

# Capital Improvement Program Update

Council Work Session  
April 16, 2018



# Presenters

## Engineering Department

- Nick Ataie, PE, Infrastructure Construction Projects

*Engineering CIP Manager*

## Public Works Department

- Patricia Jackson, PE, Facility Construction Projects

*Facilities Construction Manager*

## Parks, Recreation, and Open Space Department

- Jenny Baker, Park Construction Projects

*Parks Planning & Development Manager*



## ACTIVE COMBINED INFRASTRUCTURE PROJECT OVERVIEW

### COMBINED INFRASTRUCTURE PROJECTS

PROJECT	DESCRIPTION	PHASE
CO1606	Design Manual Updates	COMPLETE
CO1703	Pearson Avenue and Related Drainage Improvements	PRE-CONSTRUCTION
CO1704, CO1705, CO1706	Substandard Utility & Street Rehabilitation Projects	PRE-CONSTRUCTION
CO9151	Cole Street Reconstruction	COMPLETE



### On the horizon...

- *Town Center Infrastructure Improvement (FY18-19)*
- *Gateway (Southgate) Infrastructure Improvements*
- *Substandard Main Improvements (FY18-19)*



# COMBINED INFRASTRUCTURE PROJECT OVERVIEW

## PEARSON AVE & RELATED DRAINAGE IMPROVEMENTS

CO1703

### Description

Includes complete pavement rehabilitation along Pearson Ave (Waddill – Kentucky), replacement of wastewater main, and installation of storm drain system (West – Coleman)

### Schedule / Status

- Current Status: Bid Phase
- Estimated Construction Starting June 2018



### Current Financial Summary

Prof Serv: \$322,807

Const: \$2.56MM (Est.)



# COMBINED INFRASTRUCTURE PROJECT OVERVIEW

## SUBSTANDARD UTILITY & STREET REHAB PROJECTS (VARIOUS LOCATIONS)

CO1704, CO1705, CO1706

### Description

Includes replacement of approximately 28,000 linear feet of water main and 23,000 linear feet of wastewater mains previously identified as being in substandard condition. The project also includes rehabilitation of pavement in some locations.

### Schedule / Status

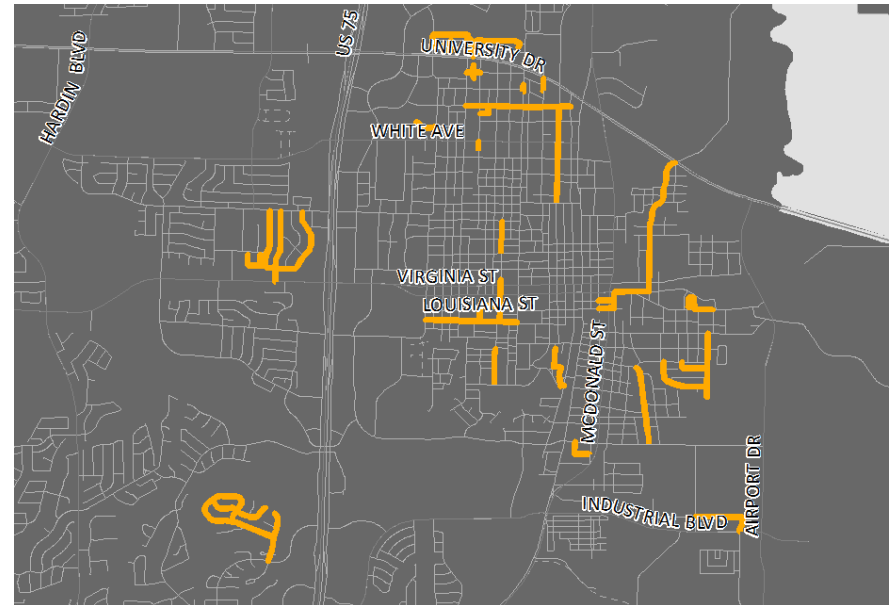
- Current Status: Pre-Construction
- Estimated Construction Summer 2018



### Current Financial Summary

Prof Serv: \$1,140,096

Const: \$15MM (Est.)



# COMBINED INFRASTRUCTURE PROJECT OVERVIEW

## COLE STREET RECONSTRUCTION

CO9151

### *Description*

Includes a complete reconstruction of Cole Street from Bass Street to College Street including water, wastewater, storm drainage, and paving.

