

# Waller Creek Guadalupe Flood Risk Reduction Project

**November 13, 2023**

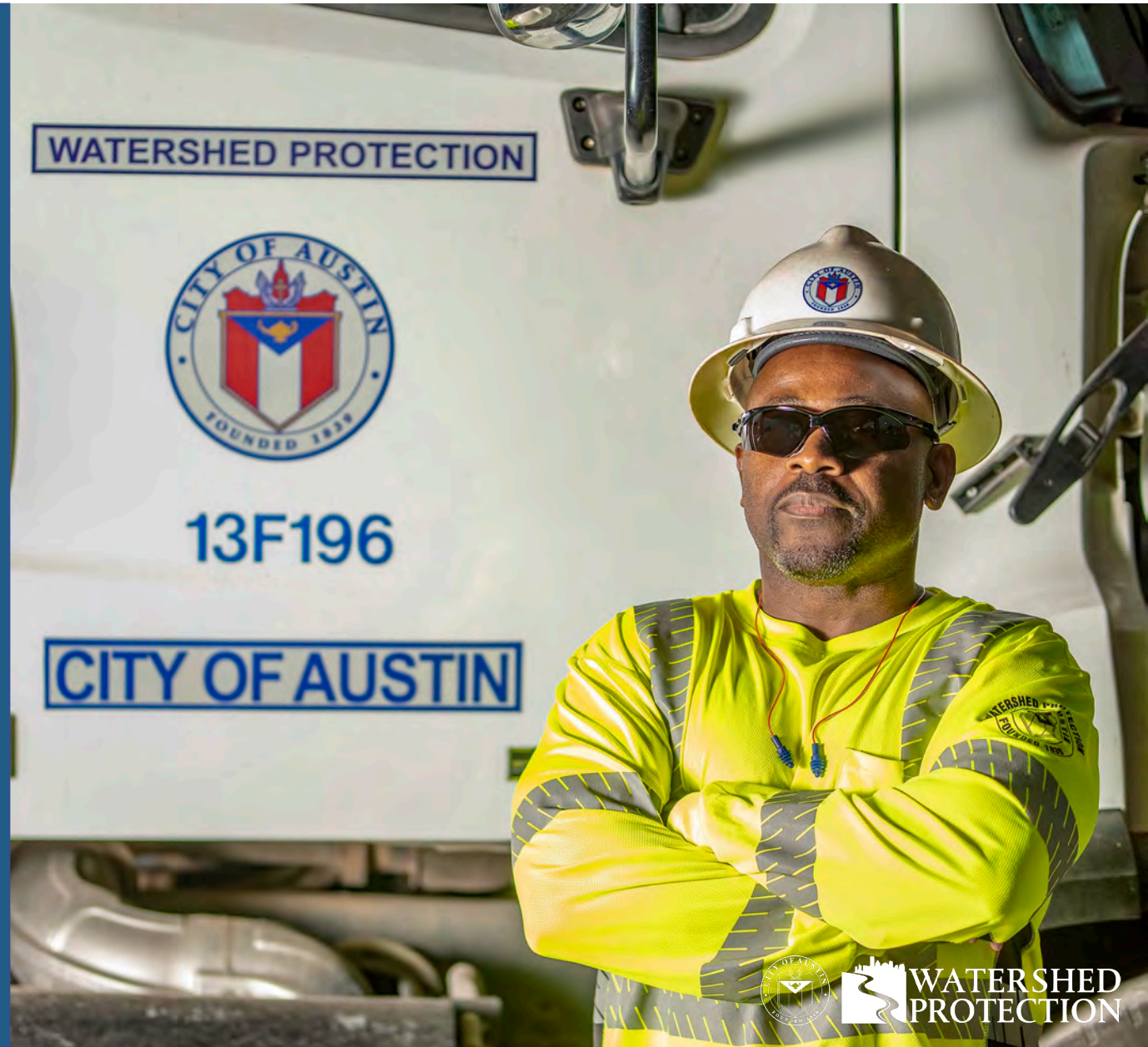
# Agenda

- Introductions
- Define Terms
- Guadalupe St. Flood Risk Reduction Project
- Draft Concept Plans
- Next Steps
- Questions



# Watershed Protection

Protects lives, property and the environment of our community by reducing the impact of flooding, erosion and water pollution.



