Key CodeNEXT Watershed Proposals

Environmental Commission November 1, 2017

CodeNEXT Environmental & Drainage Proposals

- Beneficial Use of Stormwater
 - Water Quality
 - Water Conservation
 - Environmental Resilience
- Flood Mitigation for Redevelopment
 - Forward progress on drainage & flooding
- Residential Heavy
 - Requirements for "missing middle" residential development
- Requirements for 1-2 unit residential



http://foundcom.org/housing/our-austin-communities/m-station-apartments/

23-3D-6030 Water Quality Controls and Beneficial Use Standards: Draft 1 & 2

- "A portion of the required capture volume for water quality must be retained and beneficially used on-site through practices that infiltrate, evapotranspire, or harvest and use rainwater.
- The amount of rainfall that must be retained is based on the impervious cover and associated runoff coefficient for the 95th percentile rainfall event*, as prescribed in the Environmental Criteria Manual.

Impervious	Runoff	Percent of		
Cover	Treat	Retain On-Site*	Water Quality	
(percent)	(inches)	(inches)	Volume	
10%	0.5	0.13	26%	
20%	0.5	0.26	52%	
30%	0.6	0.38	64%	
40%	0.7	0.51	73%	
50%	0.8	0.64	80%	
60%	0.9	0.77	86%	
70%	1.0	0.90	90%	
80%	1.1	1.03	93%	
90%	1.2	1.15	96%	
100%	1.3	1.28	99%	

Proposed New Code for Draft 3

For all site plans/subdivisions with more than 8,000 square feet impervious cover:

- Capture and treat the half-inch-plus water quality capture volume
 - Rainwater harvesting may have a longer drawdown for up to 25% of the water quality volume if a water balance demonstrates on-site use of the water in 28 days or fewer (not allowed in the Barton Springs Zone)
 - May have a longer drawdown for the entire water quality volume if the control is upsized accordingly
 - Rainwater system must connect to irrigation and/or interior building use

Proposed New Code for Draft 3, continued

- Must use green stormwater control measures for entire water quality volume, except for:
- Conventional water quality controls allowed under certain conditions
 - Hot-spot land uses (e.g., automotive repair)
 - Regional ponds with > 10 acres of untreated, off-site development
 - Sites with > 80% impervious cover if rainwater harvesting system is provided to irrigate landscape elements (including Functional Green areas) for at least 28 days
 - Administrative variance for unique site conditions (e.g., heritage trees, CEFs, grade challenges)

CodeNEXT Proposal: Flood Mitigation

- Redevelopment projects contribute their share to address downstream flooding
- 23-10E-3010 Critical for Approval of Development Applications
 - "the proposed development...reduces the <u>post-development peak flow</u> rate of discharge to <u>match the peak</u>
 <u>flow</u> rate of discharge for <u>undeveloped conditions</u> as prescribed in the Drainage Criteria Manual"
- Payment-in-lieu option where appropriate—to participate, project must demonstrate that it has no adverse impact and adequate downstream conveyance capacity.



CodeNEXT Proposal: Flood Mitigation

- Tools for mitigating flood impacts & reducing peak flows include:
 - Detention (surface or subsurface)
 - Conveyance improvements
 - Regional Stormwater Management
 Program (RSMP)



