



RECODE KNOXVILLE

 INVEST

 PROTECT

 CONNECT

TECHNICAL REVIEW & APPROACHES REPORT

September 2017 | CAMIROS

Update Zoning Code

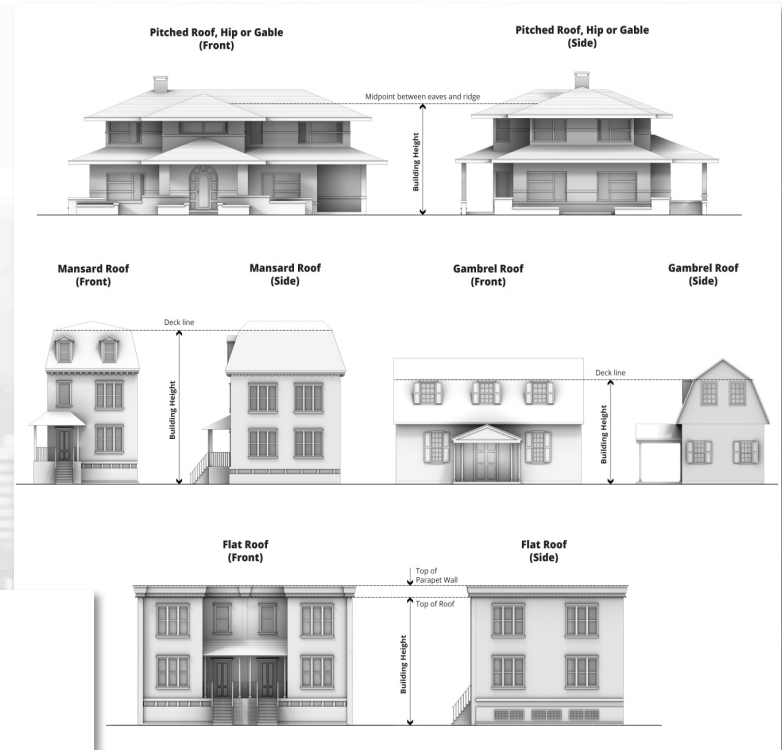
The **Goals** of this project...

- ✓ Implement adopted land use policies
- ✓ Create a Code that is graphic, intuitive, & user-friendly
- ✓ A transparent, predictable, & consistent Code
- ✓ Allow development to occur without excessive special approvals
- ✓ Increase the transparency of approvals

Zoning Organization

Key **Organization** techniques

- ✓ More illustrations & matrices
- ✓ Internal consistency
- ✓ Standardize rules of measurement
- ✓ Define all terms & uses in the Code
- ✓ Integrate new parking revision
- ✓ Align & integrate FBCs (South Waterfront & Cumberland)



Zoning Organization

COMPARTMENTALIZATION	
Introduction	Article 1: Title, Purpose & Intent Article 2: General Definitions Article 3: Measurement Methodologies Article 4: Zoning Districts & Zoning Map
Zoning Districts	Article 5: Residential Districts Article 6: Commercial Districts Article 7: Office & Industrial Districts Article 8: Special Purpose Districts
Uses	Article 9: Uses
Development Standards	Article 10: Development Standards Article 11: Off-Street Parking and Loading Article 12: Landscape
Zoning Administration	Article 13: Administrators Article 14: Application Procedures Article 15: Zoning Approvals Article 16: Planned Development
Implementation	Article 17: Nonconformities Article 18: Enforcement

Zoning Uses

Modern **Generic Use** approach

- ✓ Define each use
- ✓ Call out only specific uses that have impacts
- ✓ Add sustainable uses: urban agriculture (cross-ref), solar farms, community gardens, etc.

Tailor uses to districts

- ✓ Eliminate cumulative approach
- ✓ Prevents unintentional undesirable uses

Use Standards to regulate impacts

- ✓ Similar to Section 3 of Article 5
- ✓ Apply to permitted & special uses



Zoning Uses

New **Special Use** approach

- ✓ Convert “use on review” to “special use”
- ✓ Special use approval granted by Metropolitan Planning Commission
- ✓ Approval process is narrowly defined & structured to approve the use of a property
- ✓ Not design review
- ✓ MPC may impose additional conditions on a special use to mitigate impacts

