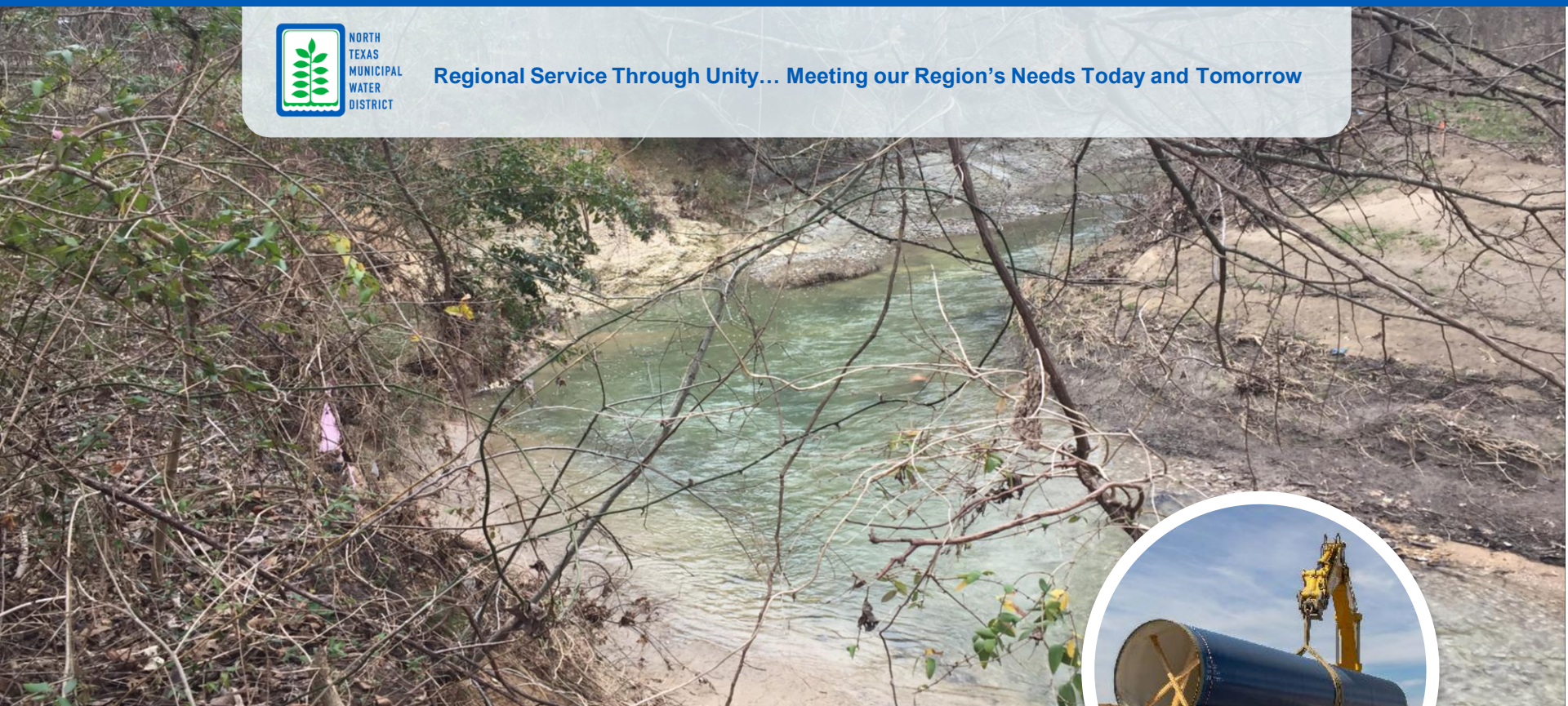




Regional Service Through Unity... Meeting our Region's Needs Today and Tomorrow



WILSON CREEK TRANSFER FORCE MAINS

November 2022

McKinney City Council



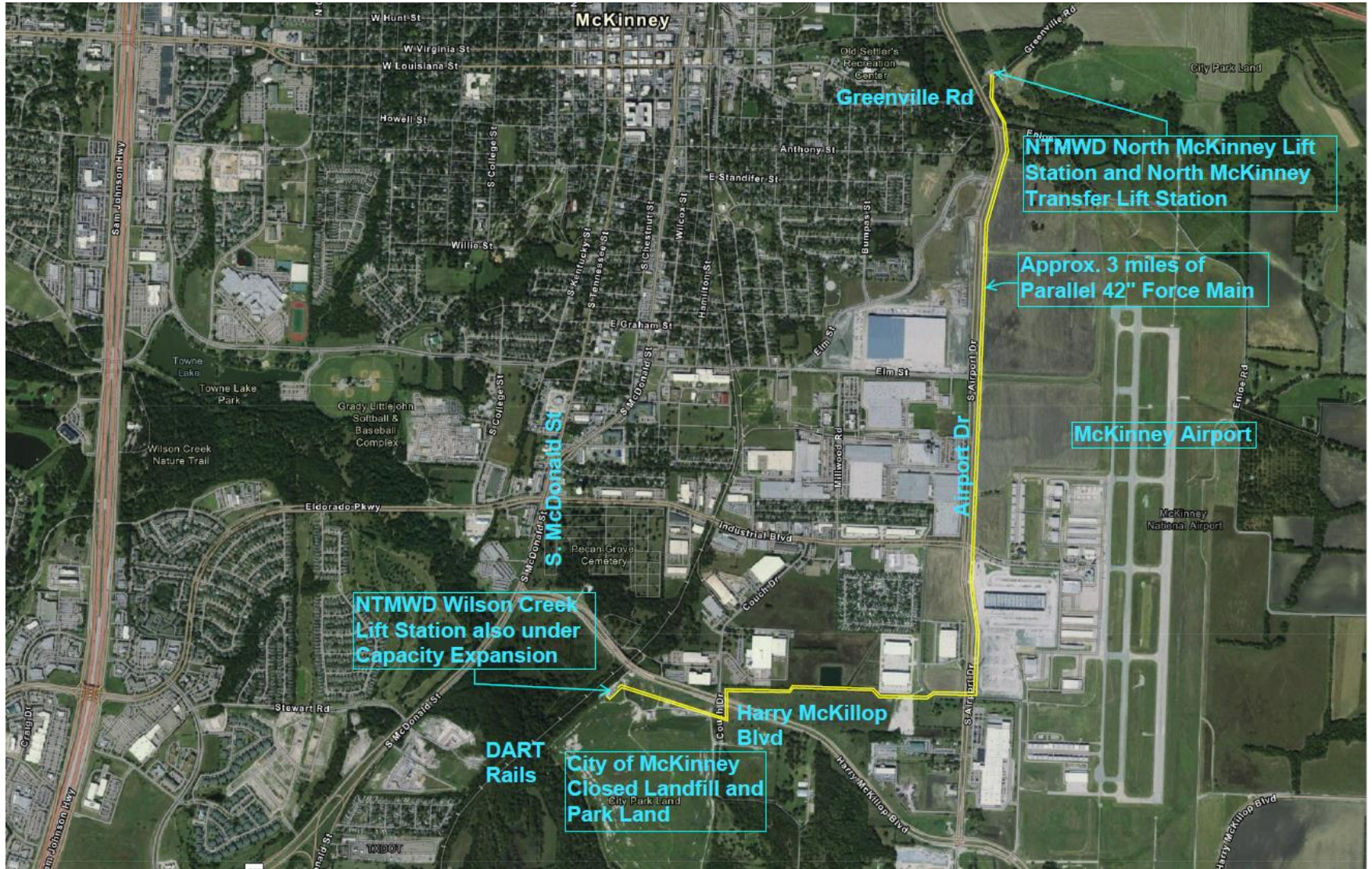
PROJECT OVERVIEW

- **Project Purpose, Scope, and Schedule**

- The purpose of this project is to provide additional pumping and conveyance capacity due to increased growth and flow projections in the North McKinney and Wilson Creek sub-basins of the North Texas Municipal Water District's (NTMWD) Upper East Fork Interceptor System (UEFIS)
- Proposed conveyance improvements consist of approximately 3-miles of new parallel 42-inch diameter force mains including necessary air valves and odor control improvements
- Ultimate conveyance to NTMWD Sister Grove RWRRF
- Construction anticipated from March 2023 through November 2024

