SCOPE OF WORK:
GENESEE COUNTY HABITAT FOR HUMANITY (GCHFH) is soliciting sealed proposals bids for providing:

- REHABILITATION OF A SINGLE-FAMILY HOME

For the homeowner occupied address: 1158 E. York Ave., Flint, MI 48505

Per the specifications listed at: geneseehabitat.org

If your firm is interested in providing the requested services, please submit 1 original and 1 copy of your detailed proposal to Genesee County Habitat for Humanity 101 Burton Street Flint, MI 48503 by ______________ before 5:00 PM (EST).

Please note: All detailed proposals received after 5:00 PM (EST) will not be considered.

The Genesee County Habitat for Humanity (GCHFH) may hold proposals for a period of 60 days from opening, for the purpose of reviewing the results and investigating the qualifications of proposal prior to making an award. Genesee County Habitat for Humanity reserves the right to waive any irregularities and accept or reject any or all bids submitted. Vendors located within the corporate city limits of Flint, Michigan may be given a seven percent (7%) competitive price advantage. Additionally, if the lowest responsible vendor is not located within the limits of the City of Flint, but is located within the county of Genesee and vendor does not exceed the bid of the lowest non local bidder by more than three and one-half percent (3%), the County vendor may have a competitive advantage. Genesee County Habitat for Humanity reserves the right to waive any irregularities and accept or reject any or all proposals submitted.

The successful bidder must comply with all requirements and pay prevailing wages and fringe benefits on this project per the City of Flint’s Resolution R-1 2 adopted 4/8/91. Pursuant to the requirements of 1976 P.A. 453 (Michigan Civil Rights Act) and 1976 P.A. 220 (Michigan Handicapped Rights Act), the local unit and its agent agree not to discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight, marital status or because of a handicap that is unrelated to the person’s ability to perform the duties of nondiscrimination provision identical to this provision and binding upon any and all contractors and subcontractors.

_Genesee County Habitat for Humanity provides equal employment opportunities (EEO) to all employees and applicants for employment without regard to race, color, religion, sex, national origin, age, disability or genetics._
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– REHABILITATION OF A SINGLE-FAMILY HOME

INSTRUCTIONS TO BIDDERS

1. Sealed bids will be received from pre-qualified firms until 12/21/2016 at Genesee County Habitat for Humanity, 101 Burton Street, Flint, MI, 48503. Label the bid as indicated on page 4. LATE BIDS AND BIDS SENT BY FACSIMILE OR BY EMAIL WILL NOT BE ACCEPTED.

2. A Mandatory Walk-through Inspection will be held on 12/14/16. Attendance at all walk-through inspections is required for the submission and consideration of any bid, the time for the mandatory walk-through inspection is 10am.

3. The bid opening will take place on 12/22/2016 at 9am and is open to the public. It will be held at the Habitat for Humanity offices at 101 Burton St., Flint, MI 48503.

4. Submit one (1) original, one (1) hardcopy, and one (1) electronic copy of the bid response. All bids become the property of Genesee County Habitat for Humanity. The original must include a signature on the Signature Page of a person authorized to make a binding offer. Additionally, the bid response must consist of one copy in electronic format on a CD or USB thumb drive formatted in Adobe (.pdf), Microsoft Word, and/or Microsoft Excel. Failure to provide the required number of duplicate copies may result in rejection of your bid.

5. To be considered for award, each bidder must be a qualified contractor. A contractor is qualified when their submitted qualifications are received and approved by GCHFH.

6. Insurance required per the specifications governing this work must be provided prior to the contract starting date and kept in full effect and compliance during entire contract period. Failure to comply with these provisions will cause termination of the contract.

7. The contractor agrees to be responsible for any loss or damage to property or persons due to the performance of services and the provision of supplies (equipment) herein contracted, and further agrees to protect and defend the Genesee County Habitat for Humanity against all claims or demands whatsoever, and to hold Genesee County Habitat for Humanity harmless from any loss or damage resulting therefrom.

8. After the award is made to the successful bidder(s), Genesee County Habitat for Humanity and the successful bidder will negotiate a final contract that substantially conforms to the Standard Construction Services Contract.