Zoning Uses

TABLE 8-1: USE MATRIX

Use	R-1	R-2	R-3 -50 & -35	R-4	R-5	R-6	R-7	DT ¹	HS	GC	MS ¹	NA	NC ¹	RR ¹	OS	PL	H	Use Standard § = Section
Residential																		
Community Residence – Small (6 or Fewer Residents)	P	P	P	P	P	P	P											§8.4.E
Community Residence – Large (7 or More Residents)						S	S											§8.4.E
Dwelling – Single-Family (Detached)	P	P	P	P	P	P	P											
Dwelling – Two-Family					P	P	P											
Dwelling – Townhouse						P	P			S	S	S	S	S				
						P	P		S	P	S	P	P	S				
								P	P	P	P	P	P	P				
					S	S	S			S		S		S			P	§8.4.O
								S	P	P	P	P	P	P	P	P	P	§8.4.D
Cultural Facility		P	P	P	P	P	P	S	P	P	P	P	P	S	P	P		
Educational Facility – Primary or Secondary	P	P	P	P	P	P	P										P	
Educational Facility – University								S		S	S	S		S			P	
Educational Facility – Vocational								S	S	P	S	P	S	S				
Government Office								P	P	P	P	P	P	S	P	P		
Park/Playground	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
Place of Worship	P	P	P	P	P	P	P	P	P	P	P	P	P	S				§8.4.M
Public Safety Facility								P	P	P	P	P	P	S	P	P	P	
Public Works Facility																	P	
Utility	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	P	S	
Retail																		
Art Gallery								P	P	P	P	P	P	P				
Auction House								S	P	P	S	P	P	P				
Brewpub								P	P	P	P	P	P	P				

Permissions
 Permitted = P
 Special = S
 Blank = Prohibited



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Zoning Uses

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Dwelling – Two-Family					P	P	P											
Dwelling – Townhouse						P	P			S	S	S	S	S				
Dwelling – Multi-Family						P	P			S	P	S	P	P	S			
Dwelling – Above the Ground Floor								P	P	P	P	P	P	P				
Live/Work Dwelling									P				P	S				
Residential Care Facility						S	S	S	S	S		S		S			P	§8.4.O
				S	S	S												
	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	§8.4.D
	P	P	P	P	P	P	P	S	P	P	P	P	P	S	P	P		
	P	P	P	P	P	P	P									P		
Educational Facility – University								S		S	S	S		S			P	
Educational Facility – Vocational								S	S	P	S	P	S	S				
Government Office								P	P	P	P	P	P	S	P	P		
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Place of Worship	P	P	P	P	P	P	P	P	P	P	P	P	P	S				§8.4.M
Public Safety Facility								P	P	P	P	P	P	S	P	P	P	
Public Works Facility																	P	
Utility	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	P	S	
Retail																		
Art Gallery								P	P	P	P	P	P					
Auction House								S	P	P	S	P	P					
Brewpub								P	P	P	P	P	P					

Locate Use
 1) By use type
 2) By district

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Zoning Uses

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Live/Work Dwelling																		
Residential Care Facility														S			P	§8.4.O
Retreat House																		
Public/Institutional																		
Community Center								S	P	P	P	P	P	P	P	P	P	
Community Garden	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	§8.4.D
Cultural Facility	P	P	P	P	P	P	P	S	P	P	P	P	P	S	P	P		
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Educational Facility – University								S		S	S	S		S		P		
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Government Office								P	P	P	P	P	P	S	P	P		
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Art Gallery								P	P	P	P	P	P	P				
Auction House								S	P	P	S	P	P	P				
Brewpub								P	P	P	P	P	P	P				

Use Standards
Certain uses have additional standards

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Zoning Uses

Address full range of temporary uses & require temporary use permit (private property only):

- ✓ Farmers Market
- ✓ Garage/Yard Sale
- ✓ Portable Storage Containers
- ✓ Real Estate Sales Office/Model Unit
- ✓ Temporary Contractor's Office/Yard
- ✓ Temporary Mobile Food Sales
- ✓ Temporary Outdoor Entertainment
- ✓ Temporary Indoor Sales
- ✓ Temporary Outdoor Sales
- ✓ Temporary Outdoor Storage Container



Residential Districts

Simplify residential district approach

- ✓ Create new set of “Residential Neighborhood Districts”
- ✓ Consolidate existing districts where appropriate
- ✓ Reflect existing development patterns
 - Current blanket standard of 7,500sf minimum lot area inappropriate*
 - Does not protect larger lot neighborhoods*
 - Places denser neighborhoods in nonconforming status*
- ✓ Setbacks & coverage limitations that are tailored to district

Evaluate **Overlay Districts** once new districts established

- ✓ IH-1: Current standards should be incorporated into existing districts
 - May no longer be needed*
- ✓ NC-1: Preserves culturally or historically valuable homes
 - Streamline administrative process*

Residential Districts

Proposed Residential Neighborhood District	Dwelling Types Allowed	Relation to Current Districts Issues addressed
EN	Single-Family	EN-1, EN-2 (Consolidate) Older, low density neighborhoods Larger lot development
RN-1	Single-Family <i>Duplex by Special Use</i>	R-1, R-1E (Consolidate) Large lots – 15,000sf median size
RN-2	Single-Family <i>Duplex by Special Use</i>	R-1A 70% of lots zoned R-1A do not meet 7,500sf minimum – refine to reflect existing pattern
RN-3	Single-Family Duplex <i>Multi-Family by Special Use</i>	New District Small lot single-family & duplex by-right
RN-4	All Types	R-2 50% of lots zoned R-2 do not meet 7,500sf minimum – refine to reflect existing pattern
RN-5	Multi-Family	R-3 Refine into primarily multi-family district