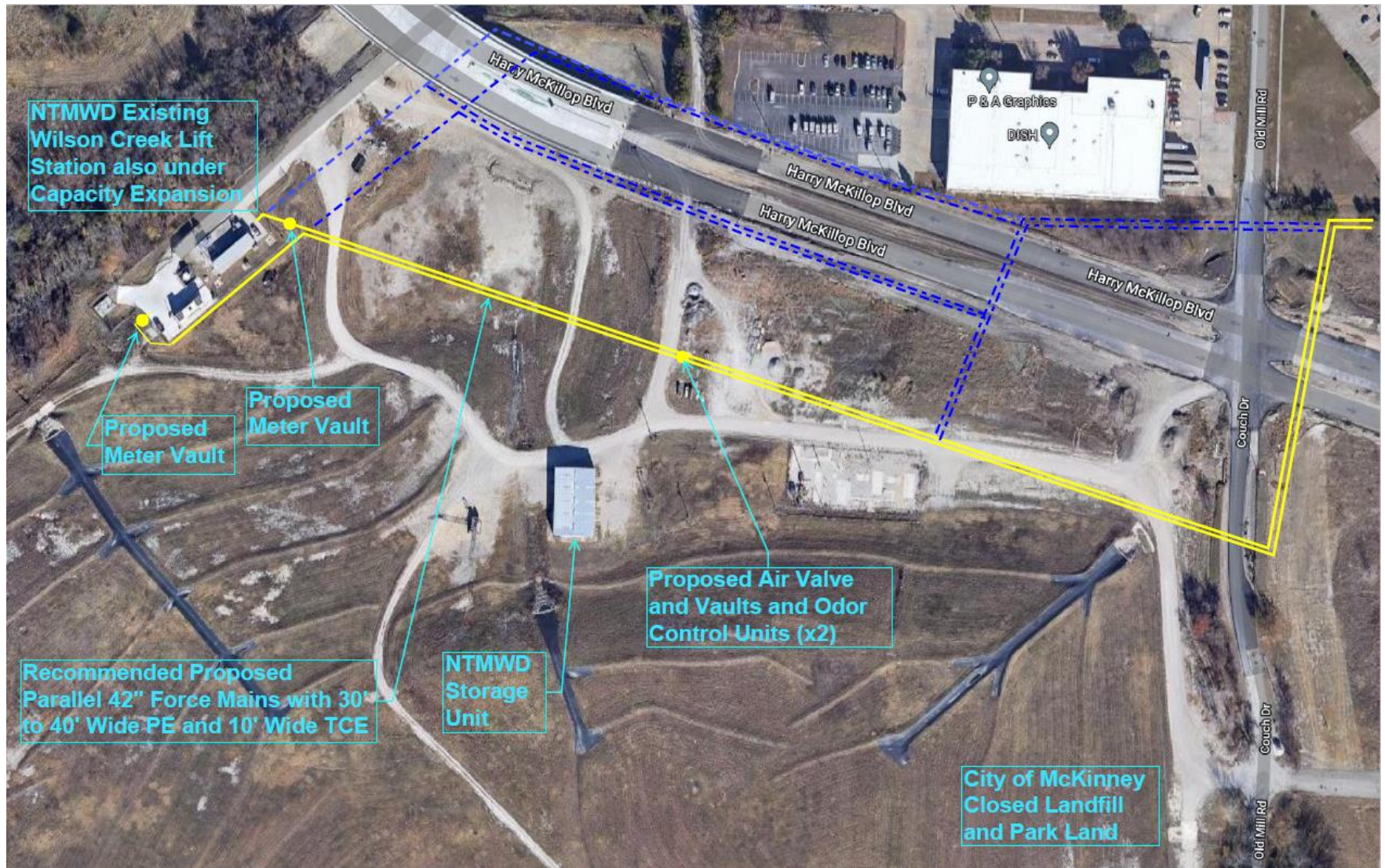


PROJECT LOCATION





PARK LAND CROSSING LOCATION



PARK LAND CROSSING LOCATION

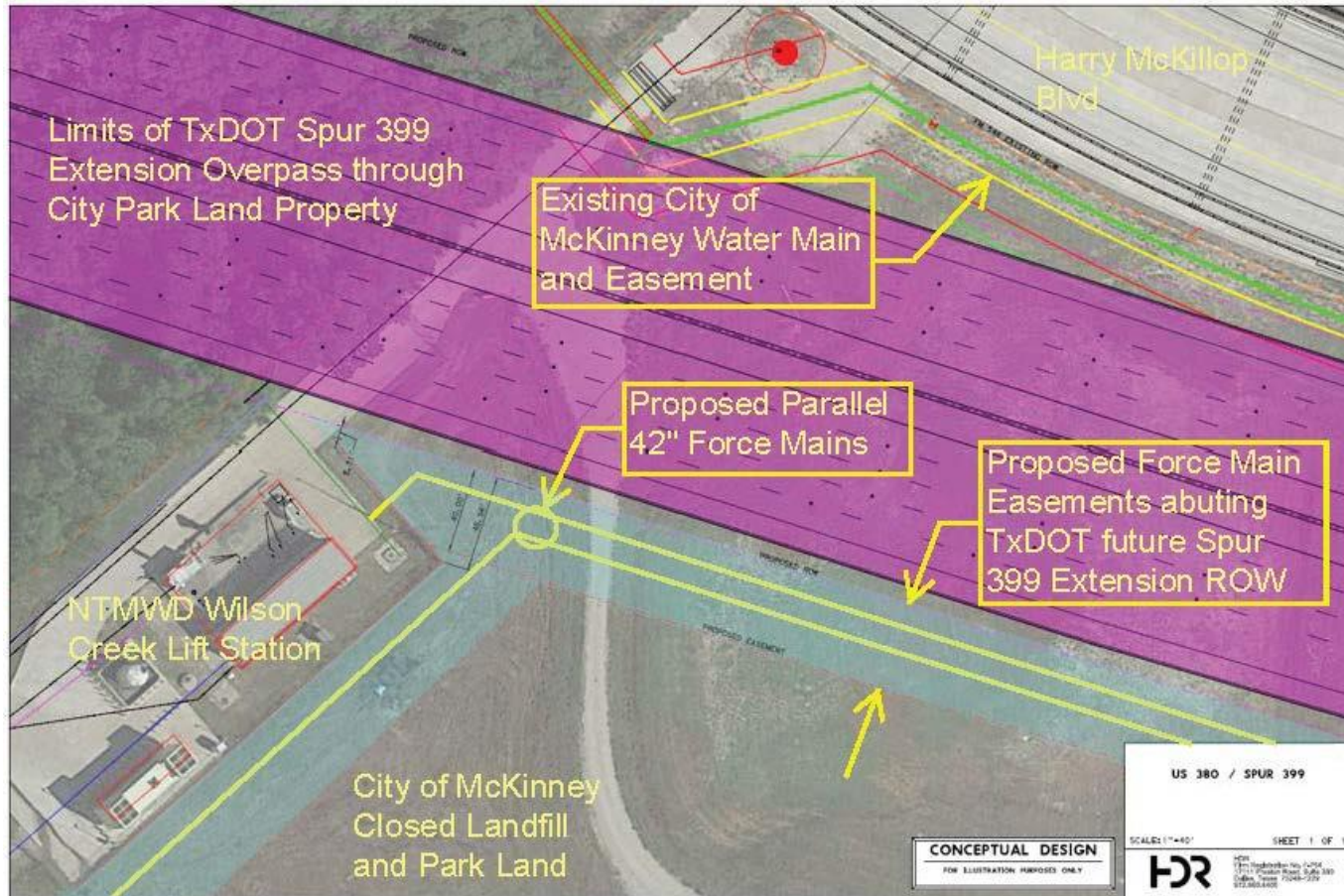
- **Force Mains Alignment**

- Traversing park land is the only viable option to meet goal
- Recommended Alignment (Solid Yellow):
 - Most optimal alignment segment and fiscally responsible use of public funds.
 - Alignment is accessible and constructable
 - Avoids existing and future conflicts (e.g. City of McKinney utilities)
 - Crosses TxDOT future Spur 399 at preferred location between future overpass piers
