

Figure 101 - Diagram illustrates the height limits set by an angled setback plane. This tool limits towering effects of taller structures near property lines. (Source: City of Austin)

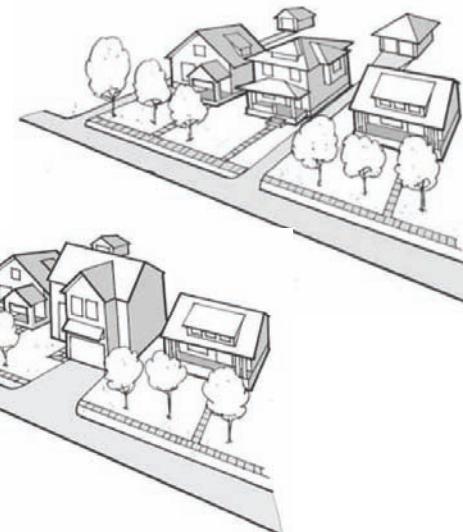


Figure 102 - Height, setback, and front yard parking that are permitted by zoning ordinance (bottom) do not reflect traditional patterns (top). (Source: National Trust for Hist. Pres.)

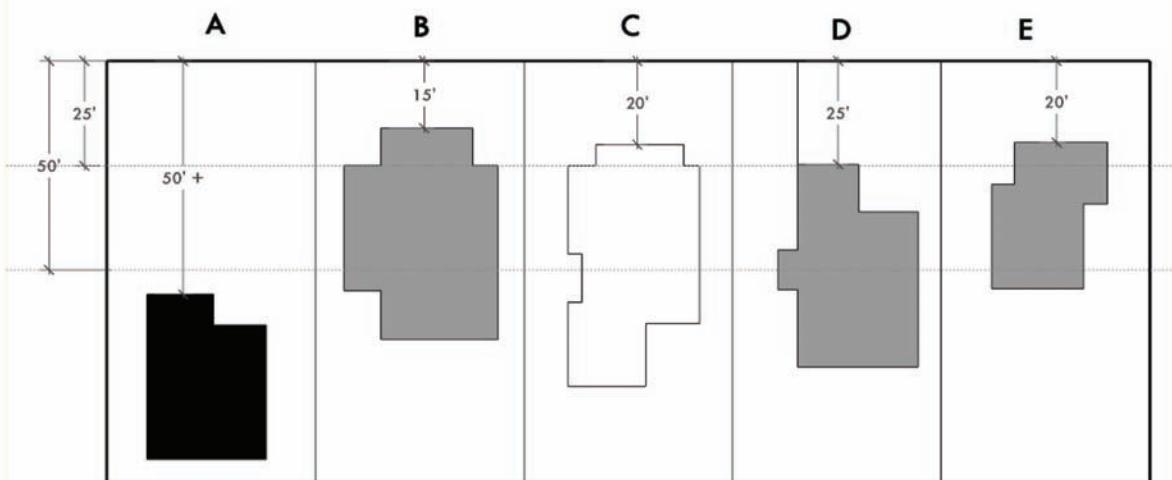


Figure 103 - Contextual block plan utilized by Austin, TX, to permit setbacks consistent with street pattern rather than by prescribed minimums. The black footprint, inconsistent with the established pattern, was not utilized in determining average setback. (Source: City of Austin)

Modified Zoning Standards

Infill construction in dense, older residential areas often magnifies the gap between the maximum building envelope that basic zoning standards allow and the traditionally smaller, average homes built in earlier decades. Many communities have dealt with the discrepancy by adjusting the basic standards to better reflect the existing housing stock. These adjustments may include altered maximum height, minimum setback distances or maximum lot coverages.

The challenge to planners, builders and civic leaders is to agree upon appropriate limits that are context-sensitive but that do not overly constrain potential infill opportunities. This broad approach is the most general and easy to apply, as it applies across entire zones and does not alter the permit submittal requirements or review process.

Additional Zoning Standards

While modifications to existing standards rely upon older, somewhat crude tools to shape new development, the introduction of more nuanced standards may offer another approach to guide context-sensitive infill. These additional standards include establishing maximum floor-area ratios (FAR), gradations of maximum height and limiting uninterrupted wall lengths.

Athens-Clarke County currently regulates FAR for commercial projects but does not consider this ratio in most residential contexts.

This tool establishes building square footage standards based on the size of the lot upon which the building is located. The City of Atlanta recently adopted this standard, in conjunction with new regulations on lot coverage and building height measurements, to regulate infill development.

Limits to uninterrupted wall lengths help reduce the overall perception of bulk or mass of a structure. Varied height measurements allow for taller portions of a structure that are farther from setbacks while requiring lower wall heights near setbacks. These varied standards may also help account for natural and man-made grade changes along a property, as well as along the different façades of a structure. While these additional standards require permit seekers to provide more information than currently required, the overall review process would not require significant alteration or additional time.

Measuring maximum height from pre-construction grades offers a highly context-sensitive regulatory approach, but it also significantly increases time and labor involved in permitting and monitoring. For example, in the City of Atlanta where this new height regulation was adopted, typical permit review time for one single-family infill home is four weeks. A high degree of coordination between building inspectors and planning reviewers is a central challenge for each of these regulatory tools.

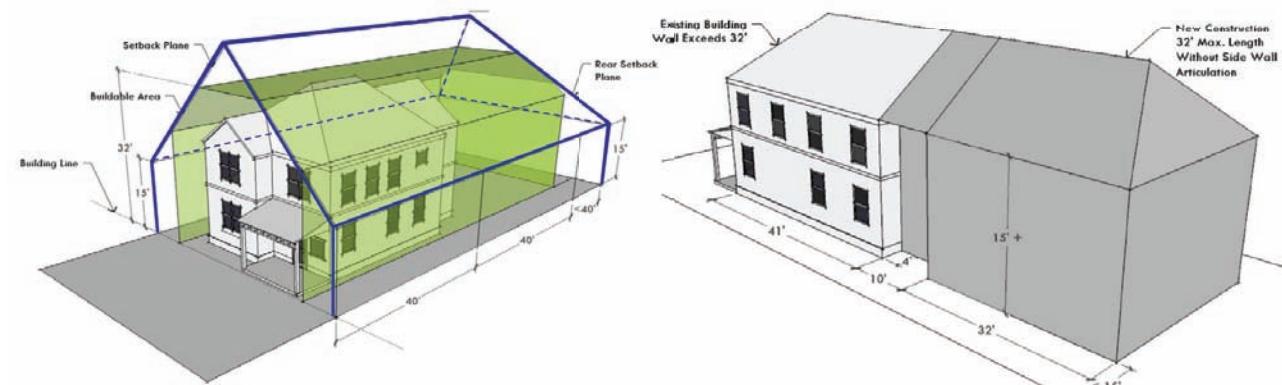
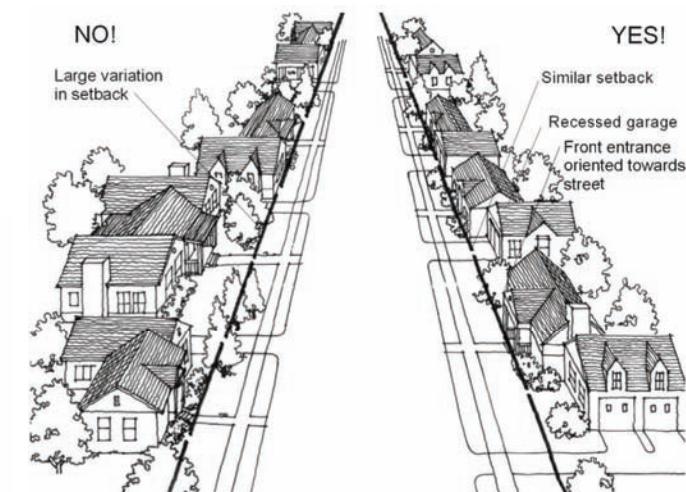
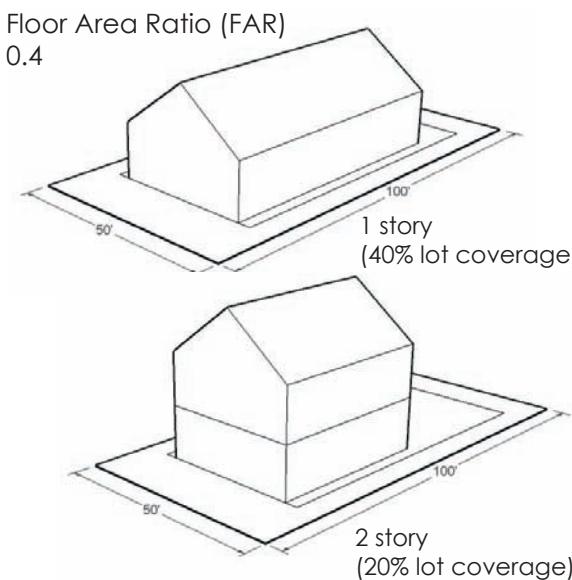