9. All prospective bidders shall be responsible for routinely checking Genesee County Habitat for Humanity website: http://www.geneseehabitat.org/invitation-to-bid.html
to obtain issued addenda. Genesee County Habitat for Humanity shall not be responsible for the failure of a prospective bidder to obtain addenda and other information issued at any time related to this IFB.

10. Use the following format for your bid:

Submit one (1) original, one (1) hardcopy, and one (1) electronic copy of the bid response to GCHFH—REHABILITATION OF A SINGLE-FAMILY HOME, 101 Burton Street Flint, MI 48503 all pages of bid forms and including Work Specifications
  • Signed Signature Page
  • Copy of the Contractor Approval Letter issued by the Genesee County Habitat for Humanity (GCHFH) stating the firm is qualified for the work within the City of Flint.
  • Bid Summary
  • Completed House Specification Sheets included after page 9 and all Bid Forms pages
  • For construction Bids exceeding $100,000 in amount, the Contractor must furnish a Bid Bond, equal to 5% of the total compensation to be paid to the Contractor under the Contract.
  • For construction Bids exceeding $100,000 in amount, the Contractor must furnish a CERTIFICATION FOR BUSINESS CONCERNS SEEKING SECTION 3 PREFERENCE IN CONTRACTING AND DEMONSTRATION OF CAPABILITY

ADDITIONAL TERMS AND CONDITIONS

• Issuing Office: This IFB is issued by Genesee County Habitat for Humanity. The sole point of contact for this solicitation is Genesee County Habitat for Humanity 101 Burton street, Flint MI 48503, (810) 766-9089 ext. 209 and fax (810) 766-9094. E-mail is the preferred method of contact. www.geneseehabitat.org/construction.html

• Questions & Inquiries: All questions regarding this IFB must be addressed at the mandatory walk-through, as indicated on page 1. Written answers to questions to clarify this solicitation will be provided via an addendum. No verbal interpretation to any respondent as to the meaning of any requirement stated in this IFB shall be binding on Genesee County Habitat for Humanity.

• Requirement for Bonds: For Construction Contracts (job total) exceeding fifty thousand dollars ($50,000.00) in amount, the Contractor must furnish a performance bond and a payment bond, each in an amount equal to ninety five percent (95%) of the total compensation to be paid to the Contractor under the Contract as security for the faithful performance of the Contract and as security for the payment of all persons performing labor and furnishing materials in connection with the performance of the Contract. The performance bond and the payment bond must be in such form as the Owner may require and must be delivered to the Owner prior to execution of the
Contract by the Owner. The Contractor shall also be required, at no cost to the Owner, to provide Performance and Payment Bonds required by any utilities for performance of any utility Work or Work on utility lines or within utility easements. For construction Bids exceeding 100 thousand dollars ($100,000) in amount, the Contractor must furnish a bid bond, equal to 5 percent (5%) of the total compensation to be paid to the Contractor under the Contract. The Surety must be acceptable to Genesee County Habitat for Humanity and must be approved to transact business in the State of Michigan.

4. **Copies to be Furnished to Beneficiaries:** Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor must promptly furnish a copy of the bonds to such person or entity.

5. **Addenda:** Genesee County Habitat for Humanity reserves the right to amend and provide clarification of this solicitation prior to the date for bid submission. In such an event, an addendum will be posted on the Genesee County Habitat for Humanity website at [http://www.geneseehabitat.org/invitation-to-bid.html](http://www.geneseehabitat.org/invitation-to-bid.html). All prospective bidders shall be responsible for routinely checking Genesee County Habitat for Humanity website to obtain issued addenda. Genesee County Habitat for Humanity shall not be responsible for the failure of a prospective bidder to obtain addenda and other information issued at any time related to this Invitation for Bids.

6. **Preparation of Bids & Cost:** All costs incurred in the preparation of a response to this IFB will be the responsibility of the respondent, and will not be reimbursed by Genesee County Habitat for Humanity. Bids should be prepared simply and economically, providing a straightforward, concise description of the bidder’s ability to meet the requirements of this IFB.

7. **Responsive Bids:** To ensure full consideration, all bidders shall submit a complete response to this IFB using the format provided in Instruction to Bidders Item 10. In addition, at least one of the bids submitted shall include an original signature of an official authorized to bind the bidder to its provisions. Any bid not prepared and submitted in accordance with this IFB or any bid lacking the information to enable Genesee County Habitat for Humanity to make a reasonable determination of compliance with the bid requirements may be considered "non-responsive" and rejected without further review.

