



Waller County Road and Bridge

Maintenance • Engineering • GIS

775 Business 290 East
Hempstead, Texas 77445
(979) 826-7670

Operations Report – Second Quarter FY 2025

Mission Statement: To provide safe and reliable infrastructure to enhance the quality of life for our citizens, businesses, and visitors through innovation, efficiency and accountability.

Submitted by: J. Ross McCall P.E., County Engineer

Maintenance

Maintenance operations continue to move forward on schedule. Material availability, specifically asphalt emulsion oil, continues to impact productivity. A plan to expand and repurpose existing oil storage tanks will be presented next quarter.

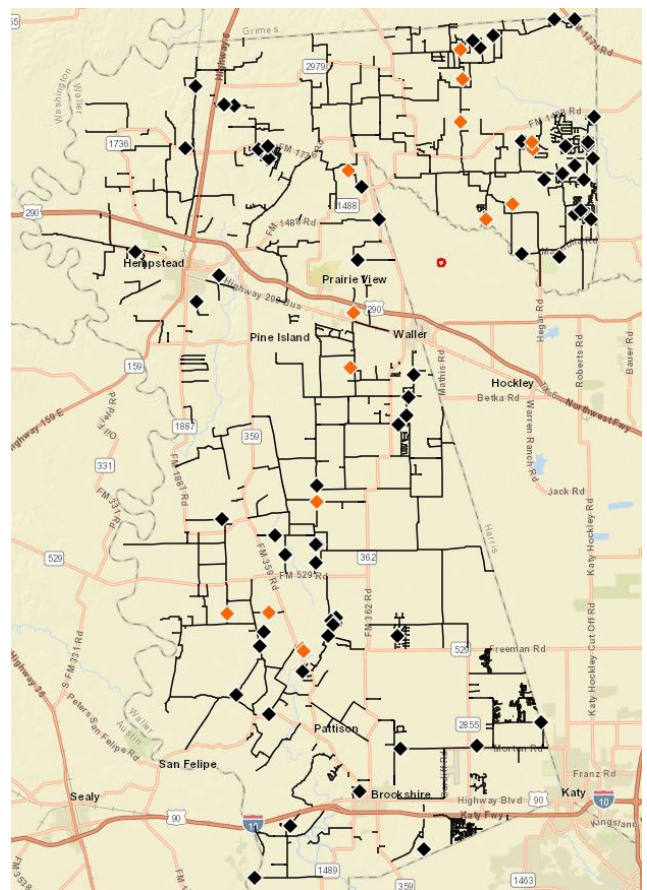
H&C completed their contracted seal coat roads, while internal county crews continue to rehabilitate and treat pavement.

Achievements this quarter include:

- H&C contracted seal coat roads completed.
- Second round of right-of-way mowing completed.
- Herbicide application on right-of-way completed.
- Assisted in annual department audit.
- Privacy fence and solar powered gate to secure stockpiles.

Right: Each maintenance request is entered into Asset Essentials to be tracked. This map shows locations and priorities of all work orders. This information was useful in identifying some inefficiencies with our driveway permitting process.

Below: The Sheriff's Office assisted in the construction of a new privacy fence to improve aesthetics and secure county equipment.



Roads completed this quarter include:

- Addie Gee Road: FM 1887 to 1.0 mile East
- Murrell Road
- Buller Road
- Waller Gladish Road
- Sterling Road
- Marti Lane
- Kelly Road: West of SH 6
- Hoff Road
- Cross Pasture Road
- Springer Road
- Tompkins Road
- Deerbrook Drive

Remaining roads to be repaired this season include:

- Avenue J: Pattison City Limits to End
- Cochran Road: FM 362 to Ray Wright Road
- Grove Park Drive
- Garrett Road: Robichaux to Buller Road
- Wilpitz Road: IH 10 to Bessies Bayou
- Peachridge Road: IH 10 to Elberta Lane
- Riley Road: Newland to Walnut Ridge – Asphalt Overlay Project
- Addie Gee: FM 359 to Grace Lane – Asphalt Overlay Project
- Reids Prairie: FM 362 to Texas Oak Road – Asphalt Overlay Project
- Old Houston Road: Clear Creek to Grace Road – Asphalt Overlay Project
- Morton Road: City of Katy to 2.5 miles West (Bond Project)
- Woods Road: IH-10 to Twinwood Pkwy (Bond Project)

The following projects require engineering design and bid documents. These projects are not expected to be delivered this season given current department resources and schedules.