Figure 104 - Green plane illustrates buildable area of lot.
(Source: City of Austin)

Figure 105 - Wall length is limited by established patterns, and requires offsets or "articulation" in order to exceed limits. (Source: City of Austin)



Figures 106 & 107 - At left, Floor Area Ratio diagram illustrates how potential footprint must shrink as multi-story square footage is incorporated into plan. At right, traditional setback lines are utilized to establish a minimum build-to line for new construction that reinforces established patterns. (On right, Source: City of Overland Park, KA)

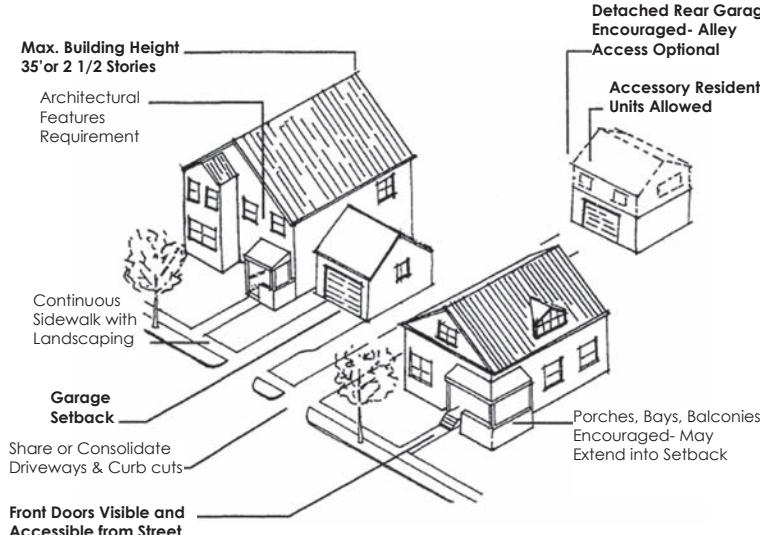
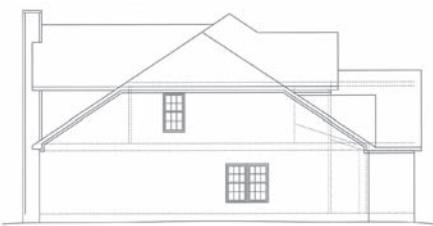


Figure 108 - Standards in bold are not currently included in A-CC code for dense, major subdivisions. (Source: OTAK)



Front Elevation



Side Elevation

Figures 110 & 111 - Architectural elevations (left) are required to review compliance with design standards. For ex., the side elevation above could not be used on a corner lot for failure to meet fenestration requirements adjacent to a street. The site plan (right) is all that is required for a typical infill permit review.

Universal Architectural Design Standards

Similar to the design standards that Athens-Clarke County applies to "major" subdivisions in dense single-family zones, some communities apply these minimum architectural standards universally to all new single-family homes. The difference between this type of infill regulation and those previously discussed is the additional review of architectural features beyond the footprint, height and bulk of the structure.

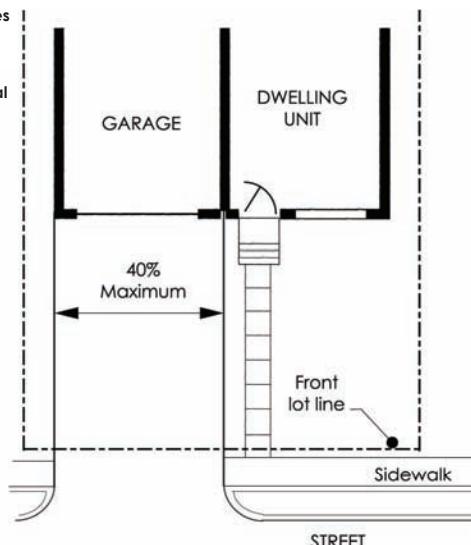
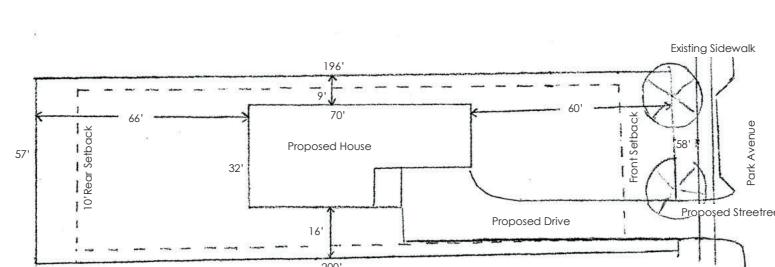


Figure 109 - Setting a maximum % of front façade occupied by garage door is a common standard. (Source: City of Portland, OR)



Residential Site Plan:
Zoned=RS-8
Two-Storied Home
Heated Sq. Ft.= 2,900
Porches Sq. Ft.= 564
Building Height= 31'

Impervious Surfaces:
Drive/Parking=960 sq. ft.
House= 2,240 sq. ft.
Lot= 11,385 sq. ft.
Impervious Coverage= 19.7%

Conservation Overlay Districts

Conservation overlay districts present an opportunity to tailor or calibrate infill construction standards to the particular characteristics of established neighborhoods, rather than applying general standards across entire zoning categories as with the previous strategies. Often referred to as “historic district light,” conservation overlays establish a set of criteria for new development that is based on the surrounding neighborhood context. Unlike historic districts, new construction is not reviewed at a public hearing and demolition or removal of existing structures is typically not restricted. Neighborhood conservation districts are designed to protect the general character of an area, not its historic fabric.

Conservation overlay districts are often established in conjunction with neighborhood plans that identify key features of the area that residents wish to conserve. To develop objective criteria, planners ascertain existing average setbacks, building heights, lot coverages and other typical features of a specific neighborhood and use these measures to craft “overlay” regulations that apply to new development within that neighborhood in addition to basic zoning requirements.

