocks and change rooms at indoor work areas
 - 3) Establish a negative pressure differential between indoor work areas and adjacent indoor areas
 - 4) Isolate HVAC system where applicable
 - 5) Post warning signage.
 - 6) Regulate access to work areas
 - m. Remediation:
 - 1) Remove and dispose all scheduled impacted materials.
 - 2) Remove all visible mold from exposed surfaces and surfaces that become exposed during the work.

- n. Cleaning:
 - 1) Brush, sand, or scrub specified building components including framing, floors, walls, miscellaneous items to remain as necessary to remove all visible debris and/or contamination within the limits of the defined locations. If the integrity of the framing or other building components is compromised, then remove and dispose of as required per unit price Contract. Authorization from the Architect or Architect's representative must be given prior to the performance of any unit price work.
- o. Disinfecting
 - 1) Use an EPA registered fungicide as directed by the manufacturer to disinfect all exposed interior surfaces within the remediation areas.
 - 2) DO NOT apply any anti-microbial coating or other permanent coating.
- p. Drying
 - 1) Prior to post remediation inspection, dry all remaining structural components, finishes, and furnishings to within two (2) points of a pre-determined "dry standard" as measured on a Protimeter Moisture Measurement System (MMS), Delmhorst TechCheck Plus, Extech MO290, or comparable moisture meter.
 - 2) Record psychometric data at least daily during the drying including, at a minimum, specific humidity in grains per pound inside of the regulated area and at the dehumidifier exhausts (grain depression).
- D. The Remediation Contractor is required to confirm all quantities of contaminated materials and their current conditions.
- E. The Remediation Contractor shall not apply any sealants (i.e. AfterShock™) or scented products prior to the final inspection or clearance testing.
- F. The cleanup work will be conducted in the following general sequence:
 - 1. Removal of all water damaged and/or microbial contaminated materials from designated areas;
 - 2. Microbial cleanup of the remaining building components in the designated areas;
 - 3. Drying of building components and finishes in the designated areas; and
 - 4. Final inspection and clearance of the remediated areas.
- G. Unless otherwise specified in this work plan, all contaminated materials are to be removed under negative pressure with critical barriers, a change room, and airlocks.
- H. The Remediation Contractor shall coordinate the waste paths from the work area to the appropriate waste container or truck with the Owner.

1.8 DEFINITIONS

- A. Accessible - A space easily accessed and which can be entered or seen without demolition.

- B. Approved Landfill – A site for the disposal of microbial contaminated wastes and other hazardous wastes that has the necessary governmental approvals for accepting these types of wastes.
- C. Architect's Representative – An individual retained by the Architect who will monitor the Contractor's work practices, perform inspections and provide testing as required to support the work.
- D. Competent Person – An individual who is capable of identifying existing microbial hazards in the workplace and selecting the appropriate control strategy for microbial exposure and who has the authority to take prompt corrective measures to eliminate them.
- E. Remediation Contractor – Remediation Contractor providing demolition and removal services as defined in these specifications.
- F. Critical Barrier - A minimum of two layers of six (6) mil polyethylene sheeting taped securely over windows, doorways, diffusers, grilles and any other openings between the Work Area and uncontaminated areas outside of the Work Area, including the outside of the building.
- G. Deodorize – The process of odor removal. The four principals for effective deodorization are:
 - 1. Removal of primary source.
 - 2. Cleaning of all surfaces exposed to contaminant.
 - 3. Recreation of conditions of penetration with appropriate odor counteractants.
 - 4. Sealing of salvageable but heavily contaminated surfaces.
- H. Demolition - The wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.
- I. Disinfect – A chemical or physical process used on surfaces or objects to destroy 99.99% of microorganisms in a specific period of time.
- J. Engineering Controls - Controls to include, but not be limited to, pressure differential equipment, decontamination enclosures, critical barriers and related procedures.
- K. Exposed - Open to view.
- L. Microbial Contamination – Visible infestation of materials by microbial growth as determined by bulk, air, microvac or wipe sampling or visual inspection.
- M. Microbial Contaminated – Any building material that has visible infestation of bacteria or fungi, as shown by bulk, air, microvac or wipe sampling or visual inspection.
- N. Respirator Program – A written program established by an employer that provides for the safe use of respirators on their job sites.
- O. Visible Residue - Any debris or dust on surfaces in areas within the Work Area where microbial abatement has taken place and which is visible to the unaided eye. All visible residue is assumed to contain microbial contamination.
- P. Wet Cleaning - The process of eliminating microbial contamination from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with an anti-microbial, and afterwards thoroughly decontaminated or disposed of as microbial-contaminated waste.

- Q. Work Area - Specific area or location where the actual work is being performed or such other area of a facility that it has been determined that it may be hazardous to public health as a result of the cleanup or abatement.

