

DESIGN, CONSTRUCTION & REGULATORY COMPLIANCE REQUIREMENTS

OCTOBER 30, 2023



TABLE OF CONTENTS

INTRODUCTION

INTRO.1	Intent.....	2
INTRO.2	Standards and Codes.....	2
INTRO.3	Organization.....	3

PRE-DESIGN ACTIVITIES

PD.1	Overview.....	6
PD.2	Requirements.....	
	1. Project Site Documentation	7
	2. Project Scope Development.....	8
	3. Project Estimate of Probable Construction Cost.....	9
	4. Project Team.....	9
PD.3	Deliverables and Review Process.....	14

DESIGN ACTIVITIES

DES.1	Overview.....	16
DES.2	Requirements.....	
	1. Accessibility and Visitability.....	17
	2. Sustainability.....	19
	3. Site Components	20
	4. Building Components.....	23
	5. Unique Building Types.....	32
DES.3	Deliverables and Review Process.....	35

CONSTRUCTION ACTIVITIES

CONS.1	Overview.....	37
CONS.2	Requirements.....	
	1. Pre-Construction.....	38
	2. Construction.....	38
	3. Construction Close-Out.....	45
CONS.3	Deliverables and Review Process.....	47

APPENDIX

APP.1	Acronyms & Abbreviations.....	i
APP.2	Key Term Definitions.....	iii
APP.3	Forms.....	xii



INTRODUCTION

INTENT

The Design, Construction & Regulatory Compliance Requirements (Requirements) have been developed to provide development teams, receiving Illinois Housing Development Authority (IHDA, or Authority) resources, a reference document outlining IHDA's requirements for the design and construction of high-quality affordable housing, including new construction, rehabilitation, and adaptive reuse of existing buildings. The Requirements are intended to be used when submitting applications for IHDA programs including 9% Low Income Housing Tax Credit (LIHTC), 4% LIHTC and Permanent Supportive Housing (PSH). The Design, Construction & Regulatory Compliance team will use the Requirements as a reference when reviewing the submitted property due diligence documents, project scope documents, design, and construction documents, and when monitoring the progress of construction.

The Requirements support the Authority's mission of "Financing the creation and preservation of affordable housing in Illinois". To that effort the Requirements have been developed to meet the following objectives.

- The development of housing meets, and in certain areas, exceeds the applicable standards and codes.
- The development of housing incorporates requirements of accessibility which benefit individuals with mobility and sensory impairments.
- The development of housing incorporates principles of sustainability with a focus on energy efficiency and healthy environments which benefit both owners and residents.

The Requirements supersede all other IHDA documents developed to identify design and construction requirements for developments and will be updated on a regular basis to continue to align with industry standards. The Requirements are not intended to identify all project situations and we acknowledge that some projects have unique aspects which will need to be reviewed on a case-by-case basis.

STANDARDS AND CODES

The Requirements are based on compliance with codes required by the Authority Having Jurisdiction (AHJ) or the most recent edition (unless noted otherwise) of applicable standards and codes. It is the responsibility of the development team to verify which standards and codes are applicable to their respective project. Therefore, the following list of potential applicable standards and codes is provided as a reference only and is not intended to be all inclusive.

- Americans with Disabilities Act Standards
- ASHRAE 62.2
- ASHRAE Standard 90.1
- ASTM E779 Standard
- ASTM Standard E1527 Environmental Assessment Standards and Risk Management Standards
- ASTM Standard E1903

INTRODUCTION

- Carbon Monoxide Alarm Detector Act (Public Act 094-0741)
- Code of Ethics and Standards of Practice for Environmental Professionals (from the National Association of Environmental Professionals)
- Code of Federal Regulations (Title 29 CFR, parts 1, 3, 5, 6, and 7)
- Contract Work Hours and Safety Standards Act
- Davis-Bacon Act or Illinois Prevailing Wage Act (820 ILCS 130/0.01)
- National Archives and Records Administration Electronic Code of Federal Regulations, Subpart B – Definitions and References (Section 312.10)
- ICC/ANSI A117.1 (2009)
- HUD Minimum Property Standards (for projects receiving federal financial assistance)
- HUD Title 24 CRF 8.23 (for projects receiving federal financial assistance)
- Illinois Accessibility Code
- Illinois Department of Public Health, IEPA, and EPA 40 CFR 61.145
- Illinois Energy Conservation Code
- Illinois State Plumbing Code
- International Code Council Suite (if no building code adopted within the AHJ)
- Local Fire and Life Safety Code or National Fire Protection Association (NFPA) Life Safety Code 101
- Manuals J and S of the Air Conditioning Contractors of America or the ASHRAE Handbook of Fundamentals
- National Electrical Code
- Smoke Detector Act (Public Act 425 ILCS 60)
- United States Department of Energy REScheck or COMcheck

ORGANIZATION

The Requirements are organized to reflect and align with IHDA's process for awarding, reviewing, and monitoring projects, with IHDA resources, as follows:

- **Pre-Design Activities (PD):** The requirements identified in this chapter pertain to the activities required to gather the project site documentation, establish the project development scope, develop the project estimate of probable construction cost, and identify the project team, many of which occur during the application phase starting with the PPA and ending with an award of IHDA resources.
- **Design Activities (DES):** The requirements identified in this chapter pertain to the activities required to design the project and develop the construction documents which occur after the award of IHDA resources and ending with the initial closing of the project.
- **Construction Activities (CONS):** The requirements identified in this section pertain to the activities required to monitor the progress of construction starting after the initial closing of the project and ending with the final closing of the project, at which point the development is ready for occupancy.

INTRODUCTION

Each chapter is organized into three sections, as follows:

- **Overview:** An overview of the activities.
- **Requirements:** A detailed listing of the requirements.
- **Deliverables and Review Process:** A detailed listing of the required deliverables with links to applicable IHDA forms, included in the Appendix. An overview of the various processes for reviewing required deliverables.



PRE-DESIGN ACTIVITIES

OVERVIEW

Pre-Design Activities are focused on obtaining and reviewing project site documentation, the project development scope, the project estimate of probable construction cost, and the project team to assist IHDA in the evaluation of the project's overall feasibility.

This chapter is organized as follows:

REQUIREMENTS

1. Project Site Documentation
2. Project Scope Development
3. Project Estimate of Probable Construction Cost
4. Project Team

DELIVERABLES AND REVIEW PROCESS

REQUIREMENTS

1. PROJECT SITE DOCUMENTATION

1.1 ENVIRONMENTAL ASSESSMENT

As part of the Application for Multifamily Financing, IHDA requires applicants to submit Environmental Reports prepared by an environmental professional, including a Phase I, Phase II (if recommended in the Phase I), and additional documentation identified below. The submitted Phase I Environmental Report shall meet the requirements of the **ASTM Standard E1527-13** and be dated no later than 180 days prior to the application date. Utilize the Phase I Environmental Report Checklist as a guide for what documentation should be included. The submitted Phase II Environmental Report shall meet the requirements of the **ASTM Standard E1903-11**.

1.2 PROPERTY NEEDS ASSESSMENT

As part of the Application for Multifamily Financing, IHDA requires applicants that are working on the rehabilitation or adaptive reuse of a property to provide a Property Needs Assessment (PNA) by an independent third-party consultant. The submitted PNA shall meet the requirements of **ASTM E2018-15 Standard Guide for Property Condition Assessment: Baseline Property Condition Assessment Process** and be dated no later than 180 days prior to the application date. The following additional requirements must also be met:

- a. IHDA must be explicitly addressed as being able to rely on the PNA.
- b. Include an ASHRAE Level 2 Energy Audit.

IHDA will accept PNA or Condition Needs Assessment (CNA) reports prepared under other similar formats including USDA Rural Development, Fannie Mae, or Freddie Mac, to avoid duplication of work prepared under similar formats. The use of other formats not mentioned herein must receive IHDA approval.

1.3 PROPERTY SURVEY

After award and as part of the project due diligence prior to initial closing, IHDA requires applicants to provide an ALTA survey by a licensed surveyor.

The submitted survey shall meet the requirements of the **2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys** (Survey Standards) as established and adopted by the American Land Title Association and the National Society of Professional Surveyors and be dated no later than 180 days prior to the initial closing date. The following additional requirements shall also be met:

- a. Certified by the surveyor to IHDA, borrower/owner and the title company that the survey has been prepared in accordance with the standard.

- b. The survey shall not contain a reference that it is made for loan purposes only.
- c. The following items, as identified on Table A, *Optional Survey Responsibilities and Specifications*, of the Survey Standards: 1, 3, 4, 6(a), 6(b), 7(a), 7(b)(1), 7(b)(2), 7(c), 8, 9, 10, 11(a), 11(b), and 20.
- d. Per item 20, as identified on Table A of the Survey Standards, the following additional requirements shall be included as to whether the property:
 - Located in a classified zone 1 (red zone) radon area.
 - Encompasses an area of protected wetlands.
 - Incorporates an engineered barrier encapsulating contaminants.

2. PROJECT SCOPE DEVELOPMENT

As a part of the Application for Multifamily Financing, IHDA requires applicants to provide a project development scope (“scope”) based on a review of the project site documentation including but not limited to the environmental assessment, the PNA, and the property survey.

The scope should be identified as one of the following types:

- a. **New Construction:** A new construction scope includes the construction of a new structure or structures on vacant land. All Requirements are applicable.
- b. **Adaptive Reuse:** An adaptive reuse scope includes the rehabilitation of an existing building where the use of the building is substantially altered. All Requirements are applicable.
- c. **Substantial Rehabilitation:** Per the IEBC definition of Alternation – Level 3, a substantial rehabilitation scope includes a work area which exceeds 50 percent of the building area. All Requirements are applicable.
- d. **Moderate Rehabilitation:** Per the IEBC definition of Alternation – Level 2, a moderate rehabilitation includes a work area which is equal to or less than 50 percent of the building area. All Requirements are applicable.
- e. **Minor Rehabilitation:** Per the IEBC definition of Alternation – Level 1, a minor rehabilitation includes a work area with the removal and replacement or the covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose. All Requirements are applicable with the exception of EGC sustainability requirements.

The scope should be organized around the following major categories:

- a. Site Development:
 - Site Hardscape
 - Site Landscape
 - Site Amenities
- b. Building Development:
 - Building Structure
 - Building Envelope
 - Building Systems
 - Building Interiors

3. PROJECT ESTIMATE OF PROBABLE CONSTRUCTION COST

As a part of the Application for Multifamily Financing, IHDA requires applicants to secure an estimate of probable construction cost (“estimate”) by an independent third-party consultant. The submitted estimate of probable construction cost shall meet the requirements as identified below and be dated no later than 90 days prior to the application date:

- a. IHDA must be explicitly addressed as being able to rely on the estimate.
- b. An estimate that includes all aspects of the work to successfully complete the full scope of the project based on scope documents supplied by the applicant.
- c. An estimate using recognized construction cost sources such as RS Means Building Construction Cost Data (BCCD).
- d. An estimate that is organized according to the Construction Specifications Institute’s (CSI) 16-division or 44-division master format numbering system.
- e. An estimate that incorporates IHDA’s requirements for the general contractor’s overhead, profit, and general conditions.

4. PROJECT TEAM

4.1 SPECIALTY CONSULTANTS

As part of the Application for Multifamily Financing, IHDA requires applicants to contract with professional services firms including specialty consultants (environmental consultant, surveyor, PNA consultant and cost estimator) and the architect of record. The Authority reserves the right to require other consultants as it may deem appropriate, for the completion of the project. The Authority shall determine if some or all these costs shall be funded by the borrower/developer. The information below is intended as a guide to applicants in the selection of consultants to be used on IHDA funded projects. It is the responsibility of the applicant to decide the capability, competence and/or limitations of a consultant. IHDA reserves the right to change or waive any of the requirements below and reject any studies.

- a. Professional services firms selected to perform services shall not have any direct or indirect interest in any property to be evaluated. IHDA reserves the right to determine necessary actions to eliminate or neutralize any conflict discovered after an applicant secured a professional firm to provide this service. Failure to disclose any organizational conflict of interest may result in rejection of the application and/or the study by the professional firm with the conflict and request of a study from a different firm at applicant's expense.
- b. The applicant is required to make a proactive effort in selecting and retaining qualified firms certified as Minority Business Enterprise (MBE), Disadvantaged Business Enterprise (DBE) and Women's Business Enterprise (WBE) whenever possible. The applicant is required to verify that any selected MBEs, DBEs and WBEs are registered and have a valid certification number.
- c. The selected consultant must be registered with the Illinois Department of Revenue to conduct business in Illinois and not be debarred, suspended, or otherwise prohibited from professional practice by any Federal, State or Local Agency.
- d. The selected consultant is required to have been in business for a minimum of five (5) years and must demonstrate knowledge and experience related to the development of affordable housing projects.
- e. The selected consultant must supply the applicant with proof of professional liability insurance with a policy limit of \$1,000,000 per occurrence and \$2,000,000 excess umbrella and must submit a copy of the certificate to IHDA. The applicant will determine and notify the applicant of any additional parties, if required prior to contract issuance. Selected firms must not allow their liability insurance to expire or cancel for any reason during the contract period.
- f. Fees for all costs related to the performance of the scope of services shall be determined between the professional services firm and the applicant. The applicant is responsible for payment of fees and entering into a written agreement with the selected professional services firm. Kickbacks or incentives for procuring inflated values will not be permitted.

