

**Date:** August 4, 2025

**To:** Mark D. Israelson, City Manager  
**Cc:** Jack Carr, Deputy City Manager

**From:** Caleb Thornhill, P.E., Director of Engineering

**Subject:** CIP Engineering Proposed CY 2025-2026 CIP Budget

This memorandum accompanies the Regular Open Meeting Community Improvement Plan (CIP) presentation scheduled for the Plano City Council on Monday, August 11, 2025.

Requested Action:

Provide direction to CIP Engineering regarding the proposal of projects totaling \$119,150,043 for the FY 2025-26 CIP Budget.

Background:

When developing the list of CIP projects, the department focuses on the replacement existing infrastructure, including the following:

- Residential and Collector streets
- Intersections
- Bridge Evaluation and Maintenance
- Erosion Control and Drainage Improvements
- Water Facilities and Pipelines
- Wastewater Facilities and Pipelines

In addition, these improvements may include the acquisition of land. The recommended list of projects aligns with this focus, with the highest priority given to projects that address aging infrastructure and revitalize existing assets. The proposed Engineering CIP budget was presented to and reviewed by the Planning and Zoning Commission on Monday, August 4, 2025.

The 2025-2026 Engineering CIP includes four sections:

- Street Improvements Projects - \$41,706,477
- Water Improvement Projects - \$22,211,687
- Wastewater Improvement Projects - \$24,857,625
- Drainage Improvement Projects - \$14,950,000

The following pages outline the projects of the recommended Engineering FY 2025-26 CIP budget. The department estimates a corresponding Operations and Maintenance (O&M) cost of \$0.

**STREET IMPROVEMENTS PROJECTS - \$41,706,477**

**13<sup>th</sup> Street Reconstruction – Municipal Ave to N Ave \$780,000**

Includes funding to complete the design and begin construction for the 15<sup>th</sup> Street improvements, including a new street section with on-street parking, wider parkways and sidewalk, and concrete street pavement replacement between Municipal Ave and N Avenue.

**15<sup>th</sup> Street Reconstruction – Municipal Ave to Jupiter Rd \$4,035,000**

Includes funding to begin construction for the 15<sup>th</sup> Street improvements, including a new street section with on-street parking, wider parkways and sidewalk, and concrete street pavement replacement between Municipal Ave and Jupiter Rd.

**Alley Reconstruction – Duke Ct, Kentucky Dr, Versailles Ln, Wyvonnnes Way \$810,000**

Funding for the construction of concrete alley removal and replacement at four locations, including 6,430 square yards of pavement replacement.

**Bridge Improvements – Plano Parkway and Spring Creek \$200,000**

Includes funding to complete a study of the creek hydraulics at this location, and determine the feasibility of replacement of the two existing bridges on Plano Parkway. Improvements will include new bridge structures, a trail in Spring Creek underneath the new bridge structures, and utility adjustments to city infrastructure.

**Bridge Repairs Phase IV \$1,899,662**

Includes funding to complete the design phase and begin construction for the fourth project to address maintenance and improvements to existing bridges across the city. Locations are reviewed based off the biannual TxDOT bridge reports and ranked and prioritized based off severity of maintenance issues and available project funding.

**CPKC Railroad Crossing at Los Rios Blvd and Sidewalk Location Improvements \$530,000**

Includes funding to complete design and begin construction to replace the CPKC Railroad crossing at Los Rios Boulevard, including the approaches in both the north and southbound directions, as well as, adding in pedestrian crossings. The project also adds other sidewalk locations including 18<sup>th</sup> Street just west of Jupiter Road, and Alma Drive (west side) just north of 15<sup>th</sup> Street.

**Douglass Sidewalks \$360,000**

Includes funding to acquire over 30 sidewalk easements within the Douglass community to allow construction of a new accessible sidewalk path and route through the neighborhood between the new DART Red Line station on the south end and the downtown area on the north end of the community.