1.9 REFERENCES

- A. The current issue of each document shall govern. Where conflict among requirements or with these specifications exists, the more stringent requirements shall apply.
1. Occupational Safety and Health Administration (OSHA)
 - a. 29 CFR 1910.134 - Respiratory Protection
 - b. 29 CFR 1926.21 - Safety Training and Education
 - c. 29 CFR 1926.32 - Competent Person
 - d. 29 CFR 1926.51 - Sanitation
 - e. 29 CFR 1910.1200 - Hazard Communication
 - f. 29 CFR 1926.200 - Accident Prevention Signs and Tags
 - g. 29 CFR 1926.417 - Lockout and Tagging of Circuits
 2. Environmental Protection Agency (EPA)
 - a. 40 CFR 763, Subpart G - Worker Protection Rule
 3. New York City Department of Health and Mental Hygiene
 - a. Guidelines on Assessment and Remediation of Fungi in Indoor Environments (issued November, 2008)
 4. American National Standards Institute (ANSI)
 - a. ANSI Z9.2 - Fundamentals Governing the Design and Operation of Local Exhaust Systems
 - b. ANSI Z88.2 - Respiratory Protection
 5. American Society of Testing and Materials (ASTM)
 - a. ASTM E 96 - Water Vapor Transmission of Materials
 6. Underwriters Laboratories, Inc. (UL)
 - a. UL 586 - High-Efficiency, Particulate, Air Filter Units
 7. Institute of Inspection, Cleaning, and Restoration Certification (IICRC)
 - a. S-500, Standard and Reference Guide for Professional Water Damage Restoration – Third Edition
 - b. S-520, Standard and Reference Guide for Professional Mold Remediation – Second Edition

8. The Connecticut Department of Public Health, Guidance for Mold Abatement Contractors.

1.10 DOCUMENTATION

- A. The following documentation shall be obtained by the Remediation Contractor to ensure compliance with the applicable regulations. An up to date copy shall be retained at the job site at all times.

1. Manufacturer's Catalog Data for:

- a. Vacuum Equipment and Negative Air Exhaust Fans
- b. Respirators
- c. Polyethylene Sheeting
- d. Adhesive Removal Chemicals
- e. MSDS for All Materials Delivered to the Site
- f. EPA registration number and MSDS for all fungicides
- g. EPA registration number and MSDS for mold-retardant sealants

2. Statements:

- a. Worker Medical Certification
- b. Worker Respirator Fit Testing
- c. Safety Plan
- d. Respirator Protection Plan
- e. Copies of all required notifications, approvals and permits for the environmentally contaminated materials.
- f. Documentation from a physician certifying that all employees who may be exposed to microbial contamination in excess of the background level have been provided with an opportunity to be medically monitored to determine whether they are physically capable of working while wearing the respirator required without suffering adverse health effects. They shall also be informed of the specific types of respirators the employee shall be required to wear and the work he/she will be required to perform as well as special work place conditions such as high temperature, high humidity and chemical contaminants to which he/she may be exposed. Individuals with immune suppression, asthma, hypersensitivity pneumonitis, severe allergies, sinusitis, or other chronic inflammatory lung diseases, or who have undergone recent surgery, shall not be permitted into the remediation Work Area.
- g. Documentation certifying that all employees have received training in the proper cleaning method and handling of materials that contain microbial contamination; understand the health implications and risks involved, including the illnesses possible from exposure to these airborne contaminants; and understands the use and limits of respiratory equipment to be used. The training can be performed as part of a program to comply with the requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

- h. Documentation of respiratory fit testing for all employees who must enter the Work Area in accordance with the OSHA Respiratory Protection Standard 29 CFR 1910.134.
 - i. Establish and supervise in accordance with 29 CFR 1926.21, a program for the education and training of workers in the recognition, avoidance and prevention of unsafe conditions and the regulations applicable to the work environment to control or eliminate any hazards or other exposure to illness or injury. Include any site-specific information to address health and safety procedures unique to this project.
 - j. Establish a written Respiratory Protection Plan in accordance with 29 CFR 1910.134. This plan shall establish procedures governing the selection and use of respirators and shall include such information as training in the proper use of respirators; medical examination of workers to determine whether or not they may be assigned an activity where respiratory protection is required; training in proper use and limitations of respirators; respirator fit testing; regular inspection and evaluation of the continued effectiveness of the program; and other elements included in the standard.
3. Records:
- a. Sign-in/out Logs
 - b. Psychometric Records

1.11 PERSONNEL PROTECTION

- A. Instruct workers in all aspects of personnel protection, work procedures, emergency evacuation procedures and use of equipment including procedures unique to this project.
- B. Ensure workers are fully protected with respirators and protective clothing during work in the Cleanup Control Area, where there is the possibility of disturbing microbial containing or microbial contaminated materials.
- C. Respiratory protection shall meet the requirements of OSHA as required in 29 CFR 1910.134. Provide appropriate respiratory protection for each worker and ensure usage during potential exposure. As a minimum, workers shall be equipped with ½-face negative respirators with HEPA filters.
- D. Select respirators from among those approved as being acceptable for protection by the National Institute for Occupational Safety and Health (NIOSH) under the provisions of 30 CFR Part 11. Provide an adequate supply of filter elements for respirators in use.
- E. Provide all authorized persons entering microbial contaminated areas with proper respirators and protective clothing. This shall include: a half-face respirator with HEPA filters; disposable protective clothing covering both head and shoes; and protective gloves.
- F. Ensure workers do not eat, drink, smoke or chew gum or tobacco while in the Work Area.