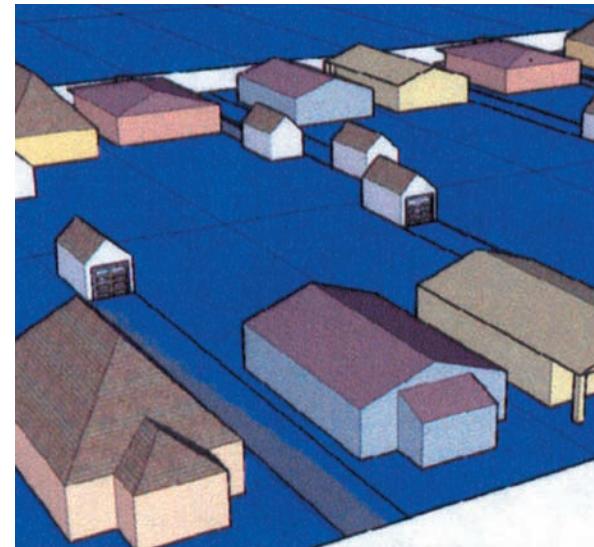


Figure 112 - Axonometric diagram of a neighborhood's existing conditions. House in foreground is reference. (Source: Nore & Winter, Neighborhood Conservation Take a Turn)

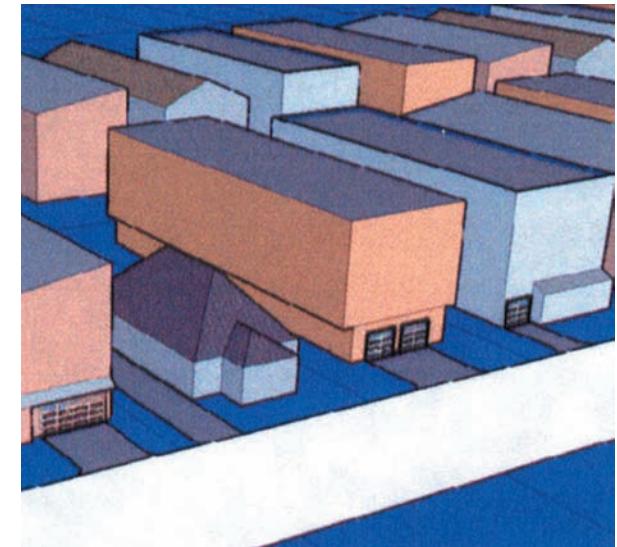
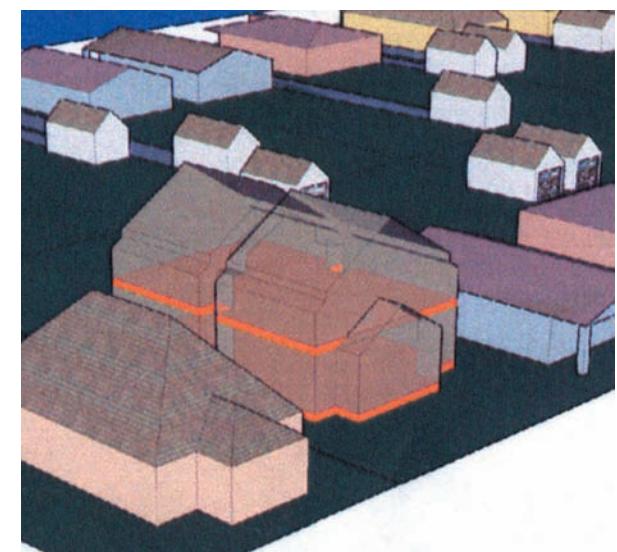
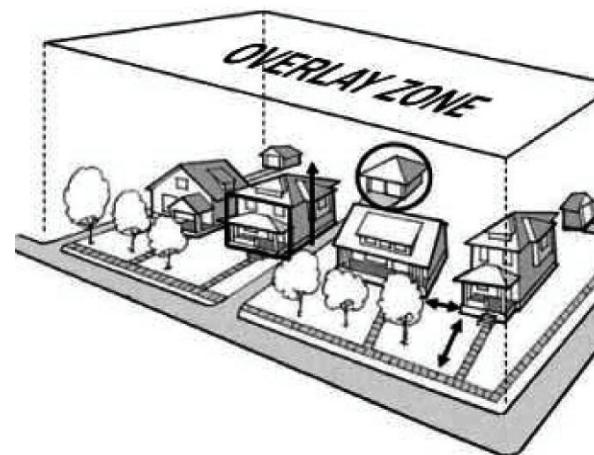


Figure 113 - Axonometric diagram of a neighborhood's potential build out allowed by zoning. One lot maintained for reference. (Source: Nore & Winter)



Figures 114 & 115 - After establishing a conservation overlay to protect established character, regulatory zoning limits are defined by neighborhood context. At right, the new potential buildable area next to the reference house is illustrated by the transparent grey building envelope. (Source: NTHP (left); Nore & Winter (right))

STRATEGIES

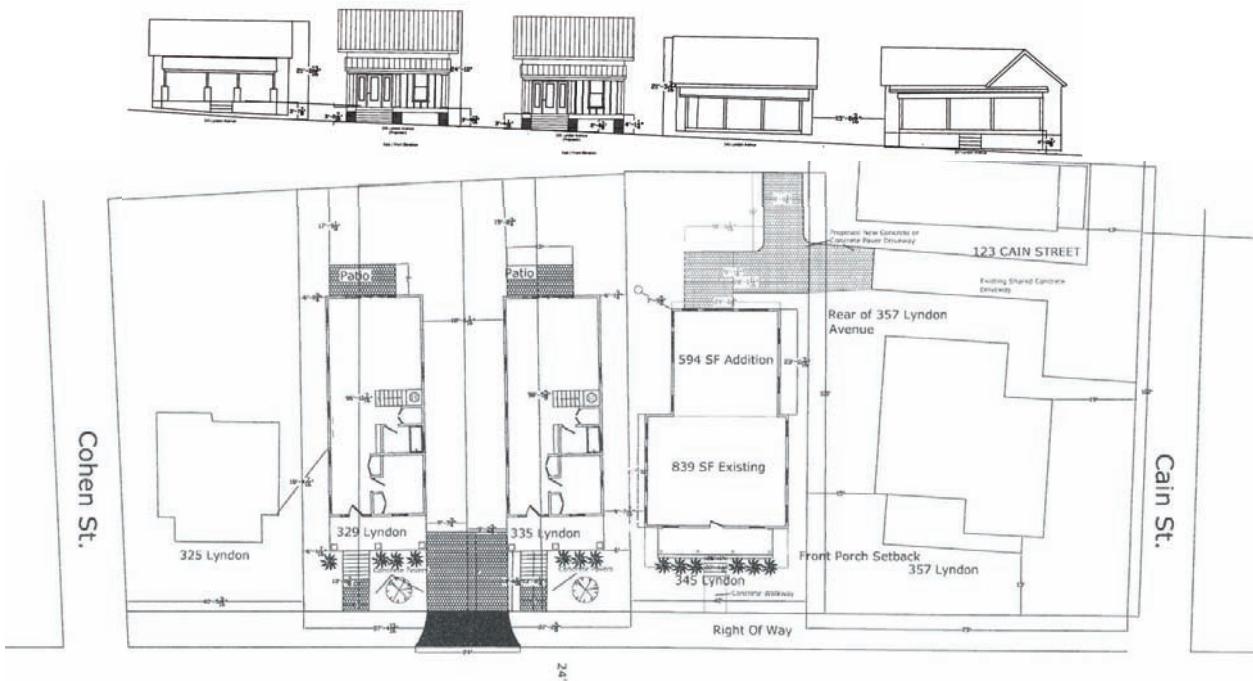
Historic Districts



Figure 116 - After approval of three infill homes on Lyndon Avenue in the Boulevard Historic District, the traditional street character is maintained.