Commercial Districts

Refocus & Refine commercial districts

- ✓ Reflect development objectives from adopted plans
- ✓ Allow for mixed-use
- ✓ Districts scale up in intensity
- ✓ Move to purpose oriented naming

Incorporate existing **Form-Based Codes**

- ✓ Maintain SW and CU Districts
- ✓ Align how these districts are applied with full Code
- ✓ Clarify how these apply to existing development

Commercial Districts

Proposed Commercial District	Intensity	Relation to Current Districts Issues addressed
O	Office	O-1 Transitional district
C-N	Neighborhood commercial	C-1 Integrated into neighborhoods
C-GC	General commercial	C-3 Urban corridors & nodes
C-H	Highway commercial	C-4 High intensity uses Ex: motor vehicle dealerships, outdoor storage
C-R	Regional commercial	New Large commercial centers
DK	Downtown	C-2, D-1 (Overlay) Sub-districts to address different form & functions of Downtown

Industrial Districts

Refine industrial districts

- ✓ Consolidate districts
- ✓ Move to more by-right administration
- ✓ Protect existing industrial
- ✓ Allow for transition to mixed-use, R&D character where appropriate

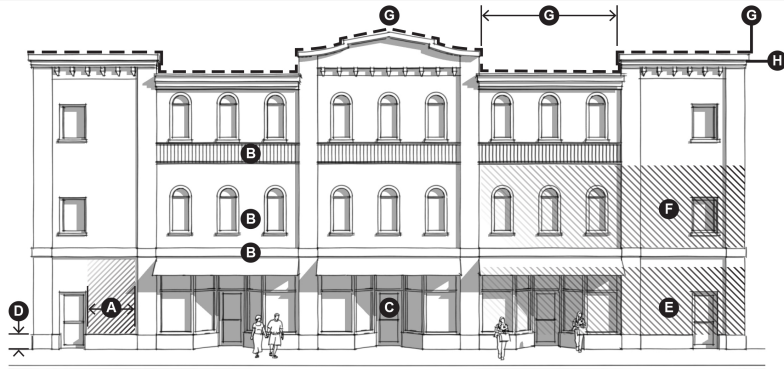
Industrial Districts

Proposed Industrial District	Intensity	Relation to Current Districts Issues addressed
IOP	Industrial office park	O-3, I-1 (Planned) Large-scale complexes with ancillary employee services Full standards to move away from “planned” requirement
I-MU	Industrial mixed-use	C-6, I-2 Low impact industrial with commercial Encourages adaptive reuse
I-RD	Research & development	BP-1, TO-1 Similar to IOP, but more tech and R&D oriented
I-G	General industrial	I-3 Typical industrial uses
I-H	Heavy industrial	I-4 Heavy industrial uses with significant outside uses

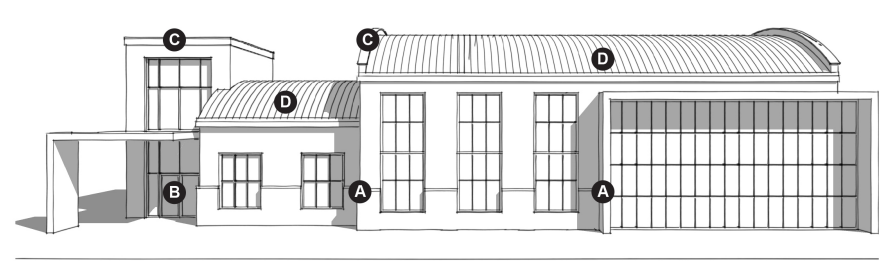
Special Purpose Districts

Proposed Special Purpose District	Orientation	Relation to Current Districts Issues addressed
INST	Institutional Districts	O-2 Government operations & large institutions
AG	Agriculture	A-1 Protect farmland
NA	Natural Areas	OS-1 Preservation of natural areas
OS	Open space	OS-2 Parks and playgrounds, including indoor recreation where appropriate
F	Floodway	F-1 Convert to overlay district
H	Historic	H-1
NC	Neighborhood conservation	NC-1
TO-1	Technology park	TO-1 TN Technology Corridor Development Authority

