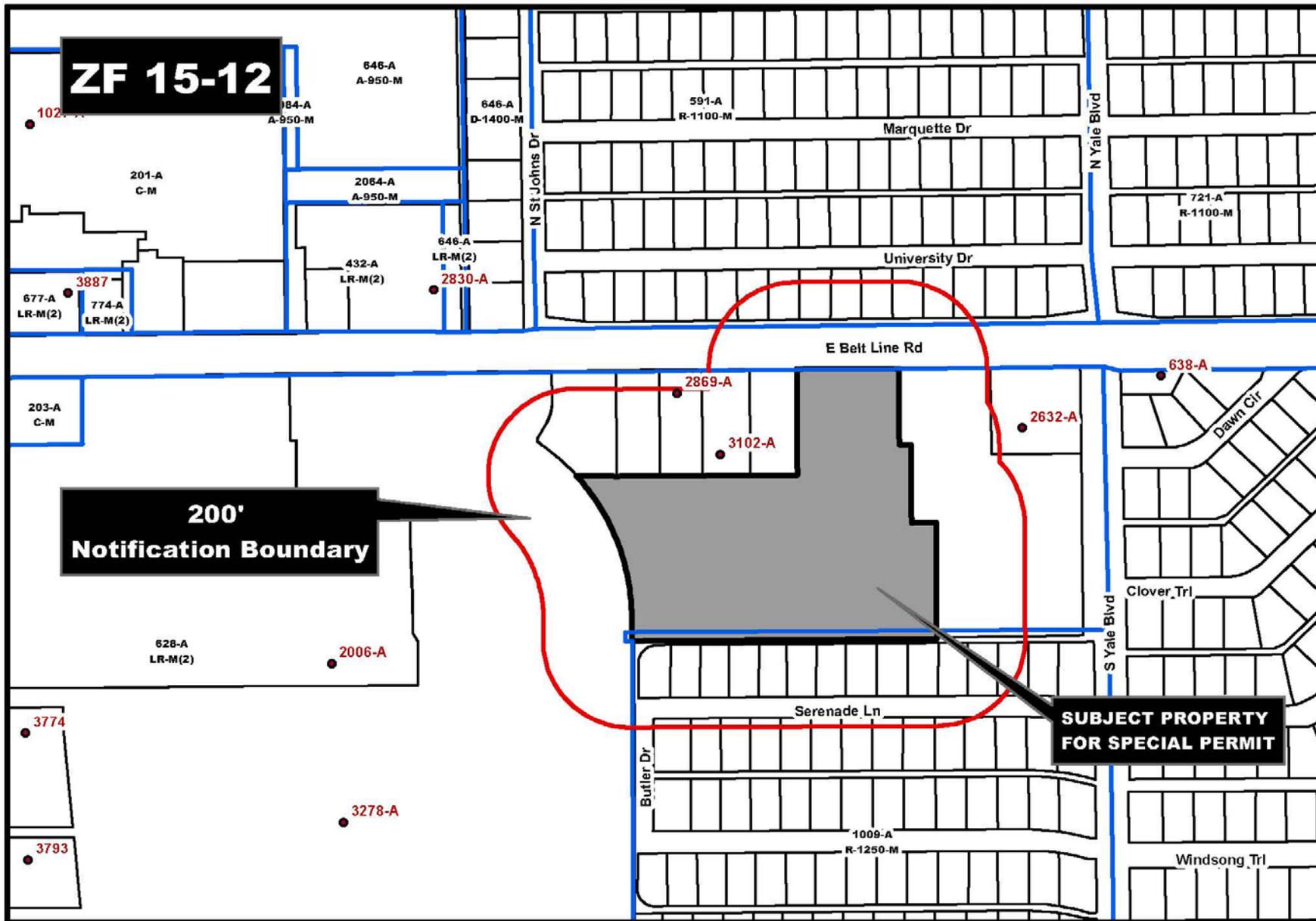


City Council Work Session Handouts

July 13, 2015

- I. Review and Discuss Zoning File 15-12
- II. Review and Discuss the Water/Wastewater Management Strategy
- III. Review and Discuss the Future Bond Program Development
- IV. Review and Discuss the Drainage Utility Program

Agenda Item 6
ZONING FILE 15-12
Special Permit
(Amusement Arcade)



ZF 15-12 Notification Map

Updated By: shacklett, Update Date: June 1, 2015
 File: DSM\Mapping\Cases\Z\2015\ZF1512\ZF1512 notification.mxd

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.





ZF 15-12

**SUBJECT PROPERTY
FOR SPECIAL PERMIT**

ZF 15-12 Aerial Map

Updated By: shacklett, Update Date: June 1, 2015
File: DSMMapping\Cases\212015ZF1512ZF1512.ortho.mxd

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.





Yale Blvd

Serenade Ln

Subject Lease Space

Lowe's

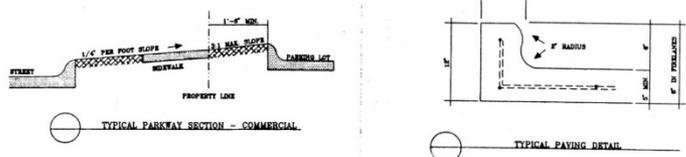
Sears

Belt Line Rd

University Dr

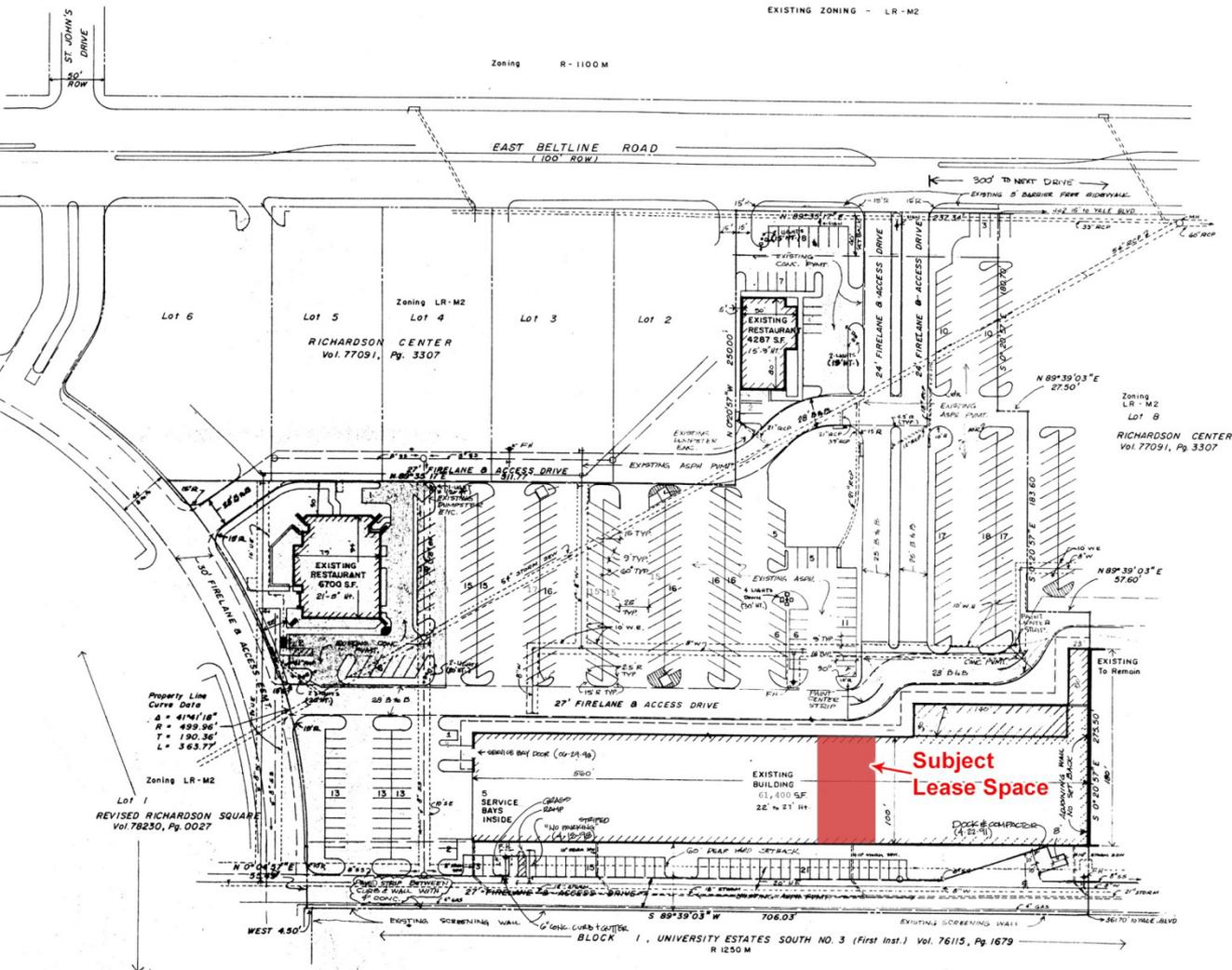
St. Johns Dr

Oblique Aerial
Looking South



SITE DATA SUMMARY

SITE AREA	7.90 Acres	344,141 S.F.
BUILDING AREA	(13-BUILDINGS)	72,387 S.F.
BUILDING HEIGHTS		
Main Building (One Story - Flat Roof)	22' to 27'	
Sizzler (One Story - Pitched Roof)	21'-6"	
Applebee's (One Story - Flat Roof)	15'-9"	
PARKING	Required	381 Spaces
	Provided	384 Spaces
LANDSCAPE AREA	7% Required	24,090 S.F.
	12% Provided	41,320 S.F.
LOT COVERAGE	21% - FAR	1:4.75
EXISTING ZONING	LR-M2	



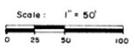
OVERALL SITE PLAN - LOT 1
 RICHARDSON CENTER
 RICHARDSON, DALLAS COUNTY, TEXAS
 JACK CORMAN 10830 N CENTRAL, SUITE 160, DALLAS, TEX.

PROPOSED
 ARCADE
 PROJECT

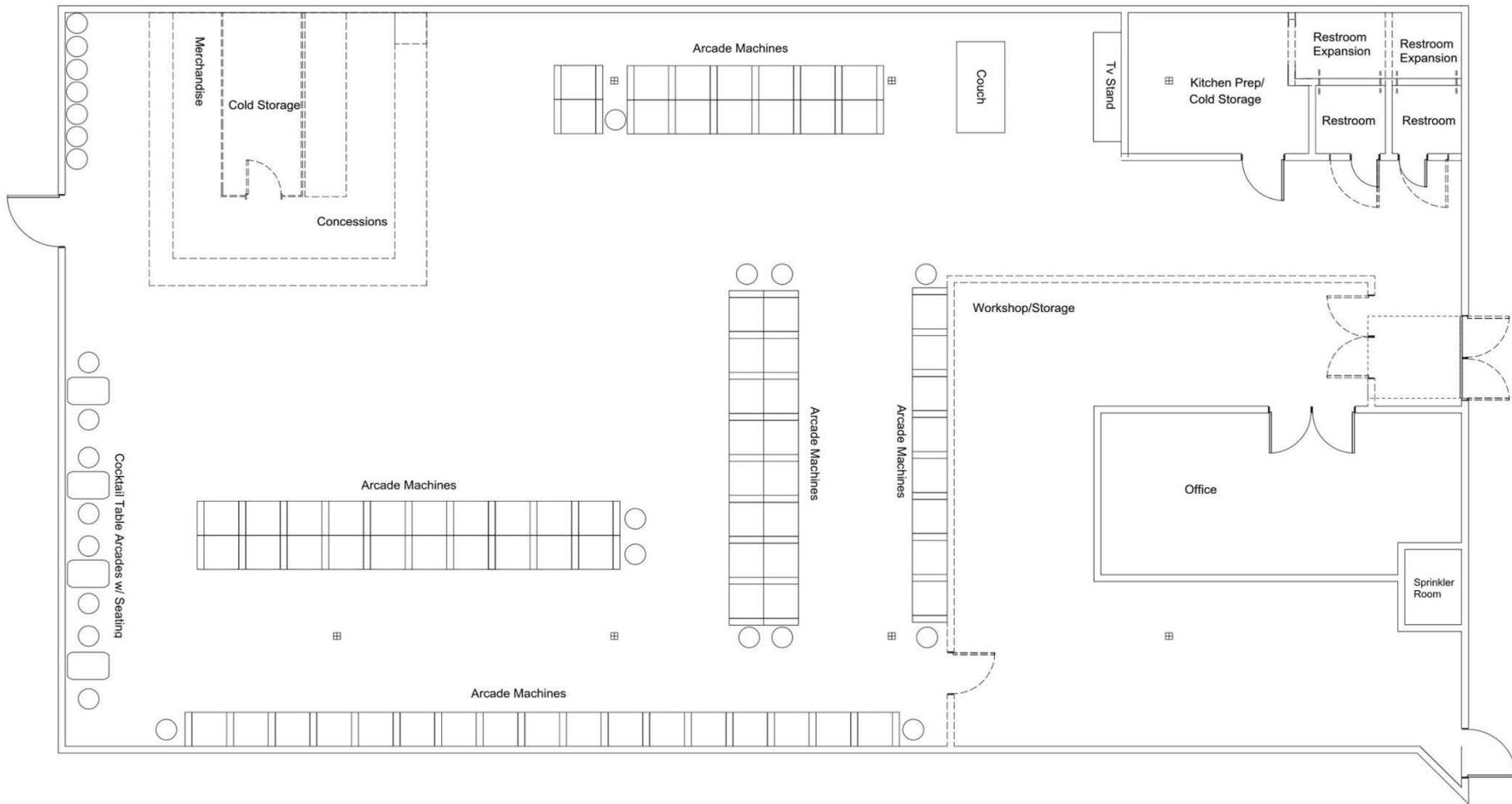
June 4, 2015

SP 1

OVERALL SITE PLAN LOT 1
 RICHARDSON CENTER



Zoning Exhibit



Floor Plan

SHERWIN-WILLIAMS

CHASE PLACE

FOR LEASE
214-369-7761

CHASE PLACE

(1)

Looking South
at Subject Lease Space



SHERWIN-WILLIAMS

FOR LEASE
214-369-7761

STOP

(2)

Looking East along
Front of Shopping Center



(3)

**Looking West along
Front of Shopping Center**



(4)

**Looking West along
Rear Property Line**



**Looking West along
Rear Property Line
(from alley side)**

(5)