Figure 117 - Numerous historic district guideline publications illustrate the role of different elements in contributing to overall compatibility. (Source: OTAK)



Figures 118 & 119 - Streetscape elevations indicating topographical changes as well as a contextual block plan are among the submittal materials necessary for evaluating the potential impact of proposed infill on a historic district. (Source: COA application documents created by D.O.C. Unlimited)

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Historic Districts

Local historic district designation provides the most thorough level of review for new infill construction, requiring a Certificate of Appropriateness for all new construction. The guidelines by which Certificates of Appropriateness are reviewed include standards for scale, setback, height and massing as well as materials and details. Historic districts are established to protect a neighborhood's defining character--the "sum" of its historic architectural "parts." But historic districts also allow and even encourage contemporary infill construction, with a key guideline for new construction stipulating that new buildings within historic districts should be reflective of their own time.

As a strategy to achieve compatible new infill construction, historic designation is often highly effective. It is also the most appropriate strategy to protect historic resources from teardown threats. However, historic districts are also a resource-intensive tool to establish and regulate. For new construction, a full-set of architectural elevations are necessary in addition to streetscape and topographic documentation in order to adequately evaluate each guideline. The minimum review time in Athens-Clarke County is one month with a \$500 application fee for infill.

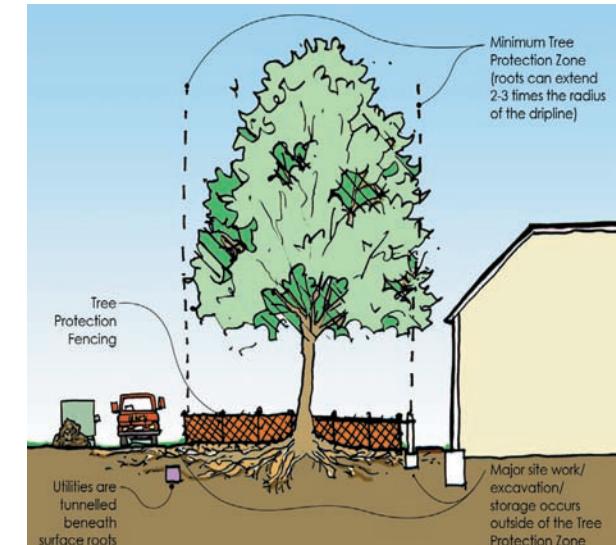
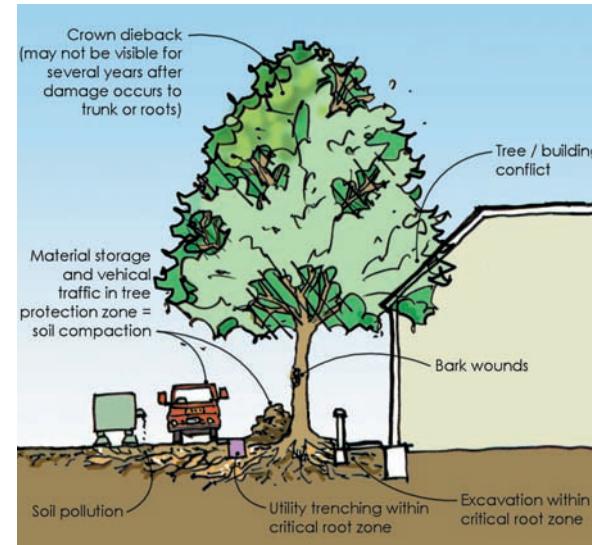
Applying this level of review in all infill urban areas would thus not only be labor-intensive from a staffing perspective and pose additional hurdles for affordable housing, but also could inadvertently hamper urban residential growth in general.

Incentives and Education

Often overlooked or overshadowed by more regulatory approaches, incentives and educational approaches to achieve better infill are often very effective. A local example is the commission of Model Infill Housing Plans discussed earlier in this report. Among some of the most compatible examples of new local housing, a number of infill homes built by utilizing these plans can be found around Athens-Clarke County.

The City of Wilmington, NC, recently utilized a similar approach by hosting a design competition, "Saving Spaces – Progressive Designs for Infill Lots." The undertaking included a juried architectural design competition and exhibition to develop a catalogue of economical, contemporary single-family and duplex housing infill units for use within the context of Wilmington's historic districts.

In Portland, Oregon, planners concluded a multi-year infill design report with the #1 recommendation to foster education and dialogue. To this end, the report identified the need for a design guidebook including prototypes for various site conditions and highlighting strategies for specific challenges (such as ameliorating scale contrasts, minimizing the prominence of vehicular areas, etc.) An annual award program for exemplary infill projects was also cited as an incentive and awareness tool.



Figures 120 & 121 - Educational materials about proper tree protection. The image on the left illustrates a common infill scenario in which builders intend to save trees during construction but inadvertently contribute to their rapid decline.



Figure 122 - Model infill plans from the Wilmington, North Carolina, catalogue that was published following a design competition that generated over 50 entries. Competition parameters included base lot dimensions and zoning limits, and student and professional entries responded with creative, contemporary plans.

RECOMMENDATIONS

Mayor & Commission Feedback

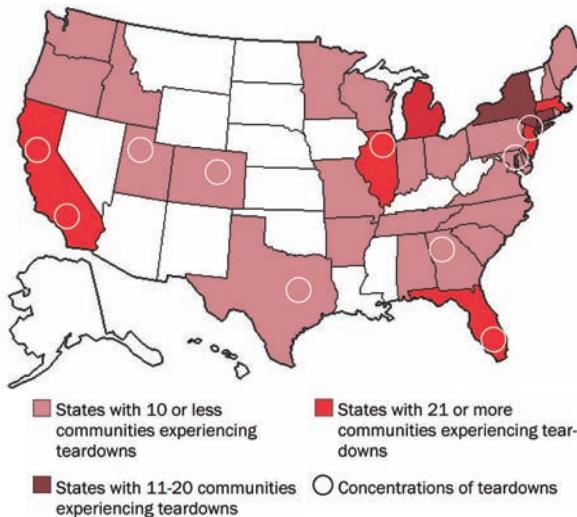


Figure 123 - This national comparison utilized press accounts to identify communities with growing teardown markets. (Source: National Trust for Historic Preservation)



Figure 125 - Infill construction on left with approximately 10% of street-facing façade in windows or doors. Image on right of same structure photo-manipulated to meet the design standard of 20% windows, doors or other openings.

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INFILL HOUSING STUDY

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Mayor & Commission Feedback

At their August 2007 work session, the Mayor and Commission highlighted several specific infill concerns warranting a special focus. The “teardown” trend and, specifically, the loss of historic structures were prominent among these topics. Shortly following that meeting, the Unified Government of Athens-Clarke County established a moratorium on demolitions for a segment of South Milledge Avenue in order to allow adequate time to prepare a strategy to protect the corridor's historic resources.

