

# **GUIDELINES for DEVELOPMENT**

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# Underwriting Guidelines

## 1. General Guidelines

- 1.1 All Rental Development must meet the 20/50, 40/60 or Income Averaging Section 42(g) Set-Asides. The Income Limits must be adjusted for family size as detailed in the Income Limits and Maximum Rents Exhibit in the Statistical Data and Forms section of this Handbook.
- 1.2 Rental Developments must be restricted for occupancy by low-income households for a minimum of 30-years.
- 1.3 Rental Developments must be located in the State of Rhode Island.
- 1.4 Rental Developments must provide a permanent structure for year-round residential use with rental units used on a permanent or transitional basis (non-LIHTC units only).
- 1.5 Rental Developments must make all units available to the general public in accordance with federal, state and local fair housing laws and statutes.
- 1.6 Rental Developments must replace all existing deed restricted affordable units being demolished on a one-for-one basis.
- 1.7 Rental Developments must comply with applicable federal, state and local building and health codes.
- 1.8 Rental Developments must satisfy all other guidelines for the various resources that are made available.

## 2. Affirmative/Action EEO Statement: **RIHousing is committed to a policy of nondiscrimination in all fields and phases of employment**

- 2.1 RIHousing maintains a strong commitment to goals established for affirmative action and equal employment opportunities for MBE/WBE businesses and workforce utilization. RIHousing will monitor developments for compliance with these goals.
- 2.2 All developments receiving funding from RIHousing are required to maintain goals to (a) award at least 10% of the total construction contract dollar amount to MBEs/WBEs and (b) ensure that at least 10% of labor hours for all trades are performed by minorities and women.
- 2.3 At all times, Developers are encouraged to exceed the minimum hiring goals set by RIHousing. Note that only those businesses included in the Rhode Island Department of Administration's Directory of Certified Minority and Women Business Enterprises will be recognized in measuring the goals.

## 3. Costs Incurred in Submitting Proposals

- 3.1 RIHousing will not be responsible or liable in any manner for costs incurred by Developers in preparing an application for funding.
- 3.2 RIHousing reserves the right to reject any or all proposals submitted and to announce additional criteria for program funds at a future date.

- 3.3 All proposals submitted by Developers shall become the property of RIHousing.
- 3.4 Predevelopment Loans for nonprofit developers may be available from RIHousing to assist in structuring proposals for financing.

#### **4. Total Development Costs**

- 4.1 RIHousing has developed Total Development Cost (TDC) caps by building type. The TDCs are outlined in the current Program Bulletin located in Section 9 of the Developer's Handbook.
- 4.2 To ensure that applicants are submitting realistic pricing for their proposals, if allocated LIHTC, the first 10% of construction cost overruns over and above the preliminary budget, will be absorbed by a like reduction in paid developer fee before any additional LIHTC or soft funds will be allocated to the project.

#### **5. Construction Costs**

- 5.1 Square foot costs are to be based on building gross square footage calculated to the outside face of exterior wall surfaces for all finished spaces. The following percentage of partial areas will be used: Garage = 2/3 of area; Unenclosed Porch = 1/2 of area; Enclosed Porch = 2/3 of area; Unfinished Basement = 1/2 of area; Canopies = 1/4 of area; and Two-story room = 1 1/2 of area.
- 5.2 Finished attics where headroom is 5' or more will be calculated at 100% of area. Unfinished attics will be excluded.

#### **6. Bidding**

- 6.1 In most situations, competitive bidding of a development will be required. In certain situations, RIHousing reserves the right to allow a negotiated bid if a strong argument can be made that it is cost effective and will greatly assist the development. If under a negotiated bid scenario, the cost of construction increases more than 10% after Preliminary Approval, the construction must be put out to bid.
- 6.2 RIHousing recognizes that in limited instances, stringent local code requirements, difficult site conditions, and/or special design considerations may necessitate costs in excess of the ranges established. In such instances, Developers will be required to justify higher costs by identifying and quantifying specific cost factors. Any deviation from ranges must be explained in writing and a waiver must be granted by RIHousing. Developers should note that one factor considered in the award of a reservation of tax credits is the cost of construction on a project, unit and per square foot basis.
- 6.3 Developers whose proposal includes a community center as part of the development scope should separate the costs of that facility from the residential expenses. [NOTE: The term residential rental property includes any facilities that are functionally related and subordinate to the property. For example swimming pools, parking lots and community rooms are considered residential rental property, may be included in eligible basis and may generate tax credits for the owners of an affordable low-income property if no fee is charged.]
- 6.4 In mixed-income developments, if the cost of non-low-income units exceeds the cost of a low-income unit (using the average square foot cost and assuming the

same size) by more than 15%, the entire cost of the non-low-income unit must be excluded from the building's eligible basis.

- 6.5 Developments must demonstrate that the lowest possible fixed price contract has been obtained for the approved scope of work.

## **7. Architectural Fees**

- 7.1 Allowable fees are outlined in the current Program Bulletin.
- 7.2 Architectural fees shall be calculated based on RIHousing's published fee percentages multiplied by the total construction cost, not including contingency, and must be negotiated as a fixed price contract with reimbursable expenses included within this fee.

**When calculating this fee, the total construction cost shall be calculated by multiplying the Gross Building Area (as per Section 5 above) by the construction cost per square foot.**

- 7.3 Architectural fees shall include all Mechanical, Plumbing, Electrical, Equipment and Structural Engineering fees as well as Civil Engineering and landscape Architect fees for projects requiring minimal site design such as scattered site city lots or small infill lots.
- 7.4 Civil Engineering and Landscape Architect fees for large scale developments with extensive road and utility improvements must also be reviewed and approved by RIHousing. These fees will be assessed on a case-by-case basis and must be negotiated as fixed price contracts with reimbursable expenses included within the fee.
- 7.5 Architectural fees for developments that have limited scopes of work or are moderate rehabilitation in nature shall be assessed on a case-by-case basis.
- 7.6 Architectural, Civil Engineering and Landscape Architect Fees must be charged at a maximum of 80% for design and 20% for construction administration.
- 7.7 All Architectural, Civil Engineering, Landscape Architect and Design Consultant Contracts must be reviewed and approved by RIHousing.
- 7.8 Notwithstanding any agreement to the contrary, contracts that exceed RIHousing's fee requirements will be the sole responsibility of the developer.

## **8. Bond Premium**

- 8.1 Rates are outlined in the current Program Bulletin in Section 9 of the Developer's Handbook.

## **9. General Contractor Fees**

- 9.1 Allowable fees are outlined in the current Program Bulletin in Section 9 of the Developer's Handbook.

## **10. Clerk of the Works**

- 10.1 Developers who wish to use a Clerk of the Works for the duration of the construction period may do so if they clearly demonstrate the value this will add

to the development. The Clerk of the Works' qualifications, resume and contract must be reviewed and approved by RIHousing.

Clerk of the Works fee cannot exceed 1% of the total construction cost.

#### **11. Base Developer Fee**

The amount of the base developer fee will be calculated as per the current Program Bulletin with the following exceptions:

- 11.1 The per unit developer fee for SRO, moderate rehabilitation and Assisted Living properties will be determined on a case-by-case basis.
- 11.2 Developer fee for acquisition-only developments will be calculated at a maximum of 5% of the acquisition price.
- 11.3 Timing of fees: Up to 50% of approved base developer fee may be paid at closing, provided that the remaining 50% fee is pledged to RIHousing unconditionally and irrevocably as a cost overrun/completion guarantee. To the extent that the assignment of remaining developer fee is conditional or revocable, the allowable fee paid at closing may be reduced commensurably.
- 11.4 Developer fee calculated by the RIHousing proforma or through formula is a **maximum** fee. The actual developer fee earned by a developer is subject to adjustment by RIHousing based upon the development cost of a project, the availability of resources and the financial contribution made by the developer.

#### **12. Deferred Developer Fee**

- 12.1 Deferred Developer fee will be recognized by RIHousing to the extent such fees are pledged to cover development costs approved by RIHousing.

#### **13. Development Consulting Fees**

- 13.1 Development consulting fees must be paid by the developer from the approved developer fee and will be subject to the same restrictions as the developer fee.

#### **14. Legal Fee Guidelines**

- 14.1 Developers should consider negotiating a maximum price with their legal counsel(s).
- 14.2 Any request for an increase in this amount is subject to review and approval by RIHousing.

#### **15. Income Targeting and Long-Term Affordability Provisions**

- 15.1 All proposals must include affordability provisions for a minimum of thirty years.
- 15.2 Developments targeting families at lower income levels than required by a particular funding source or that are serving a special needs population or homeless persons are a priority.

#### **16. Calculation of Rent Levels**

- 16.1 Proposals with Project Based Rental Assistance: Evidence of the award of the rental assistance should be included with the application. If the rental assistance contract term is less than the terms of the First Mortgage, a thirty-year operating

projection must be submitted demonstrating how affordability will be preserved following expiration of the contract. RIHousing will require FHA Risk Sharing Insurance for such proposals.

Note that under the FHA Risk Sharing Program, maximum first mortgage loans will be limited to the lesser of (1) an amount supportable by the actual Section 8 contract rent, or (2) an amount supportable by rent levels for comparable, unassisted units in the market locale.

- 16.2 Proposals without Project-Based Rental Assistance: Rents for units to be occupied by low-income persons will be limited to the specific requirements of the funding sources requested. Please refer to the Income Limits and Maximum Rents exhibit in the Statistical Data and Forms Section of this Developer's Handbook for additional information. (These income limits are updated annually by HUD, as published in the Federal Register).
- 16.3 The maximum rents for each program include an allowance for RIHousing approved utility allowances. Utility Allowances are updated annually and can be found on our website ([www.rihousing.com](http://www.rihousing.com)).
- 16.4 Market Rate Units: Rent levels for market rate units will be determined by RIHousing through analysis of market comparables, local demographics, and market conditions on the basis of a RIHousing commissioned appraisal and/or market study for the property.

## **17. Financing Fees**

- 17.1 RIHousing will assess financing fees as outlined in the current Program Bulletin and Term Sheets in this Developer's Handbook specific to the Loan type.

## **18. Subsidy Layering**

- 18.1 All developments that receive LIHTC and at least one other source of government assistance will be subject to the subsidy layering review guidelines of Section 911 of the Housing and Community Development Act of 1992. These requirements are designed to ensure that developers of affordable multifamily housing do not receive excessive compensation by combining various HUD housing assistance programs with assistance from other federal, state, or local agencies. RIHousing typically performs this subsidy layering review function for HUD. Please note that developments receiving either HOME funds or Housing Trust Funds will be subject to subsidy layering reviews established by each of these programs instead of the Section 911 review process.

## **19. Syndication Proceeds**

- 19.1 Developers must provide a signed Letter of Intent, no older than 60 days, with a syndicator prior to Firm Commitment. The LOI must, at a minimum, contain information regarding project information, capital contributions cost per credit, reserve requirements, cash flow waterfall, adjusters, operating guarantees, and guarantors.
- 19.2 RIHousing will work with the developer and the syndicator to agree on a mutually acceptable schedule for capital contribution payments.

## **20. Capital Improvements to Existing Affordable Housing Developments**

20.1 RIHousing will consider proposals for capital improvements to existing affordable housing developments. In such cases, the Developer should be prepared to demonstrate what they will contribute to cover the cost of these improvements (including but not limited to development reserves, excess cash flow, pledged management fees, grants or second mortgage loans) before requesting a contribution from RIHousing in the form of forbearance, an interest rate reduction on an existing RIHousing mortgage and/or Tax Credit Allocation. Wherever possible, the Developer is encouraged to consider the use of Tax Exempt financing and 4% LIHTC for capital improvements to existing affordable housing.

## **21. Expense/Revenue Terms**

21.1 Operating Expenses: Operating expenses will be determined on a case-by case basis in relation to each development's unit mix, building type, systems and components, location, expected vacancy and turnover rates, management agent, and management plan. Specific operating expense ranges can be found in the current Program Bulletin.

22.2 Trending Rates: Trending rates for rental income and operating expenses will be determined on a case-by-case basis in relation to each development's location, marketability, proposed rent levels, development design, and amenities.

22.3 In general, income will be trended at an annual rate of between 2%- 3%, and operating expenses will be trended at an annual rate of between 3% - 4%.

22.4 Vacancy Rates: Residential vacancy rates used in underwriting will be determined on a case-by-case basis in relation to each development's location, marketability, proposed rent levels, development design, and amenities.

22.5 In general, residential vacancy rates of between 5% and 7% will be employed for both low-income and market-rate units.

22.6 For developments containing commercial space, the greater of 10% or actual market vacancy rates will be applied to any commercial income used to support debt and/or development operations.

## **22. Required Development Reserves**

22.1 First Year Insurance and Tax Escrows: Initial deposits to insurance and tax escrows must be included as part of the overall development budget. RIHousing requires capitalization of 6 months of estimated insurance and tax payments. The initial deposit amounts may be adjusted depending on when monthly deposits to the escrow accounts are expected to commence.

22.2 Replacement Reserves: Required deposits to replacement reserves will be determined on a case-by-case basis. In general, annual replacement reserve deposits will be a minimum of \$325 per unit per year. Initial deposits to the Replacement Reserve will be, at a minimum, equal to one year of annual deposits for new production and \$2,000 per unit for preservation transactions. RIHousing reserves the right to increase the required initial deposit or the annual reserve

contribution over the term of the loan based on underwriting. Typically, withdrawals from the replacement reserve account will not be considered until the total balance in said account has reached \$2,000 per unit.

- 22.3 Rent-Up/Absorption Reserve: A cash flow analysis will be completed to estimate anticipated operating losses incurred during the rent-up period (i.e., prior to stabilized occupancy). The cash flow will be based on the appraisal, market study, information submitted by the Developer, and analysis by RIHousing staff. If losses are anticipated, the developer must provide cash or an irrevocable letter of credit (LOC) as security to cover anticipated losses and shortfalls in meeting the debt service coverage requirements. RIHousing staff must approve all LOCs.
- 22.4 Operating Reserve: For new production transactions, borrowers will be required to capitalize at construction completion, an operating reserve equal to six months operating expenses plus six months first mortgage debt service. For preservation transactions, the Operating Reserve is equal to six months operating expenses plus six months first mortgage debt service minus the deposit into the Replacement Reserve. Fully funded operating reserves will be held by RIHousing for the term of the first mortgage to cover any potential shortfalls in revenues or to cure any operating defaults of the development.

## **23. Property Operations Terms**

- 23.1 Property Management: During development operations, RIHousing will review the annual development budget to ensure that adequate funds are available to maintain the development at the required debt service coverage. An annual audit will be required of the owner, and periodic property inspections and reviews of tenant files will be performed by RIHousing. RIHousing reserves the right to require the replacement of the management agent for all developments financed by RIHousing.
- 23.2 Certification of Tenant Income: Unless a recertification Waiver 8877 has been granted by the IRS, a Certificate of Continuing Program Compliance declaring compliance with IRS regulations and requirements must be filed annually with RIHousing. Developers or owners must submit to the Secretary of Treasury an annual certification evidencing compliance with the low and moderate income set-aside requirements.
- 23.3 A certification of lead safe housing must be maintained on file for review by RIHousing staff during its physical inspection of the development.

## **24. Other Underwriting Terms and Considerations**

- 24.1 Underwriting Rates: Mortgage interest rates to be used for applications and underwriting purposes are established by RIHousing and are updated periodically via Program Bulletin.
- 24.2 Actual Rates: The actual interest rate applied to any mortgage loan offered by RIHousing will be determined at the time of the final loan commitment and can be higher or lower than the underwriting rate. The impact on development feasibility of any variance between the underwriting rate and the actual rate will be addressed by RIHousing on a case-by-case basis.



- 24.3 Risk Share: Following Preliminary Approval, RIHousing will assess the risk of the proposed development and determine the level of HUD mortgage insurance (if any) which will be required. If it is determined that Level II Risk Sharing insurance is required, the interest rate used for underwriting may be adjusted accordingly. Risk Share Guidelines are outlined in a Term Sheet included in Section 12 of the Developer's Handbook.
- 24.4 Credit Enhancement/Additional Fees: The Developer may be required to pay additional fees or post additional letters of credit when these are required by bond insurers and financial institutions that are providing credit for RIHousing's bonds.
- 24.5 Cost of Bond Issuance and Underwriter's Fees: Developers are responsible for the full cost of all Bond Issuance and Underwriter's Fees ("COI"). COI is an eligible project expense. Typically the COI is paid in a lump sum at closing.
- 24.6 Acquisition Cost Limit: Approved acquisition costs will be limited to the lesser of the last actual arms-length transfer cost (including any carrying costs approved by RIHousing) or the acquisition value as determined by an independent appraisal commissioned by RIHousing.
- 24.7 Appraisal: Prior to firm commitment, an independent appraiser will be retained by RIHousing to determine the as-built fair market value of the property and to verify rent levels, marketability and the rent-up/absorption period for the proposed development. The developer is responsible for paying the appraisal fee, which is an eligible financing expense. For developments involving acquisition of property, an "as-is" valuation will also be required.
- 24.8 Market Analysis: RIHousing may require a comprehensive market study of the housing needs of low-income individuals served by the development. This market study will be commissioned by RIHousing and conducted by an independent party at the developer's expense. These costs may be reimbursed to the developer at the time of loan closing.
- 24.9 Market Study: For any development receiving LIHTC, a market study is required by law.
- 24.10 Commercial Space: For development proposals to be financed with taxable bonds, no more than 25% of the total square footage may be used for commercial purposes. Generally, no more than 3% of tax exempt bond proceeds may be used to cover costs of developing commercial space. If included in the LIHTC partnership, all income from commercial space must be guaranteed by a third-party master lease and a guarantee in an amount and form acceptable to RIHousing.
- 24.11 Applicants must provide a commitment of financing for the commercial development regardless of whether the commercial space is part of the development or part of a separate ownership structure (i.e. a condominium).
- 24.12 Scattered Site Developments: Proposals for developments located on non-contiguous parcels of land are acceptable. For scattered site developments

financed with tax-exempt bonds, each building on a non-contiguous parcel must meet the applicable "20/50" test or "40-60" test.

