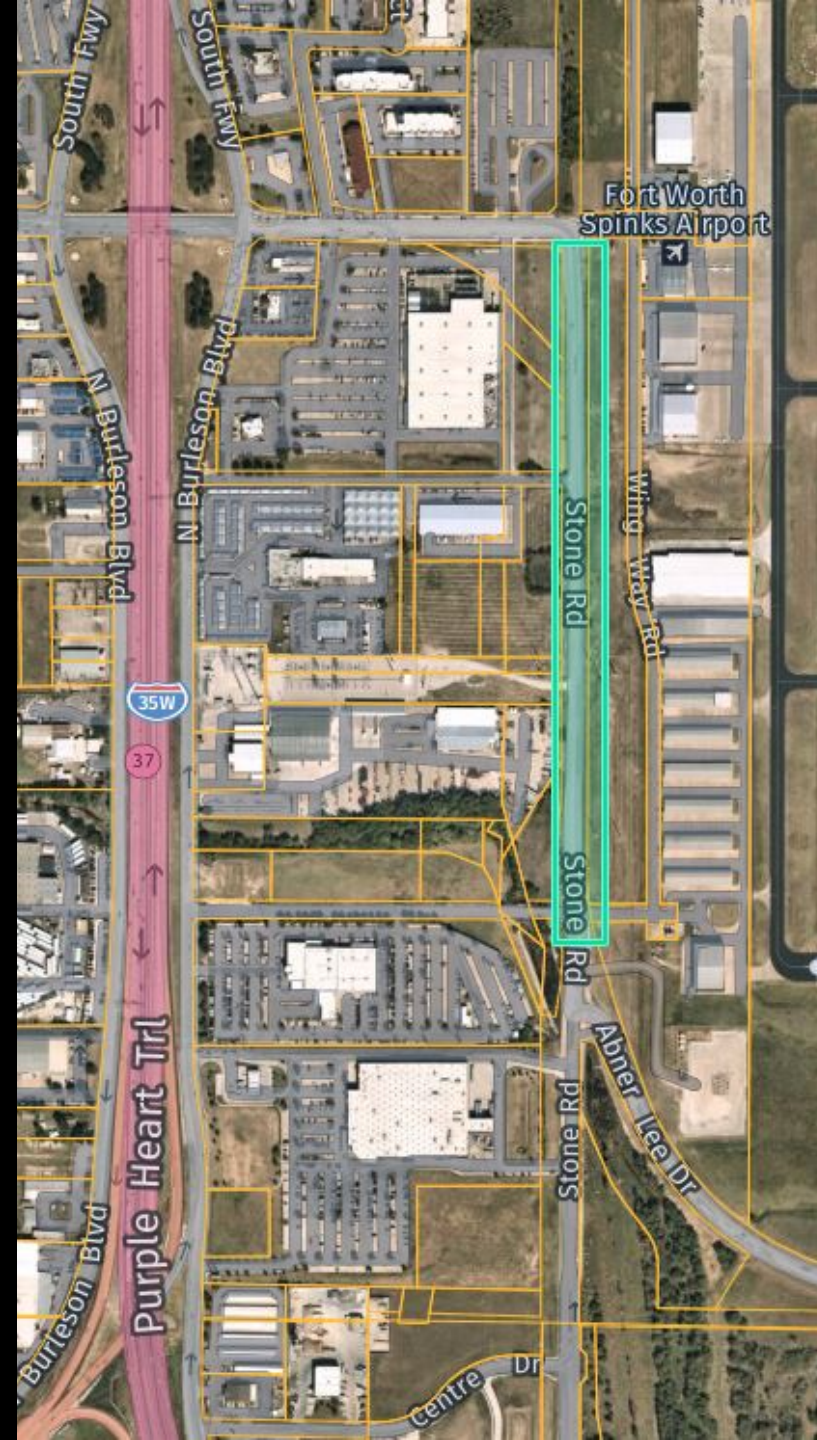


# STONE ROAD / VILLAGE CREEK PKWY DESIGN UPDATE

---



# OBJECTIVES

- PROJECT BACKGROUND
- DESIGN STATUS
- RECOMMENDED DESIGN ELEMENTS
- COUNCIL FEEDBACK



# BACKGROUND

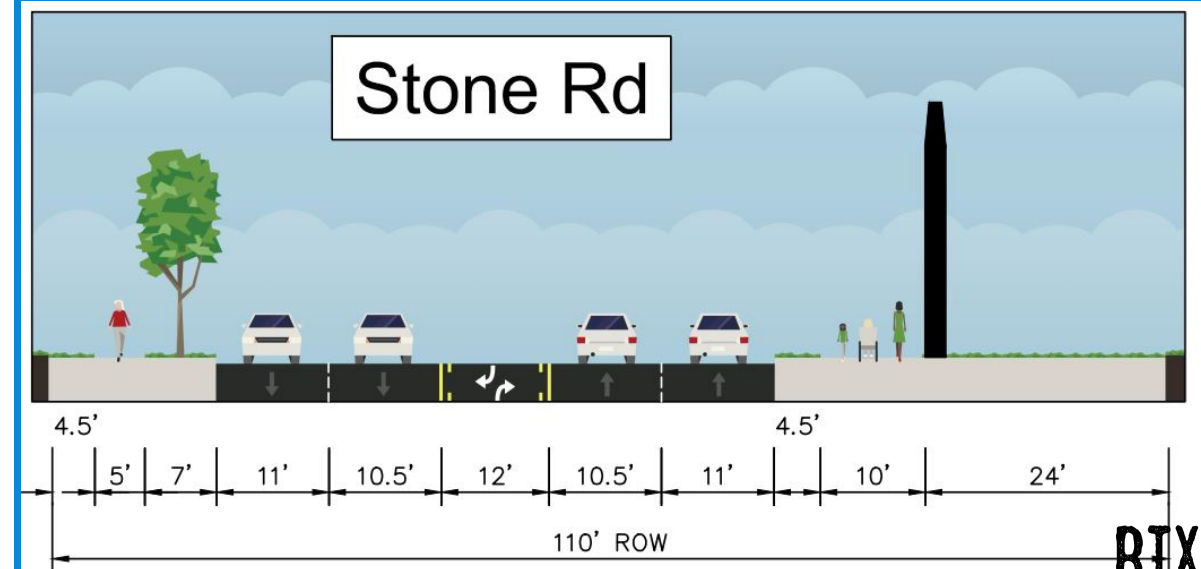
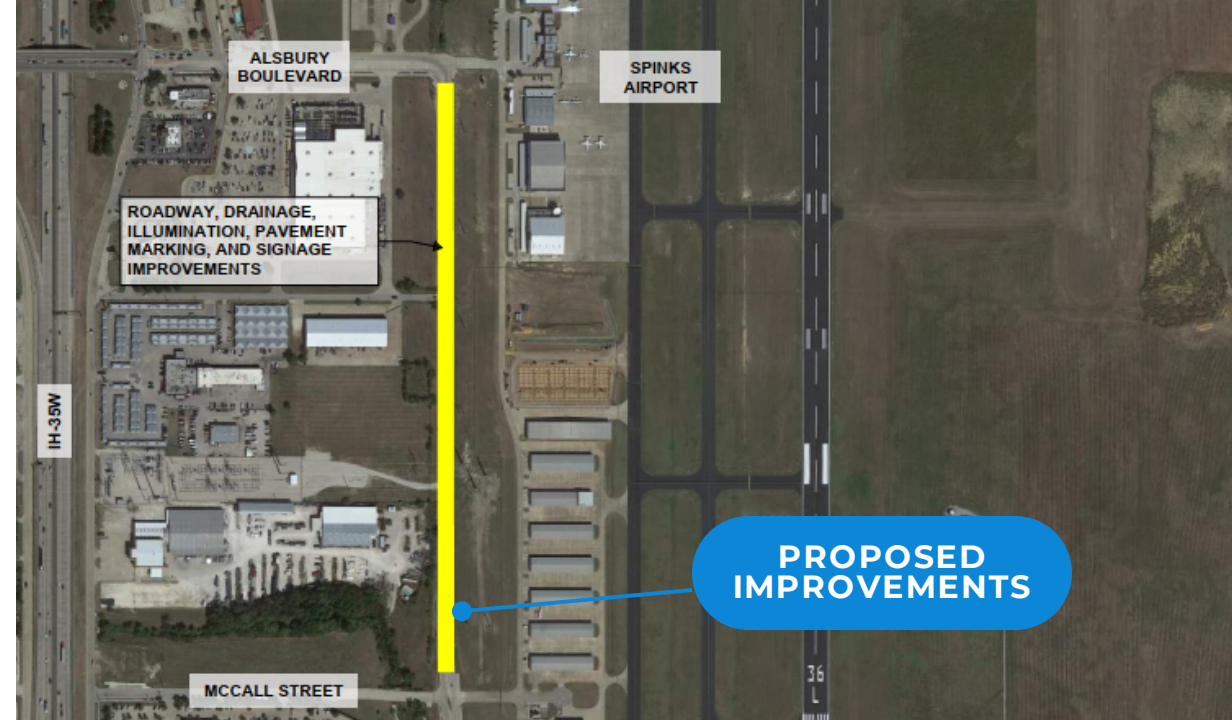
Fall 2021 project was selected for Tarrant County Bond Program (50/50 cost sharing split); Initially included in Burleson's 5-yr CIP in 2022