- Magnolia Road: Murrell Road to County Line
- Riley Road: FM 1774 to Wade Road

For a full list of maintenance projects and expected schedules, refer to Appendix A.

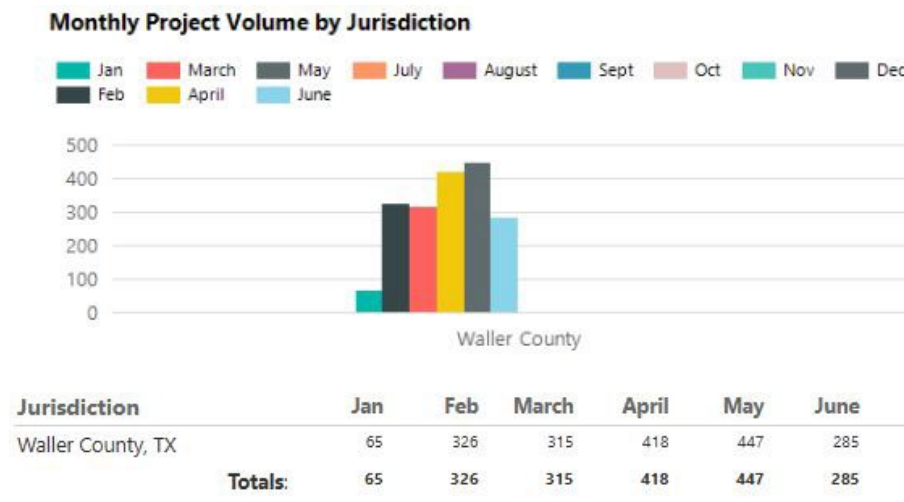
Second Quarter Work Orders (FY 25)	
Type	Number
Pavement	182
Vegetation	94
Drainage	27
Signs	59
Shop	7
Driveways	33

Second Quarter Work Orders (FY 25)			
	Originated	Completed	Open
Number of WO's	74	408	242

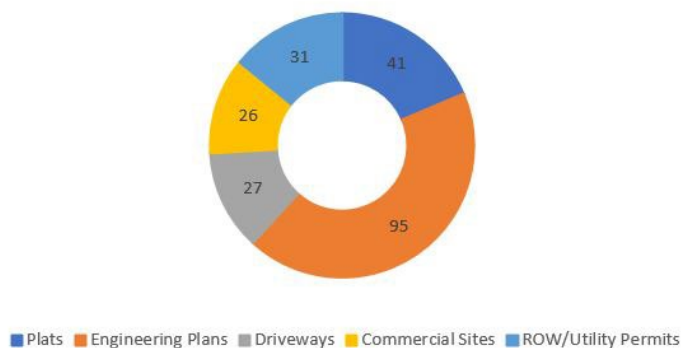
Development Services

We continue to improve our processes with MGO Permitting Software to reduce response times. A few takeaways include:

- Right-of-Way (Utility) permit process has been updated.
- Driveway installation permits are hindering ditch maintenance work orders.
- Residential building permits and 911 Addressing functions are running smoothly.
- Focusing on improving plan review process in 3rd Quarter.



Number of Open Requests



Left: Engineering plans and plats consume a lot of staff review time. The focus for the next quarter is to improve the online permitting process for the customer and refine internal processes.

