



## Housing Models: Multiple Units, Single Family Appearance



Buildings that contain several units, but are designed to appear like one older home, can be seen as more in character with some neighborhoods than either row houses or walkup garden apartments. The strategy of achieving density through this model represents a revision of older patterns once found in many America cities of models and an application to new situations an old “pre-zoning” pattern in many cities of having duplexes, Triplexes, and even larger “plexes” on corner sites, or within the shell of older buildings that have been subdivided to create separate apartments within.

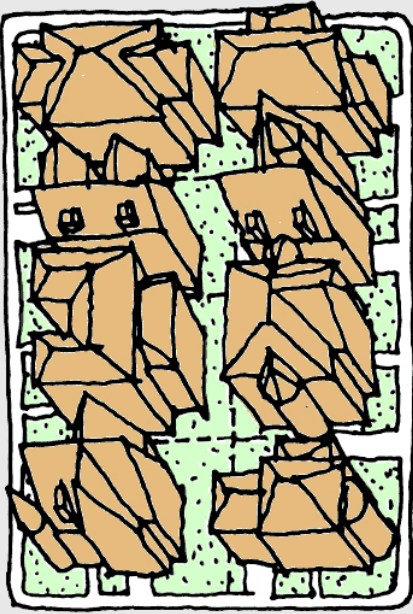
These types of buildings are often found between traditional single family detached districts and commercial or apartment housing districts. They can also be found along the “grand boulevards” that trolleys traveled and once had large estate homes. As wealthier families continued to move further out of the cities, their former homes were often subdivided into apartments. New apartments made to look like older homes were then used to fill in between the older homes.

The case studies show that a wide range of densities can be achieved using this building type, from 7 – 22 units per acre, mirroring the range of detached homes. The case studies show how this type allowed for preservation of on-site open space or the meeting of context requirements in a manner that would not have been achieved using the detached house model.

The diagram illustrates 12 different multi-unit housing configurations arranged in a 3x4 grid. Each configuration is shown in a perspective view and a corresponding floor plan view. The configurations are:

- Row 1:**
  - Multi-Family Elevator (Perspective and Floor Plan)
  - Multi-Family Walk-up (Perspective and Floor Plan)
  - Multi-Family Walk-up (Perspective and Floor Plan)
  - Row Houses (Perspective and Floor Plan)
- Row 2:**
  - Multi-Family Elevator (Perspective and Floor Plan)
  - Multi-Family Walk-up (Perspective and Floor Plan)
  - Multiple Units, Single Family Appearance (Perspective and Floor Plan)
  - Multiple Units, Single Family Appearance (Perspective and Floor Plan)
- Row 3:**
  - Multi-Family Walk-up (Perspective and Floor Plan)
  - Compact Single Family Detached (Perspective and Floor Plan)
  - Multiple Units, Single Family Appearance (Perspective and Floor Plan)
  - Single Family with Secondary Units (Perspective and Floor Plan)

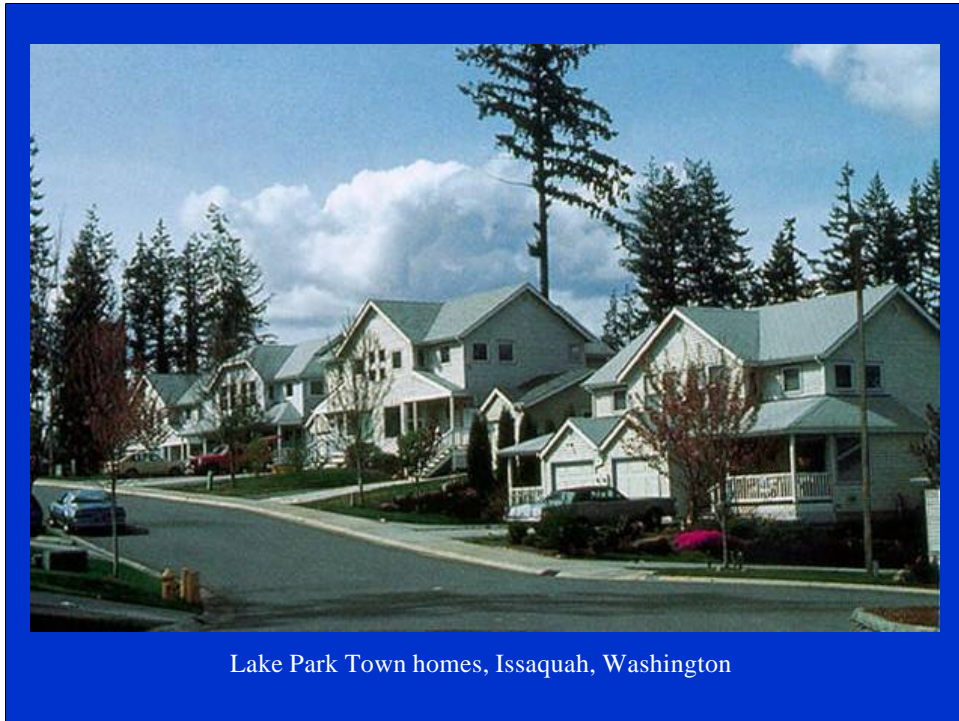
**Multiple Units, Single Family Appearance**