### *Schedule / Status*

- Current Status: Construction Complete

### *Current Financial Summary*

Const: \$2.31MM





# ACTIVE STREET INFRASTRUCTURE PROJECT SUMMARY

## STREET INFRASTRUCTURE PROJECTS

<b>ST1219/WA9145</b>	<b>Virginia Parkway Lanes 5 &amp; 6 (Bellegrove - US 75)</b>	<b>CONSTRUCTION</b>
<b>ST1231</b>	<b>Virginia Parkway Lanes 5 &amp; 6 (Ridge – Bellegrave)</b>	<b>CONSTRUCTION</b>
<b>ST1232</b>	<b>FM 546 Reconstruction</b>	<b>CONSTRUCTION</b>
ST1612/ST1613	Redbud Blvd Lanes 3&4 and McLarry Drive Improvements	DESIGN
ST1615	US 380 and Airport Dr Intersection Improvements	DESIGN
ST1617	Ridge Rd (US 380 - Wilmeth)	DESIGN
ST1618	Arterial Capacity Improvements 380/Hardin, Westridge/Custer, Virginia/Ridge	DESIGN
ST1622	Street Rehab Umbrella FY17-18	ONGOING
ST1649	PROW ADA (Eastside)	DESIGN
<b>ST3211 / ST1614</b>	<b>Hardin Lanes 5 &amp; 6 McKinney Ranch Reconstruction</b>	<b>CONSTRUCTION</b>
<b>ST4227</b>	<b>Bloomdale Road Extension - Community to Hardin</b>	<b>DESIGN</b>
ST4331	Laud Howell Parkway Design/Construction	DESIGN
ST4334	Stonebridge Bridge	DESIGN
ST4372	Country Lane Extension Project	DESIGN
ST4417	Hardin Fence	CONSTRUCTION
ST4422	Trinity Falls Parkway	RIGHT-OF-WAY
ST6093	Lake Forest Drive (Wilmeth – Bloomdale)	COMPLETE
ST9115	Custer Road Design & ROW (US 380 – FM 1461)	RIGHT-OF-WAY



## On the horizon...

- *SH 5 / McDonald St Improvements (TxDOT Led – Planning Ongoing)*
- *Intersection Capacity Improvements (FY18-19)*
- *Street Rehabilitation Program (FY18-19)*



# STREET INFRASTRUCTURE PROJECT OVERVIEW

## VIRGINIA PARKWAY LANES 5 & 6

ST1219, ST1231

### Description

Includes the construction of an additional travel lane in each direction from east of Ridge Road to US 75.

### Schedule / Status

- Current Status: Construction underway as of February 2017
  - West Phase - 95% Complete
  - East Phase – 35% Complete
- Estimated Completion February 2019

### Current Financial Summary

Const: \$13.94MM





# STREET INFRASTRUCTURE PROJECT OVERVIEW

## FM 546 CONSTRUCTION (TxDOT)

ST1232

### Description

Includes construction of FM 546 as a new location 4-lane divided roadway (6-lane ultimate) from SH 5 to existing FM 546 located south of McKinney National Airport

### Schedule / Status

- Current Status: Overall Construction (75% Complete)
- Construction Underway as of May 2016
- Estimated Completion October 2018



### Current Financial Summary

Const: \$17.4MM\*

\*Partial City Contribution



# STREET INFRASTRUCTURE PROJECT OVERVIEW

## MCKINNEY RANCH PARKWAY CONSTRUCTION

ST1614

### *Description*

Includes the reconstruction of McKinney Ranch Parkway as a 4-lane divided roadway from the eastern limits of the McKinney ISD Stadium Site to US 75

### *Schedule / Status*

- Current Status: Overall Construction (90% Complete)
- Construction Underway as of April 2017
- Estimated Completion May 2018



### *Current Financial Summary*

Const: \$1.7MM



# STREET INFRASTRUCTURE PROJECT OVERVIEW

## BLOOMDALE ROAD EXTENSION (HARDIN TO COMMUNITY)

ST4227

### Description

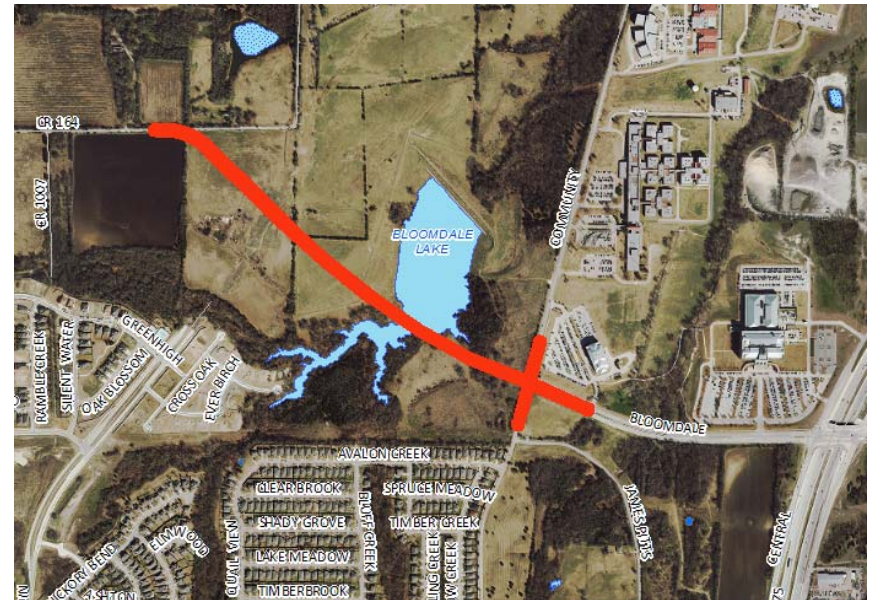
Includes the extension of Bloomdale Road as a 4-lane divided roadway (6-lane ultimate) from its current terminus at Community Ave to West of Hardin Boulevard (CR 164)