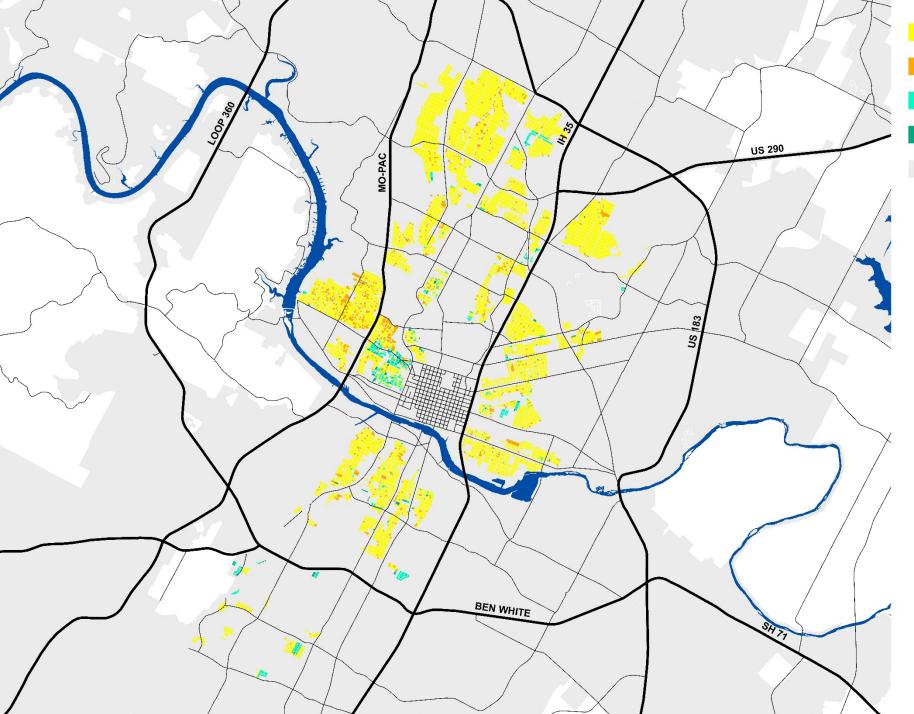
Proposed change in regulations and review process for "missing middle" residential development

- Eliminates site plan requirement and moves permitting to residential building permit
- Limited to 3-6 units on residential lots (74% of all 3-9 unit lots)
- Adds modified environmental and drainage requirements to residential review
- Requirements vary based on subdivision date
- Not allowed in Barton Springs Zone

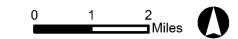
	Parcels	Acres	% of RH (parcels)	% of ALL total	% of City (area)	Max IC
45% IC limits (3-6 units) total	27,074	4,840	74%	17%	2.4%	45%
>45% IC limit (6-9 units) total	9,442	1,584	26%	6%	0.8%	55-80%
3-9 Unit Eligible Total	36,516	6,424	100%	24%	3.1%	45-80%

	Parcels	Acres	Pct of ALL (parcels)	% of City (area)	Max IC
< 45% IC: 1 - 2 units	118,512	40,838	76%	58%	45%

Note: Analysis is based on CodeNEXT (draft 2) zoning for 3-9 unit development



R3A, R3B, R3C
R3C: Cottage Court Eligible
R4A, R4B, R4C
R4: Cottage Court Eligible
Zoning Jursidiction



Environmental	
Requirements	

Watershed	Urban		Non-Urban	
Subdivision Date	pre-86	post-86, 2013	pre-86	post-86, 2013
Impervious cover	Х	Х	Х	Х
Creek buffers		Х		Х
Creek erosion hazard zone	Х	Х	Х	Х
Floodplain modification				
Env. Resource Inventory				
CEFs/Wetlands				
Grading (cut/fill)			Х	Х
Steep slopes				X
Tree protection	Х	Х	Х	Х
Erosion controls	Х	Х	Х	Х

Watershed

	Subdivision Date	pre-86
Water Quality	Water quality	
&	Floodplain	Х
Drainage Requirements	Drainage analysis by P.E. certifying no additional impact to private property and show flow to public easement	Х
	Adverse impact detention analysis or	

Subdivision Date	pre-86	post-86 & post-2013	pre-86	post-86 & post-2013
Water quality				
Floodplain	Х	Х	Х	Х
Drainage analysis by P.E. certifying no additional impact to private property and show flow to public easement	Х	Х	Х	Х
Adverse impact detention analysis or on-site detention per DCM				

Urban

Non-Urban

CodeNEXT Proposal: 1-2 Unit Development

Current code does not exempt 1-2 unit residential development from environmental and drainage regulations although requirements have not been applied since at least 1986.

- Some requirements may not be suitable for this type of development
- Staff desires to have review process reflect regulations
- After considering feedback received at Development Committee meeting Watershed and Development Services staff are evaluating options to address:
 - Concerns raised by stakeholders
 - Impacts to permit cost and time
 - DSD resource impacts



Matt Hollon

Watershed Protection Department City of Austin (512) 974-2212 matt.hollon@austintexas.gov