8. **Right To Reject:** Genesee County Habitat for Humanity reserves the right to waive any informality in the invitation for bids; to reject any or all bids; and to make an award which it considers to be in the best interest of Genesee County Habitat for Humanity.

9. **Work Schedule:** After contracts have been signed and dated, the work must start within 15 calendar days after the contract is signed and must be completed within 90 days thereafter, according to the Work Activity Schedule. After 90 days have passed, GCHFH will charge the Contractor liquidated damages of $200 per day for each business day the contracted work is not completed. The total amount will be deducted from the final
payment amount due to the Contractor. Contract extension requests should be submitted and approved by GCHFH, in writing, via Change Order. When an Invitation for Bids (IFB) includes multiple homes, each home will have a separate contract and work schedule.

10. **Payment Schedule:** Payments due the Contractor will be paid within 30 days after Genesee County Habitat for Humanity receives the Contractor’s satisfactory release of liens or claims for liens by sub-contractors, laborers, and materials suppliers for completed work or installed materials and invoice. Schedule of payments is as follows:

- Initial installment 30% of total contracted amount
- Mid installment 25% of total contracted amount
- ¾ installment 25% of total contracted amount
- Final installment 20% after all final inspections are completed from each municipality (i.e. mechanical, electrical, plumbing, building) and Genesee County Habitat for Humanity.

**STANDARD TERMS AND CONDITIONS**

1. **Bid Opening:** Bids will be opened publicly at the time and place designated in the Invitation for Bids. Bids will be open to public inspection in accordance with applicable State law.

2. **Evaluation and Award:** The contract will be awarded to the lowest responsible and responsive bidder whose bid meets the requirements and criteria set forth in the Invitation for Bids. Unless otherwise indicated in the Invitation for Bids, Genesee County Habitat for Humanity reserves the right to award the contract in whole or in part, by item, by group of items, or by section where such action serves the best interests of GCHFH. Genesee County Habitat for Humanity reserves the right to reject any or all bids, to waive any informality in any bid, and to negotiate with the apparent successful bidder(s) in the best interest of Genesee County Habitat for Humanity.

3. **Cancellation; Rejection of Bids:** The Invitation for Bids may be canceled by Genesee County Habitat for Humanity at any time for any reason. Any bid received may be rejected in whole or in part when in the best interests of Genesee County Habitat for Humanity.

4. **Receipt of Bids:** It is solely the responsibility of the bidder to assure the timely receipt of its bid at the location indicated in the bid announcement. **LATE BIDS AND BIDS SENT BY FACSIMILE OR BY EMAIL WILL NOT BE ACCEPTED.**

5. **Tax:** Genesee County Habitat for Humanity is a 5013C Corporation and as such it is exempt from Federal Excise Tax and Michigan Sales Tax.
6. **Non-Discrimination:** The successful bidder/Contractor covenants that it will not discriminate against an employee or applicant of employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, marital status or a disability that is unrelated to the individual’s ability to perform the duties of a particular job or position, and that it will require the same non-discrimination assurances from any subcontractor who may be used to carry out duties described in this contract. Breach of this covenant shall be regarded as a material breach of this contract.

7. **Performance Bond:** If a performance bond is required, the bond must be issued by a company authorized to do business in the State of Michigan.

8. **Conflict of Interest:** Each bidder, by submitting a bid, represents that the bidder has no knowledge that any employee, representative or agent of the bidder is a Genesee County Habitat for Humanity employee who has directly or indirectly participated on behalf of Genesee County Habitat for Humanity in the contemplated procurement, or that any Genesee County Habitat for Humanity employee who has so participated or any member of such an employee’s immediate family has a financial interest pertaining to the contemplated procurement from the bidder, and represents that the bidder reasonably believes that no employee, representative or agent of bidder is a Genesee County Habitat for Humanity employee who has so participated and that no Genesee County Habitat for Humanity employee who has so participated or member of that employee’s immediate family has a financial interest in the contemplated procurement from the bidder.