4.1.1 ENVIRONMENTAL CONSULTANT: The consultant preparing the environmental assessment documentation shall meet the qualifications as outlined in **ASTM Standard E1527-13**. The **Code of Ethics and Standards of Practice for Environmental Professionals** from the National Association of Environmental Professionals (NAEP) shall apply to all individuals providing environmental services for IHDA projects.

4.1.2 PROPERTY NEEDS ASSESSMENT (PNA) CONSULTANT: The consultant preparing the PNA shall be an independent observer and cannot be connected in any other fashion to the project such as the design architect, project architect of record, general contractor, property

manager or sponsor. The consultant shall be a professional in the field of architecture or engineering, or appropriate experience and/or certifications in the construction field.

4.1.3 SURVEYOR: The surveyor preparing the survey shall be a registered Illinois land surveyor.

4.1.4 COST ESTIMATOR: The consultant preparing the estimate of probable construction cost shall be an independent observer and cannot be connected in any other fashion to the project such as the design architect, project architect of record, general contractor, property manager or sponsor. The consultant shall be certified as a cost engineer by the Association for the Advancement of Cost Engineering (AACE) or as a certified professional estimator by the American Society of Professional Estimators (ASPE).

4.2 ARCHITECT OF RECORD

The Architect of Record (AOR) preparing the construction contract documents and performing construction administration services for the project shall be licensed to perform architectural services in the State of Illinois as either a professional organization or as a sole proprietor and have a history of similar work and type as required for the project.

The Authority shall evaluate the AOR's past performance in addition to the requirements as indicated on the Architect of Record Experience Certification form. The Authority reserves the right to deny a project's funding where a proposed architect does not meet the standards established in this certification, or if the architect's history with the authority does not meet a high-quality standard of design expected to be provided for all projects.

The architect of record will NOT be permitted to act as the general contractor without the written approval of the Authority.

IHDA requires applicants to contract with an architect of record, using the latest edition of contract form **AIA B101 Standard Form of Agreement Between Owner and Architect** or another version of the AIA Standard Form of Agreement Between Owner and Architect, approved in advance by the Authority.

4.3 GENERAL CONTRACTOR

The General Contractor (GC) providing the required labor and materials necessary for the construction of the project, based on the construction contract documents prepared by the AOR, shall have a history of similar work and type as required for the project.

The Authority shall evaluate the GC's past performance in addition to the requirements as indicated on the General Contractor Experience Certification form. The Authority reserves the right to deny a project's funding where a proposed contractor does not meet the standards established in this certification, or if the contractor's history with the authority does not meet a high-quality standard of construction expected to be provided for all projects.

IHDA requires applicants to contract with a general contractor, using the latest edition of contract form **AIA A102 Standard Form of Agreement Between Owner and Contractor**, the

latest edition of contract form **AIA A201 General Conditions of the Contract for Construction** without modifications, and IHDA's rider.

The following is a list of requirements to be incorporated into the GC's contract for construction:

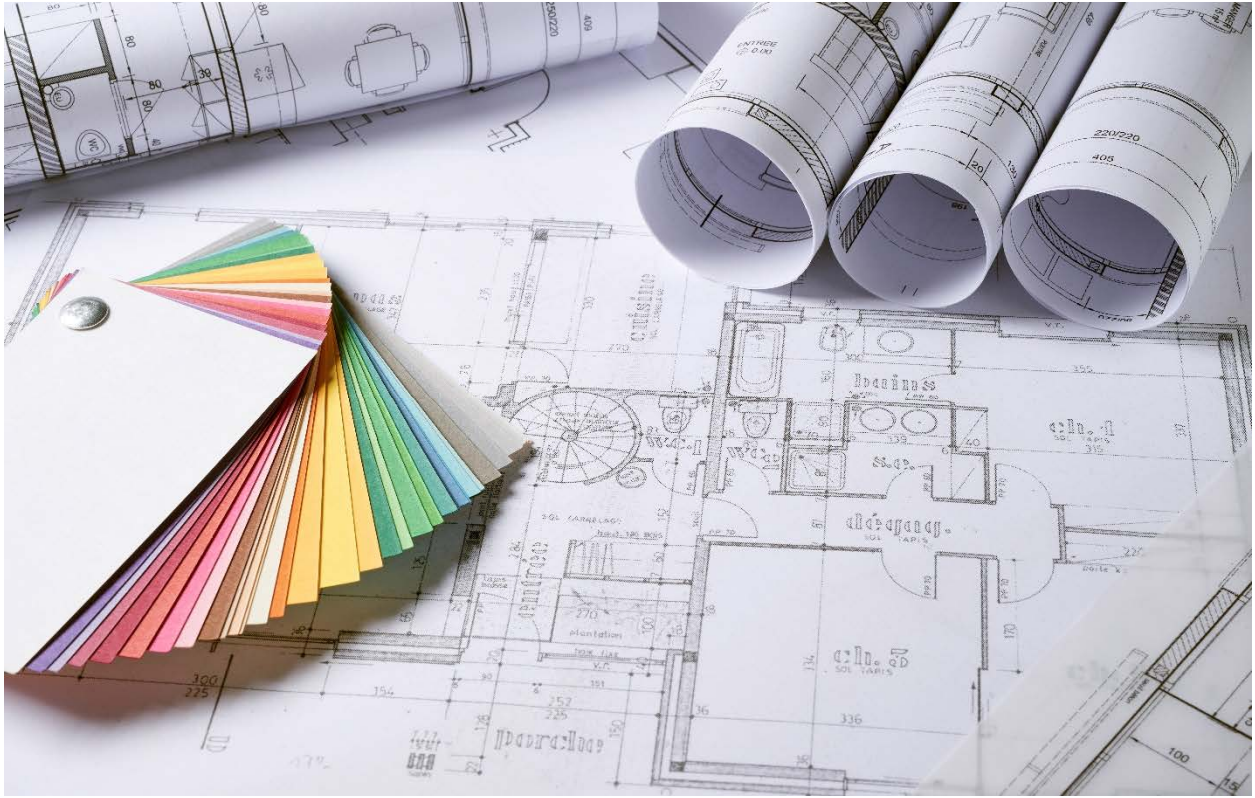
- a. **Identity of Interest:** In the event there is an identity of interest between the applicant and GC, the following will apply:
 - The developer fee will be reduced 2%, through the Authority's underwriting process via the Authority's Multifamily Application, or
 - The GC's overhead of 2% shall be eliminated. Limited partnerships, joint ventures, and other types of associations between the applicant and the general contractor shall be subject to the Authority's limitations on overhead.
- b. **Pre-Construction Services** performed by a GC shall be considered as acting as a construction consultant to the applicant. All direct costs and fees associated with this service is viewed as consultancy and therefore is paid through the developer fee.
- c. **Overhead, Profit, and General Conditions:**
 - The combined value of the GC's overhead, profit and general conditions shall not exceed 14%, calculated based on the hard construction costs. This percentage as indicated in the Contractor's Sworn Statement (CSS) at initial closing, shall remain constant throughout the project including any change orders. General conditions, overhead and profit shall be paid out equal to the completion of construction percentage as identified in the pay application. Related mobilization charges shall be evaluated on an as needed basis.
 - As the GC is responsible for general conditions, any subcontracting of these out to lower tier subcontractors will be evaluated against the stated limit and may reduce the amount of the GC's general conditions percentage a GC can collect accordingly. All general conditions items listed in the Appendix must be kept within the allowable percentages and the Authority prefers not to have individual items broken out as separate trade lines on the CSS. If individual items are isolated, the general condition line item must be reduced by the individual line value, so the sum of the general conditions listed, and individual line items do not exceed the allowable limit. Values for these items, if identified by the Authority, are more than the allowable percentage, the individual line-item values shall be removed from the budget. Redistribution of these values through the remaining trades after being removed from the contract is prohibited.
 - The GC shall reduce their markup for any self-performed work. The reduction shall be equal to the 2% of the trade cost identified as being self-performed. All self-performed work anticipated for the project must be identified on the originally submitted CSS for review prior to Initial Closing.
 - Financing, holding charges or other types of construction related interest shall be included in the overhead or general conditions calculation.

- d. **Payment and Performance Bond:** The Authority will require one of the following:
- A payment and performance bond equal to 100% of the cost of construction of the development, or
 - An unconditional, irrevocable commercial letter of credit, issued by a financial institution approved by the Authority, in an amount equal to 25% of the cost of construction of the development. This is not required for projects receiving Low-Income Housing Tax Credit financing only or seeking bond only financing with 4% Tax Credits. If a project is seeking additional financing in combination with these sources, the bond must be provided as described above.
- e. **Cost Savings:** In all instances where any contract agreement results in cost savings at the completion of the project, the disposition of any savings shall be in the sole discretion of the Authority. Trade savings are monitored to the end of a project at which point a change order is issued to place them into the contingency.

PRE-DESIGN DELIVERABLES AND REVIEW PROCESS

The following is a list of deliverables required to demonstrate compliance with the requirements of the Pre-Design Activities along with their respective review process.

- a. IHDA Environmental Report Checklist, link to form: To be submitted to IHDA at the time of application for review by Regulatory Compliance.
- b. Consultant's Environmental Phase I Report: To be submitted to IHDA at the time of application for review by Regulatory Compliance.
- c. Consultant's Environmental Phase II Report (if required): To be submitted to IHDA at the time of application for review by Regulatory Compliance.
- d. Consultant's Property Needs Assessment: To be submitted to IHDA at the time of application for review by Design Compliance.
- e. Surveyor's Property Survey: To be submitted to IHDA no later than 60 days prior to Initial Closing for review by Design Compliance.
- f. IHDA Project Development Scope Summary, link to form: To be submitted to IHDA at the time of application for review by Design Compliance.
- g. Consultant's Project Estimate of Probable Construction Cost: To be submitted to IHDA at the time of application for review by Construction Compliance.
- h. Architect of Record Experience Certification, link to form: To be submitted to IHDA at the time of application for review by Design Compliance.
- i. General Contractor Experience Certification, link to form: To be submitted to IHDA at the time of application for review by Construction Compliance.



DESIGN ACTIVITIES

OVERVIEW

Design activities are focused on obtaining and reviewing design and construction documents to assist IHDA in the evaluation of the project's compliance with design requirements.

The drawings and specifications must be prepared under direct supervision of an Illinois licensed architect in accordance with the Architectural Practice Act, bear the license number of the architect, and if the architect is part of any business structure other than a sole proprietorship, he or she must include the project design firm registration number on the drawings. The drawings are required to be signed and sealed by the architect of record. A professional engineer licensed to practice their profession in the State of Illinois, when acting as a consultant to the architect of record or under a separate agreement with the applicant, must sign and seal his work and provide proof of professional liability insurance.

The Authority's acceptance of plans and specifications is limited to the Authority review and shall not constitute a general approval of the development. The review of the plans and specifications is solely for the benefit of the Authority and not that of any other party. Subsequent modifications to the plans and specifications after the Authority's acceptance must be approved by the Authority. Further, such acceptance shall not constitute a waiver of the Authority rights against those responsible for any error or omission or unauthorized changes.

This chapter is organized as follows:

REQUIREMENTS

1. Accessibility & Visitability
2. Sustainability
3. Site Components
4. Building Components
5. Unique Building Types

DELIVERABLES AND REVIEW PROCESS

REQUIREMENTS

1. ACCESSIBILITY & VISITABILITY

Projects must comply with the adopted local building and accessibility code. One or more of the following accessibility standards and codes shall be applicable to any development funded by the Authority. When there is a conflict in the design requirements of the various standards and codes, the most stringent requirements will prevail.

- a. **The Americans with Disabilities Act (ADA):** All projects which include common areas open for public use, such as a property management or rental office, community room, kitchen, public toilet rooms, lobbies, and corridors, shall comply with all requirements.
- b. **Federal Fair Housing Act (FFHA) and International Code Council (ICC) / American National Standard (ANSI) A117.1:** New construction projects of four or more dwelling units and buildings constructed for first occupancy after March 13, 1991, shall comply with all accessibility standards and design requirements.
- c. **Illinois Accessibility Code (IAC), Section 233, Residential Facilities:** Projects with housing units that are owned or financed by a governmental unit that consist of five or more dwelling units on each project site, shall comply with all requirements.
- d. **Uniform Federal Accessibility Standards (UFAS) Section 504 of the 1973 Rehabilitation Act and 1984 Uniform Federal Accessibility Standards:** Projects with housing units that receive federal financial assistance (HOME, National Housing Trust Fund, Risk Share, Section 811, etc.), shall comply with all requirements.
- e. **United States Department of Housing and Urban Development (HUD) Title 24 Code of Federal Regulations (CFT) § 8.23, Alterations of Existing Housing Facilities:** Projects that receive federal financial assistance, shall comply with all requirements.

