Step 11. Use the Design Considerations Checklist to guide the design process.

Why is this important?

The **Design Considerations Checklist** was created to ensure that key issues with the most direct impact on overall design quality are addressed at the earliest stages of the development process. The design components discussed in the Checklist are essential to a project that meets its users' needs, enhances its neighborhood, and is built to last. Based on real-world projects and the experience of some of the foremost designers and providers of affordable housing in the country, the Checklist provides a systematic way to take advantage of as many major design opportunities as possible, and to make sure that the most important design components are built into a development project from the very beginning.

When should this be done?

The Checklist can be reviewed as early as the Concept phase for the project. It should be actively used as a tool during the **Schematic Design** phase of Predevelopment.

Who should do this?

The owner/developer together with the architect and other members of the design team. The Checklist can also be used to help focus community participation in the design process.

What should I do?

- Go through the checklist once very early in the Predevelopment process.
- Go through it again at least twice over the course of Schematic Design.
- Consult it on an as-needed basis when specific issues or design components are being analyzed and designed.
- Use the Checklist to help guide the schematic design process, facilitate participant input to the process, and focus design reviews.
- Throughout the process, make sure that accessibility issues are actively considered.
- Print out the **Design Considerations Checklist** and add it to the Project Book.

How can doing this help move my project forward?

- By carefully and consistently considering key design issues during the early phases of project development you will ensure that these issues are dealt with systematically and, most important, not overlooked as the project moves forward.
- Using the Checklist will also help guide and streamline decision-making during the critical early phases of the design process.
- Finally, using the Design Considerations Checklist can and should improve the credibility of your development - with occupants, neighbors, funding agencies and regulatory bodies – as a project committed to design excellence.

DESIGN CONSIDERATIONS CHECKLIST

- **PARKING—*Don't let parking dominate the site, the building or the street.***

Overall Impact
Avoid letting garages, driveways and parking lots dominate the streetscape. Consider placing them at the rear or side of the site to allow a majority of dwelling units to "front on" the street. Consider planting trees and shrubs to soften the overall impact of parking areas and to provide shade and noise reduction. At buildings with parking garages, avoid large areas of blank wall facing the street. Consider incorporating decorative elements above the garage door to soften its visual impact. Consider improving unavoidable blank walls with decorative artwork, display cases, vines, and good quality durable materials to minimize graffiti and deterioration.

Access and Surveillance
Provide locations for parking that minimize walking distance between dwelling units and cars and that allow for casual surveillance of cars from a number of different units. Avoid remote parking. Avoid large lots. Consider breaking them into multiple, smaller lots to enhance safety and accessibility and minimize the aesthetic impact of large, unbroken rows of cars. Locate handicapped and elderly parking with immediate access to their respective units. Locate visitor drop off and parking near main entrances and clearly mark all visitor parking spaces.

Vehicle/Pedestrian Interaction
Design to minimize conflicts between vehicles and pedestrians. Consider separating bicycle and pedestrian paths from vehicular traffic. Consider linking open spaces so that they form an uninterrupted network of vehicle-free areas. Avoid parking layouts that erode a project's open space until only "leftover" areas are available for pedestrian use. Consider traffic calming strategies to slow down cars within the project.

Car Maintenance
Recognize that parking areas will be used for car repair and maintenance. Consider providing a space, with access to water and electricity and with adequate drainage, for this purpose.

Security
In underground or multi-story parking structures, provide a limited number of secure entry points. Ensure that all parking areas are well-lighted, but avoid lighting strategies that cause glare or otherwise negatively impact surrounding buildings. Consider locating parking in areas that can be informally observed by passersby.

Parking Podiums
On parking podiums provide adequate landscaping and site furniture. Landscaping should try to include naturalistic features to mask the artificial character of the podium, if permitted by budget. Consider integrating planters, lighting, trellises, benches and other site furniture with unit and building entries into a coherent open space plan. Make planters at least 30" high to protect plants.