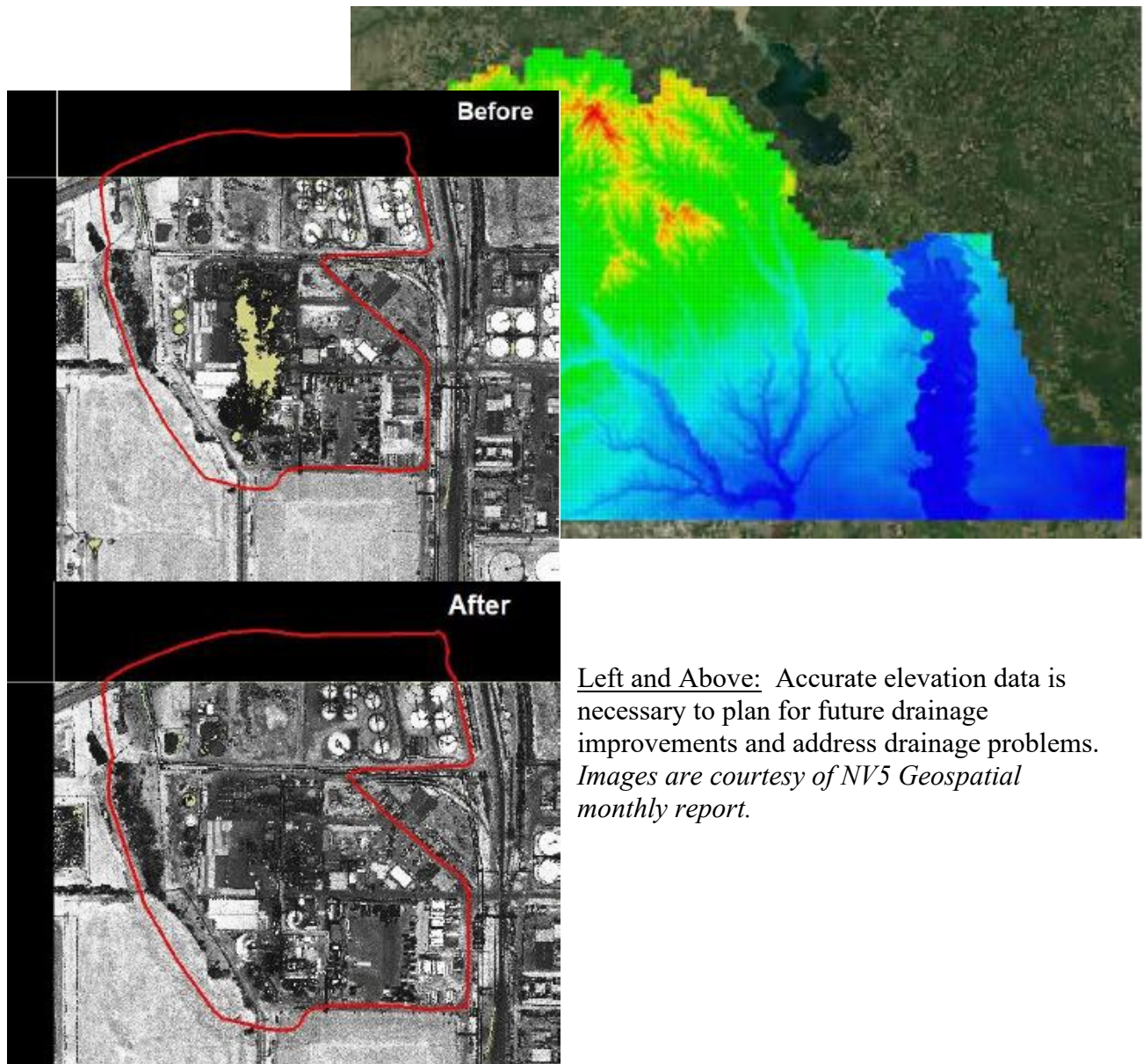
Right: Residential building permits and 911 Addressing continue to function in an efficient manner. MGO Software has been beneficial in tracking these submittals.