1.1 NEW CONSTRUCTION REQUIREMENTS

1.1.1 ADAPTABLE UNITS: At a minimum, 20% of the total number of units must comply with the requirements of the IAC Section 233.6.5.

1.1.2 ACCESSIBLE UNITS: At a minimum, 10% of the total number of units (with at least one) shall be Type 'A' accessible units for persons with mobility impairments, in compliance with ICC/ANSI A117.1 (2009). In projects where there is a variety of units offered, at least one of each type of unit, including town houses, must be designed to the Type 'A' unit standard. The development must offer the same choices of unit location and variety of units to persons with mobility impairments as those who are not mobility impaired.

1.1.3 SENSORY UNITS: At a minimum, 2% of the total number of units (with at least one) shall be suitable for units for persons with hearing or visual impairments, in compliance with

ICC/ANSI A117.1. The number of hearing and visual impaired units shall not be included in the required unit count for accessible units.

1.1.4 BUILDINGS WITH ELEVATORS: At a minimum, 100% of the total number of units must comply with the requirements of the FFHA.

1.1.5 BUILDINGS WITHOUT ELEVATORS: At a minimum, 100% of the total number of ground floor units must comply with the requirements of the FFHA.

1.2 ADAPTIVE REUSE & REHABILITATION REQUIREMENTS

Unless technically infeasible, adaptive reuse and substantial rehabilitation of existing buildings shall comply with the requirements listed for new construction.

The level of accessibility will be determined by complying with IAC, Section 202. For rehabilitation of historic buildings including compliance with requirements of the State of Illinois Historical Agency, IAC, Section 202.5 will govern.

1.3 VISITABILITY

Visitability design criteria allow persons with disabilities access to residential units by providing them with the opportunity to visit friends and family. It incorporates the following in all new construction, adaptive reuse, and rehabilitation projects, whenever practical. Visitability design criteria will be required in all single-family, townhomes, single story dwelling units and multi-story dwelling units. In multi-story elevator buildings, every unit shall be visitable. In multi-family non-elevator buildings only the ground floor units shall be visitable. Visitability shall not be used as a substitute for accessible or adaptable requirements described above.

If feasible the following should be incorporated in rehabilitation projects as well.

1.3.1 ACCESSIBLE ROUTE: From the point of arrival, defined as the public walk or public parking, to the point of access, defined as the main entrance of each unit, the accessible route should include a clear width of 36", a running slope of not greater than 5%, and a cross slope of not greater than 2%. For single family and townhome units, point of access does not include an attached garage. In the absence of a public point of arrival, consult with Design Compliance on allowable options.

1.3.2 MAIN ENTRANCE: Each unit must have at least one zero-step entrance which is an entrance without a step at the entrance door and with less than 1/2" difference between the inside and outside surfaces, or with a threshold with less than a 1/2" rise. An overhang or porch roof is recommended to protect the entrance from the elements. The main entrance shall be a minimum of 36" wide and all other doors on the main level shall be a minimum of 34" wide.

1.3.3 BATHROOM: Half bathroom on the main entrance floor in compliance with the requirements of UFAS, Section 4.34.5 or requirements of ICC/ANSI A117.1 (2009).

2. SUSTAINABILITY

Projects must comply with the following standards and codes. When there is a conflict in the design requirements of the various standards and codes, the most stringent requirements will prevail.

- a. **Enterprise Green Communities (EGC):** New construction, adaptive re-use, substantial and moderate rehabilitation project types must comply with the forty mandatory project criteria in the eight major sections of the Enterprise program, as outlined in the Mandatory Criteria Checklist, unless pursuing certification under one of the green building standards as described in the QAP. In addition, new construction, adaptive re-use, substantial and moderate rehabilitation project types must comply with the EGC requirements for blower door testing and submit the test results at the time of construction close-out. If the project is unable to comply with EGC mandatory requirements, a waiver request must be submitted at the time of application for review by Design Compliance.
- b. **Illinois Energy Conservation Code (IECC):** All project types must comply with the prescriptive option, for single family and low-rise residential buildings of 3 stories or less, or the performance option for residential buildings of 4 stories or over.

3. SITE COMPONENTS

3.1 HARDSCAPE

3.1.1 ROADWAYS & SIDEWALKS: The design of private internal roadways and sidewalks shall comply with the local jurisdiction’s design requirements to enable them to be acceptable to the municipality to qualify for future dedication to the municipality. Parking areas must be paved and graded for proper drainage as set forth in the HUD Minimum Property Standards.

3.1.2 PARKING: Parking spaces shall be provided as per local zoning ordinance but in no case be less than one parking space per dwelling unit for family housing, and 0.75 spaces per unit for senior housing except for the following housing types. Where site constraints prohibit complying with a 1:1 parking ratio, consult Design Compliance.

HOUSING TYPE	EXCEPTIONS
Supportive Living Facilities for the Frail Elderly (as defined by the Illinois Department of Public Aid)	One parking space shall be provided for each 10 units plus one parking space for every two staff members and 10% of the total number of units for visitor parking or as per local ordinance, whichever is greater.
Single Room Occupancy (SRO)	One (1) parking space shall be provided for each 10 units or as per local ordinance, whichever is greater.
Supportive Family Housing	One (1) parking space shall be provided for each 5 units or as per local ordinance, whichever is greater.
Transit Oriented Development	Reduction of parking requirement as allowed by local zoning codes meeting with distance to transit requirements.

Parking areas shall be designed to meet the minimum parking space and drive aisle requirements within the local zoning or building codes. The following minimum dimensions shall be provided if there are no local standards:

- a. Double-loaded 90-degree parking areas shall be a minimum width of 60’-0”.
- b. Single-loaded 90-degree parking areas shall have a minimum width of 42’-0”.
- c. Intermediate and access aisles shall be a minimum of 24’-0” in width for two-way traffic, and 12’-0” in width for one-way traffic.
- d. A minimum number of accessible parking and accessible van parking stalls shall be provided meeting with local and state accessibility code requirements. When accessible

parking spaces are provided, one space in every six, or fraction thereof, shall be van accessible.

Exception: Where parking is provided for all residents, one accessible parking space shall be provided for each Fully Accessible and Type A dwelling unit. Where parking is provided for only a portion of the residents, an accessible parking space shall be provided on request of the occupant of an accessible dwelling unit.

- e. Each accessible parking space must be adjacent to an access aisle as allowed by the Illinois Accessibility Code, applicable federal and local codes, whichever is most restrictive, and all access aisles shall blend to a common level with an accessible route.
- f. In multi-family developments, when covered parking is provided, a minimum of 2% of the covered parking spaces shall be accessible. If garages are provided, the minimum dimensions shall be per applicable code and the door shall be 9'-0" wide. Covered parking shall be defined as either an indoor parking garage or an outside parking lot carport.
- g. Accessible parking spaces and access aisles shall be designed so that cars and vans, when parked, cannot obstruct the required clear width of adjacent accessible routes. They shall not have a slope greater than 2% in all directions.
- h. In single family developments with single car garages, the minimum garage dimension will be 11'-0" wide by 20'-0" deep with an 8'-0" wide door.
- i. Concrete curbs at all access drives and parking lots must be provided. A single-family driveway is not considered a parking lot or an access drive and therefore does not require a curb. However, any parking lot provided at public use spaces in single family developments will require a curb per this requirement. If a site is developed within an existing neighborhood where curbs are not provided for the existing roads, new roadways shall be allowed to meet existing conditions, and shall be built per local municipality requirements.
- j. Access to fire-fighting equipment must be provided in accordance with the requirements of the local authorities.
- k. All sidewalks along the accessible route must be a minimum of 5'-0" in width,
Exception: Service walks and sidewalks accessing a single dwelling unit may be 3'-0" in width.
- l. A minimum 6-foot-wide sidewalk is required when parking spaces abut sidewalks, and the edge of the sidewalk becomes the wheel stop. If pre-cast concrete wheel stops are provided and located a minimum of 30" from the edge of the sidewalk to the centerline of the wheel stop, then a 5'-0" wide sidewalk will be permitted.

- m. Public sidewalks provided for multi-unit single family developments shall be designed to meet local municipality requirements for public sidewalks for neighborhoods.
- n. Refuse collection stations must be on an accessible route and screened with permanent enclosures. Paved areas adjacent to the collection stations must be designed to provide adequate bearing for heavy garbage trucks.

3.2 LANDSCAPE

Landscaping shall comply with the local jurisdiction's zoning or building code. The minimum cost for the landscaping shall be 1% of the hard construction cost of the project. Landscaping hard costs include vegetation, decorative hardscape, fencing, irrigation, path lighting not required for code and site_furnishings.

3.2.1 STORMWATER DESIGN: Stormwater design for the site shall comply with local jurisdictional requirements, and an approved plan shall be submitted to the Authority with the final plans and specifications prior to the start of construction. All permits must be received by the State of Illinois Environmental Protection Agency prior to closing. If no jurisdictional requirements apply, all stormwater must be managed within the project site and be connected into a clearly identified storm sewer system (dedicated or combined).

Treat or retain on-site the precipitation volume from the 60th percentile precipitation event, as defined by the U.S. Environmental Protection Agency in the Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act. On sites in which retaining the 60th percentile precipitation event is not feasible due to geotechnical issues (e.g., high groundwater elevations, contamination, underground utilities, underground transportation networks), soil conditions (e.g., clay soils) or the size of the site (e.g., zero lot line), the project must treat or retain the maximum possible up to the 60th percentile precipitation event.

3.2.2 IRRIGATION: Irrigation (manual or automated) shall be provided for the proper maintenance of planted material (e.g., trees, shrubs, sod, seeded areas, etc.). A water efficient irrigation system shall be utilized that includes irrigation zones to respond to weather conditions, timer, and controls to minimize evaporation, and soil moisture sensors. In addition, non-freeze wall hydrants or hose bibs shall be provided minimally 200'-0" apart along the perimeter of a multi-family building and at the front and rear of each scattered site development with 1-4 units.

3.3 SITE AMENITIES

3.3.1 BICYCLE STORAGE: If provided, bicycle storage facilities shall be in exterior areas with bicycle racks, and/or in a separate room in the building or in a separate storage building. Exterior bike racks, if used, must be anchored, and have the requisite space for a parked bike which will not reduce the required width of an accessible path or parking stall.

3.3.2 PLAYGROUND: For properties without tenant age restrictions, provide a fully equipped playground or tot lot appropriately sized for the project unless otherwise approved by the Authority. An accessible route to the playground must be provided. The ground surface of the

play area shall be stable, firm and slip resistant. Where play components are provided, they shall be ADA Compliant.

Play areas for younger children shall be centrally located and surrounded by dwelling units. An accessible route must be provided to the play area. The ground surface of the play area shall be stable, firm, and slip resistant.

Playground shall be designed for ages 2-12, service 25% of the occupancy where a minimum of 33% shall be accessible. Provide details for any decorative fencing, fall area material specified as accessible, and provide a basis of design for accessible play system components.

3.3.3 RECREATIONAL FACILITIES: Outdoor recreational facilities shall be on an accessible route. Swimming pools and wading pools must meet the Minimum Sanitary Regulations for the Design and Operation of Swimming Pools and Bathing Beaches by the Department of Public Health, State of Illinois, any local public health department regulations, and the ADA.

4. BUILDING COMPONENTS

4.1 LOCATION

All projects located on the flood plain shall submit proof of flood insurance. Federally funded projects located in the flood plain are subject to the 8-step review process as determined by HUD. Projects shall not be in proximity to environmental hazards. Sites that are divided by a heavily traveled major traffic artery shall be avoided and may not be financed.

4.2 FOUNDATIONS

Foundations are to be designed based on a soils report including a boring log which shall be submitted to the Authority for review. In projects composed of one building exceeding 2000 square feet, there shall be a minimum of three borings within the building footprint and two borings along sidewalks and roadways. In projects with multiple buildings exceeding 2000 square feet, there shall be a minimum of nine borings within the building footprints and evenly distributed throughout the project or as otherwise directed by the structural engineer. In addition, for both single family and multi-family, on previously developed lots, at a minimum one boring is required within the footprint of each former structure. Borings shall extend to a minimum of 15'-0" below the natural grade. For high-rise buildings at least one boring shall extend down to 100'-0" below the natural grade or hardpan.

4.2.1 WALL AND COLUMN SUPPORT FOOTINGS: Wall and column support footings shall be constructed of cast-in-place concrete. They shall be reinforced to accommodate the design loads. Timber, steel grillage, or other material used for footings will not be permitted. Wall and column footings shall extend to the appropriate frost depth for the site, or bear on suitable soil meeting the specified soil bearing capacity identified by the soils report.

4.2.2 FOUNDATION WALLS: Cast-in-place concrete, precast concrete and masonry foundation walls will be permitted and shall be designed to meet the requirements of the local building code. Steel sheet piles or helical pier foundations shall be allowed, with Authority approval. Wood foundation systems, rubble stone or any other similar materials used for foundation walls will not be permitted.

4.2.3 FOUNDATION DRAINAGE: An under-slab drainage system must be installed when the water table is 5'-0" or less below the bottom of the floor slab to prevent hydrostatic pressure build-up from groundwater fluctuation.