**Downtown Improvements – 15<sup>th</sup> Street and K Avenue \$640,000**

Includes funding to design and begin construction to make improvements to the 15<sup>th</sup> Street crosswalk and alley between K Avenue and the DART tracks, and improvements to the southeast corner of K Avenue and 15<sup>th</sup> Street to include a pocket park.

**G Avenue Paving and Water Improvements \$250,000**

Includes funding for the design of G Avenue paving improvements, including a new street section with on-street parking, wider parkways and sidewalk, and concrete street pavement replacement between 14<sup>th</sup> St and 15<sup>th</sup> St. Intersection improvements at G Ave and 15<sup>th</sup> St are included as part of the project to update the traffic signal and adjust lane configurations at the intersection.

The following locations include design and construction funding for adding capacity to various arterial intersection locations that warrant additional improvements based on levels of congestion and existing traffic volumes. In addition, safety enhancements are included at high accident locations, pedestrian facilities are upgraded and brought into Americans with Disabilities Act (ADA) compliance, and traffic signal improvements are made to upgrade the citywide signal system.

- **Intersection Improvements - 14<sup>th</sup> St at Shiloh Rd, 14<sup>th</sup> St at Plano Pkwy, Parker Rd at Archerwood St, Corporate Dr at Tennyson Pkwy, Corporate Dr at Legacy Dr, Legacy Dr at SH 121 \$3,525,000**
- **Intersection Improvements - Ohio Dr at SH 121, Ohio Dr at Plano Pkwy, Legacy Dr at Archgate Dr, Legacy Dr at Chase Oaks Dr \$570,000**

- **Intersection Improvements – Ohio Dr at Park Blvd, Custer Rd at USA Dr, Custer Rd at Ridgeview Dr, 18<sup>th</sup> St at Jupiter Rd** **\$405,000**
- **Intersection Improvements - Parkwood Blvd Corridor** **\$640,000**
- **Intersection Improvements – Plano Pkwy at K Ave** **\$635,000**
- **Intersection Improvements – Spring Creek Pkwy Corridor** **\$1,225,000**

**Legacy Drive at DNT Bridge Monuments** **\$525,000**

Includes funding to complete design and begin construction to include new bridge monuments for the pedestrian bridge crossing on both the west and east ends of the Legacy Drive pedestrian crossing connection both the Legacy West and Shops of Legacy areas.

**Mendomi Park Improvements** **\$1,075,000**

Includes funding to complete design and begin construction for the infrastructure improvements at the new Mendomi Park in the Legacy area of Plano. The project includes new street pavement, on-street parking, and sidewalk improvements along the perimeter of the new park.

The following locations include design and construction funding in 2025-2026 for the removal and replacement of concrete pavement, including streets, sidewalks, alleys, driveways, and barrier free ramps in areas where pavement deterioration and maintenance costs have increased significantly. Locations are ranked and prioritized as part of the city's asset management program.

- **Paving and Waterline Reconstruction – Middle Cove Dr, Lookout Trl, Westridge Dr, Carrington Dr, and Early Morn Dr** **\$510,000**
- **Paving and Waterline Reconstruction – Oak Grove Drive and Santa Fe Trail** **\$5,815**
- **Paving and Waterline Reconstruction – Rigsbee Dr, Peppertree Pl, Laurel Ln, and Trailridge Dr** **\$5,155,000**
- **Paving and Waterline Reconstruction – Monarch Dr, Charter Oaks Dr, White Oak Dr, Desert Garden Dr** **\$2,020,000**
- **Paving Improvements – Los Rios Boulevard at Plano East High School** **\$870,000**
- **Paving Improvements – Pinehurst Dr, Royal Cir, Granada Pl, Grand Canyon Dr, and Glen Canyon Dr** **\$430,000**

The following projects include the design and construction for the replacement of COP standard brick and mortar screening walls, including foundations, and adjacent sidewalk and alley replacement for various locations in the city.