## Original project description from Tarrant County application

**Widen and reconstruct approximately 0.5 miles of Stone Rd./Village Creek Pkwy from North of McCall St. to Alsbury Blvd.**

- Replace the existing two-lane asphalt roadway with a five-lane undivided concrete roadway including two lanes in each direction and a two-way left turn lane
- Install curb and gutter, closed drainage system, and streetlights

Install sidewalk on west side and continue 10' shared use path on east side to match section to the south



# TARRANT COUNTY BOND PROGRAM



## CALL FOR PROJECTS

Opened April 2021; City submitted application April 15, 2021



## SELECTION

Commissioner's Court accepted prioritized list of projects on August 3, 2021  
Burleson's Project was ranked #2 of 33.  
September 2021 Tarrant County Commissioner Brooks (Precinct 1) agreed to allocate additional \$500,000 from his discretionary funds to this project.



## ELECTION

Tarrant County voters passed Proposition A on November 2, 2021, allowing implementation of the 2021 Transportation Bond Program



## INTERLOCAL AGREEMENT (ILA)

ILA received from Tarrant County November 2022 and Burleson City Council approved January 9, 2023 (CSO#4085-01-2023)

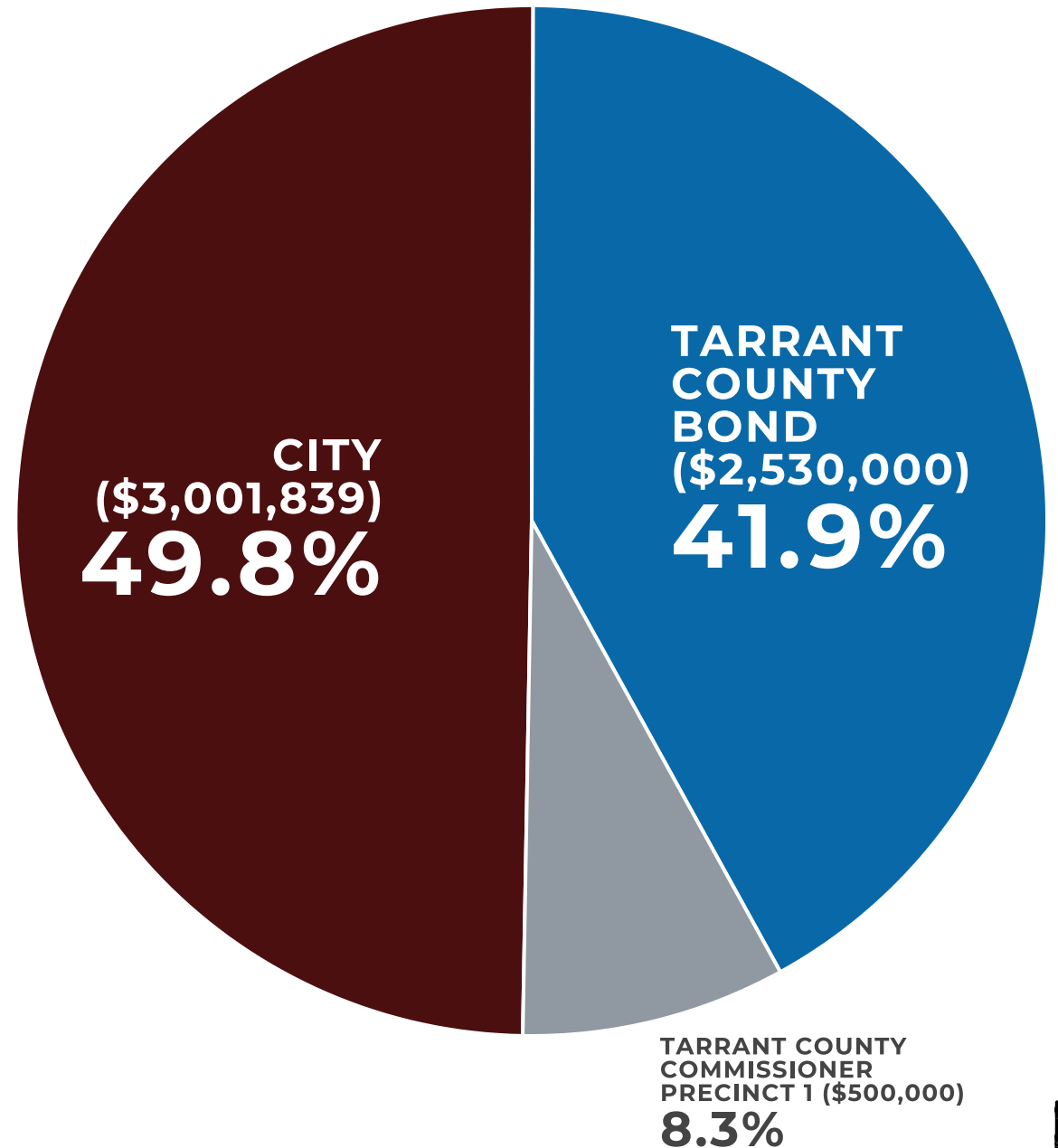


## PROGRAM ADMINISTRATION

City will be eligible to be reimbursed for 50% of design fee once final civil construction plans are approved  
City will be eligible to be reimbursed up to 50% of construction expenses monthly during construction

# PROJECT FUNDING

City funding from cash and impact fees





# DESIGN

Professional Services contract with Freese and Nichols, Inc. for design approved by City Council January 9, 2023 (CSO#4086-01-2023)



## **SURVEY**

Topographic survey to locate existing features and utilities



## **FAA COORDINATION**

Spinks Airport official notification and subsequent review of project by FAA due to proximity to the airport



## **DESIGN**

Consultant will prepare Plans and Specifications for the roadway improvements



## **CONSTRUCTION ADMINISTRATION**

Consultant will provide construction administration services



## **UTILITY COORDINATION/LOCATING AND PERMITTING**

Utility locating may be required

**DESIGN: FEBRUARY 2023- JANUARY 2024**  
**CONSTRUCTION: MARCH 2024- MAY 2025**

### **Council feedback in January included requests to:**

Assess the McCall Street intersection and the feasibility of allowing left turns out of the Spinks Airport driveway  
Incorporate context sensitive design considerations

# DESIGN PROCESS



Staff asked Freese and Nichols to develop two additional roadway section options in addition to the original Tarrant County application roadway section

Tarrant County staff is supportive of an alternative roadway section that meets the original project objectives, does not diminish capacity, nor increases their funding obligation