- 24.13 Off-Site Improvements: Off-Site improvements are not eligible development expenses.
- 24.14 Debt Service Coverage: A minimum of 115% debt coverage is required on the first mortgage for 9% HTC deals. Tax exempt bond financed developments will be underwritten at debt coverage of 120% with risk analysis enabling a higher or lower coverage ratio. Assisted Living Developments will be underwritten at higher ratios depending upon risk.
- 24.15 Loan to Value: The maximum allowable loan to value for all first mortgages is 90%. The final loan amount will be the lesser of (a) the maximum allowable loan to value or (b) the amount supportable by service coverage.
- 24.16 Equity: A minimum of a ten percent (10%) cash equity contribution will generally be required. If RIHousing is providing a construction loan, a minimum of fifteen percent (15%) cash equity contribution will be required.
- Equity is defined as funds contributed by the general or limited partner(s) to pay approved development costs, but not including funds provided through state or federally funded programs. It may include cash, private charitable contributions or syndication proceeds. In general, a maximum annual return on equity equal to the average yearly yield on thirty-year treasury bonds for the preceding calendar year plus 5% will be payable to the owner from surplus cash available after payment of debt service, operating expenses, required reserves and required repayment of Deferred Payment Loan Funds (if applicable).
- 24.17 Secondary Financing: In general, soft second financing must be fully subordinate to the RIHousing first mortgage, with no right of acceleration or foreclosure and payable only from surplus cash flow.
- 24.18 Minimum Rehabilitation costs for Tax Exempt Financing: Developments using tax exempt financing must include a minimum rehabilitation cost of at least 15% of the acquisition cost. Nonprofit mortgagors are exempt from the minimum rehabilitation requirements. Most development costs are eligible for funding under the first mortgage except: initial operating deficit reserves or other working capital, capitalized loan interest for the rent-up period, commercial space including commercial kitchens, syndication costs and some legal expenses. Costs expended prior to a reservation of funds by the RIHousing Board of Commissioners are also ineligible and must be funded from equity or a taxable capital source.
- 24.19 Construction Financing Only Proposals: RIHousing will consider construction financing for multifamily developments that obtain permanent take-out financing from other sources. Such proposals must meet the program objectives outlined in this Handbook. In addition, terms and conditions of the take-out financing must be satisfactory in all respects to RIHousing.

## **25. Title**

- 25.1 Title and Recording Fees: Borrowers are required to provide a Lender's Title Policy. Borrowers are responsible for all costs and fees associated with title and recording. By state law, there are no recording fees charged on documents recorded by or for the benefit of RIHousing.

# DESIGN AND CONSTRUCTION GUIDELINES

These Design and Construction Guidelines (the “Guidelines”) have been designed to establish a clear predictable process and timeframe from reservation of financing (“Reservation”) to loan closing (“Loan Closing”) and to establish Design and Construction Standards (“Standards”). It is our goal to construct housing that is safe, affordable, high quality, sustainable, energy efficient and healthy for residents.

## I. CODE COMPLIANCE

All work shall comply with all applicable federal, state and local codes, ordinances, and zoning requirements. Key currently updated Rhode Island State Building & Fire Code Regulations are located at:

<http://sos.ri.gov/divisions/Open-Government/State/building-and-fire-codes>

Applicable state codes include but are not limited to:

1. Rhode Island Building Code SBC-1-2013
2. Rhode Island One and Two-Family Dwelling Code SBC-2-2013
3. Rhode Island Plumbing Code SBC 3-2013
4. Rhode Island Mechanical Code SBC-4-2013
5. Rhode Island Electrical Code SBC-5-2013
6. Rhode Island Property Maintenance Code SBC-6-2013
7. Rhode Island Energy Conservation Code SBC-8-2013
8. Enforcement and Implementation Procedures for Projects Under the Jurisdiction of the State of Rhode Island SBC-9
9. Code Interpretations SBC-10
10. Public Building Accessibility Meeting Standards SBC-17
11. Fuel Gas Code SBC-19-2013 Rhode Island Rehabilitation Building and Fire Code for Existing Buildings and Structures SRC-1-202
12. Rhode Island Fire Safety Code, 2013
13. NFPA 1, Fire Code, 2012
14. NFPA 101, Life Safety Code, 2012
15. NFPA 72, National Fire Alarm and Signaling Code, 2010 edition
16. NFPA 13, Installation of Sprinkler Systems, 2010 edition
17. NFPA 720, Installation of Carbon Monoxide Detection and Warning Equipment, 2012 edition

All RIHousing funded developments must adhere to these Standards. In addition, developments utilizing Housing Trust Funds and/or HOME Program Funds must conform to RIHousing’s “Housing Trust Fund Rehabilitation Standards”, which can be found in Section 13 of the Developer’s Handbook. **Where conflicts occur between program requirements, the more stringent standards shall always take precedent.**

These Guidelines are divided into the following six sections:

- Section 1. Design and Construction Timeframe:** The steps from Reservation to Loan Closing.
- Section 2. Drawing/Specification Requirements:** Sets forth the four architectural plan stages that RIHousing requires (Schematic Design, Design Development, Construction Documents and Final Construction Documents) and details the level of information required at each stage of plan development.
- Section 3. Design and Construction Standards:** Sets forth the minimum Standards for development that all multifamily developments funded through RIHousing's Rental Housing Production Program.
- Section 4. Appendices:** This section of the Guidelines contains information that is required to be included in the bid specification document.
- Section 5. Additional Recommended Practices:** This section contains information pertaining to Healthy Homes, Green Building, Defensible Spaces and Universal Design as those terms are defined in the Guidelines. It is recommended that the developer understand these practices and considers incorporating in the construction of the proposed development.

## Section 1. Design and Construction Timeframe

### 1. The steps from Reservation to Loan Closing:

**Step 1. Approval of Schematic Design:** The Schematic Design is approved simultaneously with the Reservation of funds for a development.

**Step 2. Kick-off Meeting:** RIHousing will meet with the developer, the architect and general contractor, if selected, to review the requirements of the Guidelines. At this meeting, RIHousing will review any conditions attached to the approval of the Schematic Design and the Drawing/Specification Requirements. As part of the kick-off meeting, a detailed list of the submissions required for firm commitment and closing will be reviewed. A generic list is attached in Section 5 of these Guidelines. The development team will be required to establish a time frame with specific milestones for submission of the various plan stages by the architect and plan review by RIHousing.

Following the Reservation and Approval of Schematic Designs submitted as part of the application, there are three (3) plan stages of plan review:

#### 1. Design Development (schematic thru 50% plans).

a. **50% Review** – When the Construction Documents are 50% complete they shall be submitted for review.

#### 2. Construction Documents:

a. **90% Review** – When the Construction Documents are 90% complete they shall be submitted for review.

#### 3. Final Construction Documents.

The developer may not change the final plans without written approval from RIHousing. Any plan change will require additional review and application of any new Standards that have been adopted by RIHousing.

**Step 3. Final Commitment:** Once a development has been designed, bids have been received, the total cost of the development has been determined, and all final commitment checklist items have been received, the proposal will be submitted to the RIHousing Board of Commissioners (“Board”) for final commitment of funds.

**Step 4. Loan Closing:** As part of the Loan Closing, all required documents will be finalized and certified by the architect and general contractor as necessary.

**Step 5. Pre-Construction Meeting:** Immediately following the Loan Closing, the Pre-Construction Meeting shall be held. At the Pre-Construction Meeting, RIHousing shall review the construction process and requirements. The architect, contractor, owner and RIHousing shall sign all plans and other required documents.

## Section 2. Drawing/Specification Requirements

RIHousing requires specific required drawings for each design stage: schematic, 50% review, 90% review and final construction documents. **RIHousing assumes that the Developer is wholly familiar with the plans and specification, that the plans reflect the current financial model and the Developer has approved the submission of the documents to RIHousing for review.** Checklists have been developed to ensure that the Development Team is providing the required information with each submission.

**A. Schematic Design:** These plans are submitted as part of the application for the Rental Housing Production Program:

Section	Requirement	✓
Cover Sheet	Proposed Building by Type, Size & Construction Type per RI Building Code	
Cover Sheet	Unit Distribution by Floor, Size, Bedroom/Bath number & Handicap designation	
Cover Sheet	Sq. Ft between Commercial, Residential, Community & other uses. Both Gross & Net Rentable	
Cover Sheet	Number of Parking Spaces. Proposed Parking Ratio & Zoning Requirements	
Cover Sheet	Dwelling Units allowed by Zoning	
Cover Sheet	Percentage of Tract occupied by Buildings, Parking & other Paved Areas & by Open Areas	
Cover Sheet	Length of Roadway (if applicable)	
Cover Sheet	Compliance w/RIHousing Required Design & Construction Guidelines and/or Waiver Requests	
Site Plan	Site Location Map (Lot lines, Streets, Existing Buildings and Structures)	
Site Plan	Proposed Footprint, Parking, Site improvements and dimensions	
Site Plan	Proposed New Site Improvements: Landscaping, Fences, Retaining walls and Paving	
Site Plan	Environmental (Wetlands, Ledge, Dense vegetation, Steep slopes and Flood plains)	
Site Plan	Zoning Restrictions (Setbacks, Easements and Heights)	
Floor Plan	Minimum Scale: Floor Plans 1/8" = 1'    Unit Plans 1/4" = 1'	
Floor Plan	All plans (if different) - show unit layouts, common areas and other indoor spaces	
Floor Plan	Entry level and typical floor plan (if repetitive)	
Floor Plan	Typical dwelling furniture layouts	
Elevations	Exterior Elevations, window types and exterior material Perspective or photos of existing buildings showing all facades.	
Building Section	Minimum Scale: 1/2" = 1'	
Building Section	Building material and Construction types	
Specifications	Narrative and Outline Specification based on 16 or MasterFormat with 48 Divisions (include with schematic submission only)	
Geotechnical Report	<i>New Construction/Additions/Major Underground Utilities/Infrastructure: Subsoil Investigation Report w/ Design Recommendations by Geotech Firm.</i> (min. boring locations at all foundations, underground utilities, catch basins/structures/galleys, randomly along roads and parking areas).	
Structural Reports	Structural report prepared by licensed engineer for all renovation projects	
Phase I Environmental Report	Phase I Environmental Site Assessment (Standard 1527-13) with all applications (scattered site developments are exempt)	
Capital Needs Assessment	<i>Renovation Developments:</i> Capital Needs Assessment no more than two years old with positive 20 Year Reserve Analysis	

**B. Design Development - 50% Review:** After the Pre-Processing Meeting, the Architect shall prepare the Design Development submission, which shall include the following:

Section	Requirement	
General Requirement	All items listed in the schematic submission are to be included in the 50% submission package (new items are identified in blue)	
Cover Sheet	Name & Address of Development	
Cover Sheet	Name & Address of Developers and Architects	
Cover Sheet	Date of Submission	
Site Plan	Proposed Landscaping	
Site Demolition	Minimum Scale 1" = 30'	
Site Demolition	All items planned for Demolition unless minor & shown on another Plan	
Utility Plan	Existing utility types and locations (Water, Electric, Telephone, CATV, Gas, Sewer, Storm Water, etc.)	
Utility Plan	Proposed utility types and locations (Water, Electric, Telephone, CATV, Gas, Sewer, Storm Water, etc.)	
Floor Plan	Dimensions, Wall Types, Door Types and Sq. Ft. Tabulations	
Floor Plan	Locate kitchen, Baths, Utility Rooms, Showing Fixtures, Appliances, Boilers, Tanks, etc.	
Floor Plan	Include Roof & Basement Plans (where applicable)	
Elevations (Ext.)	All exterior finishes, Openings and Fenestration	
Building Sections	Typical Exterior Walls; Unit separation; Fire walls; Foundation walls and Roof	
Building Sections	Thermal and sound Insulation with Levels and R-Values.	
Building Sections	Wall Intersection Details for Wall/Roof; Floor/Wall; Foundation/Floor	
Building Sections	Cross-Section where Units have Attic Living Space	
Elevations (Int.)	Kitchens; Bathrooms; Accessory Locations; Cabinets for Typical and Handicap Units	
Specifications	16 Division Specification layout. Listing general, products & performance Standards by Construction Division	
Specifications	Energy Star & windows. Ongoing demonstration of lowered energy & Maintenance Cost	
Specifications	Rehab Exception: Permission may be given for substituting a work write-up for Moderate Rehabilitation of existing buildings	
Plan Review	One set of Drawings & Specs	
Plan Review	One copy of Construction Cost Breakdown (Form: RIH CF-2328)	

**C. Construction Documents – 90% Review:** Once the Design Development plans have been approved, the architect shall begin work on the Construction Documents. The Developer and Architect shall notify RIHousing in writing of any significant changes to the approved Design Development plans. Such notification shall be made as soon as the extent of the changes is known and the effect on the construction cost is determined. No significant changes to the Design Development documents shall be included in the Construction Documents unless approval is obtained from RIHousing:

Section	Requirement	
General Requirement	All items listed in schematic and 50% submission are to be included in the 90% submission package (new items are identified in blue)	
Cover Sheet	Revised Date of Submission	
Cover Sheet	Schedule of Drawings	



Cover Sheet	Signature & Date spaces for Architect; Owner; Contractor; RIHousing	
Survey	Lot Lines; Site Dimensions; Streets	
Survey	Existing Buildings w/ Dimensions to Lot Lines	
Survey	Setback dimensions & Easement locations	
Survey	Adjacent Buildings' Footprints & Heights	
Survey	Existing Topography showing Wetlands, Contours, Ledge & Vegetation	
Survey	Existing Conditions on the Site e.g. Fences, Retaining Walls, Paving, etc.	
Survey	Existing Utilities - Above & Below Ground	
Site Plan	Ground Floor Finish Elevations & Any Change in Elevation for all Buildings	
Site Plan	Spot Elevations as Necessary and along handicap accessible routes	
Site Plan	Recreational Areas: Passive & Active	
Site Plan	Landscaping Detail & Planting Schedule w/ Common Name; Number; Size for all Materials	
Site Plan	Site Lighting & Site Utilities - Shown for entire Development	
Site Plan	Site Details & Dimensions for Paving Sections, Curb Cuts, Road Radii, Trash Enclosures, Recreational Areas, etc.	
Elevations (Ext.)	Relationship Between Finished Ground Floor & Basement & Finished Grade	
Updated Geotech. Report	If necessary based on changes in design	
Elevations (Ext.)	Height of each Floor to Floor, Parapet &/or Roof	
Building Sections	R-Value Tabulations	
Building Sections	Interior/Exterior wall Intersection	
Building Sections	Typical Stairs: Public & Private	
Building Sections	Elevator Shaft	
Building Sections	All Typical Interior Walls, Partitions & Chases	
Elevations (Int.)	Kitchen & Bathroom Dimensions; Materials & Mounting Heights	
Schedules	Finish, Door & Window Schedules, Elevations & Details Keyed to Plans & Elevations	
Schedules	Door Hardware with Minimum Specification Referenced on Schedule	
Schedules	Typical Details for Clothes Storage, Linen Closets showing mounting height for shelves & rods	
Schedules	Building Thermal Insulation Schedule & NFRC window ratings	
Structural	Plans, Sections, Details & Notes sufficient to Construct Particular Development	
Structural	Design Loads	
Structural	Framing Systems & Member Sizes	
Structural	Governing Codes, Regulations & Standards	
Structural	Foundation Design responsive to Subsoil Investigation Report	
Mechanical	Location & Type of Heating Elements, Boilers, Thermostats, Controls, Meters &/or Fuel tanks.	
Mechanical	Mechanical Details, Equipment, Schedules & Ventilation Diagrams	
Electrical	Light Fixtures, Switches, Receptacles, Main Service Entrance, Breaker Panel & Meters Locations	
Electrical	Light Fixture Schedule	
Plumbing	Show Layout, Fixtures, Riser Diagrams, etc.	
Fire Alarm	Location of Equipment & Devices with Riser Diagrams & Schedules	
Fire Protection	Location of Equipment & Devices with Rise Diagrams & Schedules & Flow Calculations	

Specifications	Include RIHousing Appendix A (Front End Specification Supplementary Conditions)	
Plan Review	1 Copy of the ALTA Boundary Outline Survey, Surveyors Report & Legal Description - Form RIH CF-141	
Plan Review	Revised Construction Cost Breakdown (signed and dated by Owner & Contractor) - Form RIH CF-2328	

**D. Final Construction Documents:** After the 90% Construction Documents have been reviewed and approved by RIHousing, the Architect shall prepare the Final Construction Documents. These drawings and specifications shall be consistent with the approved 90% Construction Documents, including the development construction costs established during the preliminary phase. The drawings shall essentially be the same as those submitted at the Construction Documents stage with all revisions and additions included to bring the drawings to a 100% level of completion for construction. The Architect shall seal the architectural drawings. The Architect and the Engineer shall seal the Engineering drawings:

Section	Requirement	✓
General Requirements	All items listed in Schematic, 50% and 90% submission are to be included in the 100% submission package (new items are identified in blue)	
Additional Req.	Drawings & Specifications to be consistent with previously approved Construction Documents, including Development Construction Costs established during Prelim Phase	
Additional Req.	Any Revisions or Additions to Plans & Specifications	
Additional Req.	Signed & Sealed by Architect & Architect /Engineer for Engineering Drawings	
Additional Req.	Same Reference Date on All Drawings	
Plan Review	Final Cost Breakdown (signed and dated by Owner & Contractor) - Form RIH CF-2328	
Plan Review	Include Current Davis Bacon Wage Determination for Developments using Fed Funds for Construction	
<i>Pre-construction Meeting</i>	RIHousing D&C staff to host a pre-construction meeting at the time of loan closing to sign plans, specifications and addendum and to review all agency requirements during construction.	

**E. General Requirements:** As necessary, an engineer for HVAC, plumbing, electrical and structural shall be engaged. Throughout these requirements, when an engineer has been engaged, the engineer shall stamp the appropriate plan(s).

