

ARCHITECTURAL SUBMISSION REQUIREMENTS

DEVELOPMENT SUBMISSION REQUIREMENTS

Development Submission Requirements

Development Requirements Checklist

Estimated Utility Costs

The following documents are available on the PHFA website:

- PHFA Addendum to Owner/Contractor Agreement
- PHFA Supplemental General Conditions
- Construction Cost Breakdown
- PHFA Addendum to Owner/Architect Agreement

DEVELOPMENT SUBMISSION REQUIREMENTS

SUBMISSION PROCESS

At least 45 days prior to the anticipated construction closing, all developments shall submit (1) hard copy of contract documents for review by the Technical Services Division of PHFA. The level of completion must be sufficient (100%). Drawings shall be to scale and a minimum size of 24" x 36" and a maximum of 30" x 42". Submission of the required documents within this timeframe does NOT guarantee a review will be completed in those 45 days. If PHFA's review of the submitted documents finds conditions that are not in compliance with these requirements, written comments will be forwarded to the Owner identifying the deficiencies. Revised documents addressing these comments, along with a written response, on the Architect's letterhead, to the comments must be submitted to PHFA. All drawings and specifications must be bound.

DRAWING REQUIREMENTS – ARCHITECTURAL

Cover and Title Sheet –

1. Name of the proposed development.
2. Development address.
3. Developer's name and/or entity.
4. Design Architect's name.
5. Date of submission.
6. A location map encompassing an area of $\frac{1}{2}$ mile radius of the site.
7. Signature and date space for the Owner, Architect and Contractor.
8. Building code analysis.

Site Plan –

1. Minimum scale of 1" = 30'.
2. Indicate property lines with bearings and distances.
3. Indicate building setbacks.
4. Number all buildings for ease of reference.
5. Identify public streets and rights-of-way.
6. Existing and proposed grade elevation contours at one-foot intervals. (Applicable to new construction, additions and site improvements affecting accessibility for Preservation developments).
7. Ground floor finish elevations for all buildings and areas within buildings where a change in elevation occurs.
8. Spot elevations where necessary.
9. All site details, dimensions, paving sections, curb cut and road radii, trash enclosures, etc, as applicable
10. Identify the locations of accessible, VisitAble and Hearing/Vision Impaired units for townhouse developments and accessible parking spaces.
11. Accessible route details to accessible, adaptable, and VisitAble units. Include slope percentage on sidewalks.
12. Indicate site acreage.
13. Indicate location of utility tie-ins and proposed on site layout.
14. Landscape plan including details and plant schedule (common name, number, and size for all materials), as applicable.
15. Show the relationship of the site lighting and other site utilities to the overall site development. Coordinate with plumbing and electrical utility drawings.

Typical Building Floor Plans –

1. Building Floor Plans (All Floors, Basement and Roof plans) drawn at 1/8" =1'-0"
2. Include all dimensions.
3. Indicate locations of accessible, VisitAble and hearing/vision impaired units.
4. Indicate gross square footage per floor.
5. All rooms and spaces must be identified.
6. A "North" reference on all building floor plans.
7. Key doors and windows.

Typical Dwelling Unit Plans-

1. Unit plans for all unit types and sizes, including accessible units drawn at 1/4" = 1'-0".
2. Indicate clear floor area requirements in accessible, adaptable, and VisitAble units.
3. Indicate gross and net square footage for each unit plan.
4. Include overall dimensions, room sizes and closet dimensions.
5. Key doors and windows.

Schedules and Details –

1. Room finish schedule.
2. Door and window schedules, elevations, jamb, sill, and head details. Key to floor plans and building elevations.
3. Other as applicable.

Elevations –

1. Exterior elevations drawn at 1/8" for each orientation clearly indicating:
 - A. All exterior finishes, openings, and penetrations.
 - B. Relationship of finished floor to finished grade for units partially below grade.
 - C. Height of each story (floor to floor) parapet or roof.
 - D. Key doors and windows.
2. Interior elevations drawn at a minimum of 1/4" =1'0"
 - A. For all kitchens and bathrooms, include dimensions, materials, and mounting heights.
 - B. All other required (e.g. gang mailboxes, lobbies, etc.).