### Schedule / Status

- Current Status: Design (75% Complete)
- Design Underway as of January 2017
- Estimated Construction Start: September 2018

### Current Financial Summary

Const: \$9.5MM

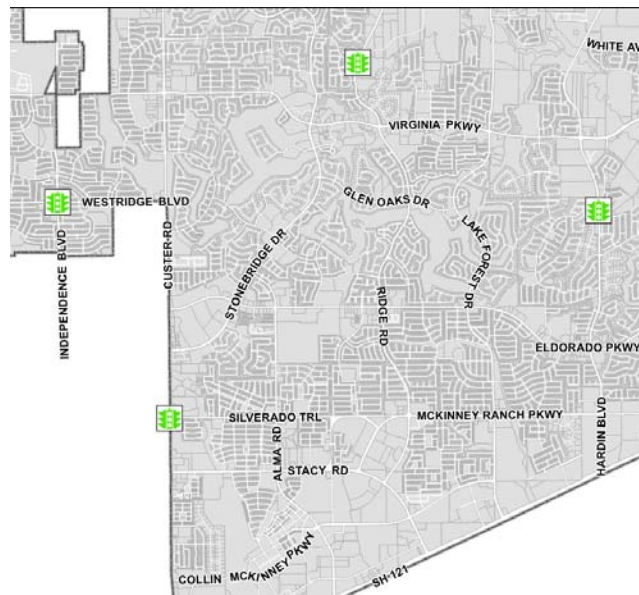


# ACTIVE TRAFFIC PROJECT SUMMARY

## TRAFFIC INFRASTRUCTURE PROJECTS MANAGED BY THE CAPITAL IMPROVEMENTS GROUP

<b>TR1603</b>	<b>TAPS Pedestrian Safety Enhancements</b>	<b>SUBSTANTIALLY COMPLETE</b>
TR1620/TR1702	FY 17 Traffic Signals	BIDDING

-  Westridge Blvd & Independence Blvd
-  Hardin Blvd & Winding Brook Dr
-  Custer Rd & Silverado Trl
-  Ridge Rd & Habersham Way



### On the horizon...

- Traffic Signal Installation (FY18-19)



## ACTIVE WATER INFRASTRUCTURE PROJECT SUMMARY

### WATER INFRASTRUCTURE PROJECTS

WA1624	Redbud Pump Station Transmission Line (794 PP)	CONSTRUCTION
WA1625	University Pump Station - 920 PP Pump	DESIGN
WA1626	McKinney Ranch Pump Station Improvements	PRE-DESIGN
WA1630	Custer Road Utility Relocations	DESIGN
<b>WA1805</b>	<b>Virginia Elevated Storage Tank Maintenance</b>	<b>DESIGN</b>
WA4202	Water Master Plan Update	DESIGN
WA4266	Club Lake 8-inch Water Line Loop	COMPLETE
WA4340	Redbud Pump Station Transmission Line (850 PP)	DESIGN
WA4415	US 380 Water Line Improvements	DESIGN
WA8132	Redbud Pump Station Site Development	CONSTRUCTION



### On the horizon...

- Updated Water Master Plan and Impact Fee Assessment
- SH 5 Utility Relocations





# WATER INFRASTRUCTURE PROJECT OVERVIEW

## VIRGINIA ELEVATED STORAGE TANK MAINTENANCE

WA1805

### Description

Includes assessment, design, and implementation of maintenance needs to the existing elevated water storage tank at Custer Rd and Virginia Pkwy.

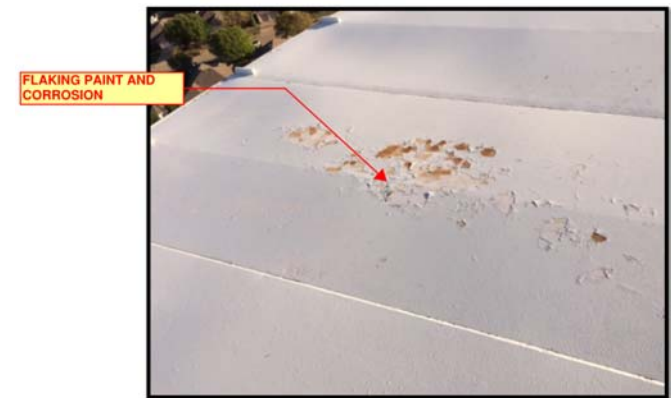
### Schedule / Status

- Current Status: Design (Assessment Complete)
- Design Underway as of December 2017
- Estimated Construction Start: Fall 2019\*