## Section 3. Design and Construction Standards

These Standards have been developed to ensure the long-term viability of housing developed under the RIHousing's Rental Housing Production Program. These Standards are based on experience from managing rental housing and are designed to ensure that the housing units developed are economical, comfortable, durable, healthy, energy efficient, and attractive. These Standards are in addition to the Building Code requirements and any applicable federal, state and local ordinances or regulations.

**Sustainable, Healthy Homes Goals:** RIHousing values and promotes healthy, durable, high quality, affordable construction. Ultimately, RIHousing strives to cost effectively combine sustainable building processes and affordable housing construction.

Sustainable means long lasting, high performance housing. The goal is to use resources wisely to help establish a continuous cycle of use and renewal within the carrying capacity of the environment. The developer should consider long term impacts and cost to the development as well as the environment.

The overall goal of these Standards is to produce affordable and attractive housing that is also:

1. **Durable:** Durability comes from both the quality of the building materials and the soundness of the building's design and construction. Materials should be long-lasting and able to withstand heavy use with minimal maintenance. Buildings should be designed and built to keep water and pests out.
2. **Energy efficient:** A modest upfront investment in materials and systems can result in lower operating costs over the life of a building while conserving natural resources.
3. **Healthy:** Significant aspects of health and quality of the indoor environment are to reduce conditions that can trigger asthma and other respiratory problems. Essential asthma reduction practices include:
  - **Dry construction:** Reducing moisture minimizes mold
  - **Clean:** Dust can trigger allergic reactions. Design for ease of cleaning.
  - **Well Ventilated:** Provide fresh air to remove moisture and toxins.
  - **Combustion Product Free:** Carbon monoxide et al. have adverse health consequences.
  - **Pest Free:** Pests can cause allergic reactions.
  - **Toxic Chemical free:** Cleaning chemicals, pesticides, oil and alkyd based paints and solvents can release toxins to indoor air and exacerbate asthma and other pulmonary disease.
  - **Comfortable:** Uncomfortable homes can make people take actions that make a home unhealthy. If people are cold, they won't ventilate their home. If they are hot or dry, they will often open windows and/or add moisture to the point of producing mold.
4. **Safe:** RIHousing encourages building and site designs that create defensible space inside and outside. Defensible spaces are areas that discourage unhealthy behavior and make transgressors feel observed and uncomfortable.

To encourage individuality and innovation, RIHousing will consider exceptions to these Standards, provided the intended results can be achieved by acceptable alternatives. A request for an exception from these Standards may be made in writing to the Development Officer. In consultation with Design/Construction, the Development Officer will review the request.

RIHousing reserves the right to establish additional requirements on a case-by-case basis prior to final approval of the Construction Documents. RIHousing may periodically revise these Standards; however, these revisions will not affect a development that has received approval of the Construction Documents unless the change is necessary for the health and safety of the future occupants.

These standards are broken out in accordance with the Construction Specification Institute (CSI) format. Some standards are statements of policies or minimum requirements. When these policies and regulations do not directly relate to the CSI format, the policies and regulations are placed in the CSI Division in which the policy or regulation best fits.

## **DIVISION 1 GENERAL REQUIREMENTS**

The criteria below are strongly encouraged for all developments financed under the Rental Housing Production Program.

- **Comprehensive Community Development** - Developers and their designers must familiarize themselves with Rhode Island Housing's Comprehensive Community Development criteria as outlined in the Rhode Island Qualified Allocation Plan and design all development communities with as many of the Comprehensive Community Development design elements as possible.
- Sustainable development in the form of Infill, Adaptive Re-use, Historic Restoration and Brownfields Redevelopment.
- Citizen and stakeholder participation in the planning process.
- Walkable, well connected communities that offer transportation options other than the automobile (i.e. bike, walk, bus, train, etc.).
- Development is within ½ mile of jobs, fresh food, recreation, culture and/or entertainment opportunities.
- Development is within ½ mile of RIPTA or MBTA public transit service.
- Development is or will be served by public water and utilities. OSWT is acceptable.
- Development is situated in an existing or proposed Growth Center, or, Development is within 1 mile of existing public infrastructure such as hospitals, schools, libraries, community centers, etc. within the **Urban Services Boundary (USB)** as defined by GrowSmartRI and 2.5 miles for **non-USB** areas. For the definition of USB please see <http://www.growsmartri.org/wp-content/uploads/2012/01/smart-growth-terms-and-concepts.pdf>.
- Development is designed using Crime Prevention Through Environmental Design (CPTED). Please see [www.planning.org/pas/quicknotes /open/pdf/Qn42.pdf](http://www.planning.org/pas/quicknotes/open/pdf/Qn42.pdf) for the key principles of CPTED.

- Development incorporates at least three types of green infrastructure such as storm water management, rain gardens, bioswales, green roofs or green streets.
- Mixed use and Mixed Income development that serves a range of incomes.
- Cluster buildings to preserve open space and to minimize infrastructure and paved areas.

**A. Exterior Appearance:** Proportion, scale color and arrangement of exterior openings, trim and materials create balanced and contextual designs. Development designs and details must be simple yet attractive and designed with the following criteria in mind:

- Avoid complicated framing details wherever possible.
- Eliminate excessive or complicated trim details.
- Minimize details that serve no real function such as false dormers and false chimneys.
- Specify modest finishes that are cost effective.
- Specify durable trim and siding products that require less maintenance.
- Incorporate cost effective, sustainable development, energy efficient, healthy homes, defensible space, and accessible housing elements into the design.
- Build higher and connect foundations where possible to minimize building foot prints.
- Design modest size and efficient units that are in conformance with RIHousing's maximum square foot requirements.

**B. Energy Efficiency and Sustainability:** Applications will be assessed and evaluated based on RIHousing's expectations outlined below:

- R.I. Residential New Construction (RNC) Tier I standards under National Grid's program guidelines are the baseline requirement of RIHousing's design and construction guidelines. These standards are slightly more stringent than the current R.I. State Energy Code Standards.
- New construction developments that achieve NGRID's RNC Tier II and Energy Star 3.1 revision 8 standards to obtain a higher level of documented energy efficiency are strongly encouraged.
- Projects undertaking substantial rehabilitation rather than new construction are encouraged to achieve NGRID's RNC Tier II standards.
- RIHousing strongly encourages development that incorporates Photo Voltaic solar panels (PV) or other renewables including net metering (as defined in R.I.G.L. Chapter 39-26-5). We strongly discourage renewable energy systems that require excessive ongoing maintenance as they can have a negative impact on long term operating costs.
- Owners that intend to design their developments to LEED or similar sustainable standards must demonstrate that their projects are cost effective and must seek non-federal or state funding for all third-party verifications and commissioning.
- Recommend designing basement spaces to be conditioned spaces with adequate insulation and air sealing.

- Building design to meet requirements consistent with Rhode Island's climate.
- Provide adequate space for comprehensive trash recycling.
- All newly installed plumbing fixtures shall meet the current published EPA Water Sense standards.
- Properties with site irrigation systems shall be equipped with time clocks, rain sensors, abatement meters and drip systems at plantings.

**C. Maximum Unit Square Footage Requirements:** Acceptable dwelling unit sizes shall be within the following maximum square footages. Unit square footage dimensions shall be based upon net rentable square footage and measured from the inside face of exterior walls, and all enclosing walls of the unit.

1 Bedroom	500 - 600 square feet
2 Bedroom	750 - 900 square feet
3 Bedroom	950 - 1,100 square feet
4 Bedroom	1,200 - 1,400 square feet

For Townhouse units add 50 - 100 square feet.

**D. Unit layout:** Dwelling unit sizes will also be evaluated on a performance basis. Determining factors are the placement of furniture, tenant circulation, functional livability and adequate storage. All dwelling units, whether new construction or rehabilitation, shall conform to the current requirements of the Rhode Island State Building and Fire Codes with respect to room size and rating of fire separations and exits.

#### **E. Room Layout:**

##### 1. Minimum room sizes:

- a. Bedrooms – 100 s.f. with a minimum dimension of 9' 6", unless it is a studio type apartment. Each apartment shall have one Master Bedroom with a minimum size requirement of 120 s.f. or greater.
- b. Living room – 121 s.f. with a minimum dimension of 11'
- c. Living/dining combination – 180 s.f. with a minimum dimension of 11'
- d. Dining room – 70 s.f. minimum dimension 8'
- e. Kitchen – 64 s.f. with a minimum dimension of 8'
- f. Bathrooms – 50 s.f. per local code for handicapped units.

##### 2. Minimum kitchen cabinet space:

- a. 1, 2, 3 Bedroom Units – A minimum of 96" of base cabinets and a minimum of 60" of wall cabinets.
- b. Over 3 Bedroom Units – A minimum of 144" of base cabinets and a minimum of 96" of wall cabinets.
- c. Kitchen cabinet layouts with base cabinets that exceed 168" in length are strongly discouraged.

3. Bathrooms: Each unit will have at least one full bath. Units with four or more bedrooms shall have a minimum of two full baths (one bath may have a shower instead of a shower/tub enclosure). Townhouse style units, with three or more bedrooms, shall be equipped with a minimum of one full bath and one-half baths.
4. Minimum closet space – A built-in closet with a shelf and clothes rod is required in each bedroom. In addition, adequate space is to be made available for general storage of tenant's belongings. This space shall include a broom closet, entry/coat closet, a linen closet, utility closet, if applicable, bathroom closet and tenant storage closet. Lockable storage area in the basements is desirable.
5. Furniture walls (walls without windows) – living room (2), bedrooms (2), dining room/area (1).

**F. Handicapped Dwelling Units:** Shall be designed and constructed in accordance with current requirements of the Fair Housing Act, Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973 and applicable building codes. When a development consists of fifteen (15) units or more, a minimum of 5% of those units (a minimum of 1 unit) shall be handicapped accessible units as defined by the Uniform Federal Accessibility Standards (UFAS) regardless of the use group exception contained in the Building Code. In addition, at least two 2% (1 additional unit) of the total units shall be designed accessible to the visual and hearing impaired as defined by UFAS. In all cases, the units shall be designed in order that they can be adapted for use by non-handicapped individuals.

**G. Structural:** The following standards will be applied in the evaluation of existing structures to be rehabilitated. Correction of all structural damage, deficiencies, and their cause must be included in the development scope of work. Prior to final commitment, RIHousing reserves the right to require a structural survey by an approved licensed structural engineer to verify the adequacy of all structural members for current and proposed loads.

**H. Attic:** Attic access for maintenance and/or inspection should be located in the building's common areas when applicable. When access is only available through the interior of building attic hatch must be insulated, weather-stripped and furnished with key locks and fire rated where required.

**I. Amenities:**

1. Management Office: A management office is required for developments of 60 or more dwelling units and desirable for developments of less than 60 units. If a community building is not provided, alternative spaces within the development shall be set aside for a required management office and adequate maintenance storage. The management office will be wired for an air conditioning unit.
2. Community Facility: If a community room is provided incorporate the following:
  - a. Common meeting room: minimum size based on 12 square feet per dwelling unit or 600 square feet, whichever is greater;
  - b. A separate fully-equipped kitchen accessible to handicapped persons to service social functions held in the community room;

- c. Storage areas for folding chairs, tables, etc.;
- d. Separate men's and women's toilet rooms, or two gender neutral toilet rooms, accessible to handicapped persons;
- e. Separate access from interior and exterior to a space for the storage of maintenance equipment and supplies designed and constructed to comply with all regulations covering the storage of flammable materials;
- f. A separate room in proximity to the main entrance to serve as an office for management personnel shall be provided. This space shall be large enough to accommodate a desk and chair, two visitor's chairs, coat rack and file cabinet;

The Community building will be heated throughout; air conditioning is required for the management office and common meeting room;

- 3. **Playground:** For all family-oriented developments, the developer shall demonstrate that playground facilities are in reasonable proximity or shall incorporate a playground as part of the development. Equipment should comply with the latest edition of US Consumer Product Safety Commission playground guidelines.
- 4. Facilities for the disposal and collection of trash are to be provided in accordance with local municipalities' requirements.
- 5. Provisions for mail delivery shall be in accordance with the requirements of the local postmaster, but with a minimum of inconvenience to the tenants.

#### **J. General Conditions:**

- 1. Blasting is to be performed strictly in accordance with the rules and regulations of authorities having jurisdiction. Prior to any blasting, RIHousing requires that a pre-blast survey of surrounding structures be conducted by a qualified consultant and submitted for review.
- 2. Soil treatment for termite control during construction is required.

## **DIVISION 2 SITE WORK**

These requirements apply to both new construction and rehabilitation of existing buildings. Rehabilitation developments should identify those Site Construction items that are not applicable to the development and seek an exception from the requirement.

**Site Design:** To achieve thoughtful site design, emphasis will be placed on the following;

- 1. **Site Location:**
  - a. **Adjacent Land** – Proposed site(s) should not be adjacent to high-tension lines, toxic waste or industrial sites or noise, crowd, or nighttime light generators, especially for elderly developments.



2. Site layout:

- a. Building Siting: Minimize distance between buildings and connect foundations where possible. Parking should be no more than 100 ft. from unit entrances and should be located at the rear or sides of buildings. Building siting should conform to the natural characteristics of site. Special effort should be made to retain trees and orient the building for maximum solar gain and to maximize open space.

3. Site Improvements:

- a. All site improvements shall be designed for low maintenance.
- b. Sidewalks: to connect all units, parking, and amenities; minimum width - 4 ft. Sidewalks shall be minimum 4" thick concrete with a light broom finish.
- c. Parking: A minimum of 1 parking space per unit or as required by zoning; handicapped parking to conform to ADA regulations. Landscape parking areas to screen car headlights from units. Spaces to be striped and have precast concrete wheel stops. Precast concrete wheel stops are not required in parking lots with perimeter curbing or at smaller 1-3 family parking lot areas. Handicapped spaces shall be signed.
- d. Landscaping: Accent landscaping at building entrances and around amenities is required. The planting schedules should include materials appropriate for the location and climate while taking into consideration maintenance issues. Planting buffers located between tenant yard spaces are strongly encouraged for defensible space and privacy. Recommend use of low maintenance, drought resistant, plant materials. Size of plant material is more important than quantity. The use of sod for lawn areas is encouraged, particularly in areas where seeding may be impractical due to traffic, surface drainage, etc.
- e. New plantings shall be provided with adequate irrigation to maintain vigor while still conserving water. Underground lawn sprinkling system, if used, must utilize a time clock, rain sensor and an abatement meter. Soaker hoses may be used as an option for watering plantings
- f. Fencing: If installed, shall be either fabric coated chain link or flat board fencing on the back and side yards. Painted wood picket, ornamental galvanized steel, vinyl picket or wrought iron fence may be installed on the front yards.
- g. Lighting: Adequate lighting, residential in appearance for roadways, sidewalks, and building entrances; no dark spots at building entrances and in parking lots; lighting deflected away from living/sleeping areas; lighting standards in scale with development buildings. Minimum 1-foot candle of illumination in all parking areas, trash dumpsters, mailboxes and building entrances. Building and site lighting must be designed using dark sky light fixtures and shields to minimize light pollution. Use high efficiency exterior light fixtures.
- h. Safety and Security: Maximize site security; secure building and unit entrances with voice intercom; no outside entry to exit stairways.
- i. Trash Pad: Must be screened on all sides and away from living units. All dumpster areas to have a concrete pad with protective bollards.
- j. Site Drainage: Dimensions, designs, and construction to conform to all applicable local and state regulations. Smart storm drainage systems to manage on site storm-

water should be used wherever possible. There can be no standing or ponding of run-off on-site. RIHousing strongly discourages the use of large permeable pavement parking lot and private roadway areas that require excessive maintenance and protection.

- k. Grading shall eliminate abrupt or excessive grade changes.
- l. Debris, junk, and dead or dangerous tree growth shall be removed. Dilapidated outbuildings, fences and other structures, unsafe structures, and visual nuisances must be demolished and removed from the site. Badly deteriorated essential paving must be repaired or replaced. Nonessential deteriorated paving will be removed.

## **DIVISION 3 CONCRETE**

### **A. Foundations:**

- 1. New construction shall be built in accordance with the Building Code with damp proofing and perimeter insulation.
- 2. Existing foundations: Fill all holes and cracks and re-point as necessary.
- 3. For new construction, install a capillary break on top of the footing and the perimeter foundation wall. (Mandatory). Slab on grade is exempt except in locations with a high-water table.
- 4. Perimeter drains as required by site engineering

### **B. Basement Slabs:**

- 1. Existing concrete slab shall be cleaned in a manner to expose the existing surface and all visible structural cracks shall be repaired with an approved concrete/bondel mix.
- 2. New concrete slabs, whether in new construction or in existing building without a concrete slab, shall have a minimum 4" thick reinforced concrete installed over 6 mil vapor barrier.
- 3. Provide rat slabs in all crawl spaces, of a minimum 2" of concrete over vapor barrier with no reinforcement.

## **DIVISION 4 MASONRY**

**Chimneys:** In rehabilitated structures that are unsound, the chimney must be repaired or removed entirely. When chimneys are being used for venting, they should be restored, and masonry re-pointed to safe and operable condition, with flue liners installed as required by the Rhode Island State Building Code.

Where masonry is considered historic, repairs will be carried out utilizing the Secretary of the Interior's "Standards of Rehabilitation" and related NPS Preservation Briefs for "Repointing Mortar Joints on Historic Masonry Buildings"

## **DIVISION 5 METALS**

Per code

## **DIVISION 6 WOOD AND PLASTICS**

### **A. Rough Carpentry:**

1. Sheathing for roofs shall be plywood or Zip Roof sheathing. Sub Floors shall be plywood or Advantech sheathing.

Sheathing for walls shall be plywood, Zip Wall sheathing or OSB. Alternate products like Advantech may be used with the approval of RIHousing.

