

# Housing Design Worksheet

Source: The Affordable Housing Design Advisor

## **Start a Design-focused Workbook for the Project**

Over the course of the development process a series of key decisions are made which strongly impact the overall design quality of a finished project. A design-focused Project Book, created at the very beginning of the development process, will help ensure that these Steps to Design Quality are actually taken and that the results are collected and used.

### **A Project Book will:**

Help guide the design decision-making process.

Provide a structure for formally recognizing each key decision as it occurs and record the results.

Create a record of the design process - what worked and what didn't - to help guide future development activities.

### **When should this step be done?**

As early as possible in the Concept phase of development.

### **Who should do this step?**

The owner/developer.

### **What should be done?**

Obtain a loose leaf notebook with at least 20 section tabs.

1. Create and print out the **Cover, Introduction, and Master Checklist** sheets and insert them in the notebook.
2. Create and print out the rest of the **Project Book**, each step and its accompanying forms or checklists.
3. Insert printed steps, one at a time, along with their accompanying forms and checklists in the notebook at the appropriate tabs.
4. As you complete each step, fill out the forms and checklists required and record the completion date on the Master Checklist at the front of the Project Book.
5. The Project Book is intended primarily as a field manual to help structure and record decisions as they are made. It is designed to be used interactively with the Design Advisor which contains a wealth of detailed resources, illustrations and case studies that will help explain and reinforce the information provided in the steps.

### **How can doing this help move my project forward?**

1. Maintaining a detailed, well organized workbook focused on design issues will help clarify design decision-making throughout the project.
2. It will also add credibility to your development - among neighbors, funding agencies and regulatory bodies - as one that is seriously and systematically pursuing design excellence.
3. Finally, the completed Project Book will provide a comprehensive record of design decision-making that will help guide your *next* project and, in the process, enhance your reputation as a development organization committed to design quality.



# Development Process Overview

Source: The Affordable Housing Design Advisor

Every development project proceeds through a series of phases, from the initial concept to final closeout. Although the terminology may vary from region to region, in general the development process can be organized into the following five phases:

- Concept
- Predevelopment
- Development
- Construction
- Operation

A number of separate, but interrelated, activities occur within each phase. For the purposes of showing how specific phases of the design process relate to specific phases of the development process, the Design Advisor assumes the activities listed below occur over the course of an affordable housing development.

Please note that this is only a generalized list. The type, mix and sequence of activities may vary over the course of an actual development. For more comprehensive information, tools and resources addressing the development process, contact:

- The Enterprise Foundation  
([www.enterprisefoundation.org](http://www.enterprisefoundation.org))
- The Development Training Institute  
([www.dtinational.org](http://www.dtinational.org))
- The Local Initiatives Support Corporation  
([www.liscnet.org](http://www.liscnet.org))
- The Neighborhood Reinvestment Corporation  
([www.nw.org/nrc](http://www.nw.org/nrc))

## Concept Phase

- Establish organizational goals for the project.
- Determine type of project, potential location and target occupants.
- Consider sources of financing and how the project might be managed.
- Develop an understanding of community and

local government support/opposition, concerns/needs.

- Evaluate site: cost and availability, technical and environmental issues.
- Visit and evaluate similar projects.
- Develop project vision and concept.
- Decide whether to explore the concept further.

*Outcome: specific use of a designated site for an identified market by a specific development team with a defined financial program*

## Predevelopment Phase

- Apply for predevelopment funds.
- Conduct market study.
- Identify governmental/regulatory requirements.
- Select project team and define scope of work for each member.
- Review development concept with potential occupants, community groups, maintenance personnel, and other stakeholders and modify as appropriate.
- Identify sources of financing.
- Negotiate tentative or conditional financing commitments.
- Test cost assumptions.
- Obtain site control.
- Develop feasibility study.

*Outcome: analysis of all assumptions regarding market, site, operation pro forma, development pro forma, financial requirements, financing, team and roles, including suggested modifications for the concept to be feasible.*

## Development Phase

- Ongoing consultation between project team and the community.
- Prepare and submit financing/loan application.
- Secure permanent financing.
- Acquire property.

- Secure construction financing.
- Solicit and review construction bids.
- Obtain planning approvals, environmental approvals, if required.
- Obtain building and other permits as required.