- **Screening Wall Replacement – Coit Road** **\$2,030,000**
- **Screening Wall Replacement – Hickory Ridge, The Woods of Sun creek, and Independence Pkwy** **\$560,000**
- **Screening Wall Replacement – Legacy Drive** **\$1,010,000**
- **Screening Wall Replacement – Marsh Lane** **\$3,510,000**
- **Screening Wall Replacement – Parkwood Blvd, Nassau Dr, and Willow Bend Dr** **\$191,000**
- **Screening Wall Replacement – Stone Creek Estates** **\$570,000**

**Sidewalk and Retaining Wall Improvements – Custer Rd, K Ave, and Tennyson Pkwy** **\$535,000**

The project includes construction funding to complete the takeover contract for new sidewalk and hike and bike trail along the Plano Parkway corridor. The project includes widening the trail section of bridge over Pittman Creek along Alma Drive, and two pedestrian bridges across Prairie Creek and Pittman Creek along Plano Parkway.

**Sidewalk Improvements – Plano Pkwy (Independence Pkwy to Alma Dr) \$305,000**

The project includes construction funding to complete the takeover contract for new sidewalk and hike and bike trail along the Plano Parkway corridor. The project includes widening the trail section of bridge over Pittman Creek along Alma Drive, and two pedestrian bridges across Prairie Creek and Pittman Creek along Plano Parkway.

The following locations include construction funding in 2026-2026 for the replacement of concrete pavement, including streets, sidewalks, alleys, driveways, and barrier free ramps associated with the replacement of neighborhood antiquated cast iron water systems in areas of increasing maintenance frequency.

- **Water Rehabilitation – Creekside Estates \$1,350,000**
- **Water Rehabilitation – Douglass Community \$300,000**
- **Water Rehabilitation – Kimberlea Additions \$100,000**
- **Water Rehabilitation – Los Rios Addition and Ranch Estates \$1,000,000**
- **Water Rehabilitation – Parkway Estates and Whiffletree Addition \$1,250,000**
- **Water Rehabilitation – River Bend Phase 1 \$1,900,000**

**WATER IMPROVEMENT PROJECTS - \$22,211,687**

**13<sup>th</sup> Street Reconstruction – Municipal Ave to N Ave \$100,000**

Construction funding allocated to the replacement of 1,175 linear feet of antiquated cast iron water lines in association with the replacement of the 13<sup>th</sup> Street pavement and reconstruction project.

**15<sup>th</sup> Street Reconstruction – Municipal Ave to Jupiter Rd \$1,200,000**

Construction funding allocated to the replacement of 3,188 linear feet of antiquated cast iron water lines in association with the replacement of the 15<sup>th</sup> Street pavement and reconstruction project.

**G Avenue Paving and Waterline Improvements – 14<sup>th</sup> St to 15<sup>th</sup> St \$80,000**

Construction funding allocated to the replacement of 475 linear feet of antiquated cast iron water lines in association with the replacement of the G Avenue pavement and reconstruction project.

**Mendomi Park Improvements \$450,000**

Construction funding allocated to the replacement and addition of 700 linear feet of antiquated cast iron and new water lines in association with the new Mendomi Park Improvements project.

**Paving Improvements – Pinehurst Dr, Royal Cir, Granada Pl, Grand Canyon Dr, Glen Canyon Dr \$300,000**

Construction funding allocated to the replacement of 200 linear feet of antiquated cast iron water lines in association with the replacement of the Pinehurst Dr, Royal Cir, Granada Pl, Grand Canyon Dr, Glen Canyon Dr pavement and reconstruction project.

**Paving and Waterline Reconstruction – Rigsbee Dr, Peppertree Ln, Laurel Ln, and Trailridge Dr \$1,480,000**

Construction funding allocated to the replacement of 5,334 linear feet of antiquated cast iron water lines in association with the replacement of the Rigsbee Dr, Peppertree Ln, Laurel Ln, and Trailridge Dr pavement and reconstruction project.

**Paving and Waterline Reconstruction – Monarch Dr, White Oak Dr, Charter Oak Dr, and Desert Garden Dr \$1,050,000**

Construction funding allocated to the replacement of 6,592 linear feet of antiquated cast iron water lines in association with the replacement of the Monarch Dr, White Oak Dr, Charter Oak Dr, and Desert Garden Dr pavement and reconstruction project.