1.12 EQUIPMENT REMOVAL PROCEDURE

- A. Clean surfaces of contaminated containers and equipment thoroughly by vacuuming with

HEPA filtered equipment and wet wiping before final cleaning and removal to uncontaminated areas.

1.13 SEQUENCE OF WORK

- A. Proceed in accordance with the sequence of work as mutually agreed upon with the Architect's Representative.
- B. The following sequence of work shall be used for the remediation work:
 - 1. All equipment and temporary utilities required for the project shall be on site and operational prior to the initiation of the remediation work.
 - 2. Preparation of work areas.
 - 3. Cleanup and remediation of all designated microbial contaminated materials by the Remediation Contractor.
 - 4. Disinfection of building components and finishes.
 - 5. Drying of building components and finishes.
 - 6. The Remediation Contractor shall not apply any sealants (i.e. AfterShock™) or scented products prior to the final inspection and re-occupancy clearance testing (if required for asbestos abatement).
 - 7. Visual inspection and microbial sampling (if necessary) of the microbial cleanup by the Architect's Representative.
 - 8. Final cleanup by the Contractor.

PART 2 PRODUCTS

2.1 DELIVERY, STORAGE AND HANDLING

- A. Deliver all materials in the original packages, containers, or bundles bearing the name of the manufacturer and the brand name and product technical description. Do not use damaged or deteriorating materials. Material that becomes contaminated shall be decontaminated or disposed of as contaminated waste.

2.2 MATERIALS

- A. Material Data Safety Sheets (MSDSs) shall be on site for all products used.
- B. Fungicides shall be registered with the United States Environmental Protection Agency (US EPA) and listed in the US EPA Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) database and approved by Norwich Housing Authority and the Consultant.
- C. Polyethylene sheet in roll size to minimize the frequency of joints, shall be delivered to job site with factory label indicating four (4) or six (6) mil.
- D. Polyethylene disposable bags shall be six (6) mil.

- E. Tape shall be capable of sealing joints in adjacent polyethylene sheets and for attachment of polyethylene sheet to finished or unfinished surfaces. Tape must be capable of adhering under both dry and wet conditions.
- F. Containers must be impermeable and shall be both air and watertight.

2.3 TOOLS AND EQUIPMENT

- A. Tools and equipment shall be suitable for microbial contamination.
- B. Protective clothing, respirators, filter cartridges, air filters and sample filter cassettes shall be provided in sufficient quantities for the project.
- C. Electrical equipment, protective devices, emergency generators (if any) and power cables shall conform to all applicable codes.
- D. Exhaust air filtration units shall be equipped with HEPA filters capable of providing sufficient air exhaust to allow a sufficient flow of air through the area. No air movement system or air filtering equipment shall discharge unfiltered air outside the Cleanup Control Area.
- E. Other materials such as lumber, nails and hardware necessary to construct and dismantle the decontamination enclosures and the barriers that isolate the Work Area shall be provided as appropriate for the work.

PART 3 EXECUTION

3.1 PREPARATION OF OUTDOOR WORK AREAS

- A. Prior to beginning work, the Architect's Representative and the Remediation Contractor shall perform a visual survey of the Work Area and list all pre-existing damage to building components.
- B. Utilize engineering controls and personnel protective equipment while installing enclosures and supports when contaminated materials may be disturbed.
- C. Provide temporary power and lighting as required and ensure safe installation, including ground fault protection, of temporary power sources and equipment in compliance with applicable electrical code and OSHA requirements. The Remediation Contractor is responsible for proper connection and installation of electrical wiring.
- D. Seal off the windows, grilles, diffusers, attic hatches, and any other openings between the Work Area and the uncontaminated indoor areas outside of the Work Area with critical barriers.
- E. Use signage and barrier tape or fencing to identify work area boundaries.

3.2 PREPARATION OF INDOOR WORK AREAS

- A. Utilize engineering controls and personnel protective equipment while installing enclosures and supports when contaminated materials may be disturbed.
- B. Provide temporary power and lighting as required and ensure safe installation, including ground fault protection, of temporary power sources and equipment in compliance with

applicable electrical code and OSHA requirements. The Remediation Contractor is responsible for proper connection and installation of electrical wiring.

- C. Seal off all openings between the Work Area and the uncontaminated indoor areas outside of the Work Area but within the units, with critical barriers. Construct an airlock door flap system and a change room at and adjacent to entry to work areas so that personnel must pass through the change room when entering or exiting the work area.
- D. Maintain the contained work area under negative pressure with HEPA filtered exhaust system. Vent the exhaust outside the building.