- **PUBLIC OPEN SPACE—*Public open areas must be designed to the same level of quality as any other "space" in a development.***

Outdoor Rooms
Think of public open space—shared outdoor areas intended for use by all residents—as "outdoor rooms," and design them as carefully as any other rooms in the project. Avoid undifferentiated, empty spaces. Consider the types of activities that will occur in the "rooms," including cultural or social activities unique to specific user groups, and design the shared open space accommodate these activities.

Access
Provide direct access to open space from the dwelling units that the open space is intended to serve. At the same time consider designing in ways to control nonresident access to these spaces. When terraces or balconies are used as shared open space, consider locating so they serve as extensions of indoor common areas.

Boundaries
Provide clear boundaries between publicly controlled spaces (streets), community controlled spaces (shared open space) and privately controlled spaces (dwellings and private open space). Consider enclosing or partially enclosing open space with project building(s) to provide clear boundaries.

Surveillance
Provide visual access to shared open spaces from individual units, preferably from the kitchen, living room or dining room.

Play Areas
Consider play—and play areas—as critical to the successful functioning of any family housing project. Avoid placing a low priority on these spaces and leaving their design until the end of a project. In particular, consider how play areas will be used by different age children (2-5 years, 5-12 years, and teenagers) and design these areas accordingly. Avoid "one space fits all" solutions. Locate play areas for small children so that they allow for adult supervision from dwelling units and/or from a central facility such as a laundry. Design play areas so that adults can also congregate and provide supervision.

Nighttime Lighting

Consider a lighting plan for shared open spaces that provides light from a variety of sources. Match lighting intensity and quality to the use for which it is intended; i.e. the lighting required for a pedestrian path is substantially different from that required to illuminate a parking garage. Avoid lighting which shines directly into dwelling units or is overly intense and bright. Consider energy efficient lighting whenever possible

- **PRIVATE OPEN SPACE—*Every home should have its own private outdoor space.***

Private Outdoor Space for All Dwelling Units

Provide each household in the project with some form of private open space: patio, porch, deck, balcony, or yard. In certain instances, consider shared entry porches and/or shared balconies. Avoid building layouts where front yards face back yards.

Access

Ensure that private open space is easily accessible—physically and visually—from individual units.

Adequate Size

Ensure that private open space is large enough so that it can actually be used. Avoid spaces, particularly balconies, decks and porches, that are too narrow to accommodate furniture.

Balconies

Attempt to locate balconies adjacent to living rooms. Avoid screening balconies with solid walls. Instead, consider screening materials that provide privacy but also allow residents, particularly small children, to look out. Avoid horizontal railings and other designs which enable children to climb up. Carefully consider how and where balconies will drain.

Fencing

Consider providing fencing around all yards and patios to provide privacy and to help define boundaries between public and private open space.

Storage

Provide outdoor storage for outdoor tools, equipment and furniture.

- **LANDSCAPING—*Landscaping can make or break a development.***

Landscaping is not a Secondary Consideration

Good landscaping is critical to the quality of any project. Consider how landscaping and planting will be handled from the very beginning of the design process. Avoid considering landscaping as an "extra" that can be added in at the end of the project or, worse, eliminated in the name of cost control.

Plantings

Provide as rich a variety of plantings—trees, shrubs, groundcover, and grass areas—as possible. Anticipate mature sizes and avoid crowding trees, shrubs and buildings. Use hardy, native species of trees and plants that are well suited to the project location and are easy to water and maintain.

Appropriate Plantings

Consider how the landscape will be used by project occupants and specify appropriate plantings. In general, assume heavy use in all landscaped areas. Avoid delicate plants and shrubs in heavily trafficked areas, especially in locations where they can be trampled by children. Instead, consider such plantings in areas that are out of the main traffic flow (e.g., as privacy planting next to buildings). Avoid providing only grass areas for children to play in. Consider a mix of grass and paved areas instead. Also, consider raising or otherwise protecting grass areas that are not meant for play.

Paved Areas

Recognize that some paved area will be necessary in family housing to facilitate children's play. However, large, empty paved areas should be avoided. Consider using alternative landscape approaches—plantings and grass—to break these areas up into smaller functional units.