*Outcome: all elements of project made definite. Letters of commitment, contracts and loan documents binding all participants to the specific elements of the deal are put in place.*

### **Construction Phase**

- Award construction contract(s).
- Initiate construction.
- Manage change orders.
- Negotiate certificate of substantial completion.
- Initiate marketing and lease-up, including outreach within the community.
- Manage construction close out.
- Conduct open house for community participants, press, etc..

*Outcome: completely built, leased/sold building, passing all inspections.*

### **Operation Phase**

- Staff up.
- Occupy.
- Provide services.
- Operate.
- Continue communication with community.

*Outcome: effectively rented/sold project meeting financial and other project goals.*

# The Matrix

Source: The Affordable Housing Design Advisor

## DEVELOPMENT

### Concept Phase

What Goes on in the Development Process

- Establish organizational goals for the project.
- Determine type of project, potential location and target occupants.
- Consider sources of financing and how the project might be managed.
- Develop an understanding of community and local government support/opposition, concerns/needs.
- Evaluate site: cost and availability, technical and environmental issues.
- Visit and evaluate similar projects.
- Develop project vision and concept.
- Decide whether to explore the concept further.

*Outcome: specific use of a designated site for an identified market by a specific development*

## DESIGN

What Goes on in the design process

- Pre-Design Phase - Activities May Include:
  - Programming
  - Space Schematics/Flow Diagrams
- Site Analysis Phase - Activities May Include:
  - Site analysis and selection

## 20 STEPS TO DESIGN QUALITY

What to do to ensure a well designed project

1. Start Project Book
2. Review the Design Considerations Checklist and continue to refer to it throughout the development process.
3. Understand where design fits in the development timeline
4. Obtain professional design assistance at the very beginning
5. Analyze target occupants and establish resident-related design goals for the project
6. Analyze neighborhood context and establish community-related design goals for the project
7. Analyze the site to make sure it can physically accommodate the proposed project and provide easy access to the amenities and services its residents will need.
8. Begin cost analyses - continue to conduct them early and often

**DEVELOPMENT****Predevelopment Phase**

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*Outcome: all elements of project made definite. Letters of commitment, contracts and loan documents binding all participants to the specific elements of the deal are put in place.*

**DESIGN**

What Goes on in the design process

- Later Schematic Design Phase - Activities May Include:
  - ◆ Architectural Design
  - ◆ Structural Design
  - ◆ Mechanical Design
  - ◆ Electrical Design
  - ◆ Civil Design
  - ◆ Landscape Design
  - ◆ Interior Design
  - ◆ Materials Research
- Design Development Phase - Activities May Include
  - ◆ Architectural Design
  - ◆ Structural Design
  - ◆ Mechanical Design
  - ◆ Electrical Design
  - ◆ Civil Design
  - ◆ Landscape Design
  - ◆ Interior Design
  - ◆ Materials Research
- Contract Documents Phase - Activities May Include
  - ◆ Architectural Design
  - ◆ Structural Design
  - ◆ Mechanical Design
  - ◆ Electrical Design
  - ◆ Civil Design
  - ◆ Landscape Design
  - ◆ Interior Design
  - ◆ Materials Research
- Bidding or Negotiations Phase - Activities May Include
  - ◆ Bidding Materials
  - ◆ Bidding/Negotiation
  - ◆ Analysis of Alternates/ Substitutions
  - ◆ Bid Evaluation
  - ◆ Contract Award

**20 STEPS TO DESIGN QUALITY**

What to do to ensure a well designed project

13. Identify and prioritize the key design components of the project - those that will do the most to meet user needs, respond to the context and enhance the neighborhood.
14. Stress the project's design quality in all funding applications.
15. Identify and prioritize the key construction materials and systems for the project - those which are most critical to making the project "built to last."
16. Identify and prioritize the key finishes and hardware for the project - those which are most critical to making the project "built to last."
17. Monitor bids and review any material, system, finish or hardware substitutions to ensure that design objectives, especially the "built to last" goal, are not compromised.

**DEVELOPMENT**

**Construction Phase**

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**20 STEPS TO DESIGN QUALITY**

What to do to ensure a well designed project

- 18.** Monitor construction to ensure that all key design, construction and finish goals are being met.