2. Underlayment shall be formaldehyde free ULB or AC Plywood (No particle board or luan).

### **B. Stairs/Porches:**

1. Interior – Design and dimensions per code.
2. Exterior – Consider weather protection. Canopy roofs, porch roofs, etc. The use of durable composite deck and railing systems is strongly encouraged at exterior porches and stoops.
3. Existing steps, stairways and porch decks to remain must be reasonably level, even surfaces, and provided with handrails and guards in compliance with current Rhode Island State Building Code.

- C. Rehabilitated Units:** Replace damaged subfloor and install new underlayment (minimum 1/4”) in all existing bath and kitchen areas.

### **D. Finish Carpentry:**

1. Closet Shelving – shall be vinyl-coated wire shelving attached to secured wall blocking.
2. Interior bases, casings, moldings and miscellaneous trim shall be clear wood or MDF products. Interior handrails shall be constructed of clear hardwood products.
3. Exterior handrail system – Newel post and columns shall be constructed from high quality composite materials, clear cedar, clear mahogany or clear hemlock. Exterior handrails shall be painted steel, PVC wrapped aluminum, mahogany or clear douglas fir.
4. Exterior woodwork and running trim shall be a PVC, Boral, Smart Siding, Fiber Cement trim board such as pre-finished Hardi-Trim products or pre-primed, clear wood trim products (i.e. premium grade, non-finger-jointed, clear cedar or redwood).
5. Eliminate exterior miter cuts and provide chamfer details at exterior horizontal trims to shed water wherever possible. Only profiled moldings should be mitered; all other trim boards should have lap joints. Exterior miter joints inevitably open as wood shrinks, exposing the end grain of both boards to the weather. It is acceptable to join trim boards with scarf angle cuts.

## **DIVISION 7 THERMAL AND MOISTURE PROTECTION**

- A.** Architect must submit plans and specifications to the Residential New Construction (RNC) program manager to ensure compliance with program regulations. The RNC Program will certify each building to determine successful completion of program requirements. (Refer to Addendum 6 of these D&C Guidelines for link to RNC Energy Efficiency Program). The Program will prepare a list of required items which may include, but is not limited to:

- Capillary breaks in concrete footings.
- Pan flashings under windows and doors.
- Back priming all wooden siding and trim boards.
- Filling voids and penetrations in walls and attic spaces.
- Direct exhaust ducted systems (Bathroom and kitchen) must run continuously, no louder than 1.5 sones, with a 7-day programmable controller. Any ducting outside the thermal envelope must be insulated.
- Judicious use of metal studs to prevent condensation and ghosting.
- Discourage the use of aluminum windows in low rise construction.
- Tape all seams in Tyvek/Typar building wrap with appropriate tape materials.
- Seal all ductwork to eliminate condensation/cold penetration and vermin/rodent infestation.
- Install low E glazing/Argon Filled for new or replacement windows.
- Careful planning of ductwork locations within the dwelling to prevent drafts.
- New heating systems must be high-efficiency above 90% or Energy Star rated equipment.
- Blower door testing is required to determine air tightness of conditioned and must not exceed 5 ACH50.

**B. Roofs:** All damaged roof decking/sheathing must be repaired or replaced prior to installing the new roof system. The overlay of existing flat roof systems is not allowed.

1. Existing roof covering: Must be replaced if blistered and the mineral covering is substantially deteriorated. Missing or leaking shingles and flashing on functional roofs must be repaired. All layers of roof shingles must be stripped to the boards or sheathing when re-roofing. The boards and sheathing must be examined for large gaps and/or spaces, cracked boards or deterioration. If large gaps or spaces exist between boards or sheathing, the roof must be overlaid with 1/2" exterior plywood underlayment prior to installing new shingles. Rotted roof boards and/or sheathing must be removed and replaced down to framing. The overlay of existing shingle or pitched roof systems is not allowed. Broken antennae must be removed or replaced.
2. Pitched Roofs: shall have a minimum roof slope of 4/12, however, roof slope shall be consistent with the character of the neighborhood. Minimum guarantee for pitched roof(s) shall be 30 years. The validity of warranties is to be verified by the manufacturer.
3. Flat Roofs: EPDM or TPO with minimum thickness of .060" and 20-year guarantee or other roofing system approved by RIHousing. Flat roofs shall utilize polyisocyanurate insulation board installed under the EPDM surface. Existing flat roof systems must be stripped in entirety to examine the existing decking for damage or deterioration.
4. Ice/Water Protection: Provide ice/water protection at eaves, valleys, and roof/wall intersections. Minimum 90 lb. felt or membrane underlayment 3 feet on both sides of valleys.

Minimum 50 lb. felt 3 feet in from eaves, and 1-foot up walls and 2 feet on roofs at roof/wall intersections.

5. Insulation Baffles: For cathedral ceilings and at attic floor/roof intersection unless utilizing spray type insulation (i.e. Icynene foam insulation), provide either preformed plastic or heavy cardboard insulation baffles with minimum 2" free air space. End dams shall be added at vent baffles to block air movement.
6. Ventilation: Per Code. For sloped roofs provide both soffit (perforated or continuous) and ridge vent openings. Vented louvers acceptable for gabled ends.
7. Soffits: Wood or PVC trims preferred. For aluminum, the minimum thickness is .019". For vinyl, the minimum thickness is .042".
8. All flashing must meet or exceed RI Building Code Requirements.

**C. Gutters and Downspouts:** Materials: Aluminum with a minimum thickness of .032" for gutters and .032" for downspouts and colored by the manufacturer to match trim. Concrete splash pads shall be installed at the end of all downspouts.

**D. Sound Insulation:** In both new and rehabilitated buildings, the following minimum requirements for insulation will apply:

1. Sound: Party walls, bath walls, mechanical room walls, kitchen plumbing walls, laundry room walls and common stair tower walls (minimum STC rating of 52), ceiling/floor (minimum STC rating of 53). On party walls, the seam at the base and top if any, of the wall must be caulked on both sides of the wall to maintain the proper STC rating. Electric outlets must be sealed and staggered to prevent sound transmission. Designs must incorporate materials, systems and construction techniques that control sound transmission. RIHousing shall evaluate all Sound Proofing techniques and methods on a case-by-case basis.

**E. Building Insulation (Table N1102.1.2 from 2013 SBC Building Code):**

1. All building insulation must meet or exceed RI Energy Code Requirements.
2. Insulation values for renovated buildings shall be consistent with the SBC requirements.

**INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT**

Climate Zone:	5
Fenestration U-Factor (b):	0.27
Skylight U-Factor (b):	0.50
Glazed Fenestration SHGC (b):	NR
Ceiling R-Value:	38
Wood Framed Wall R-Value (g):	20 or 13+5 (f)
Mass Wall R-Value:	13/17
Floor R-Value:	30 (e)
Basement (c) wall R-Value:	10/13
Slab (d) R-Value & Depth:	10/2 ft.
Crawl Space (c) Wall:	10/13

## **F. Vapor Barrier:**

- a. Under Slab: Minimum 6 mil polyethylene membrane.
- b. Exterior Walls:
  - Minimum Kraft faced, vapor barrier on face of insulation batts or insulative sheathing.
  - On new construction, damp proof exterior foundation walls at and below grade.
  - A house wrap (Tyvek or equal), minimum 6 mils. installed on all exterior wall sheathing prior to installation of exterior siding. Zip wall systems are also acceptable.

## **G. Seal all penetrations between interior spaces and outside, and between partitions and exterior walls to prevent both air and water infiltration.**

## **H. Exterior Cladding:**

1. Existing Buildings – siding and trim must be intact, free of any defects, and weatherproof. Siding requiring more than 40% replacement must be entirely removed and replaced. All wood components must have a continuous coat of paint or stain.
2. New Construction or New Cladding on Existing Buildings:
  - a. General: When choosing exterior cladding for a development, consideration must be given to durability in high traffic areas and family developments. Exterior cladding on the first story should be a material with greater durability while upper stories may be clad with different and complimentary materials. Acceptable sidings are as follows:
    - Brick.
    - Wood Siding: Cedar clapboards of random lengths not less than four (4) feet in length with an exposure of no more than six (6) inches.
    - Wood Shingles: Either as Panels (4" to 7" exposures, No. I Grade Vertical Western Red Cedar panels available in 3-, 4-, and 5- course panels) or Shingles (4" to 7" exposures, No. I Grade Vertical Western Red Cedar shingles).
    - Fiber Cement Siding: Reinforced with fiberglass mesh, with a typical thickness of 5/16" and a minimum fifty (50) year guarantee. Product should have a 15-year warranty on paint where products come pre-primed and with first coat of finished paint.
    - Exterior panels shall be PVC sheathing with joints covered by PVC or composite trim products.
  - b. Back prime exterior paintable wood siding and trim materials and prime all cut ends (i.e. Clear Redwood or Cedar) to prevent moisture absorption. (The use of Pine for trim boards is not allowed.)
3. Alternative siding materials that will be considered depending on type of development and location, subject to approval by RIIHousing are as follows:
  - Stucco: Portland Cement Plaster with a minimum 3/4" thickness. Acceptable products: WR Bonsal, Florida Stucco, California Stucco, Sto Finish System.

- Where vinyl siding products must be used - Vinyl Siding: which is .042" to .048" thick and has a twenty-five (25) year guarantee. All vinyl J channel, F channel and other necessary vinyl accessories must be concealed behind trim boards. If vinyl siding is used on the first floor, it must be a heavy gauge premium vinyl or a more durable material (i.e. cement board siding, vinyl shingles, pre-primed clear cedar clapboards or shingles). Acceptable products: Wolverine, Alcoa, CertainTeed, Heartland, Allside. Similar products may be submitted to RIHousing for approval. All trim and corner boards shall PVC trim such as Azek and/or reinforced Vinyl Trim products with built-in J channel.
4. The use of PVC trim products is strongly encouraged. At a minimum, PVC trim products are required for wet areas such as: water tables, window sills, door trim and skirt boards in close proximity to grade, soffit facias, rakes and trim boards along or in contact with roofs, etc.

## **DIVISION 8 DOORS AND WINDOWS**

### **A. Windows: Must Meet Energy Star Requirements:**

1. New Construction or Replacement Specify durable windows/door
  - a. Frames – Aluminum, vinyl-clad and wood (historic buildings only), thermally broken with a minimum thickness of frame wall - 3mm, .12" or 1/8". If the building is located in a historic district or is listed on the National Register, the appropriate authority shall approve the type of window used.
  - b. Quality vinyl windows are appropriate for one-to-three story buildings. Buildings with four or more stories shall utilize commercial grade aluminum or fiberglass windows that are properly engineered for the structure.
  - c. Guarantee – minimum 20 years on frames, 10 years on glass, and 2 years on parts.
  - d. Screens - Windows shall be equipped with operable 1/2 screens.
  - e. Windows installed in buildings of four stories or more must have a minimum of one window tested by an independent agency to ensure proper performance.
  - f. Windows shall be double hung type with tilt-in function for easy cleaning, where possible.
  - g. Existing Structures – Structures having existing acceptable windows may be allowed to maintain same when storm and screen windows are installed. These situations will be reviewed on a case-by-case basis.
  - h. Install pan flashings on all windows and exterior doors. Windows, doors and corner board locations, mechanical and plumbing penetrations must have VYCOR brand or equal, self-adhered flashing installed to all perimeters and sills for protection against air, water and moisture.
  - i. Use operable windows and mechanical ventilation for ample fresh air. All windows must have locking hardware. All bedrooms must have windows, which comply with current Rhode Island State Building Code egress requirements. Slider windows must have one operable sash if code will allow (maintenance issue).
  - j. Window Guards must be installed in all windows lower than 18" from the finish floor to prevent falling.

## **B. Doors:**

1. Exterior Entrance:
  - a. Minimum 1-3/4", 20-gauge raised panel steel insulated doors with 26-gauge steel frame or 1-3/4" solid core wood raised panel door. Minimum STC rating of 35 for exterior doors, minimum R-value = 4, except for vestibules or double entries. Doors shall be equipped with self-locking hardware and weather-stripping.
  - b. High quality fiberglass doors with Energy Star ratings are acceptable alternatives for non-fire rated unit entry doors, which open directly to the exterior of building.
  - c. Unit entrance doors, which open directly to the exterior of the building, shall be equipped with storm doors with self-storing screens. Storms shall be equipped with safety chains and installed with elongated screws that fasten directly into framing.
  - d. Unit entrance doors shall be equipped with double locking interconnected lock sets. Regardless of the manufactured used, the operation of the lock-set shall include the following features:
    - From exterior, key unlocks both dead latch and deadbolt.
    - From interior, turning knob disengages both dead latch and deadbolt at the same time.
    - Single deadbolt locking interconnected locksets are an acceptable alternative.
2. Exterior Sliders/Patio Doors: Aluminum or protected wood shall be double glazed and provided with a thermal break and screens.
3. Interior:
  - a. Minimum 1-3/8" solid wood or solid/ semi-solid core high-density fiberboard (HDF).
  - b. Existing hollow core doors shall be replaced.
4. Door stops shall be supplied for all doors. Install floor stops wherever possible.
5. Peep holes – shall be provided at building entry doors and unit doors. Handicapped unit doors shall be provided with two (2) peep holes, one at the standard height and one in accordance with the ADA standards.
6. General Door Hardware Notes – All public, common area and handicap unit doors shall be equipped with lever type hardware or hardware that meets ADA/UFAS design standards. All mechanical and equipment rooms shall be equipped with knurled hardware per ADA/UFAS design standards.

## **DIVISION 9 FINISHES**

### **A. Interior Finishes:**

1. Existing walls and woodwork should be free from peeling paint and loose or cracked plaster. Deteriorated or stained paint or wallpaper shall be removed prior to preparation and painting. Solid plaster or wallboard that has uneven but sound surfaces may remain.
2. Ceilings shall be plastered. Ceiling paint shall be flat finish except in kitchens and bathrooms where ceilings shall have a semi-gloss finish.



3. Wall surfaces shall be painted with an eggshell finish in common areas and dwelling unit living areas; semi-gloss finish in bathrooms and kitchens. All walls and ceilings shall be painted with one coat of primer and two (2) coats of finish.
4. Skim coat plaster on walls and ceilings over Imperial Drywall, unless otherwise specified.
5. Bathroom and Plumbing Wet Walls: All walls and ceilings in bathrooms and building plumbing wet walls in kitchens, laundry closets and mechanical closets require the use of either moisture, mold/mildew resistant fiberglass faced gypsum wallboard, cementitious wallboard backer, or a skim coat plaster finish on walls and ceilings over an Imperial Drywall. Use moisture, mold/mildew fiberglass glass faced gypsum wall board at basement party walls and ceilings.

## **B. Floor coverings**

1. General: Do not install carpet in wet areas such as baths, laundries, kitchens, entryways, and damp basements. Use hard surface washable flooring products whenever possible. All glued down floor products shall be installed over a suitable smooth substrate in conformance with the manufacturer's installation instructions.
  - a. Floor patterns in units and community rooms are strongly encouraged where Vinyl Composition Tile ("VCT") is utilized.
  - b. Rehabilitated units that have existing acceptable alternate flooring materials, such as hardwood, terrazzo, etc. may be allowed to maintain same. These situations will be reviewed on a case-by-case basis.
  - c. The use of LVT and LVP at minimum 0.13" thickness with vinyl base is an acceptable alternate to VCT and carpet flooring.
  - d. RIHousing shall evaluate the use of alternative floor covering material on a case-by-case basis.
2. Dwelling Unit Floor Coverings: Minimum standards for preferred coverings:
  - a. VCT – .080-gauge minimum thickness with 4" vinyl cove base.
  - b. In residential units, the use of LVT and LVP at minimum 0.13" thickness with 4" vinyl base is an acceptable alternate to VCT and carpet flooring.
  - c. Where carpet must be used, it will be restricted to dry areas within the unit and shall be a minimum 26 Oz nylon product with 6lb pad or commercial felt pad. Glue down carpet products are required at all Handicap units.
  - d. Rehabilitated units that have existing acceptable alternate flooring materials, such as hardwood, terrazzo, etc. may be allowed to maintain same. These situations will be reviewed on a case-by-case basis.
  - e. RIHousing staff shall evaluate the use of alternative floor covering material on a case-by-case basis.
  - f. Wood base is an acceptable alternate to vinyl for all flooring.
3. Community Space Floor Coverings:
  - a. Corridors: carpet 30-ounce minimum weight level loop, solution dyed nylon.

- b. Entrance Foyers/Vestibules: carpet (high traffic Berber weave, 40-ounce minimum weight) glued down with vinyl base, or quarry or other impervious material tile and base with protective entrance mat.
  - c. In foyers of scattered site developments VCT with vinyl base.
  - d. Men and Women toilet rooms: VCT .080-gauge minimum thickness with vinyl cove base or ceramic tile with ceramic tile base.
  - e. Stairs: rubber, vinyl, or carpet (level loop, 30-ounce minimum weight) stair treads and risers (full width of tread). The use of rubber stair treads is strongly encouraged. Install vinyl cove base at landings.
  - f. Office: VCT or Carpet.
  - g. Community Room: VCT .080-gauge minimum thickness with vinyl cove base.
  - h. LVT or LVP at minimum 0.13" thickness with vinyl base is an acceptable floor finish in corridors, offices, community rooms public restrooms and scattered sited development foyers.
4. Basements, utility rooms, etc. are to have 4" min. concrete floors treated with hardener/sealer or painted.

**C. Exterior Finish:** All exterior wood and hardi plank shall be painted with one coat of primer, and two coats of finish paint. Exterior siding may be stained with appropriate solid wood stains if desired. The use of high performance acrylic paints at exterior siding and trim components is strongly encouraged. Pressure treated wood must be finished with 2 coats of compatible stain.

- 1. Trim, Doors and Rails will receive a semi-gloss finish.
- 2. Siding shall receive a satin finish.

## **DIVISION 10 SPECIALTIES**

**A. Development sign,** in conformance with RIHousing standards, will be furnished and installed by the Contractor, who will remove it when construction is complete.

**B. Signage** (building and unit identification signage) – Permanent development signs shall be distinct, well-designed, easily readable, attractive and maintenance free. All rooms shall be clearly marked indicating office, restrooms, and community rooms, etc. Building Numbers – four (4) inch steel numbers, brass preferred.