3.3 MOLD AND MOISTURE REMEDIATION

- A. A Supervisor employed by the Remediation Contractor and qualified in mold and moisture remediation shall be on the job at all times to ensure the establishment and maintenance of the negative pressure enclosure (NPE) where required and proper work practices throughout the project.
- B. Protect surfaces that will not to be removed with polyethylene sheeting.
- C. Cleaning shall be accomplished by scrubbing with brushes, sanding, or other method deemed appropriate by the Architect's Representative.
- D. The standard for cleaning shall be no visible mold, dust, dirt, or debris. Stains on lumber resulting from fungal growth are acceptable.
- E. Remove all mold or moisture impacted materials from the designated locations.
- F. Efforts shall be made to reduce dust generation. This includes lightly misting the surface with a dilute soap or detergent solution prior to removal, the use of HEPA vacuum-shrouded tools at the point of dust generation. Moldy materials that can be cleaned should be cleaned using a soap or detergent solution.
- G. Fill disposal containers (six mil polyethylene bags or fiber drums) as remediation proceeds, seal filled containers. Bags shall be securely sealed to prevent accidental opening and leakage by taping in gooseneck fashion. Bags shall be decontaminated by damp cleaning before being removed from Work Area and placed in containers for transport and disposal by the Remediation Contractor.
- H. Ensure that workers do not enter from uncontaminated areas into the change room or the work area.
- I. The use of household bleach as a disinfectant is not permitted due to its corrosive effect on metal building components and potential adverse physiological impact on residents. Appropriate disinfectants are those that are specified as a fungicide and registered with the EPA.
- J. All surfaces to be microbial cleaned are to be HEPA vacuumed prior to the use of the disinfectant. The disinfectant can then be applied by hand or spray applied on all appropriate surfaces. Following the use of the disinfectant, the area must be re-cleaned and rinsed using water, dried, and then HEPA vacuumed again.
- K. All surfaces that have been cleaned shall be subject, at the discretion of the Architect's

Rrepresentative, to be treated with an anti-microbial sealant (e.g., AfterShock™) following successful completion of the post remediation testing.

- L. The work area and areas used by workers for egress shall be HEPA-vacuumed and cleaned with a damp cloth or mop and a light soap or detergent solution.
- M. If at any time during the remediation work, should the Remediation Contractor and/or the Architect's Representative suspect contamination of areas outside the Work Area, the Remediation Contractor shall stop all remediation work and take steps to decontaminate these areas and eliminate causes of such contamination. Unprotected individuals shall be prohibited from entering contaminated areas until air and swab sampling and/or visual inspections determine decontamination.
- N. All areas should be left dry and visibly free from mold, dust and debris. Remove microbial contamination waste material daily.

3.4 CLEAN-UP PROCEDURE AND INSPECTION

- A. Remove all environmental contamination from the exteriors of the negative air machines, hoses and other equipment inside the Work Area. Cleaning may be accomplished by brushing, sanding, or scrubbing.

3.5 DISPOSAL OF MICROBIAL CONTAMINATION AND DEBRIS

- A. There are no special requirements of disposal of moldy materials unless they are also contaminated by other hazardous materials such as asbestos or lead. Disposal of microbial contaminated material shall occur in compliance with the requirements of designated State agency having jurisdiction over solid waste disposal.

3.6 REMEDIATION CONTRACTOR RESPONSIBILITY

- A. For the microbial contamination cleanup, conduct worksite audits to assure that workers are using appropriate respiratory protection.

3.7 POST-REMEDICATION MICROBIAL SAMPLING

- A. After the remediation, disinfection, and cleanup, all components have been dried to within two (2) points of the pre-determined "dry standard, and after a high degree of cleanliness has been verified by visual inspection by the Architect's Representative, non-viable fungal post-remediation sampling utilizing air and/or bulk sampling methods may be conducted.
- B. For the purposes of the visual inspection, no visible dust/residue shall be allowed on the surfaces that have been cleaned and disinfected. The Architect's Representative will make the decision on the type and number of microbial samples to be taken in order to verify the acceptability of the microbial remediation work by the Contractor.

END OF SECTION

SECTION 06105

MISCELLANEOUS CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Framing with dimension lumber.
2. Wood blocking and nailers.
3. Wood furring.
4. Interior wood trim.
5. Plywood backing panels.

1.2 WORK INCLUDED

1. All contractors are to review specifications and drawings for complete scope of work regarding their trade. This work is to include Base Bid items and Unit Price items.
2. Provide wood, nails, bolts, screws, framing anchors and other rough hardware, and other items needed, and perform framing for the construction shown on the Drawings, as specified herein, and as needed for a complete and proper installation.

1.3 REFERENCE STANDARD

A. Codes and Standards

1. In addition to complying with pertinent codes and regulations of governmental agencies having jurisdiction, unless otherwise specifically directed or permitted by the Architect comply with:
 - a. "Product Use Manual" of the Western Wood Products Association for selection and use products included in that manual.
 - b. "Plywood Specification and Grade Guide" of the American Plywood Association.
 - c. State of Connecticut Basic Building Code-Appendix M, Recommended Nailing Schedule.
 - d. Framing methods shall comply with the "Wood Frame Construction Manual for One- and Two-Family Dwellings" as published by the American Forest & Paper Association.