# Introductions

- Stephanie Lott, *Public Information Specialist Sr*
- Dario Octaviano, *Project Manager*
- Hanh Thai, *Project Sponsor*
- Matt Milano, *Consultant*



# Localized Flooding

Occurs away from creeks.



# Creek Flooding

Occurs when a creek rises over its banks.





## What is a Storm Drain System?

- System of streets, ditches, pipes and culverts
- Drains rainfall from streets to nearby creek
- Inlets are placed along curb to catch rainfall
- Streets should drain in most storms.

# Components of a Storm Drain System

1. Inlets and curbs capture rainwater.



2. Underground pipes carry the water.



3. Rainwater is released into a creek at the outfall. Sometimes it goes to a water quality or detention pond first.



# Stormwater Detention Basin or Pond

- Storm drain system releases water into basin instead of creek
- Water held temporarily in basin
- Used to reduce flood risk
- Can also help remove pollutants

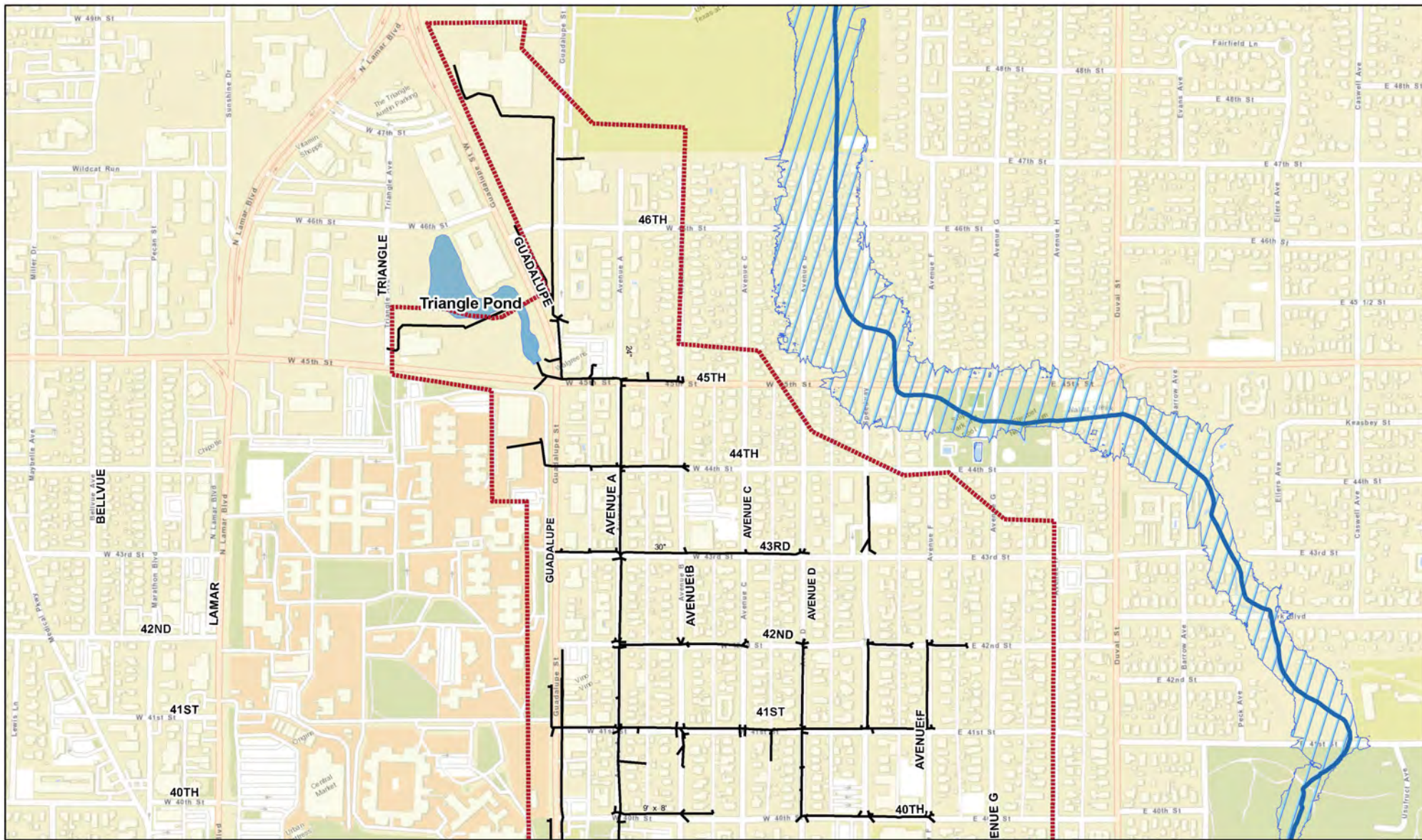




## Why did we start Guadalupe Street Flood Risk Reduction Project?



# Existing Storm Drain System



**PROJECT MAP**

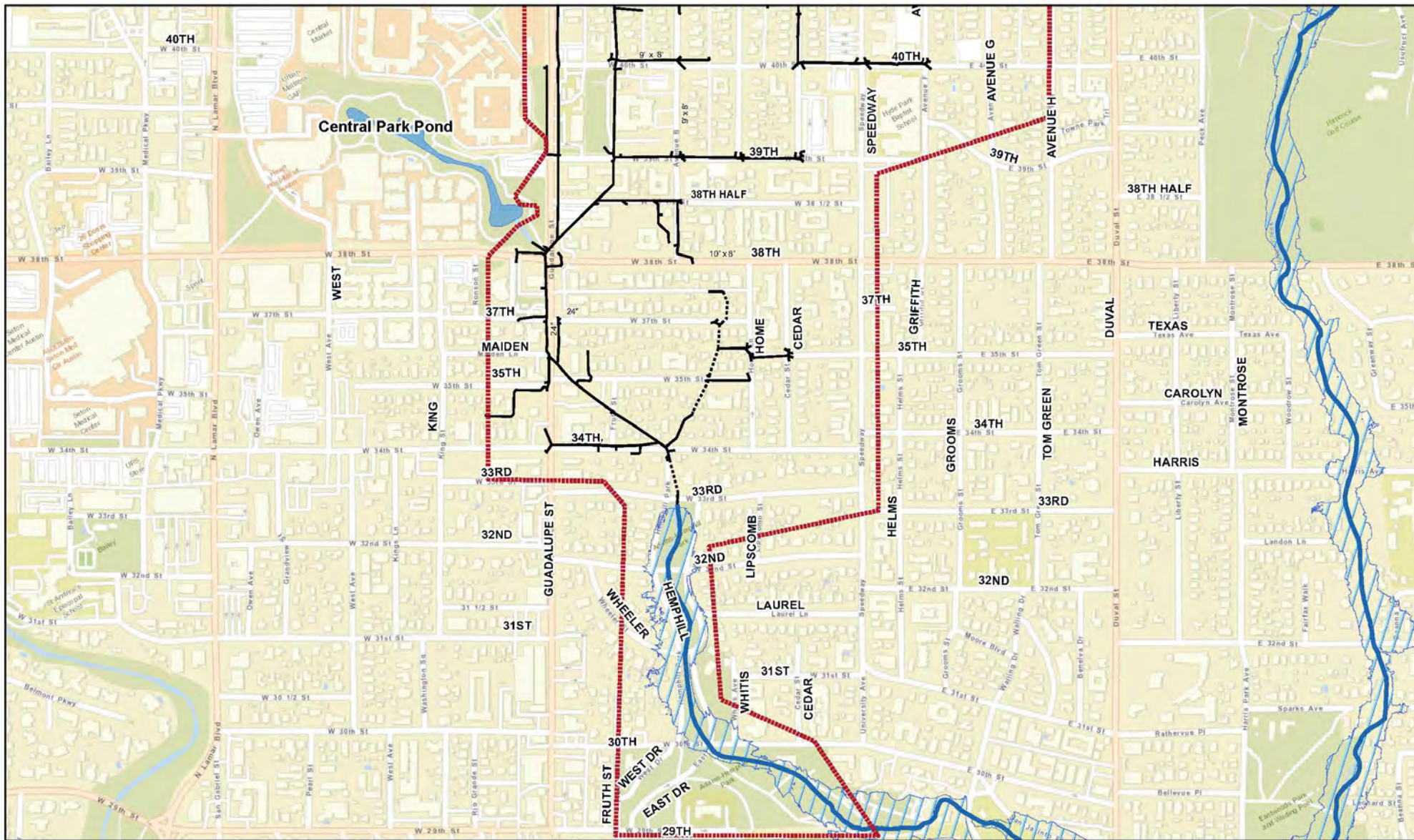
**CITY OF AUSTIN - GUADALUPE STREET EXISTING STORM DRAIN**

