

County of Volusia Community Assistance

Minimum Standards for Rehabilitation of Residential Properties

NSP 3 SUBSTANTIAL AMENDMENT ADDENDUM B



Table of Contents

GENERAL PROVISIONS.....	3
INSPECTIONS.....	4
DETAILED SPECIFICATIONS 4	
Concrete & Foundation	4
1. Concrete.....	4
2. Piers, Bases and Footing.....	5
3. Steps	5
4. Foundation Walls	5
Carpentry	5
5. Carpentry	5
6. Floor Framing.....	5
7. Flooring	6
8. Wall Finish.....	6
9. Ceiling Finish.....	6
10. Scuttle Holes	6
11. Windows.....	6
12. Doors.....	6
13. Cabinets/Countertops	7
14. Closets	7
15. Insulation	7
Exterior Finish	7
16. Exterior Siding.....	7
17. Concrete Stucco Finish	8
18. Soffit and Fascia	8
19. Gutters & Down Spouts.....	8
20. Roofing	8
21. Skirting	9
22. Miscellaneous	9
Plumbing/Mechanical/Electric	9
23. Electrical.....	9
24. Appliances.....	10
25. Heating	10
26. Mechanical Equipment Repair	10
27. Plumbing	10
28. Septic System	11
29. Handicap Friendly Bathroom	11
Painting	11
30. Painting.....	11
31. Caulking	12
Moving & Storage.....	12
32. Moving & Storage	12
Demolition, Disposal And Cleanup	13
33. Construction Debris and Removal	13
Pest Extermination.....	13
34. Pest Extermination.....	13

General Provisions

1. *Scope of Work* shall include all labor, materials, equipment, permits, drawings, if any, and services necessary for the proper completion of the rehabilitation of the property identified in the Scope of Work.
2. The *Scope of Work* shall take precedence over this Minimum Standard. When in conflict, the material, equipment and workmanship called for in the Scope of Work will be required.
3. The *Drawings* of floor plans, if any, are diagrammatic only, illustrating the general intention of the owner; they do not show all of the work required, exact dimensions, or construction details.
4. *Workmanship* shall be done in accordance with standards of the trades known as a *workman-like manner*.

NO WORK WILL BE ACCEPTED THAT DOES NOT CONFORM TO WORKMANSHIP. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARDS OF ALL TRADES AND THIS WORK IS TO BE DONE IN A WORKMAN-LIKE MANNER OR ACCEPTABLE STANDARDS OF WORKMANSHIP.

5. Repairs shall be made to all surfaces or items damaged by the Contractor resulting from his work under this Contract at no additional cost to the owner.
6. Applicable laws and regulations of Federal, State, Volusia County, and participating cities shall be complied with. In case of conflict, the most stringent requirements shall apply.
7. Quantities and locations will be indicated in the Bid Specification Sheets.
8. No substitutions for any item listed in the specifications will be accepted unless approved in writing by the Housing Inspector and Community Assistance Manager, or designee.
9. When rehabilitation work is in progress, the Contractor will not be paid for any work deviating from specifications unless approved in writing by the property owner, Housing Inspector and Community Assistance Director, or designee.
10. The Contractor shall be held responsible for the execution of work in accordance with the true intent of the drawings, Scope of Work, and specifications, which is to complete a first class job and furnish all labor and materials required whether or not each and every item is specifically mentioned.
11. All materials furnished shall be new and without any indication of damage or breakage. Usually packaged materials shall be brought to the job in original unbroken containers.
12. Brand names mentioned together with phrase "*or equal*" indicate that other makes of equal quality and suitability may be used. THE HOUSING INSPECTOR WITH THE APPROVAL OF THE COMMUNITY ASSISTANCE MANAGER OR DESIGNEE RESERVES THE SOLE RIGHT TO DECIDE EQUALITY OF MATERIALS.

13. Materials not specified, but required, shall be the best adapted to the purpose.
14. Installation of any materials or products shall be in accordance with the manufacturers' directions and specifications.
15. The Contractor shall be responsible for all required permits.
16. All work shall be in accordance with the FLORIDA BUILDING CODES, NATIONAL ELECTRICAL CODES, FLORIDA ENERGY EFFICIENCY BUILDING CODES and all LOCAL CODES.
17. It shall be the Contractor's responsibility to determine all measurements needed to complete the job and their bid prices shall so reflect.