B. Requirements for all lumber:

1. Lumber shall be surfaced all four sides (S4S).
2. Maximum moisture content of rough framing lumber, 2" or less nominal thickness shall be 19% at the time of delivery to the site.

1.4 SUBMITTALS

- A. Submit manufacturer's product data for non-wood materials and accessories. Submit samples if requested by the Architect. Approved samples may be incorporated into the work.

1.5 QUALITY ASSURANCE

- A. Forest Certification: For the following wood products, provide materials produced from wood obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001, "FSC Principles and Criteria for Forest Stewardship":
1. Dimension lumber framing.
 2. Miscellaneous lumber.
 3. Interior wood trim.
 4. Shelving and clothes rods.

1.6 DELIVERY, STORAGE & HANDLING

- A. Except as otherwise approved by the Architect, determine and comply with manufacturer's recommendation on product handling, storage, and protection.
- B. Deliveries:
1. Stockpile materials sufficiently in advance of need to assure their availability in a timely manner for this Work.
 2. Make as many trips to the job site as are needed to deliver materials of this Section in a timely manner to ensure orderly progress of the Work.
- C. Compliance:
1. Do not permit materials not complying with the provisions of this Section to be brought onto or to be stored at the job site.
 2. Promptly remove non-complying materials from the job site and replace with materials meeting the requirements of this Section.
- D. Protection:
1. Deliver the materials to the job site and store, in a safe area, out of the way of traffic, and shored up off the ground surface.
 2. Identify framing lumber as to grades, and store each grade separately from other grades.
 3. Protect metals with adequate waterproof outer wrapping.
 4. Use extreme care in off-loading of lumber to prevent damage, splitting, and breaking of materials.

PART 2 - PRODUCTS

2.1 GRADE STAMPS

- A. Identify framing lumber by a grade-marked in accordance with The Western Wood Products Association, or such other grade stamp as is approved in advance by the Architect.
- B. Identify plywood as to species, grade, and glue type by the stamp of the American Plywood Association.
- C. Identify other materials of this Section by the appropriate stamp of the agency approved in advance by the Architect.

2.2 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
 - 1. Factory mark each piece of lumber with grade stamp of grading agency.
 - 2. Provide dressed lumber, S4S, unless otherwise indicated.

2.3 WOOD-PRESERVATIVE-TREATED MATERIALS

- A. Preservative Treatment by Pressure Process: AWPA C2, except that lumber that is not in contact with the ground and is continuously protected from liquid water may be treated according to AWPA C31 with inorganic boron (SBX).
 - 1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium.
- B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or does not comply with requirements for untreated material.
- C. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
- D. Application: Treat items indicated on Drawings, and the following:
 - 1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.

2. Wood sills, sleepers, blocking, and similar concealed members in contact with masonry or concrete.
3. Wood framing and furring attached directly to the interior of below-grade exterior masonry or concrete walls.
4. Wood framing members that are less than 18 inches above the ground in crawl spaces or unexcavated areas.
5. Wood floor plates that are installed over concrete slabs-on-grade.

2.4 DIMENSION LUMBER FRAMING

- A. Maximum Moisture Content: 19 percent.
- B. Non-Load-Bearing Interior Partitions: Construction, Stud, or No. 3 grade of any species.
- C. Other Framing: Construction, Stud, or No. 3 grade and the following species:
 1. Hem-fir (north); NLGA.
 2. Southern pine; SPIB.
 3. Douglas fir-larch; WCLIB or WWPA.
 4. Mixed southern pine; SPIB.
 5. Spruce-pine-fir; NLGA.
 6. Douglas fir-south; WWPA.
 7. Hem-fir; WCLIB or WWPA.
 8. Douglas fir-larch (north); NLGA.
 9. Spruce-pine-fir (south); NeLMA, WCLIB, or WWPA.

2.5 MISCELLANEOUS LUMBER

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
 1. Blocking.
 2. Nailers.
 3. Rooftop equipment bases and support curbs.
 4. Cants.
 5. Furring.
 6. Grounds.
 7. Utility shelving.
- B. For items of dimension lumber size, provide Standard, Stud, or No. 3 grade lumber with 19 percent maximum moisture content of any species.
- C. For exposed boards, provide lumber with 19 percent maximum moisture content of eastern white pine, Idaho white, lodgepole, ponderosa, or sugar pine; Standard or No. 3 Common grade; NeLMA, NLGA, WCLIB, or WWPA.

- D. For concealed boards, provide lumber with 19 percent maximum moisture content and [any of]the following species and grades:
1. Mixed southern pine, No. 2 grade; SPIB.
 2. Eastern softwoods, No. 2 Common grade; NELMA.
 3. Northern species, No. 2 Common grade; NLGA.
 4. Western woods, Standard or No. 3 Common grade; WCLIB or WWPA.