**FIGURE 1**

**PRESE AND NICHOLS, INC.**  
 3000 W. BRIDGEMAN CIRCLE  
 SUITE 100  
 AUSTIN, TEXAS 78759  
 PHONE: 512-617-3100  
 FAX: 512-617-3101

**PROJECT INFORMATION**  
 DATE CREATED: 11/7/2023  
 DRAWING COORDINATOR: J. STEIN  
 PROJECT NUMBER: 20231107  
 PREPARED BY: J. STEIN

# Existing Storm Drain System



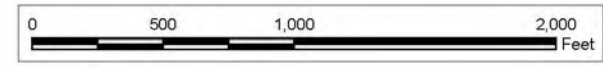
<p>PROJECT NO. _____</p> <p>DATE CHANGED _____ DATE 11/20/23</p> <p>DRAWN/COORDINATOR SYSTEM _____</p> <p>FILE NAME _____</p> <p>PREPARED BY _____</p>	
<p><b>CITY OF AUSTIN - GUADALUPE STREET EXISTING STORM DRAIN PROJECT MAP</b></p>	
<p><b>FRESE &amp; NICHOLS, INC.</b>          FRESE AND NICHOLS, INC.          10000 BURNING TREE DRIVE          AUSTIN, TEXAS 78759          PHONE: 512-617-3100          FAX: 512-617-3100</p>	
<p><b>FIGURE 2</b></p>	

Streets\_Limited  
 ProjectArea\_...