Design Standards



- A** Street abutting building façades must not contain blank wall areas that exceed 15 linear feet, measured parallel to the street.
- B** Street abutting building façades in excess of 100 feet must include a repeating pattern with no less than two of elements, such as color change, texture change, material module change, or articulation of no less than two feet in depth, such as a reveal, pilaster, or projecting rib. Elements must repeat at an interval of 40 feet.
- C** All buildings must have a public entrance from the sidewalk along the primary building frontage. Ground floor entrances must be visually distinctive or prominent on the building façade. Ground floor building entrances may be recessed no more than six feet from the required front build-to zone, and must be no wider than ten feet. A building entrance must be provided at an interval of no less than once every 40 feet.
- D** A bulkhead or knee-height wall a minimum of 18 inches and a maximum of 24 inches in height is required along any street abutting façade.
- E** In the C-D-C Sub-District, the ground floor must maintain a minimum transparency of 60%, measured between at minimum two and ten feet in height from grade.
- F** Upper stories must maintain a minimum transparency of 25% of the wall area of the story.
- G** Rooflines over 100 linear feet in building length must be variegated, and incorporate a major focal point feature, such as a dormer, gable, or projected wall feature. An element of variegation on the roofline must occur at intervals of no more than 75 linear feet.
- H** Parapet walls must feature three-dimensional cornice treatments or other shadow-creating details along their tops.



- A** Street abutting building façades in excess of 100 feet must include a repeating pattern with no less than two of the following elements: color change, texture material module change, or a wall articulation change of no less than two feet in depth into segments of no more than 40 feet.
- B** All buildings must have a public entrance from the sidewalk along the primary building frontage or at the corner, if a corner lot. Ground floor entrances must be visually distinctive or prominent on the building façade.
- C** Parapet walls must feature three-dimensional cornice treatments or other shadow-creating details along their tops.
- D** Any roof visible from a public right-of-way must be shingle or colored standing seam metal roofing.

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Adaptive Reuse

Allow for **Adaptive Reuse**

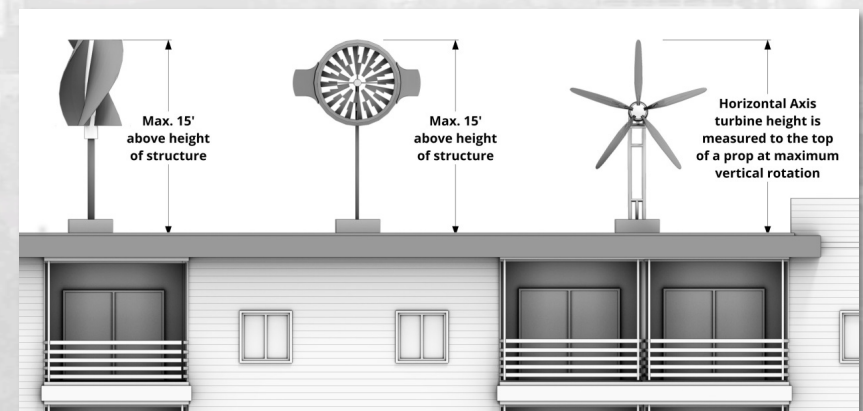
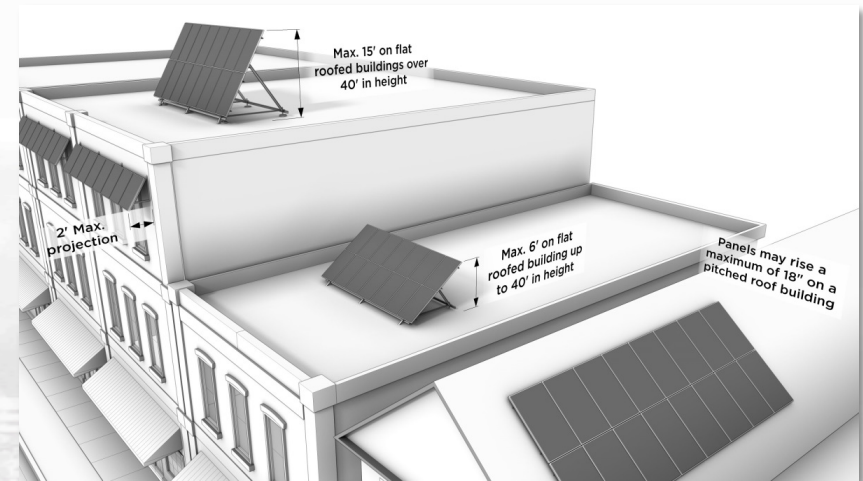
- ✓ Benefit: maintain character giving structures
- ✓ Move structures out of nonconforming status
- ✓ Adaptive reuse provisions:
 - Additional uses*
 - Parking exemptions*
 - Design & siting exemptions*



Accessory Structures & Uses

Regulate all types of
Accessory Structures & Uses

- ✓ Standards for each
 - Size, height, location*
 - Cross-reference to City Code*
- ✓ General structures
 - Detached garage, carport, fence*
- ✓ General uses
 - Storage, home occupation*
- ✓ Exterior lighting
 - Minimize light pollution & glare*
- ✓ Green technologies
 - Solar & wind*
 - Vehicle charging stations*