Finished grade at the exterior perimeter of the building shall be not less than 4" below the top of the exterior face of the foundation wall and slope away from the building at a slope of 5% for a minimum of 10'-0" measured perpendicular to the wall.

4.2.4 SPECIAL FOUNDATION CONDITIONS: Beneath concrete slabs, except where existing slabs are left intact for rehabilitation projects, choose one of the following details:

- a. Install a 4" layer of ½" diameter or greater clean aggregate as a capillary break.
- b. Install a 4" uniform layer of sand, overlain with a layer of or strips of geotextile drainage matting installed according to the manufacturer's instructions.

Beneath crawl spaces without slabs (projects on raised pier foundations with no foundation walls are exempt), choose one of the following details:

- a. Install at least 8-mil cross-laminated polyethylene on the crawl space floor, extend up at least 12" on piers and foundation walls with joints overlapping at least 12". The 8-mil and the cross-lamination ensure longevity of the polyethylene.
- b. Line the anticipated high-traffic area(s) of the crawl space with foam board, so the polyethylene beneath will not be disturbed.

4.3 EXTERIOR ENVELOPE

Provide water drainage away from walls, windows, and roofs by implementing the following techniques. Provide a continuous housewrap /weather-resistive barrier with sheets lapped shingle-style to prevent bulk water that penetrates the finished exterior cladding system from entering the wall assembly or being introduced through window or door openings or through other penetrations. Alternatively, install a fluid applied weather-resistive barrier in accordance with manufacturer's instructions. Taped systems (such as ZIP, ForceField, and others) are acceptable.

4.3.1 FLASHING: Flashings at roof/wall intersections and wall penetrations (i.e., plumbing, electrical, vents, HVAC refrigerant lines and the like in addition to windows and doors) must be integrated with the weather-resistive barrier and drainage plane prior to any exterior finish being installed to prevent bulk water from entering the exterior wall assembly. This includes kick-out flashing where a sloped roof eave terminates in a wall with siding, stucco, or other applied finish apart from brick veneer. Flashing must be installed at the bottom of exterior walls with weep holes included for masonry veneer and weep screed for stucco cladding systems or equivalent drainage systems.

4.3.2 WALL CLADDING: Exterior wall facings shall consist of 4" face brick, stone, concrete masonry units, aluminum siding, vinyl siding, metal lath and cement stucco, glass and aluminum

curtain wall systems, prefinished metal panels, cementitious siding, treated engineered wood siding, insulated precast concrete decorative panels, wood siding or Authority approved equal.

Exterior Insulation and Finish Systems (EIFS) are permitted in limited areas as an exterior facing with the approval of the Authority only and shall not be allowed as a primary building facing. EIFS shall not be allowed as a finish material to be placed over the face of exterior cladding on existing buildings.

4.3.3 MASONRY RESTORATION: Special attention shall be given to a review of the lintels and mortar joints when rehabilitating masonry structures. A detailed repair scheme must be incorporated in the plans and specifications including the clearly defined areas where lintel repair and tuckpointing work is to be performed. All steel lintels shall be galvanized and repaired if scraped during installation. All exposed surfaces of steel lintels shall be finished to match adjacent finish.

4.3.4 OPENINGS: All new windows shall have insect screens.

4.4 SYSTEMS

4.4.1 HEATING, COOLING AND VENTILATION (HVAC): All units shall be heated and air-conditioned. The design of the system shall be such to maintain a consistent temperature in all habitable spaces evenly throughout the day. Heating, ventilating, and air-conditioning systems shall be designed and installed according to the requirements of the local building code. If no building code is adopted within the jurisdiction, the most current edition of the International Mechanical Code shall apply. They shall also comply with the efficient utilization of energy in accordance with the latest edition of the International Energy Conservation Code with Illinois Amendments. Lastly, the United States Department of Energy REScheck or COMcheck compliance verification and code requirements must be submitted to the Authority for review. All HVAC, plumbing, fire protection and electrical floor and wall penetrations must be properly sealed to maintain both the proper fire rating as required by the applicable building code, and/or acoustic control of adjacent spaces.

Size and select heating and cooling equipment in accordance with the Air Conditioning Contractors of America (ACCA) Manuals J and S or in accordance with the most recent ASHRAE Handbook of Fundamentals available at time of specification.

The installation and approval of fuel gas distribution piping and equipment, fuel gas-fired appliances, and fuel gas-fired venting systems shall be in accordance with the latest edition of the International Fuel Gas Code or the local building code, whichever is most stringent.

Any change orders submitted requiring changes to mechanical room design as a result of layouts not complying with code or equipment manufacturer clearance requirements will be determined to be errors and omissions, and subject to the requirements of the Construction Activities. It is expected coordination of all equipment clearances is complete prior to submitting design documents for review.

A local mechanical exhaust system, in full accordance with ASHRAE 62.2-2010, shall be installed in each bathroom and kitchen. For Historic projects, consult Appendix A of ASHRAE 62.2-2010 on options for compliance.

Buildings of four stories or more, in full accordance with ASHRAE 62.1-2010, shall also install a mechanical ventilation system for all hallways and common spaces.

New technologies (items such as: alternative building systems, new design components and/or materials, etc.) included for the purpose of decreasing operating costs must be proven and not experimental. Any new technology incorporated for energy savings will need to be justified through a cost benefit analysis. Applicable new technologies shall include any proposed efficiencies in excess of those indicated in the 2018 International Energy Conservation Code, ASHRE Standard 90.1-2019, or beyond those typically employed in similar housing. New technologies shall have a payback period within 15 years. Simple payback analysis shall at a minimum be utilized, or: the initial cost of the technology (or differential cost over its equivalent) divided by the annual energy savings due to the new technology. The payback period shall be calculated using the current Authority underwriting forecasting assumptions and shall incorporate maintenance costs, adjustments for any needed life cycle repairs and/or reserves.

4.4.2 PLUMBING: The Illinois State Plumbing Code, the local plumbing code, and these standards shall govern all plumbing work performed on new construction and the rehabilitation of existing buildings. Whenever there is a conflict in the requirements between the regulations, the more stringent requirement will prevail. All plumbing work shall be performed only by Illinois licensed plumbers and apprentice plumbers under the direction of a licensed plumber.

- a. No project shall be served by a well or septic system.
- b. On rehabilitation projects, replacement of the lead pipe incoming water service shall be required.

All equipment used for heating water or storing hot water shall be provided, at the time of installation of such equipment, with an appropriate relief valve or valves to protect against excessive or unsafe temperature and/or pressure. Water distribution piping from the water meter throughout the building shall be "Types K or M" or ductile iron for below ground piping, and copper or PEX for above ground piping. CPVC or Polybutylene water distribution pipe shall not be permitted. PEX piping below grade shall be allowed to be installed following industry best practices and code requirements.

Dielectric isolation shall be provided between ferrous and non-ferrous metals. Provide dielectric unions at points of connection of copper piping to ferrous piping and equipment or fittings.

Indicate on the drawings that water-conserving fixtures with the following minimum specifications will be used:

FIXTURE	WATER CONSERVATION MINIMUMS
Toilets	1.28 GPF with MaP Score >800
Urinals	0.50 GPF
Showerheads	1.75 GPM
Kitchen faucets	1.50 GPM
Bathroom faucets	0.50 GPM

4.4.3 ELECTRICAL: The National Electrical Code, the local electrical code, and these standards shall govern all electrical work performed on new construction and the rehabilitation of existing buildings. Whenever there is a conflict in the requirements between the regulations, the more stringent requirement shall prevail.

The electric service to each dwelling unit shall be metered separately in all new construction projects. One central meter shall only be permitted with a letter of approval from the electric utility company.

- a. The minimum electric service to a dwelling unit shall be 60-amperes. Appropriately sized and rated, existing electrical service may be allowed to remain for apartment unit rehabilitations. A load calculation for each unit of the proposed design should be provided to ascertain if the service is properly sized for the project.
- b. Copper wiring is required in all branch circuits and within all units. Aluminum and aluminum clad copper wiring is ONLY allowed in feeders 60 amps or larger terminating in disconnects and electrical panels with lugs that are rated and suitable for aluminum wiring. The line from the transformer to the meter is regulated by the National Electrical Code and/or the local utility company whichever is most stringent.
- c. In existing buildings that have existing aluminum wiring, all switches and outlets rated 20-ampere or less directly connected to aluminum conductors must be marked CO/ALR.
- d. Every dwelling unit in buildings serviced by natural gas shall be equipped with at least one approved carbon monoxide (CO) alarm meeting the installation and operational requirements of the Carbon Monoxide Alarm Detector Act (Public Act 094-0741) and the local municipal requirements, whichever is more restrictive. All CO alarms shall be hard wired in new construction projects with appropriate battery back-up. Rehabilitation projects may utilize battery powered or plug in CO detectors if allowed by the local AHJ.
- e. Every dwelling unit shall be equipped with at least one approved smoke detector in accordance with the location and operation requirements of the Smoke Detector Act (Public Act 425 ILCS 60/) and local code requirements, whichever is more restrictive.
- f. Exposed conduit is prohibited unless concealment of the conduit is not physically possible or is considered integral to the design intent. Contact the Authority in the design

stage for prior approval. If approved, the conduit or wire mold must be painted to match the mounting surface.

- g. Family projects shall have tamperproof receptacles in all rooms except for utility rooms and garage. In rehabilitation projects receptacles shall be replaced where technically feasible.

4.4.4 LIGHTING: Exterior lighting shall be provided by LED fixtures which meet energy code requirements for lighting power densities and efficiencies. The lighting design shall minimize light trespass and glare from selected fixtures both off properties and into residential units.

Interior lighting shall be provided by LED fixtures which meet energy code requirements for lighting power densities and efficiencies. The lighting design shall meet the Illuminating Engineering Society's (IES) recommended foot-candle levels.

4.4.5 FIRE PROTECTION: Fire protection systems, if required by code, must be properly priced to include all equipment and accessories required for a fully operational system for the building. This value shall be represented on the CSS submitted for review prior to Initial Closing of the project.

- a. The price of the system included in the CSS must meet all applicable code requirements. Change orders requiring additional expenses related to the fire protection system, if as a result of code compliance after Initial Closing, will be classified as errors and omissions.
- b. Exposed piping of fire protection systems is prohibited unless concealment is not physically possible. Contact the Authority in the design stage for prior approval. If approved, the pipe must be painted to match the mounting surface.

4.4.5 SECURITY: Security components to include the following: camera system, alarm systems, and access control systems.

4.4.6 COMMUNICATION: Common areas and units to include access to high-speed internet either through wireless service or a hard-wired connection.

4.5 INTERIORS

4.5.1 FLOORING: All flooring products (whether carpet or hard surface) must comply with the emission requirements identified in EGC 6.4 Healthier Material Selection. No flexible PVC with phthalates may be installed, whether the phthalates were intentionally added or added via recycled content. Carpet shall not be permitted as a floor finish in building entryways, laundry areas, kitchens/kitchenettes, bathrooms, or utility rooms. Fluid applied finish floors may only be installed in non-occupied spaces, such as mechanical rooms.

4.5.2 INTERIOR PAINTS, COATINGS, PRIMERS, AND WALLPAPERS: These material selections must have VOC content less than or equal to the thresholds provided by the most

recent version of SCAQMD 1113 available at time of product specification for all interior paints, coatings, and primers. All wallpaper must be phthalate free.

4.5.3 INTERIOR ADHESIVES AND SEALANTS: These material selections must have VOC content less than or equal to the thresholds provided by the most recent version of SCAQMD 1168 available at time of product specification for all interior adhesives and sealants.

4.5.4 INSULATION: Fiberglass or mineral wool batt insulations must be formaldehyde-free.

4.5.5 COMPOSITE WOOD: Formaldehyde emissions less than or equal to the thresholds provided by CARB Phase 2 and/or TSCA Title IV for plywood, particleboard, MDF, and these materials within other products like cabinets and doors. For any other composite wood products not covered by CARB/TSCA requirements, but used in interior spaces, these must at minimum have No Added Urea Formaldehyde (NAUF).

4.5.6 STAIRS: Open risers are not permitted. Outdoor stairs and their approaches shall be designed so that water will not accumulate on walking surfaces. Exterior fire escapes shall not be permitted in new construction projects but will be acceptable as a means of egress component in existing buildings only.

When stairs are installed along routes that are required to be accessible there must be an alternative way to get between levels. When an accessible route consists of both a ramp and stairs, it is recommended they are in close proximity so people who can use only one of the two need not travel an unreasonable additional distance.

If the alternative option chosen is elevator or lift, the stairs do not need to comply with the “Stairways” section outlined in ICC/ANSI A117.1 (2009) adopted by the authority having jurisdiction.

If the alternative option chosen is a ramp, the stairs must comply with the “Ramps” section outlined in ICC/ANSI A117.1 (2009) adopted by the authority having jurisdiction.

4.5.7 WINDOW TREATMENTS: All windows shall be provided with window treatments that, when closed, limit views and control the amount of light entering the room.

