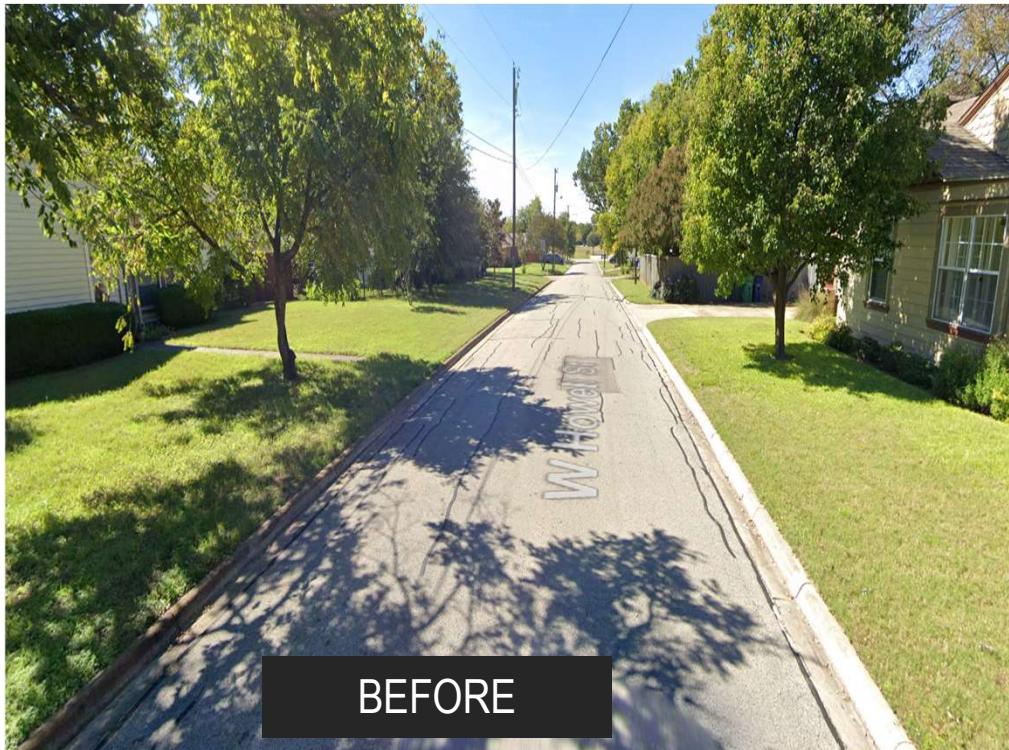


CIP Street Reconstruction Projects

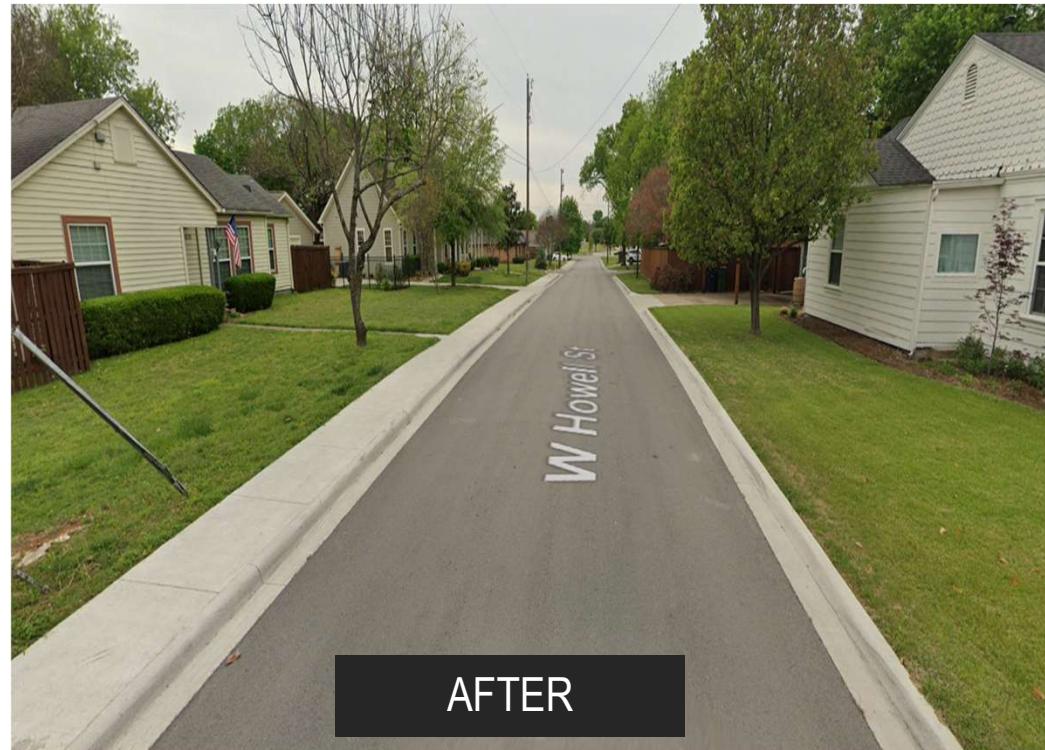


STREET RECONSTRUCTION PROGRAM

- CIP Street reconstruction projects include:
 - Paving, sidewalks, curb ramps, driveways
 - Utilities (water, wastewater, and storm drain improvements)
 - Addition of sidewalks where not currently existing (Council Direction 2023)



BEFORE



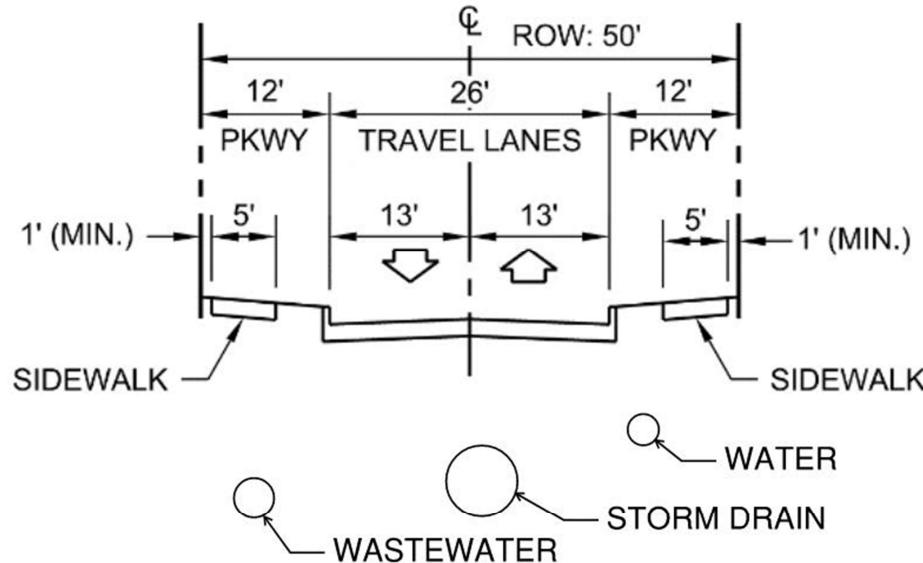
AFTER

STREET RECONSTRUCTION CHALLENGES

- Areas of Limited Right-of-Way
 - Requires city-initiated ROW acquisitions (not always supported).
 - Can be costly for long corridors.
- Areas with Significant Grade
 - May impact driveways and intersections or require retaining walls.
 - Can add a significant cost to projects.
- Conflicts with Franchise Utilities
 - Typically requires long lead time to relocate and may require additional ROW
- Areas with Mature Landscaping
 - Street, sidewalk, or utility construction may impact critical root zone and require removal of mature trees in the ROW (not always supported).
 - May disrupt character of established neighborhoods and may lead to resident opposition to the project.