*\*Pending construction of US 380 WL Improvements (WA4415)*

### Current Financial Summary

Est. Const: \$750,000



FLAKING PAINT AND CORROSION



RUSTED BOLTS ON INLET RISER





## ACTIVE WASTEWATER INFRASTRUCTURE PROJECT SUMMARY

### WASTEWATER INFRASTRUCTURE PROJECTS

WW1623	US 75 & SRT Lift Station, Force Main, and Gravity Line	COMPLETE
WW2245	Aerial Wastewater Crossing Improvements – Erwin Avenue	RIGHT-OF-WAY
WW3255	Aerial Wastewater Crossing Improvements – Jeans Creek	COMPLETE
WW4209	Wastewater Master Plan Update	DESIGN
WW4213	Oversize Participation Bloomdale (Stover Creek)	PRE-CONSTRUCTION
WW4351	Sanitary Sewer Evaluation Survey (SSES)	DESIGN



### On the horizon...

- *Updated Wastewater Master Plan and Impact Fee Assessment*
- *Wastewater Main Lining/Rehabilitation*
- *Future Oversize Participation*



# ACTIVE DRAINAGE INFRASTRUCTURE PROJECT SUMMARY

## DRAINAGE INFRASTRUCTURE PROJECTS

DR1205	King's Lake Bank Stabilization Wall	COMPLETE
DR1646	Glenwood Estates Creek Erosion Study	UNDERWAY
DR5093	NRCS Lake 4 Dam Rehabilitation	BIDDING



### On the horizon...

- Hill Street Pedestrian Bridge Replacement
- Warden Creek Watershed Study
- Finch Creek Watershed Study



## ACTIVE INFRASTRUCTURE PROJECT FINANCIAL SUMMARY

The FY 2018-2022 CIP includes programmed funding for the following infrastructure projects:

Combined Infrastructure	→	\$20.6 MM Active
Drainage	→	\$23.0 MM Active
Streets	→	\$132.3 MM Active
Traffic	→	\$8.6 MM Active
Water/Wastewater	→	\$274.2 MM Active
<b>FY 18-22 TOTAL ±\$458 MM</b>	→	<b>±\$458.7 MM Active</b>

### *On the horizon...*

- *Recommendation of FY19-23 CIP (Including proposed CIP adjustments based on SB 6 legislation)*

## ACTIVE FACILITIES CONSTRUCTION PROJECT SUMMARY

PROJECT	DESCRIPTION	PHASE	APPROVED FUNDING	FY18-22 BUDGET
AI4377	McKinney Air Center Hangar #2 (MACH2)	COMPLETE	\$ 1,500,000	\$ 1,500,000
FC1202	Public Works Master Plan & Fleet Expansion	MASTER PLAN COMPLETE	\$ 6,000,000	\$ 8,000,000
FC1707	Future City Hall Master Planning	PROGRAMMING COMPLETE	\$ 336,800	\$ 336,800
<b>FC1709</b>	<b>Dr Pepper StarCenter Expansion</b>	<b>DESIGN/PRECONSTRUCTION</b>	<b>\$ 12,960,000</b>	<b>\$ 12,960,000</b>
<b>FC2229</b>	<b>Public Safety Support Building</b>	<b>COMPLETE</b>	<b>\$ 9,064,000</b>	<b>\$ 9,064,000</b>
FC2239	Accessibility Improvements for Facilities	ONGOING	\$ 308,000	\$ 2,300,000
<b>FI1734</b>	<b>Fire Station #10</b>	<b>DESIGN</b>	<b>\$ 7,650,000</b>	<b>\$ 10,750,000</b>
<b>FI3244</b>	<b>Fire Station #9</b>	<b>COMPLETE</b>	<b>\$ 8,556,505</b>	<b>\$ 8,556,505</b>
<b>LI1609</b>	<b>John &amp; Judy Gay Library Expansion &amp; Renovation</b>	<b>DESIGN</b>	<b>\$ 9,500,000</b>	<b>\$ 9,500,000</b>
GRANT	MPAC Exterior Restoration	PROGRAMMING	\$ 150,000	\$ 150,000