Accessory Structures & Uses

Consider allowing **Accessory Dwelling Units**

- ✓ Minimum lot size: SF lots of 5,000sf or more
- ✓ Only one per lot
- ✓ Only one additional dwelling unit
- ✓ Detached and/or attached permissions
- ✓ Rules for including in an existing garage
- ✓ Maximum size of unit
- ✓ Parking



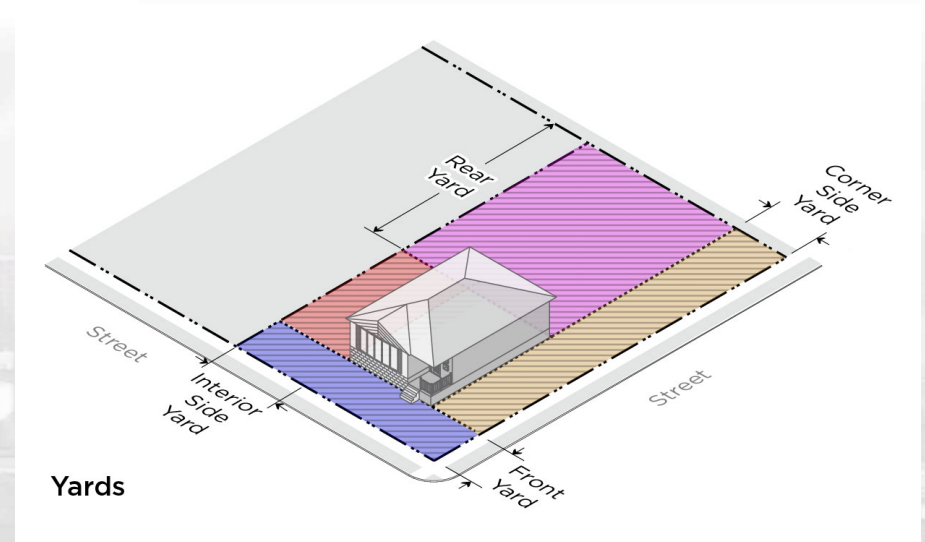
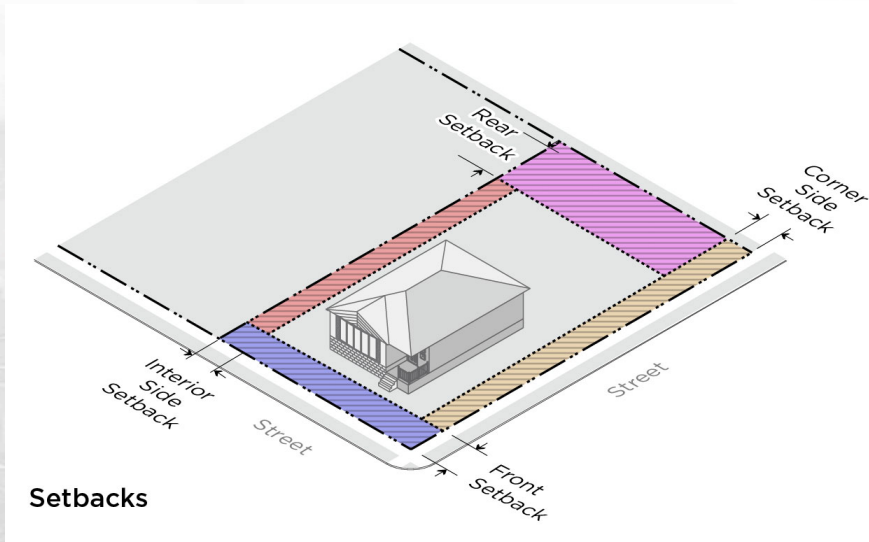
Permitted Encroachments

Table 9-1: Permitted Encroachments into Required Setbacks				
Y= Permitted // N= Prohibited				
Max. = Maximum // Min. = Minimum				
	Front Setback	Corner Side Setback	Interior Side Setback	Rear Setback
Accessibility Ramp	Y	Y	Y	Y
Air Conditioner Window Unit Max. projection of 18" from building wall No building permit required	Y	Y	Y	Y
Arbor No building permit required	Y	Y	Y	Y
Awning or Sunshade (Residential Uses) Max. of 18" into front, interior side, or corner side setback Max. of 5' into rear setback	Y	Y	Y	Y
Balcony or Balustrade Max. of 6' into front, interior side, or corner side setback Max. of 8' into rear setback Min. of 4' from any lot line Min. vertical clearance of 8'	Y	Y	Y	Y
Bay Window Max. of 5' into any setback	Y	Y	Y	Y
Canopy: Building Entrance (Residential Uses) Max. of 5' into any setback Max. 15' width or no more than 3' extension on either doorway side, whichever is less	Y	Y	Y	Y
Chimney Max. of 18" into setback	Y	Y	Y	Y
Deck or Terrace Max. of 5' into front, corner side, or interior side setback Max. of 8' into rear setback Prohibited in front yard Max. height of 5' above grade	Y	Y	Y	Y
Dog House Prohibited in front or corner side yard No building permit required	N	N	N	Y
Eaves Max. of 4' into setback	Y	Y	Y	Y
Exterior Stairwell				