2.6 INTERIOR WOOD TRIM

- A. General: Provide kiln-dried finished (surfaced) material without finger-jointing, unless otherwise indicated.
- B. Lumber Trim for Opaque (Painted) Finish: Either finger-jointed or solid lumber, of[one of] the following species and grades:
1. Grade 1 Common Idaho white, lodgepole, ponderosa, or sugar pine; NLGA or WWPA.
- C. Moldings: Made to patterns included in WMMPA WM 7 and graded according to WMMPA WM 4.
1. Moldings for Opaque (Painted) Finish: P-grade eastern white, Idaho white, lodgepole, ponderosa, or sugar pine

2.7 SHELVING AND CLOTHES RODS

- A. Shelving: Made from the following material **3/4-inch** thick.
1. Medium-density fiberboard with solid-wood front edge.
- B. Shelf Cleats: **3/4-by-3-1/2-inch** boards with hole and notch to receive clothes rods, of same species and grade indicated above for interior lumber trim for opaque finish.
- C. Clothes Rods: **1-1/2-inch-** diameter, clear, kiln-dried hardwood rods

2.8 FASTENERS

- A. General: Where carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M
- B. Power-Driven Fasteners: NES NER-272.
- C. Screws for Fastening to Cold-Formed Metal Framing: ASTM C 954, except with wafer heads and reamer wings, length as recommended by screw manufacturer for material being fastened.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Set carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit carpentry to other construction; scribe and cope as needed for accurate fit. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- B. Framing Standard: Comply with AF&PA's "Details for Conventional Wood Frame Construction," unless otherwise indicated.
- C. Do not splice structural members between supports, unless otherwise indicated.
- D. Comply with AWWPA M4 for applying field treatment to cut surfaces of preservative-treated lumber.
- E. Securely attach carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
 - 1. NES NER-272 for power-driven fasteners.
 - 2. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code.
 - 3. Table 23-II-B-1, "Nailing Schedule," and Table 23-II-B-2, "Wood Structural Panel Roof Sheathing Nailing Schedule," in ICBO's Uniform Building Code.
 - 4. Table 2305.2, "Fastening Schedule," in BOCA's BOCA National Building Code.
 - 5. Table 2306.1, "Fastening Schedule," in SBCCI's Standard Building Code.
 - 6. Table R602.3(1), "Fastener Schedule for Structural Members," and Table R602.3(2), "Alternate Attachments," in ICC's International Residential Code for One- and Two-Family Dwellings.
 - 7. Table 602.3(1), "Fastener Schedule for Structural Members," and Table 602.3(2), "Alternate Attachments," in ICC's International One- and Two-Family Dwelling Code.
- F. Wood Trim Installation: Install with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Cope at returns and miter at corners to produce tight-fitting joints with full-surface contact throughout length of joint. Use scarf joints for end-to-end joints.
 - 1. Match color and grain pattern across joints.
 - 2. Install trim after gypsum board joint-finishing operations are completed.
 - 3. Install to tolerance of **1/8 inch in 96 inches** for level and plumb. Install adjoining finish carpentry with **1/32-inch** maximum offset for flush installation and **1/16-inch (1.6-mm)** maximum offset for reveal installation.

3.2 PROTECTION

- A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

END OF SECTION 06105

SECTION 09250 GYPSUM WALLBOARD

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions, and Division 1 Specification sections, apply to work specified in this Section.

1.2 - RELATED WORK SPECIFIED ELSEWHERE

- A. Rough framing is specified in Section 06100.
- B. Painting is specified in Section 09900.

PART 2 - PRODUCTS

2.1 - ACCEPTABLE MANUFACTURERS

- A. In general, specified products and systems are by U.S. Gypsum Co. Equivalent products and systems by National Gypsum Co., & Celotex Corp. are also acceptable.

2.2 - MATERIALS

- A. Gypsum Board: ASTM C36-78, tapered edge and square edge gypsum board. Where indicated, use water-resistant gypsum board, or fire rated gypsum board. Board thickness shall be as shown on the Drawings.
- B. Edge & corner beads, and other required accessories:
 - 1. Corner beads: Paper covered metal type, equal to USG "Bead-X".

2. Casings: Vinyl concealed type typically, equal to U.S.G. P-1, abutting windows or at intersections of gypsum wallboard to dissimilar materials. No casings shall be exposed. Metal type may be used at locations not subject to wetness or condensation.
- C. Drywall screws:
1. For fastening gypsum board only to wood studs, use type S bugle head screws with rust resistant finish meeting ASTM C1002 in length recommended by manufacturer. Use galvanized screws with WR-GWB.
 2. For fastening gypsum wall board and any combination of cement board or plywood to wood studs, use type S-12 bugle head screws. Use galvanized screws with WR-GWB.
- D. Tape, compound and other required products:
1. Standard products by manufacturer of gypsum board.
- E. Acoustical Insulation: Unfaced fiberglass or mineral wool batts meeting the requirements of F.S. HH-521E, type 1, thickness as shown on the Drawings.
- F. Acoustical Sealant: Butyl rubber base or water base acoustical sealant manufactured for the purpose by U.S. Gypsum Co. or approved equal.
- G. Other Materials:
1. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor from the gypsum board manufacturer's list of recommended or acceptable products.