Permits Issued		
	1st Quarter	2nd Quarter
Subdivisions	32	4
911 Addresses	152	158
Driveways	27	34
Commercial Sites	38	23
ROW/Utility Permits	24	1
Building Permits	336	632

Engineering Studies and Projects

Houston-Galveston Area Council Light Detection and Ranging (LiDAR) Project

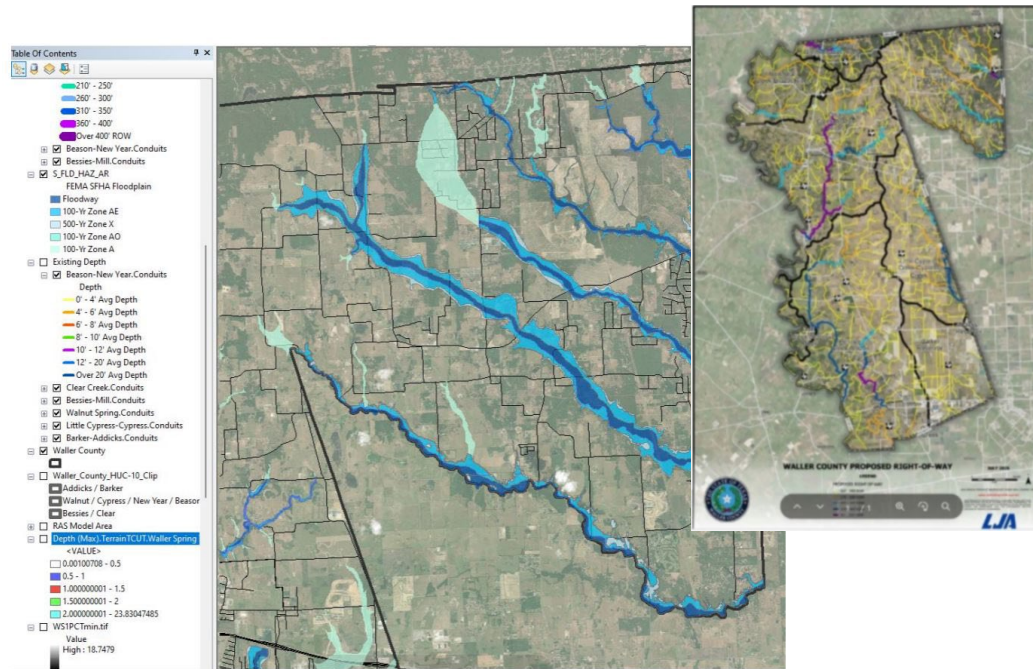
This project is a partnership with area counties to gather current elevation data and land use that will be used to analyze floodplain, develop drainage plans, and update watershed and hydrologic models. Project is 85% complete with final LiDAR data expected to be available at the end of 2025.



Left and Above: Accurate elevation data is necessary to plan for future drainage improvements and address drainage problems. *Images are courtesy of NV5 Geospatial monthly report.*

Waller County Master Drainage Plan (GLO CDBG-MIT)

This grant funded study analyzes drainage hydrology and hydraulics within Waller County. The study's results will be used to determine drainage easement needs and plan for future drainage mitigation measures. Please submit drainage comments/concerns to their planning page found at: www.wallercountymdp.com



Above: The County's consultant, LJA Engineering, has gathered extensive hydrologic and hydraulic data to accurately model the floodplain. *Image is courtesy of LJA Engineering's Waller County Master Drainage Plan status update.*