**Water Infrastructure Renovation            \$6,000,000**

Funding to analyze, design, and complete construction solutions for locations of deteriorating or failing water pipelines in the city's water system as they are prioritized.

**Water Rehabilitation – Park Blvd Phase 1 (Preston Rd to US 75)            \$905,000**

Funding for construction to replace 8,983 linear feet of antiquated 6"-12" cast iron water mains and associated pavement along the Park Boulevard corridor between Preston Rd and US 75. Most of the pipe replacement construction includes pipe bursting to provide less invasive construction operations.

**Water Rehabilitation – Park Blvd Phase 2 (US 75 to East City Limits)            \$830,687**

Funding for construction to replace 10,803 linear feet of antiquated 6"-12" cast iron water mains and associated pavement along the Park Boulevard corridor between US 75 and the east city limits. Methods to replace the pipe include open cut, where applicable, and pipe bursting to provide less invasive construction operations.

The following locations include design and construction funding in 2024-2025 for the replacement of neighborhood antiquated 4"-8" cast iron water systems in areas of increasing maintenance frequency and costs.

- **Water Rehabilitation – River Bend Phase 1 (14,240 linear feet)            \$811,000**
- **Water Rehabilitation – Los Rios Addition and Ranch Estates (13,780 linear feet)    \$2,650,000**
- **Water Rehabilitation – Parkway Estates and Whiffletree Addition (14,400 linear feet)            \$2,335,000**
- **Water Rehabilitation – Creekside Estates (11,890 linear feet)            \$2,330,000**
- **Water Rehabilitation – Douglass Community (10,400 linear feet)            \$790,000**
- **Water Rehabilitation – Kimberlea Additions (13,160 linear feet)            \$900,000**

**WASTEWATER IMPROVEMENT PROJECTS - \$24,857,625**

**13<sup>th</sup> Street Reconstruction – Municipal Ave to N Ave            \$50,000**

Construction funding allocated to the replacement of 900 linear feet of antiquated vitrified clay sewer lines in association with the replacement of the 13<sup>th</sup> Street pavement and reconstruction project.

**Aerial Crossings            \$2,300,000**

Funding to analyze, design, and complete construction solutions to locations of erosion or the replacement of aerial crossings as they are ranked and prioritized.

**Dallas North Trunk – Phase 2    \$7,600,000**

Remaining design and construction funding to complete the third phase of the replacement of 6,065 linear feet of 36" and 42" sanitary sewer interceptor pipeline along the southern portion of the city between Coit Rd and Prairie Creek along Plano Parkway.

**Plano Parkway Parallel Interceptor    \$3,031,000**

Construction funding to complete the second phase of the replacement of 7,100 linear feet of 36" and 42" sanitary sewer interceptor pipeline along the southern portion of the city between Prairie Creek to east of Custer Road along the President George Bush Turnpike (PGBT).

**Redevelopment Capacity Improvements            \$5,000,000**

Funding to analyze, design, and complete construction solutions for new and redevelopment locations as necessary to support development projects across the City.

**Sanitary Sewer Improvements: Legacy Drive, Ohio Drive, Prestonwood Country Club, and Timbercreek Drive      \$127,000**

Construction funding to complete locations of erosion stabilization failures at existing aerial wastewater crossings and point repairs to deteriorating wastewater pipe as analyzed by the Public Works department during system inspections.

**Sewer Improvements – Frito Lay, Tennyson Pkwy, Abbott, White Rock Creek, Bandolino Ln, Evans Park, Country Place, Laurel Ln, and Shawnee Park      \$1,625,000**

Remaining design and construction funding to complete numerous point repairs of system failures or deteriorating wastewater pipe as analyzed by the Public Works department during system inspections.