PART 3 - EXECUTION

3.1 - SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 - INSTALLATION

- A. If U.S. Gypsum products are used, install gypsum drywall according to "Gypsum Drywall Construction Handbook", latest edition, published by U.S. Gypsum Company. Also, conform to the requirements of ASTM C840 and Gypsum Association GA-216-96, Application and Finishing of Gypsum Board. Also conform to the requirements and recommendations of Gypsum Association GA-600-97, Fire Resistance Design Manual, Sound Control, Gypsum Systems, including Section III, Requirements for Fire Protection, and Section IV, Sound Control. Also conform to gypsum drywall system manufacturer's standards. Note that these designs stipulate use of acoustical insulation for certain designs and acoustical sealant at perimeter of walls and penetrations through walls, for all sound-rated construction. If specified standards require control joints not shown on the Drawings, notify Architect and install control joints at locations selected by Architect. Do not use water resistant gypsum board on ceilings. Do not use nails at any time.
- B. Use double studs at door and window jambs. Fasten multiple framing members securely together.
- C. Make fire-rated partitions continuous from slab or from top of floor deck to bottom of floor or roof deck above.
- D. Use tapered-edge gypsum board for finish surfaces; use square-edge for backing board. Fasten gypsum board to all studs as per manufacturer's recommendations.
- E. Use casing beads at all butt transitions to dissimilar materials and/or as detailed on Drawings. Compound, tape and compound over bead. Feather out for smooth finish surface. Completely conceal bead.

- F. Use acoustical sealant in gypsum board unit separation walls to seal all cut-outs and all intersections with adjoining walls, ceiling, and floors.
- G. Finish fasteners and joints with drywall compound and tape. Apply at least 3 coats of compound over tape and heads of screws. Conform to the requirements of Gypsum Association Publications GA-214, Levels of Gypsum Board Finish, and GA-216-96, Application and Finishing of Gypsum Board. Unless specified otherwise, the level of gypsum board finish shall be Level 4.

3.3 - CLEANING UP

- A. In addition to other requirements for cleaning, use necessary care to prevent tracking gypsum and joint finishing compound onto floor surfaces.

END OF SECTION 09250

SECTION 09900 PAINTING

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions, and Division 1 Specification sections, apply to work specified in this Section.

1.2 - WORK INCLUDED

- A. Paint all exposed new and previously painted interior surfaces of existing dwelling units. Painting work includes, but is not necessarily limited to, the following:
 - 1. Paint all exposed gypsum wallboard, unless noted otherwise.
 - 2. Paint all interior wood trim not scheduled for transparent finish.
 - 3. Paint all interior wood doors not scheduled for transparent finish.

1.3- SUBMITTALS

- A. Submit complete list of proposed materials. For each surface, list materials by manufacturer and name, and list number of coats. List thinners, if any.
- B. Submit complete range of standard and custom mix colors of the selected manufacturer for color selections.

1.4 - DELIVERY, STORAGE & HANDLING

- A. Deliver all products to job site in manufacturers' unopened containers with seals unbroken and labels intact.
- B. Store products so as to minimize danger of fire and protect building surfaces from spills.

1.5 - PROJECT/SITE CONDITIONS

- A. Do not paint when temperature of air or surfaces being painted is below 40 degrees F. Do not apply epoxy paint when temperature of air or surfaces being painted is below 60 degrees F. Do not paint when atmosphere is damp, and do not paint when surfaces are damp, unless paint manufacturer states that paint is intended for such use.
- B. Do not paint unless lighting is adequate.
- C. Provide ventilation during painting and drying periods.

PART 2 - PRODUCTS

2.1 - ACCEPTABLE MANUFACTURERS

- A. Besides manufacturer listed in schedule (PPG Industries, Inc. - Pittsburgh Paints), the following manufacturers are also acceptable:

Benjamin Moore Co.
Sherwin-Williams Co.

No other paint manufacturer will be accepted.

2.2 - MATERIALS

- A. Use first quality products of the types specified in schedule. "First quality" means best, most expensive line of professional quality paints produced by selected manufacturer.
 - 1. If requested, submit formulations to Architect to demonstrate compliance with above requirements.
 - 2. Deliver all materials to job site in unopened containers, bearing names of manufacturer and contents.

- B. Use thinners recommended by manufacturers. In general, use mineral spirits to thin oleoresinous paints.
- C. Materials shall meet all requirements of ANSI Z66.1, "Specifications to Minimize Hazards to Children from Residual Surface Coating Materials".

2.3 - COLORS

- A. For interior surfaces, the oWNER shall select colors from full range of standard ready-mixed and custom-mixed colors offered by supplying manufacturer.
- B. Concealed surfaces, such as door bottoms, may be painted grey.