Building/Wall Sections –as applicable to the building type:

1. Typical exterior wall sections (including roof and foundation).
2. Elevator shaft.
3. All typical interior walls, partitions, and chases.
4. Indicate insulation levels with R-values.
5. Indicate STC/IIC ratings.

Building Details – Must be included as necessary for the construction of the building(s).

DRAWING REQUIREMENTS – STRUCTURAL

Plans, Sections, Details and Notes – Must be included in a scope sufficient to construct the development. The scope will vary depending upon the type of development (e.g. 1 and 2-story wood frame townhouses to steel and concrete high rises). At a minimum, the following must be included:

1. Design loads.
2. Framing systems and size of members.
3. Foundation design consistent with recommendations made in the subsoil investigation report.
4. Governing codes, regulations, and standards.

DRAWING REQUIREMENTS – MECHANICAL

General – The intent of this submission is to set forth Design Development for mechanical work in sufficient detail to:

1. Clearly define the concept and elements of the mechanical systems proposed for the development.
2. Provide proper coordination with architectural, structural, and electrical specifications.
3. Allow for technical review of adequacy, economy, and compliance of proposed design with applicable regulations and codes.
4. Identify specific items of material and equipment contained in specifications for electrical work prepared in accordance with instructions noted above.

Mechanical Plans:

1. The orientation of mechanical drawings must follow the same pattern as established on the architectural drawings. Titles of rooms corresponding to titles on the architectural drawings must be noted on the mechanical plans.
2. In general, Design Development drawings must include site plans, floor plans, schematic and riser diagrams, necessary equipment schedules and pertinent details.
3. Site plans must show the routing of all underground services, site drainage, manholes, catch basins and connections to existing systems, meter locations, etc. Crossovers which are possible points of conflict with work to be done by other trades or under different contracts must be shown with invert given and clearances worked out. Details of connections to utility company lines, building entrances and manholes must be shown.
4. Provide plumbing riser diagram.
5. Floor plans must show each typical area indicating location and space requirements for equipment, fixtures, piping, air ducts, grilles, diffusers, and any other pieces of equipment. Care should be taken in working out hung ceiling depth, equipment rooms and shafts with adequate clearances provided (e.g. 7'-8" clear height for public corridors).
6. Routing of major ductwork and piping may be shown as single line. Schematic and/or riser diagrams must show all major pieces of equipment, piping, ductwork, etc. with capacities and sizes listed for each. A schedule of all pertinent data for each piece of equipment proposed must be provided.

Other Requirements – The enclosed *Estimated Utility Costs* must be completed and submitted to PHFA.

DRAWING REQUIREMENTS – ELECTRICAL

General – The intent of this submittal is to set forth Development Submission for electrical work in sufficient detail to:

1. Clearly define the concept and elements of the electrical systems proposed for the development.
2. Provide proper coordination with architectural, structural, and mechanical drawings and specifications.
3. Allow for technical review of adequacy, economy, and compliance if proposed design with applicable regulations and codes.
4. Identify specific items of material and equipment contained in the specifications for electrical work prepared in accordance with instructions noted above.

Electrical Plans:

1. The orientation of electrical drawings must follow the same pattern as established on the architectural drawings. Titles of rooms corresponding to titles on the Architectural drawings must be noted on the Electrical plans.
2. In general, Development Submission electrical drawings must include site plan, floor plans, details, schedules, riser diagram and a one-line schematic, all as outlined below.