Water & Wastewater Management Strategy

Council Briefing
July 13, 2015

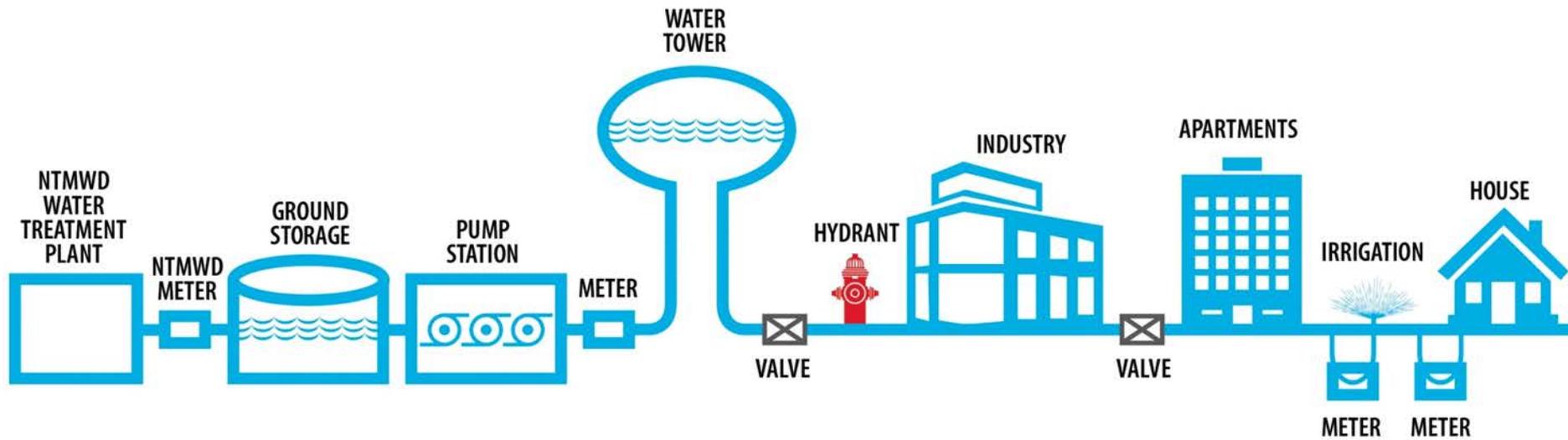
Water Maintenance Strategy



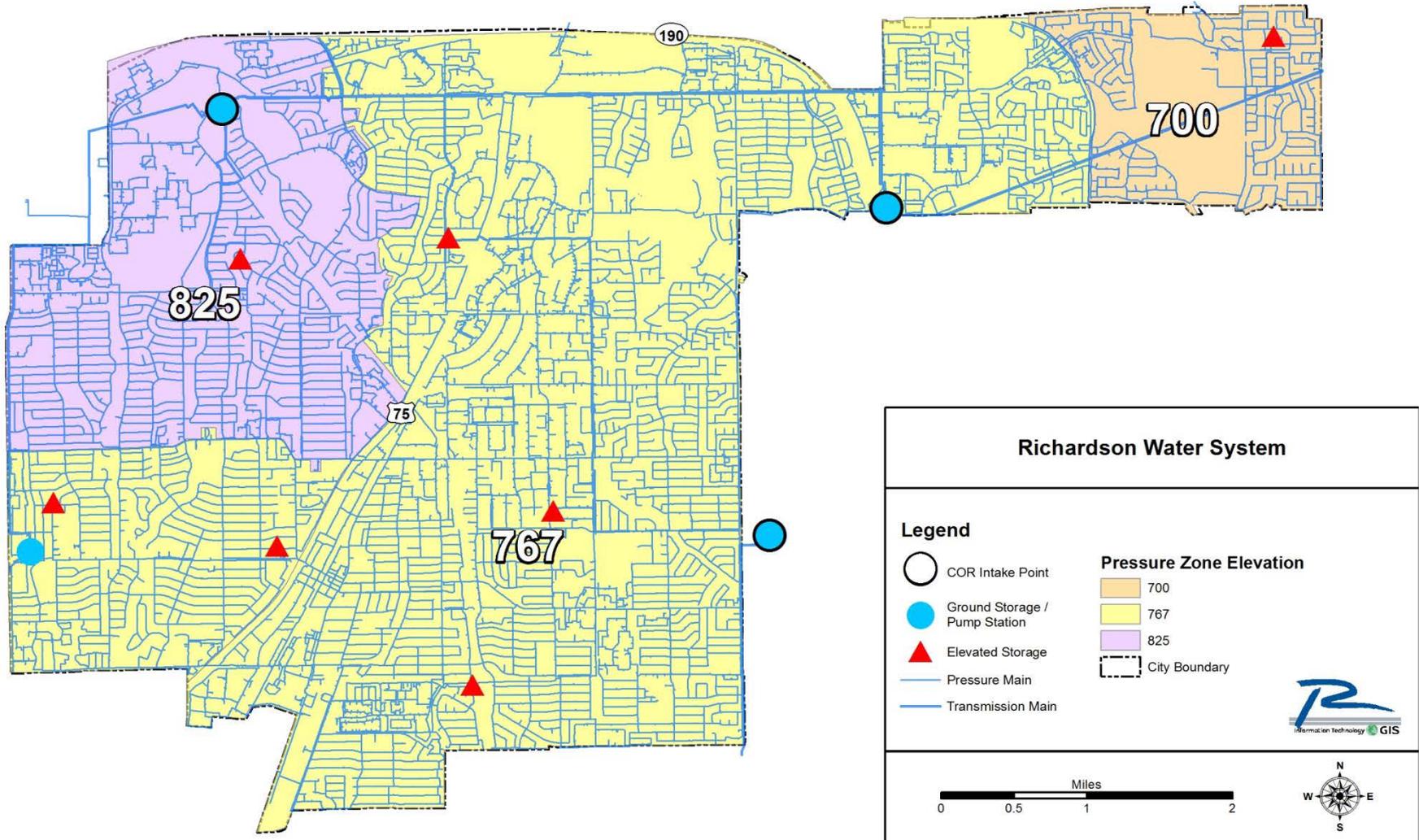
Water Distribution System Overview

- The North Texas Municipal Water District provides the City treated water
- The City operates and maintains the distribution system
 - 4 pump stations
 - 7 ground storage tanks
 - 7 elevated storage tanks
 - 522 miles of water main
 - 34,265 service connections
 - 13,391 valves
 - 4,383 hydrants

Water Distribution System Overview



Water Distribution System Overview



Water Division Overview

- Technical Operations
 - SCADA/Response Center
 - Pump Station Maintenance
 - Water Quality and Compliance
 - Water Conservation and Outreach
- Field Operations
 - Water Operations
 - Meter Shop
 - Construction and Rehabilitation



Water Maintenance Strategy

- Guiding Principles
 - Comply with all federal, state and local regulations
 - Efficiently and effectively manage, operate and maintain all parts of the distribution system
 - Maintain “Superior” water system rating from Texas Commission on Environmental Quality
 - Provide adequate capacity to deliver water during peak demand while transporting water through the distribution system as expeditiously as possible to ensure water quality

Water Maintenance Plan Elements

1. SCADA System
2. Evaluation and planning
3. Water main repair and replacement
4. Hydrant repair and replacement
5. Valve replacement program
6. Water meter replacement program
7. Elevated and ground tank inspection and rehabilitation
8. Pump maintenance and upgrades

1. SCADA System

- Supervisory Control and Data Acquisition (SCADA)
- Centralized communication to all pump stations and storage tanks
- Currently finishing a multi-phase project to upgrade and enhance SCADA system
 - Utilizing the City of Richardson's fiber network for communication and data center storage
 - Complete hardware and software replacement
 - Call center and control room improvements
 - Water quality analyzers installed at all water storage facility to receive real time water quality data

2. Evaluation & Planning

- 7 ground storage tanks (27.5 MG total)
- 7 elevated storage tanks (8.75 MG total)
- Tank evaluations are performed by licensed engineers for structural integrity and degree of metal corrosion
 - Each evaluation produces an engineered recommendation
 - Tanks are evaluated every 3-5 years per industry standards
 - Staff uses evaluations to schedule maintenance, rehabilitations and replacement
- Other enhancement opportunities, such as facility improvements, infrastructure improvements and water quality, are also studied and planned on a regular basis

3. Water Main Repair

- 522 miles of water main ranging in size from 4" - 36"
- Perform routine and emergency repairs throughout the distribution system
 - Respond to approximately 2,500 service requests a year
 - Repair over 200 water main breaks a year
 - Aging infrastructure and ground movement increases maintenance frequency and cost



4. Water Main Replacement

- Water main replacement projects are identified using historical maintenance records mapped by GIS
- Projects are identified based on:
 - Main condition
 - Condition of other related infrastructure, such as street
 - Length of main
 - Service connections affected
- On average, 5,500 linear feet of main is replaced annually through operations
- Approximately 64,000 linear feet of main has been replaced in conjunction with GO 2006 & 2010 street projects

5. Hydrant Repair and Replacement

- 4,383 hydrants
- Routine flushing to ensure proper operation of hydrant and water quality
- Repair or replacement of defective hydrants
- Painting hydrants in accordance with water main size (Silver 6", Blue 8", Yellow 10" or larger)
- Installation of new hydrants



6. Small Valve Replacement Program

- 12,835 valves 12" or smaller
 - 95% of total valves
- Small valves are crucial elements of maintaining an efficient water system
- Small valve replacements are identified based on location, depth, current valve condition and service connections affected
- Anticipate the need to expand this program as valves age



7. Water Meter Replacement Program

- 33,882 active metered accounts
- Meters range in size from 5/8" - 12"
- Upgrading system to Automatic Meter Reading (AMR)
- Currently replacing meters in conjunction with construction projects and maintenance calls
- Studying a variety of factors that will be used to develop a citywide replacement program in the coming years



8. Pump Station Maintenance

- 4 Pump Stations
- 25 Distribution Pumps
- Annual maintenance is performed on each pump
 - 7 separate tests
- Regular maintenance performed weekly
- Maintenance provides estimates on potential motor or pump repair/replacement



Funding Strategies

- Funding to maintain the Water Distribution System comes from two primary sources:
 1. Utility Fund Operations
 2. Utility Fund Certificates of Obligation (CO)



Water Maintenance Strategy - Operations

Programs	FY 14/15	FY 15/16
Evaluation/Planning	\$35,000	\$12,000
Water Main Repair	\$263,000	\$315,000
Water Main Replacement	\$625,000	\$557,000
Hydrant Repair/Replacement	\$50,000	\$55,500
Small Valve Replacement Program	\$20,000	\$22,500
Meter Testing and Replacement Program	\$50,000	\$140,000
Pump Maintenance/Upgrades	\$150,000	\$150,000
Total	\$1,193,000	\$1,252,000

Water Maintenance Strategy – Certificates of Obligation

	Series 2016	Series 2017	Series 2018	Series 2019	Series 2020
Water Main Replacement	\$1,000,000	\$500,000	\$1,000,000	\$500,000	\$1,000,000
Large Valve Replacement	\$0	\$500,000	\$0	\$500,000	\$0
Tank Rehab	\$0	\$750,000	\$0	\$750,000	\$0
Meter Replacement	\$1,000,000	\$250,000	\$1,000,000	\$250,000	\$1,000,000
New Water Tower Design	\$0	\$500,000	\$0	\$0	\$0
New Water Tower Construction	\$0	\$0	\$0	\$3,500,000	\$0
Total	\$2,000,000	\$2,500,000	\$2,000,000	\$5,500,000	\$2,000,000

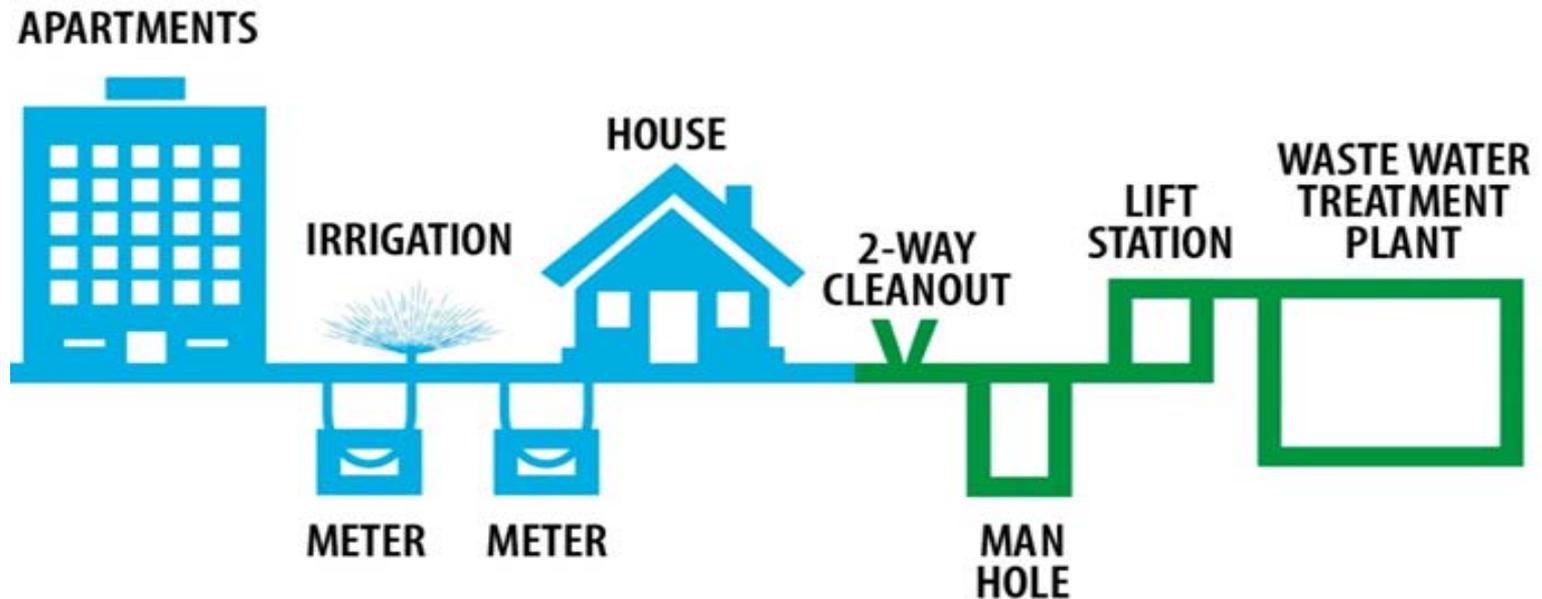
Wastewater Maintenance Strategy



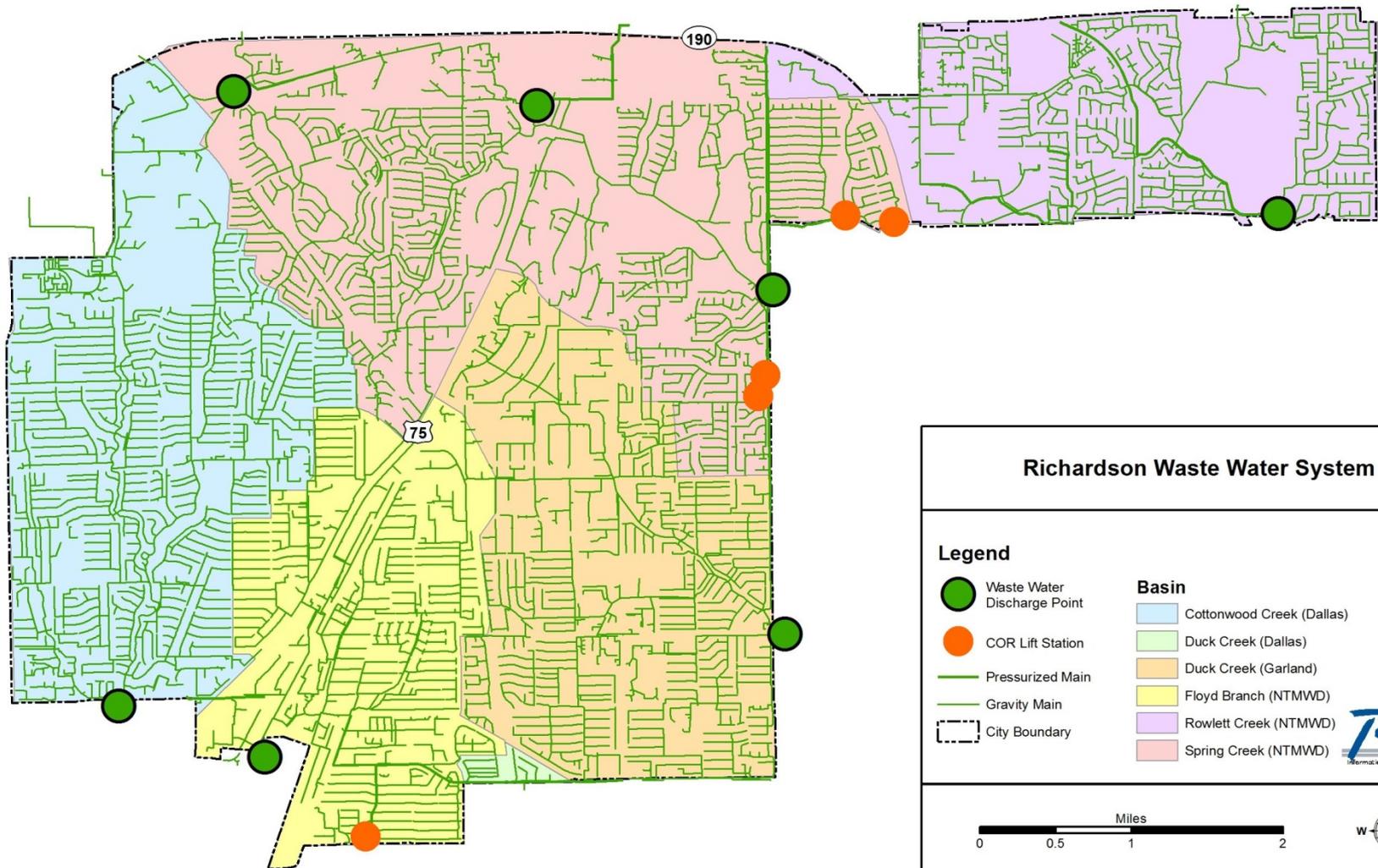
Wastewater Collection System

- Treatment of wastewater is provided by the North Texas Municipal Water District, City of Dallas, and City of Garland
- The City operates and maintains the collection system
 - 401 miles of sewer main
 - 4,044 manholes
 - 1,739 main line cleanouts
 - 8,000+ two-way cleanouts
 - 5 sewer lift stations and 10 wastewater pumps

Wastewater Collection System



Drainage Basins



Wastewater Division Overview

- Technical Operations
 - SCADA / Response Center / Reporting
 - Plant Maintenance
 - Wastewater Education and Outreach
- Field Operations
 - Wastewater Operations
 - Construction and Rehabilitation



EPA Inspection

- The Environmental Protection Agency (EPA) recently conducted inspections of the NTMWD and all of its wastewater member cities
- The inspections were part of a nationwide inspection initiative
- Richardson is currently awaiting the results of its inspection but has already begun taking steps to address concerns the EPA informally shared during its debrief
- Additional funding has been dedicated to implement these initial action items as well as prepare for additional mandates