Inspections

1. When opening up any roof, the Contractor shall notify the Housing Inspector and Building Inspector of the local jurisdiction.
2. When any framing members are exposed such as rafters, sheeting, framing studs, ceiling joist, floor joist, etc., the Contractor shall call the Housing Inspector and Building Inspector of the local jurisdiction before closing.
3. All exterior plywood shall be inspected by the Housing Inspector and Building Inspector of the local jurisdiction.
4. All framing lumber shall conform to applicable standards or grading rules and be identified by a grade mark.
5. All electrical, plumbing, mechanical, or structural inspections required under the respective permits must be made by the proper Building Inspectors of the local jurisdiction that issued the permit. All improvements shall be uncovered and in plain view and the contractor shall be responsible for contacting the appropriate inspection departments to approve rough-ins, electrical, plumbing, mechanical and structural components

Detailed Specifications

Concrete & Foundation

1. Concrete

Concrete in footings, piers, slabs, walls and so forth, shall have an ultimate compressive strength of not less than 2500 PSI. No concrete is to be placed over grass, roots or foreign material. All reinforcing shall be free of scale, rust or coatings that reduce concrete bonds. All reinforcing rods shall be deformed domestic. All reinforcing rods shall have minimum coverage of three (3) inches on bottom and sides. All concrete slabs shall be separated from existing construction by 1/2" inch asphalt-impregnated expansion joint material. Concrete slabs shall have #10, six (6) inch by six (6) inch welded metal wire properly installed for slab reinforcement or use fiber reinforced concrete. All fill dirt shall be clean. All materials used for concrete forms shall be removed after concrete has set. Voids in exposed concrete surfaces will be filled with cement paste and dressed smoothly. No

concrete shall be poured when the temperature of surrounding air is below 40 degrees Fahrenheit without taking protective measures from freezing.

2. Piers, Bases and Footing

- a. *Piers* shall be solid, one-piece, reinforced concrete, minimum dimension eight (8) inches by eight (8) inches.
- b. *Bases* shall be minimum eight (8) inches by 16 inches by 16 inches.
- c. *Footing* shall be minimum eight (8) inches thick reinforced concrete 16 inches by 16 inches or larger. Footings must be set below existing ground level.

3. Steps

- a. *Precast* steps shall be standard size, placed over a concrete slab that is four (4) feet by four (4) feet by four (4) inch.
- b. *Hollow poured* steps shall be formed and poured over an eight (8) inch by 16 inch footing. Wall thickness shall be a minimum four (4) inches.
- c. *Exterior Framed* steps shall be constructed using pressure treated (PT) graded lumber with two (2) inch by 12 inch stringers, one (1) inch by eight (8) inch risers, and two (2) inch by 10 inch PT stair stock tread.
- d. Any other type steps not listed will be detailed in the written specifications.

4. Foundation Walls

Masonry walls shall be a nominal eight (8) inches by 16 inches hollow masonry block laid with full mortar bedding in a running bond with tooled joints. Pre-cast lintels over all openings with final course of lintel block. Appropriate steel bars placed, tied and poured with concrete in accordance with the Florida Building Code.

Carpentry

5. Carpentry

Framing lumber shall be grade marked; Douglas Fir, construction grade or better; or Southern Pine, stud grade or better, of adequate size and dimension to meet span tables as specified in the SPIB lumber table. Framing shall fit closely, set to line, level and fastened in place rigidly.

6. Floor Framing

Floor joist spacing shall be no more than 16 inches on center (OC) when applying 5/8 inch flooring directly to the joist. Joists may be spaced 24 inches OC provided a minimum of 3/4 inch thick sub-floor is used.

All new or replaced floor joists shall be supported at their extreme ends by either a two (2) inch by two (2) inch ledger or metal joist hangers. Nailing only will not be acceptable. Splicing of floor joists between supports will not be permitted.

7. Flooring

All damaged, rotten, loose or broken sub-flooring shall be repaired or replaced before installation of a finished floor. Spot repairing of existing tongue and groove flooring shall be made so that end joints occur over a floor joist. Adjacent end joints shall be staggered. Replaced flooring shall match existing in size, quality and finish, unless otherwise specified. Remove all high spots and fill all seams. Flooring or floor covering, when repairing or replacing, shall extend into closets and storage areas. All finish materials shall be applied in accordance with manufacturer's instructions.

8. Wall Finish

When installing new sheetrock in conjunction with new windows, window trim shall be eliminated and sheetrock returned to the window using metal or plastic corner bead and imitation marble sills. All sheetrock shall be to existing square cut baseboard. Any existing baseboard, window or door trim shall be removed and reused if possible otherwise it will be replaced. All openings without doors shall be finished with metal corner bead or capped with C grade Douglas Fir or better lumber. WATER RESISTANT CONCRETE BOARD SHALL BE USED IN ALL WET AREAS.

9. Ceiling Finish

The repaired area shall conform to the rest of the ceiling and to be finished in good workmanship like manner. One-half (½) inch to one and one-half (1 ½) inch cove molding shall be used when ceiling butts to wood, concrete or paneled walls. The ceiling will be textured, primed with one (1) coat of a suitable primer and covered with two (2) coats of the finish color. New ceilings will be installed in accordance with Florida Building Codes.

10. Scuttle Holes

Scuttle holes shall be installed in areas indicated on Bid Specifications (size 22 inches by 36 inches) and trimmed to conform to ceiling surfaces.

11. Windows

When installing or repairing windows, the contractor shall repair any surrounding areas affected by this work. The repair work shall be finished so as to conform to the surrounding surfaces. See number "8. Wall Finish" when installing windows with new sheetrock.

12. Doors

When installing or repairing doors, the contractor shall repair any surrounding areas affected by the work. The repair work shall be finished so as to conform to the surrounding surfaces. Sanding, staining, varnishing, or painting is required for all new door installations to include all edges of the door.

Replacement doors shall consist of the following, unless otherwise specified in the bid specifications:

- a. *Exterior:* Pre-hung exterior six (6) panel steel door complete with hardware and trim shall be used to replace existing door when the door jam requires replacement. Exterior doors where the existing door jam remains shall be replaced with a one and three-quarters (1 $\frac{3}{4}$) inches solid core stock size and design complete with hardware and trim unless Bid specification specifies otherwise. Doors shall be plumb with 1/8-inch clearance at head, jamb and threshold and adjusted to open, close and lock properly.
- b. *Interior:* 1 $\frac{3}{8}$ inches minimum thickness, hollow core, paint grade installed with two (2) but hinges. Replacement shall include the same as above unless otherwise stated.

13. Cabinets/Countertops

All cabinets and countertops shall be installed according to the manufacturer's specifications. Proper fastening and leveling is required. All cabinets are to have standard trim as provided by the cabinetmaker.

14. Closets

Each clothes closet shall contain a minimum of one (1) rod and one (1) shelf of suitable material and design provided that the finish product meets the following standards: The shelf shall support a uniformly distributed load of 30 pounds per square foot with vertical deflection not to exceed one-quarter ($\frac{1}{4}$) inch. The rod shall support 10 pounds per square foot with vertical deflection not to exceed one-quarter ($\frac{1}{4}$) inch. .

15. Insulation

Insulation indicated in the bid specification shall include preparation of existing areas to receive insulation, the installation of insulation, protection of work area, cleanup and a certification of material.

Insulation materials must meet local codes with at least R-30 for ceilings, R-11 for floors and walls, and R-3 for block and may be blown rock wool, rock wool batts and fiberglass batts, John Mansville or equal. Provide minimum one (1) inch airspace between roof decking and insulation baffle around perimeter for attic.

Exterior Finish

16. Exterior Siding

Replace all cracked, rotten, decayed or deteriorated siding. Replacement exterior siding shall be of a type suitable for its intended use, free from tool marks and other objectionable defects and shall match existing siding. All joint shall be caulked using manufacturers recommended caulking. Butt joints and adjacent runs shall be staggered. New work shall be primed upon installation.

Aluminum/vinyl siding shall be installed over vapor barrier as recommended by the manufacturer. Installation shall include window J-channel, door channel, inside and outside corners, starter strip and finish molding. All siding shall include trim for windows, doors and

sills. All siding will be installed in accordance with manufacturer's specifications and standard practices in the trade.

Fiber Cement Siding shall be installed according to manufacturer's specifications.

17. Concrete Stucco Finish

The concrete block surface must be thoroughly cleaned and, if necessary, prepared with a masonry-bonding agent. Concrete stucco finish on concrete block shall have one (1) scratch coat and one (1) finish coat in accordance with the Florida Building Code. Note: Wire lath with vapor barrier to be used on all wood surfaces.

18. Soffit and Fascia

The soffit shall be constructed at 90 degrees to the wall, parallel to the ground, with supports at a minimum of 24 inches center to center or to match existing roof pitch.

All aluminum or vinyl soffit shall be either ventilated, ribbed or v-groove, with a minimum of .019 thickness.

Enclosing of eaves shall include installation of fascia board.

When replacing a fascia board, its length shall be sufficient to reach a minimum of three (3) rafter ends.

19. Gutters & Down Spouts

Gutters and Down spouts shall not be less than 26 gauge galvanized metal or aluminum with attachments designed and recommended by the manufacturer. The down spouts shall be three (3) inches and extend to within four (4) inches of the finish grade and securely fastened. The splash-block shall be concrete minimum size 12 inches by 24 inches.

20. Roofing

All roofing shall be applied in accordance with Florida Building Code or as identified in the bid specification. Shingles will be 30 year dimensional shingles.

New roofs shall not be installed over any old roofing. All roof openings such as vent pipes that extend through the roofing shall have lead or rubber boots.

The first layer of building paper or ground sheet on all roofs shall be nailed down to the decking by means of disc and roofing nails or approved type fastener designed for this purpose.

Roofing work shall carry a minimum five (5) year warranty on materials and three (3) year warranty on workmanship.

Sheathing supported by barge rafters shall extend back onto the roof at least four (4) feet.

All rafters that are rotted, damaged or deteriorated beyond repair shall be removed entirely. No splicing of any rotten, substantially damaged or deteriorated rafter will be permitted.

Minimum Standards For Rehabilitation Of Residential Properties

When rafter tails are to be replaced, they shall be cut back flush with the exterior siding. New rafter tails shall be of the same dimensions as the old and attached to the end of the existing rafter by toenailing and nails driven through the roof sheathing from the topside.

Collar Ties shall be installed on all new rafters. Ties shall be one (1) inch by six (6) inches pine, and installed in accordance with local building codes.

When a ridge board is to be installed, it shall be a minimum of one and one-half (1 ½") inch in thickness and not less in depth than the cut end of the rafter it joins.

Ceiling joists and rafters shall be nailed to each other where possible. Ceiling joists shall be continuous or joined together over a partition to provide a continuous tie across the structure.

When replacing a fascia board, its length shall be sufficient to reach a minimum of three (3) rafter ends.

All flashing, valleys, eave drip and gravel stops shall be a minimum 26 gauge-galvanized steel or aluminum as specified and follow all local building codes.

Weaving of shingles is acceptable but not instead of 26 gauge-galvanized steel or aluminum flashing.

21. Skirting

All skirting shall go down to the ground. Access door minimum size is 18 inches by 24 inches and should access the crawl space. Skirting vents are to be provided for cross ventilation (one (1) square foot per 150 square feet of crawl space area, or one and one-half (1 ½) square feet of opening per 15 linear feet of perimeter wall).

22. Miscellaneous

All items not covered by this minimum standard or contained in the bid specifications, shall be included to meet the Florida Building Code and ordinances of Volusia County and applicable jurisdictions.

Plumbing/Mechanical/Electric

23. Electrical

All electrical panels, wiring, fixtures and equipment shall be installed in accordance with the requirements of the NATIONAL ELECTRICAL CODE and approval of appropriate building official.

All habitable rooms and other appropriate spaces requiring electrical service shall be provided with a system of wiring devices, and equipment to safely supply electrical energy for proper illumination, appliances, residential security, and other electrical equipment. Electrical wiring and electrical equipment where continued service is contemplated shall not be a potential source of electrical hazard. Every dwelling shall be wired for electric lights and convenience receptacles. Every habitable room of such dwelling shall contain at least

Minimum Standards For Rehabilitation Of Residential Properties

two (2) separate floor or wall type electrical convenience outlets; and every kitchen, bathroom, laundry room, furnace room, corridor, hallway and each porch shall contain at least one (1) ceiling or wall type of electric light fixture which can be controlled by a wall switch. All receptacles in bathrooms and receptacles that serve counter top surfaces shall be arc fault protected.

It shall be the Contractor's responsibility to determine the additional wiring needed to complete the job and conform to the NATIONAL ELECTRICAL CODE and his bid prices shall so reflect.

24. Appliances

All appliances shall be installed according to the manufacturer's specifications and tested for proper operation prior to final inspection. Appliances will be electric and include a refrigerator (minimum 18 cu. Ft.), a hot water heater (minimum 40 gallon), and a standard 30" range. ENERGY STAR rated.

25. Heating

All heating systems shall be adequate to heat all rooms to a temperature of 70 degrees Fahrenheit at three (3) feet above the floor when the outside temperature is 20 degrees Fahrenheit.

26. Mechanical Equipment Repair

All repaired equipment such as ranges, refrigerators, range hoods, heating equipment, etc. shall be tested to assure safe operation and maximum durability.

27. Plumbing

Plumbing fixtures, equipment and material shall comply with and be installed in accordance with the requirements of the Florida Building Code.

All tubs, sinks, lavatories, water heaters, and/or water closets, when provided new, shall be installed complete from the nearest fitting below floor level. New chrome trim and fittings shall include: faucets, traps, supply and return pipes, stops, diverter valve, lead and brass stubs, and water closet in and out parts. When a showerhead and supply lines are called for, separate shut-off valves shall accompany them.

Plumbing fixtures, which are to remain, shall be placed in good working order. Missing or defective parts shall be replaced. Fixtures shall be left in clean sanitary condition. Fittings shall be equipped with appropriate shut-off valves.

The plumbing system shall operate free of fouling and clogging and not have cross connections which permit contamination of water supply or back siphonage between fixtures.

28. Septic System

Septic systems shall operate free of fouling and clogging and shall not have cross connections to permit contamination of water supply or back siphonage between fixtures. Waste lines shall be connected to an approved system.

29. Handicap Friendly Bathroom

A. Shower: Contractor shall install a 60" x 30" curb less shower with a pan, necessary plumbing and adequate slope to provide complete drainage. The recess of floor shall be 60" x 42". THE TOP OF TILE AT CENTER OF SHOWER SHALL BE AT A MINIMUM OF 1 ½" (ONE & ONE-HALF) NOT TO EXCEED TWO (2") INCHES BELOW OUTER EDGE OF SHOWER FLOOR. Install minimum ½ inch, maximum ¾ inch high marble threshold as a water barrier at the transition from shower floor to bathroom floor.

B. Water Closet: Contractor shall install an ADA accessible water closet BRIGGS MODEL #4234 (White) max. 1.6 gpf/6.0 lpf or equal. Unit shall include a new shut-off valve, supply line, and Bermis Model 1850 TT open front seat with cover or equal.

C. Grab Bars: Contractor shall install ADA grab bars in tub area with heavy duty, 18 gauge, type 304, stainless steel, 1 1/2" diameter, Model #7040 and 7075. Unit shall include solid backing for secured mounting.

D. Lavatory: Contractor shall install a wall mount vitreous china lavatory BRIGGS MODEL #6602 or equal.

E. Hose: Contractor shall install a hand held shower Alsons Model 45 C BX with 490 84 BX hose or equal. Unit shall include top and wall bracket.

F. Seat: Contractor shall install a Bobrick Medicaid ADA seat Model B 5191 or equal.

G. Ceramic Tile: Contractor shall install 2" x 2" ceramic tile on the entire bathroom floor with 4" ceramic base tile. Color selection by homeowner.

Painting

30. Painting

ALL PAINT PRODUCTS SHALL BE APPLIED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. NO LEAD BASED PAINTS SHALL BE USED.

All painted surfaces, interior and exterior shall include three (3) coats: one primer/sealer coat and two coats of the primary color. The owner shall select paint colors for exterior surfaces only. Interior colors shall be painted white. All surfaces are to be properly prepared and any painting over dirt, loose, flaking or peeling paint will be rejected. Do not mix paint or primer with texture material.

All painting products shall be standard, washable, nationally known brands, of *best grade*, first line quality 100% acrylic with labels on the containers. All paint shall be delivered to the job site in unopened containers.

Each coat is to be inspected by the Housing Inspector. The Contractor is responsible for contacting the Housing Inspector for each painting inspection per the following:

- a. The first inspection is to be made after surface preparation and primer coat application.
- b. The second inspection is to be made after the application of the first coat of primary color.
- c. The third and final inspection is to be made after the application of the second coat of primary color.

All joints in trim, siding, and frames shall be caulked by gun method before application of paint. Prepare surfaces by scraping loose paint, and removing any cracked putty, point up all cracks and holes and sand smooth both exterior and interior surfaces.

The painting of a room shall include all walls, ceilings, base trim, window and door trim, interior and exterior of all closets and shelves, kitchen cabinets and both sides and all edges of doors. Painting or varnishing of cabinets shall include the inside as well as the outside.

All newly installed wood soffit shall receive one coat of primer and two coats of 100% acrylic paint to match existing.

Paintings of any electrical items, fixtures, finish hardware, or any surfaces not normally painted are not permitted. If any of these items have been painted before, they will be replaced.

All surfaces including floors, walls, ceiling, trim, doors and windows shall be thoroughly cleaned and any paint spatter removed at completion of painting. Reasonable care shall be exercised in moving ladders and scaffolding to avoid damage to shrubbery and premises.

31. Caulking

Exterior joints around windows and door frames; openings between wall panels; openings at penetrations of utility services through walls, floors and roofs; and all other such openings in the building envelope shall be caulked with exterior silicone caulking, gasketed, weather stripped or otherwise sealed in an approved manner.

Interior joints shall be caulked with an interior latex caulk made for this purpose.

Caulking material used shall be in accordance with the manufacturers' recommendations and installed in accordance with the manufacturer's instructions.

Caulking shall be a smooth bead, uniform, straight, clean and crisp.

Moving & Storage

32. Moving & Storage

The Contractor shall be responsible for providing the following services:

- a. Moving all household furnishings to a storage area owned and operated by a private contractor or to a secured portable container on the job site.

- b. Storage of all household furnishings in a secured area or in a secured portable container on the job site for a period not to exceed the completion of the rehabilitation work.
- c. Moving all household furnishings from the storage area owned and operated by a private contractor or from the secured portable container on the job site to the address of the owner at the completion of the rehabilitation work.
- d. Where required, disconnect appliances for temporary relocation to the storage area and reconnect appliances upon return to the address of the owner. This includes, but is not limited to, stoves, refrigerators, freezers, microwaves, televisions and heaters.
- e. Contractor shall be liable for any damages, theft, or loss occurring while loading or unloading in route to or from the storage area, or while at the storage area whether off-site or on the job site.
- f. The Contractor shall have the option of moving and storing homeowner household items himself, or hiring a private moving and storage company to provide this service.

Demolition, Disposal And Cleanup

33. Construction Debris and Removal

The construction site shall be kept clean and all construction debris shall be kept in a trash bin or dumpster at the job site. All construction debris shall be removed from the premises before requesting for a final inspection.

Pest Extermination

34. Pest Extermination

Infestations of termites, borers or powder post beetles shall be eliminated by treating in accordance with the requirements of the State of Florida Pest Control Commission and damage shall be repaired.

A one-year renewable termite bond shall be provided to the owner for units undergoing a moderate rehabilitation. A one-month renewable ant and roach guarantee shall be provided to the owner for units undergoing a substantial rehabilitation.

The chemicals used shall be those that will cause the least inconvenience to the owner (i.e. moving of plants, foam rubber articles, etc.)

ANY DAMAGES TO THE STRUCTURE, INTERIOR OR EXTERIOR, OR TO THE PROPERTY (PLANTS, ETC.) CAUSED BY THE TERMITE TREATMENT SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR.

NSP 3 SUBSTANTIAL AMENDMENT – ADDENDUM B
TO MINIMUM STANDARDS FOR REHABILITATION OF RESIDENTIAL PROPERTIES:
NEIGHBORHOOD STABILIZATION PROGRAM (NSP) REHABILITATION
NSP energy efficiency and conservation standards

The below listed standards apply to any home rehabilitated in whole or in part with Neighborhood Stabilization Program (NSP) funds, as designated by Volusia County. The standards have been adopted to ensure compliance with NSP requirements to promote energy efficiency and conservation in the use of NSP funds for housing rehabilitation. The standards apply to all NSP funded housing rehabilitation commenced on or after March 1, 2011.

1. Gut rehabilitation (“Substantial rehabilitation”)
 - A. Residential buildings up to three stories. All gut rehabilitation or new construction (i.e., general replacement of the interior of a building that may or may not include changed to structural elements such as flooring systems, columns or load bearing interior or exterior walls) of residential buildings up to three stories must be designed to meet the standards for Energy Star Qualified New Homes. See information posted at http://www.energystar.gov/index.cfm?c=new_homes.hm_index
 - B. Residential buildings more than three stories. All gut rehabilitation or new construction of mid- or high-rise multifamily housing must be designed to meet American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standards 901-2004, Appendix G plus 20 percent (which is the Energy Star standard for multifamily buildings piloted by the Environmental Protection Agency and the Department of Energy)
2. Other rehabilitation. All other rehabilitation of NSP homes, except for gut rehabilitation as defined above, shall be constructed according to the Minimum Rehabilitation Standards, and the Scope of Work. The NSP energy efficiency and conservation standards described below apply only to the portion of the rehabilitation work undertaken that requires replacement or substantial repair of any of the following housing elements due to obsolescence or severe damage.
 - A. AIR-SEAL BUILDING ENVELOPE
Seal all accessible cracks gaps and holes in the building envelope (the barrier between the indoor condition space and the outside) with low-VOC caulk (if < 1/4”) or expanding foam (if > 1/4”). Seal all top plate and bottom plate penetrations. If the foundation masonry wall is open core concrete block seal the tops of the block with foundation expanding foam. Seal all penetrations created by plumbing, gas lines, electrical boxes and outlets. Seal large accessible gaps around windows between house framing and window frame – use special care on large sliding-glass doors and vinyl-framed windows: do not use expansive foam on these. Take care to seal all joints without excess sealant. Seal any gaps in the building envelope adjacent to flues with carefully cut to fit sheet metal that is securely fastened to framing sealing all seams and gaps with fire rated caulk. Seal recessed light fixtures in ceilings that are part of the building envelope and are not rated for insulation contact with an airtight box made of drywall sealed to the ceiling. Seal IC rated recessed fixtures with caulk. Seal any entries to attic space using weather-stripping on attic doors or hatches. Air sealing must be done prior to the installation of insulation.
 - B. ATTIC R-38 CELLULOSE
After air sealing blow borax treated (no ammonium sulfate permitted), cellulose insulation per manufacturer’s specifications to R38. Maintain ventilation routes from soft and other vents with baffles. Replace all material removed or cut to gain access to match existing materials.

C. INSULATE DOMESTIC WATER SUPPLY PIPE

Insulate exposed hot and cold water mains with closed cell polyethylene slip-on pipe insulation, sized to fit the pipe's diameter. Seal seams with either 5-mil Pipe Insulation sealing tape or Closure Clips designed for pipe insulation placed every 4 inches. Seal all butt joints between sections of pipe with 5-mil Pipe Insulation sealing tape. Neatly miter all angled junctions.