3. Site plans must show:
 - A. Utilities – proposed and existing.
 - B. Topography – proposed and existing.
 - C. Site lighting and circuitry.
 - D. Fuel system location.
 - E. Meter locations.
 - F. Building outline.
 - G. Location of temporary services, if applicable.
 - H. Pertinent dimensions.
4. Floor plans must show each typical area in indicating the location and electrical circuitry to:
 - A. Outlets, Switches, Special systems, Mechanical equipment, Smoke detectors, Electrical equipment, Receptacles, Lighting fixtures, Panel boards, Hearing and Vision fixtures.
5. Details (as required by individual development) must include:
 - A. Transformer, Counterpoise, Grounding, Site luminaries, Emergency system, Manholes and Concrete structures.
 - B. Generator including: Duct systems, Exhaust systems and Fuel systems.
6. Schedules (as required by individual development) must include:
 - A. Lighting fixtures, Electrical equipment, Panel boards, Heat transfer appliance, Transformers, Special apparatus, and Mechanical equipment (requiring electrical service).
7. One-line schematic (depending upon the scope of the development) must show:
 - A. Service entrance, Power distribution, Grounding, Telephone, Communications, Security, Fire alarms, TV system, Heat and Smoke detectors.

SPECIFICATIONS

Specifications must be prepared in accordance with the CSI 50-Division MasterFormat 2004 Edition. Masterspec version or similar templates may be used. Outline specifications template may not be used.

AIA Document A201, 2017 Edition – General Conditions of the Contract for Construction and the PHFA Addendum to the AIA A101 and A201

PHFA Supplemental General Conditions

All Applicable Compliance Requirements for developments with Federal or State funds used for construction including:

1. Non-Discrimination Clause.
2. Section 8 Affirmative Action Plan.
3. MBE/WBE/SERB Plan.
4. Labor Standards and Davis Bacon Wage Determination.

Subsoil Investigation Report (New Construction and additions)

1. Test Borings must be provided at the following locations:
 - A. Beneath major building footing components of ALL buildings, in the area of the highest design load. If multiple buildings are proposed, borings must be provided for each building.
 - B. Major trenching of MAIN subsurface utilities.
 - C. Each parking area.
2. An overlay map of the boring locations in relationship to the proposed building footprint(s), parking area(s) and utilities is required. If the building, parking or utility design changes after final approval, the borings must be modified /rebored to accommodate the new design.
3. Additional borings may be requested/required based upon the findings of initial borings.

DEVELOPMENT SUBMISSION REQUIREMENTS CHECKLIST

Development Name: _____

The undersigned certifies that all items have been provided in the drawings and/or the specifications.

Design Architect (Print & sign): _____

Date: _____

Check the appropriate box if the development conforms to the requirement. Check A if it is applicable or NA if it is not applicable. The Architect must submit a written request to PHFA for any waiver of the PHFA Design Requirements or for any items that are neither checked nor indicated as not applicable.

Preservation Developments must follow these guidelines to the greatest extent possible. It is not the intent to burden a development with unnecessary work; however, we do expect the development to have a minimum 20-year life expectancy after preservation work is completed.

It is not the intention of PHFA to require changes to existing building layouts to conform to these standards. Where the level of rehabilitation is substantial, the requirements of these Guidelines should be followed. Preservation developments undergoing major rehab where a majority or all interior walls, systems, etc. are scheduled to be replaced, will be considered a "gut preservation" development, and reviewed under the guidelines for New Construction/Substantial Rehabilitation.

In the event it is not economically feasible to adhere strictly to all submission or design requirements in this Guide, individual requirements may be waived at the discretion of the Agency. Waivers will not be required for Dwelling Unit size, Room size, Corridor/Stair width and Closet doors/shelves unless interior spaces are proposed to be redesigned (PRESERVATION Developments ONLY).

1. Minimum/Maximum Unit Size Requirements

The following matrix established the minimum and maximum allowable net square footage area for units. Net square footage shall be measured from the inside face of the exterior walls to the inside face of interior demising walls. The net area does not include unfinished outdoor storage space, spaces for heating and cooling equipment located outside the unit, garages, or porches, patios, and balconies. Rehabilitation developments may vary from the minimums and maximums by 10% if acceptable furnishing plans are provided. Accessible units may vary from the maximums as required to provide an accessible route and accessibility maneuvering clearances. An Efficiency Dwelling Unit is defined as having a single habitable room without demising walls/doors separating the Living, Dining, Kitchen and Sleeping areas.