- Alternative Alignments (Dashed Blue); Evaluated, but not recommended due to:
 - Insufficient construction and maintenance access space
 - Conflicts with existing and future (parallel) below and above-ground utilities and easements
 - Conflicts with existing development/building

TXDOT FUTURE SPUR 399 EXTENSION AT PARK LAND

Other Future Encumbrance Consideration

- TxDOT future Spur 399 Extension through City closed landfill and park land.
- Proposed force mains and easements abut future Spur 399 ROW. Have coordinated with TxDOT during design and reached verbal acceptance to co-locate to avoid future impacts



PARK LAND SITE

- Existing Facilities on Park Land Property

NTMWD
Existing Wilson
Creek Lift
Station



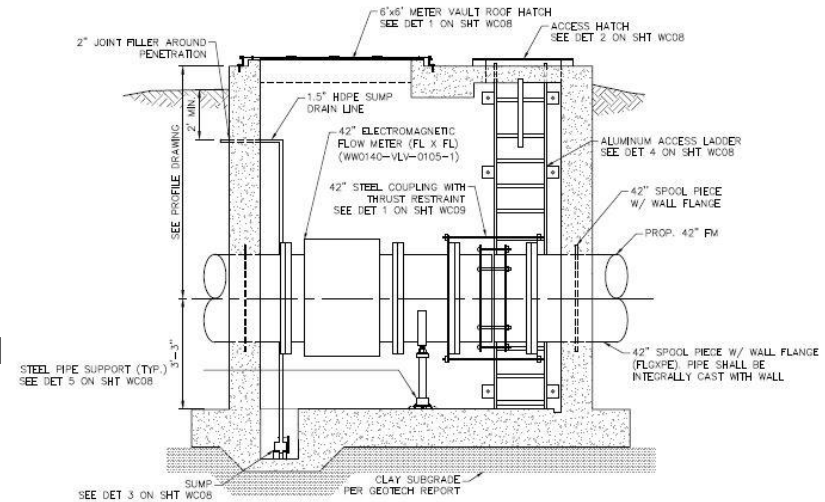
Existing
Landfill,
Landfill Flare
Facility, and
Storage Unit
Building



PROPOSED APPURTENANCES AND EASEMENTS

• Proposed Above Grade Appurtenances

- Two flow meter vaults adjacent to lift station to record flow
- Two air release valve vaults and odor control units at force main high point
- Vaults above grade for maintenance accessibility and to minimize deep force mains. Vaults co-located next to other above ground facilities to minimize harm to park land.