**Existing Storm Drain Pipe**  
 Existing Storm Drain Pipe

**abandon**  
 Existing Storm Drain Pipe To Be Abandoned

Existing Ponds  
 Ultimate 100-year Floodplain

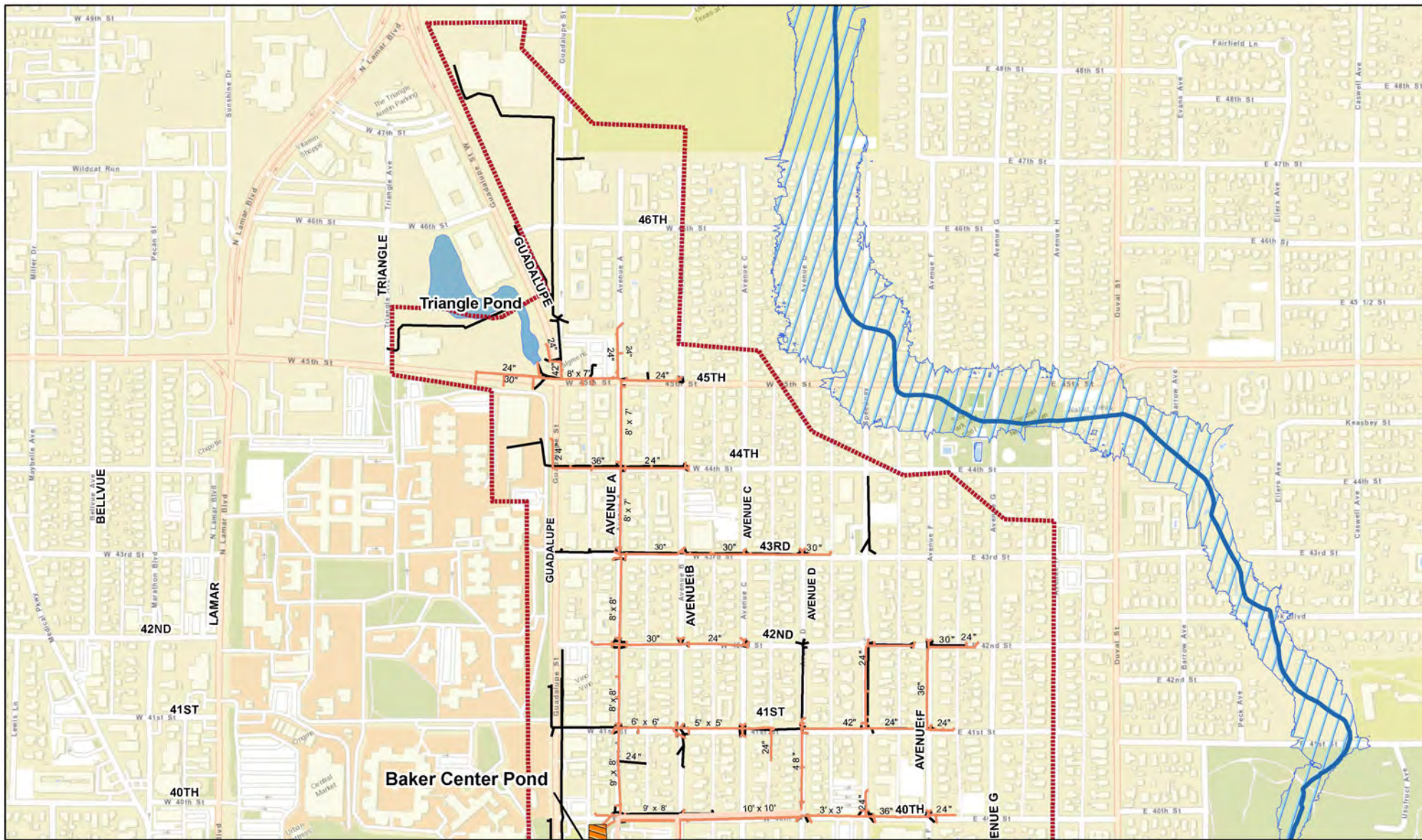


# Existing Drainage System

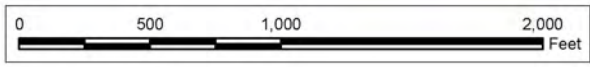
- Main storm system built in 1928
- Generally follows Avenue A to Hemphill Branch at W. 33rd St
- Pipe size varies from 42 inch in diameter to a 9 x 5.5 foot box culvert
- Central Park Pond designed in 1993
- Triangle Pond designed in 2004