- 1. Unit Numbers – three (3) inch aluminum numbers mounted to unit door.
- 2. ADA Regulations – All signs shall conform to ADA regulations. The development entrance sign shall be illuminated.

**C. Bathroom accessories to be provided:**

- 1. Medicine cabinet with light (recessed where possible)
- 2. Towel bars (min. 2) 24" long
- 3. Soap dish at sink and tub
- 4. Double robe hook

5. Shower Rod
6. Toilet paper holder

#### **D. Appurtenances**

1. Mailboxes – One (1) mailbox shall be supplied per dwelling unit and shall be in accordance with United States Postmaster requirements. Mailboxes shall be surface mounted on exterior with a lockable cover and magazine/newspaper holder. When cluster boxes are installed, planting buffers are required at perimeters.
2. Fire Extinguishers – One wall-mounted fire extinguisher shall be provided within reach of the stove in the kitchen in all dwelling units (UL Rated 2-A, 5lb. Minimum capacity). All common areas should have extinguishers located per code. (Exception) Fire Extinguishers do not have to be located within the unit kitchens where a building is equipped with common area fire extinguishers that are in full compliance with the RI State Fire Code for new or existing apartments.
3. Fire Stop Canisters. Each kitchen range hood will be outfitted with a pair of Fire Stop canisters to prevent kitchen fires.

### **DIVISION 11 EQUIPMENT Specify Energy Star Appliances**

#### **A. Refrigerator/Freezer** - two door frost free

1. 1 Bedroom – 14.5 cu. ft. min.
2. 2-4 Bedrooms – 18.0 cu. ft. min.
3. Handicap Units – Compliant with ADA requirements

#### **B. Range and Range Hood**

1. Range – 30” min with oven. Range in handicapped units equipped with front controls and self-cleaning oven
2. Range hood – Exhaust fan must perform between 100cfm and 125cfm when directly vented to the outside. In handicapped unit, locate the switch at front of base cabinet within UFAS/ADA limits.

#### **C. Washer/Dryer** - see Laundry Facilities under Division 15.

#### **D. Combination Microwave Range Hoods, Garbage Disposals, and Dishwashers**

1. Combination Microwave Range Hoods and Garbage Disposals are not considered standard equipment. However, if the development has sufficient non-RIHousing subordinate resources available then these appliances can be included within each apartment.
2. Dishwashers are considered standard equipment in all apartments but are not required.

#### **E. Allowable Appliance Finishes** - All standard enamel finishes are acceptable. Stainless steel appliances are not allowed.

## **DIVISION 12 FURNISHINGS**

### **A. Kitchen Cabinets or Residential Case Work**

1. All cabinets shall meet requirements for HUD severe-use. Cabinet doors will be equipped with raised or recessed panels and door knobs. The use of flat panel cabinet doors shall be reviewed on a case-by-case basis. Door pulls shall be installed in handicap accessible units.
2. Counter Tops: Materials - one-piece laminate with rolled front edge and backsplash. The use of high-end solid surface or stone counter tops are not allowed except for cultured stone vanity tops for use in bathrooms.

### **B. Bathrooms**

1. Vanity cabinets (including under-counter storage with doors) are required in all dwelling unit full and half-bathrooms except those designated for handicapped tenants and rehabilitated units utilizing existing lavatories not adaptable to vanity arrangements.

### **C. General**

1. Window Treatments – Window treatments should be non-dust collecting, such as fiberglass reinforced shades.
2. Vertical Blinds must be installed for Sliding patio doors.

## **DIVISION 13 SPECIALTY CONSTRUCTION**

**A. Lead Safe Construction:** Renovation work shall be completed in a lead safe manner as defined by the RI Rules and Regulations for Lead Poisoning Prevention (R 23-24.6-PB). Furthermore, HUD Lead Safe Housing Rule (24 CFR, Part 35) requires various levels of evaluation and treatment of lead paint hazards when federal money is used for housing rehabilitation. All friction surfaces within units shall be made lead free as defined by the aforementioned regulations. In addition, contracting firms must become certified with the EPA and must successfully complete an EPA-accredited renovator course for its workers. Furthermore, prior to tenant occupancy, post abatement clearance testing shall be required for all units, soils, exteriors, common areas and water. The developer is responsible for the hiring of an independent Rhode Island licensed lead inspector to conduct all pre and post abatement lead testing and clearance.

**B. Radon Protection:** All new construction and gut rehabilitation projects are required to install passive radon systems with wiring for future exhaust fans. All units with higher than EPA permissible exposure limits of 4.0 pci/l for radon gas exposure are required to install active radon systems. Radon testing is required pre and post construction in conformance with HUD, EPA and RIHousing protocols.

**C.** Please refer to the Section 5, Additional Recommended Practices, Environmental Guidelines, for compliance information.

## **DIVISION 14 CONVEYING SYSTEM**

- A.** Systems if required shall be installed per code.
- B.** Elevator motors shall be high efficiency motors.

## **DIVISION 15 MECHANICAL** Use Energy Star Rated Equipment.

### **General:**

1. Plan for a commissioning process (in large multi-unit buildings only) that will ensure that heating, ventilating and air-conditioning (HVAC) systems perform in conformity with design intent.
2. Commissioning Agent to provide Testing and Balancing Reports/Commissioning of systems in large multi-unit buildings only (i.e. Boilers and Furnaces greater than 200,000 BTU's will require commissioning). At a minimum, manufacturer start-up reports shall be required for all new furnace, boiler and HVAC equipment regardless of project size.
3. Housekeeping pads – 4" thick concrete to be provided for all mechanical equipment where not installed on lifts or wall mounted.
4. Ductwork shall be sealed with liquid mastic. Duct tape is unacceptable.
5. Ductwork and/or mechanical piping shall be soffited or boxed with solid construction material within all dwelling unit living spaces. Exposed spiral ductwork will be reviewed on a case-by-case basis and is encouraged in mill conversion buildings and commercial areas with high ceilings.
6. Air Conditioning Sleeves – While not mandatory, inclusion of through-wall sleeves to accommodate future air conditioning units is allowable for inclusion in new developments. If sleeves are installed, dedicated electrical service outlets shall be furnished to operate air conditioning units. Sleeves shall be insulated to the same R-value as the wall and weather sealed. A minimum of (2) AC sleeves per unit shall be installed and should be in the Living Room and/or Master Bedroom. Air Conditioner units are not considered standard equipment. If AC sleeves are not installed, then the owner must provide heavy duty AC brackets for future window AC installs. Specified brackets shall not void window warranties. In addition, developments that do not install AC sleeves, but have only one egress window located in any unit area, must utilize code compliant air conditioners that do not restrict window egresses in accordance with HUD's Uniform Physical Condition Standards (UPCS). Dedicated AC outlets shall be installed underneath at-least one LR & MBR window regardless of whether or not sleeves are installed.
7. Provide bathrooms with Energy Star rated continuous run or Smart Flow technology exhaust fan and light with integral timer and timer controls. Separate ceiling exhaust fan and light fixture with same function are an acceptable alternate. Ventilation must provide a minimum of 15 CFM per person (# occupants = # bedrooms +1).
8. Exhaust kitchen and bath moisture and odors to exterior. Recirculating range hoods are not acceptable.
9. Seal all utility penetrations with corrosion and rodent proof materials.

10. Install mechanical vents that penetrate buildings on painted blocking and locate at side or rear elevations of the building or rear roof areas, wherever possible. Vents should be modest in scale and color that blends into or compliments the façade.

#### **A. Heating:**

1. Habitable rooms must be provided with 68-degree (F) heat when the outside temperature is at the average yearly minimum for the locale. Wall mounted thermostatic controls are required for each dwelling unit heating system. Heating units with self-contained controls are not acceptable.
2. Existing heating systems, which are inoperative, hazardous or inefficient (under 75% efficiency per test) must be repaired to perform at a minimum 80% efficiency or be replaced. Ductwork and piping must be enclosed in all habitable areas. Boilers and furnaces must be located in fire resistant areas.
3. New heating systems shall operate at minimum, 90% EFVE for gas fired boilers, 87% EFVE for oil fired boilers. Steel boilers are not allowed.
4. Use sealed combustion gas/oil appliances only with external combustion air.
5. Size heating equipment for maximum efficiency.
6. Install ductwork in unconditioned spaces when no other solution is possible.
  - a. When ducts must be located in unconditioned spaces, insulate to R-5 insulation at minimum.
  - b. Ducts will be tested with duct blaster to be  $\leq 8\%$  total leakage and  $\leq 4\%$  leakage to outside.
  - c. Avoid unnecessary heating of unoccupied zones like entry, storage, mechanical, and utility areas.
7. Install boiler and furnace vent piping on painted blocking and locate vents at side or rear elevations of the building or rear roof areas only.
8. High Efficiency VRF (Variable Refrigerant Flow), Electric Heat Pump or Mini Split Systems rated for use in cold weather climates are an acceptable alternative to conventional heating and air conditioning systems.
9. The use of electric resistance heating systems is strongly discouraged unless the operation costs are offset by renewables.

#### **B. Hot Water Supply:**

1. Each dwelling unit shall be provided with hot water supply (individual or common) adequate to service the number of occupants and fixtures. Water heaters should produce at least 120°F water at all taps and be insulated. Relief valves and overflow pipes must be properly installed.
2. Hot water heaters shall be highly energy efficient or indirect storage tanks supplied and sized as follows:
  - a. Efficiency, one and two-bedroom units - 30-gallon hot water heater or central water heating system.
  - b. Three-bedroom unit - 40-gallon hot water heater or central water heating system.

- c. Four-bedroom unit - 55-gallon hot water heater or central water heating system.
- d. Properly sized and engineered high efficiency combi-boiler units, indirect fired water heaters or on-demand hot water heaters are acceptable alternatives to standard hot water tanks.
- e. Conventional electric resistance water heaters should be avoided to help ensure the required RNC Tier rating and Energy Star certification.

### **C. Plumbing Systems:**

1. Existing Structures: In rehabilitation of existing structures, the following shall be considered:
  - a. All newly installed plumbing fixtures shall meet the current published EPA water sense standards: <http://www3.epa.gov/watersense>.
  - b. Plumbing fixtures, fittings water lines and shut-offs must be free from leaking. Water-conserving plumbing fixtures, showerheads, and faucet aerators are required. Toilets cannot exceed 1.28 gallon per flush. Low flow shower head and sink aerators are also required.
2. Main Shutoff – There must be a main shutoff for each dwelling unit located either in the unit or interior to the structure and accessible. Install hot water heaters in rooms with drains or drip pans and floor coverings that are not water sensitive with easy to use shut off valves.
3. Exterior frost-proof hose bibbs are required at front and rear elevations minimum.
4. Pipe Insulation:
  - a. Insulate all hot and cold-water pipes for both domestic and mechanical use in uninsulated or unconditioned areas to conserve heat and minimize condensation. Large buildings require insulation on all domestic and mechanical hot and cold-water piping throughout the building. In handicapped units all exposed pipes shall be insulated with a protective insulative jacket.
  - b. Insulate interior rainwater conductors.
  - c. For hot and cold water and mechanical pipes up to 2", insulation shall be 1" thick. For larger pipes, insulation shall be 1.5" thick. For runouts insulation thickness shall be 1/2".
5. Avoid installing plumbing piping in exterior walls.
6. Install plumbing stacks at rear roof areas of each building. Consider black ABS piping at roof penetrations to better blend with roof shingles.

### **D. Fire Protection:**

1. Install smoke, heat and carbon monoxide detectors per code.
2. Fire alarms – per code. NOTE: All fire alarm wiring must be concealed in walls, ceiling, floors and chases, where possible. EMT that cannot be concealed must be installed along perimeter of room in inconspicuous locations and painted to match adjacent ceiling and/or wall areas.
3. Sprinklers – per code. Each riser should include tamper and flow switches tied to a central station alarm or fire department. NOTE: All fire protection piping must be concealed in

walls, ceiling, floors and chases, where possible. Piping that cannot be concealed must be installed along perimeter of room in inconspicuous locations and painted to match adjacent ceiling and/or wall areas. Escutcheon plates are to be installed at all wall/pipe penetrations. Sprinkler heads should be clean and free of paint or other materials that may compromise water flow.

#### **E. Security:**

1. Emergency call systems shall be installed in each unit in senior/disabled developments.
2. Security plans shall be provided for all developments.
3. Install security alarm/motion detector/camera monitoring systems in large buildings and buildings that house the elderly.

#### **F. Laundry Facilities:**

1. Large Properties: Accessible central laundry facilities shall be provided in all developments (one per 14 units, one washer/dryer to be ADA compliant), other than scattered site developments, and shall have floor drains. Energy Star rated washers and dryers shall be used if supplied at common Laundry rooms.
2. Clothes washer and dryer connections shall be provided within each handicap accessible dwelling unit where no central laundry facility is provided or is not easily accessible. If connections are supplied in every unit, the tenants are responsible to furnish and install laundry appliances.
3. Scattered site properties: Laundry equipment hook-ups (hot and cold water, electrical duplex outlet, 220V electrical dryer outlet, dryer vent to exterior) and floor drain assemblies shall be installed in the basements. The space provided shall accommodate separate washer and dryer. The manager or developer shall contract out or purchase and install coin operated washers and dryers.
4. Vertical washer and dryer stacked combination units are discouraged due to cost concerns.
5. Laundry equipment shall be installed in rooms with floor drains or drip pans with water resistant floor covering. All laundry facilities shall have water detection shut off devices and easily accessed shut off valves.

### **DIVISION 16 ELECTRICAL**

Use Energy Star Rated Equipment and Fixtures

**A. Service:** Per code with a minimum 100-amp service per dwelling.

**B. Metering:** Provisions for individual apartment metering of all utility use is required. Rhode Island State Law specifically prohibits the use of so-called "master meters" for measuring electric consumption in developments exceeding ten (10) dwelling units. Meters shall be installed on sides and rears of buildings and buffered with plantings wherever possible.



**C. Existing Structures:**

1. Existing service entrance shall be a minimum capacity of 100 amps and be in good condition and sized to safely service all outlets, fixtures and appliances proposed to remain or be newly installed during the rehab. Essential motors requiring 240 volts must have a separate dedicated circuit and outlet. All electrical modifications or updates must meet current code requirements.
2. Open circuit breakers, knockouts and/or gaps in the electrical panel, junction boxes, and other fixtures must be properly capped/blanked.

**D. Lighting:** Every habitable room must be provided with a light fixture or one outlet controlled by a wall switch. All new light fixtures must be LED Energy Star Compliant. Avoid installing high-end lighting fixtures.

1. Stairways within dwelling units must have at least one light controlled by a three-way switch; common stairways and hallways, three-way switches or automatic switching devices.
2. All exterior stairs must have a light fixture.
3. The dining area shall be provided with a ceiling light fixture.
4. Bathrooms shall have ceiling light fixture, medicine cabinet light fixture and exhaust fan. A GFI duplex convenience outlet is to be located close to sink.
5. Kitchens shall be equipped with at least one overhead light fixture and one light fixture located above the sink area.
6. Walk in closets and apartment laundry closet areas should be equipped with an overhead light fixture.
7. Use efficient outdoor LED light fixtures.
8. Interior and exterior building and site lighting shall be controlled by photocells or timers and must be designed using dark sky light fixtures and shields to minimize light pollution.
9. Building security flood lights should be equipped with motion sensors with photocell timers.
10. Site pole lights shall be residential in character and scale.

**E. Phone Connection:** Pre-wire for telephone service in accordance with the current regulations of the utility company. The pre-wiring shall include the installation of terminal boxes and interconnects resulting in a system ready for operation. Provide a minimum of one phone jack in each dwelling unit and management office(s).

**F. Cable Connection:** Install rough wiring and jacks for CATV outlets in each dwelling unit living room, all bedrooms, management office and in the Community Room, if one is provided.

**G. Miscellaneous:**

1. Install door bells at 1-3 Family apartments or first floor townhouse buildings.
2. Install intercom systems with electronic buzzers and door strikes in buildings with four or more units and two or more floors.

## Section 4. Appendix

### A. RIHousing Supplementary General Conditions

The following are to be incorporated into the Architect's specifications:

1. The Owner and Contractor acknowledge and understand that the work to be performed under this contract is to be financed by a construction loan to be secured by a mortgage. The terms of said loan are set forth in a Construction Loan Agreement between the Owner as a Borrower and RIHousing or another Construction Lender.
2. Changes in the Drawings and Specifications or any terms of the Contract Documents, or orders for extra work that add or delete from the work which will result in any construction cost change, or will change design, may be effectuated only with the prior written approval of the Owner and RIHousing and under such conditions as RIHousing may establish. RIHousing will allow the following combined overhead and profit for additional work resulting from approved change orders:

To the General Contractor, for work performed by its own forces.....12%

To any Subcontractor, for work performed by its own forces.....12%

To any General Contractor, for work performed by its Subcontractor.....8%

Note: All Change order requests must be submitted with itemized labor, materials, equipment and contract mark-ups for proper analysis.

3. The date of substantial completion shall be the date RIHousing endorses the final Development Inspection Report (RIHousing Form HF-30 "Permission to Occupy").
4. The Contractor shall attach to each request for payment its acknowledgment of payment and all subcontractor's and suppliers' acknowledgments of payment for work done and materials, equipment and fixtures furnished through the date covered by the previous payment. Concurrent with the final payment, the contractor shall execute a waiver or release of lien for all work performed and materials furnished thereunder, and the Contractor shall obtain similar waivers or releases from all subcontractors and suppliers.
5. Upon completion of construction, the Contractor shall furnish to the Owner an "as-built" survey showing the location of all improvements constructed thereon, and showing the location of all water, sewer, gas, electrical, and telephone lines and mains, storm sewers, and of all existing utility easements. Such survey shall be prepared by a licensed surveyor who shall certify that the work is installed and erected entirely upon the land covered by the Mortgage and within any building restriction lines on said land and does not overhang or otherwise encroach upon any easement or right-of-way of others.
6. The Contractor shall furnish and pay the premium for Performance and Payment Bonds equal to 100% of the contract price. Said bonds shall be in Dual Obligee form to the Owner and RIHousing. In lieu of said bonds, a letter of credit equal to 25% of the total construction cost may be provided by a bank approved by RIHousing.
7. RIHousing and its agents or assigns, at all times during construction, have the right of entry and free access to the development and the right to inspect all work done and materials, equipment and fixtures furnished, installed or stored in and about the development.
8. RIHousing reserves the right to request one (1) copy of all approved shop drawings, catalog cuts, samples, etc.