9. **Inspection:** All goods are received subject to inspection and testing. If goods are defective or fail to meet the bid specifications, Genesee County Habitat for Humanity shall have the right to reject the goods or to correct the defects. The contractor shall pay Genesee County Habitat for Humanity for expenses incurred in correcting defects. Rejected goods will be held for forty-five days after delivery awaiting instructions from the contractor. After the forty-five day period, Genesee County Habitat for Humanity will dispose of the goods without further liability to Genesee County Habitat for Humanity. The contractor is responsible for the costs of handling, packing, and transportation incurred in returning or disposing of defective or non-conforming goods.

10. **Bidder’s Representations:** Each bidder by submitting a bid represents as follows:
    a. That the bidder has read and understood the bidding documents and has bid in accordance therewith;
    b. That the bid has been submitted by a duly authorized owner, partner, or corporate officer;
    c. That the bid submitted has been prepared independently without collusion, agreement, understanding, or planned common course of action with any other
supplier of the goods or services described in the Invitation for Bids, designed
to limit independent bidding or competition.

11. **Independent Contractor:** Bidder agrees that if awarded a contract, bidder shall be an
independent contractor and not an employee of Genesee County Habitat for Humanity. The
contractor shall secure at its own expense all personnel required in supplying
goods or services under the awarded contract. All such personnel shall have no
contractual relationship with Genesee County Habitat for Humanity and shall not be
considered employees of Genesee County Habitat for Humanity.

12. **Insurance:** Each bidder must submit a completed Bidder’s Insurance Checklist, if so
stipulated in the IFB. The required coverage and minimum limits may vary dependent
upon the dollar amount of the contract, length of time of the contract, and the hazard
level of the work or services to be performed. The types of insurance coverage may
include: workers compensation, general liability, auto liability and/or professional
liability. The insurer, insurance retention group, pool, or self-insurer must be
authorized/licensed to provide such coverage within the State of Michigan and meet
minimum financial ratings, if applicable, as supplied by Best or S & P.

13. **Indemnification:** The successful bidder shall defend, indemnify, and hold harmless
Genesee County Habitat for Humanity and its officers and employees from and
against all claims, losses, damages, and expenses including but not limited to
attorney’s fees, arising out of or resulting from the performance of the contract.

14. **Warranty:** The bidder warrants that all goods and services furnished under a contract
resulting from the Invitation for Bids shall be in conformance with the bid documents
and that the goods are of merchantable quality as described in the Uniform
Commercial Code, Section 2-314, and fit for the purpose for which they are sold. This
warranty is in addition to any manufacturer’s standard warranty which may apply or
any warranty provided by law, and is in addition to all other express warranties made
by the bidder.

15. **Applicable Law:** Any contract resulting from the Invitation for Bids shall be governed
by the laws of the State of Michigan. Unless otherwise provided in the contract
documents, the contractor shall secure and pay for all permits, fees, duties, licenses,
inspections, and approvals necessary for the execution and completion of the contract.
The contractor shall give all notices and comply with all laws, ordinances, rules,
regulations, and lawful orders of any public authority bearing on the performance of
the contract.

16. **Right to Inspect:** Genesee County Habitat for Humanity may, at reasonable times,
inspect the plant, place of business, or work site of a contractor or subcontractor
which is pertinent to the performance of a contract or potential contract.

17. **Right to Audit:** Genesee County Habitat for Humanity may at reasonable times and
places, audit the books and records of any contractor who has submitted cost or pricing
data as a part of its bid, to the extent that such books and records are pertinent to such cost or pricing data for a period of three years from the date of final payment under the contract. Genesee County Habitat for Humanity shall be entitled to audit the books and records of a contractor or subcontractor other than a firm fixed-price contract to the extent that such books and records are pertinent to the performance of such contract or subcontract. Such books and records shall be maintained by the contractor for a period of three years from the date of final payment under a prime contract and by the subcontractor for a period of three years from the date of final payment under a subcontract.

18. **Safety**: Genesee County Habitat for Humanity, as the owner of the premises where the service or work is to be performed, or as the purchaser of goods received, requires that all applicable Michigan Occupational Health & Safety (MIOSHA) Rules and Regulations are followed by your employees and that the goods meet the applicable safety regulation. All Center of Disease Control guidelines (CDC) incorporated by reference within the MIOSHA regulations must be followed.
HOUSE SPECIFICATION SHEETS & BID FORMS

- Please bid on the attached GENESEE COUNTY HABITAT FOR HUMANITY HOME REHABILITATION PROGRAM – CONTRACTOR WORK ACTIVITY SCHEDULE. A cost is to be provided for every item/service listed.