# ROADWAY SECTION ANALYSIS

## Original - Tarrant County Bond Application

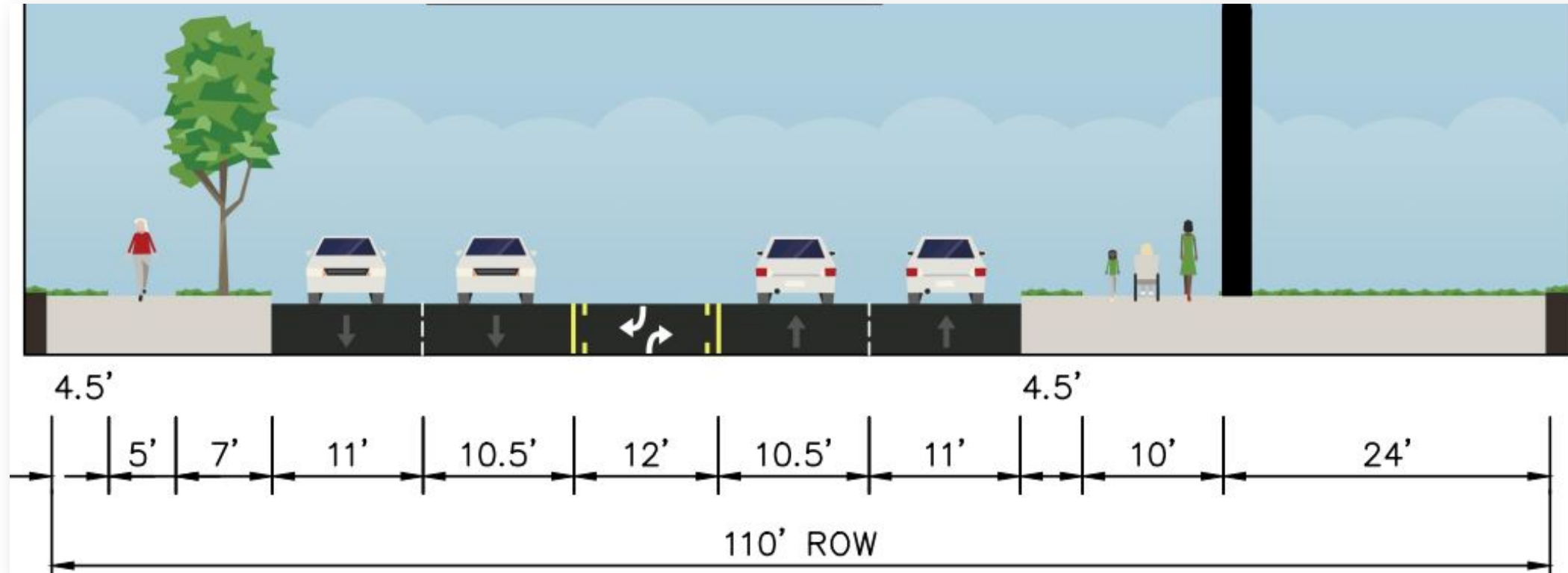
110-120' ROW- 5 LANE UNDIVIDED  
(EXISTING ROW IS 90')

### CONS

- Requires right-of-way acquisition
- Highest construction cost compared to four-lane divided
- Limited benefit for the two-way left turn lane- no southbound left turn lane is necessary (Spinks Airport property)
- Does not allow for median landscape improvements

### PROS

- Continues 10' shared use path for trail extension
- Adds travel lane in each direction
- Two-way left turn lane provides access to developments on westside of roadway





# ROADWAY SECTION ANALYSIS

## Concept A

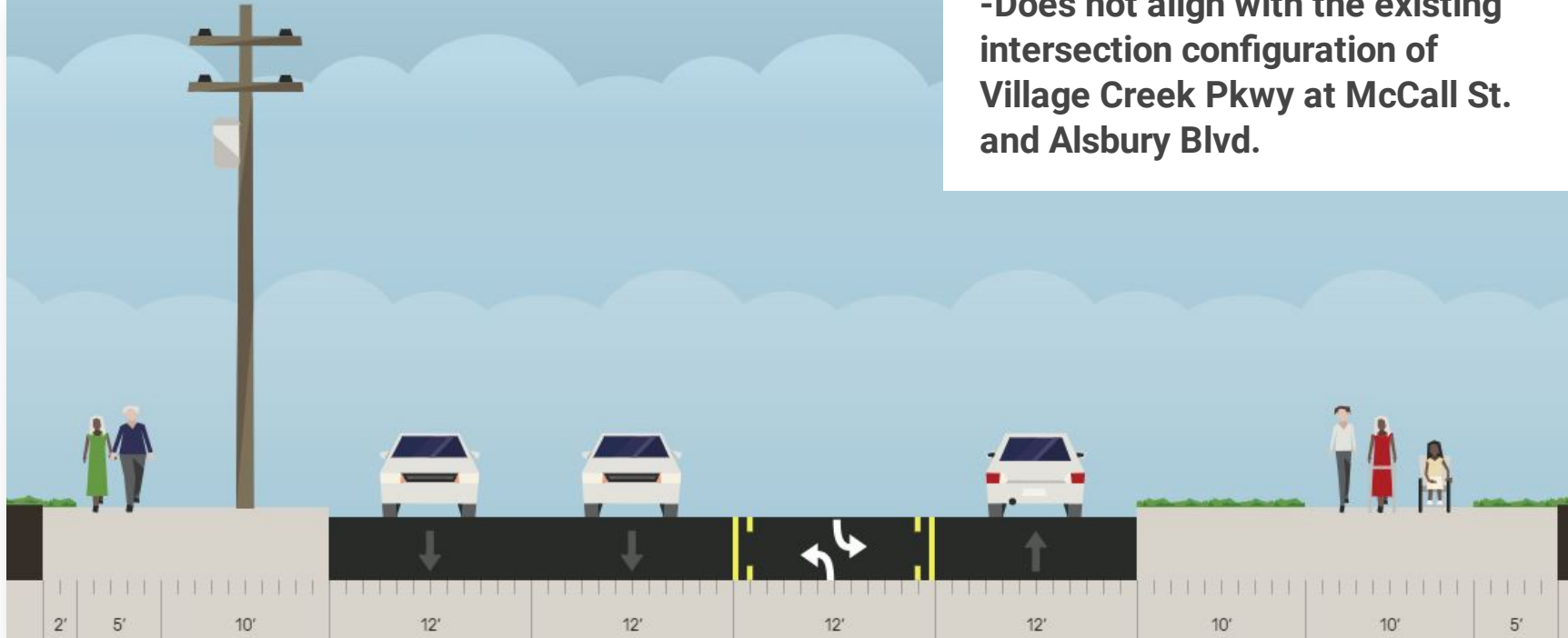
90' ROW- 4 LANE UNDIVIDED

## CONS

- Requires ILA update with Tarrant County
- Adds travel lane only in southbound direction
- Limited benefit for the two-way left turn lane- no southbound left turn lane is necessary (Spinks Airport property)
- Does not allow for median landscape improvements
- Does not align with the existing intersection configuration of Village Creek Pkwy at McCall St. and Alsbury Blvd.

## PROS

- Continues 10' shared use path for trail extension
- No right-of-way acquisition needed
- Reduced construction cost compared to original five lane undivided section and four lane divided section
- Two-way left turn lane provides access to developments on westside of roadway



# ROADWAY SECTION ANALYSIS

## Concept B

90' ROW- 4 LANE DIVIDED

with gently meandering 10' Shared Use Path within Oncor Easement

## CONS

-Requires ILA update with Tarrant County

## PROS

- Continues 10' shared use path for trail extension
- Provides two lanes in each direction, increasing capacity
- Enhances safety with raised median; also available for landscaping
- Fits within existing right-of-way
- Reduces construction cost compared to original five lane undivided section
- Includes context-sensitive design elements (eliminates unnecessary two-way left turn lane, provides gently meandering shared use path within Oncor easement)



Proposed left turn lanes for northbound traffic at:

- **BOONE RD.**
- **ONCOR SUBSTATION DRIVEWAY**

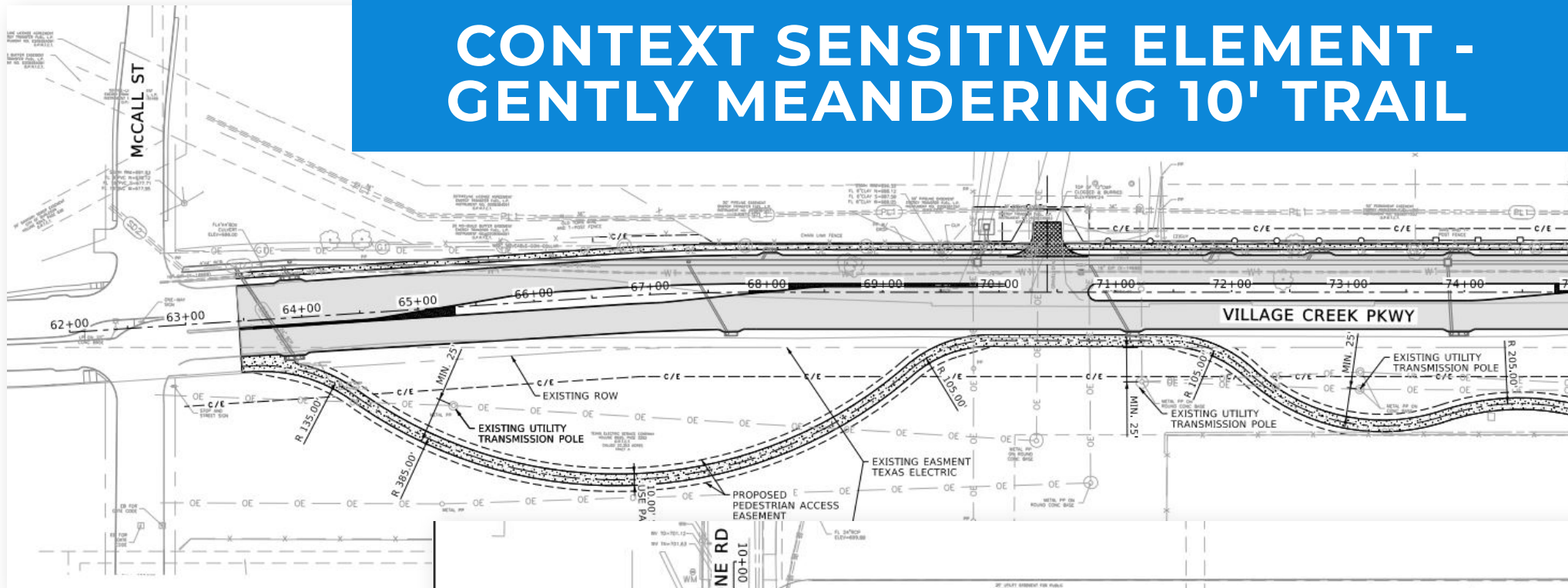
# ROADWAY SECTION COMPARISON

| Section   | Right-of-Way Acquisition | Cost*  | Median Landscaping | Safety   | Capacity                                  |
|---|--------------------------|--------|--------------------|--|---|
| <b>ORIGINAL</b><br>5 Lane Undivided<br>(120' ROW) | Yes                      | \$\$\$ | No                 | Two Way Left Turn Lane;<br>Less Safe                                 | Two lanes each direction                  |
| <b>CONCEPT A</b><br>4 Lane Undivided<br>(90' ROW) | No                       | \$     | No                 | Two Way Left Turn Lane;<br>Less Safe                                 | Two lanes southbound; one lane northbound |
| <b>CONCEPT B</b><br>4 Lane Divided<br>(90' ROW)   | No                       | \$\$   | Yes                | Raised median offsetting northbound and southbound traffic;<br>Safer | Two lanes each direction                  |

\*All options are within the established project budget

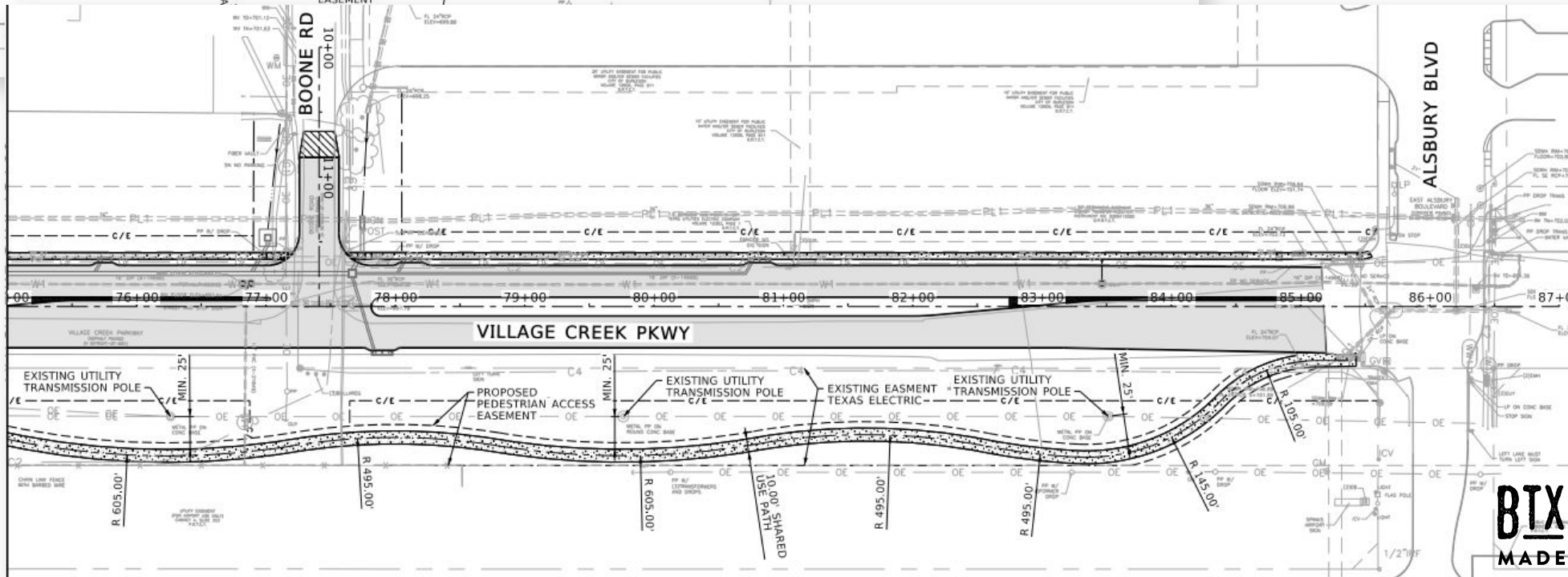
**STAFF RECOMMENDS CONCEPT B**  
(4-lane divided with gently meandering trail within Oncor easement)

# CONTEXT SENSITIVE ELEMENT - GENTLY MEANDERING 10' TRAIL



Oncor is open to allowing this alignment. FNI started separate permitting process

This will allow greater separation of the proposed trail and the roadway along with alignment variability for pedestrian enjoyment





# McCall Intersection

Designed and constructed with Village Creek Pkwy/ Stone Rd. Phase 1- completed in 2014

McCall St. right-of-way was previously dedicated and planned to connect to Stone Rd./ Village Creek Pkwy

Design resulted in the safest intersection option for McCall St. and Abner Lee Dr. while maintaining southbound access to Spinks Airport

**Current design revisited this intersection to investigate other options for cross traffic access at McCall and Spinks Airport driveway**