9. RIHousing will be furnished one (1) copy of all change orders. The Owner and Contractor acknowledge and understand that funding of approved change orders during construction are the responsibility of the Owner and must be obtained from sources outside of the Mortgage Loan. RIHousing will have the exclusive right of determination.
10. The Architect will perform field inspection services of a nature and frequency determined by construction progress and sound professional judgment. Field inspections will encompass all disciplines; e.g. architectural, mechanical, electrical, site, etc.
11. Field and laboratory testing service requirements to be paid for by the Contractor shall be incorporated into the technical specifications. These shall include, but not necessarily be limited to, soil compaction and analysis, concrete design, mix, concrete compression, pile load test. RIHousing shall be provided with copies of all test reports as these reports are available.
12. AIA Forms G702 and G703 (latest editions) will be utilized for Contractor requisitions.
13. Notwithstanding any agreements to the contrary between the Owner and the Contractor, the Lender will advance for construction monthly from mortgage proceeds 90% of the value of work in place and material stored on the development site. With the concurrence of the Owner, and upon written request, the Lender will consider a reduction of the retainage percentage from 10% to 5% upon 50% completion of the work included in the contract.
14. Notwithstanding any agreement to the contrary between the Owner and the Architect, the Lender will advance requisitions for architectural services during the construction administration/ supervision phase in increments proportional to the Contractor's progress billings. In no event will the Supervising Architect be paid in full prior to development final completion and project close-out.
15. Construction Completion – Mortgagors of all developments must assume financial responsibility for the completion of construction. Any cost overruns shall be the sole responsibility of the mortgagor.
16. Cost Certification – Cost certification for the developer and general contractor must be submitted at the completion of the construction period prior to the final advance of funds.
17. In-state Subcontractor Requirements – A minimum of seventy five percent (75%) of the value of the construction contract shall be awarded to Rhode Island construction firms. A Rhode Island construction firm shall be defined as a contractor/subcontractor whose place of business is located in the State of Rhode Island and is registered and/or licensed in the State of Rhode Island.
18. Non-Resident (Out of State) Contractor Tax Compliance – Notwithstanding anything herein to the contrary provided, in the event that any contractor or subcontractor is a “non-resident contractor” as that term is used in Section 44-1-6 of the General Laws of Rhode Island, as amended, Lender shall withhold 3% of the cumulative value of these contracts until such time as the Borrower has complied with the provisions of this Section. All non-resident (out of state) contractors or subcontractors shall be required to furnish a “No Tax Due” affidavit issued by the R.I. Division of Taxation as evidence of compliance with this law.

## **B. Equal Opportunity and Affirmative Action Rules and Regulations**

Section 1. Purposes Of Procedures: RIHousing has determined that a need exists to ensure that recipients of its funds under the Rental Housing Production Program do not discriminate in their hiring or contract practices on the basis of race, sex, national origin, age, religion, sexual orientation, handicap or status as a veteran. RIHousing has also determined that it is necessary to

take affirmative action to eliminate the vestiges of past societal discrimination and to ensure equal employment opportunities and social advancements for minorities and women. These Rules and Regulations set forth requirements established by RIHousing to ensure non-discrimination and affirmative action by Developers, Contractors, and Subcontractors, and shall be construed and applied so as to accomplish the objective stated above.

## Section 2. Construction of Rules and Regulations and Definitions:

Unless otherwise defined herein or unless a different meaning is required from the context in which they are used herein, all words and terms used in these Rules and Regulations are as defined in the Act.

1. “Act” means the Housing and Mortgage Finance Corporation Act more particularly set forth in R.I.G.L. 42-55 as amended.
2. “Affirmative Action Officer” (AAO) means the individual(s) appointed by the Executive Director to serve as AAO under these Rules and Regulations.
3. “Board of Commissioners” means the Board of Commissioners of the RIHousing and Mortgage Finance Corporation.
4. “Contractor” means an individual, corporation or partnership retained by a Developer to serve as a general contractor or construction manager in the construction of a development.
5. “Corporate Office” means 44 Washington Street, Providence, Rhode Island 02903.
6. “Development” means a multi-family residential housing complex developed under the Program.
7. “Executive Director” means the Executive Director of RIHousing.
8. “Hearing Officer” means the individual or individuals appointed by the Executive Director to serve as a Hearing Officer under these Rules and Regulations.
9. “Minorities” or “Minority” means person or persons who is included in any of the following racial and ethnic categories:
  - a. African American/Black – A person having origins in any of the black racial groups of Africa.
  - b. American Indian or Alaskan Native – A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition.
  - c. Asian or Pacific Islander – A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands.
  - d. Hispanic/Latino – A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
10. “Minority and Female Owned” means businesses in which at least fifty-one percent (51%) of the ownership interest is held by, and which are managed and controlled by minorities and/or women, and which have obtained written certification thereof from the state in which their principal office is located or from such other governmental or non-governmental office, board, commission, department, agency or entity satisfactory to RIHousing.

11. “Mortgage Loan” means a loan made to a Developer for the purpose of providing construction or permanent financing, or both, for a Development.
12. “Program” means the RIHousing Rental Housing Production Program.
13. “Proposal” means a written proposal for the construction, development and/or rehabilitation of a development.
14. RIHousing means RIHousing and Mortgage Finance Corporation, a public corporation organized and existing under the Act.
15. “Developer” means corporations, individuals, joint ventures, partnerships, limited partnerships, trusts, firms, associations, or other legal entities or any combination thereof, whether organized for profit or not, qualified either to own, construct, acquire, develop or rehabilitate a Development.
16. “Subcontractor” means individuals, corporations, joint ventures, partnerships, limited partnerships, associations, or other legal entities retained by a Developer or Contractor to render services, or services and material in connection with the construction or rehabilitation of a Development.
17. “Suspension” means disqualification of a Developer from participation in RIHousing’s programs and suspension of Developer’s rights to disbursements from Mortgage Loan.
18. “Total Construction Cost” means the total funds expended on the construction or rehabilitation of the Development.
19. “Total Work Force Hours” means the total number of worker-hours expended on the construction or rehabilitation of the Development.

### Section 3. Affirmative Action Obligations:

3.1 Generally – Through affirmative action activities provided for herein, the developer and or contractor shall use all reasonable efforts to ensure that ten percent (10 %) of the Total Work Force Hours are provided by Minorities and women. The Developer and or Contractor shall utilize Minorities and females, and Minority and Female Owned businesses, as Contractors and Subcontractors to the greatest extent practicable in the construction of the Development. The Developer and or Contractor shall include a statement regarding its non-discriminatory and affirmative action policies in all solicitations for Contractors and Subcontractors issued in connection with the Development. The Developer and or Contractor shall maintain records relating to all such solicitations, all responses received to solicitations (specifically identifying responses received from Minority and Female Owned businesses), and all awards made based on such solicitations and the reasons therefore. The Developer and or Contractor shall use its best efforts to ensure that at least ten percent (10%) of the Total Construction Costs shall be paid to Minority and/or females Contractors and Subcontractors, or Minority and/or Female Owned Contractors and Subcontractors. The Developer and or Contractor shall provide RIHousing with a schedule of anticipated awards to be made to Minority and Female Owned Contractors and Subcontractors prior to the initial closing of the Mortgage Loan.

3.2 Contractual Obligations – All contracts with a contract price of \$50,000.00 or more executed in connection with the Rental Housing Production Program development shall:

1. post a written notice of at least 8 inches by 11 inches in size in a conspicuous place in its principal office stating that it is an equal opportunity employer and does not discriminate

on the basis of race, sex, national origin, age, religion, sexual orientation, handicap or status as a veteran;

2. abstain from harassment, intimidation and coercion of employees based on race, sex, national origin, age, religion, sexual orientation, handicap or status as a veteran;
3. establish and maintain a current list of recruitment sources for Minority and female employees, provide written notification to such sources of employment opportunities, and maintain a record of each organization's response to each such notification;
4. maintain a record of the name, address and telephone number of each Minority and female applicant for employment, which record shall contain a statement regarding the action taken with respect to the application;
5. to the extent feasible, participate in area-based training programs for Minorities and women;
6. provide notice of its obligations under these Rules and Regulations to any union(s) with which it has entered a collective bargaining agreement, and to entities regularly conducting training programs within the area of its principal place of business, and request the assistance of such unions and entities in its compliance with these Rules and Regulations;
7. include a statement of its non-discriminatory practices in any company manuals, collective bargaining agreements it enters, and company newspapers or newsletters it produces;
8. notify the Developer in writing when signatory unions and bargaining agreements it has entered prohibit or deter its equal employment and affirmative action recruiting activities;
9. ensure that all facilities and activities under its control are non-segregated, except for the segregation by sex of toilet and changing facilities;
10. where feasible, employ Minority and female workers in summer employment and on-the-job training programs;
11. take such other steps as necessary to ensure that equal employment policies are implemented, and that recruitment job classifications and other employment procedures do not have a direct, or indirect discriminatory effect on Minority or female employees or applicants.

Section 4. Preliminary Information: Once funds have been reserved for a Rental Housing Production Program development, the AAO shall provide the Developer with a summary of the equal opportunity and affirmative action requirements contained in these Rules and Regulations, and a list of Minority and female contractors. Said list was compiled by the State of Rhode Island and amended by RIHousing.

Section 5. Pre-Construction Conference: At the Pre-Construction Meeting, RIHousing shall discuss the requirements of these Rules and Regulations and the Developer's affirmative action goals for the Rental Housing Production Program development with the Developer and all contractors chosen as of that date.

Section 6. Utilization Reports: The Developer shall submit to RIHousing monthly, a report of the total construction cost as of the date of said report, and shall specify therein, the total amount paid to Minority and female contractors and subcontractors or Minority and Female Owned contractors and subcontractors.

Section 7. Review Conference and On-Site Inspections: RIHousing may, anytime during construction or rehabilitation of a development, conduct such on-site inspection(s), reviews of the Developer's records and all contracts relating to the development, and conferences with Developer, contractors and subcontractors as it deems necessary to ensure compliance with these Rules and Regulations.

Section 8. Report of Discrimination Charges Filed: The Developer shall promptly notify RIHousing, in writing, of any charges it becomes aware of which have been filed with the Rhode Island Commission of Human Rights, the United States Equal Employment Opportunity Commission or any other agency alleging discrimination by the Developer, or any Contractor or Subcontractor in connection with the development.

Section 9. Suspension of Developers and/or Contractors:

9.1 Generally – Suspension is a measure which may be invoked by RIHousing either to exclude or to disqualify a Developer and/or a Contractor from participation in any of the RIHousing's programs. Suspension shall be used to ensure compliance with these Rules and Regulations and not for punitive purposes. The exclusion or disqualification of a Developer and/or a Contractor from participation in RIHousing's programs, and the reconsideration of such measures, shall be based upon all available evidence and facts. Investigations required to accumulate such facts and evidence shall be conducted by the AAO or by such other individuals as may be designated by the Executive Director from time to time.

9.2 Notice of Violation – In the event that it is determined that a Developer and/or a Contractor is in violation of these Rules and Regulations, the AAO shall notify the Developer and/or a Contractor of such violation(s) in writing by certified or registered mail. Said notice shall: specify the violation(s); request the developer and/or contractor to correct the violation(s) within fifteen (15) business days from receipt of said notice; and, inform the Developer and/or Contractor of possible suspension for failure to rectify the violation(s) within said period. The Developer and/or Contractor shall, within the allotted time, rectify the violation(s) and provide evidence of compliance satisfactory and acceptable to the AAO. In the event the Developer and/or Contractor fails to rectify the violations and produce sufficient evidence of compliance, the AAO may recommend to the Executive Director that the Developer and/or Contractor be suspended.

9.3 Suspensions – The Executive Director shall review all findings and recommendations of the AAO and may suspend any developer and/or contractor who fails to comply with these Rules and Regulations. Said suspension shall be in full force and effect until the Developer and/or Contractor can demonstrate, to the satisfaction of the Executive Director, that the violation(s) has been corrected and that steps have been taken to insure future compliance with these Rules and Regulations.

1. Effects of Suspension – The Developer and/or Contractor may not obtain any advances or payments due under any existing loan agreement with RIHousing nor participate in any RIHousing programs. The Executive Director may waive these limitations if it is determined that the limitations will adversely affect the community to be served, the development/proposal has some unique value or that the limitations are not in the best interest of the public.

2. Notice of Suspension – The Developer and/or Contractor shall be served by certified mail, return receipt requested, with a written notice of suspension within five (5) days prior to the effective date of the suspension. The notice shall state: the basis for the suspension; that the suspension is effective until compliance has been documented; that the Developer and/or Contractor may not participate in any program of RIHousing during the term of the suspension; that all rights of the Developer and/or Contractor under all loan agreements with RIHousing shall be suspended until reinstatement of the Developer and/or Contractor; and, that the Developer and/or Contractor may request a hearing and be represented by counsel at the hearing.

#### Section 10. Hearings:

10.1 Requests for Hearings – The Developer and/or Contractor may request a hearing on the suspension and may be represented by counsel at the hearing. The hearing request shall be made in writing, addressed to RIHousing at the Corporate Office and to the attention of AAO. The Developer and/or Contractor shall have ten (10) days from receipt of notification of suspension to request a hearing. If no request is received by RIHousing within the time period, the Developer and/or Contractor shall be deemed to have waived its right to be heard, and final action on the proposed suspension may be taken.

10.2 Notice and Procedures – Upon receipt of a request for a hearing, the AAO shall arrange a prompt and timely hearing. Notice of the time and place of such hearing shall be in writing, and delivered to all interested parties by certified mail, return receipt requested, together with a statement indicating the nature of the proceedings. All hearings shall be conducted in accordance with Section 42-35 of the General Laws of the State of Rhode Island of 1956, as amended, by a Hearing Officer. All witnesses shall testify under oath or affirmation and shall be subject to cross-examination.

10.3 Determination by Hearing Officer in Suspension Hearings – The Hearing Officer shall make a written determination and recommendation to the Executive Director based on all evidence presented at the hearing. All interested parties shall be notified of said determination by certified mail, return receipt requested. The Executive Director shall review the findings of the Hearing Officer and issue a final determination on suspension of the Developer and/or Contractor within thirty (30) days from the date of the hearing. Notice of the Executive Director's determination shall be given to all interested parties in writing, signed by the Executive Director and transmitted by registered mail, return receipt requested.

10.4 Powers of Hearing Officer – While conducting hearings, the Hearing Officer shall have all powers necessary to conduct hearings in an expeditious and fair manner. The powers of the Hearing Officer shall include, but not be limited to, the power to:

1. Hold conferences to settle, simplify, or fix the issues in a proceeding, or to consider other matters that may aid in the expeditious disposition of the proceeding by consent of the parties or upon his own motion;
2. Require parties to state their position with respect to the various issues in the proceeding;
3. Require parties to produce for examination those relevant witnesses and documents under their control;
4. Rule on motions and other procedural items on matters pending before him/her;



5. Regulate the course of the hearing and conduct of the participants therein;
6. Receive, rule on, exclude, or limit evidence, and limit lines of questioning of testimony which are irrelevant, immaterial or unduly repetitious;
7. Fix time limits for submission of written documents in matters before him/her;
8. Impose appropriate sanctions against any party or person failing or refusing to follow or to obey an order under these procedures which sanctions may include;
  - a. Refusing to allow the party to support or oppose designated claims or defenses, or prohibiting him/her from introducing designated matters in evidence,
  - b. Excluding all testimony of an unresponsive or evasive witness,
  - c. Expelling any party or person from further participation in the hearing.
9. Take official notice of any material fact not appearing in evidence in the record, which is among the traditional matters of judicial notice.

Section 11. Rescission and Reinstatement: The Developer and/or Contractor against which a suspension has been invoked may request reinstatement in writing. Reinstatement proceedings shall be conducted by the AAO. All recommendations of the AAO for reinstatement shall be submitted to the Executive Director for final approval. Reinstatements may only be granted upon the determination that the matter or matters resulting in suspension have been rectified, and that the suspended party shall comply with all requirements of these Rules and Regulations in the future. When a suspension has been rescinded, the Executive Director shall forward notice of reinstatement to the Developer and/or Contractor by certified mail, return receipt requested.

Section 12. Substitute Policies or Procedures: A Developer and/or Contractor subject to other equal employment and affirmative action laws, regulations, procedures or policies ("Substitute Regulations") of any federal or state agency, board or commission may request that RIHousing accept compliance with such Substitute Regulations in lieu of compliance with these Rules and Regulations if such Substitute Regulations are substantially similar to the requirements of these Rules and Regulations. All such requests shall be made in writing to the Executive Director of RIHousing and shall set forth the requirements of such Substitute Regulations. All decisions of the Executive Director regarding such Substitute Regulations shall be final and binding on the parties.

NOTE: Projects with Federal Funding will require additional supplementary conditions pertaining to Section 3 Reporting and may require Davis Bacon reporting requirements.

### **C. Development Sign Specifications**

We require that a development sign be displayed at each job site in order to provide proper development identification and furnish information to assist prospective residents. A layout of the mandatory design is below.

Prior to the start of construction, the Contractor and/or the Developer shall contact the Development Officer for the development to order the development sign. RIHousing will design and order the development sign for installation. The contractor is responsible for installing the development sign provided by RIHousing at the development site. Contractors will be billed for the cost of the development sign and should budget at least \$1,000 for the sign. Contractors and developers should contact RIHousing for the most current signage pricing.