Wastewater Maintenance Strategy

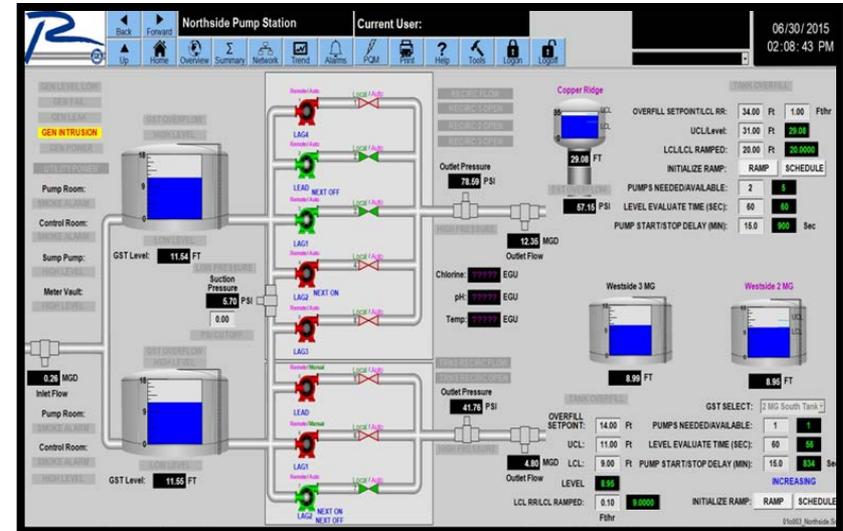
- Guiding Principles
 - Comply with all federal, state and local regulations
 - Efficiently and effectively manage, operate and maintain all parts of the wastewater collection system
 - Provide adequate capacity to convey peak flows
 - Minimize inflow and infiltration (I&I)
 - Prevention of I&I helps minimize treatment costs – immediate financial return on investment
 - Minimize the frequency of sanitary sewer overflows
 - Mitigate the impact of sanitary sewer overflows

Wastewater Plan Elements

1. SCADA
2. Evaluation and planning
3. Sewer main maintenance
4. Sewer main repairs
5. Manhole rehabilitation
6. CIPP projects
7. Lift station maintenance

1. SCADA System

- SCADA monitors 5 lift stations in real time
 - Wet well level
 - High level alarms
 - Pump cycling
 - Power outages
- Analyzes level trends to predict potential problems
- SCADA processes all initial reporting of Sanitary Sewer Overflows to TCEQ



2. Evaluation and Planning

- Develop the following policies and procedures:
 - Capacity, Management, Operations, Maintenance Program (CMOM)
 - Overflow Emergency Response Plan
 - Wastewater Standard Operating Policies
- Staff is currently considering various professional services to assist in a comprehensive assessment of the wastewater collection system
- Anticipate additional study initiatives will be required subsequent to receiving EPA report

3. Sewer Main Maintenance

- 401 miles of sewer main
- Regular preventative maintenance
 - Extends the life of sewer mains
 - Helps avoid costly emergency repairs
 - Decreases inflow and infiltration (I&I)
 - Helps reduce the frequency of sanitary sewer overflows (SSOs)
- Preventative maintenance strategies
 - Sewer main jetting and cleaning
 - Sewer main inspection via camera
 - Identify and repair breaks and blockages

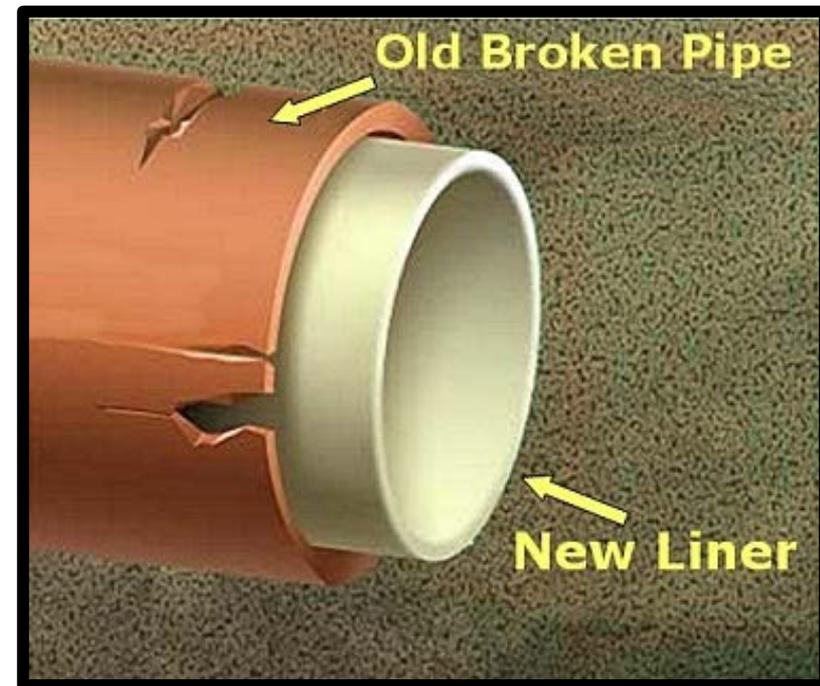
4. Sewer Main Repairs

- Address blockages by jetting main
 - 1,100 service requests annually
- Address sewer main point repairs identified during video inspection
- Assessment and maintenance of aerial sewer crossings
- Replace sewer main in conjunction with capital projects
- Response and site remediation of Sanitary Sewer Overflow (SSO)



5. Sewer Main In-Line Rehab

- Cured-In Place Pipe (CIPP)
 - Sewer main rehabilitation method that does not require pipes to be excavated, removed, or replaced.
 - Trenchless technology
 - A special liner is pulled through pipeline, inflated, and cured to create a joint-less, seamless seal inside an existing pipe.
 - 50 year expected useful life

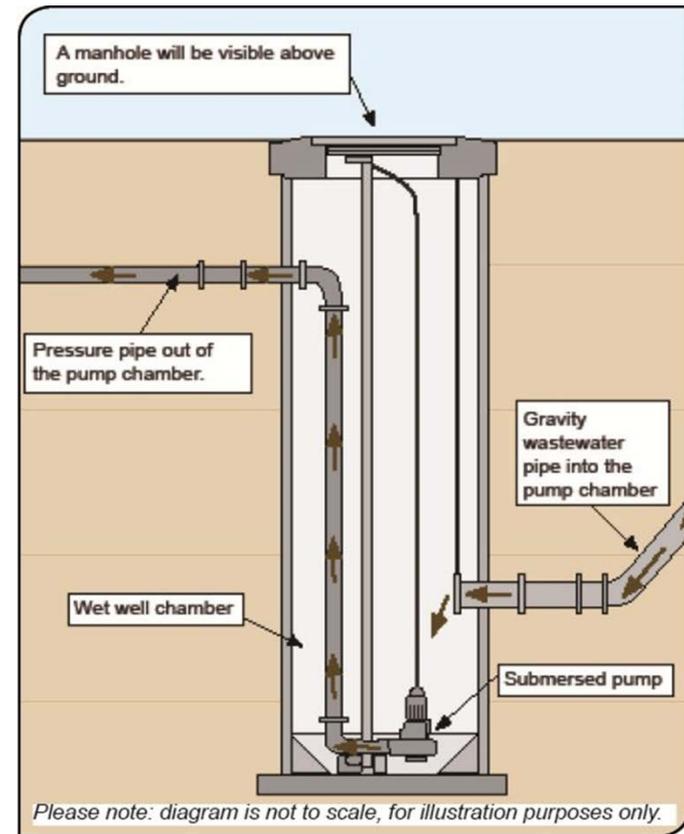


6. Manhole Rehabilitation

- 4,044 manholes
- Regular inspection and repair of manholes helps decrease inflow and infiltration (I&I) and helps reduce the frequency of sanitary sewer overflows (SSOs)
- Inspections to evaluate condition, depth, material class and life expectancy
- Point repairs to address minor issues
 - Ring/lid adjustments, rain guard, regrouting
- Replacement to address major issues
 - Structural failure, excessive inflow and infiltration (I&I)

7. Lift Station Maintenance

- 5 sewer lift stations
- 10 wastewater pumps
- Daily inspections of lift stations to identify repair or replacement needs
 - Major electrical components
 - Pumps & Motors
 - Discharge force main assessments
- Future considerations
 - Permanent backup power at all lift stations
 - Wet/Dry well upgrades



Wastewater Maintenance Strategy

	FY 14/15	FY 15/16
Evaluation/Planning	\$100,000	\$125,000
Sewer Main Maintenance	\$0	\$175,000
Sewer Main Repair	\$30,000	\$100,000*
Manhole Rehab	\$0	\$100,000*
Sewer Main In-Line Rehab (CIPP)	\$235,000	\$350,000
Lift Station Maintenance	\$23,500	\$25,000
CMOM Plan Implementation	NA	\$300,000*
Total	\$388,500	\$1,175,000

*\$500,000 in new funding in FY 15/16.

Wastewater Maintenance Strategy

- FY 15/16 includes \$500,000 in new resources to initiate enhanced maintenance strategies as identified in the CMOM. Funds are planned to increase as follows:
 - FY 16/17 - \$750,000
 - FY 17/18 - \$1,000,000
- The exact deployment of the funds will be outlined subsequent to system evaluations and possible EPA instructions.
- The City will continue to work with the NTMWD to identify possible partnering opportunities to reduce I&I and SSOs



2015 Bond Program Review

City Council Briefing: June 13, 2015





2015 Bond Program Briefing Overview

- December 8, 2014 – Reviewed planning for a possible bond program
- April 20, 2015 – Reviewed election calendar, debt capacity outlook
- April 20, 2015 – Reviewed possible park and recreation bond program projects
- April 27, 2015 – Reviewed possible drainage bond program projects
- May 4, 2015 – Reviewed possible facility bond program projects
- June 15, 2015 – Reviewed possible streets, alleys and sidewalk bond program projects
- June 15, 2015 – Reviewed possible traffic and transportation bond program projects



Purpose of Tonight's Briefing

1. Review details of a No Tax Increase debt capacity scenario
2. Review a summary of possible bond program projects by area
3. Accept direction from City Council regarding development of proposition structure and composition



Recent Debt Issuance History

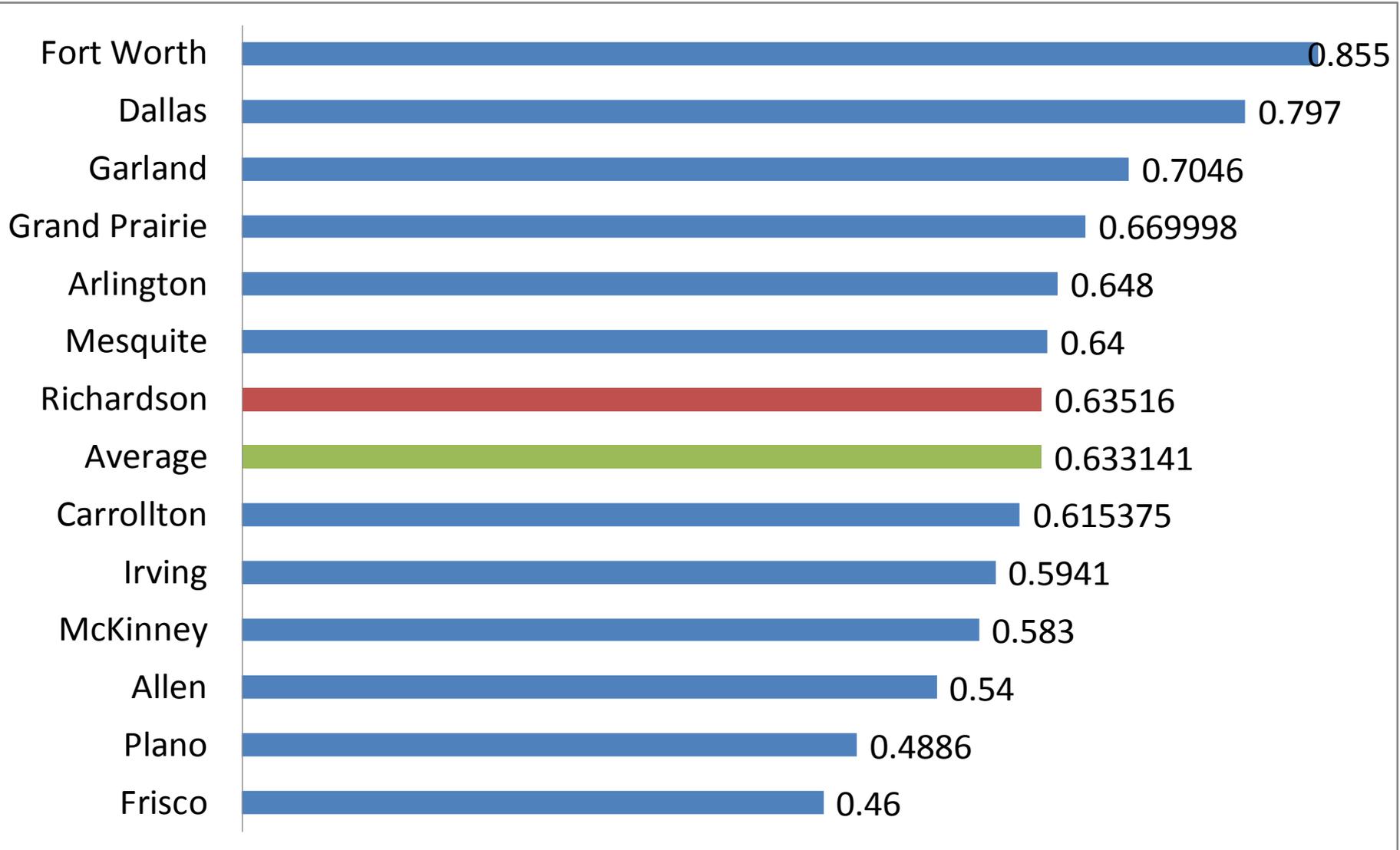
- Through the 2006 and 2010 Bond Programs over \$120 million has been invested in meaningful projects
- Prior Bond Election Summary

Bond Election	Referendum Size	Tax Rate Increase	Tax Rate
2006	\$55 Million	5 cents	\$0.57516
2010	\$66 Million	6 cents	\$0.63516

- Current tax rate impact is approximately 1 cent per \$14 million of projects
- Richardson's property tax rate currently sits in the middle of comparable cities
 - ***Currently ranked 7th out of 13 comparable cities***



Property Tax Rate Ranking





Debt Capacity Overview

- Staff along with First Southwest has modeled future debt capacity
- Based on the annual retirement of existing debt, the City anticipates the ability to issue future debt without a tax rate increase
- Debt Capacity is available in FY 2016 – FY 2021 and beyond
- Conservative Debt Planning Assumptions
 - Taxable Assessed Value Growth
 - First 4 years value growth of 3%, 2%, 1%, 1% respectively
 - No value growth beginning in year 5 and beyond
 - Average interest rates of 5.25% for future issues
 - Level debt payments for future bond issuances
 - Maintains annual equipment/capital CO issuance
 - Does not factor in future refunding opportunities



Debt Capacity Overview

- Model shows the ability to issue Serial (Annual) debt sales based on the amount of debt authorized by a Bond Election
 - Citizens authorize a total amount that is issued in increments each year
- A Serial Debt sale allows:
 - Take advantage of annual existing debt retirements and future capacity
 - Ability to issue debt each year without a tax rate increase
 - Avoid paying interest that occurs with selling all at once
 - Allows flexibility to make adjustments if economic or market factors occur



Debt Capacity Overview

- Model estimates the following Serial sale schedule

Program Year	Fiscal Year	Annual Issuance	Cumulative Issuance
1	2015-2016	\$ 7,500,000	\$ 7,500,000
2	2016-2017	5,025,000	12,525,000
3	2017-2018	12,930,000	25,455,000
4	2018-2019	10,190,000	35,645,000
5	2019-2020	18,115,000	53,760,000
6	2020-2021	59,335,000	113,095,000

- Existing debt schedule shows large drop in 2020-2021 due to debt maturing for large capital projects from early 2000's
- Serial sales will cause projects to be studied in cash flow packets



Debt Capacity Overview

- Inflation Estimates

Program Length	Issue Amount	Low Inflation 3.65%	High Inflation 7.22%
5 Year	\$53 Million	\$47 Million	\$42 Million
6 Year	\$113 Million	\$95 Million	\$81 Million

- Referendum will be at the Issue Amount, but will need to test projects against Inflation.
- Beginning next week, project estimates will be inflated to fit the issue amount.
- ❖ *Inflation factors are estimated based on national construction indexes or architectural advice and are subject to change*

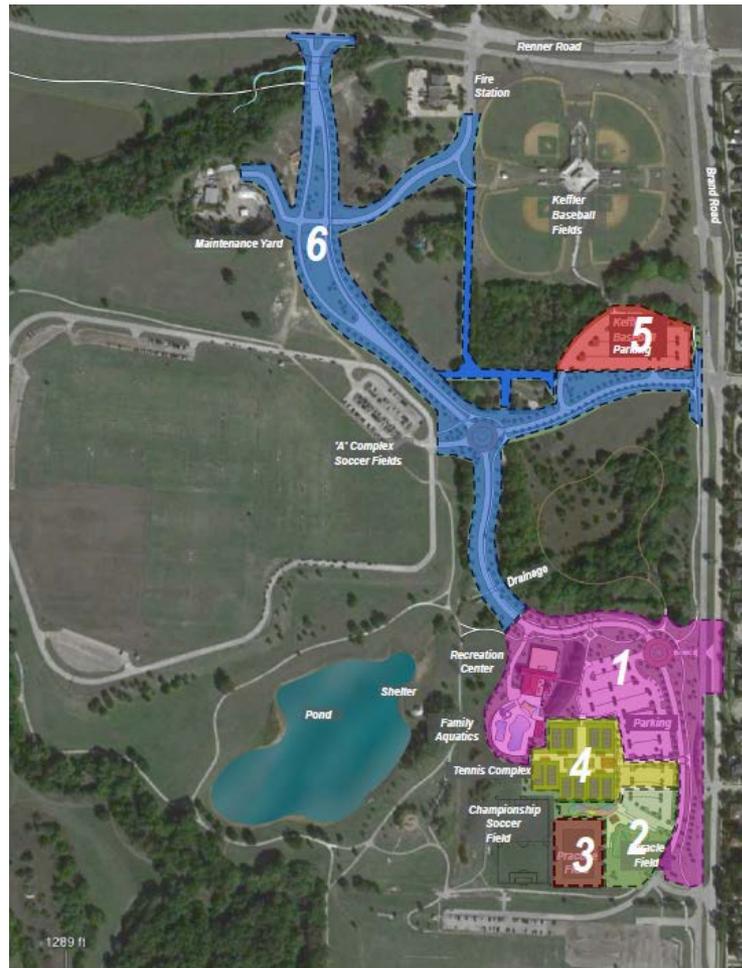
A person is jogging on a paved path that winds through a wooded area. The trees are mostly bare, suggesting a late autumn or winter setting. The sun is low in the sky, creating long shadows and a warm, golden light. The jogger is wearing a light blue long-sleeved shirt, dark shorts, and white sneakers. The path is made of asphalt and is flanked by grass and some low-lying vegetation. The overall scene is peaceful and active.