# FACILITIES CONSTRUCTION PROJECT OVERVIEW

## DR PEPPER STARCENTER EXPANSION (DPSCE)

FC1709

### Description

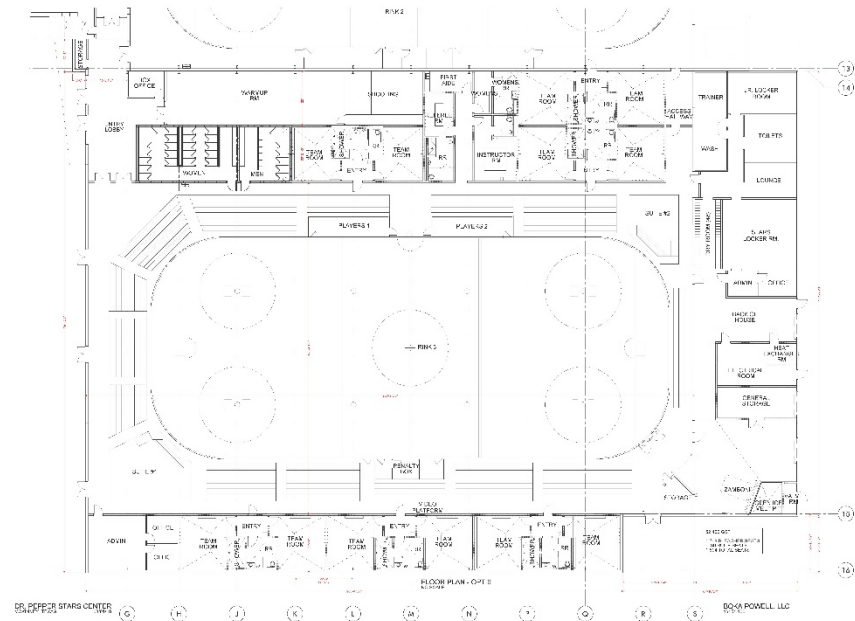
Includes approximately 52,000 square feet with one additional sheet of ice and the various locker room and team spaces needed. Project delivery method is Design / Build (D/B).

### Schedule / Status

- Current Status: D/B to Council – June 2018
- Design (10% Complete)
- Projected Completion – March 2019

### Current Financial Summary

Project Total: \$12.9 Million



# FACILITIES CONSTRUCTION PROJECT OVERVIEW

## PUBLIC SAFETY – SUPPORT BUILDING (MPSB-SB)

FC2229

### Description

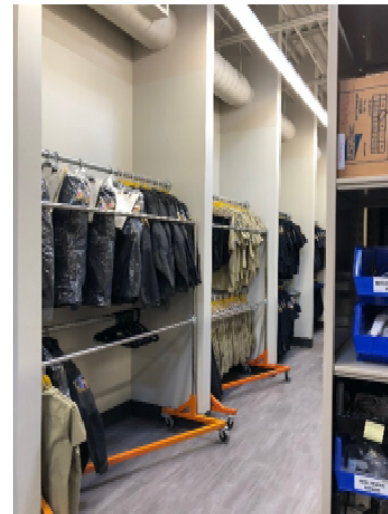
Includes 27,000 square foot Public Safety support building that will house spaces such as the Police Department's crime lab, property storage and quartermaster, as well as, the Fire Department's logistics warehouse, bunker gear and various work rooms. Project delivery method is Construction Manager at Risk.

### Schedule / Status

- Current Status: Construction (Complete)
- Design (Complete)

### Current Financial Summary

Project Total: \$9.1 Million





# FACILITIES CONSTRUCTION PROJECT OVERVIEW

## FIRE STATION #9 (MFS9)

FI3244

### Description

Includes 15,000 square foot fire station with 3 apparatus bays, interior areas for up to 10 on-site personnel along with a community room with appropriate parking and apron areas. Project delivery method is Construction Manager at Risk.

### Schedule / Status

- Current Status: Construction (Complete)
- Design (Complete)

### Current Financial Summary

Project Total: \$8.56 Million



# FACILITIES CONSTRUCTION PROJECT OVERVIEW

## FIRE STATION #10 (MFS10) – TRINITY FALLS

FI1734

### Description

Includes 15,000 square foot fire station with 3 apparatus bays, interior areas for up to 10 on-site personnel along with a community room with appropriate parking and apron areas. Project delivery method is Construction Manager at Risk.

### Schedule / Status

- Current Status: Construction (0% Complete)
- Design (10% Complete)
- Projected Completion – May 2020

### Current Financial Summary

Project Total: \$10.75 Million



# FACILITIES CONSTRUCTION PROJECT OVERVIEW

## JOHN & JUDY GAY LIBRARY EXPANSION & RENOVATION (JJGL-E&R)

LI1609

### Description

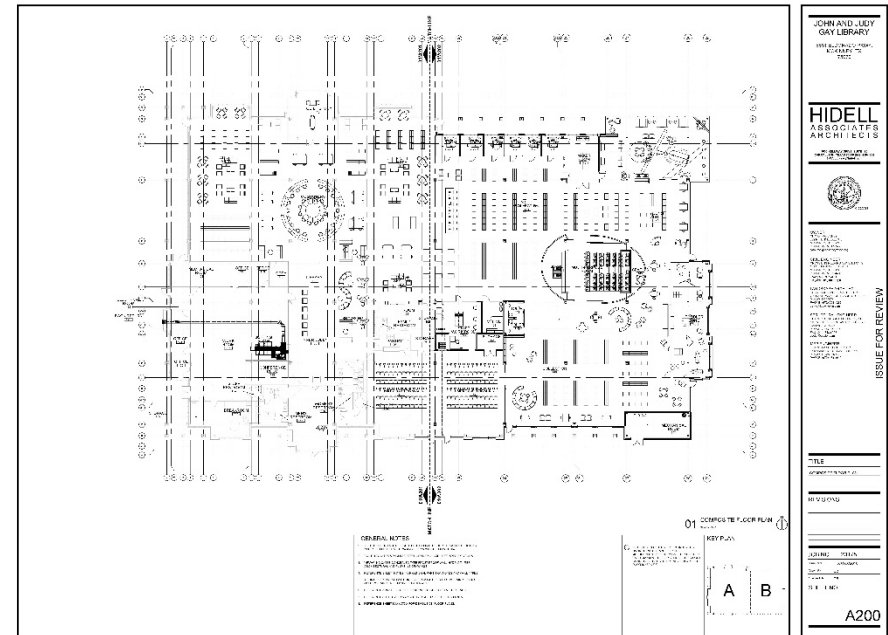
Includes approximately 20,000 square foot of additional interior library space as well as renovation of some of the existing spaces. Project delivery method is Construction Manager at Risk.