- A contractor must bid on the address offered in this bid and provide the total bid amount in the Bid Summary.

- Submitted bids must be not more than 10% lower or 15% higher than the cost! estimate. If the amount of all bids received are outside of this range, the bid shall go to the closest bidder.

- Section 3 requirements:
  With respect to recipients of Housing and/or Community Development funding, all contractors (or subcontractors) receiving covered funds in excess of $100,000 to complete projects involving housing construction, rehabilitation, or other public construction are required to comply with the requirements of Section 3. The threshold of $100,000 is base on the BID TOTAL for Genesee County Habitat for Humanity Invitations for Bid. When BID TOTAL exceeds $100,000 the form CERTIFICATION FOR BUSINESS CONCERNS SEEKING SECTION 3 PREFERENCE IN CONTRACTING AND DEMONSTRATION OF CAPABILITY is to be completed and included with the bid. When the award notification is made, the successful bidder will be instructed regarding the appropriate verification required prior to signing the contract.

- Contractors must verify all unit quantities listed on the enclosed specification sheets prior to submitting a bid.

BID SUMMARY

ADDRESS & JOB #

______________________________ $__________________

Company/Phone___________________________________________________________

Signature ___________________________ Date__________________
### Location: 1 - General Requirements

<table>
<thead>
<tr>
<th>Spec #</th>
<th>Spec</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>BUILDING PERMIT REQUIRED</td>
<td>1.00</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The contractor is responsible for submitting this owner-prepared work write up to the building department, applying for, paying for and receiving a building permit prior to starting any work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>PLUMBING PERMIT REQUIRED</td>
<td>1.00</td>
<td>EA</td>
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</tr>
<tr>
<td></td>
<td>Prior to the start of work, the contractor shall: create a riser diagram, septic layout and all other documentation needed to apply for, pay for and receive a plumbing permit on behalf of the owner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>HVAC PERMIT REQUIRED</td>
<td>1.00</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prior to the start of the heating/cooling work, the contractor shall create a heating distribution layout and perform heat/cooling loss calculations and all other documentation needed to apply for, pay for and receive an HVAC permit on behalf of the owner.</td>
<td></td>
<td></td>
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### Location: 2 - Exterior

<table>
<thead>
<tr>
<th>Spec #</th>
<th>Spec</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2983</td>
<td>WINDOW-VINYL-SGL HNG REPLACEMENT</td>
<td>8.00</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remove armor guard before and reinstall after, field measure and install a PVC, single hung replacement window that meets the ENERGY STAR standards for this climate for U value and SHGC. Include 1/2 screen. Wrap exterior jamb and sill with aluminum coil stock back caulked and nailed 6&quot; on center. Retrim opening with casing, apron and stool to match existing. Prep for paint where necessary.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3184</td>
<td>DOOR -- PREHUNG METAL ENTRANCE -- ENERGY STAR</td>
<td>2.00</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Location Total:

---

**Address:** 1158 E York Avenue

**Unit:** Unit 01

**Project Manager:** Thomas Hutchison

**Phone:** (810)766-9089 ext.211

**Case Number:** GCH-1650

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**Pre-Bid Site Visit:** 12/14/16 @ 10am

**Bidding Open Date:** 12/14/2016

**Bidding Close Date:** 12/21/2016

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**Location:**

- General Requirements
  - Approx. Wall SF: 0
  - Ceiling/Floor SF: 0

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**Trade:**

- **General Requirements**
- **Demolition & Disposal**
- **Carpentry**
## Trade: 10 Carpentry

<table>
<thead>
<tr>
<th>Spec #</th>
<th>Spec</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1158 E York Avenue</td>
<td>Unit 01</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location: 2 - Exterior</td>
<td>Approx. Wall SF: 0</td>
<td>Ceiling/Floor SF: 0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Install a Jeld Wen or equal ENERGY STAR certified insulated prehung steel door, to match existing size, swing and style, a passage latch and double cylinder dead bolt.