Multi Units, Single Family Appearance



Multi Units, Single Family Appearance

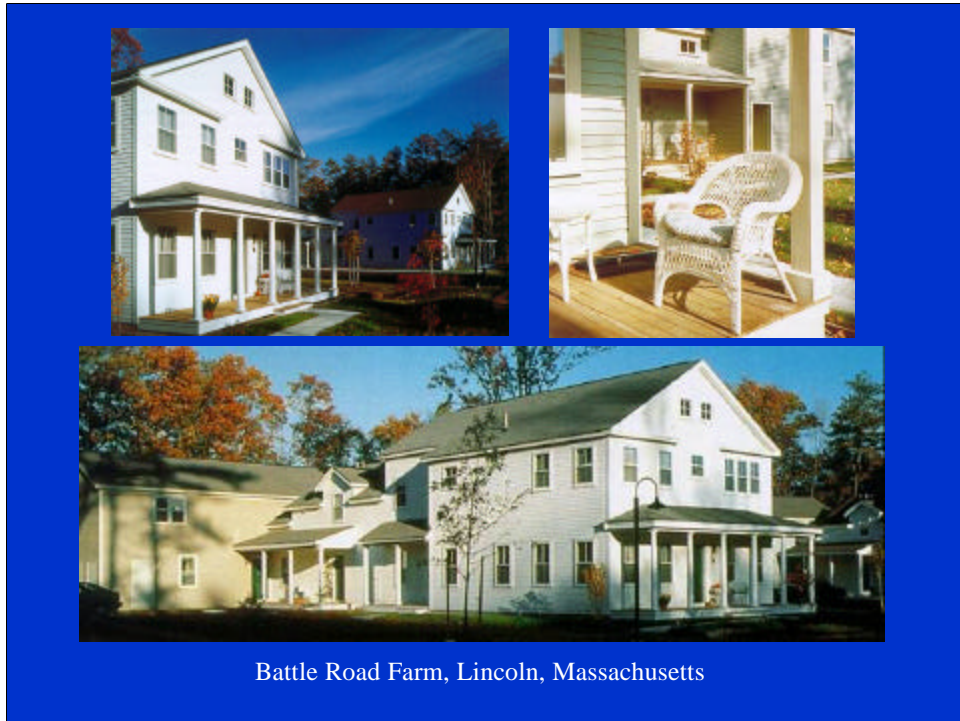


Case Study 11: Lake Park Townhomes 7.8 units per acre including street.

These homes are actually duplexes that are about the same density as the Lyton Park detached homes, but show a different approach to the issue of scale and context compatibility. The development of detached homes was considered but rejected, as they would have appeared too small and closely spaced compared to the surrounding homes in the Klahanie new town. Duplexes also offered some construction and maintenance savings by being attached along one party wall

These 14 duplex buildings provide 28 units of 1450 units each that fit into the size and scale of the 3000 SF homes in the adjacent master planned community. Large front setbacks and side setbacks copy of the patterns of the neighboring homes. One basic plan has been used, but changes in window placement, garage placement, porch forms, and roof forms provide variety.

Large backyards are also a feature of the development



Battle Road Farm, Lincoln, Massachusetts

#### Case Study 12: Battle Road Farm, 10 units per acre including wetlands and commons

The 120 units at Battle Road Farm are developed in 34 separate buildings that are designed to appear like traditional large New England homes and outbuildings. These are laid out on a curving street system and inserted between existing mature trees to create a meandering village edge feeling that is compatible with the pattern of large homes and estates found nearby.

The allusion to traditional architecture includes the use of familiar symmetrical main homes, with a large front porch facing the street, and then attached lower and more irregular “outbuildings” at the rear that mimic traditional add-ons that linked original homes to their later carriage houses and small barns.