Edges

Where planted areas, other than lawns, meet hard surfaces include some form of raised edge to contain the soil and discourage cutting across the bed. Consider designing the edges so they can also serve as outdoor seating areas.

Outdoor Seating

Outdoor seating should be an integral part of any landscape plan and should be thoughtfully designed and located. Avoid simply scattering seats at random through the site. Consider what the seating looks at and what looks at it. Consider how the seating is oriented with respect to the sun and breezes and whether it needs protection from rain or wind. Avoid "one type fits all" solutions, particularly in larger projects. Consider providing different seating for different users.

Paths
Pedestrian paths and walkways are critical to the smooth functioning of any affordable housing project, particularly larger, multi-unit developments. Consider the wide range of uses that any path must accommodate—children, adults, bicycles, skate boards, shopping carts, walkers, pets, furniture moving, etc.—and design with this range of uses in mind. Avoid paths that are too narrow to accommodate multiple users at the same time. Consider rounded corners at all intersections and direction changes, especially in projects with children. Ensure that paths are well lighted so that users can see where they are going and be seen by other people. Consider designing path edges so that they encourage users to stay on the path and not trample on adjacent plantings (e.g. through changes in slope or materials or by providing raised edges). Remember that the shortest route from point A to point B is usually a straight line. Avoid forcing people to follow circuitous routes to their destinations or be prepared for the new, unplanned paths that will inevitably appear to accommodate occupant use patterns.

Storage
Provide adequate space to store landscape maintenance equipment and materials.

- **BUILDING LOCATION—*A building should respect its street, enhance its site and respond to its climate.***

Site Entry and Circulation
The entry to the site is critical to the public image of the development. Emphasize the main entrance and place central and shared facilities there if possible. Respect the street and locate buildings on the site so that they reinforce street frontages.

Setbacks
To the extent possible, maintain the existing setback patterns within the immediate vicinity of the building. Avoid locating a building far in front of or far behind the average setback lines of the four to five properties located on either side of the proposed project. Respect the prevalent side yard and rear yard setback lines prevalent in the area.

Climate Considerations
Consider placing buildings on the site so as to maximize solar access during cooler months and to control it during warmer months. Also consider maximizing natural ventilation and access to views from within the site. Avoid a layout in which adjacent buildings obstruct one another. Design the building so that sun directly enters each dwelling unit during some part of the day year round.

- **BUILDING SHAPE—*A building should reinforce the physical "fabric" of the surrounding neighborhood.***

Building Height
Relate the overall height of the new structure to that of adjacent structures and those of the immediate neighborhood. Avoid new construction that varies greatly in height from other buildings in the area, except where the local plan calls for redeveloping the whole area at much greater height and density. To the extent feasible, relate individual floor-to-floor heights to those of neighboring buildings. In particular, consider how the first floor level relates to the street and whether this is consistent with the first floors in neighboring buildings.

Building Scale and Massing
Relate the size and bulk of the new structure to the prevalent scale in other buildings in the immediate neighborhood.

Building Form
Consider utilizing a variety of building forms and roof shapes rather than box-like forms with large, unvaried roofs. Consider how the building can be efficiently manipulated to create clusters of units, and variations in height, setback and roof shape.

- **BUILDING APPEARANCE—*A building should look good to residents and neighbors.***

Image
Avoid creating a building that look strange or out of place in its neighborhood. Consider a building image that that fits in with the image of middle income housing in the community where the project is located.

Visual Complexity
Consider providing visual and architectural complexity as possible to the building's appearance. Consider breaking a large building into smaller units or clusters. Consider variations in height, color, setback, materials, texture, trim, and roof shape. Consider variations in the shape and placement of windows, balconies and other façade elements. Consider using landscape elements to add variety and differentiate units from each other.

Windows
Maximize window number and size (within budget constraints) to enhance views and make spaces feel larger. Use minimum number of different size windows, but consider varying where and how they are used. Consider ways to screen and physically separate ground floor windows from walkways—through screens or plantings—to provide privacy.