### Schedule / Status

- Current Status: Construction (0% Complete)
- Design (30% Complete)
- Projected Completion – Fall 2019

### Current Financial Summary

Project Total: \$9.5 Million



## ACTIVE PARKS PROJECT SUMMARY

PROJECT	DESCRIPTION	PHASE	APPROVED FUNDING	FY18-22 BUDGET
PK1213	HIKE AND BIKE TRAIL CONSTRUCTION	ONGOING	\$ 270,000	\$ 1,270,000
PK1701	LAND ACQUISITION (UMBRELLA)	ONGOING	\$ 2,300,166	\$ 2,300,166
PK1735	FY17-18 ZONE J MEDIAN ESCROW	ONGOING	\$ 90,000	\$ 90,000
PK1736	FY17-18 ZONE I MEDIAN ESCROW	ONGOING	\$ 140,000	\$ 140,000
PK4325	PARKS ACCESSIBILITY	ONGOING	\$ 650,000	\$ 1,513,369
PK1643	PROSPER ISD PARK (PRESTWYCK)	LAND ACQUISITION	\$ 2,000,000	\$ 2,000,000
PK9138	STACY ROAD/ROWLETT CREEK H/B - SPCA	LAND ACQUISITION	\$ 540,000	\$ 540,000
PK1211	FINCH PARK PHASE IV	PLANNING	\$ 2,000,000	\$ 2,000,000
PK4392	RUSCHHAUPT RESTROOM RENOVATION	PLANNING	\$ 500,000	\$ 1,000,000
PK4394	SENIOR CENTER EXPANSION	PLANNING	\$ 1,500,000	\$ 5,500,000
PK9143	ERWIN PARK DEV - PHASE I	PLANNING	\$ 200,000	\$ 2,000,000
PK1737	COTTONWOOD PARK	DESIGN	\$ 150,000	\$ 1,000,000
PK2206	GRAY BRANCH COM. MASTER PLAN	DESIGN	\$ 1,435,333	\$ 4,435,333
PK1803	PAVILION AT FITZHUGH PARK	DESIGN	\$ 135,000	\$ 135,000
PK1806	GABE NESBITT COMMUNITY PARK IMPROVEMENTS	DESIGN	\$ 1,250,000	\$ 1,250,000
PK3224	GEORGE WEBB PARK	BIDDING	\$ 2,425,000	\$ 2,425,000
PK4396	GABE NESBITT TENNIS EXPANSION	CONSTRUCTION	\$ 9,600,000	\$ 9,600,000
PK3222	BONNIE WENK PARK PHASE II	CONSTRUCTION	\$ 8,391,031	\$ 8,391,031
PK4326	COMEGYS CREEK HIKE AND BIKE TRAIL	COMPLETED	\$ 1,043,000	\$ 1,043,000
PK1802	PLAYGROUND @ TOWNE LAKE	COMPLETED	\$ 8,391,031	\$ 8,391,031
PK1803	PLAYGROUND @ WINNIFORD PARK	COMPLETED	\$ 8,391,031	\$ 8,391,031
PK4413	ROWLETT CREEK H/B - 121	COMPLETED	\$ 620,000	\$ 620,000
PK4414	COMMUNITY CENTER PLAYGROUND	COMPLETED	\$ 130,000	\$ 130,000
PK8062	WILSON CREEK HIKE AND BIKE TRAIL	COMPLETED	\$ 986,700	\$ 986,700



# PARKS PROJECT OVERVIEW

## SENIOR CENTER EXPANSION

PK4394

### Description

Renovate the existing facility, increase parking, and add approximately 13,000 SF, effectively doubling the size of the current building.