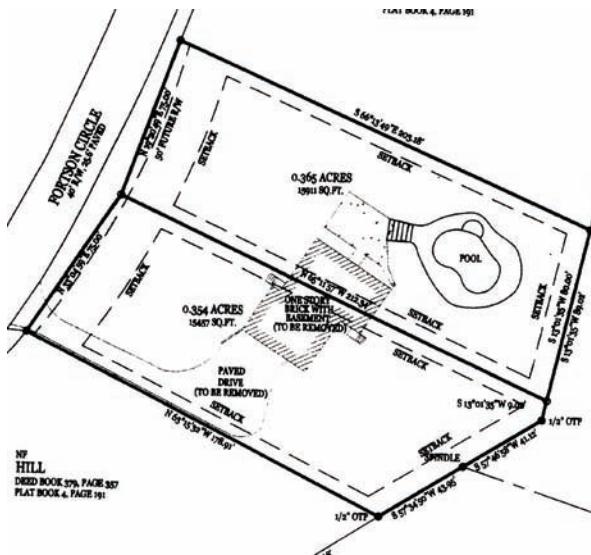


Figure 124 - This subdivision plat creating two new single-family lots where one previously existed is an example of the “teardown” trend highlighted by the Commission.



Teardowns in non-historic areas to allow for additional potential lots were also a point of discussion. This trend is made possible by zoning that allows for denser development than that originally planned with a subdivision's or neighborhood's initial layout. One suggested approach was to examine typical lot sizes and better align permitted densities with existing development patterns. Staff cautions that this approach may stifle infill altogether and revert growth pressures to Greater Athens, Rural Athens, and beyond.

Finally, Commissioners discussed design standards to compel more compatible fenestration, setbacks, and heights, among other features. Developing long- and short-term approaches to improving these standards was a clear goal from the work session input.

Planning Commission Feedback

The Planning Commission discussed the infill housing study at their October meeting and offered several feedback topics. Some questioned whether there might be value in prioritizing the relative importance of different compatibility elements. For example, might details and materials be of lesser significance than scale and massing?

Other points dealt with subjects omitted from the report but pertinent to infill, nonetheless. These included the recommendation to examine other housing types beyond single-family residential, such as duplexes, accessory dwelling units, and manufactured housing, as these housing forms may be appropriate in infill areas if well designed. The use of form-based codes, development regulations that prescribe urban form rather than land use, is one approach to guide infill of various housing types.

Finally, Planning Commissioners stressed the importance of examining the relationship between infill housing pressures and gentrification. While acknowledging that socioeconomic housing issues are outside the general scope of this study, Planning Commissioners suggested that further analysis is warranted.

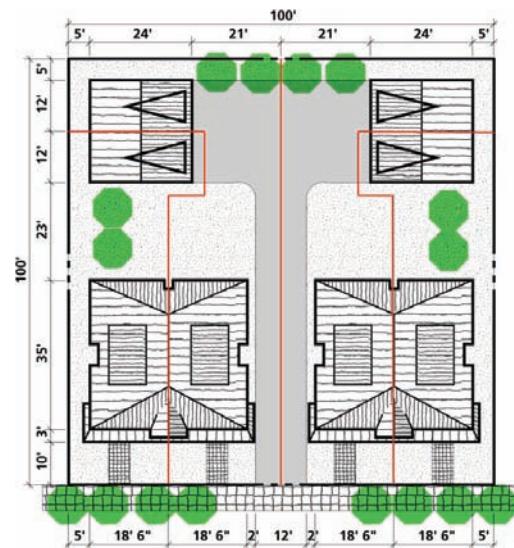


Figure 126 - Design guidelines and housing prototypes for attached single-family residential infill.
(Source: Portland Infill Design Project)

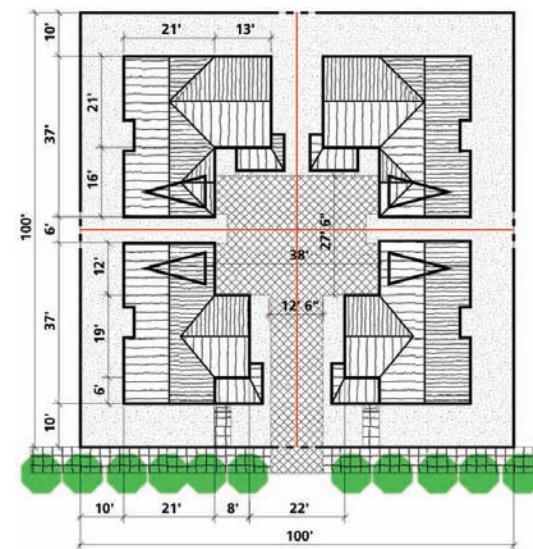


Figure 127 - Design guidelines and housing prototypes for stacked infill lots with a shared courtyard drive.
(Source: Portland Infill Design Project)



RECOMMENDATIONS

Near-term Implementation



Figure 128 - Although this recent structure's height is in stark contrast to neighboring dwellings, it is under the 40 ft. maximum height limits of the zoning code.



Figure 129 - The red line in the aerial above indicates the traditional front yard setback. The two infill dwellings are set farther back to meet future right-of-way setbacks.



Figure 130 - The aerial image on the left shows three infill homes with 20-foot wide parking areas that occupy roughly 1/3 of the front yard area of each lot. The manipulated image on the right demonstrates how shared drives and rear parking can minimize the visual impact of parking on the streetscape.



INFILL HOUSING STUDY

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Regulatory Approaches

Near-term Implementation (Little to no additional resources required)

1. Height Regulations.
Modify height limits and/or amend definition. Athens-Clarke County's height regulations in most residential areas are incongruous with typical development patterns. Staff recommends lowering the maximum height in most residential zones and amending the definition of structure height to clarify how it is measured. After surveying a number of jurisdiction's height regulations, more typical height limits are 30 to 35 feet or 2 ½ stories.

2. Parking Regulations.
a. To mitigate against the negative visual impact of front yard parking, staff recommends modifying the driveway design code to allow 18 feet of width by the depth of the front yard or 25% of the front yard, "whichever is less." The current code permits 25 feet of width and "whichever is more" language. Staff acknowledges that this modification would limit front yard parking options for narrow lots.
b. As narrower infill lots utilize shared drives to serve two residential units, specific parking design guidelines should be tailored for this scenario.

3. Setbacks.
Permit the Director of Public Works to administratively waive future right-of-way setback requirements when requested to maintain traditional setback patterns and when not in conflict with anticipated right-of-way improvements.

Regulatory Approaches

Potential Future Implementation (May require additional resources)

1. Revisit height and setback limits.

Incorporate 45° angle modification or alternative height limit for narrow side setbacks. Consider maximum FAR requirement to relate permitted dwelling square footage to lot size.

2. Revisit design standards:

a. Content – garage and shared drive design guidelines, incorporate foundation plantings, address slab construction standards, require minimum depth eaves, eliminate false front materials, etc.

b. Applicability– the application of architectural design standards to all infill residential construction, rather than only to major RS-5 and RS-8 subdivisions, will require additional resources and potentially a Plans Review process similar to major subdivision site review.

3. Consider Conservation Overlays when the following conditions exist:

a. Neighborhood Planning is a key first step to conservation overlay districts. Neighborhood groups identify key character-defining features of their respective areas that they wish to protect.

b. Preservation of development patterns, not individual buildings, is the primary goal of the overlay.

c. Compatible setbacks, height, and overall bulk are primary focus.