		<u>Flats</u>	<u>Multi-Floor Units</u>
<input type="checkbox"/> <u>A</u> <input type="checkbox"/> <u>NA</u>	SRO	90 to 200	
<input type="checkbox"/> <u>A</u> <input type="checkbox"/> <u>NA</u>	EFF	400 to 600	
<input type="checkbox"/> <u>A</u> <input type="checkbox"/> <u>NA</u>	1 BR	550 to 850	650 to 950
<input type="checkbox"/> <u>A</u> <input type="checkbox"/> <u>NA</u>	2 BR	700 to 1,100	850 to 1,300
<input type="checkbox"/> <u>A</u> <input type="checkbox"/> <u>NA</u>	3 BR	950 to 1,350	1,000 to 1,550
<input type="checkbox"/> <u>A</u> <input type="checkbox"/> <u>NA</u>	4 BR	1,100 to 1,550	1,200 to 1,750
<input type="checkbox"/> <u>A</u> <input type="checkbox"/> <u>NA</u>	5 BR	1,300 to 1,750	1,400 to 2,000

2. Minimum Room Size Requirements

All bedrooms must have a demising wall with a door between it and other spaces within the dwelling unit, there must be a closet and an operable window to provide natural light and ventilation. Minimum room sizes do not include unusable alcove space at doors. Accessible rooms may require additional space. (Waivers may be granted for room sizes in rehabilitation developments only, based on acceptable furnishability plans).

Bedrooms:

Primary bedroom – 120 SF (least dimension 10'-0")
 Additional bedroom(s) – 90 SF (least dimension 9'-0")

Living Room:

The living room area must be sufficient to provide adequate space based on the number of persons who will reside in the Unit. Units with more bedrooms, and thus more people, should have larger living areas to accommodate furnishings that will serve the number of residents in that unit. In open plan configurations, living room furniture must be a minimum of 5' from any kitchen cabinets/appliances.

Living Room (least dimension in any direction 11'-0").

Dining Area:

The dining area must be in addition to the living room area and must be appropriately sized, based on the number of residents who will live in that unit. In open plan configurations and eat-in kitchens, dining furniture must be a minimum of 36" from any furniture in the living room, kitchen cabinets/appliances and all walls. Island/bar seating is not permitted as the only dining area in General Occupancy developments with 2 or more bedrooms.

Efficiency Unit - Living Room/Sleeping Combination:

Living/Sleeping – 200 SF min. (least dimension 10'-0").

Other Unit Space:

Dwelling unit corridors and stairs – 36" min. width.

3. Air Conditioning

A. The living areas and bedrooms of all dwelling units in new construction and substantial rehabilitation developments must be air conditioned. Preservation developments should strive to provide air conditioning. Window air conditioners will not be considered as meeting this criterion, except in Preservation developments (unless Code does not permit this arrangement).

B. In new construction and substantial rehabilitation developments, all common areas must be air conditioned, except for stair towers, mechanical and storage areas. Preservation developments should strive to provide air conditioning.

4. **Below-Grade Units** – The maximum distance a floor level in any dwelling unit may be below finish grade elevation outside the unit is 4'-0". Finish grade must slope away from the building. Area wells/window wells are permitted in Rehabilitation Developments with PHFA approval.

5. Bathrooms:

A. Vanity bases are recommended in all bathrooms unless an additional storage cabinet or closet is provided.

B. All bathrooms must have a minimum of (1) 18" towel bar, a toilet paper holder, a shower rod in the tub/shower unit or shower unit, (1) towel ring, a medicine cabinet with a mirror and a light fixture located over the mirror. Where Powder rooms are provided, each must have a minimum of (1) 12" towel bar or towel ring, toilet paper holder and a mirror with a light fixture located over the mirror.

6. Kitchens:

A. Kitchens should be designed to serve the number of residents in the unit. For example, kitchens in units with three bedrooms shall provide more base cabinets and counter space than kitchens in a one-bedroom unit.

