

**Utilities**

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## MEMORANDUM

**Date:** November 1, 2023

**To:** Mayor Arndt and City Councilmembers

**Through:** Kelly DiMartino, City Manager DS  
TM  
Tyler Marr, Deputy City Manager

Kendall Minor, Utilities Executive Director DS  
DK  
Dean Klingner, Community Services Director

**From:** Katie Collins, Water Conservation Specialist DS  
KB  
Kendra Boot, City Forester

Kathryne Marko, Environmental Regulatory Affairs Manager

**Subject:** October 10, 2023, Work Session Summary: Council Priorities for Landscape Standard Improvements including Xeriscape, Soil Amendments, and Trees

The purpose of this memo is to summarize discussions during the October 10, 2023 Work Session. All Councilmembers were present. Staff members present were Katie Collins, Mariel Miller, Kendra Boot, Mike Calhoon, Kathryne Marko and Jill Oropeza.

Staff presented key proposed program improvements, anticipated resource needs, and path forward for three council priorities related to xeriscape, soil, and trees.

**Bottom line:**

- General support for the intent to increase protection and mitigation for trees; updated landscapes standards for commercial and multi-family development; soil inspection program; education and outreach for all landscape and irrigation efficiency efforts.
- While supportive of the goals of preserving mature tree canopy, shared concerns related to competing values and tradeoffs associated with cost, specifically small business and infill projects. Staff will be doing more work to present options that try to balance these tradeoffs.



- There was not support to continue with single-family xeriscape requirements at this time. Councilmembers requested that staff continue to work on topics into the future, such as parkways, incentivizing conservation-oriented development, collaboration with other water providers, and the Urban Forest Strategic Plan that is scheduled for work session in Q1 2024.

**Feedback:**

- Prefer voluntary action city-wide through education and outreach related to irrigation scheduling rather than enforcement of a daytime watering restriction.
- On landscape standards for single-unit front yards, focus on making xeriscape the easy choice through voluntary action. Evaluate how to incentivize, remove barriers, and improve cost effectiveness.
- Review and adjust as appropriate tree mitigation for impacts to small businesses, greenfield vs infill differences, and voluntary trees species – especially those that are high water consuming and/or invasive.

**Next steps:**

- Staff will schedule a hearing in Q1 2024 for code changes necessary for the soil amendments and commercial/multifamily landscape requirements. A supporting staffing appropriation will also be presented at that time.
- Staff will work with leadership and Leadership Planning Team to determine next action steps (such as a potential work session) and associated timeframes related to trees including commercial/multifamily mitigation requirements, Russian-olives, etc.
- Utilities will provide a memo to Council related to xeriscape, water and water conservation with information on estimated water savings, including acre-foot units, and water portfolio information.
- During the work session, staff showed a presentation with formatting that differed from the copy of the presentation included in the council packet. Staff also acknowledged an error on the *Xeriscape Standards – Cost Comparison* table. A revised presentation with all changes noted is attached.

**Attachment:**

Updated Presentation: *Landscape Standards\_Council Work Session\_Updated.pdf*

**Cc**

Mariel Miller, Water Conservation Manager  
John Phelan, Acting Deputy Director, Customer Connections  
Mike Calhoon, Director of Parks  
Jason Graham, Director of Water Utilities  
Jill Oropeza, Senior Director of Integrated Sciences and Planning  
Heather Jarvis, Assistant City Attorney



Eric Potyondy, Assistant City Attorney





# Landscape Standards – Soil, Xeriscape and Trees



Kathryne Marko, Environmental Regulatory Affairs Manager, Utilities

Katie Collins, Water Conservation Specialist, Utilities

Kendra Boot, City Forester, Forestry Division

10-10-2023

# Brief Topic Overview

## Staff have partnered to draft codes that align across soil, xeriscape and tree priority areas:

- City Council Priorities (#s 14, 19, and 28)
- Municipal Code, Chapters 12 and 26
- Land Use Code 3.2.1 and 3.8.21
  - Landscaping and Tree Protection

Benefits of Landscapes	Benefits of Landscape Codes
<ul style="list-style-type: none"> <li>• Reduce air temperature/heat island effect</li> <li>• Stormwater quality</li> <li>• Reduce runoff</li> <li>• Better air quality</li> <li>• Wildlife habitat</li> <li>• Recreation</li> <li>• Visual Appeal</li> </ul>	<ul style="list-style-type: none"> <li>• Landscapes built “smart from the start”</li> <li>• Better prepared for future needs or changes</li> <li>• Reduced frequency of low to no benefit landscapes</li> </ul>