Parks & Recreation

Breckinridge Recreation Center

\$38,787,000

- Zone 1 – Rec Ctr, Aquatics \$20,920,000
- Zone 2 – Miracle Field \$2,739,000
- Zone 3 – Practice Field \$1,136,000
- Zone 4 – Tennis Complex \$4,271,000
- Zone 5 - Keffler Parking \$1,035,000
- Zone 6 – Spine Road \$8,686,000
- Includes 2% for public art



Estimate Zones Plan



Breckinridge Recreation Center \$38,787,000



Phase I \$14,815,000

- Facility admin and building support space
- Pre-School program
- Library satellite services
- Classroom / party room
- Games room / children’s indoor playground
- Dry arts and crafts room
- Community / fitness room
- Catering kitchen
- Single HS / double elem. school gymnasium
- Cardiovascular exercise / weight room
- Includes 2% for public art

Estimated Operating Costs **\$688,000**

Furnishings/Fixtures/Equipment (FF&E) **\$532,500**

Senior Center Renovation

\$3,860,000

- New dance / activity room
- Raised ceiling in dance / activity room
- Enlarged and updated exercise area
- Kitchen and dining area upgrades
- Remodeled wing for increased square footage
- Improved efficiency in operations & security
- Technology upgrades to sound system & computers
- Accessibility upgrades to restrooms and entrances
- Includes 2% for public art

Furnishings/Fixtures/Equipment (FF&E) \$140,000



Pool Buildings Mechanical Renovation

\$700,000

- Plumbing upgrades including ADA compliant fixtures
- Ventilation system upgrades
- Electrical system upgrades including new power panels and distribution branch circuits
- Lighting system upgrades including new building lighting and controls

Park Playground Renovations

\$1,067,000

- Breckinridge Lakes Park \$ 80,000
- Canyon Creek Park \$120,000
- Cottonwood Park \$160,000
- Crowley Park North Park \$205,000
- Duck Creek Linear Park \$80,000
- Lookout Park \$157,000
- Point North Park \$135,000
- Wyndsor Park \$130,000





Proposed Park Trail Projects

\$1,212,000

- Breckinridge Park \$484,000
- Campbell Ridge Park \$130,000
- Crowley Park \$116,000
- Custer Park \$40,000
- Lookout Park \$92,000
- Mimosa Park \$63,000
- Spring Creek Nature Area \$222,000
- Woodland Park \$65,000

Irrigation Controller Water Conservation Upgrades

\$1,700,000

- Implementation will:
 - Increase operational efficiency
 - Decrease staff hours
- Project can be phased with multiple funding cycles and performed in-house



Parks Summary

Request	Amount
Breckinridge Park Rec Center <ul style="list-style-type: none">Phase I	\$38,787,000 \$14,815,000
Senior Center Renovation	\$3,860,000
Pool Buildings Mechanical Renovations	\$700,000
Park Playground Renovations	\$1,067,000
Park Trail Projects	\$1,212,000
Irrigation Controller Upgrades	\$1,700,000
Total	\$47,326,000

RICHARDSON CIVIC CENTER
CITY HALL

Public Buildings

Animal Shelter Kennel Suite Upgrades

\$375,000

- Remove existing chain link kennel enclosures
- Install new epoxy floor coating system (Easier to clean and sanitize)
- Install modern kennel enclosures and doggie doors/frames
- Install Acoustic Panels
- Paint Kennel Suite walls and trim

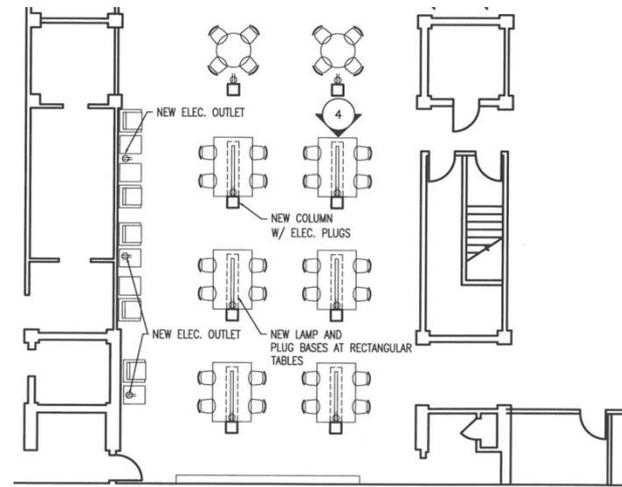


Library Facility Enhancements

\$825,000

- Basement and 2nd floor Rest Room Renovations
- Basement Study Area Remodel
- Third Floor Study Area Addition
- Staff Elevator Replacement
- Electrical and Lighting Enhancements
- Exterior concrete panel rehabilitation

**Furnishings/Fixtures/Equipment
(FF&E) \$100,000**



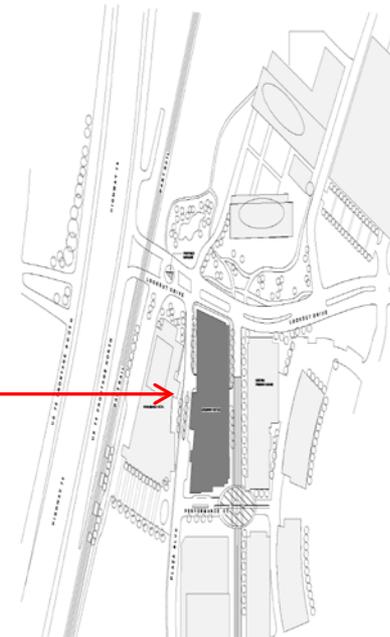
Eisemann Center

\$ 4,625,000

Digital Sign/Marquee

\$675,000

- New digital display sign announcing upcoming events
- Could be located near the intersection of Lookout Drive and US-75



Proposed location for LED Digital Marquee

Eisemann Center

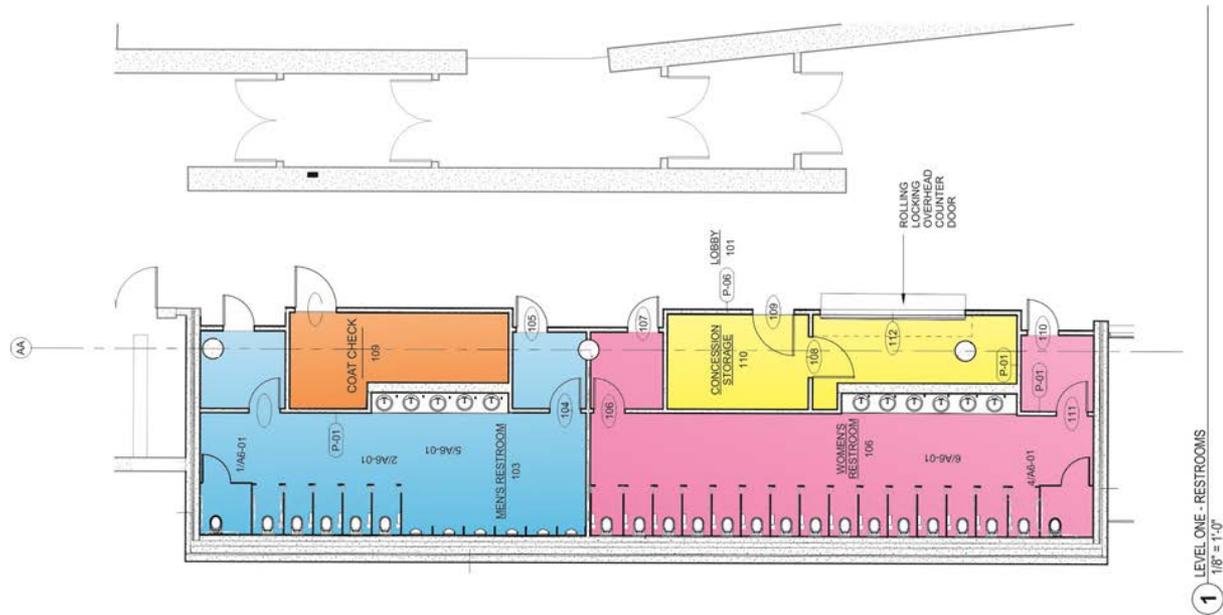
\$ 4,625,000

West Lobby Expansion Levels 1 & 2

\$2,800,000

Level 1

- Additional public restrooms
- Additional concessions
- Additional space for equipment and patron items (i.e. coats)
- Includes 2% for public art



Eisemann Center

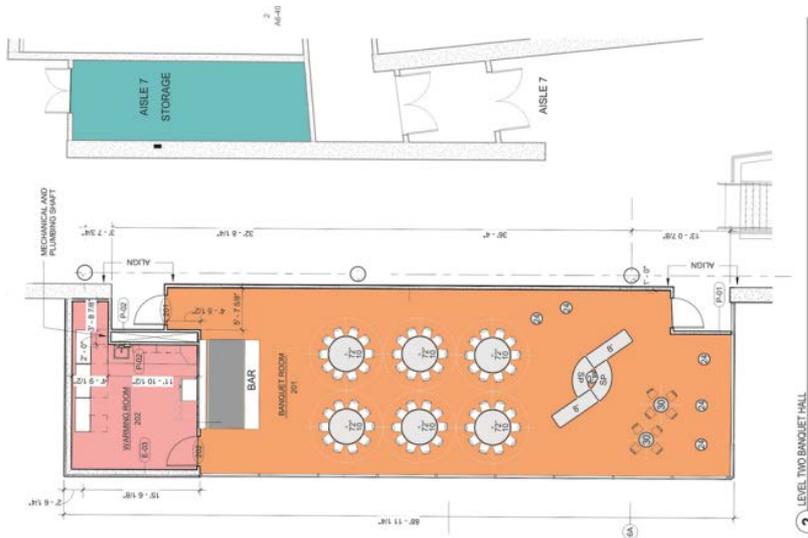
\$ 4,625,000

West Lobby Expansion Levels 1 & 2

\$2,800,000

Level 2

- Banquet room with seating for 60-80 people
- Rentable space for private events



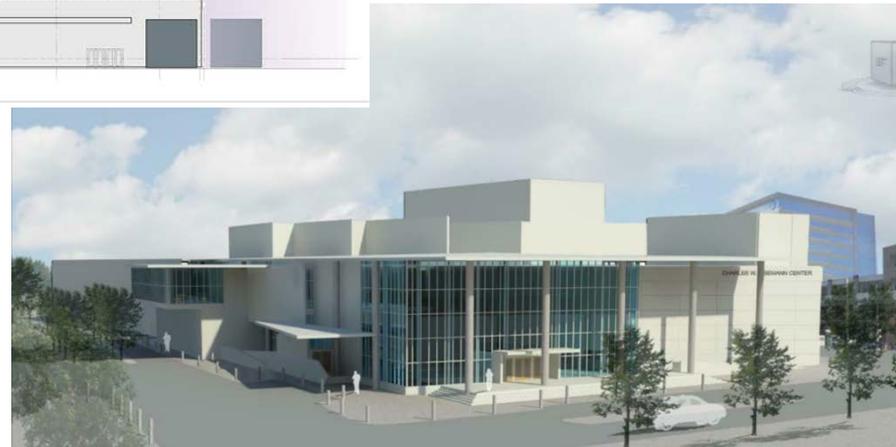
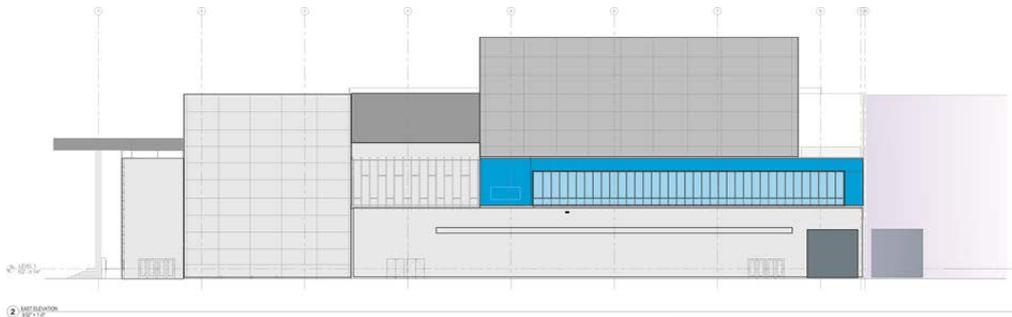
Eisemann Center

\$ 4,625,000

East Side Office Expansion

\$1,150,000

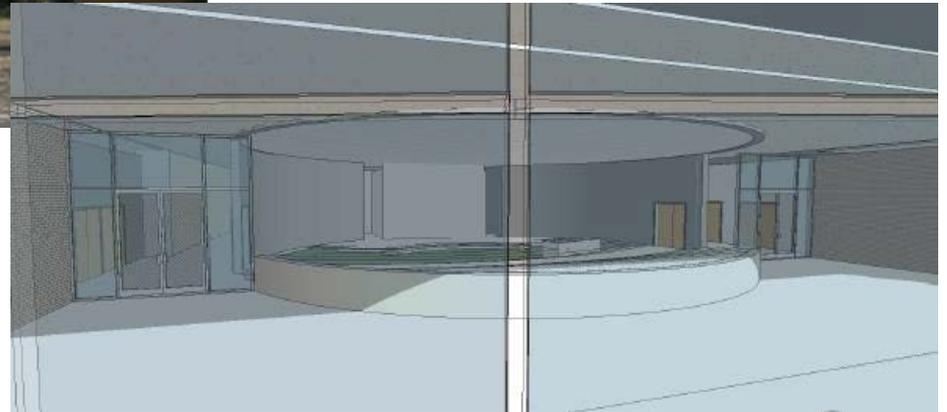
- Expand administrative offices and meeting space
- Create new hallway corridor connecting existing administrative offices with northwest side of second floor mezzanine



City Hall & Civic Center

\$2,500,000

- City Hall Improvements \$1,400,000
- Council Chamber Expansion \$1,100,000
 - (Modest Renovation \$400,000)



Furnishings/Fixtures/Equipment (FF&E) \$200,000



Public Safety Complex

\$60,350,000

Phase I

\$10.6 M

- Site preparation, utilities and enhancements
- Construct parking and security enhancements
 - New parking entrances and exits
 - Secure perimeter fencing
 - Controlled access gates for Police staff and vehicles
 - 250 secure spaces for Police staff and vehicles
 - New surveillance system
 - Install perimeter landscaping
- Expand and renovate patrol locker rooms
 - Improve space utilization
- Add offices/storage where possible