**Sewer Improvements – Shiloh Road (Plano Parkway to 14<sup>th</sup> Street)      \$2,103,625**

Design and construction funding to rehabilitate or replace portions of the existing wastewater line along the west side of Shiloh Rd, crossing under the existing Union Pacific/DART railroad.

**Spring Creek Interceptor Phase 1, 2, and 3      \$2,771,000**

Funding for the design and construction of three phases to replace the large sewer interceptor lines both up- and downstream from the Collin Creek Mall Development. Phase 1 is downstream of Plano Parkway, connects to the existing NTMWD Spring Creek Lift Station No. 2, and will begin construction in 2024-2025. Phases 2 and 3 have design funding allocated to begin analyzing the possible replacement of these wastewater lines upstream of the Collin Creek Mall along Spring Creek.

**Wastewater System Model      \$250,000**

Funding to complete necessary updates to the existing wastewater system model, to develop anticipated locations for sewer system replacement and the correction of system surcharges.

**DRAINAGE IMPROVEMENT PROJECTS - \$14,950,000**

**Drainage Improvements – Rockbrook Dr, Flintstone Dr, Brandon Ct, Eden Valley Ln, and Russell Creek Park      \$460,000**

Funding to complete the design and begin construction for local drainage improvements to creek outfalls that are failing, small drainage systems that are under capacity, and other improvements to the drainage systems at these locations.

**East Side Drainage Improvements      \$500,000**

Funding to analyze, design and provide construction solutions to areas of localized flooding on the east side of Plano as they are discovered.

**Erosion Control      \$500,000**

Funding to analyze, design, and provide construction solutions to locations of erosion as they are ranked and prioritized.

**Erosion Control – Pecan Hollow Golf Course Holes 6 and 7      \$3,020,000**

Construction funding to address erosion in Rowlett Creek that is threatening the adjacent golf course and cart paths at these specific locations.

**Erosion Control – Willow Creek and Ports O'Call      \$1,430,000**

Construction funding to address erosion by stabilizing the creek bank at these locations.

**Miscellaneous Drainage Improvements      \$500,000**

Funding to analyze, design, and provide construction solutions to areas of localized flooding locations as they are discovered.

**Paving and Waterline Reconstruction – Rigsbee Dr, Peppertree Ln, Laurel Ln, and Trailridge Dr      \$1,600,000**

Construction funding allocated to the erosion control and culvert replacement across Rigsbee Dr for Streams 2D8 and 2D10 and gabion wall construction to properly align and protect the streams both up and downstream in association with the replacement of the Rigsbee Dr, Peppertree Ln, Laurel Ln, and Trailridge Dr pavement and reconstruction project.

**Spring Creek Drainage Analysis – 15<sup>th</sup> Street to Plano Parkway      \$1,000,000**

This project includes the full drainage analysis of the culverts and Spring Creek between 15th St. to E. Plano Pkwy. This first phase will include a hydraulic analysis of mitigation alternatives accompanied with an environmental review and final report.

**Spring Creek and Pittman Creek Model Revision for LOMR      \$40,000**

This project includes the full drainage analysis of the culverts and Spring Creek between 15th St. to E. Plano Pkwy. This first phase will include a hydraulic analysis of mitigation alternatives accompanied with an environmental review and final report.

**Streambank Citywide Erosion Assessment Program      \$3,000,000**

Funding to continue the results from the citywide streambank assessment and inventory development. Projects prioritized by the assessment and inventory development will begin to be addressed and programmed for design and construction into separate projects from this funding allocation.

**Texas Water Board of Development – FIF Grant Application      \$5,000**

A project that assists staff in the preparation of nearly \$2,000,000 in grant funding applications to assist with creek studies in the city.

**Winding Hollow Drainage Improvements      \$2,895,000**

Design and construction funding to replace the culverts at this location to alleviate localized flooding during heavy rain events.

## **ENGINEERING - TRANSPORTATION**

The following items outline the projects of the recommended Engineering - Facilities FY 2025-26 CIP budget. The department estimates a corresponding Operations and Maintenance (O&M) cost of \$0.