### Council Priority 14

Effective soil amendment policies and compliance (water usage)

### Council Priority 19

Xeriscape – increase rebates and education, less green lawns with new development

### Council Priority 28

Improve tree policies



# Brief Topic Overview

## Status Update

- Key Improvements
- Additional Considerations
- Resource Needs
- Themes from Engagement
- Timeline
- Next Phases



# Questions for Council Discussion

## **Specific to Xeriscape and Irrigation**

1. What feedback or questions does Council have on applying landscape and irrigation standards to single-unit dwelling front yards?
  
2. On daytime watering restrictions, what feedback or questions does Council have regarding:
  - a. application to all water districts within city limits?
  - b. staff continuing conversations with raw water users and providers?

## **General feedback for all sections**

3. What feedback or questions does Council have on the proposed path forward?



# Trees



## Land Use Code 3.2.1

- Improved mitigation standards incentivizing tree preservation
- Creation of separate street tree escrow and timeframe for tree replacement responsibility
- Specified repercussions for tree damage or healthy tree removal violations
- Improved tree diversity requirements
- Improved tree protection during construction

## Resources and Impacts

- 2 FTE Zoning Landscape Inspectors funded, hired one in 2023 and another in 2024
- Increase in tree mitigation requirements

**Proposed Implementation - January 1, 2024**





# Trees – Mitigation Standard Comparison

## Sample Project: Kum & Go Prospect and Lemay

Species	Size (Diameter at Breast Height)	Tree Condition	Current Mitigation Standard	Proposed Mitigation Standard
Honeylocust	20"	Fair	3 trees = \$1500	\$8,404
Honeylocust	17"	Fair	3 = 1500	\$6,072
Boxelder	6"	Fair	1 = 500	\$1,500
Boxelder	8"	Fair	.5 = 250	\$2,000
Boxelder	12"	Fair	1.5 = 750	\$3,000
Siberian Elm	18"	Fair minus	1.5 = 750	\$2,778
Siberian Elm	5"	Fair minus	0	0
Siberian Elm	6"	Fair minus	0	0
Siberian Elm	16"	Fair minus	1.5 = 750	\$2,195
Boxelder	10"	Fair	1 = 500	\$2,500
Honeylocust	26"	Fair	3.5 = 1750	\$14,204
Rocky Mountain Juniper	18"	Fair	2.5 = 1250	\$5,189
Rocky Mountain Juniper	20"	Fair	2.5 = 1250	\$6,406
Ponderosa Pine	20"	Fair minus	2 = 1000	\$8,516
Ponderosa Pine	20"	Fair minus	2 = 1000	\$8,516
Ponderosa Pine	24"	Fair minus	2.5 = 1250	\$12,263
Ponderosa Pine	19"	Fair minus	2 = 1000	\$7,685
Siberian Elm	11"	Fair minus	1 = 500	\$750
			<b>31 trees = \$15,500</b>	<b>\$90,978</b>

**~\$63,000 savings**





# Soils

## Municipal Code, Chapter 12

- Define standards for soil compaction and soil quality
- Clearly define thresholds for applicability
  - Residential seeking Certificate of Occupancy and > 1000 sf where plant materials will be installed
  - Non-residential requiring development review and > 1000 sf where plant materials will be installed
- Remove barriers for considering existing soil and/or plant type

## Program-related

- Implement comprehensive field inspection program for all sites

## Proposed Implementation - January 1, 2025





# Xeriscape and Irrigation

## Proposed changes to Land Use Code 3.2.1

- 30% of landscape can be irrigated turf
  - Front yards up to 1,000 sf
  - Commercial up to 10,000 sf
- Artificial turf restriction with limited exceptions
- 50% living plant coverage on the surface of landscaped areas
- Irrigation equipment and design standards for front yards
- Dedicated irrigation to trees

## Proposed change to Municipal Code Sec. [12-123]

- Limit overhead irrigation of landscaping and turf between 10 a.m. and 6 p.m.