# Proposed Storm Drain System

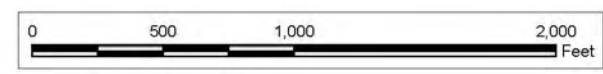
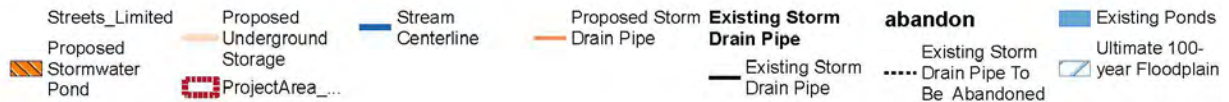
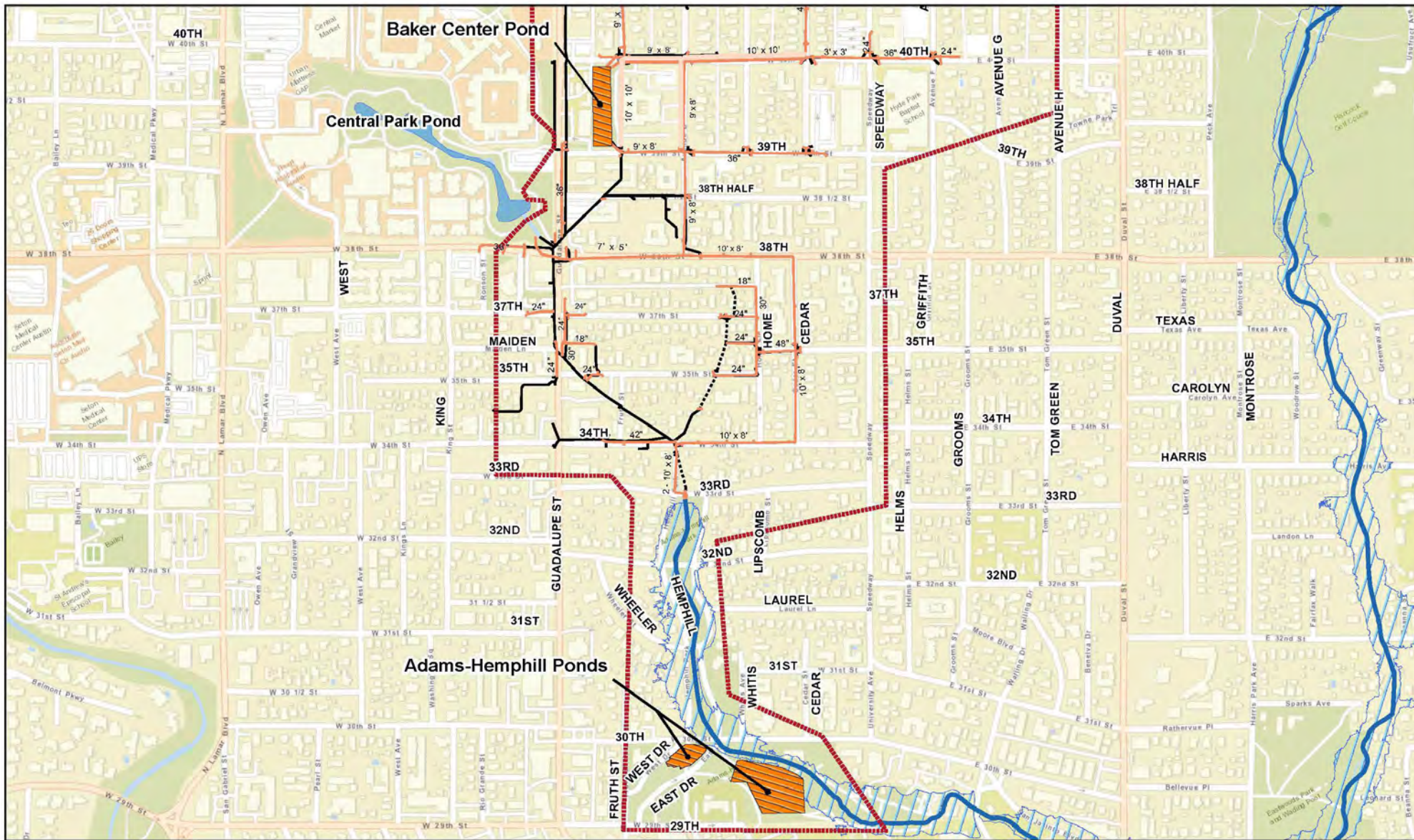


- Streets\_Limited
- Proposed Stormwater Pond
- Proposed Underground Storage
- ProjectArea\_...
- Stream Centerline
- Proposed Storm Drain Pipe
- Existing Storm Drain Pipe
- Existing Storm Drain Pipe
- abandon
- Existing Storm Drain Pipe To Be Abandoned
- Existing Ponds
- Ultimate 100-year Floodplain



<p><b>CITY OF AUSTIN - GUADALUPE STREET STORM DRAIN IMPROVEMENTS</b></p> <p><b>PROJECT MAP</b></p>	<p>PROJECT NO. 20231107</p> <p>DATE CREATED: 11/7/2023</p> <p>DRAWN &amp; COORDINATED BY: FNI</p> <p>FILE NAME: H:\STORMWATER\Final Exhibits\FNI_ProjectMap_publicmeetin_20231107_A.mxd</p> <p>PREPARED BY: FNI</p>
<p><b>FIGURE 1</b></p>	
<p>FREESSEE AND NICHOLS, INC.          3000 W. MORADO CIRCLE          SUITE 100          AUSTIN, TEXAS 78759          PHONE: 512-617-3100          FAX: 512-617-3101</p>	

# Proposed Storm Drain System



<p>PROJECT NO. _____</p> <p>DATE CHANGED: _____ DATE: 11/20/23</p> <p>DRAWN BY: _____</p> <p>FILE NAME: _____</p> <p>PREPARED BY: _____</p>	
<p><b>CITY OF AUSTIN - GUADALUPE STREET STORM DRAIN IMPROVEMENTS</b></p> <p><b>PROJECT MAP</b></p>	
<p><b>FREESE AND NICHOLS, INC.</b>          10000 BURNING TREE DRIVE          SUITE 300          AUSTIN, TEXAS 78759          PHONE: 512-617-3100          FAX: 512-617-3100</p>	
<p><b>FIGURE</b></p> <p><b>2</b></p>	