### Schedule / Status

Current Status: Selection of Design Team for Needs Assessment

### Current Financial Summary

Approved Funding: \$1,500,000

Total projected budget to be determined through needs assessment and project scope





# PARKS PROJECT OVERVIEW

## COTTONWOOD PARK

PK1737

### Description

Cottonwood Park is a 3.2 acre park that is planned for complete redesign and upgrades to existing amenities through the master planning process

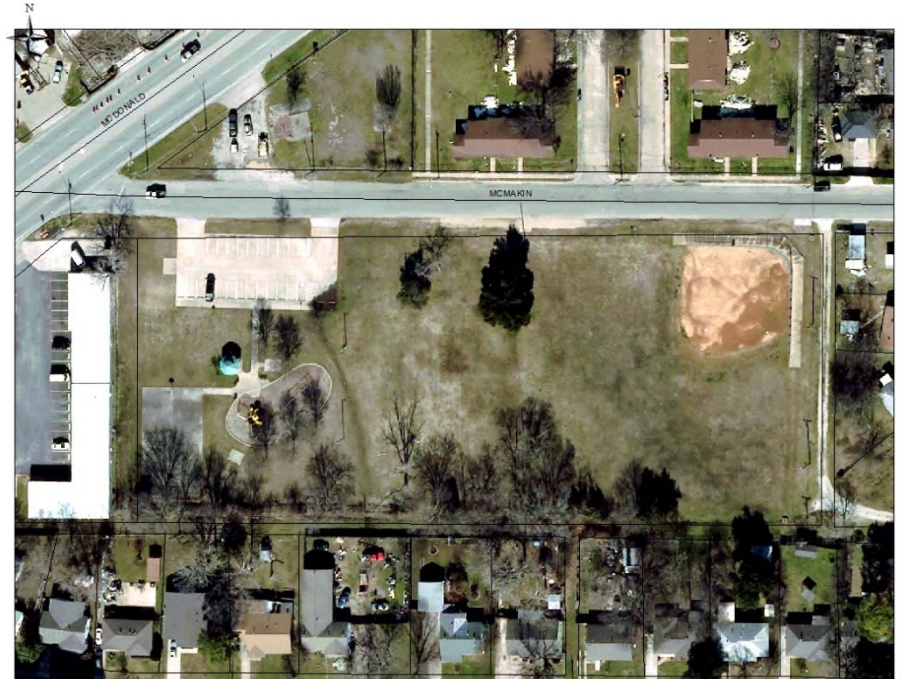
### Schedule / Status

Current Status: Master Plan in Progress to determine project scope

### Current Financial Summary

Approved Funding:	\$150,000
Master Plan:	\$ 47,250
Remaining Budget:	\$102,750

Total projected budget to be determined through the master planning process





# PARKS PROJECT OVERVIEW

## GRAY BRANCH MASTER PLAN

PK2206

### Description

Master plan a 212 acre community park that could include lighted sports fields, parking, future recreation center, trails, natural features and park amenities

### Schedule / Status

Current Status: Master Plan in Progress

### Current Financial Summary

Approved Funding: \$1,435,333

Master Plan: \$ 224,500

Remaining Budget: \$1,210,833

Total projected budget to be determined through the master planning process



GRAY BRANCH  
212 ACRES

Original - 100 acres - 2009  
Additional - 50 acres - 2013  
62 acres - 2016



## PARKS PROJECT OVERVIEW

### GEORGE WEBB PARK

PK3224

#### *Description*

An 11 acre neighborhood park that includes a play structure, musical stations, pavilions, basketball court, interactive dry riverbed, trails, and open space.

#### *Schedule / Status*

Current Status: Construction bidding in May

Design (95% Complete)



#### *Current Financial Summary*

Project Total: \$2.4 Million  
(includes design and construction)



# PARKS PROJECT OVERVIEW

## BONNIE WENK PARK PHASE II

PK3222

### Description

Includes two lighted multi-purpose fields, an all inclusive play structure, sky walk, restrooms, pavilions, trails, parking, and the extension of the park road to Hardin Blvd.

### Schedule / Status

Current Status: Construction (85% Complete)

Design (100% Complete)

Projected Completion – July 2018



### Current Financial Summary

Project Total: \$8,391,031  
(includes design and construction)





## PARKS PROJECT OVERVIEW

### GABE NESBITT TENNIS CENTER EXPANSION

PK4396

#### *Description*

Includes 12 additional tennis courts, play structures, pavilions, restrooms, open space, trails, additional parking and a 3,000 square foot maintenance facility that includes public restrooms and a small office

#### *Schedule / Status*

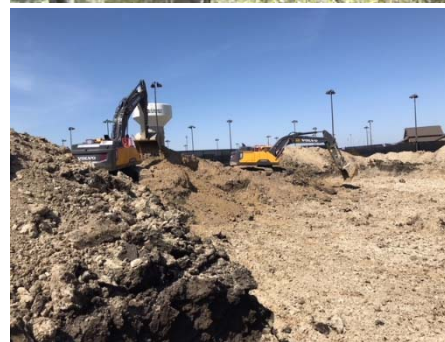
Current Status: Construction began February 2018

Projected Completion – February 2019



#### *Current Financial Summary*

Project Total: \$9,600,000  
(includes design and construction)



## PARKS PROJECT OVERVIEW

### GOLD STAR FAMILY MEMORIAL at VETERANS MEMORIAL PARK

PK1644

#### *Description*

Construction of a granite monument to honor the families of fallen soldiers along with eight lighted flag poles.

