

New Approaches to LID Permitting in the River Walk City: Comprehensive LID Use Pattern Ordinance



Picture courtesy San Antonio River Authority

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New Permitting Approach for San Antonio— LID Use Pattern Ordinance

Four Key Characteristics

- Voluntary ✓
- Stand-alone ✓
- Comprehensive: What's
expected in a LID
development ✓
- Suite of incentives ✓

New Permitting Approach – LID Use Pattern Ordinance, cont.

- Conveys how LID development should be consistent with and diverge from the City's existing code
 - Stormwater performance standards
 - Plan review
 - Resource protection
 - Street design
 - Right-of-way uses
 - Parking
 - Screening
 - Landscaping
 - Open space
 - Construction activity
 - Etc.



Why a more sustainable stormwater management approach in San Antonio?



Picture courtesy the San Antonio River Authority

Overarching Goal of LID Ordinance

*Provide site **design flexibility**, development **incentives and strategies** to implement Low Impact Development and Natural Channel Design Protocol*



Specific Purposes of LID Ordinance

- *To provide a **voluntary permitting** and regulatory basis.*
- *To protect and enhance **property values** by preserving and creating high quality green features.*
- *To **more fully address the range of impacts caused by stormwater runoff.***
- *To help address **Total Maximum Daily Load** requirements and prevent future degradation of streams.*
- *To **implement existing City policies which call for the use of Low Impact Development techniques***



How did we develop the draft ordinance and buy-in?

Pictures courtesy San Antonio River Authority



Stakeholder Input

Incorporate significant stakeholder input process:

- Seek representatives from staff and development/design group memberships ✓
- Conduct stakeholder workshops ✓
 - Address barriers ✓
 - Seek input on draft code outline and text ✓
- Seek input on draft/final code ← Where we are

Agency Advisory Panel

CITY OF SAN ANTONIO

Center City Development
 City Attorney's Office
 Development Services
 Land Development Division
 City Arborist
 Street Construction Engineering
 Subdivision Platting and Vested
 Rights
 Zoning
 Economic Development
 Field Service Division
 Building Inspections (Commercial)
 Code Enforcement
 Fire Department
 Health
 Historic Preservation
 Office of Sustainability
 Parks and Recreation
 Park Landscape Design/Planning
 Park Maintenance
 Urban Forester
 Planning and Community Development

Plan Review Division
 Solid Waste Management
 Stormwater Plan Review
 Transportation and Capital Improvements
 Project Delivery
 Transportation Planning
 Street Design and Landscaping
 Stormwater Engineering
 Maintenance Operations
 Sweeping Operations

BEXAR COUNTY

Environmental Services
 Public Works

CPS ENERGY

SAWS

Water Resources and Conservation

SARA

Environmental Sciences
 Executive Offices
 Intergovernmental & Community Rlns.
 Watershed Engineering

Development & Design Stakeholder Entities

- American Council of Engineering Companies
- Associated General Contractors – San Antonio
- Associated Builders and Contractors – San Antonio
- American Institute of Architects
- American Society of Civil Engineers
- American Society of Landscape Architects
- Bexar Regional Watershed Management
- Build SA Green
- Chambers of Commerce
- Development Process Task Force
- Greater San Antonio Builders Association
- Professional Engineers in Private Practice
- Real Estate Council of San Antonio
- Responsible Growth Alliance
- Texas Society of Professional Engineers
- US Green Building Council
- Water Environment Association of Texas/American Water Works Association

Draft LID/NCDP Ordinance

Draft LID/NCDP Code “Table of Contents”

- Tracks the required title and arrangement of sections in San Antonio’s UDC Use Patterns
 - (a) *Applicability.*
 - (b) *Processing procedures.*
 - (c) *Uses and density.*
 - (d) *Traffic impact analysis.*
 - (e) *Lot layout.*
 - (f) *Transportation.*
 - (g) *Storm Water management.*
 - (h) *Utilities.*
 - (i) *Parks and open space.*
 - (j) *Natural resource protection and tree preservation.*
 - (k) *Buffers, landscaping, streetscape planting and tree preservation.*
 - (l) *Parking.*
 - Added
 - (m) *Construction Activities.*
 - (n) *Maintenance.*
 - (o) *Post Construction Inspections.*
 - (p) *Compliance.*

Example Section: Performance Standards

- **Water Quality Volume (WQV)** based on runoff volume for the first 1.5 inches of rainfall
- TSS, Bacteria, Volume, and Flow Rate standards
- Manage a **minimum of 60% of water quality volume** with LID BMPs to be eligible for incentives

Performance Standards

- **Redevelopment** Performance Standard
 - Sized for 1.18 inches (**reduced requirement as incentive**)
 - Only new impervious area must be managed
- Special LID BMP considerations for **historic areas**
- LID credit for the required detention



Picture courtesy City of San Antonio

Example Section: Lot Layout

- Setback, Side Yard, and Rear Yard Incentives.
 - In order to accommodate LID BMPs and optimize LID/NCDP site design, required setback, side yards, and rear yards in table 310-1 of this chapter **may be reduced as long as such reductions meet fire code standards**. The reductions may not compromise public safety such as the **sight distance triangles**