4.6 COMMUNITY FACILITIES

4.6.1 COMMUNITY ROOM: Provide a kitchen that at a minimum has a sink, range/oven, refrigerator, base, and overhead storage. In municipalities requiring a commercial range hood above a range, the range/oven may be omitted, but a letter confirming this requirement as part of the municipal code must be provided to the Authority for review. A microwave is not a substitute for a range/oven.

4.6.2 LAUNDRY ROOM: Provide a common laundry room with washers and dryers equal to the more stringent number required by the most current edition of the local or state plumbing code. 5% of the total number, or a minimum of one each, of washers and dryers must be front loading. When a common laundry room is not provided, washers and dryers must be provided within

each dwelling unit. Utility hook-ups alone are not sufficient. In accessible dwelling units, a front loading washer and dryer must be provided.

4.6.3 RECREATIONAL FACILITIES: Indoor recreational facilities shall be located within the project, and shall comply with the following minimum size requirements:

Dwelling Type	Area
5-100 dwelling units	600 square feet
101-300 dwelling units	800 square feet
301-500 dwelling units	1200 square feet

4.6.4 SUPPORT SPACES:

- a. Support spaces include the management office and maintenance spaces. If office space is contemplated, it must be for the exclusive use for tenant services or for the operation of the building. The applicant shall discuss the plans with the Authority’s staff at the earliest opportunity. If the size of the project warrants a separate common space for the management staff and rental office, it shall include an office large enough to accommodate a secretarial space, a waiting/reception area, at least one accessible public restroom, and a storage/coat closet. These areas must be located on an accessible route from the point of arrival and accessible to persons with disabilities. These areas may be in separate buildings, such as a clubhouse, or on the ground floor to allow for maximum site and building surveillance. When a separate workroom or repair shop having vehicular access is provided, it shall be appropriately sized and include storage facilities, a utility sink, toilet facilities, and work bench.
- b. Refuse collection and compactor rooms shall be mechanically ventilated and be in a room completely separated from the remainder of the building with walls and ceiling meeting code defined fire separation requirements. Where the room is serviced by a trash chute, code required, and maintenance sprinkler heads shall be provided. All openings to trash rooms shall meet code requirements in terms of fire rating and hardware. A concrete slab shall directly link access from this area to the exterior pick up point. Floor drains and hose bibs shall be provided at these trash termination locations. Refuse and laundry chutes shall not be used for any other purpose. The chutes shall have a fire resistive rating of not less than what is required by the applicable building code. An automatic sprinkler system shall be installed as required by code. Chutes extending three or more floors shall have additional sprinkler heads installed within the chute on alternate floors and be accessible for servicing. Trash chute access doors shall have lever operating device and closers if not automatically actuated.

4.7 UNITS

4.7.1 UNIT SIZES: The following table indicates the Authority’s minimum acceptable dwelling unit size:

DWELLING TYPE	AREA (INSIDE DIMENSIONS)
Single Room Occupancy (SRO) – 1 occupant	250 SF
Single Room Occupancy (SRO) – 2 occupants	400 SF
Efficiency	300 SF
Supportive Living – 1 occupant	300 SF
Supportive Living – 2 occupants	450 SF
1 Bedroom and 1 Bathroom	525 SF
2 Bedrooms and 1 ½ Bathrooms	750 SF
3 Bedrooms and 1 ¾ Bathrooms	950 SF
4 Bedrooms and 2 Bathrooms	1,100 SF
For rehabilitation type projects, the existing dwelling unit size will be allowable.	

All SROs shall include both a private bathroom with sink, toilet and bathing facilities, and a kitchen within the unit.

Unit living rooms (excluding SRO, efficiency, and supportive living units, or combined living areas) shall contain a minimum of 150 square feet and have a minimum dimension of 10'-0" in any horizontal dimension. Units’ bedrooms (excluding SRO, and efficiency) shall contain a minimum of 100 square feet, not including closets, and have a minimum dimension of 9'-0" in any horizontal dimension. Clearly provide overall dimensions on enlarged plans.

4.7.2 UNIT STORAGE: All projects must include bulk storage areas within closets in the apartment unit or in a common tenant storage room. If provided within a closet, the provided volume must be free and clear from the floor to the ceiling without any fixed shelving. Adjustable shelving is allowed. The total volume provided within all bulk storage areas shall be as follows:

DWELLING TYPE	VOLUME
SRO/Efficiency	32 cubic feet
1-bedroom unit	72 cubic feet
2-bedroom unit	128 cubic feet
3-bedroom unit	200 cubic feet
4-bedroom unit	288 cubic feet

The minimum ceiling height in all habitable rooms shall be 7'-6". Soffits may be dropped to 7'-0" if soffit area does not exceed 20% of room area.

4.7.3 UNIT BATHROOMS: If prefabricated shower and/or bathtub units are specified and provided with factory installed integral reinforcing, cast into the unit for installation of grab bars at code compliant locations of the unit walls.

- a. When prefabricated units are installed in multi-unit apartments, they must have a single layer of water-resistant wall sheathing installed prior to the unit being placed behind the unit, along with a cover layer of sheathing installed over the unit wall flange.
- b. The installation of grab bars at all water closets, bathtubs and shower units complying with ICC/ANSI A117.1 (2009 or latest version adopted by the authority having jurisdiction) shall be required for fully accessible units or in buildings dedicated to seniors or people with disabilities.

4.8 COMMERCIAL TENANT SPACE

When commercial tenant space is provided in new construction, adaptive re-use, and substantial rehabilitation project types, shafts for routing potential future ductwork, and piping that are required for exhaust must be included to allow for the exhaust to be expelled above the roof line.

5. UNIQUE BUILDING TYPES

5.1 SUPPORTIVE LIVING FACILITIES

A supportive living facility (SLF) is a residential setting in Illinois that provides or coordinates flexible personal care services, 24 hour supervision and assistance (scheduled and unscheduled), activities, and health-related services with a service program and physical environment designed to minimize the need for residents to move within or from the setting to accommodate changing needs and preferences; has an organizational mission, service programs and a physical environment designed to maximize resident's dignity, autonomy, privacy and independence; and encourages family and community involvement.

All SLF developments must be approved by the State of Illinois Department of Healthcare and Family Services (DHFS). Written approval from DHFS must be provided to the Authority at the time the application is submitted. The SLF's architectural plans shall conform to Title 89, Social Services, Chapter 1: Department of Healthcare and Family Services, Subchapter d: Medical Programs, Part 146.210 Structural Requirements, An SLF's architectural plans shall conform to the current state building codes for the respective building type, local fire and life safety standards for health care occupancy or the 2000 National Fire Protection Association Life Safety Code (NFPA) 101, Chapter 32, Residential Board and Care Occupancies, (March 11, 2003, no later amendments or editions included) or local building codes if more stringent.

Each SLF shall meet accessibility standards as related to the Americans with Disabilities Act of 1990, the Illinois Accessibility Code, Section 504 of the Rehabilitation Act of 1973 (if applicable), and the Fair Housing Act and the local building code.

5.2 FACTORY-BUILT HOMES

This section refers to both pre-manufactured and modular housing. The proposed manufacturer must have at least five years of experience in manufacturing similar housing units. In addition, the installer/general contractor must have prior experience in setting and finishing factory-built housing. Factory-built housing units for multi-family applications will only be allowed for up to one-story in height unless approved by the Authority prior to having the design coordinated by the fabricator. Please contact the Authority design staff for review of potential fabricators prior to commencing work. Factory-built housing units for single-family, detached units will be allowed for up to two stories in height. The design, construction and installation of the factory-built housing units must incorporate all applicable wind, live, dead, snow and seismic design loads including geotechnical characteristics based on the specific geographical site conditions. As applicable, all factory-built housing must comply with the requirements of Title 24, Part 3280 Manufactured Home Construction and Safety Standards, United States Department of Housing and Urban Development. Factory-built housing must also comply with the Illinois Department of Public Health requirements including Approved Manufacturers, Regulations for Factory Built Structures in Illinois, and Guidelines for Installing Manufactured Homes in Illinois which is only intended to be used for installations where the manufacturer's installation instructions are not available.

The Authority's requirements include the following:

- a. The minimum ceiling height in all habitable rooms shall be 7'-6" high. All exterior doors shall have a 32" clear width measured from the face of the door to the opposing stop when the door is open at 90 degrees and a minimum height of 80". All interior doors shall have a nominal 32" clear width measured from the face of the door to the opposing stop when the door is open at 90 degrees and a minimum height of 80".
- b. Living rooms shall contain a minimum of 150 square feet and a minimum dimension of 10'-0" in any horizontal dimension. All other habitable rooms shall have a minimum size of 100 square feet (not including closets) and a minimum dimension of 9'-0" in any horizontal dimension.
- c. Hallways shall have a minimum horizontal dimension of 36" measured from the interior finished surface to the interior finished surface of the opposite wall. If the hallway is restricted by a continuous apparatus, installed or future application, such as a handrail, the measurement shall be from the face of the apparatus.
- d. Carbon monoxide detectors shall comply with the State of Illinois Carbon Monoxide Detector Act and shall be hardwired. Smoke detectors shall be hardwired with battery back-up.
- e. Water distribution piping from the water meter throughout the building shall be Type K for below ground piping, and Types L or M copper or PEX for above ground piping. CPVC and Polybutylene water distribution pipe shall not be permitted. PEX piping shall be allowed to be installed below floor slabs as allowed by code and industry best practices.

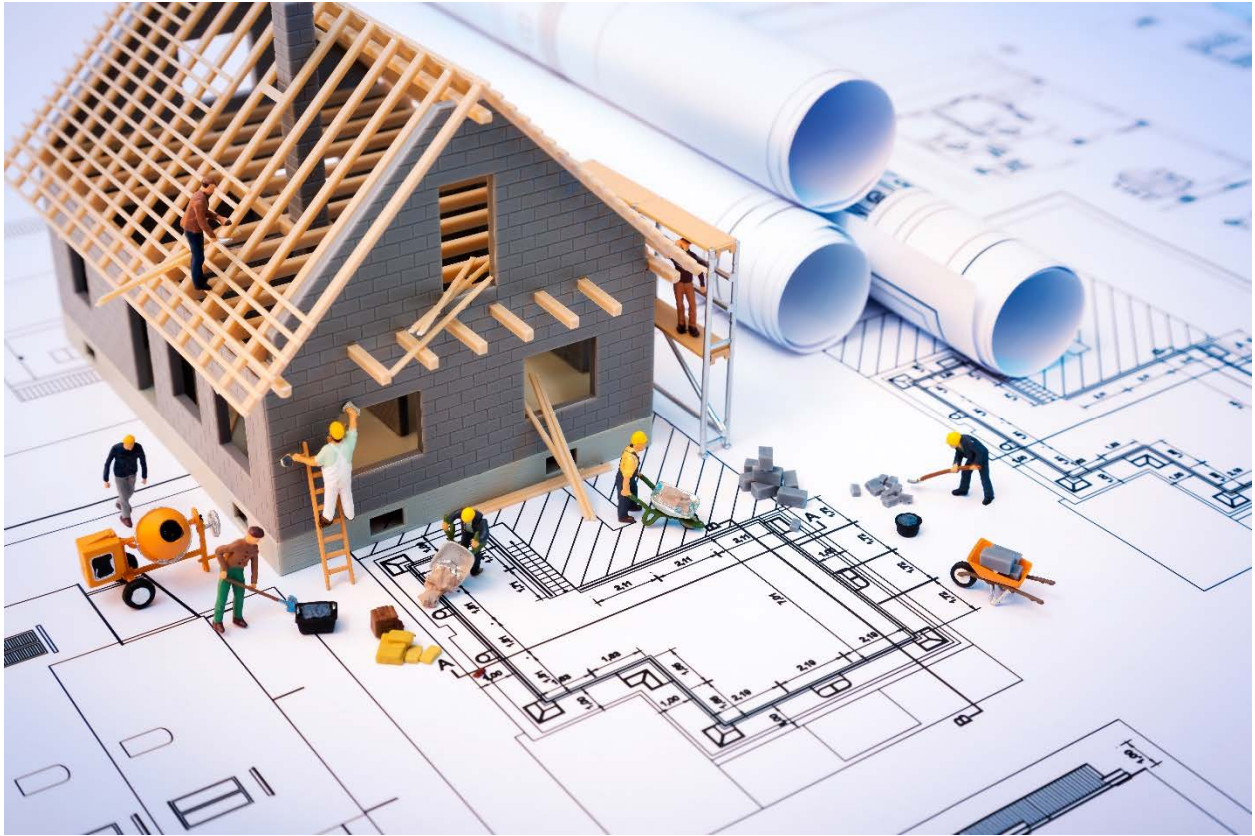
All plumbing shall comply with the State of Illinois Plumbing Code and the HUD regulations. If there is a conflict, the more stringent requirement will prevail.