Front Doors
Pay careful attention to the design and detailing of front doors. Consider what the front doors convey about the quality of the project and its residents. To the extent possible, respect the placement and detailing of good quality front doors in neighboring homes.

Facade
Relate the character of the new building façade to the façades of similar, good quality buildings in the surrounding neighborhood or region. Horizontal buildings can be made to relate to more vertical adjacent structures by breaking the façade into smaller components that individually appear more vertical. Avoid strongly horizontal or vertical façade expression unless compatible with the character of the majority of the structures in the immediate area.

Roof Shape
Consider relating the roof forms of the new building to those found in similar, good quality buildings in the neighborhood or region. Avoid introducing roof shapes, pitches or materials not found in the neighborhood or region.

Size and Rhythm of Openings
Respect the rhythm, size and proportion of openings—particularly on the street facades—of similar, good quality buildings in the neighborhood or surrounding area. Avoid introducing drastically new window patterns and door openings inconsistent with similar, good quality buildings in the neighborhood or surrounding area.

Trim and Details
Trim and details can provide warmth and character to a building's appearance, particularly on street facades. Carefully consider the design of porch and stair railings, fascia boards, corners, and areas where vertical and horizontal surfaces meet—for example where a wall meets the roof. Generally put trim around windows. Consider adding simple pieces of trim to the top and bottom of porch columns.

Materials and Color
Use materials and colors for the façade (including foundation walls) and roofing that are compatible with those in similar, good quality buildings in the surrounding neighborhood or region. Avoid introducing drastically different colors and materials than those of the surrounding area. Consider using materials that do not require repeated or expensive maintenance, especially those that residents can easily maintain themselves. Consider using materials with high levels of recycled content where possible.

Individual Identity
To the extent possible, provide individual identities and addresses for each dwelling unit. Consider ways to break large, repetitive structures into smaller, individually identifiable clusters. Ensure that all dwelling units have clear, individual addresses. Consider design strategies that allow residents to enhance and individualize the exterior appearance of their own units.

- **BUILDING LAYOUT—*A building should "work" for residents, staff and visitors.***

Entries
Provide as many private, ground level entries to individual units as possible. Ensure that all building entries are prominent and visible and create a sense that the user is transitioning from a public to a semi-private area. Avoid side entries and those that are not visually defined. At all entries consider issues of shelter, security, lighting, durability, and identity. For apartment buildings, allow visual access from managers office and/or 24 hour desk. Allow visual access to stairs and elevators from the lobby. For buildings with clustered and individual unit entries, consider providing small "porch" areas that residents can personalize with plants, etc. Limit "shared entries" to less than eight households. Consider providing some form of storage—for strollers, bikes, shopping carts, etc.—at or close to all main entries.

Central Facilities and Common Rooms
Consider locating central facilities—such as community rooms and laundries—in a central part of the development or building. Common rooms should be linked to common outdoor space. Ensure that community rooms are comfortable, accessible, durable, and, most important, flexible places. Community room should have access to toilet rooms, a kitchenette, and should have good storage. Consider whether or not a childcare program will be provided and whether the community room will accommodate it. Provide access to daylight and natural ventilation in all common rooms.

Support and Service Areas
Carefully consider the design and location of key support/service areas such as the managers office, maintenance rooms, janitor's facilities, mechanical equipment rooms and trash collection areas. Provide access to bathrooms and kitchens, and adequate space, furniture and storage for each of these uses, together with access to bathrooms and kitchens as appropriate. The manager's office should supervise the main entrance and should be located centrally, next to community and maintenance rooms. Provide screened trash collection areas that are convenient and easy to access from all of the units. Consider the path of travel of trash from source to removal area.

Stairs
Ensure stairs are durable, attractive and safe. Avoid treating stairs as an afterthought. Instead, consider them, particularly entry stairs, as major design elements. Consider how they relate to the street and neighborhood, how they accommodate users and visitors, and what they "say" about the project and its occupants. Consider how the area under the stairs will look and be used. Ensure that all stairs can accommodate moving furniture without damage to finishes.

Elevators
Locate elevators in sight of managers office if possible. Design adequate space in front of elevator to allow waiting and passage.