** This table is an example from another community. Used for illustrative purposes only.*

Permitted Encroachments

Define Yard vs. Setback



Off-Street Parking

Integrate & Align new parking ordinance into Code

- ✓ Match districts cited with new district structure
- ✓ Match uses listed in parking ratio table with new use structure
- ✓ Update graphics to match full Code
- ✓ Move landscape requirements to landscape article
- ✓ Evaluate if all parking flexibilities are available to fulfill Code objectives

Ex: adaptive reuse

Landscape Requirements

Landscape for all aspects of site development

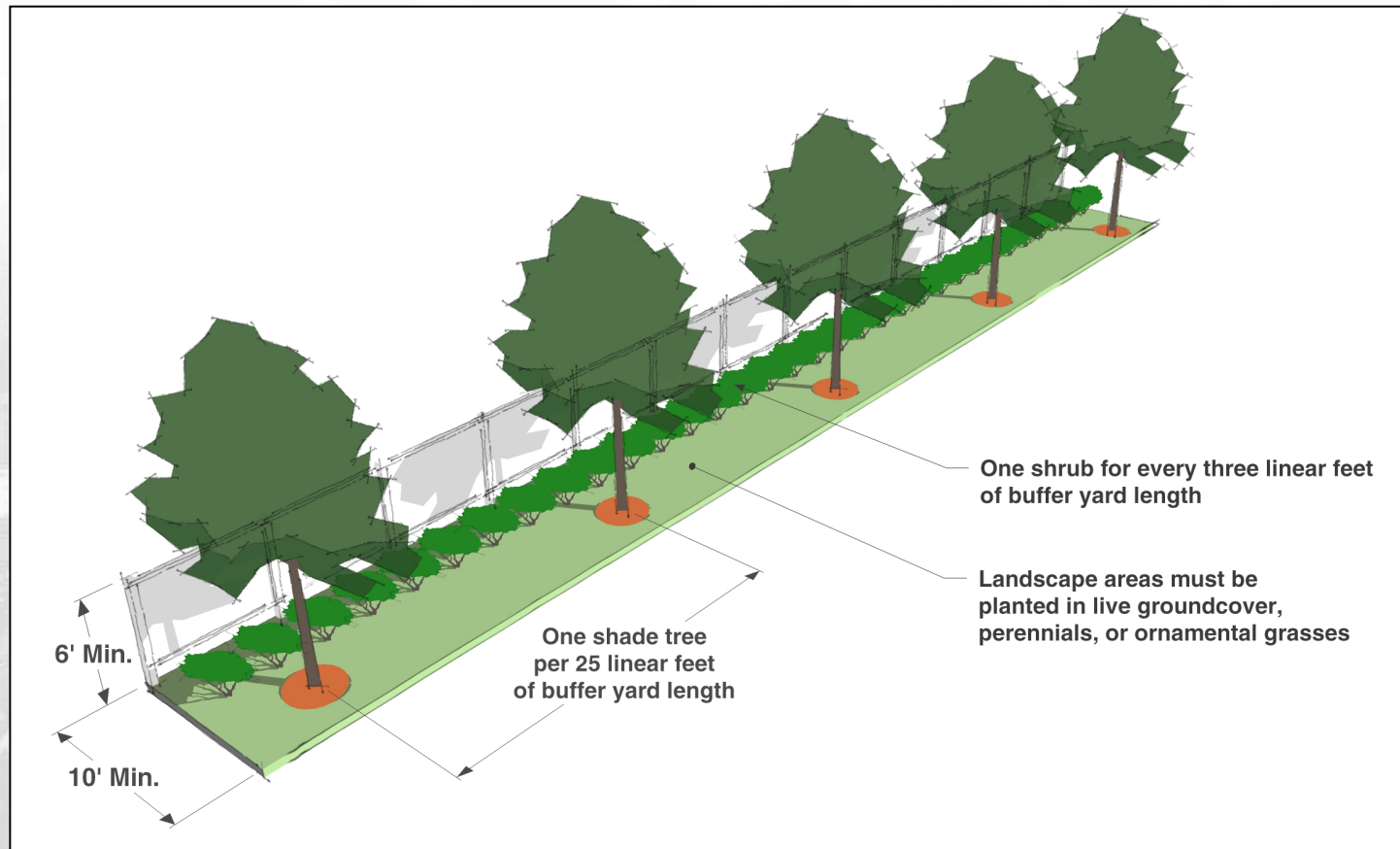
- ✓ Perimeter of parking lots (*from parking ordinance*)
- ✓ Interior of parking lot (*from parking ordinance*)
- ✓ Buffer & screening yards
- ✓ Building setback landscape
- ✓ Tree preservation