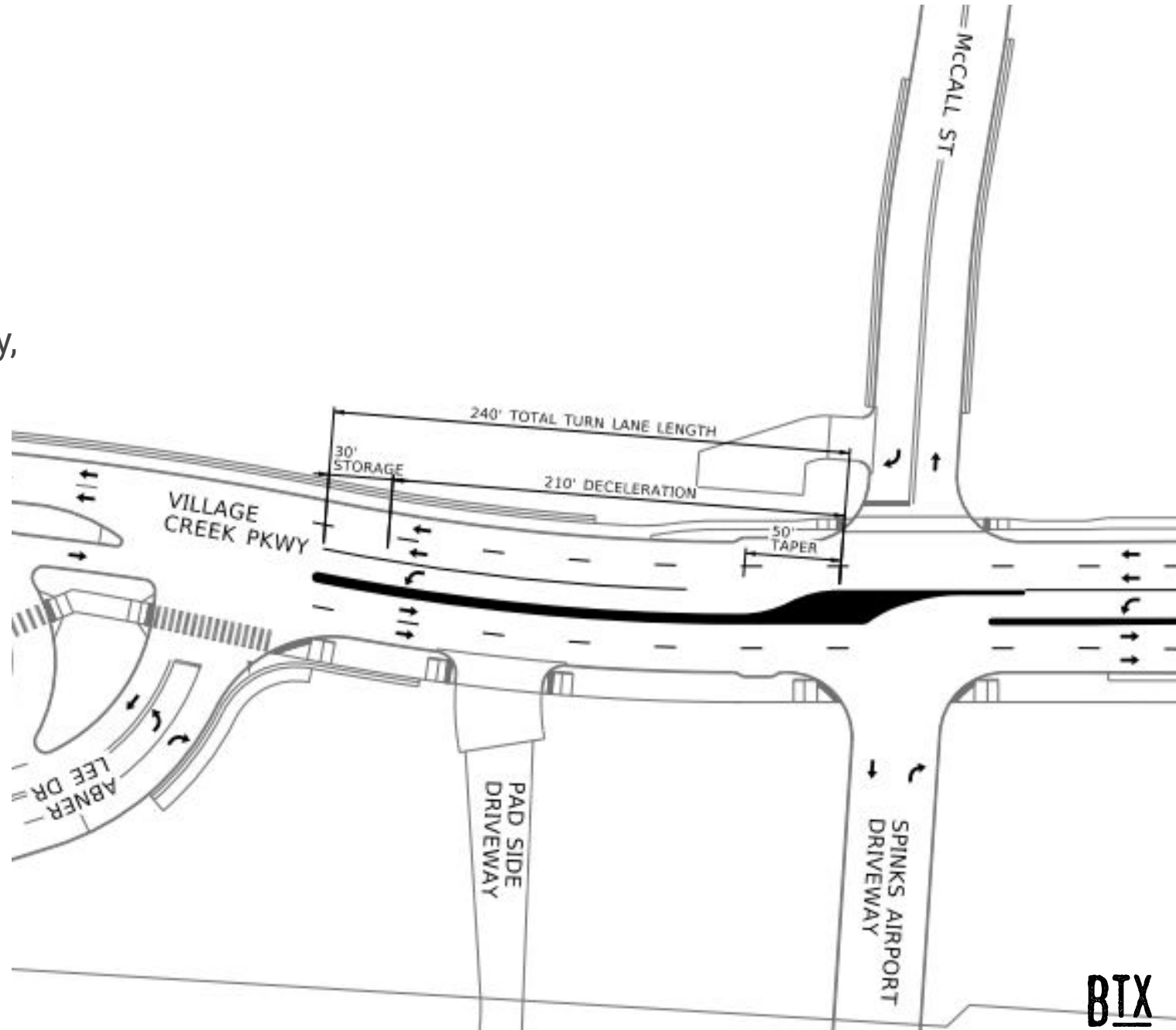


# McCall Intersection

## Existing

Right-in/right-out for McCall, southbound  
hooded left entry for Spinks Airport driveway,  
240' southbound left turn lane for Abner Lee

- Does not meet City Standard turn lane length (minimum 300'); would require eliminating hooded left turn lane into Spinks Airport driveway
- Meets City Standard median opening spacing (minimum 450' for major collectors)
- Provides the safest corridor option while still providing southbound left turn access to Abner Lee and Spinks Airport driveway



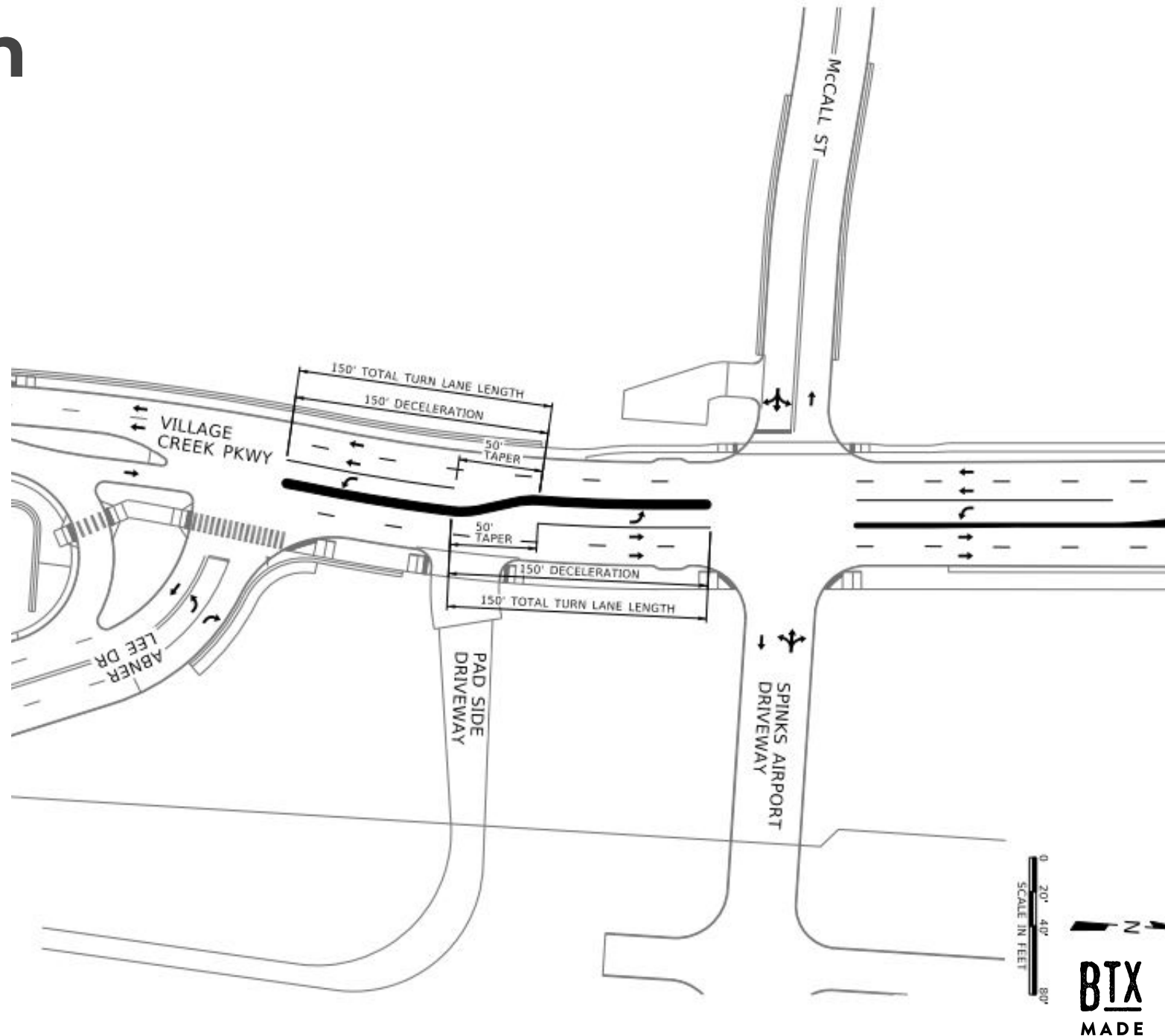


# McCall Intersection

## Option A2

Open intersection for McCall and Spinks Airport driveway, 150' left turn lanes for Abner Lee and McCall

- Does not meet City Standard turn lane length (minimum 300')
- Does not meet City Standard median opening spacing (minimum 450' for major collectors)
- Introduces additional safety concerns