Furnishings/Fixtures/Equipment (FF&E) \$180,000



Public Safety Complex

\$60,350,000

Phase II

\$35.75M

- Constructs new 39,500 SF Police Station over communications building and detention center
- Renovate 23,000 SF of existing Police Department Facility
- Demolish 1950's era Police Buildings
- Includes 2% for public art

Furnishings/Fixtures/Equipment (FF&E) \$975,000

Phase III

\$14M

- Construct New Fire Station No. 1 and Fire Administration
- Demolish old Fire Department buildings
- Construct remaining Police Parking
- Construct Police Vehicle Inspection Facility
- Includes 2% for public art

Furnishings/Fixtures/Equipment (FF&E) \$380,000

Fire Station #3

\$6,300,000

- Construct New 11,800 SF Fire Station
- Three pull through apparatus bays
- Visitor lobby
- Separate living quarters
- Fitness room
- ADA accessible
- Includes 2% for public art



Fire Training Center Parking

\$575,000

- Fire Training Center activities frequently exceed 25 spaces today and use is expected to increase
- Recommended improvements will add 48+/- spaces nearly tripling current parking capacity





Public Buildings Summary

Public Buildings	\$75,550,000
Public Safety Complex <ul style="list-style-type: none">Phase IPhase IIPhase III	\$60,350,000 <ul style="list-style-type: none">\$10,600,000\$35,750,000\$14,000,000
Fire Department Facilities <ul style="list-style-type: none">Fire StationFire Training Center Parking	\$6,875,000 <ul style="list-style-type: none">\$6,300,000\$575,000
City Hall & Civic Center <ul style="list-style-type: none">City Hall ImprovementsCouncil Chamber Expansion	\$2,500,000 <ul style="list-style-type: none">\$1,400,000\$1,100,000
Animal Shelter	\$375,000
Library	\$825,000
Eisemann Center <ul style="list-style-type: none">Digital Sign/MarqueeWest Lobby ExpansionEast Side Office Expansion	\$4,625,000 <ul style="list-style-type: none">\$675,000\$2,800,000\$1,150,000
Total	\$77,100,000



Drainage Proposition

Bridge and Culvert Projects

\$3,000,000

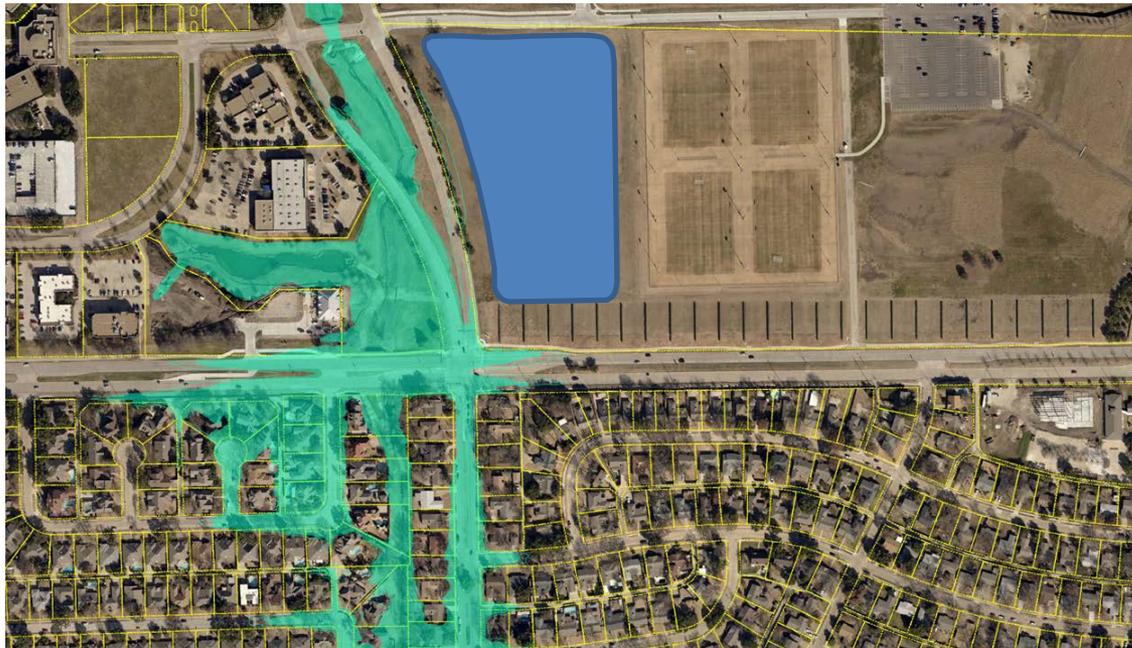
- W. Belt Line Rd. at Hunt Branch \$2.0 M
- Cherrywood Ln at Hunt Branch \$0.6 M
- Regal Rd at Hunt Branch \$0.4 M



Flood Prevention Projects

\$17,000,000

- Lois Branch Channel Improvements \$9.9 M
 - Phase 1 – Spring Valley to Pittman (\$4.0 M)
- West Fork of Cottonwood Creek Detention \$5.8 M
- Glenville Dr Phase 1 – Belt Line Rd to Huffhines \$1.3 M

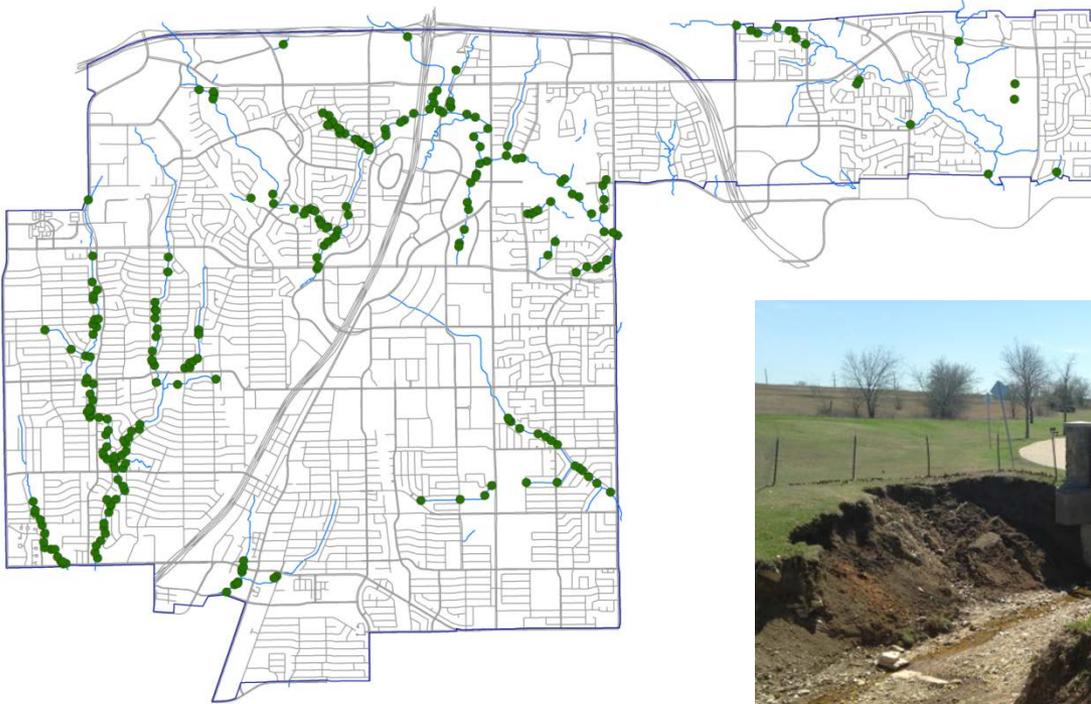


West Fork of Cottonwood Creek Detention

Erosion Control Projects

\$2,240,000

- Breckinridge Park Area A Channel \$700,000
- Woods Park on Beck Branch – 4 sites \$600,000
- Spring Creek at Plano Rd - \$1,100,000



● Erosion sites





Drainage Summary

Request	Amount
Bridge and Culvert	\$3,000,000
Flood Prevention	\$17,000,000
Erosion Control	\$2,240,000
Total	\$22,240,000

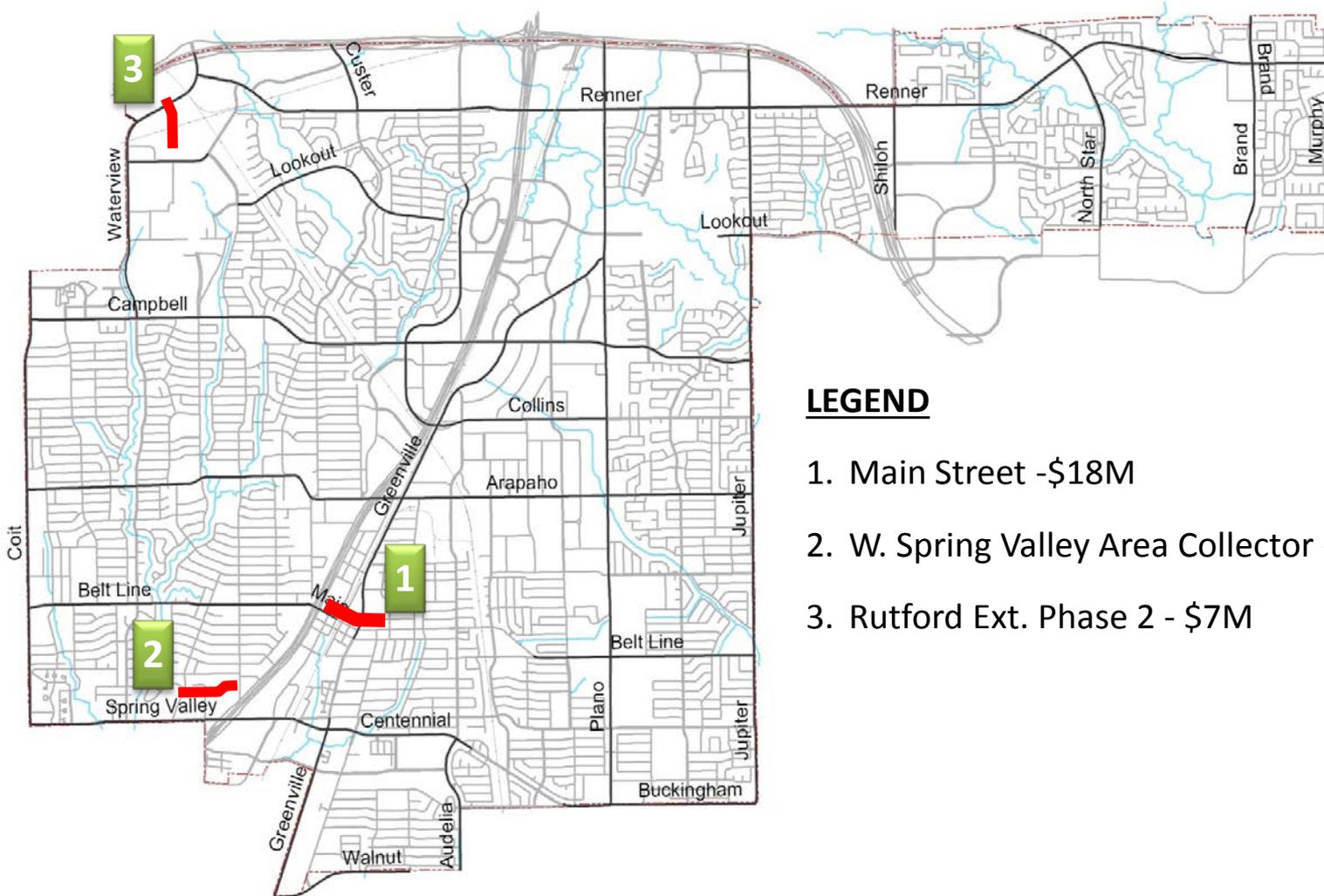


Streets, Alleys, Sidewalks



Streets - New

\$33,000,000



LEGEND

- 1. Main Street - \$18M
- 2. W. Spring Valley Area Collector - \$8M
- 3. Rutford Ext. Phase 2 - \$7M



Streets Rehabilitation - Collectors

\$17,075,000

Project	GO Allocation
E. Lookout Drive – Plano East to Terminus	\$2,400,000
Old Campbell Road – Nantucket to Campbell	\$575,000
W. Prairie Creek – Campbell to Collins	\$4,275,000
Glenville Drive – Campbell to Commerce	\$2,500,000
Custer Road – Campbell to Arapaho	\$3,875,000
Richland Park Boulevard – Park Bend to Walnut	\$800,000
Sherman Drive – Kaufman to Spring Valley	\$950,000
West Shore Drive – Campbell to the alley south of Sherbrook	\$1,700,000



Streets Rehabilitation - Local

\$11,350,000

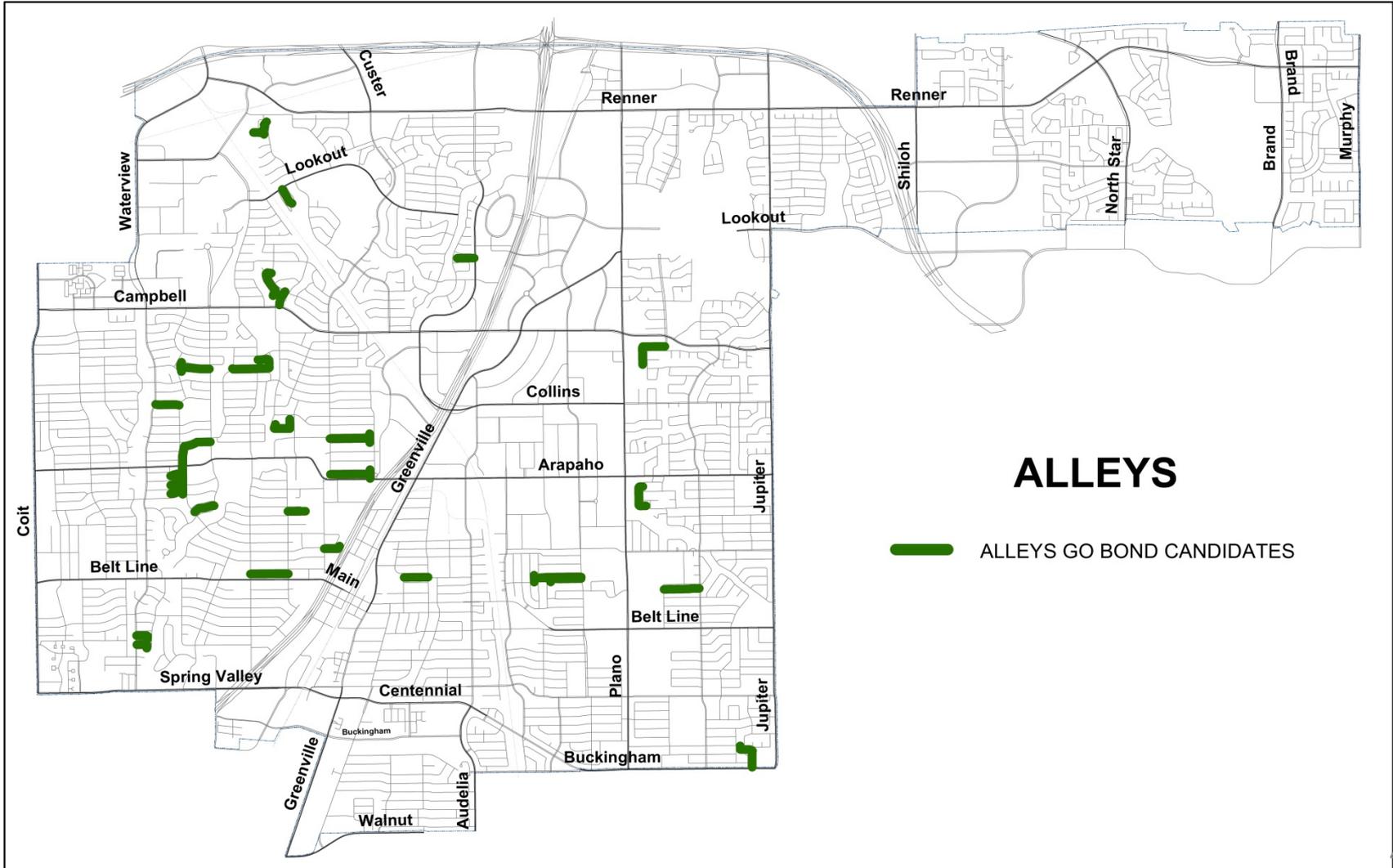
Project	GO Allocation
700 Greenleaf	\$450,000
700 Winchester	\$300,000
700 Scottsdale	\$550,000
600 Scottsdale	\$625,000
700 Downing	\$500,000
900 Lakeview	\$575,000
Bradshaw – Northstar to City Limit	\$425,000
Sherwood – Gentle to Floyd	\$600,000
Nottingham – Hyde Park to Dumont	\$1,300,000