## Program-related

- Continue to promote programs and provide education

## Proposed Implementation - January 1, 2025





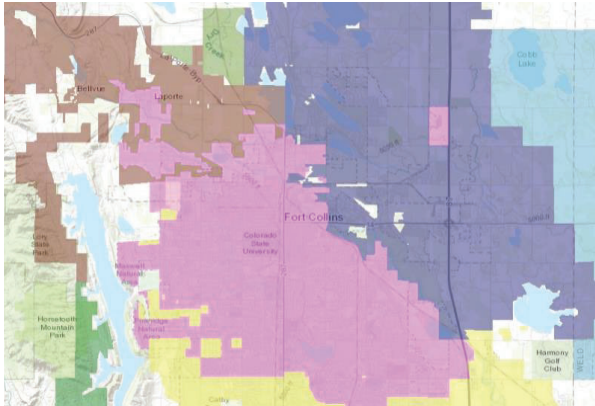
# Soil and Xeriscape - Resources per Proposal

Proposal	# FTE	Description of Role	Ongoing Cost	One-time Cost
Soil Inspection Program	1	Review plans and perform site inspections for sites required to meet soil standards.	\$93,300	\$3,000
Daytime Watering Restriction	0.5	Enforcement	\$53,760	\$3,000
Landscape Standards, non-single-unit residential	1	Review landscape and irrigation plans and perform inspections.	\$98,960	\$1,500
Landscape Standards, single-unit residential	1	Review landscape and irrigation plans and perform inspections.	\$87,334	\$38,000
Landscape Education Programming	1	Develop landscape resources; education and outreach	\$105,871	\$1,500
<b>Total</b>	<b>4.5</b>		<b>\$439,225</b>	<b>\$47,000</b>

**100% General Fund assuming applicability throughout city limits and fully implemented inspections.**

# Additional Details

## Daytime Watering Limit



### In City Limits?

- › Utilities service area vs. all treated water
- › City staff responsible to enforce

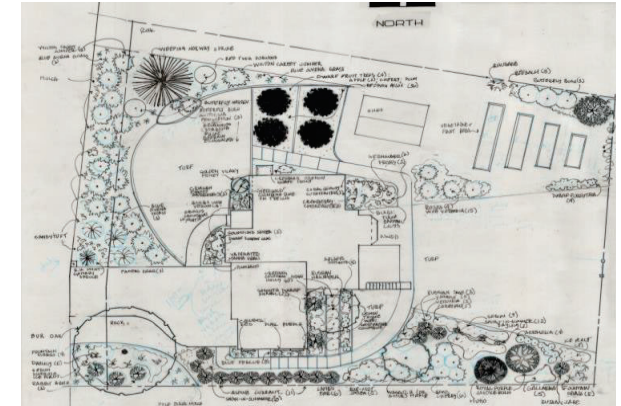
## Daytime Watering Limit



### For Raw Water?

- › Maximizes benefits of water efficiency
- › City overreach?
- › Impact on functionality
- › Impact to delivery window?

## Xeriscape Standards



### For Single-Unit Dwellings?

- › Built “smart from the start”
- › Reduces water demand
- › Front yards only
- › Best supported with education
- › New processes and additional staff
- › Development fees don't match landscape type

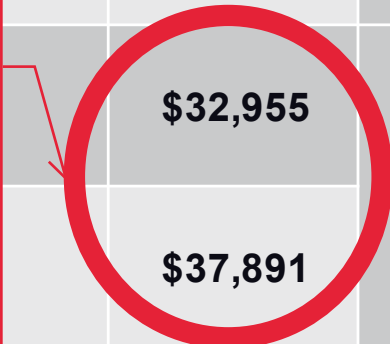


# Xeriscape Standards – Cost Comparison

Property, Landscape Type	Total Landscape Area (% high-water grass)	Design & Install. cost	Estimated Water Supply Req.*	20-year cost to irrigate**	Total	Water-wise cost difference over 20 years
Commercial, typical					\$260,597	
Commercial, water-wise					\$245,061	-\$15,536
Res. front yard, typical					\$32,955	
Res. front yard, water-wise					\$37,891	+\$4,936

The total costs on the presentation submitted with the council packet were incorrect, but did not impact the 20 year cost difference. The background slide is the corrected version, the original costs were:

\$23,633  
\$28,569



\* Fort Collins Utilities 2025 Rates. Residential estimates based on 4 bed house on 7,500 sq ft lot with 5,200 sf outdoor area. Commercial assumes irrigation-only tap.