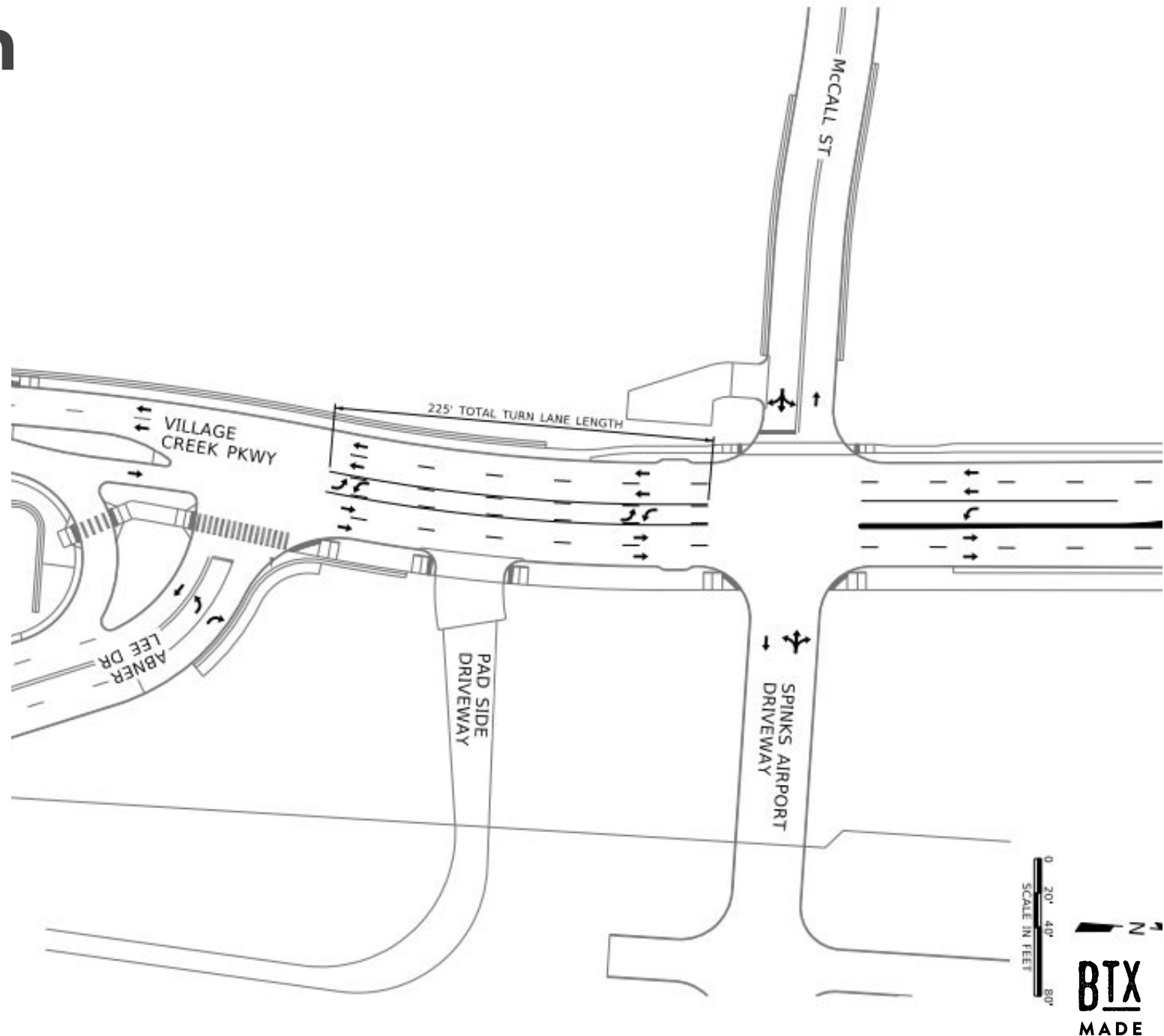


# McCall Intersection

## Option A3

Open intersection for McCall and Spinks Airport driveway, two-way left turn lane between Abner Lee and McCall

- Does not meet City Standard median opening spacing (minimum 450' for major collectors)
- Introduces additional safety concerns