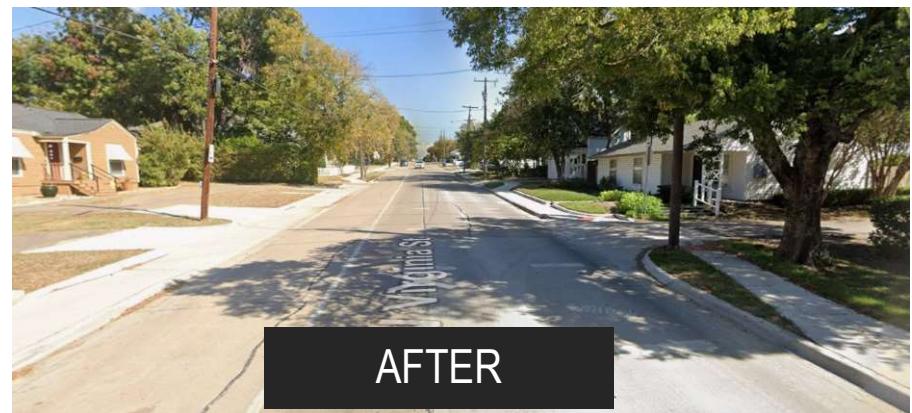
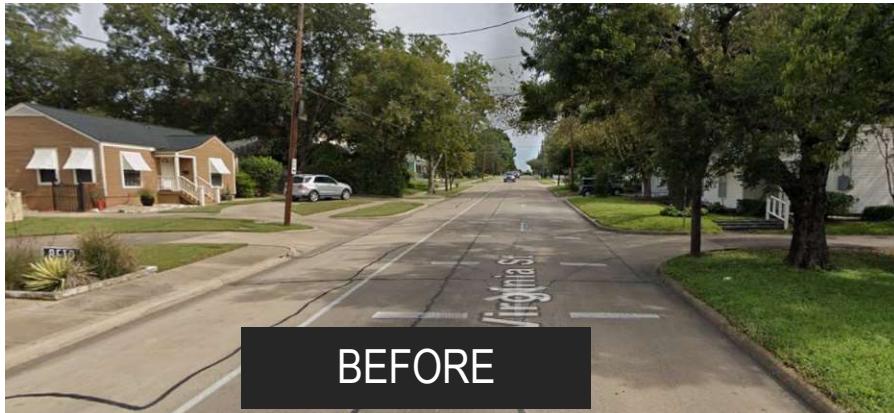
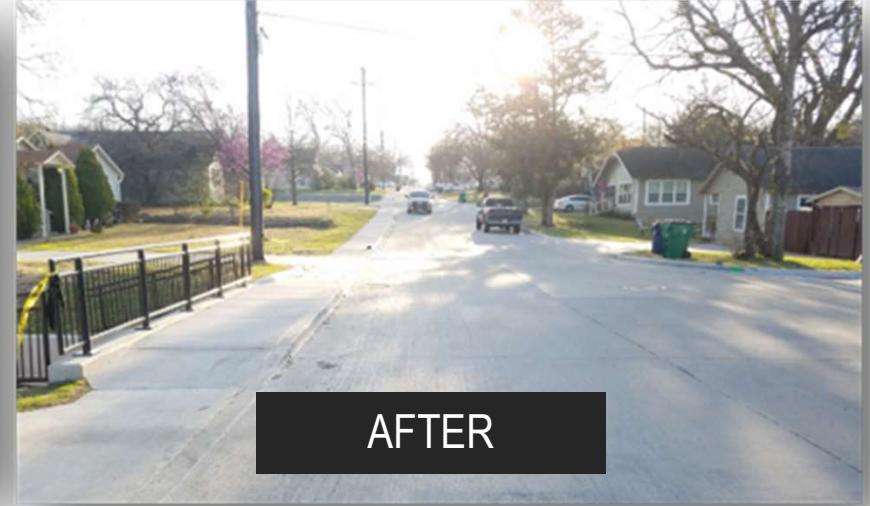