**DEVELOPMENT****Operation Phase**

What Goes on in the Development Process

- Staff up.
  - Occupy.
  - Provide services.
  - Operate.
  - Continue communication with community.
  -
- Outcome: effectively rented/sold project meeting financial and other project goals.*

**DESIGN**

What Goes on in the design process

- Post Contract Phase - Activities May Include
  - ◆ Maintenance and operational programming
  - ◆ Start-up assistance
  - ◆ Record drawing
  - ◆ Warranty review
  - ◆ Post occupancy evaluation

**20 STEPS TO DESIGN QUALITY**

What to do to ensure a well designed project

- 19.** Create an operation and maintenance manual for the project.
- 20.** Complete Project Book



Source:

**HOUSING PRODUCTION AND REHABILITATION*****Enterprise Foundation***[www.enterprisefoundation.org](http://www.enterprisefoundation.org)

The Enterprise Foundation helps identify community developers' strengths and weaknesses and provides tools for success, including training and consulting on everything from managing budgets and staffing to raising additional money to creating solutions for the community's toughest challenges

***Fannie Mae***[www.fanniemae.com/housingcommdev](http://www.fanniemae.com/housingcommdev)

Through the development of mortgage products, services, investments, national partnerships, and local initiatives, Fannie Mae works to expand the dream of homeownership and affordable rental housing.

***Freddie Mac***[www.freddiemac.com](http://www.freddiemac.com)

Freddie Mac keeps mortgage rates stable and low so that more families can buy their own homes and enjoy quality, affordable rental housing.

***Governor's Office for Small Cities***[www.smallcities.org](http://www.smallcities.org)

The Governor's Office for Small Cities administers the Community Development Block Grant (CDBG) Program for the State of New York. CDBG provides grants to eligible cities, towns, and villages with a population under 50,000 and counties with an area population under 200,000 to revitalize neighborhoods, expand affordable housing and economic opportunities and or improve community facilities and services.

***Habitat for Humanity***[www.habitat.org](http://www.habitat.org)

Habitat for Humanity International is a nonprofit, ecumenical Christian housing ministry. HFHI seeks to eliminate poverty housing and homelessness from the world, and to make decent shelter a matter of conscience and action. Habitat invites people of all backgrounds, races and religions to build houses together in partnership with families in need. Habitat for Humanity has built and rehabilitated more than 150,000 houses with families in need since its founding in 1976.

***HUD - US Department of Housing & Urban Development***[www.hud.gov](http://www.hud.gov)

The US Department of Housing & Urban Development (HUD) mission is to increase homeownership, support community development and increase access to affordable housing free from discrimination. To fulfill this

mission, HUD will embrace high standards of ethics, management and accountability and forge new partnerships--particularly with faith-based and community organizations--that leverage resources and improve HUD's ability to be effective on the community level.

### ***NeighborWorks***

[www.nw.org](http://www.nw.org)

NeighborWorks America, local NeighborWorks organizations and Neighborhood Housing Services of America make up the NeighborWorks System, which provide financial services and funding to help create new opportunities for residents while improving communities. This site is a treasure trove of information on all aspects of housing.

### ***New York State Division of Housing and Community Renewal***

[www.dhcr.state.ny.us](http://www.dhcr.state.ny.us)

New York State Division of Housing and Community Renewal (DHCR) has a mission to make New York State a better place to live by supporting community efforts to preserve and expand affordable housing, home ownership and economic opportunities, and by providing equal access to safe, decent and affordable housing.

### ***Rural LISC***

(202) 739-9283

[www.ruralisc.org](http://www.ruralisc.org)

The Local Initiatives Support Corporation (LISC), a national community-building organization, provides grants, loans and equity investments to community development corporations (CDCs) for neighborhood redevelopment. In 1995, LISC launched Rural LISC to expand its reach beyond urban areas to include rural communities. Rural LISC's mission is to build the capacity of resident-led rural CDCs, increase their production and impact, demonstrate the value of investing in and through rural CDCs and make the resource and policy environment more supportive of rural CDCs and their work.

### ***United States Department of Agriculture, Rural Development***

[www.rurdev.usda.gov/ny](http://www.rurdev.usda.gov/ny)

USDA Rural Development has financial programs to support essential public facilities and services such as housing.

## ***HOUSING GROUPS, TRADE ASSOCIATIONS AND MEMBERSHIPS***

### ***Local Government Commission***

[www.lgc.org](http://www.lgc.org)

The Local Government Commission (LGC) is a nonprofit, nonpartisan, membership organization that provides inspiration, technical assistance, and networking to local elected officials and other dedicated community leaders who are working to create healthy, walkable, and resource-efficient communities. The LGC's membership is composed of local elected officials, city and county staff, planners, architects, and community leaders who are committed to making their communities more livable, prosperous, and resource-efficient.