### **TRANSPORTATION IMPROVEMENTS PROJECTS - \$15,424,254**

**Vehicle Detection System Upgrade      \$4,000,000**

Citywide upgrade of 15 to 20-year-old intersection vehicle detection system hardware and software.

**Traffic Signal Cabinet Upgrade      \$4,025,000**

Citywide upgrade of 20-year-old traffic signal cabinet technology.

**CCTV Camera Intersection Expansion      \$1,114,071 (Federal)**

Signalized intersection CCTV camera expansion at 146 locations.

**Diamond Intersection Traffic Safety Improvements      \$1,295,183 (Federal)**

Signing, pavement marking, signalization, pedestrian, and capacity improvements for 62 freeway diamond intersections. First year of a \$5.1 million Federal grant.

**Phase IV, Package A Fiber Communications Expansion      \$3,100,000**

Upgrade of traffic signal leased wireless communications to fiber optic communications. Approximately 45% of traffic signals already upgraded to fiber communications.

**2025-26 Traffic Signalization Design**                      **\$550,000**  
Design effort for up to 8 new or revised traffic signal installations.

**Preston and McDermott Lighting Construction**                      **\$320,000**  
New roadway lighting installations along Preston between Headquarters and SH 121 and McDermott between Preston and Ohio.

**Neighborhood Traffic Management Program**                      **\$100,000**  
New neighborhood traffic management program that helps address speed, volume, and crash issues within residential neighborhoods.

**Citywide Traffic Count Program**                      **\$120,000**  
Biennial traffic data collection on major arterials including 24-hour counts, 7-day counts, turning movement counts, and travel times.

**Citywide Signal Retiming**                      **\$350,000**  
Update to coordinated traffic signal timing plans.

**Computerized Signal System**                      **\$200,000**  
Upgrade of traffic management system software.

**Traffic Studies, Plans & Models**                      **\$75,000**  
Includes intersection capacity studies, traffic impact studies, crash studies, among others

**Traffic Technology Program Management Contract**                      **\$175,000**  
Consultant contract supporting traffic management technology project design and construction.

## **ENGINEERING - FACILITIES**

The following items outline the projects of the recommended Engineering - Facilities FY 2025-26 CIP budget. The department estimates a corresponding Operations and Maintenance (O&M) cost of \$73,384.

### **FIRE AND PUBLIC SAFETY PROJECTS - \$2,929,185**

**Renovations to Fire Station 8**                      **\$2,061,085**  
Expansion and renovation to the existing station to add apparatus bays, sleeping areas, and storm shelter.

**Improvements to Fire Station 7**                      **\$701,500**  
Replacement of the overhead bay doors as well as replacement the roof

**Improvements to Fire Station 3**                      **\$166,600**  
Replacement of the overhead bay doors as well as replacement the roof

### **LIBRARY PROJECTS - \$1,838,191**

**Schimelpfenig Library**                      **\$145,000**  
Replace western parking lot.

**Haggard Library**                      **\$1,175,000**  
Replace all exterior windows as well as replacement of the roof

**Parr Library**                      **\$518,191**  
Repair foundational issues

### **SERVICE CENTER PROJECTS - \$3,881,066**

**High Point Fuel**                      **\$3,881,066**  
Construct fueling station for city vehicular fleet.



**POLICE AND COURTS PROJECTS - \$300,000**

**Robinson Justice Center**      **\$300,000**  
Replace Elevators

**SERVICE CENTER PROJECTS - \$3,881,066**

**High Point Fuel**      **\$3,881,066**  
Construct fueling station for city vehicular fleet.

**FACILITIES CAPITAL MAINTENANCE FUND - \$10,033,039**

**Generators**      **\$7.2m**  
Replacement of existing and adding new

**Safety and Security**      **\$1.0m**  
Security improvements at facility lobbies

**Preservation of Infrastructure**      **\$1.3m**  
Equipment replacement

**Support of the City Mission**      **\$0.4m**  
Departmental requirements to support added staff and business changes

**Sustainability**      **\$0.1m**  
Projects to improve energy use efficiency