GreeningsGroup

integrate nature into the city

June 23, 2015

Introduction

How we can achieve the Imagine Austin goals of integrating nature into the city and creating complete communities through revisions to our zoning and environment codes?



"green infrastructure is strategically planned and managed networks of natural lands, parks, working landscapes, other open spaces, and green stormwater controls that conserve and enhance ecosystems and provide associated benefits to human populations."

imagine austin





Four Green Infrastructure Themes

Council Direction (November 20, 2014)

• Asked that the CodeNEXT focus include green infrastructure & sustainable water management

Topics for Discussion

- 1. Land Cover and Natural Function
- 2. Integrate Nature into the City
- 3. Beneficial Use of Stormwater
- 4. Stormwater Options for Redevelopment/Infill

Land Cover and Natural Function

Goals

- Ensure adequate natural function for all sites
 Protect greenfield sites
 - <u>Restore</u> redevelopment and infill sites
- Promote desirable, purposeful open spaces & connectivity
- Want the design and care of our built environment to take advantage of strengths of both pervious and impervious cover

Land Cover and Natural Function

Challenges

- Low natural function on medium to high impervious sites
- Pervious areas don't necessarily function as intended (e.g., soil compaction)
- Impervious cover limits can produce fragmented landscapes of unconnected, private green spaces
- Application to centers & corridors



Integrate Nature into the City

Goals

- Functional landscapes with multiple benefits (e.g., urban heat island, water conservation, habitat, enhanced public realm)
- Urban forest preservation and replenishment
- Climate resilience and adaptation to drought
- Green transitions between different land uses
- Practical to implement and maintain the ordinance

Integrate Nature into the City

Challenges

- Landscaping code does not apply to dense urban areas (e.g. CBD) or parking lots for remodels
- "Street yard" concept does not work in all contexts
- Inadequate provisions for shade trees & existing trees
- Missed opportunities for onsite infiltration of stormwater and use of non-potable water
- Transitions between land uses (e.g., centers & corridors and adjacent residential) need refining

Beneficial Use of Stormwater

Recap

- Need to address drought & climate change impacts on watershed health and water supply
- Stakeholder meetings (Watershed Protection Ordinance Phase 2) from January to July 2014
- Final Report of the Austin Water Resource Planning Task Force recommended "Tapping into the Cityscape as a Water Supply Source"
- Phase 2 recognized need for requiring infiltration and/or re-use of stormwater on-site for new & re-development

Rain Garden Medians

Rain Gardens

Harvesting

Beneficial Use of Stormwater

Going Forward

Discuss specific proposals for achieving beneficial use of stormwater as part of CodeNEXT:

- Infiltration / Baseflow / Water Quality
- Water Conservation / Drought & Climate Resilience
- Long-term ownership and maintenance of green infrastructure

Stormwater Options for Redevelopment/Infill

Goals

- Address longstanding problems due to development without sufficient flood controls and/or drainage conveyance
- Provide additional flexibility and options to enhance water quality for redevelopment and infill

Del Curto Rd and Bluebonnet Ln

Stormwater Options for Redevelopment/Infill

Challenges

- Code does not require flood mitigation if impervious cover is not increased and downstream conveyance is not further impaired (S. Lamar case study)
- Payment-in-lieu for water quality only allowed within Urban Watersheds; new role of green controls

Burnet Road Corridor

Green Infrastructure Working Group Schedule

Integration of Green Elements	June 26
Stormwater Options for Redevelopment & Infill	May 15
Beneficial Use of Stormwater	Apr. 10
Integrate Nature into the City	Mar. 13
Land Cover & Natural Function	Feb. 20
Kickoff	Jan. 30

CodeNEXT Participation



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