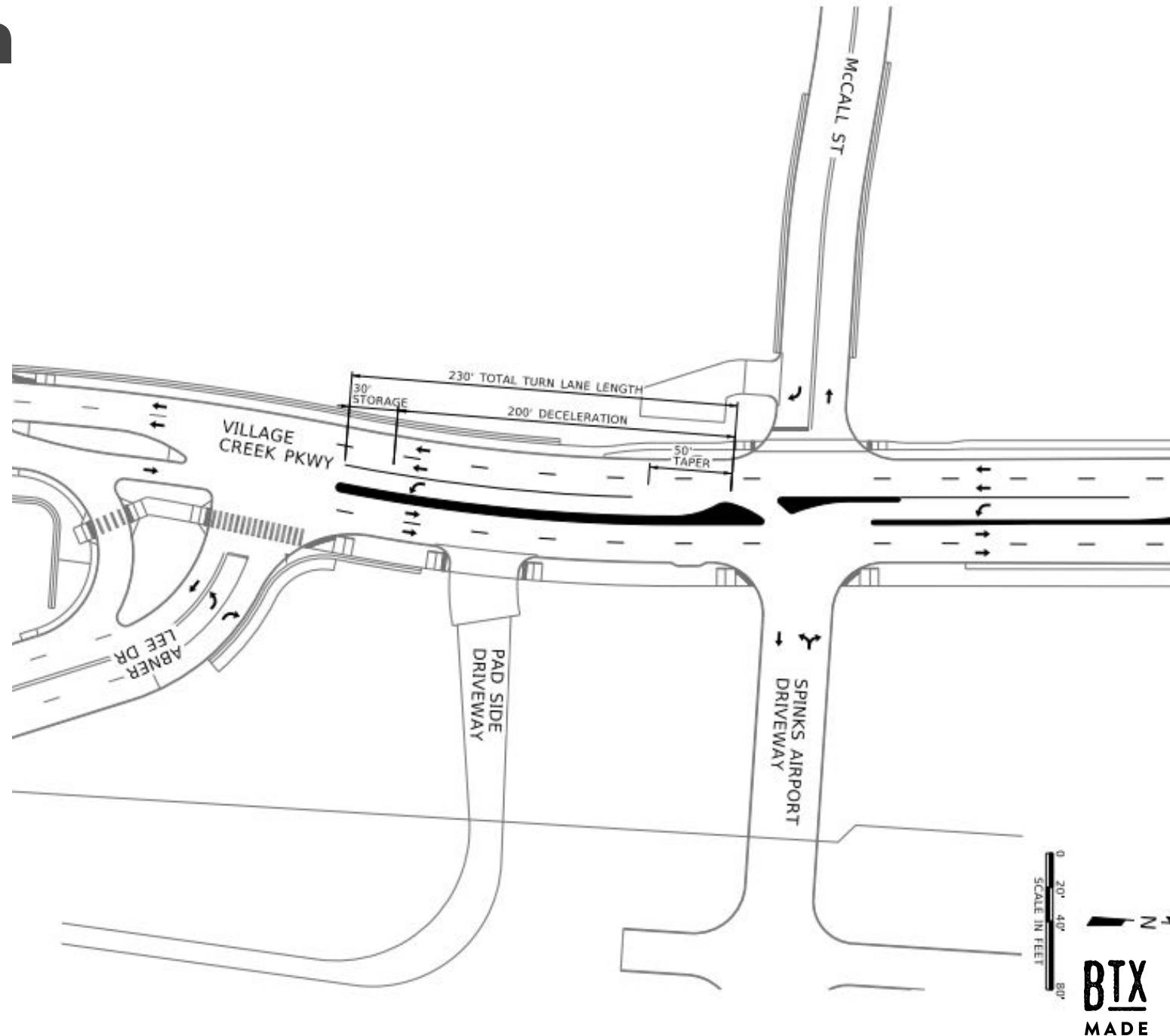


# McCall Intersection

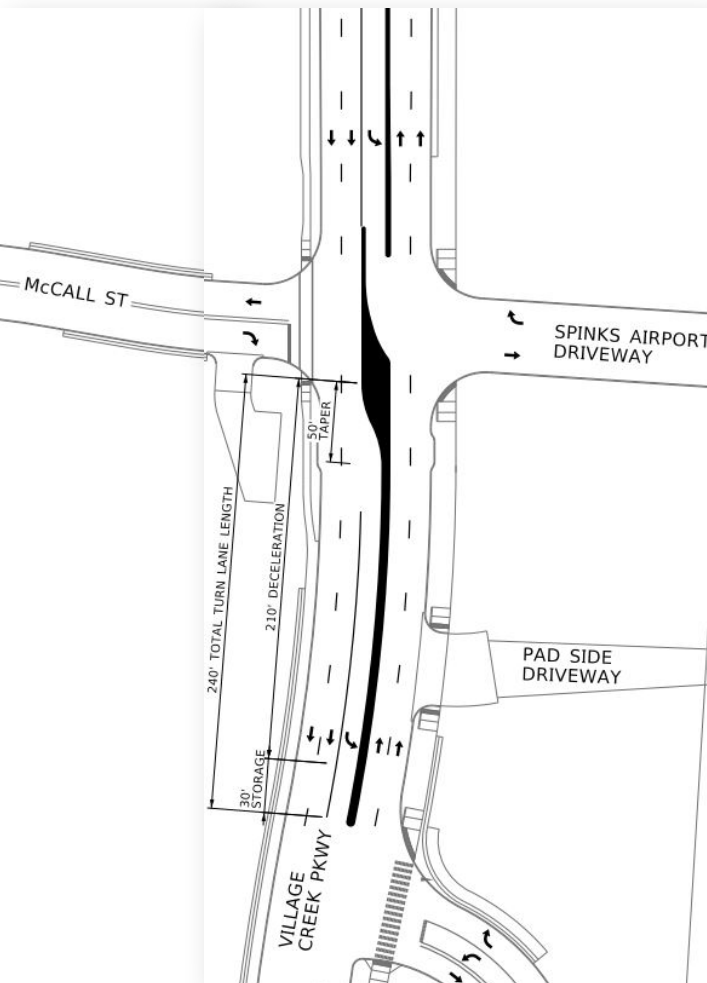
## Option A4

Adjust intersection for hooded left turns from Spinks Airport driveway, 230' southbound left turn lane for Abner Lee

- Does not meet City Standard turn lane length (minimum 300')
- Does not meet minimum vehicle refuge area for left turns from Spinks Airport driveway
- Introduces additional safety concerns