- f. All manufactured housing must comply with the energy conservation requirements of the International Energy Conservation Code, latest edition, and the energy conservation measures outlined in these standards.
- g. Copper wiring is required in all branch circuits and within all units. Aluminum and aluminum-clad copper wiring is ONLY allowed in feeders 60 amps or larger terminating in disconnects and electrical panels with lugs that are rated and suitable for aluminum wiring. The line from the transformer to the meter is regulated by the National Electrical Code and/or the local utility company, whichever is most stringent. The minimum electric service to the dwelling unit shall be 60-amperes.

DESIGN DELIVERABLES AND REVIEW PROCESS

The following is a list of deliverables required to demonstrate compliance with the requirements of the Design Activities along with their respective review process.

- a. **Project Drawings & Specifications – Preliminary Optional Review:** To be submitted to IHDA no earlier than the completion of the Schematic Design Phase for review by Design Compliance.
- b. **Project Drawings & Specifications – Final Required Review:** To be submitted to IHDA no later than 60 days prior to Initial Closing for review by Design Compliance.
- c. **Project Drawings & Specifications – Issue for Construction:** To be submitted to IHDA prior to the start of construction for review by Design Compliance. The Issue for Construction documents shall incorporate all changes requested by IHDA and other governmental agencies and agreed to by the AOR. The documents shall be sealed and signed.



CONSTRUCTION ACTIVITIES

OVERVIEW

Construction activities are focused on monitoring the progress of construction to assist IHDA in the evaluation of the project's compliance with construction requirements.

The Authority's assigned Coordinator of Construction Compliance will work with the development team to review required documents and monitor the progress of construction to ensure the implementation of the scope of construction work is in compliance with the general contractor's construction contract.

This chapter is organized as follows:

REQUIREMENTS

1. Pre-Construction
2. Construction
3. Construction Close-Out

DELIVERABLES AND REVIEW PROCESS

REQUIREMENTS

1. PRE-CONSTRUCTION

The Authority will convene a meeting prior to the start of construction, attended by representatives of the applicant, architect of record, and the GC.

2. CONSTRUCTION

2.1 PAYMENT PROCEDURES

2.1.1 STORED MATERIALS: The value of reimbursements for stored materials shall not exceed 60% of the total contract value for the associated line on the Contractor's Sworn Statement. The timeframe between payment of stored materials and installation of stored materials shall not exceed 120 calendar days. The stored materials must be under the control of the general contractor or subcontractor, not the manufacturer or fabricator, and located either offsite in an independent facility or onsite in an area isolated from construction activities. The following documents will be required to review and process the reimbursement:

- a. **Proof of Approval:** Architect's approved shop submittals, if applicable.
- b. **Proof of Payment:** Manufacturer or fabricator's approved invoice. Proof of payment, clearly indicating payee, must be submitted on the subsequent construction draw. If proof of payment is not submitted on the subsequent construction draw, IHDA reserves the right to deduct an amount equal to the approved invoice, on the construction draw.
- c. **Proof of Delivery:** Manufacturer or fabricator's bill of lading, identifying shipping insurance, liability information and the approved destination for materials to be delivered to.
- d. **Proof of Storage:** IHDA Stored Materials Log and photo documentation to provide evidence of stored materials.
- e. **Proof of Insurance:** Insurance rider denoting actual materials being stored, with IHDA and other funders of the project being named as insured.

2.1.2 DEPOSITS ON MATERIALS: The value of reimbursements for deposits on materials shall not exceed 50% of the total value of the costs. Failure to deliver the materials as scheduled will void the agreement to fund deposits on materials and a hold will be placed on the subsequent Developer Fee installments, equal to IHDA's portion of the deposit on materials.

- a. **Proof of Cost:** Total value of material costs for the project, identifying the value of the deposits, broken out per IHDA's portion and the developer's portion.

- b. **Proof of Payment:** Vendor's approved invoice and proof of payment, clearly indicating payee.
- c. **Proof of Schedule:** A schedule which identifies the following: order date(s), delivery date(s) and installation date(s).

2.1.3 RETAINAGE: A 10% retention must be retained up to 50% completion, upon which it may be reduced to 5% with the approval of the Authority's Construction Compliance Coordinator:

Retention shall apply to all trade labor and material costs, general conditions, overhead and profit and all COs, but does not apply to insurance, bonds, and permits.

For single family and scattered site projects only, the Authority will consider retention reduction based upon individual site completion as identified on an individual contractor's sworn statement for each individual site.

2.2 WAGE COMPLIANCE

2.2.1 DAVIS BACON: The Authority administers funds from federal sources for housing development activities. The Authority and the recipients of these funds must ensure that all applicable requirements are followed.

The Davis-Bacon Act and Related Acts (DBRA) requires the payment of prevailing wage rates to all laborers and mechanics on federally assisted construction contracts. These regulations can be found in part from the Code of Federal Regulations (Title 29 CFR, parts 1,3,5,6 and 7) as amended. Overall program responsibilities are administered by the U.S. Department of Labor (USDOL) while the project-specific responsibilities are administered by the Authority.

The USDOL provides employers, workers, and others with clear and easy-to-access information and assistance on how to comply with the Davis-Bacon and Related Acts, such as the DBRA Forms page. Other compliance assistance related to the Act, including the Davis-Bacon and Related Acts Web Page and regulatory and interpretive materials is available at the USDOL Compliance Assistance web page.

The Davis-Bacon Act requires that all contractors and subcontractors performing on federal contracts (and contractors or subcontractors performing on federally assisted contracts under the related acts) with a value of more than \$2,000, pay their laborers and mechanics not less than the prevailing wage rates and fringe benefits listed in the contract's Davis-Bacon Wage Rate Determination for corresponding classes of laborers and mechanics employed on similar projects in the area. Davis-Bacon labor standards clauses must be included in covered contracts.

Prevailing wages are computed by the USDOL and are issued in the form of a Federal Wage Determination. This determination includes a Wage Rate Determination for each work classification listed by construction type, for each county where work is performed. Each contractor and subcontractor must sign a contract which includes the Federal Wage Determination for its employees by worker classification.

The applicant, GC, and the entity responsible for the labor standards submission to the Authority should first obtain a copy of the current version of HUD's *Making Davis-Bacon Work, A Contractor's Guide to Prevailing Wage Requirements for Federally-Assisted Construction Projects* (The Guide). The Guide will address the various aspects of the process, the required documentation, and relevant items, such as Laws, Regulations and Responsibilities, Compliance, Certified Payroll Submission, Corrections to Payroll, and Withholdings and Sanctions.

Once familiar with the Guide, the GC should determine what subcontractors will be utilized and submit the Guide to those responsible for their implementation. The GC will be responsible for the full compliance of all its employees, subcontractors, and lower-tier subcontractors; subsequently the Authority will correspond directly with the GC.

During the Pre-Construction meeting, the Authority will review the DBRA procedures, requirements, the Wage Determination for the project and other forms for compliance.

The GC shall notify the Authority when construction starts on the project. Beginning with the first week that the GC or subcontractor works on the project and for every week until the work (or trade) has been completed, each covered contractor and subcontractor must provide the Authority with a completed Labor Relations Agreement and certified payroll submitted through the GC. The "certification" part of the payroll contains specific language attesting to the employer's compliance with the wage requirements and signed by the employer or their authorized agent. Submission to and acceptance of appropriate certified weekly payrolls by IHDA must be done prior to any payments to the GC.

IHDA's overall objective is that the project complies with the relevant DBRA provisions. As such, the Authority will strive to provide guidance throughout the process. The applicant should contact the Authority in the early development stage to determine the applicable labor standard requirements and to convey this information to the GC prior to the contractor's estimate and sworn statement.

The Authority's oversight will include:

- a. Ensure Davis-Bacon requirements are properly applied. The Authority will determine when Davis-Bacon prevailing wage rates are applied and that any exemptions or exceptions are identified.
- b. Provide basic training and technical support to contractors to ensure that they understand their obligations under prevailing wage and reporting requirements.
- c. Monitor contractor performance and review of certified payroll submissions and other information to help ensure contractor compliance with labor standards provisions and the payment of prevailing wages to workers.
- d. Investigate evidence of any violations, determine the validity of the allegation, and take any necessary action to resolve.

Federal funds subject to DBRA and administered through the Authority include HOME Investment Partnership (HOME), Section 811 and Risk Share.

2.2.2 HOME Investment Partnership Program (HOME): A program derived from Title II of the Cranston-Gonzales National Affordable Housing Act of 1990, (as amended) 24 CFR Part 92. Any contract for the construction of affordable housing units assisted with HOME funds made available under this subtitle shall contain a provision requiring that not less than the wages prevailing in the locality, as predetermined by the Secretary of Labor pursuant to the Davis-Bacon Act, shall be paid to all laborers and mechanics employed in the development of affordable housing involved.

The standard for coverage is assisted not financed. This means that Davis-Bacon requirements are operable without regard to whether the HOME funds are used for construction or non-construction activities. Non-construction activities include real property acquisition, architectural and engineering fees, and other professional services. In some cases, Davis-Bacon requirements may be triggered when HOME funds are used to provide down payment assistance to individual homebuyers. HOME projects can contain units that are not assisted by HOME. The threshold applies only to the number of units assisted by HOME. For unit threshold purposes, we use the number of units identified as “HOME” units under the program definition whether determined on a pro-rata basis, specific designation, or other means allowable by HUD’s Office of Community Planning and Development (CPD).

Once Davis-Bacon requirements are triggered, the labor standards are applicable to the construction of the entire project, including the portions of the project other than the assisted units. Davis-Bacon requirements are applicable to contracts for construction covering 12 or more HOME-assisted units.

2.2.3 Section 811: Section 811 Supportive Housing for persons with Disabilities program provides funding to develop and subsidize rental housing with availability of supportive services for very low and extremely low income adults with disabilities. This program is authorized by Section 811 of the national Affordable Housing Act of 1990. For further overview of the program please see HUD Handbook 4571.2 [and HUD Handbook 4571.4](#).

Davis Bacon is triggered if there will be 12 or more units within the development assisted with Section 811 rental assistance.

CONSTRUCTION ACTIVITIES

2.2.4 Risk Share: A program which is implemented through the Authority and HUD under Section 542(C) of the Housing and Community Development Act of 1992.

- a. All laborers and mechanics employed by contractors or subcontractors on a Risk-Sharing project shall be paid not less than the wages prevailing in the locality in which the work is performed for the corresponding classes of laborers and mechanics employed in construction of similar character, as determined by the Secretary of Labor in accordance with the Davis-Bacon Act, as amended, where the project meets all of the following conditions:
 - The project involves new construction or substantial rehabilitation;
 - Advances are insured; and
 - The project will contain 12 or more dwelling units.
- b. Projects that do not meet these conditions must also comply with the Davis-Bacon Act if it is required as a condition of other Federal assistance.

In addition to the exceptions noted above, Davis-Bacon Act wage requirements shall not apply to any individual that:

- a. Performs services for which the individual volunteered;
- b. Does not receive compensation for such services; or
- c. Is paid expenses, reasonable benefits, or a nominal fee for such services; and
- d. Is not otherwise employed at any time in the construction work.

2.3 CHANGE MANAGEMENT

A change order (CO) can originate from the applicant, architect of record, or GC. When an applicant receives or creates a request for a CO, they shall direct their architect of record and GC to certify the requested items are not already included in the contract for construction.

Contingency can't be used for the following:

- a. Costs to cover insurance deductible for a claim related to damage or theft.
- b. Costs for work outside of the GC's construction contract.

The change order (CO) packet shall include the following:

- a. AOR letter - explaining reason for change,
- b. AIA Document G701 – unexecuted,
- c. Supporting Documentation.

CONSTRUCTION ACTIVITIES

Construction Compliance will review the CO to decide whether the change is either:

- a. an unforeseen condition, or
- b. miscoordination, or
- c. a project betterment.

After receiving the CO Determination, the applicant will:

- a. Follow the general CO and construction contingency provisions below.
- b. Submit a CO packet including the fully executed version of the AIA G701, and all required pricing back up included to achieve the CO determination with the next draw package.
- c. Allocate funds as necessary, including the use of construction contingency, to fund the CO on the next draw.
- d. Properly show the CO value on the on the OSS and CSS.

Contingency exists solely to support the trade costs incurred with the construction of the project, and only to fund project related construction work after receiving the CO determination.

Contingency does not exist to fund items including, but not limited to, off-site improvements, soft costs, vehicles, applicant fees, resident services, management and operations, items not related to the project, or other non-construction items.

The applicant assumes all risk (both monetary and construction rework) in completing CO work without prior CO Determination.

The applicant is responsible to pay for any CO submitted after exhausting all contingency funds. The Authority will not provide any additional project funding after expending all contingency funds. Contingency funds are available only to the applicant and shall be reflected accordingly on the OSS.

Contractors shall not include any contingency amount in their bid whatsoever. Contractors and applicants shall not enter into any agreement accessing or splitting applicant contingency or trade line savings. There shall be no utilization of cost savings without Authority approval.

The Authority will maintain a log of CO determinations for every project and will evaluate future funding awards based on the criteria listed below. The Authority retains the right to deny funding for any CO not consistent with construction best practices, not in alignment with the rules listed above or elsewhere in this document.

Any deletion of Authority required work items from the scope due to costs will not be approved, and any CO requests to reimburse the contractor for installing items related to these standards will be deemed as error when presented to the Authority for CO determination.