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View Video at: <https://youtu.be/3ZOInUi4CVU>



## Are there alternative locations?

- Evaluated numerous variations of detention basins, channel modifications and culvert improvements
- No other feasible alternatives have been identified
- Detention basins need a large space in a low spot where runoff naturally drains to
- Fully developed area with very little open space
- Ruled out buyouts of several homes between 33rd and 34th Streets
- Open spaces at the Austin Presbyterian Seminary and Scottish Rite Dormitory are too small



# Storm Drain Capital Improvement Program Project Phases

In House  
Feasibility

Preliminary  
Engineering

Design

Permitting  
&  
Bidding

Constructio  
n

We are  
here

# Schedule & Funding Update

- Project will be divided into 4-5 phases
- Each phase takes approximately 2-3 years to complete
- Current estimated total cost is about \$91.5 million
- **Estimated cost and schedule are dependent on funding availability and may change due to future circumstances**

Phase	Estimated Construction Start Year	Estimated Construction End Year
1	2025	2027
2	2027	2029
3	2030	2032
4-5	2032	2035

# Funding Update

- Currently funded through the design phase
- Additional funds are needed to move to construction phase
- Construction funds allocation may take more than 5 years
- Working to identify alternative funding sources such as state or federal grants and subsidized loans

# ATX FLOOD SAFETY



# ATX FLOOD SAFETY



## LEGEND

- 1 Basketball Court
- 2 Rain/Pollinator Garden for Biofiltration
- 3 Scenic Overlook
- 4 Removable bollards
- 5 Basin Retaining Wall with 42" Ornamental Guardrail
- 7 Traditional Playground
- 8 Nature Play Playground
- 9 8' Concrete Perimeter Trail
- 10 Existing Tree Retaining Walls
- 12 12' Concrete Perimeter Trail
- 13 Drinking Fountain
- 14 Rock Climbing Wall
- 15 6' Concrete Path
- 16 Outlet
- 17 Tiered Retaining Seat Walls
- 18 6' Wide Concrete Accessible Route
- 19 Backstop and Benches
- 20 Required Staging Area
- 22 Inlet
- Park Bench
- Park Lighting
- Sports Lighting
- Picnic Tables
- Park Sign/ Art Opp.
- River Centerline

# ATX FLOOD SAFETY



## ADAMS-HEMPHILL NEIGHBORHOOD PARK - SECTION VIEW OF LOWER BASIN

NOVEMBER 2023



Lower Basin Pathway

Open Green Space

Biofiltration/  
Pollinator Garden

3:1 Natural Slope

Shade Trees/  
Natural Space

8' Perimeter Trail with  
Guardrail

Lower Basin Inlet

8' Perimeter Trail

# Previous Communications and Outreach

## **Guadalupe St. Flood Risk Reduction Project**

- Notification and Public Meetings – 2017, 2018 and 2021
- NUNA Meetings – 2021 and 2023

## **Adams Hemphill Neighborhood Park**

- Initial Survey and Open House – 2022
- Advisory Committee Meetings – 2023

## Next Steps

- Community input on two draft concept plans
- Parks and Recreation Director approves final concept plan
- Parks Board will vote on whether to recommend use of park land for drainage should proceed
- City Council will decide on whether to proceed with using park land for drainage
- If not approved, there will be no project to reduce flood risk between 45th St. and 33rd St.



# Ground Rules

**Everyone is encouraged to participate!**

## **1. Step up, Step back**

Please be brief and to the point. Let others have an opportunity to speak.

## **2. Mute, Unmute**

When called upon, unmute your microphone. One person speaks at a time. When you finish speaking, please be sure to put yourself back on mute.

## **3. Be Mindful**

Please be respectful of staff and other attendees. Demeaning, derogatory, disruptive, inflammatory, threatening or vulgar language or actions will not be permitted and may result in attendee(s) being removed from the meeting.

# Questions: Two Ways

## Raise Your Hand:

Click “Raise Your Hand.” When called on, unmute yourself and speak. Don’t forget to lower your hand afterwards.

## Type Your Question:

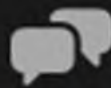
Click “Q&A” and type your question. You can also “upvote” other people’s questions by liking them.



Chat



Raise Hand



Q&A



Live Transcript



Interpretation



# PROJECT TEAM



Thank you!