These “homes contain 3 or 4 units each, with the structures paired so that uncovered parking courts on one side provide both vehicular and pedestrian access to the side and rear units, while all units have porches or access to the large shared side yard that is shared by 6-8 facing units. While there are no fenced in individual yards, the clustering of the units allowed for a sizable wetlands that occupies about 20% of 24 acre site, and a 120 foot by 550 foot green “commons” at the heart of the community.





### Case Study 13: Field Street, Detroit, 12 units per acre

The 21 units in duplex and quadruple structures along Field Street and Grand Boulevard East replace previously razed structures, and are designed to match the very large single family and duplex homes in the surrounding area.

The overall placement and shapes of the buildings match the context, which is characterized by large rectangular homes with full width front porches, structures raised up on semi-depressed basements, with a mixture of brick and wood siding and historical styles.

The quadruple units look like large single family homes but actually contain four two story units, with two accessed by way of the front porch, and two entered through smaller side entries. On other lots, the units resemble nearby duplexes, or nearby row houses, but all have the same setbacks and share the system of a rear alley that provides access to parking



Case Study 14: The Farm, Soquel CA 13 units per acre including preserved meadow field and community building

The farm is situated in a semi-rural area adjacent to existing large single family homes, and the site required the preservation of a natural meadow. An old farmhouse on grounds that constituted almost half the site was preserved and renovated for use as a childcare and community center. A guest parking lot was developed adjacent to the old farmhouse

The new housing on an L shaped parcel opposite the farm house provides for 2 or three town homes within each new “farmhouse” whose composition, materials, colors, and detailing echoed the original renovated farmhouse. Some of these face the public street, while others are arranged along a wide green commons at right angles to the street.

Parking for the units is provided in an I shaped lot at the rear of the units. Individual front porches provide the only private open space, but the commons and the open fields around the restored farmhouse provide ample shared recreational open space, which together constitute about 30% of the site. Without the inclusion of the field and community building, the density of the housing and its attributable parking and commons would be about 18 units per acre.





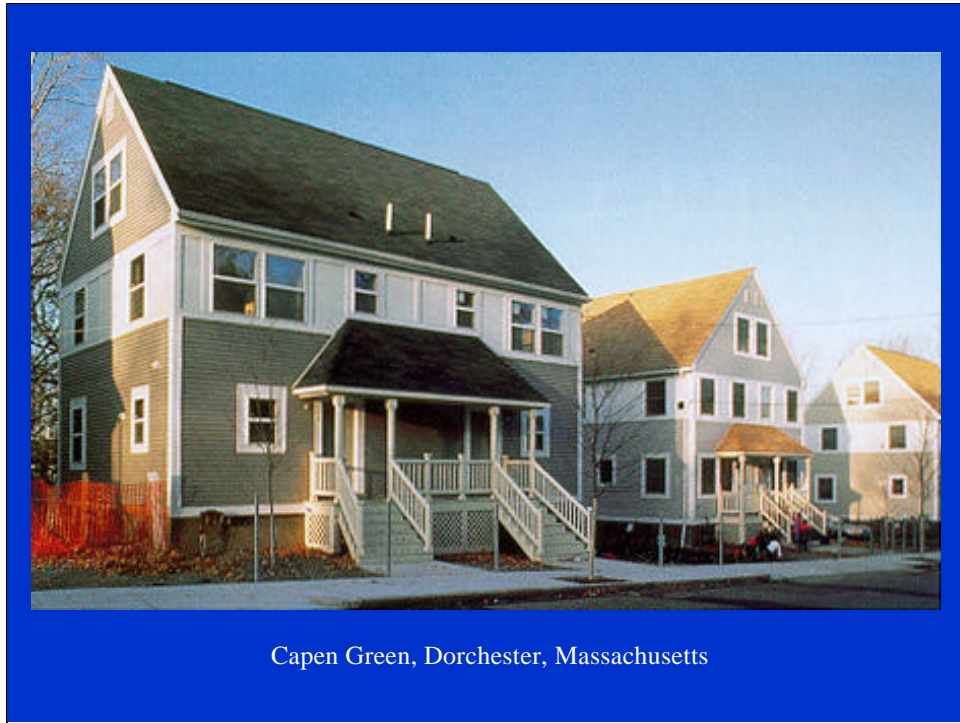
Great House, Fairfax County, Virginia

Case Study 15: Great House, Fairfax County, density varies with lot size: range 8-16 units per acre

The Great House is a building typology being utilized by market rate builders to meet their required below market rate units in new large home subdivision throughout the county. The Great House incorporates two or four townhouses within one building designed to look similar in scale and character to the adjacent market rate homes. In the model pictured, the façade is designed to mask the several entries and provide some asymmetrical elements to avoid looking like a standard duplex or fourplex. Middle units have access to a third floor attic, and all units also have access to full basements below and large decks behind. Parking is on surface lots at the rear of the building.