ACCOMMODATING IMPACTS



- Evaluate constraints and street, sidewalk and utility configuration holistically on a case-by-case basis
- Reduce street width
- Eliminate sidewalk on one side of the block
- Relocate sidewalk adjacent to curb
- Meander sidewalk or bridge across root zone (if space allows)
- Consult arborist to evaluate post-construction tree survivability
- If removal is unavoidable, plant a replacement tree within the ROW if possible (using appropriate species selection, root barriers, and best practices)

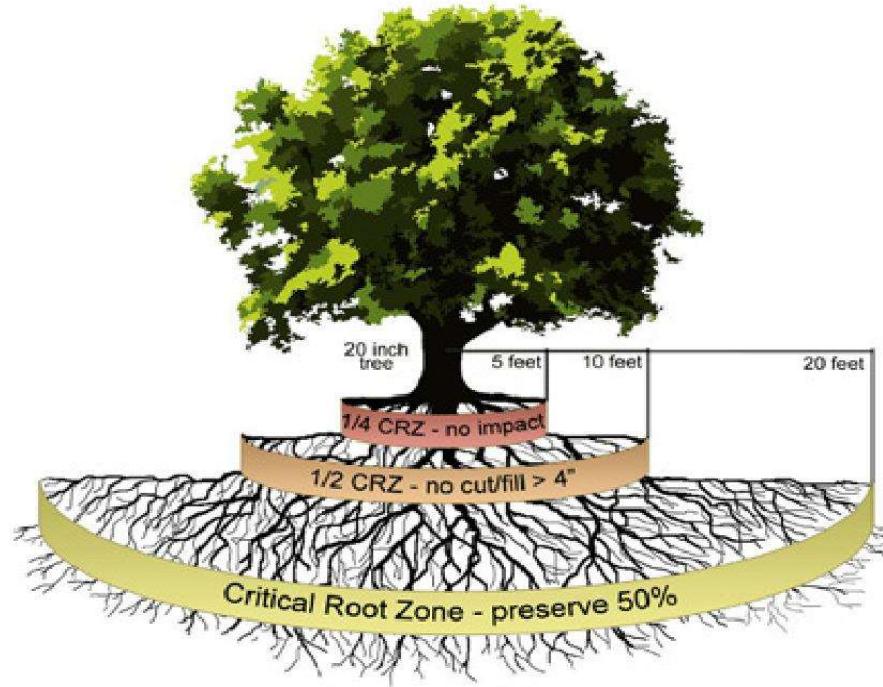
STREET IMPROVEMENT CHALLENGES



TREE CONSIDERATIONS

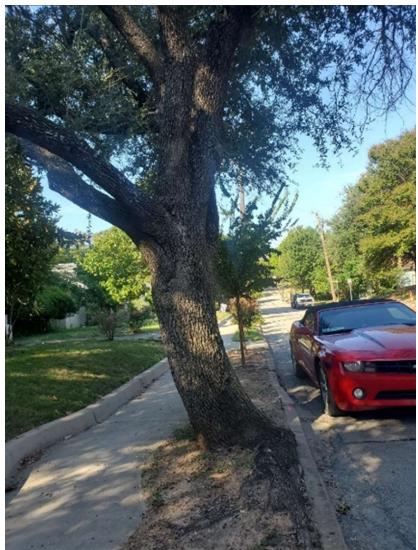
The Critical Root Zone - Development Impact Zones

Example: 20 inch diameter tree



Healthy trees may tolerate CRZ infringements as large as 1/3 of the total CRZ area, but trees that are extremely large, old, under stress or more sensitive to construction impacts will have lower tolerances. For example, young, healthy trees growing in good sites may have a ratio of 1:2, while older, sensitive trees growing on poor sites may have a ratio of 1:4 or more.

TREE CONSIDERATIONS



KEY TAKEAWAYS

- Street reconstruction is challenging in downtown areas, due to limited ROW, issues with grading, mature landscape, conflict with utilities.
- Engineering staff makes every effort to minimize removal of existing trees resulting from roadway reconstruction.



QUESTIONS?

