



4

CITY OF DANBURY

HEALTH & HUMAN SERVICES DEPARTMENT
155 DEER HILL AVENUE, DANBURY, CONNECTICUT 06810

Central Health Office
203 - 797-4625
Fax 796-1596

Social Services Office
203 - 797-4569
Fax 797-4566

October 18, 2011

Mayor Mark Boughton and City Council
City Hall
155 Deer Hill Avenue
Danbury, Connecticut 06810

RE: Weatherization of City Emergency Shelter

New Opportunities, Inc's. Weatherization Division recently conducted an energy audit of the Emergency Shelter and provided a written report (enclosed) and recommendations to meet energy efficiency and effective cost savings of our City owned building.

This is a free service of work, materials and labor. There are no matching requirements for this fund. The approximate amount utilized for this service is \$3000.00 and is not to exceed in the amount of \$3000.00. In today's difficult economic times, the Emergency Shelter provides a much needed service through the use of our Day Center and our Night time shelter. We will continue to provide assistance to this needed population and will strive to support and promote the Mayor's Ten Year Plan to End Homelessness.

It is also important to note that both State and Federal funding has been either eliminated or reduced in support of assisting the homeless population in most communities. New Opportunities Weatherization Division is assisting by providing and filling these funding gaps in Connecticut.

Sincerely,

Scott T. LeRoy MPH, MS
Director of Health and Human Services

All City Services 311
Eviction Prevention 797-4565
Information-Referral 797-4569

Dial 2-1-1 for all
Connecticut Services!

Emergency Shelter 796-1661
Em. Shelter Fax 796-1660
WIC Program 797-4638

4-1



NEW OPPORTUNITIES, INC.

Helping People. Changing Lives. ~ Community Action Partnership

Corporate Address:
232 North Elm Street – Waterbury, CT 06702
203.575.9799 ~ 203.755.8254 (fax)

October 18, 2011

Sue Zaborowski
Social Service Manager
City of Danbury Emergency Shelter
41 New Street
Danbury, CT 06810

Dear Sue,

New Opportunities, Inc., through the American Recovery & Reinvestment Act Weatherization Assistance Program, would like permission to perform a number of weatherization measures at the City of Danbury Emergency Shelter in order to make the structure more energy efficient. These measures will exceed not \$3,000.00. The City of Danbury will not be responsible for any portion of that amount; this program is completely free of charge.

I have enclosed a copy of the auditor's report dated July 1, 2011 for review.

Sincerely,

Kimberly Stein
ARRA Weatherization Program
New Opportunities, Inc.
232 North Main Street
Waterbury, CT 06702

Enc.

4-2

**City Of Danbury Emergency Housing Shelter
41 New Street
Danbury, Connecticut 06810**

Prepared By: Wesson Energy
165 Railroad Hill St.
Waterbury, CT. 06708
Energy Auditors: Keith Czarsty B.P.I. cert. B.A. & E.P.

Agency: New Opportunities Inc.
232 North Elm St.
Waterbury, CT. 06702

Audit Date: April 19th, 2011

Issue Date: July 1st, 2011

Building Use: Transitional Housing apx.
15 Male Beds
5 Female beds
20 Beds Total

Structure: Style: Commercial
Stories: 1.5 Floors
Built: 1910
Additions/Remodeled 2001

Area:	<u>Common Area</u>	<u>Adm. Area</u>
Basement	621 ft ²	
1 st Floor	2669 ft ²	371 ft ²
2 nd Floor	<u>404 ft²</u>	<u> </u>
Total	3694 ft ²	371 ft ²
Total Common Area	3323 ft ²	

Equivalent Number of Units: $3323 \text{ ft}^2 / 800 = 4.15$ **5 Units**

Heating System:
Make: American Standard (TRANE)
Model: THS 120A 98583
Input: 120,000 BTU/HR

Fuel: Natural Gas
Distribution: Forced Hot Air
Build Date: N/A (Age Apx. 8-10 Years)

- Recommendations:**
1. Install Additional Return Ducts from Dorm Area of Structure to Air Handling Unit.
 2. Eliminate Return Duct That Is Using Air From Outside the Thermal Envelope.
(see attached Jpeg's *Ductwork1 & Ductwork2*)
 3. Balance Ductwork to Distribute Forced Hot/Cold Air Evenly throughout Structure.

Hot Water System:

Make: A/O Smith
Model: BT-80-300
Input: 75,100 BTU/HR
Fuel: Natural Gas
Capacity: 74 Gallons (U.S.)
Recovery: 72.82. Gallons/Hour (U.S.)
Build Date: 9/11/2007

- Recommendations:**
1. Install 6 ft. of ¾ Pipe Insulation on Hot Water Distribution Pipe.
(see attached Jpeg's *DHW1*)

Basement Insulation: Structure is built on Field Stone and Concrete Foundation.

Floor Joist 2"x 6" Construction.

Recommendations:

1. Apply Closed Cell Foam (Spray-On) Insulation to All Plumbing Penetrations thru Basement Floor to 1st floor.
2. Trim Fiberglass batt Insulation hanging from wall cavities from 1st Floor.
(see attached Jpeg's *Basement1 & basement2*)
3. Insulate Band Joist in Basement with Spray-On Closed Cell foam insulation, between Sheetrock and Top of Foundation
(refer to gaps shown in Jpeg *Basement1 thru Basement3* as example)
4. Apply Closed Cell Foam (Spray-On) Insulation to penetrations in Fieldstone foundation
(see attached Jpeg *Basement4*)

Attic Insulation: Existing Attic insulation is R-38 Fiberglass Batt in Unfinished Portion of Attic

Existing Attic Insulation is R-19 above Finished portion of Attic and Mechanical Room on 2nd Floor (Drywall prevents further insulation opportunities)

Existing Insulation in Wall between Finished & Unfinished Portion (Attic) of 2nd Floor is R-13 Fiberglass Batt

Recommendations:

- 1. Insulate Vertical attic access hatch to a minimum R-11 and Apply Air Sealing Measures.

Sidewall Insulation: Existing Insulation R-19 Fiberglass

Recommendations: None

Air Sealing & Conservation Measures:

1st Floor

Install: Weather Strip & Door Sweeps
(3) Exterior Doors

Install: Weather Strip & Door Sweeps
(1) Interior Doors to basement

Install: Women's Bathroom
(1) 2.0 G.P.M Low Flow Shower Head
(1) 1.5 G.P.M. Low Flow Aerator

Install: Men's Bathroom
(2) 2.0 G.P.M Low Flow Shower Head
(2) 1.5 G.P.M. Low Flow Aerator
(see attached **1st Floor Plan** for specific location).

Attic: **Install:** Weather Strip & Door Sweeps
(1) Interior Doors to attic
(see attached floor plans for specific locations).