Project	GO Allocation
S. Dorothy – Frances Way to Highland	\$575,000
Wisteria – Melrose to Pinehurst	\$1,600,000
Pinehurst – Wisteria to Floyd	\$650,000
N. Dorothy – LaSalle to Main	\$425,000
Dover – Colfax to Ridgeway	\$425,000
Colfax – Decca to Dover	\$675,000
Provincetown – Melrose to Nantucket	\$625,000
Maple – Abrams to Grace	\$600,000
N. Briarcrest – Pacific to Wake	\$450,000



Streets Rehabilitation - Alleys

\$5,150,000





Streets Rehabilitation - Alleys

\$5,150,000

Project	GO Allocation
1100 Pacific	\$550,000
1100 High Vista, 3300 Canyon Creek	\$140,000
600 Nantucket	\$175,000
400 Rustic	\$85,000
1100 Overlake, 1100 Greenway	\$200,000
500 West Shore	\$150,000
1600-1710 Syracuse	\$200,000
800 Fontana, Lomita and Meadow View	\$215,000
600-700 Kindred, 600 Williams	\$320,000
1300 Buckingham Pl	\$200,000
2000 Fairmeadow	\$200,000
2000 Nantucket	\$100,000
900 - 1000 Crestview	\$325,000

Project	GO Allocation
828 - 834 Teakwood	\$75,000
800 Chadwick	\$75,000
826 - 834 Northlake	\$75,000
400 Fairview	\$150,000
800 Arapaho	\$275,000
900 Redwood	\$140,000
2500 Big Horn	\$125,000
600 Belt Line	\$225,000
24-34 Creekwood	\$175,000
1500 Barclay/1800 Valcourt	\$250,000
500 Winchester	\$125,000
800 Willowcrest	\$200,000
400 W. Arapaho / 400 Lynn	\$400,000



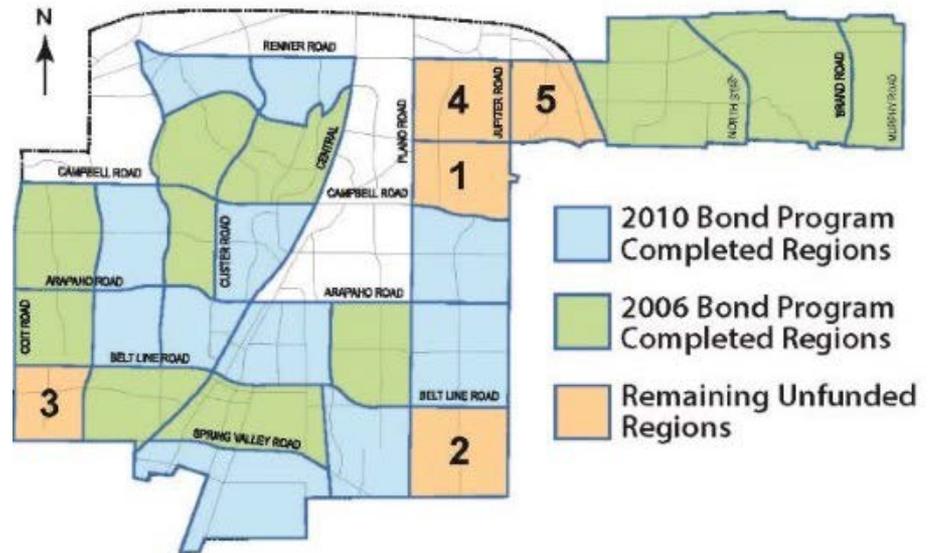
Sidewalks

\$2,410,000

Gap Program - \$410,000



Repair Program - \$2M



LEGEND

- 1. SH190 west of Alma - \$80,000
- 2. Synergy/Renner/Greenside - \$150,000
- 3. Canyon Creek east of Custer - \$30,000
- 4. North Star/Breckinridge - \$75,000
- 5. Renner/Moroney/Brand - (a) \$30,000, (b) \$150,000



Streets, Alleys, Sidewalks Summary

Request	Amount
New Streets	\$33,000,000
Collectors	\$17,075,000
Local	\$11,350,000
Alleys	\$ 5,150,000
Sidewalks	\$2,410,000
Entry Features, Walls, Bridges	\$0
Total	\$68,985,000



Traffic Proposition

Plano Rd

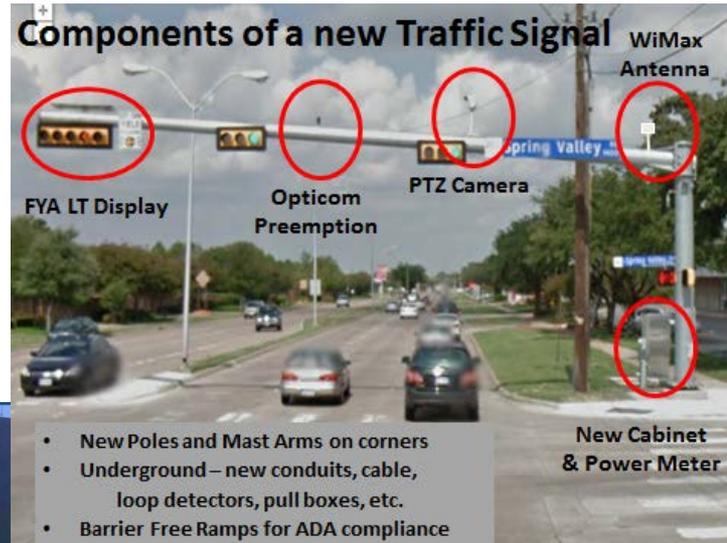
S Plano Rd

ES

Traffic Control Devices

\$4,100,000

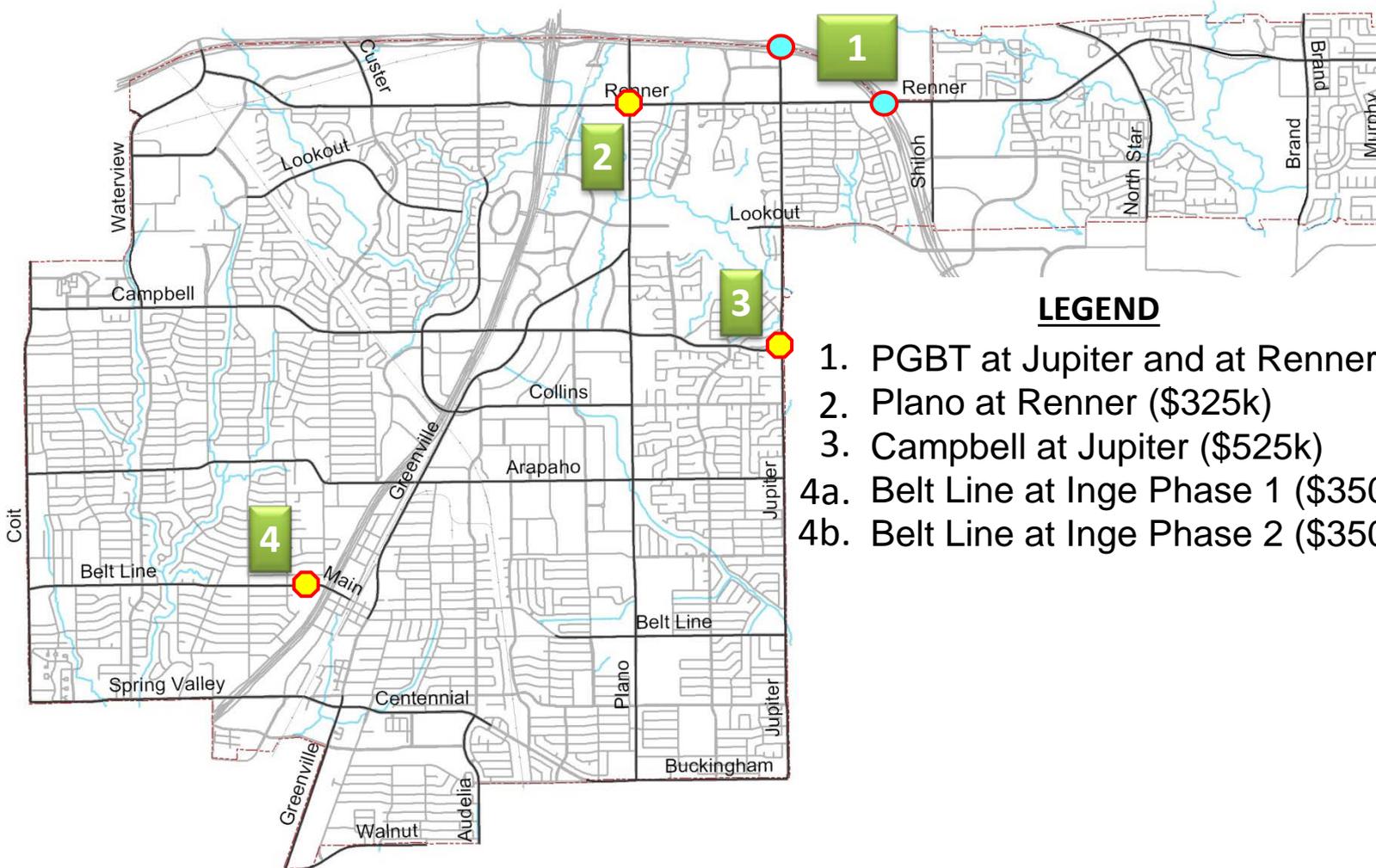
- Traffic Signal Rebuilds - 15 locations (\$3M)
- Traffic Signal Cabinet & Battery Backup Units - 38 locations (\$910k)
- Crosswalk Rectangular Rapid Flashing Beacons - 10 locations (\$190k)





Operational & Efficiency Improvements - Intersections

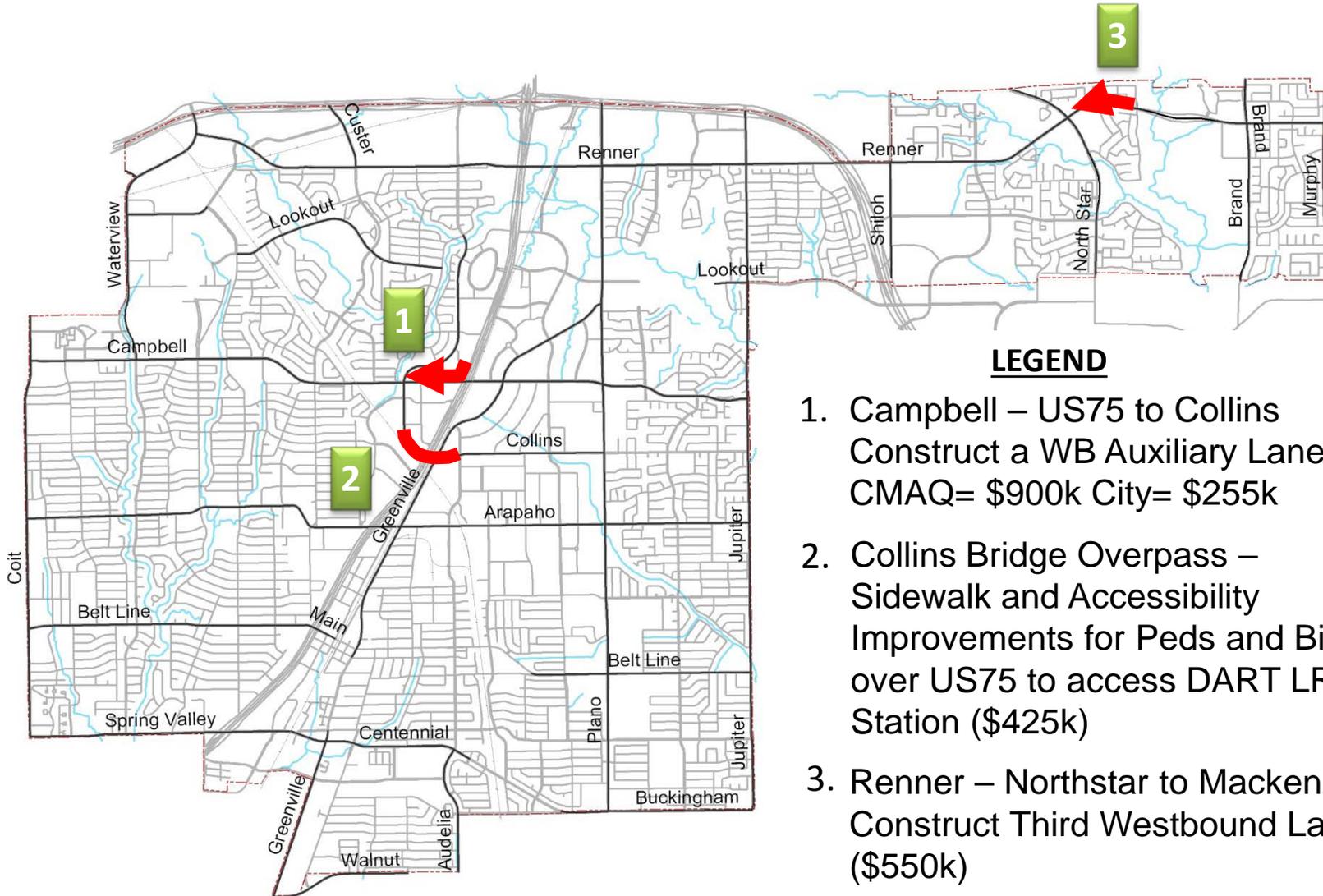
\$2,200,000





Operational & Efficiency Improvements - Streets

\$1,225,000



LEGEND

1. Campbell – US75 to Collins
Construct a WB Auxiliary Lane
CMAQ= \$900k City= \$255k
2. Collins Bridge Overpass –
Sidewalk and Accessibility
Improvements for Peds and Bikes
over US75 to access DART LRT
Station (\$425k)
3. Renner – Northstar to Mackenzie
Construct Third Westbound Lane
(\$550k)



Traffic Summary

Request	Amount
Traffic Control Devices	\$4,100,000
Operational & Efficiency Improvements:	\$3,425,000
• Intersections	\$2,200,000
• Streets	\$1,225,000
Total	\$7,525,000



2015 Requests By Area

Request	Amount
Parks	\$47,326,000
Public Buildings	\$75,550,000
Drainage	\$22,240,000
Streets	\$68,985,000
Traffic	\$7,525,000
Total	\$221,626,000



Considerations

- Both the 5 and 6 year bond program option are No Tax Increase plans
- Existing debt schedule shows significant drop in 2020-2021 due to debt maturing for large capital projects from early 2000's
 - This capacity presents a unique opportunity to undertake a significant multi-phase project that would otherwise be unlikely to take on all at once
- Because debt planning assumptions are conservative, it is possible that the issuance amount of the serial sale's earlier years could be less more than planned and projects could start/conclude sooner than expected
 - It is important to remember that the serial sales will cause projects to have to be implemented in conjunction funding availability



Next Steps

- July 20, 2015
 - Present City Council with additional information regarding projects and possible propositions
 - Project estimates will be escalated to reflect the anticipated cost of future construction and to fit the final issue amount
- July 27, 2015
 - Present City Council with refined/final recommendations for propositions
 - Finalize propositions in advance of adoption of resolution
- August 3, 2015
 - Ordinance calling Bond Program Election planned for City Council Agenda
- August 24, 2015
 - Last possible date for Ordinance calling Bond Program Election to be on City Council Agenda





Considerations

- The Composition of Previous Bond Programs

Proposition	2006 Amount	2006 Percent	2010 Amount	2010 Percent
Streets & Drainage	\$32,210,000	58.56%	\$24,710,000	37.44%
Parks & Recreation	\$8,940,000	16.25%	\$22,645,000	34.31%
Public Buildings	\$4,100,000	7.45%	\$10,495,000	15.90%
Neighborhood Vitality	\$9,750,000	17.73%	\$8,150,000	12.35%