Access Corridors
Avoid corridors of excessive length; i.e. greater than 100 feet unbroken length. Break up long corridors with lobbies, lighting, benches, materials and color changes, offsets, artwork. To the extent possible, provide corridors with access to natural daylight and ventilation. Ensure that all corridors can accommodate moving furniture without damage to finishes.

Security
Consider ease of visual and physical surveillance by the residents of areas such as the street, the main entrances to the site and the building, children's play areas, public open space and parking areas. Consider locating windows from actively used rooms such as kitchens and living rooms so that they look onto key areas. Also consider containing open spaces within the building layout and using the selection and layout of plant materials to enhance, rather than hinder, surveillance and security. Consider specific design strategies to maximize the security of the building, including adequate lighting, lockable gates and doors at all entrances to the site and the buildings, and video cameras and monitors**.**

- **UNIT LAYOUT—***A home should "work" for its residents.*

Entry
Consider recessing or otherwise articulating unit entries so as to provide individual identities for each unit and to allow residents to personalize their entry areas.

Room Relationships
Unit layout and room organization will be partly determined by the building type, orientation, location on the site and user profile. Consider activities and behaviors in each space to allow adequate room and durable materials for these activities. Create a clear separation of the private sleeping areas from the less private living areas. Avoid excessive circulation space. To the extent possible in multi-unit buildings, locate similar rooms adjacent to each other; for example, place the bedrooms of one unit adjacent to the bedrooms of the neighboring unit. Try to stack "wet" rooms so that plumbing runs are efficient.

Room Design
Consider how individual rooms will be used. Test furniture arrangements, outlet, telephone and cable jack, and light fixture locations to ensure that all rooms can be reasonably furnished. Consider partly enclosing kitchen to allow flexibility in dining/living room use. The master bedroom may have a private bath; other bedrooms will share bathrooms. Consider how rooms can be arranged to accommodate working at home. Avoid through traffic in living rooms.

Unit Mix
Unless local requirements dictate otherwise, consider providing a variety of unit types—studios, one-, two-, three- and four-bedrooms. The proportion of each type should take into account the population being served and the prevalent mix of units in the area surrounding the project. In multi-story buildings, try to locate larger family units on the ground floor to allow easy access and surveillance of children.

Dining Rooms
Provide enough space to accommodate a large table and enough chairs for occupants and guests. Consider how the space might be used for other activities such as homework.

Bathrooms
Provide visual screening of bathrooms from the entry and from the living and dining areas. When more than one bedroom shares a bathroom, consider separating the lavatory from the toilet/tub area to allow use by more than one person at a time.

Daylight and Ventilation
Access to natural light in all bedrooms and the living room is essential and cross ventilation throughout the unit is encouraged. Consider layouts that allow natural light to the kitchen and allow the natural ventilation and lighting of bathrooms.

Storage Space
Provide as much storage space as possible. At a minimum provide an amount of bulk storage commensurate with the size of the unit and the number and ages of residents it is expected to accommodate, including: coat closets in the entry area, large closets in the bedrooms, linen closets, pantry spaces, and storage rooms adjacent to exterior balconies or patios. Assume two occupants per bedroom for storage purposes.

Window Views
Consider what residents will see when they look out the window. To the extent possible orient the most used rooms to the best views.

Materials
Avoid materials that require frequent maintenance, especially by specialists. Consider materials that residents can maintain themselves. Provide floor coverings appropriate to use in room—generally use resilient flooring in kitchens, bathroom, laundries, dining rooms and entries. Consider "healthy" building materials for interior finishes and materials, such as: carpet, resilient flooring, paint, glues, cabinets. Evaluate selection of materials in terms of lifecycle cost.

Appliances and Mechanical Systems
Avoid appliances that require frequent care at short intervals by specialists. Provide heavy-duty, energy-efficient appliances and fixtures. Consider providing washer/dryer hookups, especially for families and disabled households. Provide adequate duct/chase space for both vertical and horizontal duct runs, especially for ranges and bathroom fan.