Riley Road at Birch Creek Bridge

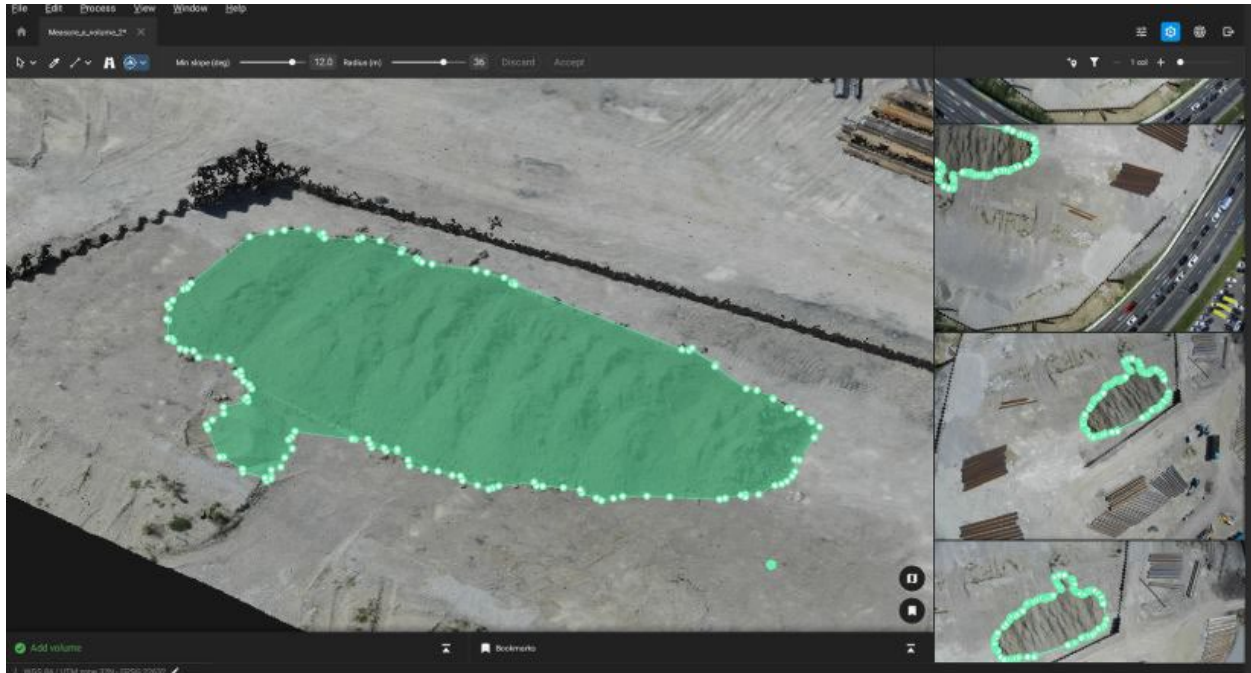
This two-lane bridge has been designed to allow for future widening to four-lanes without impacting traffic. The County will receive bids in July with construction starting later in the Summer.

Clay Road: Schlipf Road to Bartlett Road

This project consists of replacing the existing asphalt road with a 2-lane concrete curb and gutter road with storm sewer, and is funded by the developer, Astro Sunterra, LP. This project will become half of the ultimate 4-lane concrete boulevard from Schlipf Road to Pitts Road being constructed under the Mobility Bond Program.

GIS/911 Addressing

While preparing for this year's annual audit, the GIS team noticed an opportunity to improve the material inventory process. Our department is preparing a procedure to routinely fly material stockpiles with a drone to track material usage. This concept will require the use of PIX4D drone software.



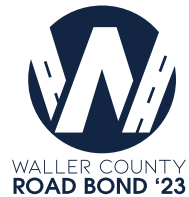
Above: Pix4D software will allow drone operators to measure aggregate stockpiles. This is useful for inventory control, budgeting and during the auditing process. *Image courtesy of PIX4D Software.*

Financial

The Road and Bridge Department will remain within budget for FY 2025. Equipment maintenance costs are expected to exceed the original budgeted line item; however, we are minimizing increases by auctioning off unused equipment and adjusting our equipment rental strategy. In addition, Asset Essentials is being used to track preventative maintenance of equipment. Results are expected to extend equipment life and improve our needs forecast.

Next quarter, a request will be presented to Commissioners Court to repurpose and expand our existing asphalt emulsion tanks. Larger tanks will be required to meet production schedules and reduce project costs.

Appendix B details expenses and remaining FY 2025 funds by category.