#### *Schedule / Status*

- Current Status: Construction Complete

#### *Current Financial Summary*

Project Total: \$165,000



## PARKS PROJECT OVERVIEW

### COMEGYS HIKE AND BIKE TRAIL

PK4326

#### *Description*

Includes a 12' concrete hike and bike trail connection from Malvern Elementary to the McKinney Community Center along with a trail head with seating and signage

#### *Schedule / Status*

Current Status: Construction Complete



#### *Current Financial Summary*

Project Total: \$1,043,000





## PARKS PROJECT OVERVIEW

### ROWLETT CREEK/121 HIKE AND BIKE TRAIL

PK4413

#### *Description*

Includes a 12' concrete hike and bike trail connection from the City of Allen trail under Sam Rayburn Tollway (SRT) to the hike and bike trail at the TCP Golf Course. This connection is part of the 6 Cities Trail.

#### *Schedule / Status*

Current Status: Construction Complete



Looking south towards Sam Rayburn Tollway where the trail connects to the City of Allen along Rowlett Creek



#### *Current Financial Summary*

Project Total: \$620,000



# PARKS PROJECT OVERVIEW

## PLAYGROUNDS

### Description

Added a new play structure at the McKinney Community Center; Replaced aging play structures at Towne Lake and Winniford Parks in addition to adding new swings

### Schedule / Status

- Community Center – Completed March 2018
- Winniford Park – Completed April 2018
- Towne Lake – Completed February 2018



### Current Financial Summary

Community Center: \$130,000

Winniford Park: \$ 75,000

Towne Lake: \$165,000

New Community Center Playground



Winniford Before



Winniford After



Towne Lake Before



Towne Lake After



## PARKS PROJECT OVERVIEW

### WILSON CREEK HIKE AND BIKE TRAIL

PK8062

#### *Description*

Includes a 12' concrete hike and bike trail connection from Grady Littlejohn Ballfields to Eldorado Parkway along with a trailhead with seating and educational signage.

#### *Schedule / Status*

- Current Status: Construction Complete
- Design (100% Complete)



#### *Current Financial Summary*

Project Total: \$986,700





# PARKS PROJECT OVERVIEW

## FITZHUGH PARK

PK1803

### Description

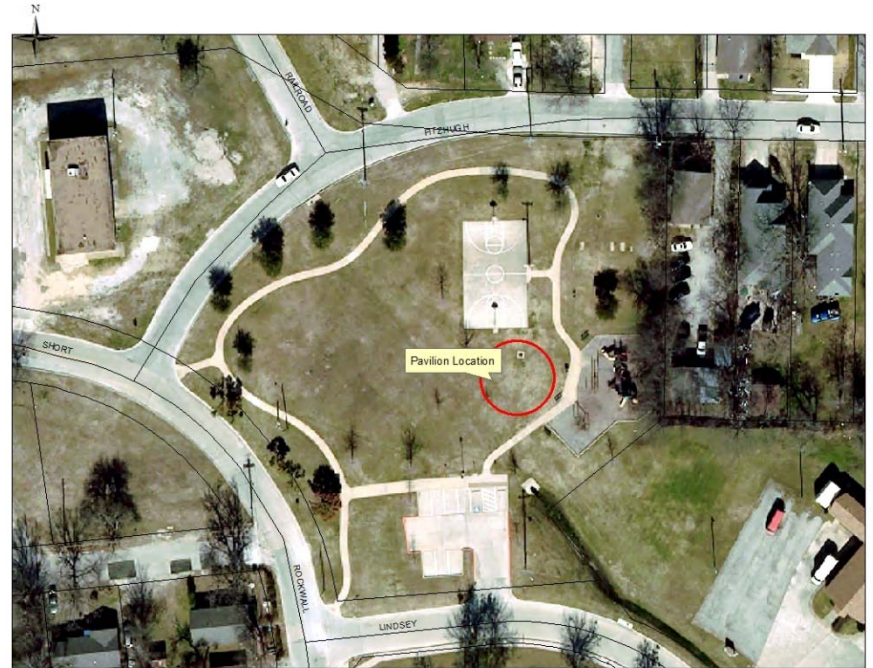
A new pavilion with picnic tables (similar to the one in Finch Park) will be constructed near the play structure; a drinking fountain has been installed along the walking trail.

### Schedule / Status

- Current Status: In Design

### Current Financial Summary

Approved Funding:	\$135,000
Design:	\$ 12,998
Remaining Budget:	\$122,002



# PARKS PROJECT OVERVIEW

## GABE NESBITT IMPROVEMENTS

PK1806

### Description

In conjunction with the John and Judy Gay Library expansion, a park road linking the library to the park road internal to Gabe Nesbitt will be constructed, along with additional parking. An update to the Gabe Nesbitt Master Plan will also occur.

### Schedule / Status

Current Status: In Design

### Current Financial Summary

Project Total:	\$1,250,000
Master Plan:	\$ 22,000
Remaining Budget:	\$1,228,000