B. Ranges must be provided in all units (except SROs with common cooking facilities). A protective shield must be provided on the section of wall directly behind all ranges. The protection must extend from the top of the range to the underside of the hood or cabinet above for the width of the range or more. Protective shields must be high pressure plastic laminate, enameled steel, or stainless steel.

C. Ducted range hoods with fans and lights must be provided above all ranges (Recirculating range hoods are allowed in buildings if an intake grille is located near the range).

D. Consideration should be given to the installation of electronic high temperature limiting devices on the stovetop elements of electric ranges, or the installation of powder-based stovetop fire suppression canisters above electric or gas ranges.

E. Refrigerators must be provided with all units except SROs with common cooking facilities. All refrigerators must be frost-free and must have 2 doors (separate doors for freezers and refrigerator compartments). **Minimum sizes: Eff-10.0 cu. ft., 1 BR – 13.0 cu. ft., 2 BR – 15 cu. Ft., 3 BR – 15.0 c. ft. and 4BR – 17.0 cu. ft.**

F. Where dishwashers are supplied in General Occupancy units, they must be 24" wide, full size, under counter type.

7. Closets and Storage:

A. All closets must have doors that fully conceal the contents of the closet.

B. Pantry storage must be provided and must be concealed (2 lineal feet minimum x 18" minimum depth closet or an 18" minimum width pantry cabinet is acceptable).

C. Linen storage must be provided and must be concealed (2 lineal feet minimum x 18" minimum depth closet, separate from a bedroom or coat closet or an 18" minimum width linen cabinet is acceptable).

D. Miscellaneous storage closet must be provided (2 lineal feet minimum x 24" minimum depth).

E. A minimum of 4 lineal feet of full height hanging space must be provided in each primary bedroom within a unit.

F. A minimum of 3 lineal feet of full height hanging space must be provided in each additional bedroom within a unit.

G. SRO's must provide adequate closet or wardrobe cabinet for clothes storage.

8. Blocking: Provide concealed 1½" thick wood blocking at the following locations:

A. All wall mounted accessories (curtains, blinds, towel bars, toilet accessories).

B. A□ NA□ Grab bars – Blocking for installed or future grab bars shall be continuous behind the bar location. Where small grab bars are installed for Visitability or Fair Housing Act conformance, the blocking shall be sized to accommodate the grab bars required by ANSI A117.1-2009 (or edition currently adopted by PA UCC).

9. Laundry Facilities:

- A. A□ NA□** Central laundry facilities must be provided unless individual washers and dryers are provided in each unit. For developments consisting of numerous buildings, several small facilities may be provided in lieu of one facility.
- B. A□ NA□** A minimum of 1 front loading washer and dryer must be provided in each common laundry facility and in accessible units with laundry facilities.

10. Waste Disposal: (Check applicable systems)

- A. A□ NA□** Garbage disposals are recommended where wet garbage presents sanitation problems. Disposals are required in mid- or high-rise buildings if trash chutes and compactors are not provided.
- B. A□ NA□** Trash room(s) – All trash rooms must contain a hose bib and floor drain and have a durable water-resistant floor finish.
- C. A□ NA□** Trash compactor.
- D. A□ NA□** Dumpster(s). Outdoor collection areas must have concrete pads and be visually screened, (e.g. evergreen hedges or shrubs, masonry, pressure-treated wood or vinyl fence enclosures). The type of collection service must be determined in advance of design in order to establish the correct size and number of areas and the required service vehicle access and clearance. A minimum 6" thick, reinforced structural concrete pad (approximately 10' x width of dumpster enclosure) must be provided in front of the collection area to prevent pavement damage by the garbage trucks for dumpster type collection.
- E. A□ NA□** Outdoor trash collection areas, with multiple resident unit trash containers, must have concrete pads, be visually screened (masonry, pressure-treated wood or vinyl fence enclosures) from public view and have concrete sidewalk access from the collection area to each dwelling unit and/or public collection area (street).
- F. A□ NA□** Recycling provisions – The size, number and design of collection area(s) must conform to the requirements of the Local recycling ordinance.