Flow Meter Vault



Typical Air Release Valve and Odor Control



Typical Odor Control Canister

PROPOSED APPURTENANCES AND EASEMENTS

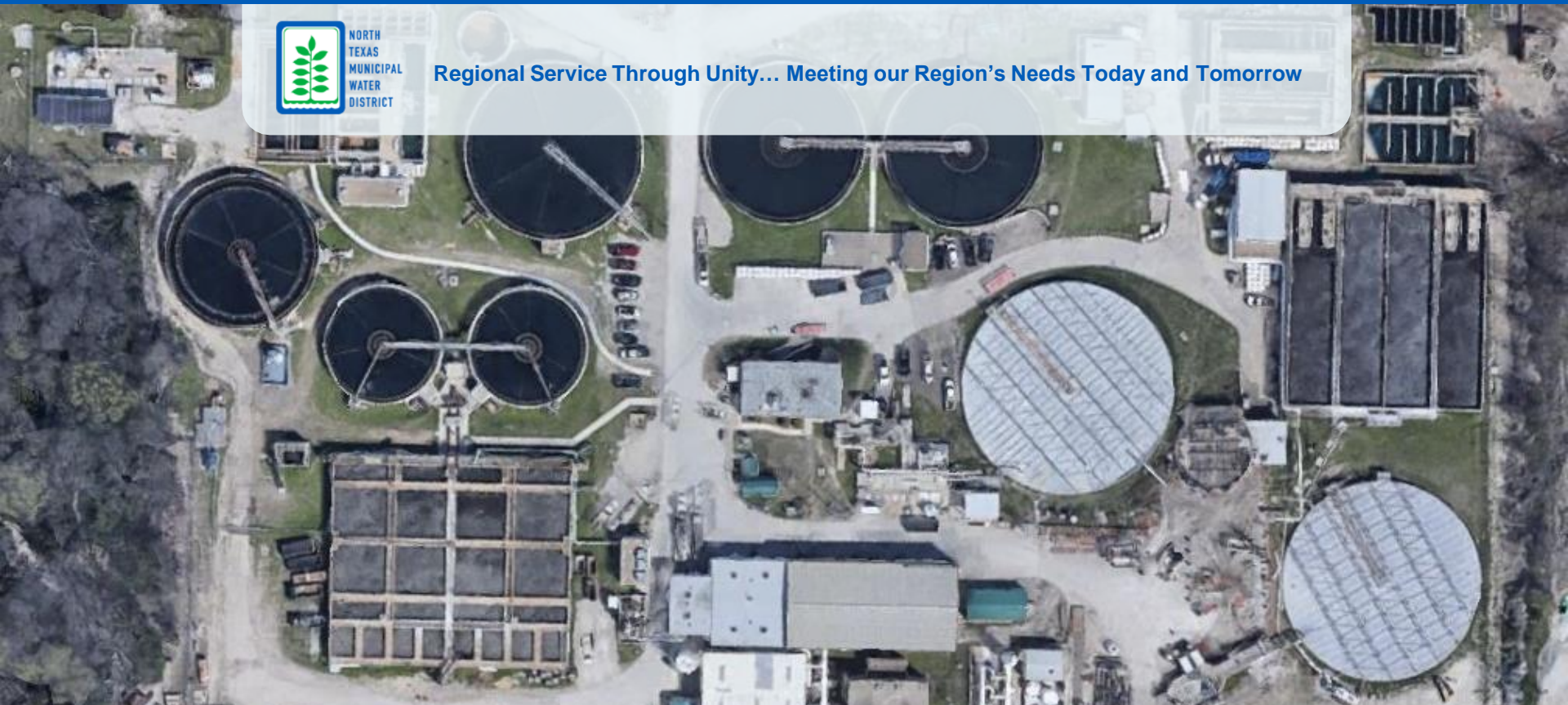
- **Summary**

- Proposed approximately 1.7 acres of permanent easement and 0.5 acres of temporary construction easement on parkland property
- Recommended Alignment is the most optimal alignment segment and fiscally responsible use of public funds.
- Avoids existing and future conflicts with City of McKinney utilities
- Crosses TxDOT future Spur 399 at a preferred location between overpass piers



NORTH
TEXAS
MUNICIPAL
WATER
DISTRICT

Regional Service Through Unity... Meeting our Region's Needs Today and Tomorrow



WILSON CREEK TRANSFER FORCE MAINS

QUESTIONS?



NORTH
TEXAS
MUNICIPAL
WATER
DISTRICT