Installation & Maintenance Standards to ensure proper implementation

- ✓ Landscape plan requirements
- ✓ Selection and installation requirements
- ✓ Species diversity
- ✓ Design criteria
- ✓ Stormwater management techniques

Landscape Requirements

Buffer Yard

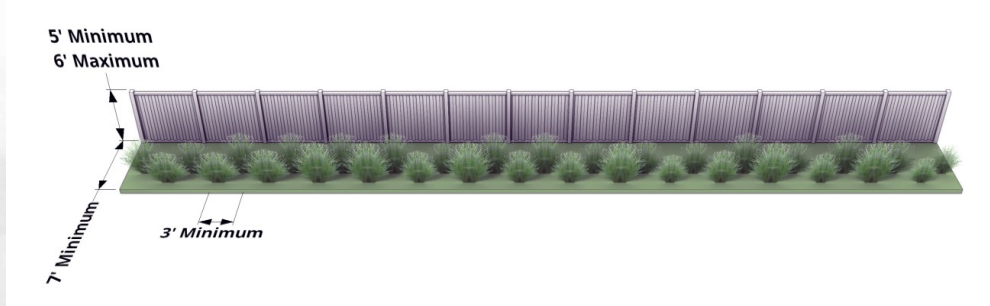


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Landscape Requirements

Buffer Yard - Alternatives

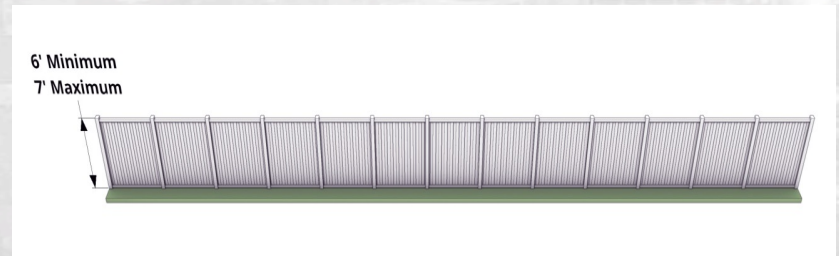
INTERIOR SIDE SETBACK BUFFER YARD



REAR SETBACK BUFFER YARD



More than 90' of lot depth



90' or less of lot depth

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Zoning Administration

Ordinance Administrators

- ✓ City Council
- ✓ Metropolitan Planning Commission
- ✓ Board of Zoning Appeals
- ✓ Historic Zoning Commission
- ✓ Administrative Review Commission
- ✓ Zoning Administrator

Potentially eliminate Downtown Design Review Board & Infill Housing Design Review Committee

Zoning Administration

Application Process

- ✓ Application process
 - Completeness review*
 - Optional pre-application review*
- ✓ Notice
- ✓ Public hearing

Application	Authority	
	Zoning Administrator	MPC Staff
Amendment (text and map)		✓
Special use		✓
Variance	✓	
Administrative modification	✓	
Site plan review	✓	
Planned unit development		✓
Certificate of appropriateness		✓
Zoning interpretation	✓	
Zoning appeal of Zoning Administrator decision	✓	
Zoning appeal of MPC decision		✓

Zoning Administration

Zoning Approvals – Current

- ✓ Amendments (text and map)
- ✓ Variations
- ✓ Certificate of appropriateness
- ✓ Zoning appeal
- ✓ Zoning designation letter

Update timeframes & approval standards

Define appeal windows

Clarify process

Zoning Administration

Zoning Approvals – New

- ✓ Special use
 - New process tied to new use approach*
 - Approved by MPC*

- ✓ Administrative modifications
 - Approved by Zoning Administrator*
 - 10% variation to district standards*
 - Small variations to vehicle & bicycle parking requirements*
 - Appeal to Zoning Board of Appeals*

- ✓ Zoning interpretation
 - Formal process for asking for an interpretation*
 - Conducted by Zoning Administrator*

Zoning Administration

Zoning Approvals – New

- ✓ Site plan review
 - Administrative process
 - Administrative Review Committee & MPC Staff*
 - Code would specify who reviews*
 - What is reviewed?
 - New construction & significant enlargements except single-family & duplexes*
 - Special uses*
 - Standards for review
 - Site design, landscape, screening, circulation, etc.*
 - Process for review...