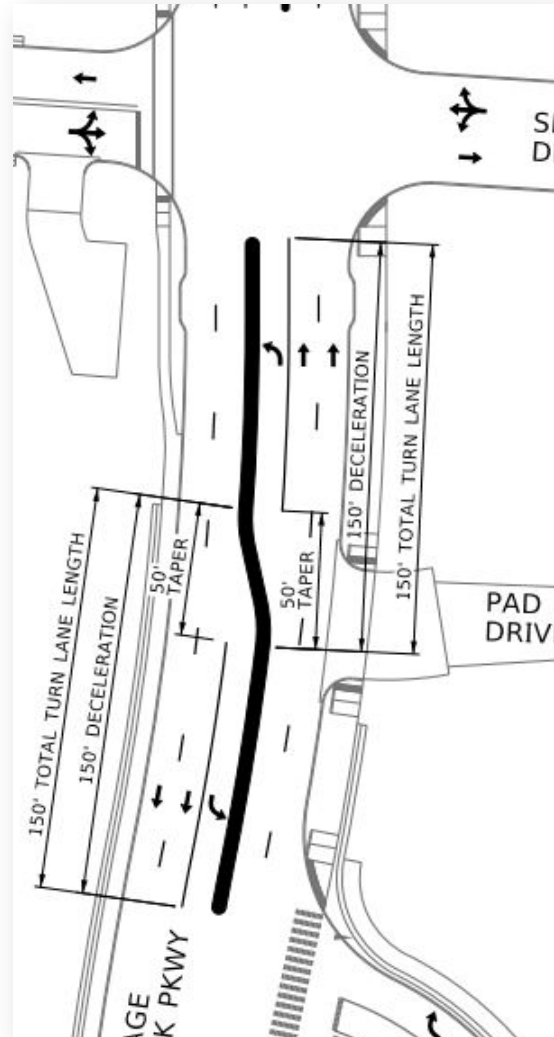


# McCall Intersection Summary of Options



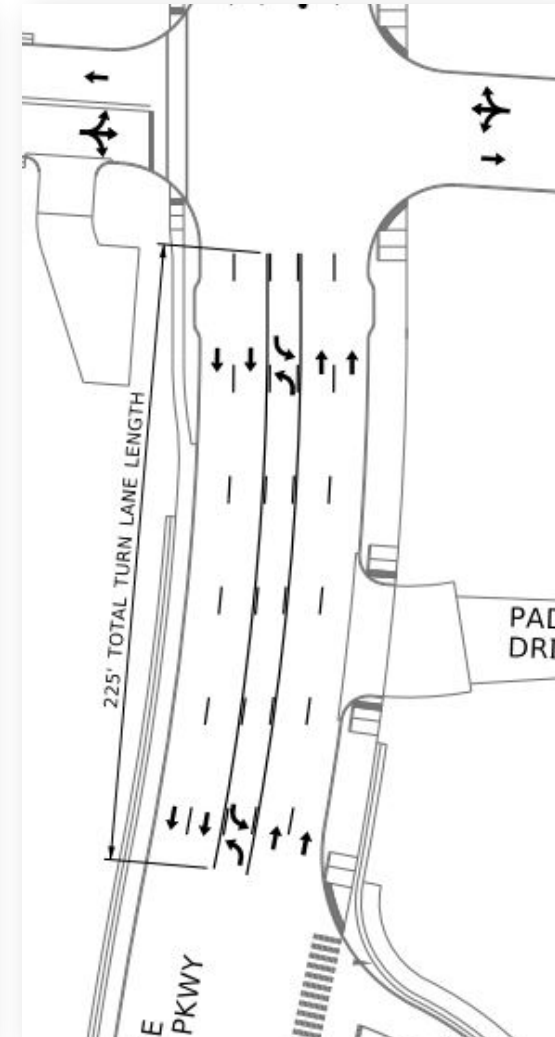
Existing- 240' Turn Lane

**\*Does not meet City Standard turn lane length in order to allow hooded left into Spinks Airport driveway**



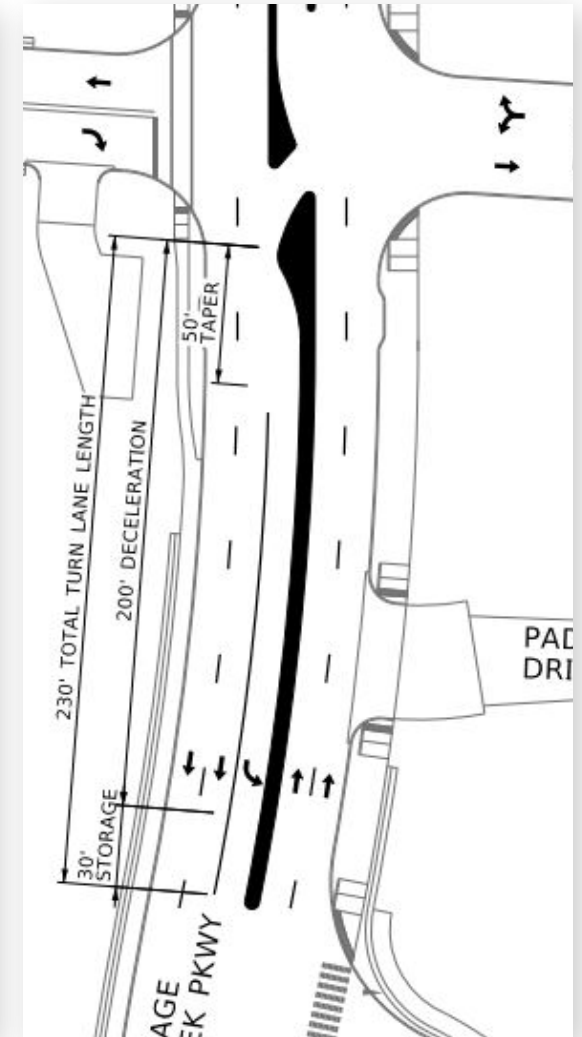
A2- Open Intersection 150' Turn Lanes

**\*Does not meet City Standard turn lane length nor median opening spacing; Safety Concerns**



A3- Open Intersection Two-way Left Turn Lane

**\*Does not meet City Standard median opening spacing; Safety Concerns**



A4- Revise Intersection for only left turns from Spinks

**\*Does not meet City Standard turn lane length**

# SPEED DATA COLLECTION

Posted speed limit is 40 MPH

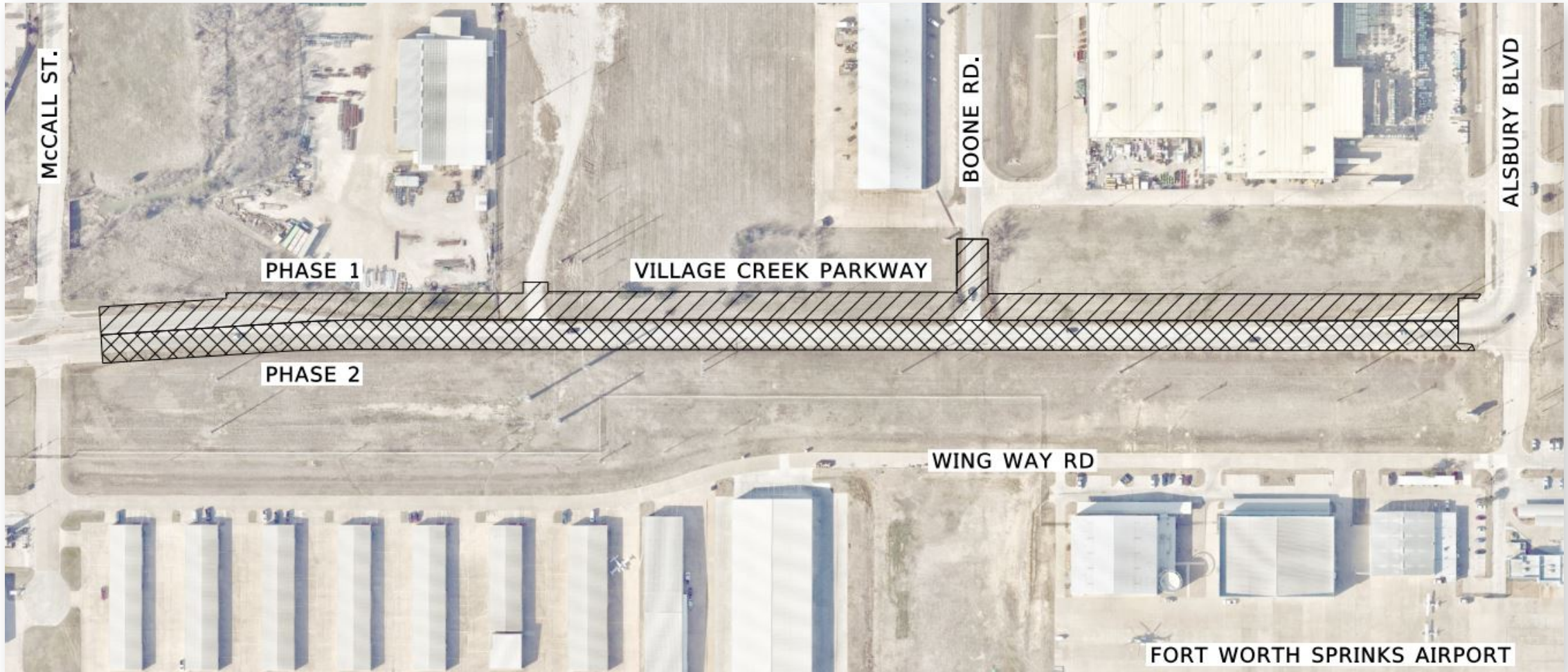
| Collection Point                            | Road Section  | Direction  | Number of Vehicles | 85th Percentile Speed | Direction  | Number of Vehicles | 85th Percentile Speed |
|---|---|------------|--------------------|-----------------------|------------|--------------------|-----------------------|
| Village Creek Pkwy<br>(South of Abner Lee)  | Two 12' concrete Lanes (Stone Rd. Ph. 1- completed fall 2014) | Northbound | 381                | 43 MPH                | Southbound | 692                | 42 MPH                |
| Village Creek Pkwy<br>(North of Boone Rd. ) | One 14' asphalt lane in each direction                        | Northbound | 499                | 44 MPH                | Southbound | 647                | 41 MPH                |

Collection time period for each area 3 hours (10 am - 1 pm)



# PRELIMINARY THOUGHTS ON CONSTRUCTION PHASING

Maintain one lane open in each direction during construction





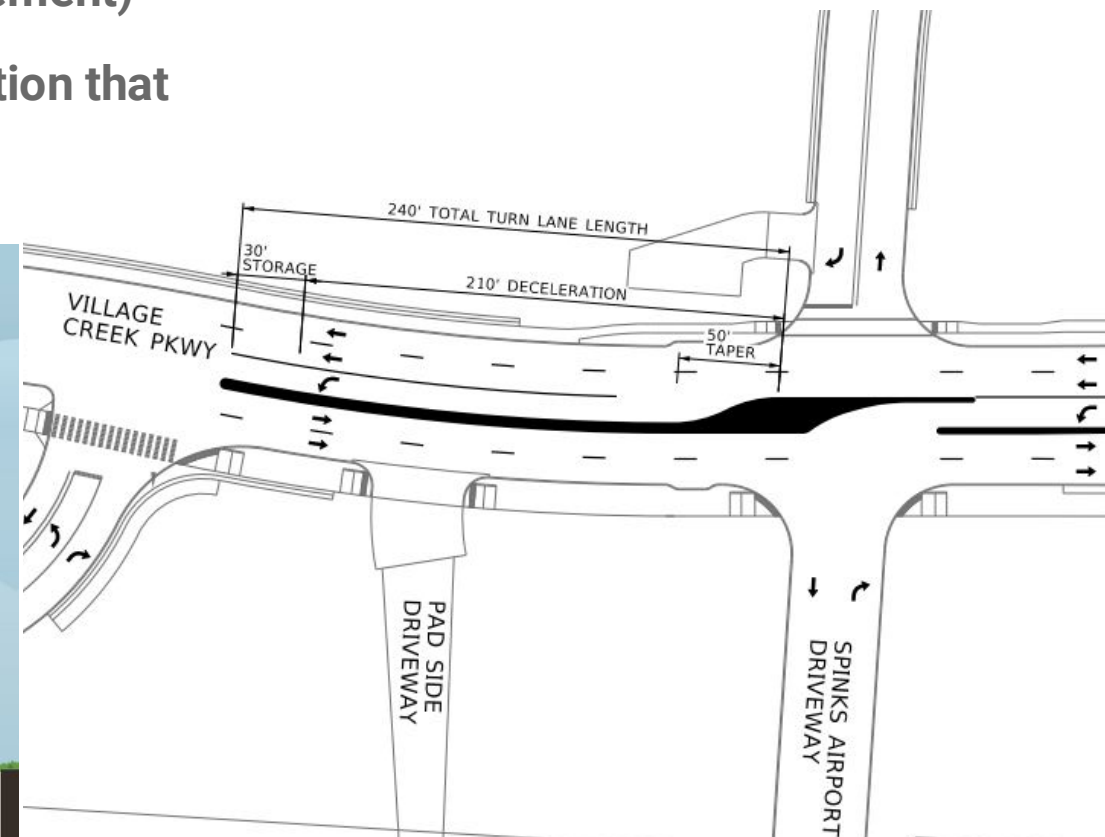
# RECOMMENDATION

Staff recommends proceeding with the development of construction plans including:

- Roadway section concept B (4-lane divided within existing 90' right-of-way with gently meandering shared use path within Oncor easement)
- Retaining the existing configuration of the McCall St. intersection that presents the safest of the alternatives

Complete Design by  
January 2024

Begin Construction by  
March 2024





An illustration on a piece of aged, yellowed graph paper. Two hands are shown using a large pair of compasses to draw a circle. A white, cloud-like thought bubble is positioned in the center-left of the frame, containing the text 'FEEDBACK / DISCUSSION'. The text is in a bold, blue, sans-serif font. In the upper right corner, the text 'N° 1' is printed. In the bottom right corner, the logo 'BTX MADE' is visible. The overall style is that of a technical or architectural drawing.

# FEEDBACK / DISCUSSION

N° 1