In addition, the sign shall be placed not less than 36” from grade. Sign posts shall be 4’x4’ with horizontal bracing as needed. The sign location must be approved by RIHousing. Developers may erect an additional sign, but its location must be more than 50’ from the RIHousing sign.



**ABC Apartments/Development**

Developer  
**ABC Developer**

Architect  
**ABC Architect**

General Contractor  
**ABC Contractor, Inc.**

For information, contact:  
Jane Doe  
555-555-5555  
email@email.com

**RIHousing**  
www.rihousing.com



## **Lead Hazard Reduction Policy**

Any building constructed prior to 1978 may have lead-based paint (LBP). Sponsors seeking financing from RIHousing will be required to have appropriate testing of painted surfaces performed, and if positive results are obtained, will be required to perform lead hazard reduction and/or abatement in accordance with the most stringent state or federal requirements.

All units receiving financing from RIHousing must comply with the State of Rhode Island Rules and Regulations for Lead Poisoning Prevention. In all cases involving work on existing buildings, lead-safe construction techniques shall be utilized. Demolition and rehabilitation work creates potentially dangerous situations for workers as well as children living in abutting properties. Therefore, construction work financed by RIHousing will be expected to comply with state law, Rhode Island Department of Health Regulation R 23-24.6 PB and federal regulation under Sections 1012 and 1013 of the Residential Lead-Based Paint Hazard Reduction Act of 1992, Title X regarding lead-safe hazard reduction.

### **Projects Not Funded with Federal Funds**

All units financed through RIHousing with only state funding and no HUD funds in the project will be subject to the following minimum lead clearance standards depending on the type of construction:

1. **All new construction:** analytical testing to determine lead in soil and water supply lines; units are assumed to be lead-free.
2. **Mixed new construction and rehabilitation:** lead-safe or lead-free certificates for all units and common areas, building exterior, soil and water supply lines.
3. **Rehabilitation:** lead-safe or lead-free certificates for all units and common areas, building exterior, soil and water supply lines.

**Lead-safe or Lead-free certificates must be issued for all units and common areas, building exterior, soil and supply line water prior to tenant occupancy.**

The following types of properties may be exempt from this regulation. However, RIHousing will assess if a property is exempt on a case by case basis.

- > Housing built subsequent to 1978 (when lead paint was banned for residential use).
- > Housing exclusively for the elderly or people with disabilities, unless a child under age 6 is expected to reside there.
- > Zero bedroom dwellings, including efficiency apartments, single-room occupancy, or dormitory housing, unless a child under the age of 6 is expected to reside there.
- > Property that has been found to be free of lead-based paint by a certified environmental lead inspector.
- > Unoccupied housing that will remain vacant until it is demolished.
- > Non-residential property.
- > Any rehabilitation or housing improvement that does not disturb a painted surface.

Units determined to have lead hazards may be eligible for State and Federal Lead Hazard Reduction funding. Contact RIHousing at 401-450-1350 to discuss eligibility. All lead hazard reduction work must be performed in accordance with state law and the Rhode Island Department

of Health Regulation R 23-24.6 PB, which requires the use of state-licensed lead contractors and inspectors.

**Note:** For general lead related questions or questions related to the rehabilitation of public housing and Section 8 related rehabilitation, please contact Charles Pytel (401-457-1265 or [cpytel@rihousing.com](mailto:cpytel@rihousing.com)) for more information on the additional HUD LBP standards required under Part 35.

### **Projects Funded with HOME and Other Federally Funded Programs**

In addition to meeting State requirements as stated above, Sponsors seeking financing or assistance through federally funded programs must also comply with federal regulations at **§24 CFR Part 35<sup>1</sup>**. For RIH administered funds, this includes HUD-funded project-based and tenant-based rental assistance as well as HOME, the Housing Trust Fund (HTF) and other programs used to fund the acquisition, rehabilitation or construction of affordable housing.

For HOME and HTF funded rehabilitation of housing, pre-1978 properties that are not determined to be exempt are subject to the HUD LBP standards at 35.900 - .930, which requires (beyond State lead requirements):

- Risk assessments of the entire property by a certified risk assessor (when federal rehabilitation assistance exceeds \$5,000 per unit);
- Abatement of interior lead hazards by a certified abatement contractor (when federal rehabilitation assistance exceeds \$25,000 per unit); and
- Clearance under federal standards.

For questions about our HOME and HTF lead hazard reduction policy contact Tony A’Vant (401-457-1103 or [tavant@rihousing.com](mailto:tavant@rihousing.com)).

*Updated August 2018.*

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<sup>1</sup> <http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=e1741143a75841f15fcfd930d325ac2b&rgn=div5&view=text&node=24:1.1.1.1.24&idno=24>

<b>Typical List of Deliverables for Design &amp; Construction Review</b>	
<b>A project specific list will be developed for each individual transaction</b>	
<b>Architect Doc</b>	
Waiver of Corp. Design Req. (if applicable)	Before Firm
AIA from B305 Qualification Statement	Before Firm
Owner/Architect Agreement AIA/B101 - Draft	Before Firm
Owner/Architect Agreement AIA/B101 - Final	Post Firm
Architect Insurance Certificate	Post Firm
Architect Design Certification (RIH form)	Post Firm
Section 504/ADA/Fair Housing Approval	Post Firm
Consent of Architect Agreement	Post Firm
<b>Architectural Exhibit</b>	
Drawings 50% Complete	Before Firm
Drawings 90% Complete	Before Firm
Final Plans and Specs	Before Firm
<b>Contractor Docs</b>	
AIA Form A305 Qualification Statement	Before Firm
Contractor Registration card	Before Firm
Contractor's 3 Yr Financials	Before Firm
Contractor's Credit Report	Before Firm
Construction Schedule	Before Firm
Construction Cost Breakdown - Schedule of Values	Before Firm
Owner/Contract Agreement - AIA - A101 w/ AIA A201 (bid) Draft	Before Firm
Owner/Contract Agreement - AIA - A101 w/ AIA A201 (bid) Final	Post Firm
Bid Results	Before Firm
Owner/Contract Agreement - AIA - A102GMP w/ AIA A201 (neg) DRAFT	Before Firm
Owner/Contract Agreement - AIA - A102GMP w/ AIA A201 (neg) FINAL	Post Firm
RIH Affirmative Action Plan	Before Firm
Statement of Davis Bacon Applicability	Before Firm
Contractor's Insurance Certificate	Post Firm
List of Subcontractors	Before Firm
Payment & Performance Bonds or Letter of Credit	Post Firm
Clerk of the Works Contract (if applicable)	Before Firm
Consent of Contractor	Post Firm
Owner Insurance Policy with Builder's Risk Coverage or similar	Post Firm
<b>Environmental / Building Reports</b>	
RIH Environmental Standards provided to Borrower	Before Firm
Environmental issues sited in plans and specs?	Before Firm
REAC Report (if applicable)	Before Firm
CNA Reports for preservation or moderate rehabilitation	Before Preliminary
Property Maintenance Inspection for Rehab Units	Before Firm

## Typical List of Deliverables - Page 2

<b>Environmental / Building Reports - Continued</b>	
Phase 1 Reports	Before Preliminary
Phase 1 Update	Post Firm
Phase 2 Report (if applicable)	Before Firm
Asbestos Survey	Before Firm
Asbestos O&M Plan	Before Firm
Asbestos Abatement Plan w/DOH Approval	Before Firm
Asbestos Contractor License	Post Firm
Lead Survey	Before Firm
Lead Remediation Plan	Before Firm
Lead Contractor License	Post Firm
Radon Survey	Before Firm
PCB Survey (if applicable)	Before Firm
Mold Survey	Before Firm
Structural and Building Envelope Reports	Before Preliminary
Fire Code Report	Before Firm
UST RIDEM Certificate of Closure (if applicable)	Before Firm
Elevator Inspection (ADA, Fire & Service) (if applicable)	Before Firm
Existing HVAC and Major Systems Test Reports (if applicable)	Before Firm
Security Plans	Before Firm
<b>Evidence of Utilities</b>	
Electric	Before Firm
Heating Fuel (Gas, Propane, Oil)	Before Firm
Water	Before Firm
Sewer	Before Firm
Cable/Broadband	Before Firm
Telephone	Before Firm
Storm water utility letter; NBC	Before Firm
Fire Water Service - (Include Flow Test)	Before Firm
Trash	Before Firm

## Typical List of Deliverables - Page 3

<b>Surveys</b>	
Draft ALTA Survey	Before Firm
Survey Report	Post Firm
Survey Certificate	Post Firm
Legal Description	Before Firm
Property Easements / Agreements	Before Firm
Final ALTA Survey	Post Firm
<b>Site Approvals</b>	
RIH Confirm Environmental Review	Before Firm
Master Plan Approval	Before Firm
Preliminary Plan Approval	Before Firm
Final Plan Approval	Before Firm
Subdivision Approval	Before Firm
Zoning Certificate	Before Firm
Flood Zone Approval	Before Firm
Wetland Approval	Before Firm
CRMC Approval (if applicable)	Before Firm
Building Variances	Before Firm
Zoning Variances	Before Firm
Impact Fee Variance (if applicable)	Before Firm
Fire Code Variances / Approvals	Before Firm
Remedial Action Workplan - DEM	Before Firm
Geotechnical and Soil and Foundation Reports to be provided as part of applications for new construction, additions & sites with major underground utilities/infrastructure	Before Preliminary
Building Permits	Post Firm
Curb Cuts	Post Firm
Storm water Protection Permit / DEM Approval	Before Firm
RIDOT Physical Alteration Permit	Before Firm
Historic 106 Approval	Before Firm
Historic Part 1 Approval (if applicable)	Before Firm
Historic Part 2 Approval (if applicable)	Before Firm
Historic Part 3 Approval (if applicable)	Before Firm
Historic District Approval (if applicable)	Before Firm
RIDEM Insignificant Alteration Permit	Before Firm

## Section 5: Additional Recommended Practices

The following information includes building practices associated with Energy Efficient Construction, Healthy Home, Green Building, Defensible Spaces and Universal Design. The developer should become familiar with these recommended practices and consider implementing them in their developments when feasible, even if not otherwise required.

### ENERGY EFFICIENT CONSTRUCTION

For additional information regarding Energy Efficient Construction and the Rhode Island Energy Code, National Grid has developed a Field Guide for Residential New Construction. It can be found at:

<https://www1.nationalgridus.com/files/AddedPDF/Field%20Guide%20RI,%20Final.pdf>

**\*Refer to Section 1 of the Developer's Handbook for a complete listing of energy efficiency programs currently offered through National Grid.**

### Healthy Home Practices

- Avoid putting plumbing in exterior walls.
- Use cement board, fiber cement board or cement plaster as an air barrier in wet areas such as behind tubs or showers.
- Avoid putting duct work and air handlers in unconditioned spaces because of air leakage.
- Insulate water pipes (Hot and Cold) (Domestics and Mechanical).
- Do not install carpet in wet areas (e.g. bathrooms, laundry rooms, kitchen, entryways and damp basements. Use smooth surfaces that do not act as reservoirs for moisture/mold and that can be washed. (e.g. vinyl, wood, tile, rubber). Whenever possible, install smooth and washable surfaces in other rooms/areas/ e.g. common areas, bedrooms, living rooms). Carpet can trap moisture and dust. They can become a breeding ground for mold; smooth clean surfaces do not trap moisture and are easier to clean. Provide at least one bedroom with hard surface flooring (VCT, hardwoods).
- Ensure that exterior claddings have drainage plains between the cladding and the house wrap material. Drainage plains provide a pathway to allow water to run away from the structure and avoid creating a reservoir behind the claddings.
- Back prime exterior, paintable cladding materials (paint back, front edges and ends of wood. This helps prevent claddings from absorbing moisture and eliminates a potential reservoir.
- Install power vented fans or range hoods that exhaust to the exterior when gas cook tops and gas stoves are present.
- Seal forced ductwork particularly on the return (suction) side when gas cook tops are present. This helps avoid negative air pressure that can draw contaminants (radon soil gas) into homes from far below grade or smoke indoor odors from far below grade or smoke and odors from neighboring units.
- Pest Free - Seal all utility openings and joints between openings. Avoid materials that rodents can chew. Use corrosion proof materials (e.g. copper or stainless steel mesh). Reducing the hole minimizes pathways for rodents and pests.
- Implement a no smoking policy in the buildings during construction and occupancy.
- Eliminate wet carpet cleaning. Use HEPA filters on vacuum cleaners.



- Eliminate pesticide and herbicide use on and around buildings.
- Design ventilated separate storage for cleaning supplies and paints.
- Incorporate Healthy Home Design features as described in the Asthma Regional Council's Healthy Housing Guidelines.
- Encourage the use of no or low VOC (below 20g/liter) paints, primers, finishes and stains.
- Use low or no formaldehyde composites in cabinets and vanities (i.e. MDF Board).

### **Green Building Practices**

- Utilize materials that are durable and long lasting.
- Utilize materials that are cost effective and easy to maintain.
- Use natural resources and materials efficiently, use materials and products based on their life cycle environmental impacts.
- Conserve water usage, reduce run-off.
- Maximize energy conservation and efficiency, use renewable energy resources.
- Reduce building footprints and maximize space efficiently.
- Optimize building orientation; integrate natural daylight and ventilation.
- Eliminate harmful and toxic materials and finishes in buildings.
- Preserve existing structures through rehabilitation.
- Use regionally manufactured building materials when possible.
- Use a construction minimal waste plan during construction.
- Provide adequate space for comprehensive trash recycling.
- Use engineered structural lumber products and advanced framing techniques.
- Use of gypcrete underlayment over a properly prepared subfloor prior to installing finish flooring materials. Gypcrete provides sound insulation and fire protection.
- Use MDF board as a substitute for interior running trim on base boards, chair rails and window and door trim.
- Discourage the use of drywall returns at the window area in lieu of wood/MDF casings.
- Recommend low VOC hard surface washable flooring products where possible.
- Consider using recycled content insulation to meet required insulation levels.

### **Defensible Spaces Practices**

Defensible spaces are areas that make transgressors feel observed and uncomfortable. Defensible spaces have clearly defined boundaries and take away the feeling of “No Man’s Land”. Some examples are:

- Clearly demarcated exteriors (fences, shrubbery, etc.); Good exterior lighting to eliminate hiding places.
- Removal of visual barriers such as high, solid fences and other screenings that will obscure view.
- Avoid setting the front of the building too far back from the street to keep the building observable to neighbors.
- Eliminate long corridors in apartment buildings.
- Cluster entrances to apartments to enable the tenant the ability to “watch out” for their neighbors.
- Provide a sense of community for apartment residents.

- Provide ability of tenants to observe who is in the building, i.e. fixed windows with view into the hallways and courtyards.
- Limited access into buildings or apartments.
- Encourage residential attitudes and behavior to enforce defensible practices.
- Planting buffers located between tenant yard spaces are strongly encouraged for defensible space and privacy.
- Establish proprietary spaces farther away from buildings, including plots for gardening.

### **Universal Design Practices**

Universal Design is an approach to design that incorporates products as well as site and building features which, to the greatest extent possible, can be used by everyone including people with functional limitations. It doesn't call undue attention to these functional limitations.

- Ability to live on one floor is preferred.
- Open floor plans.
- Sense of security and comfort.
- Wider and deeper stairs in multi-level buildings.
- Closet shelving in adjustable heights.
- 3 ft. wide interior doors.
- Lever door handles.
- Non slip flooring with flush thresholds.
- Outlets minimum of 18" above floor.
- Light switches 48" above floor.
- Thermostats at easy to read locations and elevations.
- Sufficient floor space for workflow.
- Single lever faucets.
- Pulls rather than knobs on cabinet drawers and doors.
- Roll out shelves or drawers in lower cabinets.
- Multi-purpose spaces such as desk/seated work counters/eating areas.
- No raised threshold bathroom doors.
- Increased use of support rails and non-slip flooring in bathrooms.
- Easy maintenance shower heads and faucet with self-cleaning features.
- Shower seat.
- Hand held shower spray with 60" hose.
- Wall blocking for future grab bars.
- Consider installing cable receptacles in all unit bedrooms.

# ENVIRONMENTAL GUIDELINES

Environmental concerns have recently emerged as one of the most potentially serious problems facing the real estate industry. Recognizing this, RIHousing finds it necessary to establish policy guidelines to be followed in connection with its underwriting and administrative processes applicable to the Rental Housing Production Program. These guidelines are intended to address, but not necessarily be limited to, RIHousing's concern with the environmental effects of the following:

- Hazardous waste deposits
- Lead based paint
- Asbestos
- Radon
- Underground storage tanks (UST's)
- Noise pollution
- Air Quality
- Ground water quality
- Mold
- Polychlorinated biphenyl (PCB's)

**APPLICATION:** All applications for financing must include a signed statement from the Developer which shall include a disclosure of the Developer's knowledge of any past or present environmental impact on the proposed site, a summary of corrective action previously taken or proposed to be taken, if applicable and a list of authorities having jurisdiction (i.e. DEM, EPA, etc.).

RIHousing will routinely conduct a site inspection of each property submitted as part of its underwriting process. Part of this inspection will involve a physical survey of the site and abutting areas to identify any potential or suspicious environmental problems. Based on the conclusions of the survey, RIHousing will determine minimum requirements, if necessary, for further investigation and/or corrective action.

**HAZARDOUS MATERIAL DEPOSIT:** As lender, RIHousing will exercise due diligence to sufficiently satisfy itself that the loan collateral is free from any negative environmental impact. This will be accomplished by requiring (1) an environmental assessment of the property prior to Firm Commitment and (2) ongoing confirmation, subsequent to closing that the property is maintained in an environmentally sound manner.

The environmental assessment requirement will consist of the following:

1. An evaluation of any disclosures submitted by the Developer with the loan application.
2. An evaluation based on the observations made during RIHousing's site inspection.
3. A Phase I environmental site assessment based upon the ASTM E1527-13 standards.
4. Depending on the conclusions and recommendations of the Phase I assessment, a Phase II site assessment may be required. Both Phase I and II assessments are further described below.
5. Phase I Environmental Site Assessment (ESA) - The report must have been within the last 180 days (or 6 months). It can be updated between 6-12 months. A new report is required after 12 months.