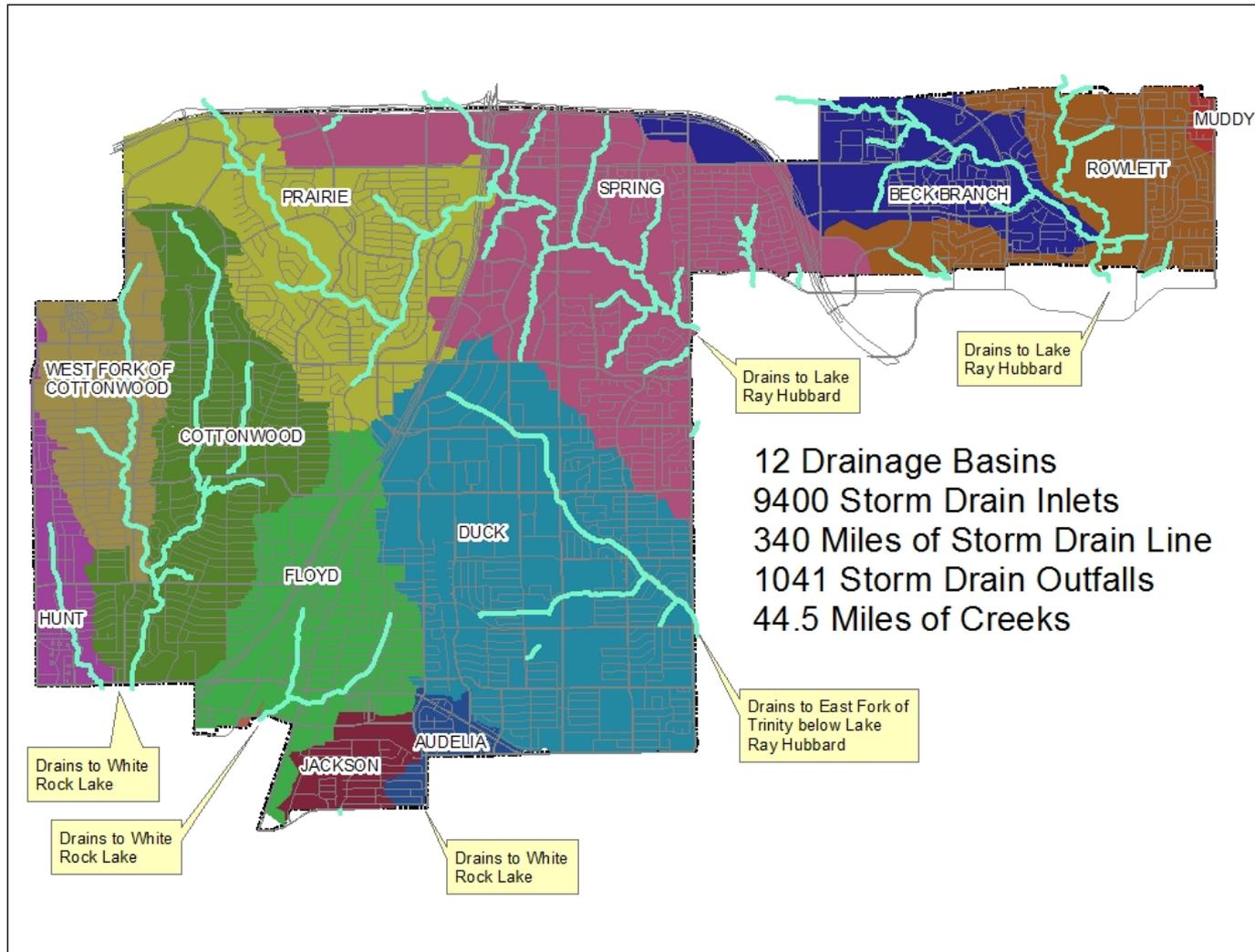
DRAINAGE UTILITY FY 2015-16 PROGRAM UPDATE

City Council Briefing: July 13, 2015

Presentation Overview

- Background
- Work Plan Update
- Proposed FY2015-2016
- Next Steps

Richardson's Drainage Infrastructure



Drainage Utility Background

- Drainage Utility Established - November 28, 2011
- Purposes:
 - Continue to sustain the City's environmental and regulatory obligations for storm water management
 - Enhance maintenance, capital work plans and services in response to community needs
 - Allocate cost of services through an equitable rate method
- Rates:
 - single residential monthly rate of \$3.75 per household
 - commercial monthly rate of \$0.105 per 100 square feet of impervious area which is equivalent to the charge for the average residential property

12-City Review

City	Drainage Utility?	Avg. Res.
Allen	Yes	\$3.00
Arlington	Yes	\$5.25
Carrollton	No	-
Dallas	Yes	\$7.77
Ft. Worth	Yes	\$5.40
Frisco	Yes	\$3.45
Garland	Yes	\$2.88
Grand Prairie	Yes	\$4.35
Irving	Yes	\$4.00
McKinney	Yes	\$2.75
Mesquite	Yes	\$4.00
Plano	Yes	\$4.15
		Survey Avg: \$4.27
<i>Richardson</i>	Yes	\$3.75

Drainage Utility Services Work Plan Update

- City Operations
 - Maintenance
 - Storm Response
 - Inspection and Compliance
- Contract Services
 - Maintenance contracts
 - Engineering Services
- Projects
 - Flood Prevention
 - Erosion Protection

Drainage Utility Services Work Plan Update

	FY 12/13	FY 13/14	FY 14/15
City Operations (inter-fund transfer)	\$ 910,000	\$ 910,000	\$1,025,000
Contract Services	\$ 390,000	\$ 400,000	\$ 440,000
Projects	\$1,385,000	\$1,410,000	\$1,235,000
Total	\$2,685,000	\$2,700,000	\$2,700,000

City Operations supported by the Drainage Utility

Departments and Services

Conveyance, Water Quality, Floodplain Management

- Public Services
 - Maintenance of inlets, pipes, bridges, channels
 - Storm preparation and response
 - Spill response
- Development Services, Capital Projects, Building Inspections
 - Plan review
 - Inspection /Compliance
 - Flood plain management
- Fire Department
 - Hazardous spill response
- Parks Department
 - Street sweeping
 - Public education
 - Park pond maintenance
- Health Department
 - Public education and outreach
 - Inspection and compliance
 - Spill response
- Capital Projects, Water Customer Services
 - Customer service
 - Program administration

City Operations supported by the Drainage Utility - Underway

Storm Preparation and Response

- Winter Ice Storms
- Heavy Spring Rains
- Respond to Citizen's drainage and erosion concerns

Construction Activity

- Drainage Improvement Plan Review and Construction Inspection
- Construction Site Pollution Prevention Inspection/Enforcement

Storm Water Management Plan, TCEQ permit implementation

- Reviewing and assessing procedures and documentation of activities involving 10 city divisions

Flood Insurance Rate Map updates

- Duck Creek Map Revision- Final determination anticipated this fall
- Spring Creek and Prairie Creek Map Revisions – Anticipated 2016
- Rowlett Creek and Beck Branch Map Revisions – Anticipated 2016

Contract Services

- Open Channel Maintenance
- Pipe and inlet Inspection and Cleaning
- Street Sweeping
- Engineering and Planning Studies
- Hydraulic Studies for Flood Risk Assessments

Contract Services - Underway

Open channel maintenance



Contract Services - Underway

Pipe and Inlet Inspection and cleaning

- Inspect condition of inlets and pipes
- Remove debris to maintain capacity
- Make repairs as needed



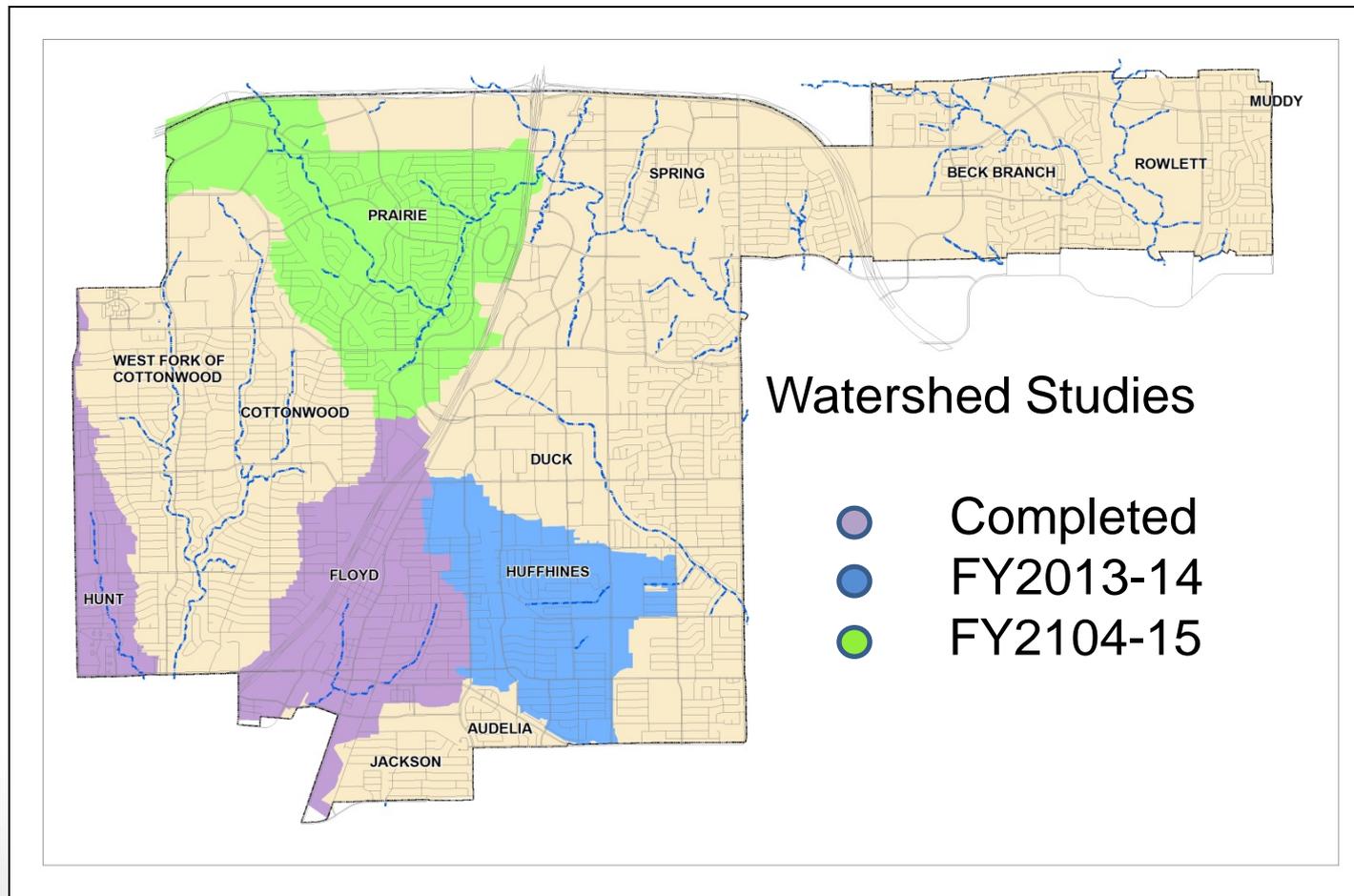
Street sweeping

- Contract sweeping of primary roadways
- Litter and sediment removal



Contract Services - Underway

Prairie Creek Watershed Study and Capital Improvement Plan



Contract Services - Underway

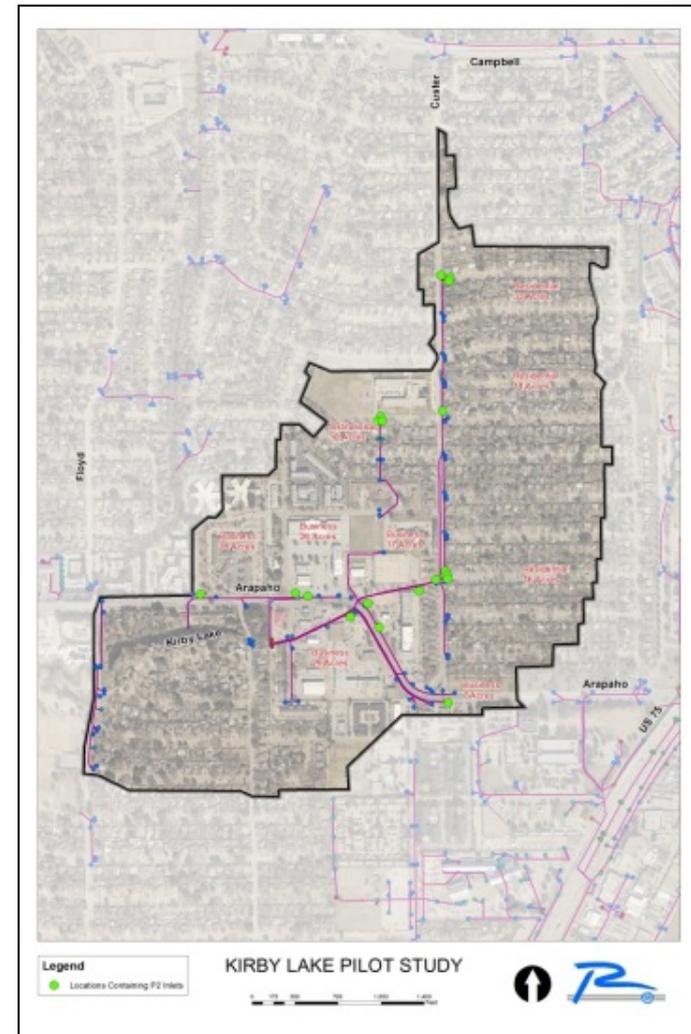
Prairie Creek watershed study and capital improvement plan

- Study will identify and prioritize system deficiencies for future project consideration.
- Fourth comprehensive basin assessment (Hunt Branch Floyd Branch, and Huffhines Branch completed)
- Approximately 2500 acres
- Over 18 miles of underground storm drain pipe
- Scheduled to be completed 2016

Contract Services - Underway

Litter abatement pilot study - Kirby Lake

- Approximately 200 acre study area
- Capture litter and debris near the source
- Determine waste stream information
- Identify conditions for effective placement of inlet insert
- Study results from May 2014 to April 2015



Contract Services - Underway

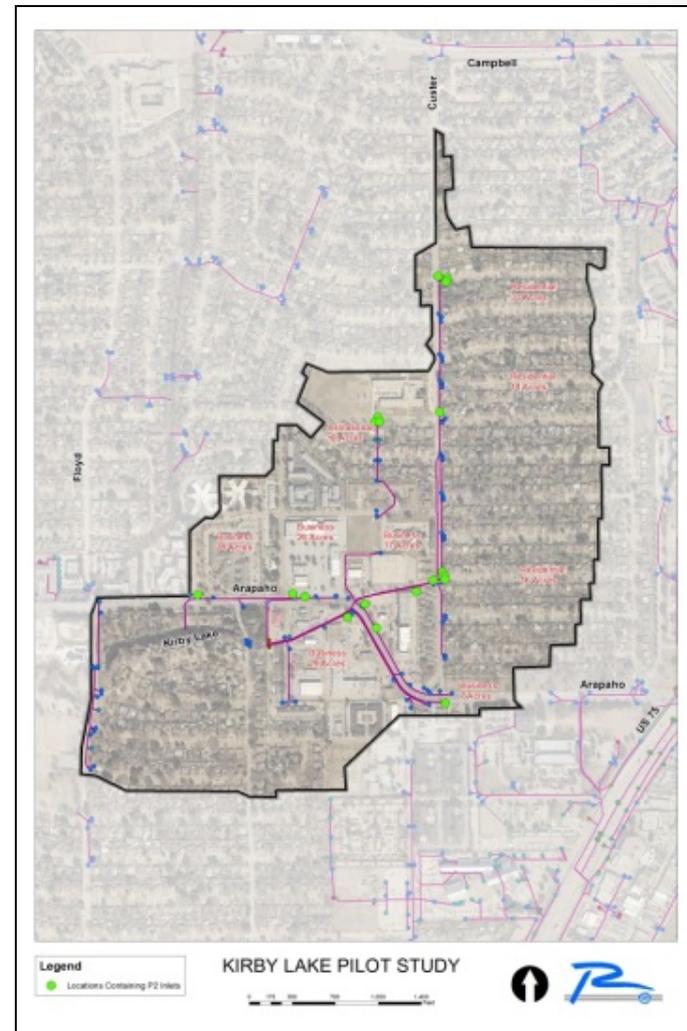
Litter abatement pilot study -Kirby Lake