## Trade: 15 Roofing

<table>
<thead>
<tr>
<th>Spec #</th>
<th>Spec</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>4579</td>
<td>TEAR OFF AND REROOF</td>
<td>8.00</td>
<td>SQ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4645</td>
<td>GUTTER/DOWNSPOUT--5&quot; SEAMLESS</td>
<td>101.00</td>
<td>LF</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remove and dispose of all roofing & defective sheathing. Roof sheathing will be replaced on a change-order basis. After replacing sheathing, install ice dam preventative membrane and shingle underlayment and install 1.25" lip drip edge to shingle manufacturer's specification. Replace all required flashing. Install asphalt dimensional shingles. Vent attic to code.

Dispose of original and replace with 5", K Type, seamless .027 aluminum gutter, downspout, concrete splash blocks and accessories to service entire dwelling. Install downspouts at each corner and major offset with straps 3’ on center. Color choice by owner.

## Location Total:

| Location: 3 - Kitchen | Approx. Wall SF: 0 | Ceiling/Floor SF: 0 | | | |

## Trade: 17 Drywall & Plaster

<table>
<thead>
<tr>
<th>Spec #</th>
<th>Spec</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>5210</td>
<td>DRYWALL--PATCH--LARGE</td>
<td>68.00</td>
<td>SF</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Where old furnace was, cut back defective gypsum to expose half of the studs on each side of the hole. Cut and tightly fit drywall patch. Glue and nail or screw patch. Apply tape and 3 coats of compound feathered out at least 8". Wet sand ready for paint on wall, match existing texture on ceiling.

## Trade: 21 HVAC

<table>
<thead>
<tr>
<th>Spec #</th>
<th>Spec</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>6028</td>
<td>FURNACE--REMOVE</td>
<td>1.00</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6040</td>
<td>FURNACE 90+ GAS - WITH DISTRIBUTION</td>
<td>1.00</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remove old furnace in kitchen with supply. Take to a recycling facility.

Use the Air Conditioning Contractors of America's (ACCA) late test edition of their Manual J Heat loss calculation tool http://www.acca.org/tech/manualj/ (calculate manual J based on the post rehab building envelope), use ACCA’s Manual S for equipment selection and use Manual D for ductwork design. Make every effort to install supply ducts in interior partitions (in conditioned wall cavities). NOTE: Provide Manual J, S and D reports before work begins. Size furnace to the living unit considering any areas which may be added or subtracted from the plan. Remove existing furnace or boiler, recycle all metal components and dispose of all other materials in a code legal way.
Trade:  
HVAC

dump.  FURNACE: install a 90+ gas fired forced air furnace with minimum AFUE rating of 90% or higher on 2” patio block to with new supply and return ductwork work & gas line. New furnace to be vented with PVC piping per manufacturer’s specifications. New furnace will have minimum limited warranties of: 20 years on heat exchangers; 5 years on parts. Include auto set back thermostat controls, vent pipe & new shut-off valve. Install return air duct ensuring easy access, good fit & easy replacement of air filter. An exterior return air filter box shall be installed on one side, both sides, or bottom of new furnace. Seal all duct joints with Duct Mastic.

Trade:  
Plumbing

7070  WATER HEATER--40 GALLON GAS  
Install a 40 gallon, glass lined, 90+, high recovery, insulated to R-7, gas water heater with a 10 year warranty. Include pressure and temperature relief valve, discharge tube to within 6” of floor or to outside of structure, vent, thimble, and gas piping from shut-off valve to fixture. Dispose of old water heater in code legal dump.

Location Total:

Trade:  
Conservation

4999  INSULATE ATTIC HATCH  
Glue foil faced Polyisocyanurate insulation boards together to create a 6” thick (R-39) assembly on the top of the attic hatch/door. Wrap edges of the foam board with foil faced tape (not cloth duct tape) to cover the exposed foam edges and extend the foil tape onto the top of the foam board assembly. Weatherstrip the top edge of the casing that supports the door in its frame with foam adhesive faced weatherstripping tape so that there is no air leakage around the door. Caulk and/or foam the frame and trim for the door to create an air tight frame that provides a continual thermal barrier at the ceiling level when combined with attic insulation.

Location Total: