PHYSICAL/CAPITAL NEEDS ASSESSMENT REQUIREMENTS

Preservation applicants for rehabilitation must submit a Physical Condition Assessment (PCA), or recent Capital Needs Assessment (CNA) and replacement reserves analysis. The PCA/CNA must have been performed within 12 months of the submission date of the Application.

The PCA/CNA shall include the following five (5) major components:

1. Critical Repair Items. All health and safety deficiencies or violations of Section 8 housing quality standards, including any/all Federal Lead Based Paint requirements, and FHA's regulatory agreement standards that require immediate remediation.
2. Twelve-Month Physical Needs. An estimate of the repairs, replacements, and significant deferred and other maintenance items that will need to be addressed within 12 months. Includes the minimum market amenities needed to restore the property to the non-luxury standard adequate for the rental market for which the development was originally approved. If the standard has changed over time, the rehabilitation may include improvements to meet the current standards.
3. Long-Term Physical Needs. As estimate of the repairs and replacement items beyond the first year that are required to maintain the development's physical integrity over the next **twenty (20) years**, such as major structural systems that will need to be replaced during this period.
4. Analysis of Reserves for Replacement. An estimate of the initial and monthly deposit to the Reserves for Replacement account needed to fund the development's long-term physical needs, accounting for inflation, the existing Reserves for Replacement balance, and the Expected Useful Life (EUL) of major building systems. This analysis should include the cost of twelve-month physical needs, but not any work items that would be treated as an operating expense.
5. Costing. A Cost Estimate should be part of this report. All items included in components #1 Critical Repair Items, #2 Twelve Month Physical Needs and the abatement of environmental hazards must be included in the scope of work proposed in the Application. The scope of work should also include items shown for replacement within the first 5 years of component #3 Long-Term Physical Needs.

Statement of Work

1. The report shall be written with detailed narrative and accompanying color photographs and shall describe the property's exterior and interior physical condition, including architectural and structural components, and mechanical systems.
2. The report shall:
   a) Identify in detail any repair items that represent an immediate threat to health and safety, and all other significant defects, deficiencies, items of deferred maintenance, and material building code violations (individual and collectively, "Physical Deficiencies") that would limit the expected useful life of major components or systems. Deficiencies regarding significant life safety issues must be identified;
   b) Provide estimated costs to remedy the detailed Physical Deficiencies (Critical repair items, 12-month physical needs, and the first five years of long term physical needs); and
   c) Prepare a Replacement Reserve Schedule, including an estimate of the initial and annual deposits (projected to increase at the operating cost adjustment factor) based on the remaining term of the mortgage plus two years.

3. The report shall identify any Physical Deficiencies as a result of:

   a) A visual survey;

   b) A review of any pertinent documentation; and

   c) Interviews with the property owner, management staff, tenants, interested local community groups and government officials.

4. The report shall provide a description of directly observed or potential on-site environmental hazards including but not limited to above and below ground tanks which are not in use. The report shall also include copies of laboratory testing results for the presence of radon, lead in domestic water, lead based paint, where applicable, and asbestos, where potential asbestos containing materials exist. A minimum of 10% or 5 of the dwelling units (whichever is greater) must be tested.

   Radon must be tested in all dwelling units on lowest floor level or the lowest level of the building containing community space.

   Testing for lead in the water shall be based on 2 samples from each location; an initial draw sample taken after a period of no water use, and a sample taken after thoroughly flushing the system.

   Lead based paint testing shall be performed using an X-ray Fluorescence spectrum analyzer (XRF) and in accordance with HUD's "Final Rule", 24 CFR Part 35, as amended June 21, 2004.

   A survey of the building shall be performed to identify suspect asbestos containing materials. All such material shall be tested using polarized light microscopy (PLM).

5. The report shall assess the twelve-month physical needs. The standard is a non-luxury standard adequate for the rental market. The physical needs identified should be those necessary for the development to retain its original market position as an affordable development in a decent, safe and sanitary condition (recognizing any evolution of standards appropriate for such a development). The twelve-month physical needs should include those improvements the development requires to compete in the market. Where a range of options exists, the most effective options for rehabilitation should be chosen, when both capital and operating costs are taken into consideration.

6. A diagnostic and comprehensive energy audit performed by a Building Performance Institute (BPI) Certified Multifamily Building Analyst must be conducted in accordance with the PHFA guidelines attached. The energy audit report must be included in the application. Measures to reduce both development paid and tenant paid utilities must be evaluated.

7. The report must be prepared by an independent consultant, an architect, general contractor or engineer, any all of whom must be versed in all applicable codes currently in effect in the locality in which the development is located.

8. The report shall explain how the development will meet the requirements for accessibility/VisitAbility to persons with disabilities, to the extent applicable.