A Phase I environmental site assessment is principally a screening process to quickly determine if sufficient information is available to clearly evaluate the environmental status of the property and focuses on: (1) a review of available documents; (2) interviews with persons familiar with site operations; and (3) a physical inspection of the site and adjoining properties. The site assessment must follow the most recently revised version of ASTM. In cases where the Phase I conclusions are of an adverse or questionable nature, a Phase II assessment is required. A Phase II assessment involves a more detailed site inspection and review of historical records. The purpose of this assessment is to determine the presence or absence of a questionable hazard (i.e. asbestos, lead, radon, mold, leaking UST, PCB) or to quantify the extent of an observed or suspected hazard, such as ground water contamination. Based on the results and conclusions of the Phase II assessment, further testing and/or investigation may be necessary, usually to identify specific hazards and sources.

Both Phase I and II assessments must be performed by professionals qualified in the field of environmental consulting. Consultants shall demonstrate the firm's personnel have adequate and appropriate education and training to carry out the required tasks. In addition, consultants must be able to demonstrate successful experience in their areas of expertise, such as letters of reference, certification, or licensing by a professionally recognized or governmental authority, or successful completion of work of a similar nature to that proposed to be done. Unacceptable, for instance, would be a situation where a firm having experience only in asbestos abatement is proposed to perform ground water tests.

It should be noted that some properties may have conditions which are either acceptable (i.e., within established safe limits as determined by authorities having jurisdiction) or have been corrected in an approved manner but must be monitored for the term of the loan by instituting an operations and maintenance program (O & M program). An example of a condition requiring an O & M program is the confirmed existence of asbestos, the hazard having been corrected by approved encapsulation. While the danger from the asbestos material has been acceptably abated, measures must be undertaken to ensure that the protective covering is maintained in an undamaged condition and that people are made aware of the potential hazard. Such O & M programs will be required to be incorporated into any approved Management Plan.

The approved Management Plan and Management Agreement shall contain provisions requiring the agent to monitor and report any suspected environmental threat or condition which could have an adverse impact on the property or residents. In addition to notifying RIHousing, all actions necessary to ensure that any known violations of applicable environmental statutes are reported to the appropriate local, state or federal authorities shall be taken.

**LEAD SAFE HOUSING RULE:** U.S. Department of Housing and Urban Development Office of Health Homes and Lead Hazard Control, Washington DC 20410 ([www.hud.gov/offices/lead](http://www.hud.gov/offices/lead)) Revised June 21, 2004. The Lead Safe Housing Rule applies to the Low-Income Housing Credit Program, when the HUD Uniform Physical Conditions Standards (UPCS) are used by the state housing agency for monitoring purposes. The Lead Safe Housing Rule is part of the UPCS [24 CFR 5.703(f)]. Resources for information about lead hazards and prevention: (1) National Lead Information Center (800-424-LEAD, [www.epa.gov/lead/nlic.htm](http://www.epa.gov/lead/nlic.htm)): Information about lead hazards and prevention (EPA, HUD, CDC); (2) Lead Listing ([www.leadlisting.org](http://www.leadlisting.org)): Lists of certified firms, training providers, etc.; (3) Lead Regulations Hotline: 202-402-7698 and [lead\\_regulations@hud.gov](mailto:lead_regulations@hud.gov); (4) HUD lead website ([www.hud.gov/offices/lead](http://www.hud.gov/offices/lead)): Regulatory and guidance information, general lead information; and (5) EPA lead website ([www.epa.gov/lead](http://www.epa.gov/lead)): Info about lead, lead hazards, and protective

steps. Any building constructed prior to 1979 may have lead-based paint. Developers seeking financing from RIHousing will be required to have appropriate testing of painted surfaces performed, and if positive results are obtained, will be required to perform lead-paint hazard reduction in accordance with the most rigid local, state or federal requirements.

All units receiving financing from RIHousing must comply with the Rhode Island Rules and Regulations for Lead Poisoning Prevention. In all cases, lead safe construction techniques shall be utilized. Demolition and rehabilitation work creates potentially dangerous situations for workers as well as children living in abutting properties. Therefore, construction work financed by RIHousing will be expected to comply with State law, RI Department of Health Regulation R 23-24.6PB and Federal regulations under sections 1012 and 1013 of the Residential Lead-Based Paint Hazard Reduction Act of 1992, Title X regarding lead hazard reduction. HUD Lead Safe Housing Rule (24 CFR, Part 35) requires various levels of evaluation and treatment of lead paint hazards when federal money is used for rehabilitation of target. More information is available at:

[http://portal.hud.gov/hudportal/documents/huddoc?id=DOC\\_12347.pdf](http://portal.hud.gov/hudportal/documents/huddoc?id=DOC_12347.pdf).

In addition, On April 22, 2008, EPA issued [a rule requiring the use of lead-safe practices](#) and other actions aimed at preventing lead poisoning. Under the Renovation, Repair, and Painting Rule (RRP), beginning in April 2010, contractors performing renovation, repair and painting projects that disturb lead-based paint in homes, child care facilities, and schools built before 1978 must be certified and must follow specific work practices to prevent lead contamination. Contracting firms must become certified with the EPA and must successfully complete an EPA-accredited renovator course for its workers.

In addition, all units financed through RI Housing programs will be required to achieve a minimum of lead-safe status as defined in Section c.1.0 of the Rhode Island Rules and Regulations for Lead Poisoning Prevention. All friction surfaces (i.e. windows and doors) shall be addressed by the lead hazard reduction methods, as defined in the RIDOH regulation 12.1(d). A lead-safe certificate is required for each unit prior to final disbursement of funds.

The following types of properties may be exempt from these regulations. However, RIHousing will assess if a property is exempt on a case-by-case basis.

- Housing built subsequent to 1979 (when lead paint was banned for residential use).
- Housing exclusively for the elderly or people with disabilities, unless a child under age 6 is expected to reside there.
- Zero bedroom dwellings, including efficiency apartments, single-room occupancy, or dormitory housing, unless a child under the age of 6 is expected to reside there.
- Property that has been found to be free of lead-based paint by a certified lead-based paint inspector.
- Unoccupied housing that will remain vacant until it is demolished.
- Non-residential property.
- Any rehabilitation or housing improvement that does not disturb a painted surface.

**RADON:** Existing buildings proposed to be rehabilitated and proposed new construction sites shall be surveyed for the existence of radon levels exceeding the maximum safe limits as established by local, state or federal authorities. For those locations considered at risk due to elevated radiation, appropriate design and construction requirements will be imposed to mitigate the problem. Radon testing must be completed in strict conformance with HUD, EPA, Rhode

Island Department of Health and RIHousing Requirements. Determination of any radon hazard with an acceptable remediation strategy will be made during the initial (preliminary) loan underwriting period.

**UNDERGROUND STORAGE TANKS:** Underground storage tanks (USTs) must be registered with the Rhode Island Department of Environmental Management (DEM) in accordance with current rules and regulations. It should be noted that USTs of any size which contain diesel oil must be registered. For USTs holding other materials, the requirement for registration depends on the tank size.

RIHousing requires that all USTs be pressure tested for integrity at least once per year or more frequently if required by other authorities having jurisdiction. Test results that show leakage in excess of the maximum allowed by local, state or federal requirements shall be promptly reported to RIHousing and DEM. Immediate corrective action shall be taken to ensure compliance with existing regulations.

**NOISE POLLUTION:** Based on the initial site inspection by RIHousing, a determination shall be made on the necessity to conduct a noise survey. Survey results that exceed the maximum acceptable noise readings established by local, state or federal standards will be mitigated, if possible, by incorporating appropriate design and construction requirements into the structure.

**AIR QUALITY:** The initial site inspection generally will determine the necessity of requiring an air quality survey; however, results of either a Phase I or II environmental site assessment could disclose factors or conditions which would indicate that an air quality study should be performed. As a rule, RIHousing will discourage the establishment or financing of developments in areas of demonstrated poor or unacceptable air quality.

**GROUND WATER QUALITY:** A determination of the potential hazard from substandard ground water shall be based on the conclusions of a Phase I or II environmental site assessment.

**MOLD HAZARDS:** A determination of the potential hazard of mold shall be based on the conclusions of a Phase I environmental assessment. If the Phase I assessment does not address mold hazards then a separate environmental hazmat survey for mold will be required and all findings must be properly treated and/or abated.

**POLYCHLORINATED BIPHENYL (PCBs):** A determination of the potential hazard and required abatement provisions for identified PCBs shall be based on the conclusions of a Phase I or II environmental site assessment.

These guidelines are intended to provide direction to the Developer/applicant and the remainder of the development team. They do not necessarily address each and every possible environmental situation or condition, which may be encountered. For any cases not specifically covered, RIHousing reserves the right to review and establish requirements on a case-by-case basis.

Finally, nothing in these guidelines is to be interpreted as superseding or conflicting with applicable codes, laws, ordinances or regulations issued by legally established authorities.

# Construction Plan Submission Checklist(s)

## Schematic Design

Section	Requirement	✓
Cover Sheet	Proposed Building by Type, Size & Construction Type per RI Building Code	
Cover Sheet	Unit Distribution by Floor, Size, Bedroom/Bath number & Handicap designation	
Cover Sheet	Sq. Ft between Commercial, Residential, Community & other uses. Both Gross & Net Rentable	
Cover Sheet	Number of Parking Spaces. Proposed Parking Ratio & Zoning Requirements	
Cover Sheet	Dwelling Units allowed by Zoning	
Cover Sheet	Percentage of Tract occupied by Buildings, Parking & other Paved Areas & by Open Areas	
Cover Sheet	Length of Roadway (if applicable)	
Cover Sheet	Compliance w/RIHousing Required Design & Construction Guidelines and/or Waiver Requests	
Site Plan	Site Location Map (Lot lines, Streets, Existing Buildings and Structures)	
Site Plan	Proposed Footprint, Parking, Site improvements and dimensions	
Site Plan	Proposed New Site Improvements: Landscaping, Fences, Retaining walls and Paving	
Site Plan	Environmental (Wetlands, Ledge, Dense vegetation, Steep slopes and Flood plains)	
Site Plan	Zoning Restrictions (Setbacks, Easements and Heights)	
Floor Plan	Minimum Scale: Floor Plans 1/8" = 1' Unit Plans 1/4" = 1'	
Floor Plan	All plans (if different) - show unit layouts, common areas and other indoor spaces	
Floor Plan	Entry level and typical floor plan (if repetitive)	
Floor Plan	Typical dwelling furniture layouts	
Elevations	Exterior Elevations, window types and exterior material Perspective or photos of existing buildings showing all facades.	
Building Section	Minimum Scale: 1/2" = 1'	
Building Section	Building material and Construction types	
Specifications	Narrative and Outline Specification based on 16 Divisions (include with schematic submission only)	
Geotechnical Report	<i>New Construction/Additions/Major Underground Utilities/Infrastructure: Subsoil Investigation Report w/ Design Recommendations by Geotech Firm.</i> (min. boring locations at all foundations, underground utilities, catch basins/structures/galleys, randomly along roads and parking areas).	
Structural Reports	Structural report prepared by licensed engineer for all renovation projects	
Phase I Environmental Report	Phase I Environmental Site Assessment (Standard 1527-13) with all applications ( <i>scattered site developments are exempt</i> )	
Capital Needs Assessment	<i>Renovation Developments:</i> Capital Needs Assessment no more than two years old with positive 20 Year Reserve Analysis	

## Design Development (50% Plans and Specifications)

Section	Requirement	✓
General Requirement	All items listed in the schematic submission are to be included in the 50% submission package (new items are identified in blue)	
Cover Sheet	Name & Address of Development	
Cover Sheet	Name & Address of Developers and Architects	
Cover Sheet	Date of Submission	
Site Plan	Proposed Landscaping	
Site Demolition	Minimum Scale 1" = 30'	
Site Demolition	All items planned for Demolition unless minor & shown on another Plan	
Utility Plan	Existing utility types and locations (Water, Electric, Telephone, CATV, Gas, Sewer, Storm Water, etc.)	
Utility Plan	Proposed utility types and locations (Water, Electric, Telephone, CATV, Gas, Sewer, Storm Water, etc.)	
Floor Plan	Dimensions, Wall Types, Door Types and Sq. Ft. Tabulations	
Floor Plan	Locate kitchen, Baths, Utility Rooms, Showing Fixtures, Appliances, Boilers, Tanks, etc.	
Floor Plan	Include Roof & Basement Plans (where applicable)	
Elevations (Ext.)	All exterior finishes, Openings and Fenestration	
Building Sections	Typical Exterior Walls; Unit separation; Fire walls; Foundation walls and Roof	
Building Sections	Thermal Insulation with Levels and R-Values. (Show Sound Insulation)	
Building Sections	Wall Intersection Details for Wall/Roof; Floor/Wall; Foundation/Floor	
Building Sections	Cross-Section where Units have Attic Living Space	
Elevations (Int.)	Kitchens; Bathrooms; Accessory Locations; Cabinets for Typical and Handicap Units	
Specifications	16 Division Specification layout. Listing general, Products & Performance Standards by Construction Division	
Specifications	Energy Star & quality windows. Ongoing demonstration of lowered energy & Maintenance Cost	
Specifications	Rehab Exception: Permission may be given for substituting a work write-up for Moderate Rehabilitation of existing buildings	
Plan Review	One set of Drawings & Specs	
Plan Review	One copy of Construction Cost Breakdown (Form: RIH CF-2328)	

## Construction Documents (90% Plans and Specifications)

Section	Requirement	✓
General Requirement	All items listed in schematic and 50% submission are to be included in the 90% submission package (new items are identified in blue)	
Cover Sheet	Revised Date of Submission	
Cover Sheet	Schedule of Drawings	
Cover Sheet	Signature & Date spaces for Architect; Owner; Contractor; RIHousing	
Survey	Lot Lines; Site Dimensions; Streets	
Survey	Existing Buildings w/ Dimensions to Lot Lines	
Survey	Setback dimensions & Easement locations	
Survey	Adjacent Buildings' Footprints & Heights	
Survey	Existing Topography showing Wetlands, Contours, Ledge & Vegetation	
Survey	Existing Conditions on the Site e.g. Fences, Retaining Walls, Paving, etc.	
Survey	Existing Utilities - Above & Below Ground	
Site Plan	Ground Floor Finish Elevations & Any Change in Elevation for all Buildings	



Site Plan	Spot Elevations as Necessary and along handicap accessible routes	
Site Plan	Recreational Areas: Passive & Active	
Site Plan	Landscaping Detail & Planting Schedule w/ Common Name; Number; Size for all Materials	
Site Plan	Site Lighting & Site Utilities - Shown for entire Development	
Site Plan	Site Details & Dimensions for Paving Sections, Curb Cuts, Road Radii, Trash Enclosures, Recreational Areas, etc.	
Elevations (Ext.)	Relationship Between Finished Ground Floor & Basement & Finished Grade	
Updated Geotech. Report	If necessary based on changes in design	
Elevations (Ext.)	Height of each Floor to Floor, Parapet &/or Roof	
Building Sections	R-Value Tabulations	
Building Sections	Interior/Exterior wall Intersection	
Building Sections	Typical Stairs: Public & Private	
Building Sections	Elevator Shaft	
Building Sections	All Typical Interior Walls, Partitions & Chases	
Elevations (Int.)	Kitchen & Bathroom Dimensions; Materials & Mounting Heights	
Schedules	Finish, Door & Window Schedules, Elevations & Details Keyed to Plans & Elevations	
Schedules	Door Hardware with Minimum Specification Referenced on Schedule	
Schedules	Typical Details for Clothes Storage, Linen Closets showing mounting height for shelves & rods	
Schedules	Building Thermal Insulation Schedule & NFRC window ratings	
Structural	Plans, Sections, Details & Notes sufficient to Construct Particular Development	
Structural	Design Loads	
Structural	Framing Systems & Member Sizes	
Structural	Governing Codes, Regulations & Standards	
Structural	Foundation Design responsive to Subsoil Investigation Report	
Mechanical	Location & Type of Heating Elements, Boilers, Thermostats, Controls, Meters &/or Fuel tanks.	
Mechanical	Mechanical Details, Equipment, Schedules & Ventilation Diagrams	
Electrical	Light Fixtures, Switches, Receptacles, Main Service Entrance, Breaker Panel & Meters Locations	
Electrical	Light Fixture Schedule	
Plumbing	Show Layout, Fixtures, Riser Diagrams, etc.	
Fire Alarm	Location of Equipment & Devices with Riser Diagrams & Schedules	
Fire Protection	Location of Equipment & Devices with Rise Diagrams & Schedules & Flow Calculations	
Specifications	Include RIHousing Appendix A (Front End Specification Supplementary Conditions)	
Plan Review	1 Copy of the ALTA Boundary Outline Survey, Surveyors Report & Legal Description - Form RIH CF-141	
Plan Review	Revised Construction Cost Breakdown (signed and dated by Owner & Contractor) - Form RIH CF-2328	

## Final Construction Documents (100% Plans and Specifications)

Section	Requirement	
General Requirements	All items listed in Schematic, 50% and 90% submission are to be included in the 100% submission package (new items are identified in blue)	
Additional Req.	Drawings & Specifications to be consistent with previously approved Construction Documents, including Development Construction Costs established during Prelim Phase	
Additional Req.	Any Revisions or Additions to Plans & Specifications	
Additional Req.	Signed & Sealed by Architect & Architect /Engineer for Engineering Drawings	
Additional Req.	Same Reference Date on All Drawings	
Plan Review	Final Cost Breakdown (signed and dated by Owner & Contractor) - Form RIH CF-2328	
Plan Review	Include Current Davis Bacon Wage Determination for Developments using Fed Funds for Construction	
<i>Pre-construction Meeting</i>	RIHousing D&C staff to host a pre-construction meeting at the time of loan closing to sign plans, specifications and addendum and to review all agency requirements during construction.	

INSERT CHECK LISTS FOR PLAN SUBMISSIONS