PART 3 - EXECUTION

3.1 - INSPECTION

- A. Examine all surfaces to receive paint.
 - 1. If surfaces are not fit to receive paint; scrape, brush, or remove unsatisfactory materials by mechanical means, then clean and prepare surfaces for painting operation. Follow manufacturer's instructions concerning surface suitability.
- B. The start of work on any surface shall constitute acceptance of the condition of that surface.

3.2 - PREPARATION

- A. Broom-clean entire area before painting.
- B. Clean surfaces to be painted.
- C. Remove rust. If, in Architect's opinion, primed products have corroded significantly, strip all primer from such products, prepare again and reprime.

- D. Sand and fill rough surfaces, which are not intended to be rough. Spackle interior holes and cracks. Putty fastener holes after applying prime coat.
- E. Seal knots and pitch spots. Wash sap and pitch from surface, and apply Western Pine Association Formula WP-578 sealer or equivalent as recommended by selected manufacturer.
- F. Protect adjacent surfaces and items. Remove or protect such items as electrical plates and hardware. After painting, reinstall items removed for protection.

3.3 - APPLICATION

- A. Architect has specified number of coats of paint based on the assumption that quality of paint, opacity of pigments, extent of thinning, and quality of workmanship will be good. If Contractor disputes Architect's scheduled systems, notify Architect in writing before starting work.
- B. Use products as packaged, unless manufacturer specifically directs thinning or other alteration for proper application. Mix all products thoroughly before, and regularly during application.
- C. Follow manufacturer's directions for millage thickness application and rate of coverage.
- D. Apply paint evenly. Produce uniform surfaces. Avoid runs, sags, brush or roller marks, "holidays", differences in sheen or color, and other blemishes.
- E. If specified number of coats is not sufficient to satisfy requirements specified in D. above, as adjudged by Architect, apply additional coats as required to do so.
- F. Brush paint into cracks and seams. Cut straight, neat edges.
- G. Do not allow paint to get on adjacent surfaces. Clean up spills and spatters as soon as possible, and no later than end of same day.
- H. Allow each coat to dry as recommended by manufacturer before applying following coat.

- I. Between coats, trowel in place drywall compound to cover defects in surface and sand smooth to match adjacent surfaces. Reprime those areas.
- J. At substantial completion, all surfaces shall be clean. If painted surfaces cannot be uniform, rectify condition by cleaning, or repaint them in accordance with 3.2 and 3.3 of this specification section.
- K. Sand smooth finish enamel between coats.

3.4 - SCHEDULE

- A. General
 - 1. Paint concealed surfaces such as door tops and bottoms and panel frames and edges.
 - 2. Paint mechanical/electrical products unless they are fully concealed and corrosion-resistant.
 - 3. If shop-applied primer coat is in good condition, field prime coat is not required. Patch primer where scratched or abraded.
 - 4. If shop-applied finish coat is in good condition, and if it matches Architect's selected color, field finishing is not required. Patch where not smooth, uniform, and in tact.
- B. Paint all exposed interior surfaces except the following:
 - 1. Items such as window glass, acoustical tile, ceramic tile, plastic laminates, and resilient flooring which are customarily not painted.
 - 2. Shop-finished items such as cabinets, window frames, and toilet partitions, except as required in A. above.
 - 3. Wood doors, wood trim, and architectural woodwork scheduled for transparent finish.

4. Concrete floors and walls, except where schedule on the Drawings specifically calls for painted concrete floors or walls.
 5. Floor, wall, and ceiling surfaces listed in finish schedule not to be painted.
 6. Sealant.
- C. Schedule by surfaces. The following schedule is based on the products of Pittsburgh Paints as manufactured by PPG Industries, Inc. Minimum Wet Film (MWF) and Minimum Dry Film (MDF) are also designated. Equal products of other manufacturers listed in 2.1 above are also acceptable. Submit schedule to the Architect as required in 1.3 above. Primer coat may be deleted on previously painted surfaces.
1. Interior Gypsum Wallboard Surfaces except those identified in #3 below:
 - Primer: 1 coat Speedhide Quick-drying Latex Primer-Sealer, 6-2. MWF 3.0 mils, MDF 1.0 mils per coat.
 - Finish: 2 coats Speedhide Eggshell Latex Enamel, 6-411 series. MWF 4.5 mils, MDF 1.6 mils per coat.
 2. Interior Gypsum Wallboard Surfaces of bathrooms:
 - Primer: 1 coat Speedhide Quick-drying Latex Primer-Sealer, 6-2. MWF 3.0 mils, MDF 1.0 mils per coat.
 - Finish: 2 coats Speedhide Semi-Gloss Latex Enamel, 6-510. MWF 4.0 mils, MDF 1.4 mils per coat.
 3. Interior Wood Trim scheduled for opaque finish:
 - Primer: 1 Coat Speedhide water base undercoater, 6-755. MWF 4.0 mils, MDF 1.5 mils per coat.
 - Finish: 2 coats Speedhide Semi-Gloss Latex Enamel, 6-510. MWF 4.0 mils, MDF 1.4 mils per coat.

8. Other Surfaces:

Follow master specification of selected paint manufacturer for three (3) coat work in normal service area.

END OF SECTION 09900