9. Prepare a PCA/CNA report, which in addition to the five major aforementioned components and at a minimum shall include the following subcomponents.

   a) Development Summary Sheet; and

   b) Executive Summary (discussion of the physical condition of the property and any major repair/rehab items observed); and

   c) Index; and

   d) Introduction to the Report; and

e) Building Evaluation (property identification, including location and description); and

f) Site Improvement Evaluation/Analysis (utilities, parking, paving, sidewalks, sewer and drainage, landscaping, trash enclosures/compactors and general site improvements); and

g) Building Architectural and Structural Systems Evaluation (foundations superstructure and floors, roof structures and roofing, exterior walls and stairs, siding, downspouts, and common areas energy efficiency, tenant amenities, playgrounds and playground equipment); and

h) Building Mechanical and Electrical Systems Evaluation (building HVAC, plumbing, electrical, elevators, fire protection/security systems); and

i) Interior Dwelling Units Evaluation (interior finishes, all floors, walls, ceilings, paint, kitchens and appliances, carpet, vinyl, interior doors, shelves, cabinets, vanities, closets, interior HVAC, plumbing, bathroom fixtures, electrical fire protection systems, security systems); and

j) Evaluation/Analysis of Other Structures; and

k) Estimated Useful Life Analysis (computation of Repairs and Replacement Reserves); and

l) The basis for identifying any item for repair or replacement; and

m) Unit cost breakdowns shall be provided for multiple items (i.e., stoves, refrigerators, cabinets, bathroom fixtures, etc.); and

n) Acknowledgments (who prepared report, when report was prepared, who received report and when report was reviewed); and

o) Appendices (photographs, site plans, maps, etc.); and

p) Identification of any observed hazards, flammable or explosive facilities/operations in the immediate area of the development; and

q) State whether the development is located in a Flood Plain.

Energy Audit Guidelines

The multifamily audit is a detailed examination of how the multifamily facility uses energy and other controllable utilities, quantification of the buildings energy and water consumption, the cost of energy, technical analysis of the building and associated systems, and in conclusion a set of recommendations to reduce the energy costs. The energy cost reduction will be categorized by building envelope, equipment (mechanical, electrical, plumbing) and operational changes.

The audit should include:

- Analysis of existing energy (electric, natural gas, Liquid propane, fuel oil) consumption. A minimum of one year's bills should be evaluated. Evaluate consumption levels and patterns. Audited financial statements are not acceptable.
- Review maintenance and repair records.
- Review Record Drawings (As-built).
- Fuel usage data should be normalized with local weather data.
- Discuss building with management. The discussions should include building performance, HVAC systems, electrical, and building envelope. Occupant comfort and complaints should be Included in the discussions.
- Site visit should be conducted using acceptable techniques for building type and size (i.e. small building with independent entries may utilize blower testing, large building with common entrances and hallways may utilize visual inspection and measurements to calculate leakage).
    - Sampling should include 10% of total existing units.
    - All unit types (bedroom count, HVAC system type, location in building) shall be taken into account.
    - Field verify blue prints
    - Inventory MEP equipment
    - Identify moisture problems
    - Identify ventilation system
    - Field verify fan operation
    - Assess building airflow
    - Evaluate building envelope
- Energy modeling should be conducted, according to ASHRAE Fundamentals Chapter 31. TREAT, EA-QUIP or other multifamily energy audit software approved by DOE must be used for energy modeling. The energy model shall be calibrated against the previous 12 months actual usage to verify the accuracy of the model. Assumptions and calculation methods should be documented.
- Economic analysis
    - Account for inflation and discount rates utilizing the Savings-to-Investment Ratio formula.
    - Cost estimates for all energy efficiency measures. Provide back-up for cost estimates (RS Means is acceptable). Provide in spreadsheet format for local verification.
    - Calculate energy dollar savings (annual savings, life cycle savings, show payback period) per recommended efficiency measure.
    - Include benefits to end use bill payers.
    - Identify non-energy related benefits.

- Mechanical Systems
  - Provide a detailed list of HVAC equipment, include age, capacities, make and model numbers.
  - Identify equipment as common area, tenant area and if equipment is central or systems within tenant area.
  - State condition of equipment.
  - Provide combustion efficiencies for combustion equipment
  - Identify distribution systems and state condition of distribution systems and components.
- Electrical Systems
  - Provide a schedule of lighting, motors, and major appliances.
  - Identify savings, consumption and dollars for retrofits, in common space and units.

Reporting and Review

- Deliverable - Report including:
  - Executive Summary including Detailed Table of All Measures with
    - Annual Savings in kilowatt-hours, MMBTU, and gallons
    - Annual Savings in dollars
    - Life of Measure
    - Life Cycle Savings of Measure
    - Estimated Cost (RS Means is acceptable)
    - Savings-to-Investment Ratio (SIR*) based on Estimated Cost
  - Building Description - Include the following,
    - Building Envelope
    - Mechanical Equipment and appurtenances
    - Electrical Equipment and appurtenances
    - Plumbing Equipment and appurtenances
  - All Evaluated Measures
    - Description
    - Rational
  - Analysis of Fuel and Electricity Bills

* Savings-to-Investment Ration (SIR): the calculated lifetime dollar savings divided by the cost of the installed measure. It is recommended that energy efficiency recommendations should be based on a calculated SIR, with larger SIRs receiving a higher priority.