11. A□ NA□ Fire Extinguishers – Provide a minimum of one 5-pound, 2A-10B-C rated fire extinguisher in all units with a range or cook top. Other fire extinguishers must be provided for the development as required by code.

12. A□ NA□ Environmental Remediation Requirements – The Architect must indicate in the Contract Documents any environmental remediation work to be performed on the site. This must be shown as part of the Scope of work described in the Contract Documents. This is required to identify that remediation work needs to be done, so the proper officials will be made aware of the need to certify the work was properly performed. In the case where the environmental remediation work is not part of the Scope of Work, it must be clearly noted in order to place the responsibility on the party responsible for the work.

13. Sound Transmission:

	<u>Location</u>	<u>IIC*</u>	<u>STC**</u>
<input type="checkbox"/> <input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> NA <input type="checkbox"/>	Partitions	NA	50(55)***
<input type="checkbox"/> <input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> NA <input type="checkbox"/>	Flooring/Ceiling	50(55)***	50(55)***

* **Impact Isolation Class** for floor/ceiling assemblies separating living units from other living units and from public spaces and service areas with moderate noise levels.

** **Sound Transmission Class** for partitions separating living units from other living units and from public spaces and service areas with moderate noise levels.

*** **(55)** represents the IIC and STC Class for separations between living units and high noise areas (e.g. mechanical, emergency generator and trash compactor rooms, elevator, trash chases and chutes, laundry, and maintenance areas, etc.).

14. A NA Substrates – Ceramic tile or EIFS (Dryvit) interior or exterior finished shall only be installed over cementitious or masonry substrates. Moisture-resistant gypsum board is NOT allowed.

15. Elderly (55+/62+) Facilities Amenities: Required physical and design accommodation features and amenities:

- A. NA Handrails on both sides of common area corridors. Handrail ends must return to the wall.
- B. NA In 1 Bedroom and 2 Bedroom Elderly Units, an 18" wide dishwasher is permitted.
- C. NA Showers are encouraged in 100% of the Units, to allow for aging in-place.
Under cabinet lighting should be considered in all Unit kitchens in Elderly developments.

16. Design and Construction should conform to the Fair Housing Amendments Act of 1988, the Pennsylvania Uniform Construction Code and Section 504 of the Rehabilitation Act of 1973, as amended. The site, building(s) and dwelling units must conform to the Uniform Federal Accessibility Standards (UFAS), the ANSI A117.1-2009 (or edition currently adopted by PA UCC), and/or the 2010 ADA Standards for Accessibility Design, as applicable. In addition, the following PHFA Supplemental Accessibility Requirements must be incorporated:

1. Common Areas Designed for Mobility Impairments

- A. NA A full-width kick plate must be provided on both sides of all exterior doors, all accessible unit entrance doors and all common area doors that permit tenant access.
- B. NA Wall corner guards (textured vinyl 1-1/2" x 1-1/2" minimum) must be provided at all outside wall corners in all common areas.
- C. NA Ranges in common Kitchens or Kitchenettes must be self-cleaning type.
- D. NA All developments must be designed with a minimum of 5% accessible units and an additional minimum of 2% hearing/vision impaired units.

2. Accessible Dwelling Units - All accessible units shall conform to the requirements for ICC/ANSI A117.1-2009 (or edition currently adopted by PA UCC) "Type A Units". For developments with federal funding and subject to the Uniform Federal Accessibility Standards (UFAS), note that HUD allows conformance with the 2010 ADA in lieu of UFAS, with a few limitations. In addition, the following PHFA provisions are required:

- A. A NA** A full width kick plate must be provided on both sides of all accessible Unit entrance doors, interior doors that permit passage and on one side of all other doors.
- B. A NA** Wall corner guards (textured, vinyl 1½" x 1½" minimum) must be provided at all outside wall corners within accessible units.
- C. A NA** Grab bars must be installed at all required locations.
- D. A NA** Shower heads and mirrors in accessible units shall be mounted to permit use by those with mobility impairments and those without.
- E. A NA** Removable kitchen and bath base cabinets may be installed at the areas requiring knee space. These cabinets must be removable without disconnection of any plumbing lines. The walls, floor and sides of adjacent cabinets must be finished, and wall base installed during the initial construction.
- F. A NA** Ranges must be self-cleaning type.
- G. A NA** A 30" work surface with knee space (or removable cabinet) beneath must be provided beside the oven in all accessible kitchens.
- H. A NA** Knee and leg protection must be provided at all exposed plumbing beneath accessible kitchen sinks and lavatories, even if removable cabinets are installed.
- J. A NA** An accessible route must be provided to all spaces and elements in an accessible unit, in accordance with ANSI A117.1-2009 (or edition currently adopted by PA UCC), Section 1003.3.
- K. A NA** The accessible dwelling units must be distributed throughout the building(s) and site in a sufficient range of sizes and amenities to allow a choice of living arrangements for persons with disabilities, generally comparable to that of other persons.
- L. A NA** All Accessible dwelling Units must include audible and visual signaling devices for hearing/vision impaired.
 - Strobic visual signal wired to the dwelling unit smoke detectors, visible in all rooms of the dwelling unit including the bathroom.
 - Strobic visual signal wired to the central fire alarm system (if one is required by code), visible in all rooms of the dwelling unit including the bathroom. This signal must be distinguishable from that in paragraph "A" above.
 - A doorbell at the dwelling exterior or corridor entrance door with a visual signaling device.
 - TTY capable telephone to be provided by tenant.
 - In buildings with a common entrance, a means for a hearing-impaired individual to identify visitors without leaving his/her dwelling unit.
 - Additional devices as may be required.

17. A NA Broadband Infrastructure – The installation of broadband infrastructure is required in all projects, in compliance with Federal Register 81 FR 31181 “Narrowing the Digital Divide through Installation of Broadband Infrastructure.” Infrastructure must be provided in each dwelling unit meeting the Federal Communications Commissions (FCC's) definitions in effect at the time the pre-construction estimates are generated. Currently the FCC defines broadband speeds as 25 Mbps download and 3 Mbps upload.

18. A NA VisitAbilitycm* – In new construction and new additions, all units are expected to be visitable. All newly constructed single-family houses, townhouses, units in elevator buildings and all

ground floor units in walk-up apartment buildings shall be visitable. Rehabilitation developments should strive for 100% visitability, but a minimum of 25% of the units shall be visitable unless it is unfeasible due to structural or other existing conditions that cannot be readily corrected. Preservation developments are exempt from this requirement but are encouraged to provide VisitAble units where feasible.

- **Zero-Step Entrance** – For a building and a unit to be VisitAble, it must provide at least one zero-step entrance with a 36" wide door. A zero-step entrance is one with no step at the exterior door and with less than a $\frac{1}{2}$ " difference between the inside and outside surfaces or with a threshold with less than a $\frac{1}{2}$ " rise. When selecting sliding doors, choose those with the lowest bottom track and providing at least 32" clear opening.
 - The methods of achieving a zero-step entrance include consideration of grade when planning a site. Grading an accessible route flush with the entrance of a unit is typically less costly than constructing a ramp and often less than installing steps. At the zero-step entrance to a unit an overhang or porch should be provided to protect the entrance door from rain or snow.
- **Wider Doors** – All doors, doorways, and passageways on the accessible entry level floor of a unit must be 36" wide (minimum). A 34" door will provide approximately a 32" clear opening, which is marginally adequate. Wider doorways make movement of people, furniture, and assistive devices such as wheelchairs, walkers, and crutches safer and easier.
- **Convenience Facilities** – A 36" clear path of travel to the bathroom or powder room and a clear floor space within the room and at the plumbing fixtures in accordance with the Fair Housing Act Design Manual is required. A parallel approach or front approach (with knee and toe clearance) is required at the vanity. If a front approach is provided, additional storage in the form of a cabinet or closet is required. Removable cabinets will not be permitted.
- **Grab Bars** – A 24" minimum grab bar shall be provided beside the toilet for visitability. The grab bar can be used as a towel bar in the ground floor bathrooms or powder rooms and placed so they can double as grab bars for visitors who may need them. Walls behind grab bars must have reinforcement (3/4" plywood or OSB over studs [preferred] or at least 2" x 8" blocking between studs). Blocking should be centered at 34" above the floor. Grab bars must be rated to hold at least 250 lbs. of static weight, stand away from the wall 1 $\frac{1}{2}$ " and be 1 $\frac{1}{4}$ " to 1 $\frac{1}{2}$ " diameter.
- **Accessible Routes** – Make hallways as wide as possible; 36" is the minimum (42" is preferable). Exterior accessible routes should be considered when designing the site. Care should be taken to locate VisitAble units in close proximity to access to services without congregating them together. Also, locate these units where they have easy access to neighboring units that have incorporated VisitAbilitycm* features in their designs. A clear pathway to the living and dining areas is required.