Zoning Administration

Zoning Approvals – New

- ✓ Site plan review
 - Process for review
 - 1) *No special approvals, the site plan approval before building permit*
 - 2) *With special approval, approved prior to the hearing*
Approved site plan forwarded with staff's recommendation
Approving body allowed to impose additional conditions

Correct site plan must be maintained within records

When conditions are imposed, a revised site plan must be resubmitted showing all required changes prior to issuance of a permit

Zoning Lots

Code should contain a provision for “**Zoning Lots**”

- ✓ Issues regarding development on two contiguously owned lots
- ✓ Property owners forced into lot consolidation, adds time & cost

Example:

Residential owner owns two lots of record & builds home on one

At a later time, owner would like to build detached garage on second

Most codes define a zoning lot:

A lot or combination of contiguous lots within a single block, all owned by a single property owner, to be used and/or developed as a unit. A zoning lot may or may not coincide with a lot of record.

Knoxville has a unique mapping situation:

- 1) Original ward map (lots of record)
- 2) Parcel map (taxing parcels)

Incorporating a traditional “zoning lot” may be more difficult

Continue to work with City and MPC staff to address this issue

Zoning Nonconformities

Specifically address the variety of nonconforming situations

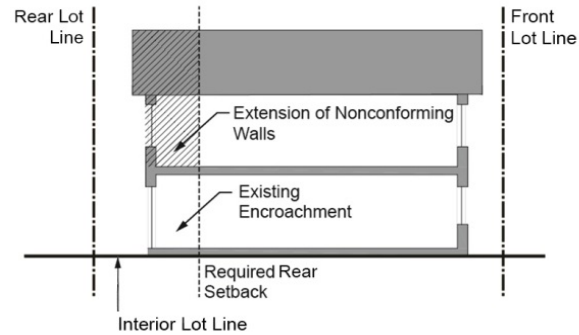
- ✓ Nonconforming use
- ✓ Nonconforming structure
- ✓ Nonconforming lot

Nonconforming structure regulations clearly state that the element that is nonconforming is not permitted to expand

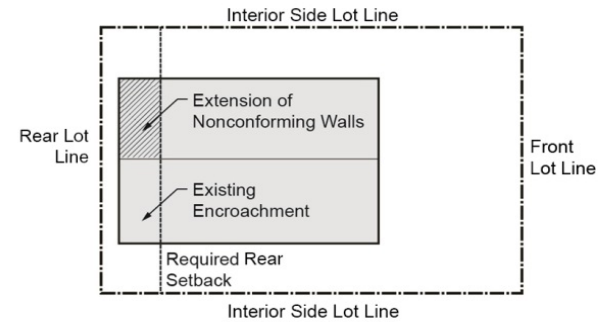
- ✓ A conforming addition on a nonconforming structure can be built when it conforms to all regulations
- ✓ Allow of SF, 2F nonconforming side & rear wall vertical or horizontal additions without variation

Zoning Nonconformities

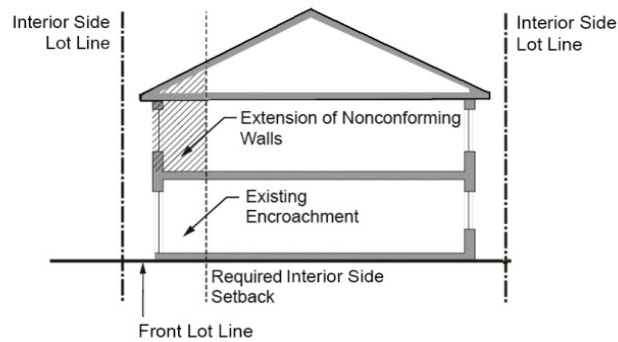
VERTICAL - REAR



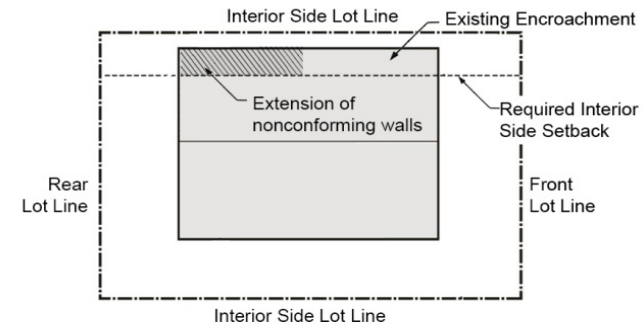
HORIZONTAL - REAR



VERTICAL - SIDE



HORIZONTAL - SIDE



Zoning PUD

Eliminate “Types” & any special development standards for PUD

No specific PUD types – treated as a type of approval process

PUD is not a district

PUD is a **Multi-Step Process**, with numerous points of public input

- ✓ Pre-Application Meeting with Staff
- ✓ Concept Plan (can be optional)
- ✓ Preliminary Plan
- ✓ Final Plan

Negotiate for high quality development

Require public amenities & benefits – examples:

- ✓ Community amenities: plazas, formal gardens, places to congregate, outdoor seating, public art, & pedestrian, bicycle, & transit facilities
- ✓ Preservation of natural areas & site design sensitive to environmental features

Allow Changes to Approved PUDs: administrative, minor, & major



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