### ***National Association of Home Builders***

[www.nahb.org](http://www.nahb.org)

Source:

National Association of Home Builders (NAHB) is a trade association that helps promote the policies that make housing a national priority.

### ***National Association of Planning Councils***

[www.communityplanning.org](http://www.communityplanning.org)

The *National Association of Planning Councils* offers elements of quality community planning as demonstrated by its member organizations.

### ***Neighborhood Funders Group***

[www.nfg.org](http://www.nfg.org)

The Neighborhood Funders Group (NFG) is a national network of foundations and philanthropic organizations. Their members support community-based efforts that improve economic and social conditions in low-income communities. NFG provides information, learning opportunities, critical thinking and other professional development activities to their members.

### ***New York State Association For Affordable Housing***

[www.nysafah.org](http://www.nysafah.org)

The New York State Association for Affordable Housing (NYSFAFH), formed in 1998, is a trade association for private sector organizations throughout New York State that are involved in affordable housing. Their goals are to increase housing programs and subsidies, to be a voice for professionals in the field, and to inform members of new opportunities and developments.

## **RESOURCE AND IDEA BANKS**

### ***Affordable Housing Design Advisor***

[www.designadvisor.org](http://www.designadvisor.org)

*The Affordable Housing Advisor* is a tool, resource, idea bank and step-by-step guide to design in affordable housing.

### ***Fair Housing Accessibility FIRST***

[www.fairhousingfirst.org](http://www.fairhousingfirst.org)

Fair Housing Accessibility FIRST is an initiative designed to promote compliance with the Fair Housing Act design and construction requirements. The program offers comprehensive and detailed instruction programs, useful online web resources, and a toll free information line for technical guidance and support.

### ***KnowledgePlex***

[www.knowledgeplex.org](http://www.knowledgeplex.org)

KnowledgePlex is designed to support the efforts of practitioners, grantors, policy makers, scholars, investors, and others involved or interested in the fields of affordable housing and community development. KnowledgePlex organizes and presents the most up-to-date, comprehensive collection of publications from all of its partner organizations. By browsing or searching KnowledgePlex, users can find highly relevant research, case studies, best practices, scholarly articles, opinion pieces, and other material related to the affordable housing and community development fields. KnowledgePlex incorporates the latest news stories from thousands

Source:

of publications nationwide through an arrangement with LexisNexis. KnowledgePlex provides a set of discussion forums for your use. They are organized along the same set of topics as the documents on KnowledgePlex. Join other professionals to discuss documents, trends, news articles, or anything of interest!

### ***New Urbanism***

[www.newurbanism.org](http://www.newurbanism.org)

New Urbanism promotes the creation and restoration of diverse, walkable, compact, vibrant, mixed-use communities composed of the same components of conventional development, but assembled in a more integrated fashion, in the form of complete communities

### ***SUSTAINABILITY***

#### ***New York State Energy Research and Development Authority***

[www.nyserda.org](http://www.nyserda.org)

[www.powernaturally.org](http://www.powernaturally.org)

[www.getenergysmart.org](http://www.getenergysmart.org)

New York State Energy Research and Development Authority is a public benefit corporation whose mission is to use innovation and technology to solve some of New York's most difficult energy and environmental problems. They oversee many programs which give information and incentives to promote energy efficiency and alternate sources

#### ***Sustainable Hudson Valley***

[www.sustainhv.org](http://www.sustainhv.org)

The mission of Sustainable Hudson Valley is to educate, inspire and support communities in creating sustainable local and regional economies, and people in becoming more conscious consumers and effective citizens to support a sustainable future. A resource for environmentally friendly building products and practices.

#### ***US Green Building Council***

[www.usbg.org](http://www.usbg.org)

The U.S. Green Building Council (USBC) is a coalition of leaders from across the building industry working to promote buildings that are environmentally responsible, profitable and healthy places to live. Good source for information on LEEDS.

### ***GREEN PRODUCTS AND SERVICES***

#### ***Eco-Friendly Flooring***

[www.ecofriendlyflooring.com](http://www.ecofriendlyflooring.com)

Eco-Friendly Flooring is a wholesale supplier and installation contractor for sustainable flooring products.

#### ***Cabinet King, Inc.***

[www.cabinetking.com](http://www.cabinetking.com)

Cabinet King, Inc. specializes in green cabinetry for homes and offices.

#### ***Ice Stone***

[www.icestone.biz](http://www.icestone.biz)

Manufacturers of a durable surface material made from recycled glass and concrete.

#### ***Sunpipe***