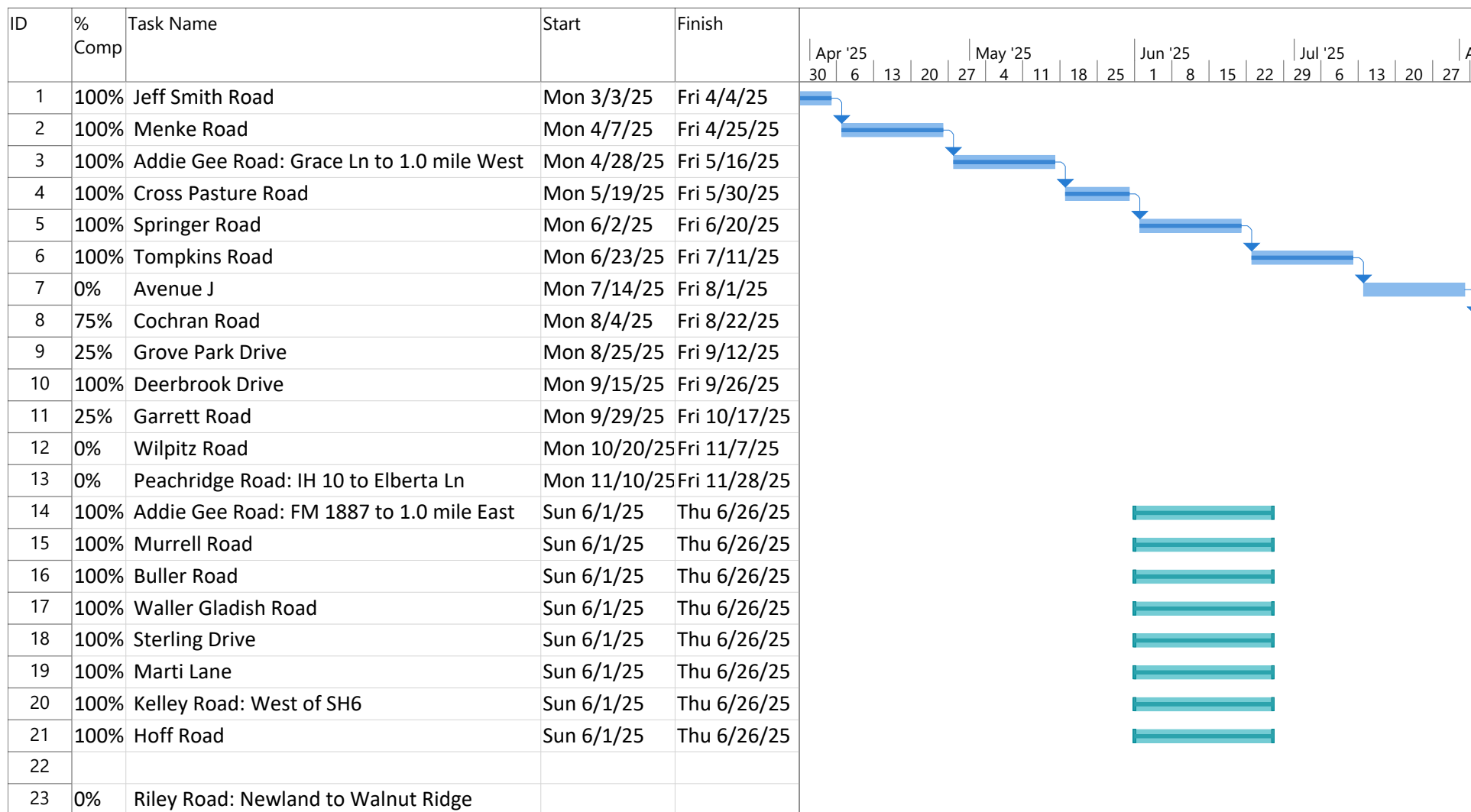
Road Bond




















This quarter, LJA helped finalize 10 engineering design contracts, which received court approval. (Seven engineering design contracts were approved last quarter.) Other items of interest include:

- Published program dashboard on the County website
- \$105.5M in bonds sold; currently \$39.3M encumbered (excludes legal costs)
- Coordinated with TxDOT on projects adjacent to TxDOT roads
- Held initial workshop with BKDD, expect to receive BKDD data on developer coordination next quarter
- Coordinated with Harris County for Clay and Pitts Roads
- Expect draft Preliminary Engineering Reports (PERS) submitted by Engineering project teams for the first projects in the next quarter




















Next quarter, following court approval, four more projects are expected to enter the design phase. Once approved, project limits will be updated on the program dashboard found on the Road and Bridge webpage.

Appendix A: Maintenance Schedule



Project: FY 2025 Maintenance S Date: Mon 8/4/25	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	
	Milestone		Duration-only		Deadline	
	Summary		Manual Summary Rollup		Progress	
	Project Summary		Manual Summary		Manual Progress	
	Inactive Task		Start-only			
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Appendix B: Road and Bridge Expense Summary