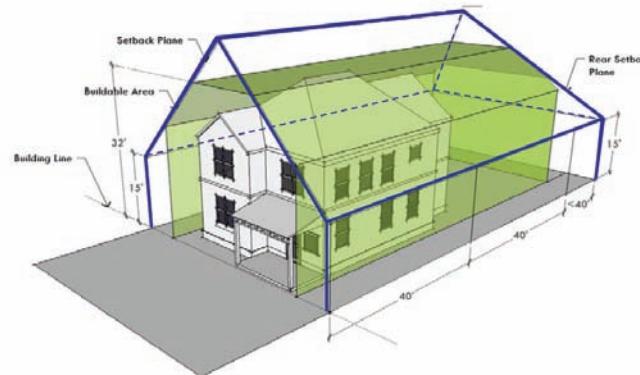


Figure 131 - The diagram above shows how a 45° setback plane limits structure height closer to side lot lines. The green envelope is the buildable area. (Source: City of Austin)



Figure 133 - Neighborhood-scale planning is a key first step for determining boundaries and goals of conservation overlay zones. Figure 134 - Oblique aerial imagery and Pictometry software enable Planning staff to assess typical setbacks, heights, and lot coverages that contribute to an area's existing character.

Application checklist for two-story or more single-family dwelling or those exceeding 20 feet in height:

- 2 full-size sets of floor plans and elevations of all facades, sealed and certified by licensed architect, engineer, or surveyor;
- 2 sets of topographic survey at 1' intervals sealed by licensed surveyor;
- Site plan including coverage areas for decks, breezeways, patios, drives and all parking areas;
- Contextual site plan of block (if using setback averaging).

Figure 132 - This submittal checklist from Austin, TX, indicates the degree of detail required to review more nuanced design standards like 45° setback plane limits.



RECOMMENDATIONS

Potential Future Implementation

Potential Local Historic Districts from ACC Community Assessment...

Athens Warehouse Historic District
Buena Vista Heights Historic District
Carr's Hill Historic District
Dearing Street Historic District in entirety
King Avenue Historic District
Milledge Avenue Historic District
Milledge Circle Historic District
Oglethorpe Avenue Historic District
Pulaski Street/Pulaski Heights Historic District
Reese Street Historic District
West Hancock Historic District
Hull Street Historic District

Figure 135 - Each of these potential future historic districts has a corresponding national historic district already in place.

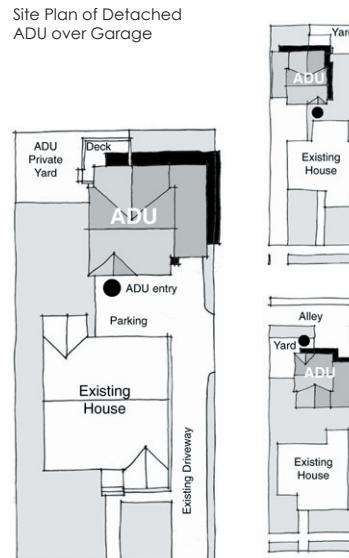
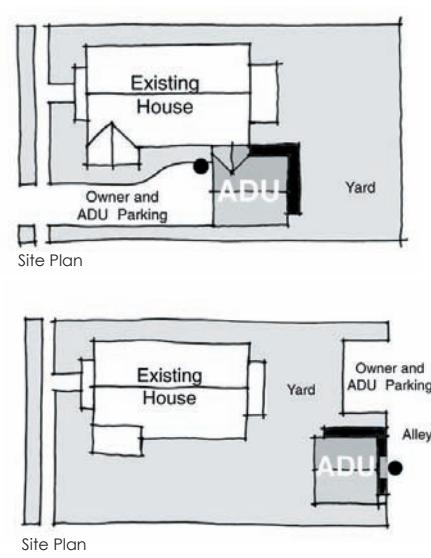
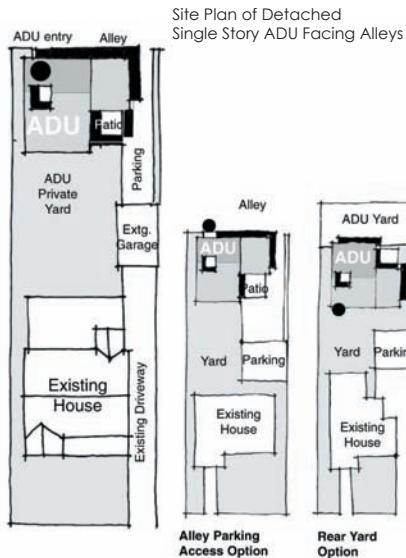


Figure 137 - From the Santa Cruz, CA Model Accessory Dwelling Unit Ordinance, these site plan examples demonstrate the variety of ways accessory dwellings (a.k.a. granny flats or in-law suites) may be appropriately incorporated on a single-family residential lot, depending on the neighborhood context. (Source: City of Santa Cruz)

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Potential Future Implementation, cont.'d
(May require additional resources)

4. Consider additional Historic Districts when the following conditions exist:
 - a. The area's combination of architectural and/or cultural resources contributes to a distinctive historic character.
 - b. Preservation of the architectural or cultural heritage of the area, as reflected in the built, historic environment, is the primary goal of the district.
 - c. Public hearing review of demolition permit applications is desired.
5. Consider Accessory Dwelling Unit and/or "Single Family Residential" Condominium ordinances to:
 - a. Encourage appropriate density where zoning supports it.
 - b. Define acceptable design and site criteria for accessory dwellings and/or multiple dwellings on a single lot.
 - c. Provide affordable housing options in accessible areas.
 - d. Enable legal, non-conforming properties in historic districts (single-family homes with existing historic accessory dwellings) to become eligible for tax assessment freeze benefits.



Figure 136 - Applying subdivision site design regulations to the review of this 7-unit single-family condo development, an emerging trend, was somewhat cumbersome.

Permitting Review and Enforcement

The development review and permitting process should continue to improve in consistency and efficacy. While the Planning Department strives for efficient and timely reviews of single-family residential permits, the range of potential code issues involved in the construction of a single-family dwelling warrants a careful and thorough review. After surveying a number of communities similar in size to Athens-Clarke County, staff was somewhat surprised to learn the typically lengthier review periods for single-family permits in comparable jurisdictions.

Consideration of architectural design standards in infill scenarios must include an appraisal of the additional administrative review and inspection demands that would be necessary for implementation.

Lack of adherence to approved plans with respect to building setbacks and driveway design is a common problem identified by inspectors and neighbors. These inconsistencies may be resolved by requiring the builder to amend the approved plan to accurately reflect the site alterations. Occasionally, however, the altered plans cannot be approved due to code violations, and variance requests frequently ensue. While not as common as often perceived, this "don't ask permission, ask forgiveness" approach to home building is costly, time-consuming, and frustrating for all involved.

Jurisdiction	Review Time	Submittal Requirements
Asheville, NC	10 days	site plan and elevations
Atlanta, GA	4 weeks	site plan, elevations, topo survey, grading plan
Auburn, AL	1-2 days	site plan only
Austin, TX	2-4 weeks	site plan, full set architectural, topo survey, contextual block site plan
Champaign, IL	5 days	site plan and elevations
Charlottesville, VA	2-3 weeks	site plan and full set architectural
Fayetteville, AR	7-10 days	site plan, tree protection plan, grading plan, elevations
Greenville, SC	NA	site plan only
Iowa City, IA	1-2 weeks	site plan and elevations

Figure 138 - From phone surveys and online materials, this compilation of typical review periods and submittal requirements related to single-family permitting includes jurisdictions similar in size to Athens-Clarke County as well as those with design standards or additional zoning requirements such as a maximum residential FAR.