19. Radon

- A** **NA** Sub-slab depressurization system.
- A** **NA** Common house (non-tenant) power source in close proximity to vents for installation of fans, if required.
- A** **NA** An Indicator, signifying the fan is in operation, must be visible in a common area.

ESTIMATED UTILITY COSTS

Development Name: _____

Prepared By: _____ **Date:** _____

PHFA has developed the following standard Estimated Utility Costs Form for submission by the Architect with assistance from their Mechanical Engineer on all developments. The information on this form is required by the Owner and PHFA to complete the underwriting for the development. Utility costs are necessary to ascertain the financial feasibility of the development. There are major consequences affecting the maximum rent allowed to be charged to the tenants based on the utility costs estimated and reported in this document. Care should be taken in preparing this information.

There are two types of utility costs and payments for each development.

1. **Tenant Paid Utilities** – Utilities that are paid by the tenant or occupant by individual metering of the utilities. Payment of Water/sewer must be the responsibility of the Owner. The tenant cannot be billed for these utilities.
2. **Development Paid Utilities** – Utilities that are paid by the development by bulk metering and/or by house sub-metering of the utilities and must include water/sewer.

Description of HVAC system:

Fuel and Energy Types (dwelling units only)

Fuel Types: HP – Heat Pump; FO – Fuel Oil; G – Gas; EL - Electric

Space Heating _____

Domestic Water Heating _____

Cooking _____

Air Conditioning _____

Lighting & Misc. Power _____

Utility Providers:

Electric: _____

Gas: _____

Water: _____

Sewer: _____

Oil: _____

Cost of Utility Used:

Electric per KWH - _____ Gas per MCF - _____ Fuel Oil per Gallon - _____

Development Paid Costs - Provide documentation to substantiate cost calculations. Include tariffs used and price to compare.

Development Paid Costs per Year (includes site lighting, elevators, public space, HVAC and electric).

Electric: _____ Gas: _____ Domestic Water: _____

Sanitary Sewer: _____ Fuel Oil: _____

Rehabilitation Construction – Please list the Building Thermal Envelope Upgrades proposed for this development including “R” factors:

Wall Insulation: _____

Ceiling Insulation: _____

Window Replacement Type: _____

Storm Windows: _____

Others: _____

List Tenant Paid Utility Allowance per Unit Type & Source of TPUA

Fuel and Energy Types (dwelling units only)

Fuel Types: HP – Heat Pump; FO – Fuel Oil; G – Gas; EL - Electric

<u>Fuel Type</u>	<u>Average Cost per Unit per Month</u>				
	SRO/EFF	1 BR	2BR	3BR	4 BR
Space Heating	_____	_____	_____	_____	_____
Domestic Water Heating	_____	_____	_____	_____	_____
Cooking	_____	_____	_____	_____	_____
Air Conditioning	_____	_____	_____	_____	_____
Lighting & Misc. Power	_____	_____	_____	_____	_____

Provide documentation to substantiate cost calculations. Include tariffs used and price to compare.