Contract Services - Underway

Litter abatement pilot study - Kirby Lake

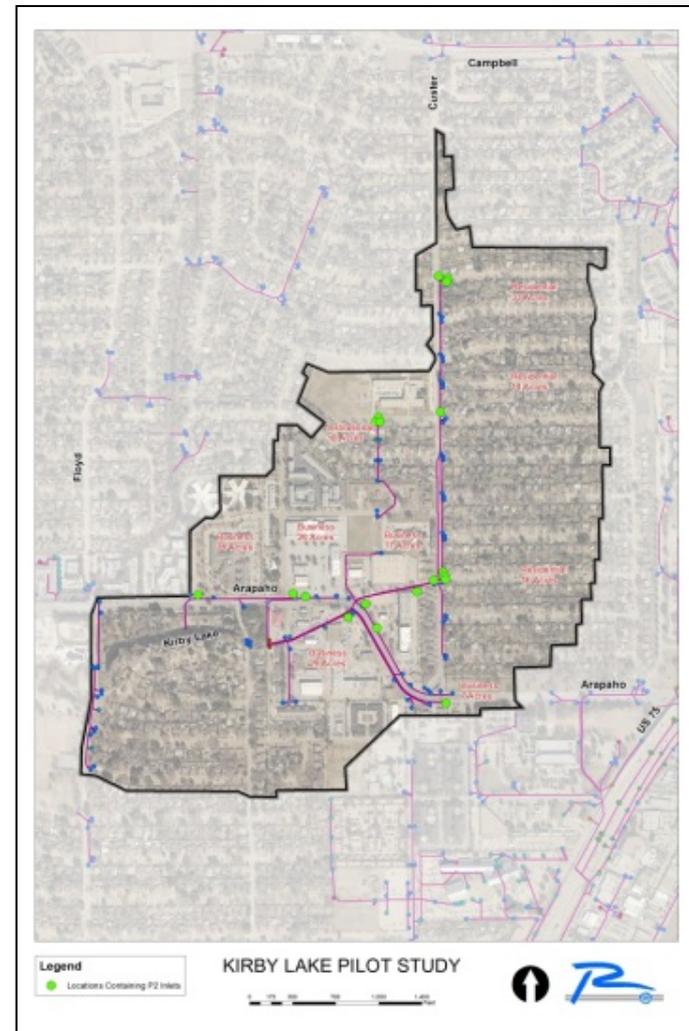
- Study results from May 2014 to April 2015
- Over 7700 pounds of debris captured
- Debris composition by weight:
 - Sediment approx. 67%
 - Yard debris approx. 28%
 - Floatables approx. 4%
- Wide variation in results from inlet to inlet, month to month, service area and land use.
- Yard debris was predominant component for residential areas
- Floatables heaviest in commercial areas and major streets



Contract Services - Underway

Litter abatement pilot study - Kirby Lake

- Data collection will conclude in April 2016
- Information taken from this study will be incorporated into our debris prevention and abatement strategies
 - Public education and outreach
 - Site management practices
 - Street sweeping practices
 - Effective utilization of source controls



Projects (pay-go)

Projects may include:

- Flood prevention projects
- Erosion protection projects
- Bridge and culvert construction and repair
- Spillways/dam structures

Projects - Completed

Dumont Culvert at Hunt Branch

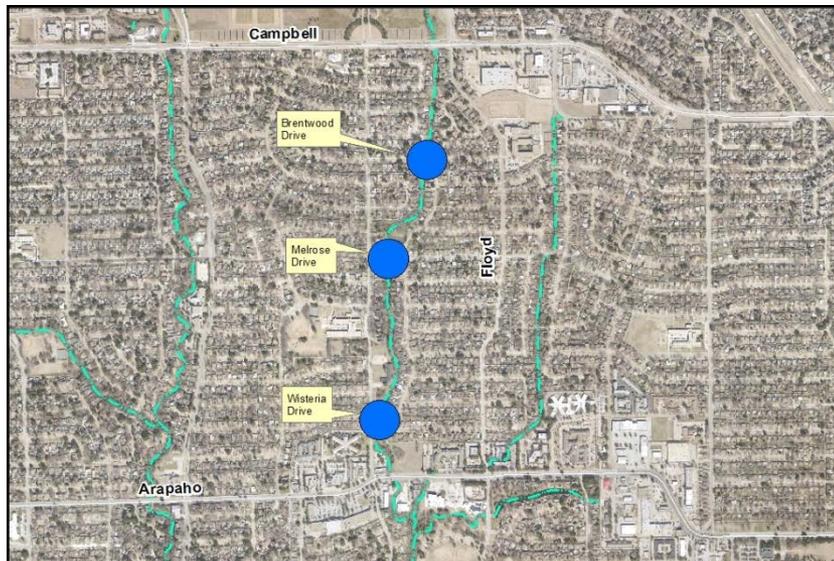
- Flood protection – roadway was overtopped more than 2 feet by the one percent annual chance storm event.
- Undersized culvert was replaced with arch culvert.
- This is also a 2010 bond program Neighborhood Vitality bridge aesthetic location. The enhancements were funded from 2010 GO Bond program.
- New culvert construction completed February 2014.



Projects - Underway

Three Cottonwood Creek Culverts

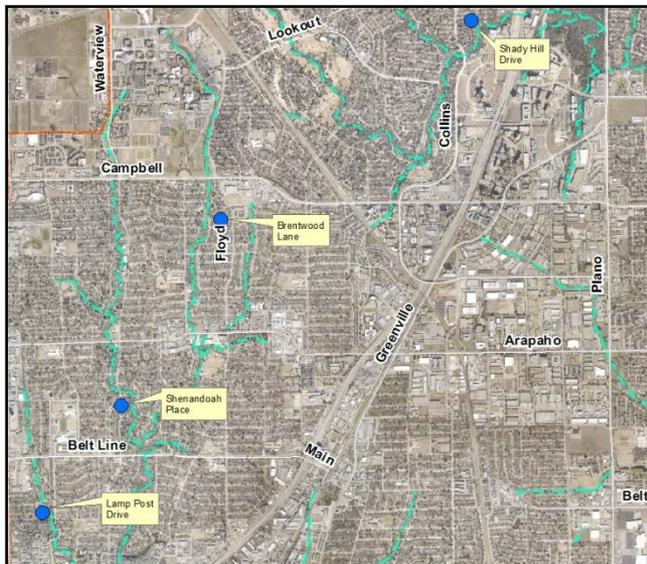
- Brentwood Drive, Melrose Drive and Wisteria Drive
- Flood protection- roadways overtopped by approx. 2 feet for one percent annual chance flood
- Bridge rail enhancements will be included with funding from neighborhood vitality program
- Construction began in June at Wisteria
- Completion of all 3 culvert scheduled for Summer 2016



Projects - Underway

Flood prevention/Storm drain improvements

- Brentwood Drainage Floyd to Wisteria
 - Under construction, scheduled completion 2016
- Shenandoah to Laurel Drainage
 - Bidding, scheduled for construction this fall
- 200 Shady Hill Dr. Alley Groundwater Drainage
 - Under design, scheduled for construction this fall
- Lamp Post Dr. Flood Prevention
 - Under design, scheduled for construction in 2016



Storm Water/Drainage Utility: Proposed FY2015-2016



Drainage Utility Work Plans

	FY 12/13	FY 13/14	FY 14/15	FY15/16 Proposed
City Operations (inter-fund transfer)	\$ 910,000	\$ 910,000	\$1,025,000	\$1,025,000
Contract Services	\$ 390,000	\$ 400,000	\$ 440,000	\$ 575,000
Projects	\$1,385,000	\$1,410,000	\$1,235,000	\$1,100,000
Total	\$2,685,000	\$2,700,000	\$2,700,000	\$2,700,000

City Operations FY2015-16 \$1,025,000

Continuation of drainage services provided by City forces

- Multi-departmental
- Conveyance, Water quality, Flood plain management

Storm Water Management Plan implementation, TCEQ permit

- Review and assessment of existing procedures across several departments
- Increased documentation and reporting

Contract Services FY2015-16 \$575,000

Pipe and Inlet Inspection and Cleaning

Street Sweeping

Litter Abatement Pilot Study- Kirby Lake

Open Channel Maintenance

- Lois Branch Channel
- Floyd Branch at Spring Valley – fall and spring

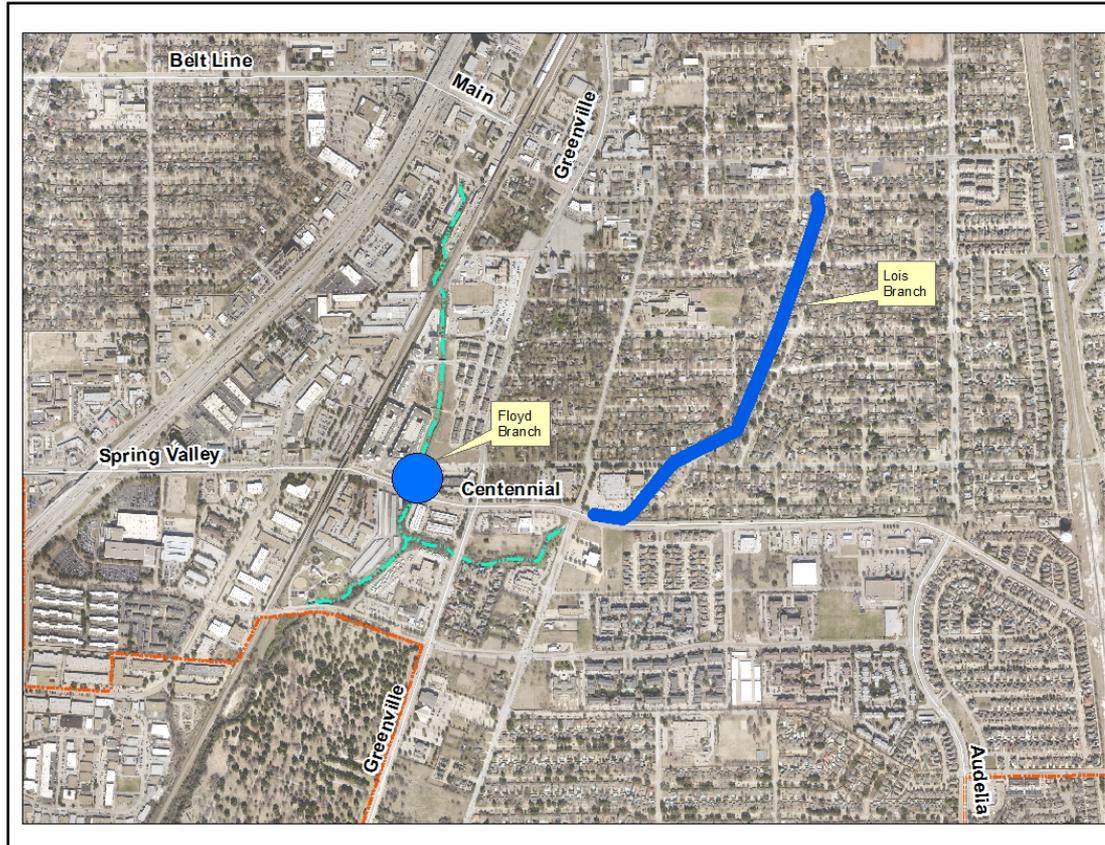
Watershed Study and Capital Improvement Plan

- Cottonwood Creek – 2200 Ac. (5th basin to be studied)

Contract Services FY2015-16

Open Channel Maintenance

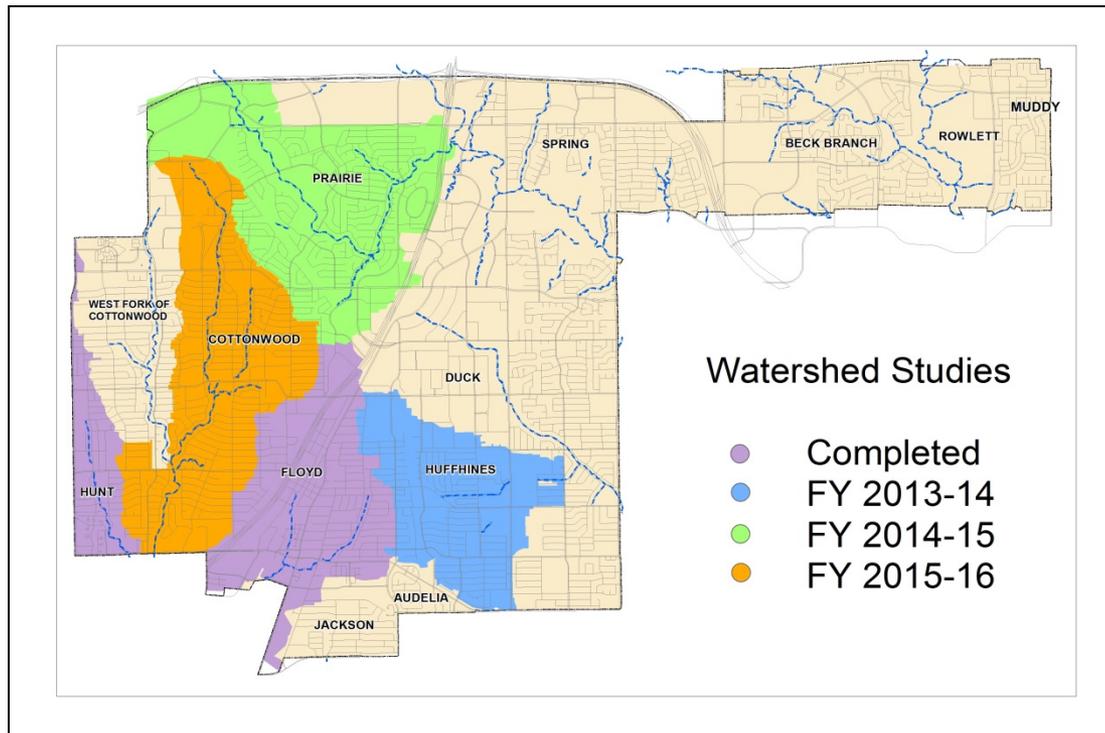
- Lois Branch Channel
- Floyd Branch at Spring Valley – fall and spring



Contract Services FY2015-16

Cottonwood Creek Watershed Study and Capital Improvement Plan

- Study will identify and prioritize system deficiencies for future project consideration.
- Approximately 2200 acres

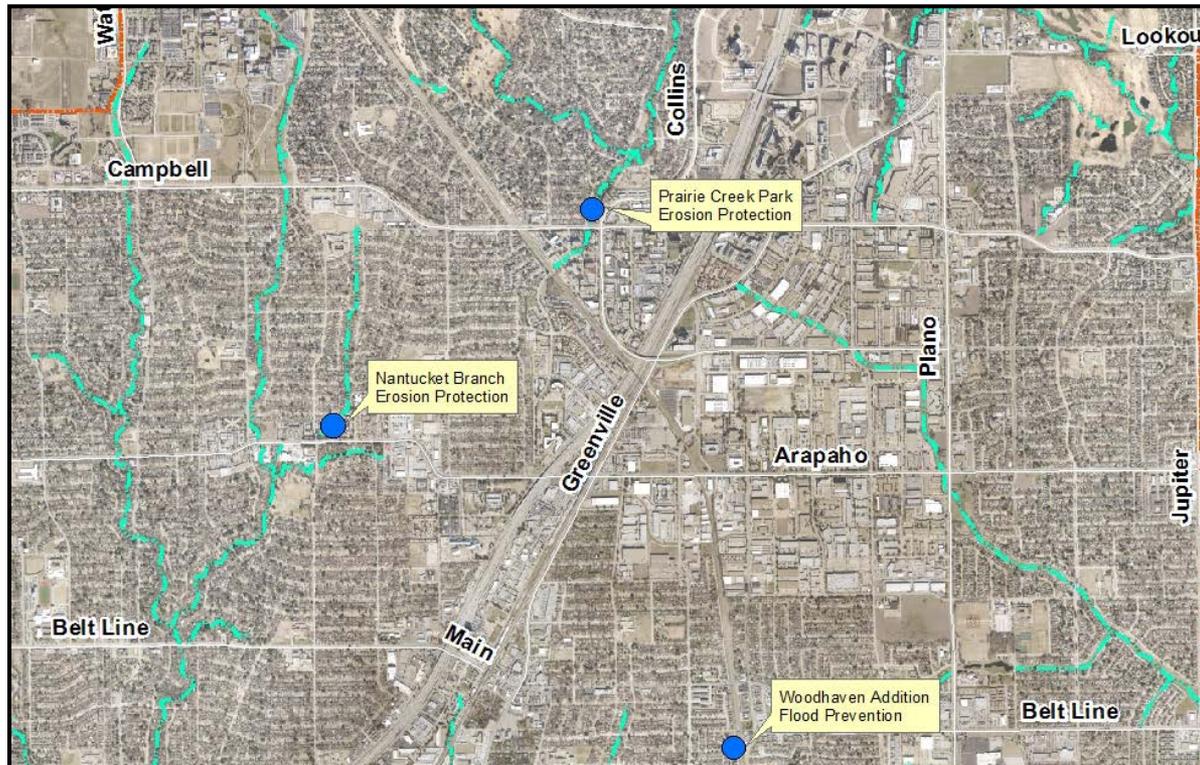


Projects FY2015-16

\$ 1,100,000

Flood prevention/Storm drain improvements

- Woodhaven Addition Flood Prevention \$ 650,000
- Nantucket Branch Erosion Protection \$ 250,000
- Prairie Creek Park Erosion Protection \$ 200,000



Next Steps

- Continue work on current year work plan.
- Future year work plans will build on studies and assessments
 - Watershed studies
 - Erosion and lake assessment
 - TCEQ Stormwater management plan development
- Drainage Utility will target projects generally less than \$0.5 M with some larger projects constructed in phases.
- Studies will also identify larger capital projects to be considered for future G.O. bond program.
- Work plans will be reviewed and updated annually.