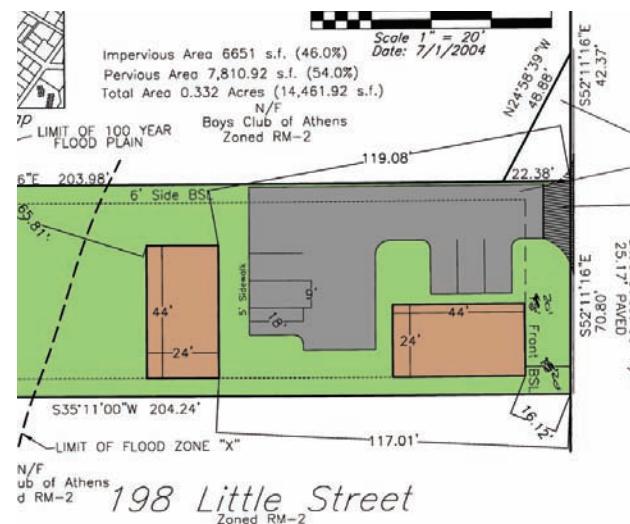


Figure 139 - The site plan (left) submitted for construction of two dwellings in the mixed-density residential zone was not adhered to during construction in 2005. The aerial image at right shows the site as constructed. While the structures meet basic building and zoning codes, the parking configuration does not.

RECOMMENDATIONS

Incentive and Educational Programs

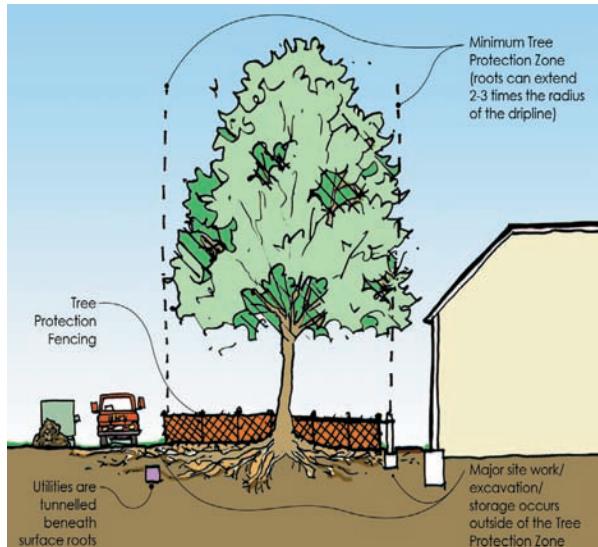


Figure 140 - Educational tool: diagram of proper tree protection.



Figure 141 - Regular workshops may help educate home buyers and builders alike about a variety of infill topics, from site plan preparation tools to tree protection.



Figures 142 & 143 - The use of innovative materials and stormwater management designs warrant code incentives to encourage their use on infill sites.

INFILL HOUSING STUDY

February 2008

Incentive and Educational Programs

Educational Workshops

Through coordinated efforts, the Planning Department, Building Inspections and Permitting Department, and Public Works Departments could host best management practices workshops for home builders and others in the development community. These topical workshops might address a range of issues from tree protection to masking scale contrasts to innovative stormwater management tools. Potential funding sources include grant programs and participation fees.

Regulatory Incentives

Athens-Clarke County zoning regulations currently do not encourage the use porous pavement or other innovative pervious surface materials for driveway and parking design. The zoning code treats these more costly improvements on par with conventional asphalt and concrete areas in the calculation of lot coverage. Paired with educational workshops about proper installation and maintenance, adjusted coverage allowances may offer a regulatory incentive for more sensitive driveway materials.

Incentive and Educational Programs

Voluntary Tree Management Plans

For home builders intending to retain mature trees within proximity to infill construction, voluntary tree management plans would help identify necessary protection measures to ensure tree survival. Infill builders that are in compliance with protection plans during random site checks from the arborist or other inspectors would receive a *Green Leaf* certificate for the property, a potential selling point for savvy home buyers.

Design Competitions and Awards

To update and expand upon the successful example of the Model Infill Housing Plans, Athens-Clarke County could host an infill design competition for local builders and designers. Winning entries would be published in a catalogue available at the Planning Department. Another initiative to raise awareness about good infill construction could include an annual Golden Hammer award presented to exemplary projects, similar to the current A-CC Transportation and Public Works Department's Stormwater Steward annual award at GreenFest. These positive incentives acknowledge exemplary work by builders and designers and would serve to highlight design that can serve as models for future development. Potential funding sources include grant programs and competition entry fees.

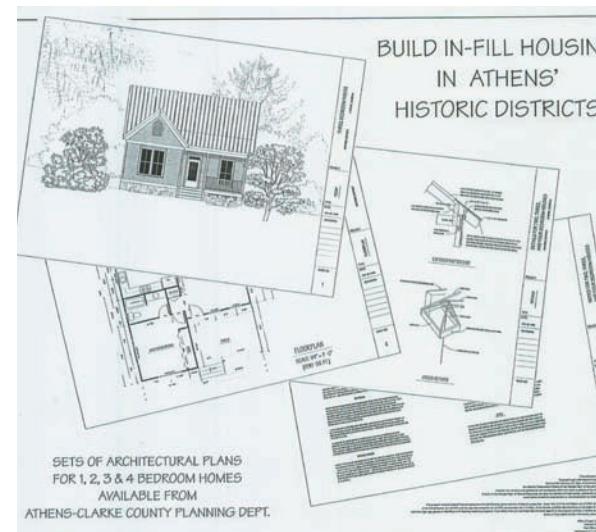


Figure 144 - The four Model Infill Housing Plans produced ten years ago should be updated and expanded upon with a new design competition.



Figure 146 - Community recognition like the Athens Clarke Heritage Foundation's annual preservation awards bring attention to noteworthy projects that merit emulation.



Green Leaf Steward Certificate

This is to certify that
**Historic Van de Kamp Bakery Building,
Northeast Center,
Los Angeles City College,
Los Angeles, California**

has achieved the rating of

GOOD

Under

Bespoke BREEAM

This assessment was carried out at the
CONSTRUCTION PHASE

Signed on behalf of Building Research Establishment Ltd.

Clare Loxe
Date: 22 November 2005

<i>Licensed Architect</i>	Amy Garrod	<i>On behalf of:</i>	Faber Maunsell / DMJM
<i>Client</i>	Los Angeles Community College District	<i>Local Expert:</i>	DMJM / JGM Program Management
<i>Architect:</i>	Roschen Van Cleve	<i>Master Plan</i>	Steven Ehrlich Architects

Figure 145 - Certificates that recognize exemplary construction practices are another incentive tool.

(Source:BREEAM)

APPENDIX

Source Summaries

"Neighborhood Conservation Takes a Turn"

Winter & Company

This article examines Durango Colorado's established neighborhood's efforts to preserve their existing character by creating "conservation districts" rather than historic districts. It examines the different viewpoints in choosing this approach; how the "historic vs. conservation" conflict arose; options for discretionary review; and efforts being made for more context-sensitive zoning. Methods explored to fine-tune the underlying zoning so that it is more context sensitive include:

- Adjusting the maximum building height
- Defining different height limits based on the position on a lot.
- Set a limit to wall length.
- Establish a floor area ratio.
- Revise building setback provision.