CONSTRUCTION ACTIVITIES

In all instances where any contract agreement results in cost savings at the completion of the Project, the disposition of any savings shall be in the sole discretion of the Authority.

CO DETERMINATION CRITERIA FOR UNFORSEEN CONDITION	
TYPE	DESCRIPTION
Concealed Condition	Unforeseen items revealed as a part of normal construction activity either underground, within walls or hidden from view prior to removal of existing items not anticipated as part of the original design and are not shown within the approved construction documents. The Authority expects the design team to have completed an adequate amount of selective demolition for renovation projects to properly anticipate concealed conditions prior to the completion of the construction documents.
Construction Cost Increase	If the cost increases are proven to be caused by market uncertainty and the rapid rise in construction material costs, the funds from the construction contingency may be used to pay for the cost increases.
Building Inspector or any Municipal Official Requirements	If not required by the building code but are required for building occupancy by a field inspector.
CO DETERMINATION CRITERIA FOR MISCOORDINATION	
TYPE	DESCRIPTION
Building Code-Related Issue	Foreseeable costs which should have been included within the project's original design to meet local code restrictions.
Architect's, Engineer's, and Contractor's Errors and Omissions and Additional Fees	Design items which are not coordinated within the approved construction documents, or missing materials which would be necessary to complete proper construction or maintain a product warranty.
Seasonal Constraints	Winter conditions, water extraction from recent rains or other costs could result in scheduling delays. These items should be anticipated and included in the original construction budget or paid through available general conditions costs.
Other	Any additional architectural, engineering, or other services outside of the scope of work that may be required. This includes construction related delays or time extensions resulting from additional scope, extended warranties, contractor incentives, or overtime or premium time.

CO DETERMINATION CRITERIA FOR PROJECT BETTERMENT	
TYPE	DESCRIPTION
Improvements or Additional Scope	<p>The following criteria will be used for a CO Determination of a project's upgrade (betterments):</p> <ul style="list-style-type: none"> • Improvement made in the design material quality, quantity, or performance to provide a better environment for the residents than what is represented in the approved construction documents. • Additional scope items to improve the project not shown on the approved construction documents.

3. CONSTRUCTION CLOSE-OUT

When the project is complete, prior to final project close out, several criteria must be met in order for Construction Compliance to give their approval to release the final 5% retention.

- a. The building must be occupiable.
- b. Certificate of Occupancy or Final Inspection from the governing jurisdiction (if applicable).
- c. Signed PDF copy of the AIA. G704 must be submitted to the construction field representative and any punch list items (punch list cost multiplied by 150% to be held in escrow).
- d. Digital signed PDF copy of the Authority's Permission to Occupy must be submitted to the construction field representative.
- e. Digital signed PDF copy of the Authority's Construction Completion Form with the Authority's construction field representative approval.
- f. All prevailing wage, Davis-Bacon, certified payrolls, and HUD Section 3 compliance requirements are met and satisfied.
- g. Environmental clearance required by demolition (i.e., asbestos and lead-based paint clearance report and O&M manual) are received by the Authority.
- h. Environmental No Further Remediation (NFR) letter recorded by all jurisdictions.
- i. Blower Door and Duct Leakage tests, if applicable.

CONSTRUCTION ACTIVITIES

- j. For projects receiving tax credits for universal design, the Authority's Construction Compliance staff will provide a final inspection approval of the items identified for scoring.
- k. At final project closeout, projects awarded funding based on scoring for pursuing green building certification, must submit the applicable third-party certification, green maintenance, tenant manual, Operations & Maintenance manual, and videos (if applicable).

When the project is 100% complete, the Authority's Construction Compliance Coordinator will verify and inform the Authority's Manager of Construction Compliance, who will review validity of the final 5% retention release, less any holdback for punch list items as noted above.

CONSTRUCTION DELIVERABLES AND REVIEW PROCESS

The following is a list of deliverables required to demonstrate compliance with the requirements of the Construction Activities along with their respective review process.

- a. **GC Contract:** To be submitted to IHDA no later than 5 days prior to the draw inspection for review by Construction Compliance. Application shall include the following: AIA Document G702, Application and Certification for Payment, and AIA Document G703 submitted by the GC and all subcontractors.
- b. **Application and Certificate for Payment:** To be submitted to IHDA no later than 5 days prior to the draw inspection for review by Construction Compliance. Application shall include the following: AIA Document G702, Application and Certification for Payment, and AIA Document G703 submitted by the GC and all subcontractors.
- c. **Change Order Packet:** To be submitted to IHDA no later than 30 days prior to inclusion within a construction draw package for review by Construction Compliance. Upon receipt of a completed CO packet, Construction Compliance will issue a determination within 15 days.

ACRONYMS & ABBREVIATIONS

AFF: Above Finished Floor

ACCA: Air Conditioning Contractors of America

C of O: Certificate of Occupancy

CDBG: Community Development Block Grant

CLOMA: Conditional Letter of Map Amendment

CLOMR: Conditional Letter of Map Revision

CO: Change order

CONS: Construction Phase

CPD: Community Planning and Development

CPVC: Chlorinated polyvinyl chloride

CSI: Construction Specifications Institute

CSS: Construction Standard Specification

CWHSSA: Contract Work Hours and Safety Standards Act

DBE: Disadvantaged Business Enterprise

DBRA: Davis Bacon and Related Acts

DES: Design Phase

EIFS: Exterior Insulation and Finish Systems

FEMA: Federal Emergency Management Agency

FF&E: Furniture, Fixtures, and Equipment

FLSA: Fair Labor Standards Act

GC: General Contractor

GFCI: Ground-Fault Circuit-Interrupter

HARGIS: Historic & Architectural Resources Geographic Information System

HCDA: Housing and Community Development Act of 1974

HOME: HOME Investment Partnerships Program

HQS: Housing Quality Standards

HUD: U.S. Department of Housing and Urban Development

ACRONYMS & ABBREVIATIONS continued

HVAC: Heating, Ventilation, and Air Conditioning
IDNR: Illinois Department of Natural Resources
IECC: International Energy Conservation Code
IEPA: Illinois Environmental Protection Agency
IHDA: Illinois Housing Development Authority
IHPA: Illinois Historic Preservation Agency
ISGS: Illinois State Geological Survey
LIHTC: Low Income Housing Tax Credit
LRA: Labor Relations Agreement
MBE: Minority Business Enterprise
NAEP: National Association of Environmental Professionals
NEC: National Energy Code
PCBs: Polychlorinated Biphenyls
PD: Pre-Design Phase
PEX: Cross-Linked Polyethylene
PNA: Property Needs Assessment
POA: Point Of Access
PSH: Permanent Supportive Housing
QAP: Qualified Allocation Plan
RUL: Remaining Useful Life
SLF: Supportive Living Facility
UFAS: Uniform Federal Accessibility Standards
USDOL: U.S. Department of Labor
UST / AST: Underground Storage Tank and Above Ground Storage Tank
WBE: Women's Business Enterprise
WDOL: Wage Determinations OnLine

KEY TERM DEFINITIONS

Accessible Dwelling Unit: a unit that is approached, entered, and used by people with disabilities and designed to meet all applicable code requirements.

Accessible Route: a continuous unobstructed path connecting all accessible elements and spaces of a building or facility. Interior accessible routes may include corridors, doorways, floors, ramps, elevators, lifts, skywalks, and tunnels. Exterior accessible routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, ramps, and lifts.

Accessibility Standards: the Federal Fair Housing Act, Illinois Accessibility Code, Americans with Disabilities Act, local building codes, and Section 504 of the 1973 Rehabilitation Act

Adaptability or Adaptable: the addition or alteration of certain building spaces and elements, such as kitchen counters, sinks and grab bars, so as to accommodate the needs of residents.

Adaptable Dwelling Unit: a unit constructed and equipped so it can be converted with minimal structural change for use by people with disabilities.

Adaptive Reuse: the process of converting or adapting structures for purposes or uses other than those initially intended, i.e. office use to residential use or conversion of a school building to apartments.

Addition: an expansion, extension or increase in the gross floor area of a building or facility.

Alteration: any modification or renovation that affects, or could affect, the usability of the building or facility or part of the building or facility. Alteration includes* but is not limited to, remodeling, renovation, rehabilitation, reconstruction, historic preservation, historic reconstruction, historic restoration (as separately required in Section 202.5 of the Illinois Accessibility Code), changes or rearrangement of the structural parts or elements, extraordinary repairs (as defined herein), changes to or replacement of plumbing fixtures or controls, changes or rearrangement in the plan configuration of walls and full-height partitions, and changes or improvements to parking lots (as separately required in Section 202.3.3 of the Illinois Accessibility Code); per Section 3, Environmental Barriers Act (EBA).

*The following work is not considered to be an alteration unless it affects the usability of the building or facility: normal maintenance, re-roofing, interior or exterior redecoration, changes to mechanical and electrical systems, replacement of plumbing, piping or valves, asbestos removal, or installation of fire sprinkler systems.

Applicability: the latest version of the Requirements shall be used in conjunction with the design and construction of the project. The Owner and General Contractor shall incorporate these Requirements into their contract and agree to abide by them. If there is a conflict between these Requirements and any provision in the contract, these Requirements shall prevail.

Application: the process of applying for financing support from IHDA, inclusive of multiple phases

Architect/Engineer of Record: an architect, professional engineer or structural engineer, as defined by the Illinois Architecture Practice Act, the Illinois Professional Engineering Practice

Act, or the Illinois Structural Engineering Licensing Act, who has the contract responsibility for the project, who prepares the construction documents from which the building is constructed, and who signs the required documents.

Architect/Engineering Consulting: an architect, professional engineer or structural engineer, as defined by the Illinois Architecture Practice Act, the Illinois Professional Engineering Practice Act, or the Illinois Structural Engineering Licensing Act, who provides their professional services such as civil, mechanical, electrical and plumbing engineering and design, to the Architect/Engineer of Record.

Area, Gross: the total area of a building or part of a building measured from the outside face of the exterior walls, including areas of usable or occupiable basements but not including areas of basements used for storage or mechanical purposes only, overhangs, and mechanical penthouses on the roof.

Area, Net: the total usable or occupiable area within the enclosing walls or partitions exclusive of shafts, partitions, columns, walls, elevators, stairs, permanent fixtures, toilet rooms, janitor closets, and mechanical, electrical, and telephone rooms.

Area of Rescue Assistance: an area which has direct access to an exit, where people who are unable to use stairs may remain temporarily in safety to await further instructions or assistance during emergency evacuation.

Authority: Illinois Housing Development Authority (IHDA)

Broadband Infrastructure: cables, fiber optics, wiring, or other permanent (integral to the structure) infrastructure, including wireless infrastructure, provided the installation results in broadband infrastructure in each dwelling unit meeting the Federal Communications Commission's (FCC) definition during the schematic design phase of the plans. Currently, the FCC defines broadband speeds as 25 Megabits per second (Mbps) download, 3 Mbps upload.

Building Code, Applicable: the building code and applicable amendments, adopted by the administrative authority under whose jurisdiction the work involved with the construction, addition, alteration, or change of occupancy will be carried out. If no building code has been adopted by the administrative authority, or if the work is not within a municipal or other administrative authority's jurisdiction, the building code shall be deemed to be the 2015 International Building Code package.

Change Order (CO): a written request prepared on AIA Form G701 that changes the scope of work from the Authority approved drawings and specifications. The change order must be signed by the Owner/Developer, Architect/Engineer of Record, and the General Contractor and presented to the Authority's field representative at least one month before requesting payment on a draw.

Clear Floor Space: the minimum unobstructed floor or ground space required to accommodate a single, stationary wheelchair and occupant.

Common Use or Common Areas: areas, including interior and exterior rooms, spaces, or elements, which are for use by all tenants, their guests, and owners in public facilities and multi-story housing units.

Construction Contingency: amount of money allocated to the project in the Authority awarded funds available to the Owner/Developer to pay for construction related items not in the approved construction documents. Value should be equal to 5% of new construction hard costs and 10% of rehabilitation hard costs. Allocation of these funds shall be in compliance with the Construction Activities.

Cross Slope: the slope that is perpendicular to the direction of travel; see also Running Slope.

Curb Ramp: a short ramp cutting through a curb or built up to it.

Detectable Warning: a standardized surface feature built in or applied to a walking surface or other element to warn people with visual impairments of hazards on the circulation path. The State of Illinois has adopted the truncated dome standard with a contrasting color to the base surface.

Dwelling Unit: a single residential unit which provides a kitchen or food preparation area, in addition to rooms and spaces for living, bathing, sleeping, and the like.

Efficiency or Studio Unit: a unit used or intended to be used as a residential housekeeping unit by not more than one occupant for living, sleeping, and cooking facilities. The unit shall contain not less than the area indicated in the Design Activities.

Emergency Warning System: a fire alarm, carbon monoxide, smoke or heat detector system used to activate emergency audible and visual alarms.

Entrance: any access point to a building or portion of a building used for the purpose of entering. An entrance includes the approach walk, the vertical access leading to the entrance platform itself, vestibules, if provided, and the entry door(s) or gate(s).