\*\* Based on Fort Collins Utilities 10-year rates forecast. Residential water bill estimate is for front yard only with 3/4" tap. Indoor and remaining outdoor water use estimates are not included in 20-year cost to irrigate. Commercial water bill estimate is based on 1-1/2" irrigation-only tap.



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Commercial, typical	26,000 (80%)	\$110,000	\$82,530	\$68,067	\$260,597	-\$15,536
Commercial, water-wise	26,000 (30%)	\$140,000	\$51,975	\$53,086	\$245,061	
Res. front yard, typical	900 (70%)	\$6,500	\$21,168	\$5,287	\$32,955	+\$4,936
Res. front yard, water-wise	900 (30%)	\$12,000	\$21,168	\$4,723	\$37,891	

\* Fort Collins Utilities 2023 Rates. Residential estimates based on 4-bedroom house on 7,300 sf lot with 5,200 sf outdoor area. Commercial assumes irrigation-only tap.

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# Themes of Engagement

## Public, Community Partners, Boards and Commissions expressed

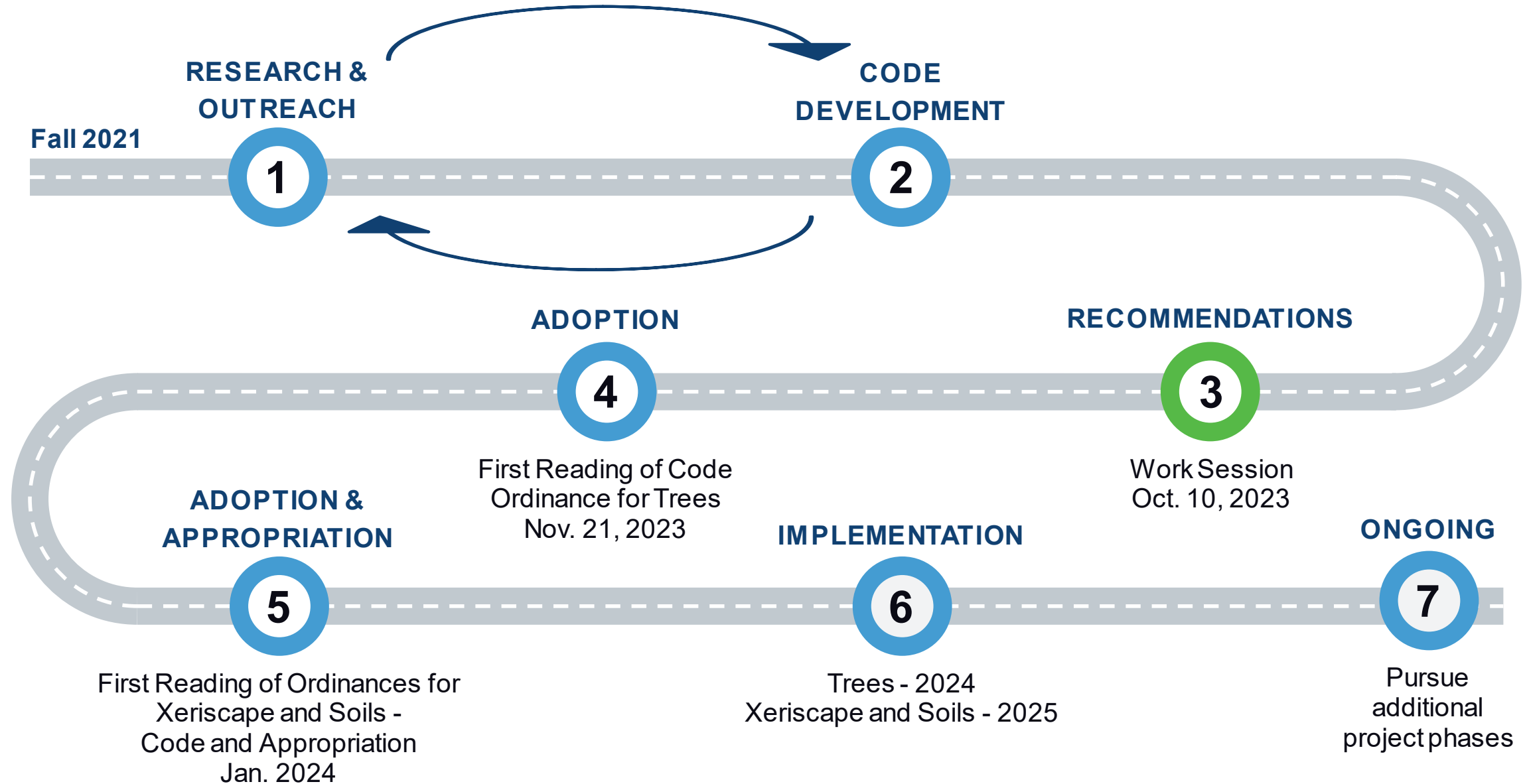
### Support for:

- General direction
- Importance of education and outreach
- Applicability citywide
- Importance of simple, predictable processes for implementation

### Concerns about:

- Impact to costs, affordability
- Funding sources for additional staff and processes
- Applicability for single-unit houses
- Consideration of unique public sites such as parks, downtown core
- Allowing turfgrass in parkways
- Artificial turf – what's the alternative?

# Timeline





# Next Phases

## In Progress



### Assessment of Compliance with Local Environmental Policy (Q1 2024)

- Alignment of related permitting, inspection and enforcement efforts
- Where would additional resources provide the most benefit

## In Progress



### Urban Forest Strategic Plan (Q2 2024)

- Heritage Tree Program
- Tree preservation and protection on single-unit properties

## In Progress



### Water Efficiency Plan (Q4 2024)

- Goalsetting for water efficiency
- Effective strategies to meet goals

## Future Exploration

- Turfgrass in parkways
- Unique public areas - such as parks, and downtown core
- Raw water opportunities
- Single-unit development fees

# Questions for Council Discussion

## **Specific to Xeriscape and Irrigation**

1. What feedback or questions does Council have on applying landscape and irrigation standards to single-unit dwelling front yards?
  
2. On daytime watering restrictions, what feedback or questions does Council have regarding:
  - a. application to all water districts within city limits?
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## **General feedback for all sections**

3. What feedback or questions does Council have on the proposed path forward?










Planning, Development and Transportation  
Community Development and  
Neighborhood Services  
281 N. College Avenue  
PO Box 580, Fort Collins, CO 80522

## MEMORANDUM

Date: October 17, 2023

To: Mayor and City Councilmembers

Through: Kelly DiMartino, City Manager <sup>DS</sup>  
Tyler Marr, Deputy City Manager  
Travis Storin, Chief Financial Officer <sup>DS</sup>  
Caryn Champine, Director, Planning, Development & Transportation <sup>DS</sup>  
Paul Sizemore, Director, Community Development & Neighborhood Services <sup>DS</sup>  
Clay Frickey, Planning Manager <sup>DS</sup>

From: Megan Keith, Senior Planner <sup>DS</sup>  
Sylvia Tatman-Burruss, Senior Policy and Project Manager <sup>DS</sup>

Subject: October 10, 2023, Work Session Summary: East Mulberry Plan

The purpose of this memo is to document the summary of discussion during the October 10<sup>th</sup> Work Session. At the October 10<sup>th</sup> City Council Work Session, staff provided background and an overview of the contents within the updated draft East Mulberry Plan. Staff presenters included Megan Keith and Sylvia Tatman-Burruss. All Councilmembers were present.

### Summary of Discussion

- Councilmembers asked clarifying questions about the thresholds approach and the example threshold that was shared.
  - Councilmembers asked about road maintenance and the process of inheriting roads previously developed within or maintained by Larimer County. This conversation also touched on setting expectations for the community surrounding road maintenance and improvement.
  - There was dialogue about what the benefits could be for businesses and residents within the East Mulberry Enclave upon future potential annexation.
  - Councilmembers also asked clarifying questions about funding sources and financial impacts of a full annexation. There was subsequent dialogue about how under a thresholds approach, these decisions and financial impacts can be considered annexation-by-annexation.
-



- The conversation also focused on the application of flexibility in the development review process for changes of use and other more minor development review processes within the East Mulberry Enclave and other parts of Fort Collins.

### **Next Steps**

- Staff will return for First Reading of the draft East Mulberry Plan on November 21.

### **Staff Follow-Up on Council Questions**

- Staff will follow up regarding development review standards and street maintenance information via memo prior to first reading.