In order to achieve a more context-sensitive approach, the existing character must be documented (configuration of blocks, streets, alleys, as well as building arrangement, setbacks, mass and scale). The article also suggests that a forum should be provided so that all viewpoints on this approach can be heard to ensure the character and livability of these established neighborhoods can be preserved.

"Single-Family Residential Infill / Redevelopment Design Guidelines and Standards"

City of Overland Park, Kansas

The City of Overland Park, Kansas implemented an Infill and Redevelopment Overlay Zone that established Design Guidelines and Standards for one-family and two-family (duplex) dwellings. These guidelines were broken down into two categories: Site Planning and Site Layout/ Development Patterns.

Site Planning:

- Lot Coverage
- Preservation of Natural Resources (Existing Tree, Tree Replacement, etc.)

Site Layout/ Development Pattern:

- Lot Dimensions
- Setbacks
- Bldg. Orientation
- Street Connection
- Building Design & Architecture (Building Height/Massing/Form, Roof Form, Building Façade, Accessory Structures, etc.)

"What is Infill"

The State of New Jersey's DCA

This document examines the different definitions of infill, characteristics and provides examples of infill.

INFILL HOUSING STUDY

February 2008

"Who's in Control Here?"

Elizabeth A. Lunday

An Arts & Craft bungalow neighborhood located in Fort Worth, Texas was faced with the problem of properties being bought, demolished, and replaced with new larger homes that were inconsistent with the rest of the neighborhood. The neighborhood began to pursue a historic designation but some neighbors were apprehensive about being included, which threatened to produce a district that resembles "swiss cheese" with many holes. This article examines the topic of owner's consent across the country when cities seek to save historic neighborhoods.

"Teardowns"

David Matlow

The National Trust for Historic Preservation explains the teardown epidemic that is wiping out historic neighborhoods one house at a time. They offer resources, the online "Teardown Resource Guide" to help historic neighborhoods through a variety of tools and approaches that help manage this type of growth. They also warn that there is not a "one-size-fits-all" solution and that each community should expect to use a combination of tools.

Some examples from the "Teardown Resource Guide" are included in the article. One is an analysis of teardowns by state and community and the other is a visual analysis of teardowns across America.

ATHENS-CLARKE COUNTY

Planning Department

"The Power of INFILLtration"

Elizabeth A. Lunday

This document examines the land use pattern in which single-family residential has become separated from multifamily over the years and the emerging return of multifamily developments being integrated into traditional neighborhoods. The article looks at setbacks, ways to make small-scale multifamily work, and how to encourage appropriate dense development.

A strategy that the City of Austin, Texas utilizes is a university neighborhood overlay zone that covers an area of approximately 231 acres near the University of Texas. The goal is to create higher densities, to upgrade student rentals, to reduce spillover of students into nearby neighborhoods, while preserving the character of historic neighborhoods where development is occurring.

Also included in the article is the West Campus Design Guidelines, which correspond to one of the University Neighborhood Overlays. A sample of the University Neighborhood Overlays Ordinance is also included.

This article includes a section on "The Return of the Garage Apartment." Austin, Texas and St. Petersburg, Florida have adopted ordinances to allow accessory dwellings in order to take pressure off redevelopment, increasing property values and densities. Currently in Austin, Texas the owners of a single-family lot with a least 7, 000 square feet can build a garage apartment or granny flat. The city is contemplating a reduction of the minimum lot size to 5,750 square feet.

APPENDIX

Source Summaries

"Accessory Dwelling Units: Issues and Opportunities"

Municipal Research & Services Center of Washington

Prior to the 1950's Accessory Dwelling Units (ADU's) were common. However in the past decades communities have adopted restrictions against ADU's in order to protect single family neighborhoods. This article examines why the ADU's have become popular again (affordable housing crisis, demographic trends and state laws); how benefits are accrued (to community, homeowners, and tenants); and what regulatory and zoning issues and options are common.

Some key points of the article include the Model Accessory Dwelling Unit Ordinance from the Washington State Department of Community, Trade and Economic Development that explains the purpose of allowing ADUs. The article also touches on review and approval procedures, size regulations, owner-occupancy requirements, occupant restrictions, the number of occupants, parking requirements, and design standards for accessory dwelling units.

"Residential Design and Compatibility Standards"

The City of Austin, Texas

Austin's City Council approved the "Residential Design and Compatibility Standards" in order to minimize the impact of new construction, remodeling and additions to existing buildings on surrounding properties in residential neighborhoods. They are designed to protect Austin's older neighborhoods by ensuring that new construction and additions are compatible in scale and bulk.

Some development standards include:

- maximum density
- building height
- setbacks (fronts yard, rear yard, & side yard)
- setback planes (side & rear)
- buildable area
- side wall articulation

"Innovative Tools for Historic Preservation: Where is Conservation Zoning Appropriate?"

Marya Morris

The article examines conservation zoning and its relationship to historic preservation. The primary purpose for some conservation districts are to preserve housing, protect the character of a neighborhood and promote neighborhood revitalization. Conservation districts are a viable alteration to full historic designation. Many cities have different criteria, procedures, and methods for nomination or for establishing these districts.

APPENDIX

Source Summaries

"West Campus Design Guidelines for the University Neighborhood Overlay, a component of the Central Austin Combined Neighborhood Plan"

Cotera+Reed Architects

The West Campus Design Guidelines and the University Neighborhood Overlay of which it is a part are components of a neighborhood plan sponsored by the City of Austin and neighborhood organizations to the west and north of the UT Austin campus.

These documents are intended to create a long range vision of an urban and diverse residential district in the area just west of the campus, while preserving the smaller scale residential character of other areas in the neighborhood plan. The overlay and guidelines are intended to help create a residential district that is close to the campus, consolidating some of the student housing that is presently scattered throughout the city, and thereby reducing transient student traffic to campus from outside, and reducing the transient parking requirements around West Campus.

Some examples of what these guidelines include are as follows: creation of hierarchy for transportation concerns in street design (pedestrian traffic, transit, bicycle traffic and cars, respectively), building setbacks, streetscapes, building size and location as well as parking structure standards (screening, flat slab when parking structures faced the street, etc).

INFILL HOUSING STUDY

February 2008

"Out With the Old, in With the New: The Cost of Teardowns"

Lane Kendig

This article examines the reasons behind teardowns: housing styles and materials that are dated, structural problems and economics. The general rule for new housing is that the lot value should be no more than 25% of the total value of the property. For teardowns land value will exceed the value of the house, the lot is likely to be 50% or more of the value of the property.

The article suggests that the first step in combating teardowns is predicting where they will occur. Teardowns typically occur when there is access to transit, waterfronts, recreational opportunities and tourist amenities. Other signs to look for are: where the standard unit is among the smallest in the community, depression-era homes (1940's-1950's), homes that range from 900-1,400 square feet, number of stories (ranch styles are vulnerable because two stories homes are now the standard).

Some suggested tools for regulating teardowns include:

- modified setbacks
- building coverage
- floor area ratio
- height
- building volume ratio
- side wall articulation

Some additional suggested tools for regulating teardowns include:

- landscape volume ratio
- side volume ratio

Suggested regulations that can preserve community character are:

- overlay districts
- neighborhood conservation districts
- downzoning
- waiting periods

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