Environmental Barrier: an element or space of the built environment which limits accessibility to or use of the built environment by persons with disabilities.

Exit: the portion of a means of egress which is separated from all other spaces of a building or structure by construction or equipment as required by the applicable building code to provide a protected way of travel to the exit discharge. The walls ceiling, and openings therein, of the protected way of travel shall provide a fire resistance rating required by the applicable building code.

Exit Access: the portion of a means of egress that leads to an exit.

Exit Discharge: the portion of a means of egress between the termination of an exit and a public way.

Extraordinary Repair: the replacement or renewal of any element of an existing building or facility for purposes other than normal routine maintenance. It includes but is not limited to

replacement of sidewalk and curb ramp, replacement of a door and frame, complete stair replacement and plumbing fixture replacement; see also Alteration.

Facility: all or any portion of buildings, structures, site improvements, complexes, equipment, roads, walks, passageways, parking lots, or other real or personal property located on a site; see also Public Facility.

Floor: any level within a building that may be occupied by the public. Mezzanines and seating tiers are not included in this definition per the Illinois Accessibility Code.

Functional Spaces: the rooms or spaces in a building or facility that house the primary functions for which the building or facility is intended and the secondary or supporting functions that relate to the support, maintenance, or performance of the primary functions, including connective or ancillary space such as parking and storage. Unfinished or undeveloped space is included as a functional space.

General Conditions: As defined in the Pre-Design Phase guidelines, the functions needed to complete the construction phase, including equipment, personnel, materials, etc. They shall include the following costs, typically identified within Construction Specifications Institute MasterFormat Divisions 0 and 1:

- project manager and superintendent,
- draw related paperwork,
- layout, surveys, plans and printing,
- material testing,
- communications,
- mobilization,
- temporary heat and utilities,
- portable toilet(s),
- temporary fencing,
- OSHA protection,
- field office,
- hoisting equipment,
- security,
- small tools,
- disposal,
- construction photography,
- cost certifications,
- audits,
- mock-up(s),
- daily construction site cleaning and final clean,
- general labor.

General Contractor (GC): the responsible party for providing all of the material, labor, equipment, and services necessary for the construction of a project. The GC is responsible for

the day-to-day oversight of the construction site, management of vendors and trades, and communication of information to involved parties throughout the course of construction.

Governmental Unit: the State, or any political subdivision thereof, including but not limited to any county, town, township, city, village, municipality, municipal corporation, school district, park district, sanitary district, local housing authority, public commission, public authority, the Authority, or other special purpose district.

Grade: the elevation of the finished surface of the ground, paving, or sidewalk within the area between the building and an imaginary line five feet (5') from the building.

Ground Floor: any occupiable floor less than one story above or below grade with direct access to grade. A building or facility always has at least one ground floor and may have more than one ground floor where a split-level entrance has been provided or where a building is built into a hillside. A building where the first floor containing dwelling units is above grade, that floor will be considered the ground floor; for example, a grade level or slightly below grade floor contains parking, laundry, building office, and storage is not considered a ground floor. The first floor in a building of this type containing dwelling units will be considered the ground floor.

Habitable Room: a room within a residential occupancy and used, or intended to be used, for living, sleeping, eating, or cooking purposes as well as any room within a residential occupancy but does not include bathrooms, toilet rooms laundries, pantries, foyers, corridors, storage spaces, stairways, or closets.

Historic Building: all buildings, parts of buildings, facilities or sites individually listed in or eligible for listing in the National Register of Historic Places, a contributing building or site in a National Register Historic District as determined by the Illinois Department of Natural Resources (IDNR) State Historic Preservation Officer or as determined by a Certified Local Government designated by the IDNR, a building or site designated as a historic or architectural landmark by a local Landmarks Commission or local Historic Preservation Commission, and buildings which undergo historic reconstruction.

Historic Preservation: the act or process of accurately preserving and/or recovering the form and details of a historic building and its setting as it appeared at a particular period of time by means of repair, stabilization, or restoration as defined herein. Historic Preservation also includes Historic Reconstruction and Historic Restoration.

Historic Reconstruction: the act or process of reproducing by new construction the exact form and detail of an original building, structure, object, or part thereof as it appeared at a specific period of time. Historic Reconstruction only applies to reconstruction of buildings which are open to view by the public, are used to demonstrate historic or architectural values, and/or are used for purposes of display of a historic building type, design, and technique of construction or period setting.

Historic Restoration: the act or process of accurately recovering the form and details of a building or facility and its setting as it appeared at a particular period of time by means of the removal of later works or replacement of missing earlier work.

Housing, Financed or Guaranteed by a Government Unit: any building or facility, or portion thereof, excluding in-patient medical care facilities, which contains one or more dwelling units or sleeping accommodations, and which is owned by or on behalf of a governmental unit, or financed, in whole or in part, for either initial construction or subsequent alteration, by a grant or loan made or guaranteed by a governmental unit. Such housing may include, but is not limited to, one family dwellings and multi-family dwellings, including multi-story apartment buildings, group homes, dormitories, and housing for the elderly.

Interior Redecoration: replacement of interior floor, wall, and ceiling decorative finishes such as carpet, wall coverings, paint, and paneling or replacement of window treatments such as drapery, blinds, and shades or replacement of interior space lighting, fixtures, furnishings, and furniture.

Masonry Unit: brick, tile, stone, glass or concrete block conforming to the requirements specified in Section 2103 of the 2018 International Building Code.

Means of Egress: a continuous and unobstructed path of travel from any point in a building or structure to a public way, consisting of three separate and distinct parts: the exit access, the exit, and the exit discharge. A means of egress comprises vertical and horizontal means of travel and includes intervening room spaces, doors, hallways, corridors, passageways, balconies, ramps, stairs, enclosures, lobbies, escalators, horizontal exits, courts, and yards; per Section 3, Environmental Barriers Act (EBA).

Mezzanine: any intermediate occupiable and usable level placed above any floor of a building and limited to 33% of the net floor area of the floor over which it is placed. The net area of a mezzanine is included in the net area of the floor above which it is placed.

Multi-Story Building: any building of any type two or more stories above the grade level containing any number of units.

Multi-Story Housing Unit: any building of four or more stories containing ten or more dwelling units constructed to be held out for sale or lease by any person to the public. This category includes, but is not limited to, the following building types: apartment buildings, condominium apartment buildings, convents, housing for the elderly, and monasteries.

Other Alterations (Section 504): if the project involves fewer than 15 units or the cost of alterations is less than 75% of the replacement cost of the completed facility and the recipient has not made 5% of its units in the development accessible to and usable by individuals with disabilities, then the requirements of 24 CFR 8.23(b) apply. Under this Section, alterations to dwelling units shall, to the maximum extent feasible, be made readily accessible to and usable by individuals with disabilities. If alterations to single elements or spaces of a dwelling unit, when considered together, amount to an alteration of a dwelling unit, the entire unit shall be made accessible. Alteration of an entire unit is considered to be when at least all of the following individual elements are replaced:

- renovation of whole kitchens, or at least replacement of kitchen cabinets; and

- renovation of the bathroom, if at least bathtub or shower is replaced or added, or a toilet and flooring is replaced; and
- replacement of entrance door jambs.

When the entire unit is not being altered, 100% of the single elements being altered must be made accessible until 5% of the units in the development are accessible. However, HUD strongly encourages a recipient to make 5% of the units in a development readily accessible to and usable by individuals with mobility impairments, since that will avoid the necessity of making every element altered accessible, which often may result in having partially accessible units which may be of little or no value for persons with mobility impairments. It is also more likely that the cost of making 5% of the units accessible up front will be less than making each and every element altered accessible. Alterations must meet the applicable Sections of the UFAS which govern alterations.

Overhead: the expenses necessary to conduct a business. Cost shall also include those specific to the project and include transportation, travel expenses, temporary housing, etc.

Point of Arrival: a location within the site where an accessible route must be provided. Acceptable locations shall include an accessible parking space, accessible passenger unloading/loading zone, public street or sidewalk, or each public transportation stop.

Power-Assisted Door: a door used for human passage with a mechanism that helps to open the door or relieves the opening resistance of the door upon the activation of a switch or a continued force applied to the door itself.

Preparer: as defined in Pre-Design Phase guidelines, the individual engaged in preparation of PNA on behalf of the Applicant

Principal or Primary Entrance: an entrance intended to be used by the residents or users to enter or leave a building or facility. This shall include, but is not limited to, the main entrance.

Privately Owned Building: any building which is not publicly owned as defined herein.

Profit: the proceeds of transaction minus the cost, including intangibles such as contract incentives. Individual mark-up is not allowed on GC supplied materials or the total "Profit" line item on the Contractors Sworn Statement will be reduced accordingly. If this is insufficient, then deductions will be made to the General Conditions and/or Overhead lines.

Project: any building, structure or site including the related improvements owned or financed in whole or in part by the Authority, or one in which the Authority has or will have an interest.

Project Sites: the intended location(s) for which the Application is being prepared.

Public: any group of people who are users of the building and employees of the building, excluding those people who are employed by the owner of a building for construction or alteration of a building.

Public Facility: any building, structure, or site improvement which is: (i) owned by or on behalf of a governmental unit; leased, rented, or used, in whole or in part, by a governmental unit:

financed, in whole or in part, by a grant or a loan made or guaranteed by a governmental unit.
(ii) used or held out for use or intended for use by the public or by employees for one or more of, but not limited to, the following: the purpose of gathering, recreation, transient lodging, education, employment, institutional care, or the purchase, rental, sale or acquisition of any goods, personal property or services; places of public display or collection; social service establishments; and stations used for specified public transportation.

Public Use: interior and exterior rooms or spaces that are made available to the general public at a building or facility that is privately or publicly owned.

Ramp: a walking surface which has a running slope greater than 1:20 (5%) and a cross slope no greater than 1:50 (2%).

Reproduction Cost: the estimated cost of constructing a new building, structure, or site improvement of like size, design and materials at the site of the original building, structure, or site improvement, assuming such site is clear. The reproduction cost shall be determined by using the recognized standards of an authoritative technical organization (see Authoritative Technical Organization for examples of estimating guides).

Requirements: Design, Construction, & Regulatory Compliance Requirements for development teams receiving IHDA resources.

Residential Square Footage (SF): in new construction this is a measurement calculated from a continuous end to end delineation from the outside of the exterior assembly. In rehabilitation this is a measurement calculated from a continuous end to end delineation from the inside of the exterior assembly.

Residential Unit Area SF: measurement calculated from a continuous end to end delineation comprised from the following strike criteria: 1) interior side of an exterior assembly, 2) tenant side of a shaft, utility, common area partition 3) midline of the tenant demising partition.

Running Slope: the slope that is parallel to the direction of travel; see also Cross Slope.

Service Entrance: an entrance intended primarily for delivery of goods or services. A service entrance may not be the principal entrance unless it is the only entrance to the building/facility.

Single Room Occupancy Unit or SRO: a unit used or intended to be used as a residential housekeeping unit by not more than one occupant for living, sleeping, with or without cooking facilities. See Design Activities for area requirements.

Storage, Bulk: a clear volume space provided for storage of personal items such as luggage, boxes of seasonal items or any bulk items. The space may be located in the dwelling unit, in a separate room in the building, or in a separate building on the same site.

Structural Change: changes to or rearrangement of the structural elements, plumbing fixture changes, or changes to or rearrangement of the plan configuration of walls and full height partitions.

Structurally Impracticable: those rare circumstances when the unique characteristics of terrain prevent the incorporation of accessibility features in new construction.

Substantial Alteration (Section 504): Alterations are substantial if they are undertaken to a project that has 15 or more units and the cost of the alterations is 75% or more of the replacement cost of the completed facility. [See HUD Title 24 CFR 8.23(a)]. The new construction provisions of HUD Title 24 CFR 8.22 shall apply. Subsection 8.22 (b) requires that a minimum of 5% of the dwelling units, or at least one unit, whichever is greater, shall be made accessible to persons with mobility disabilities and an additional 2% of the dwelling units, or at least one unit, whichever is greater, shall be made accessible to persons with hearing or visual disabilities.

Technically Infeasible: with respect to an alteration of a building or a facility, a change that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member, which is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces or features which are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility, per ADA Accessibility Guidelines 4.1.6.

Toilet or Powder Rooms: at a minimum, a room consisting of one water closet and one lavatory.

Type A Unit: Reference ICC/ANSI 117.1 2009

Type B Unit: Reference ICC/ANSI 117.1 2009

Vehicular Way: A route intended for vehicular traffic, such as a street, driveway, or parking lot.

Visitability: the requirement that all single-family homes, townhouses, multi-story housing units, and multi-family apartment units provide accessible features that permit people with mobility impairments to visit (enter and stay, but not live in) a residence. See the Design Activities for additional guidance.

APPENDIX

FORMS

Pre-Design

Phase I Environmental Report Checklist

Design

Drawing Checklist

Construction

Section 3 Form

Stored Materials Log

Completion of Construction Certificate

Owners Request for Acknowledgement of Permission to Occupy