The overall composition and volume of the building fits into the typology of the area, where one projecting wing may signify the living room, and the other contain a three car garage entered from the side. Prior to the development of the Great House, the typical solution to the Affordable Dwelling Unit requirement had been the construction of conventional townhouses and low-rise multi-family multi-plexes, both of which appeared quite incompatible with the predominant single family detached homes and clearly labeled the affordable housing as different and less desirable.

To date, two projects containing attached Great House units have been built in Fairfax County - one with two units in a single building (the duplex model) and the other with four units per building (the multiplex model).



Case Study 16: Capen Green, Dorchester Mass. 17 units per acre

These ten duplexes provide similar size units as the Issaquah homes, but the house forms allow for expansion by the owners who can convert unfinished basements and attics to bonus rooms for their own use, or to create income producing secondary units over time. If all owners do install secondary units, the density will statistically increase to 34 units per acre.

Buildings are alternatively placed along the street front with a wide side facing the street, then a narrower gabled side facing the street. This provided variety, and also allowed for a closer spacing of the units along the street, allowing one more duplex in a series of five than would have otherwise been possible. Additional variety is economically provided by changing the location and direction of front porch stairs and the style of porch details. The main simple rectangle homes feature modular construction components, but look like the traditionally built

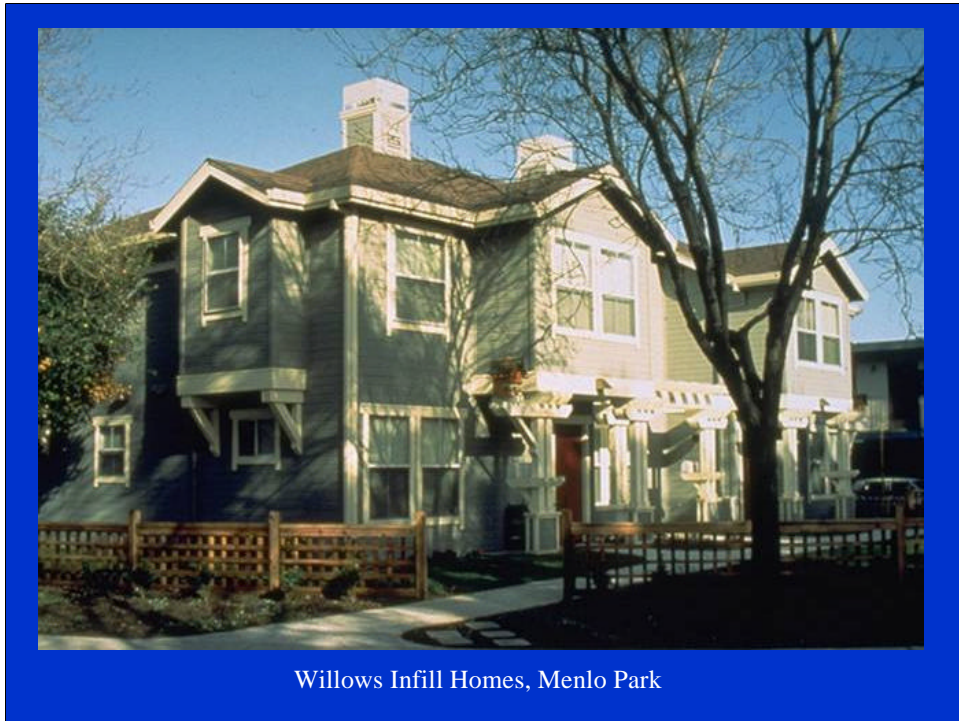
The homes circle most of a common block, so they share common open space beyond their own small yards. Parking did not have to be covered, so two cars are effectively accommodated in tandem form on a private drive at one side of each building.



Sheridan Senior Estates, Mt Angel, Oregon

Sheridan Senior Estates, 18 units per acre

The development consists of seven cottage-style buildings that accommodate fourteen two-bedroom rental units. The homes face inwards towards a centrally located laundry/storage facility and a small community center featuring two outdoor patios. The units were designed with two bedrooms to provide additional space for a caregiver. The vaulted ceilings and combined living, dining, kitchen alcove, provide large open, well-lit space in these efficiently designed, small units.