D. HEAT PUMP, REPLACE, 15 SEER

Size furnace to the living unit considering any area which may be added or subtracted from the plan. Remove existing Heat Pump after removing all CFC and HCFCs, recycle all metal components and dispose of all other materials in a code legal dump. Install a minimum 15 SEER Heat Pump to existing duct work & gas line. Heat Pump, will have minimum limited warranties of 5 years on parts. New outdoor heat pump shall be installed on a code approved outdoor pad. Include auto set back thermostat controls. Insure that the system ductwork is capable of handling the airflow of the new unit per manufacturer's specifications. Re-work cold air return if necessary to ensure easy access, good fit and easy replacement of air filter.

E. RETURN AIR TRANSFER GRILL 12X6

Install a Tamarack Return Air Pathway (RAP) 12.6 (12" x 6"), or similar, sound and light restricted by-pass grill to air balance forced air system – www.tamtech.com. Install in stud cavity between specified room and common space to provide return air. Seal to wall finish and install flange trim.

F. SINK, DOUBLE BOWL COMPLETE – Replacement

Install a double bowl, stainless steel, self-rimming kitchen sink including a steel, metal body faucet, rated at 2.0 GPM or less.

G. FAUCET, LAVATORY – Replacement

Install a water-efficient faucet with a maximum 2.0 gallons per minute flow rate.

H. SHOWER HEAD, 2-GPM – Replacement

Install a water efficient shower head with a maximum 2.0 gallons per minute flow rate.

I. COMMODE, REPLACE, 1.3-GPF

Install a high efficient double flush or single flush commode with 1.3 GPF or similar rating.

J. WATER HEATER, 40 GAL. ELECTRIC

Remove and dispose of water heater in legal dump. Install a 40-gallon, low profile, high recovery, glass lined, insulated to R-7, double element, electric water heater with 10-year warranty. Include pressure and temperature relief valve, discharge tube to within 6" of floor or to outside of structure, shut-off valve and electric supply.

K. ENERGY STAR KITCHEN SEILING FIXTURE – Replacement

Install an Energy Star approved, 4 – 4' tube, instant start fluorescent ceiling light fixture, with an acrylic diffuser such as the Lowes – American Fluorescent – Item #: 184346 – Model: PLW432RC. Connect to existing wiring.

L. ENERGY STAR INTERIOR CEILING FIXTURE – Replacement

Install an Energy Star approved, 13-watt fluorescent ceiling light fixture such as a Lowes Good Earth Lighting. Connect to existing wiring.

M. ENERGY STAR INTERIOR WALL FIXTURE - Replacement

Install an Energy Star approved 13-watt fluorescent wall fixture such as the Lowes Good Earth Lighting. Connect to existing wiring.

N. CFL REPLACEMENT LAMP

Install a 9-watt compact fluorescent (CFL) medium screw base lamp in the specified light fixture properly disposing of any existing lamp.

O. FAN/LIGHT FIXTURE-ENERGY STAR

Remove and dispose of old fan/light fixture. Install an Energy Star approved ceiling-mounted Fan/Light fixture.

P. Range hood

Remove and dispose of old range hood. Install an Energy Star approved range hood. Duct to the exterior if old range hood was exterior vented or if reasonably feasible. Otherwise replace with an Energy Star approved range hood with filtration.

Q. ENERGY STAR CEILING FAN LIGHT FIXTURE

Remove and dispose of old ceiling fan light fixture. Install an Energy Star approved ceiling fan switched at the room entrance.

R. REFRIGERATOR, 18 CF, ENERGY STAR

Remove and dispose of old refrigerator. Install an Energy Star approved 2-door, top freeze, frost free refrigerator with at least 17.5-cubic feet.

S. DISHWASHER, 2-CYCLE

Remove and dispose of old dishwasher. Install a 24" 2-cycle, built-in Energy Star labeled dishwasher including all alterations and connections to plumbing and electric system.

T. WINDOWS

Remove and dispose of old windows. Install low-E, double-pane, high performance, vinyl windows with U-value ≤ 0.32 and SHGC ≤ 0.29 or better.

U. DOORS, Exterior

Remove and dispose of old doors. Install pre-hung 6 panel steel doors, complete with hardware. Finish designated by owner.