Picture courtesy San Antonio River Authority

Example Section: Transportation

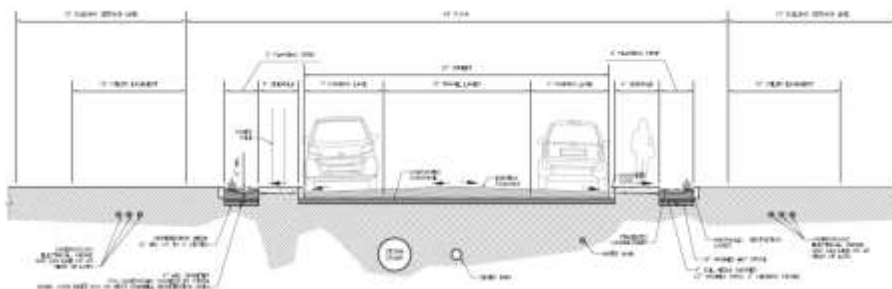
A LID/NCDP shall comply with the transportation standards of this chapter except as follows:

- Credit for LID in the **privately maintained ROW area**
- Allows use of **permeable pavements** for on-street parking and sidewalks while still meeting ADA
- Allow LID in **center medians, landscape entrances, traffic calming bumpouts**



Transportation –

- Minimum Pavement Width and Street Design –
Adhere to Traditional Street Design Standards



Residential

Example Section: Parking

- Encourages use of **minimum vehicle spaces**
- Allows alternate, **smaller parking dimensions** for LID/NCDP plans
- **Permeable pavement** in off-street parking allowed
- LID BMPs can be used to meet parking area **landscaping, buffering and shading**



How to get a developer to choose the voluntary LID path? Incentives!



Picture courtesy San Antonio River Authority

Credit/Offset	Incentive Factor
<u>Stream Buffer or Stream Restoration to Parkland Acre⁽¹⁾</u>	<u>1.5</u>
<u>LID BMP to Landscape Area Acre</u>	<u>1.5</u>
<u>LID BMP to Tree Canopy⁽²⁾</u>	<u>1.5</u>
<u>Stream Restoration to Tree Canopy</u>	<u>1.25</u>
<u>LID BMP to Streetscape Tree⁽³⁾</u>	<u>1</u>
<u>Linear Park to Parkland Acre⁽⁴⁾</u>	<u>1.5</u>
<u>LID BMP Drainage Area to Parkland Acre⁽⁵⁾</u>	<u>1.5</u>
<u>Density Bonus⁽⁶⁾</u>	<u>10%</u>

Fee Credit Incentive	Percent of Water Quality Volume Managed				
	60%	70%	80%	90%	100%
Credit/Offset					
Detention In-Lieu Fee Discount					
Meets LID Performance Standard	0%	5%	10%	15%	20%
Meets Detention Requirements or Increases Channel Storage through NCDP	Cumulative Reduction in Flow Sliding Scale –				

Footnotes

- Buffers may meet a maximum of 50 percent of the site's parkland requirement.
- Up to 30 percent of new required landscaping trees in the Right-of-Way may be met by installing a landscape LID storm water BMP if part of an approved storm water management plan.
- Linear park may meet a maximum of 50 percent of the site's parkland requirement.
- LID BMP drainage area parkland credit Includes only permeable drainage area. Must provide multiple uses such as recreation and trails. May meet a maximum of [20] percent of the site's parkland requirement.

← Example

*Footnotes:
Negotiated
caps and
caveats to
incentives*

Education about LID Cost and Benefits

Local LID Construction Cost Comparison

- Conventional System
 - \$589,625
- LID Alternative
 - \$525,000
- DELTA > **\$63,319** 9.31% savings



In weighing costs and benefits of LID & NCDP, there are many benefits to consider....

- More walkable neighborhoods
- Increased property values
- Neighborhood stabilization
- Water conservation and water supply resiliency
- Reduced water treatment costs
- Recreational opportunities
- Energy savings
- Jobs
- Air quality
- Wildlife and birding habitat
- Avoided stream restoration costs
- Reduced urban heat island effect



Lessons Learned So Far

Agency Staff Involvement

- Developing a comprehensive LID ordinance requires:
 - Careful negotiation to ensure both LID and departmental objectives are met
 - Significant time commitment by staff (approved by top management)

Development/Design Stakeholder Involvement

- Create core group of diverse development/design stakeholder representatives
 - Critical input and buy-in
 - Help shepherd through the ordinance approval process
- A cost comparison is critical
- In voluntary LID program
 - Balancing flexibility and accountability is essential
 - You will capture the interest of some (but not all)



Performance Standards

- Must be credible and make sense locally
- Don't use all or nothing approach in voluntary LID program: allow portion of WQV or site to be managed using LID



Streets and Right-of-Way

- Use existing “narrow” street standards if they exist
- Credit for LID BMPs in privately maintained ROW must address
 - long-term maintenance issues
 - conflicts with other utilities' operations/excavations

Drafting the Ordinance & Incentives

- Begin with framing of existing code provisions and how they pose a barrier to LID
- Provide different ordinance language options
- Create a strawman draft code to respond to and negotiate around
- Take staff's draft ordinance to development stakeholders
- Resolve differences

Drafting the Ordinance & Incentives, cont.

- Neutral third party is helpful
 - Help resolve conflicts AND
 - Knowledge of LID



Picture courtesy San Antonio River Authority

Toward the finish line...

- Complete review by development and design stakeholder groups in March
- Submit revised ordinance by May 1 for Unified Development Code update process
- Targeted adoption December 2015



Picture courtesy San Antonio River Authority

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