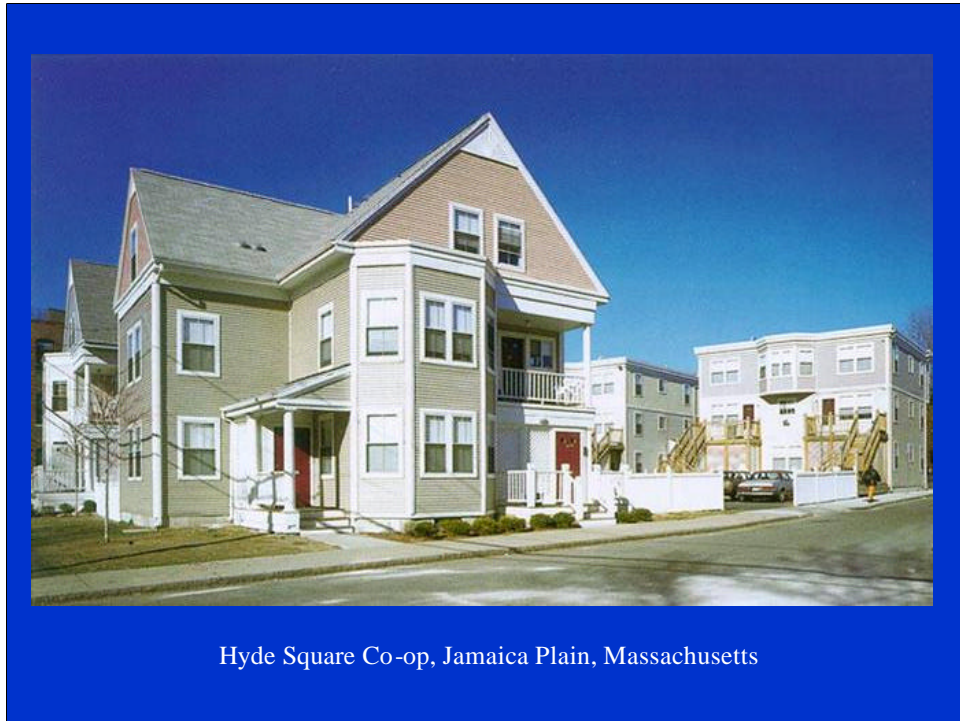
Case Study 17: Willows Homes, Menlo Park, 21 units per acre

The Willows development utilized several scattered sites in a neighborhood of large old arts and crafts style homes. Using the standard 6000 Square foot lot, a basic Triplex building type was developed, with porches, trellis, and fencing that vary from site to site. Units are sited so that they front a walkway at right angles to the street, with uncovered parking in a common lot behind.

While the siting of the building is not typical for the immediate neighborhood, it is a familiar solution historically. Within the wider community and the greater Bay Area region, there are neighborhoods and streets that have narrow but deep lots on which large homes have been built that are entered like the Willows from the side, not from the front.

There are no fenced in private yards, but the community has nearby large parks, and the walkways and entry areas serve as semiprivate open space. Small back areas on the parking side also are used for social space, and both the parking area and the front walk double as hard surface play areas.





Hyde Square Co-op, Jamaica Plain, Massachusetts

#### Case Study 18: Hyde Street Co-op, 22 units per acre

Like the Willows in Menlo Park, The Hyde Street Co-op is a scattered site infill development, with 41 units in 17 buildings. Three different building types were developed. These included including two different duplex (stacked flats) models looking like large single family houses with some bedrooms of the upper unit under a steep pitched roof. The third building type is a three unit three story flat roofed building building resembling the “triple-Decker” stacked flats that also exist in the area. The neighborhood pattern of curving and angled streets and irregular lot depths meant that unlike the Menlo Park project no two sites were alike and presented a major site planning challenge. The “house” style duplexes were sited on the narrower lots or sideways on shallow corner lots. The “triple decker” buildings containing two two-story flats over one single level apartment were in a wider but shallower building type, so better suited to the wide but shallow lots in the area.

All ground floor units have some rear yard area, and all units on upper floors have large porches to compensate for their lack of private yards.

Parking is provided in a variety of patterns, including a mix of shared lots at the side or rear of clustered buildings, and some group parking across the street from buildings on lots too small or narrow to have on-site parking.