Walnut Creek Wastewater Treatment Plant Expansion and Modernization

Permitting and Construction Cost Update

Austin

Environmental Commission

December 2, 2026

Agenda

- Ordinance & Permitting Timeline
- Construction Update
- Environmental Commission Recommendation Update
- Envision Planning Update

Ordinance & Permitting Timeline

- April 2, 2025: Environmental Commission Ordinance Recommendation
- April 22, 2025: Planning Commission Ordinance Recommendation
- June 5, 2025: City Council Ordinance Approval
- June 16, 2025: Ordinance Effective Date
- June 17, 2025: Zoning And Platting Commission - Conditional Use Site Plan
- August 28, 2025: Conditional Use Site Plan SPC-2025-0091A
- March 9, 2026: Site Plan SP-2025-0148D with Stacked Detention
- October 30, 2026: Site Plan Revision SP-2025-0148D(R1) with Wet Pond

Expansion and Modernization

- Upgrade existing facilities for new treatment process (Biological Nutrient Removal or BNR)
- Construct new facilities for BNR
- Construct new facilities for 25 MGD expansion

Upgraded Treatment

Plant-Wide Modernization

Safer Disinfection Process

Advanced Odor Control

Flood Protection

Continuous Service



Construction Update



GMP 1 - H - HDWRKS & I - ILS
- S100 - HW - ORC/Southland
- S101 - ILS - Webber
- S113 - Haz Mat - Tejas
- S116 - Electrical - T. Morales

GMP 6 - D - Wet Weather
- S602 - Yard Piping - Harper Brothers
- S603 - Water Bearing Conc. Str - Bodell/AECON
- S605 - Elev. Storage Tank - Maguire
- S615 - Process Mechanical - Rust/Shimmick
- S616 - Electrical - T Morales

GMP 4 - A - Flood Wall
- S402 - Floodwall, Storm Site Drainage - Harper Brothers
- S403 - Conc Wall, Gates - Harper Brothers
- S415 - Stormwater Pump Station - Bodell/AECON
- S416 - Electrical - Bodell/AECON

GMP 8 - E - Outfall
- S802 - Tunnel & Outfall

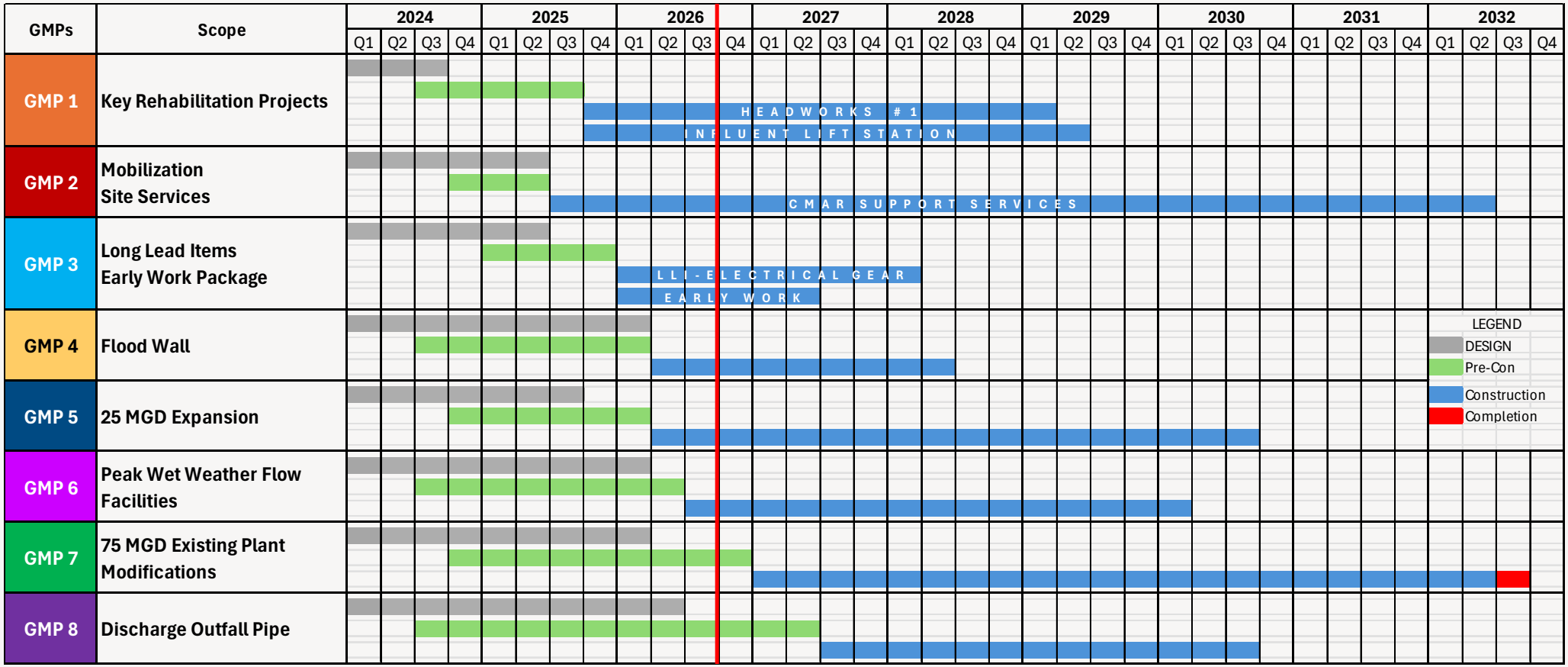
GMP 7 - B - Existing Plant
- S700A - Bio-P/ABs/Clarifiers
- S700B - UV/HW2
- S700C - Filters/Sludge
- S702 - Influent Siphons
- S713 - Maintenance Building
- S716 - Existing Plant Electr and I&C
- S720 - Sitewide Hardscape, Landscape and Permanent Fencing

GMP 3 - LLI Electrical & Early Work
- S302 - Demo - Robles 1
- S303 - Clarifiers - Webber
- S316 - Electrical - T Morales

GMP 5 - C - 25 MGD
- S501 - Architectural Structure - Rava
- S503A/515A - Liquid Train Area & Process Mechanical - Webber
- S503B/515B - Fermenter Area & Process Mechanical - Rust/Shimmick
- S503C/515C - UV/Filter Area & Process Mechanical - Bodell/AECON
- S516 - Electrical - Alterman

GMP 2 - Mobilization & Site Services
- SS01 - Site Prep
- SS02 - Temp Power
- SS03 - Temp Facilities
- SS04 - Shared Equipment
- SS05 - EMT Services
- SS06 - Site Security
- SS07 - Internet
- SS09 - PTC Bypass Piping
- SS10 - SWPPP
- SS11 - Janitorial
- SS12 - Trailers
- SS13 - Cameras
- SS14 - Traffic Control & Offsite Parking
- SS15 - Envision

Construction Update



Environmental Commission Recommendation

1. **Increase marking and interpretation of wastewater conservation programs.**
   - Water conservation marketing and incentives are underway by Austin Water as approved in the Fiscal Year 2027 Budget.
2. **Improve incentives for new and remodel construction to utilize water conservation programs.**
   - Continued water conservation marketing and incentives are and will be provided by Austin Water as approved in the Fiscal Year 2027 Budget.
3. **Request additional downstream nutrient meters beyond TCEQ requirements.**
   - Nutrient removal commitments are required for this project through the current TCEQ permit for the Walnut Creek WWTP.
   - Nutrient monitoring in the Colorado River is the responsibility of TCEQ.

Environmental Commission Recommendation

4. **Report back to the Environmental Commission annually on all administrative variance approvals.**

LAND DEVELOPMENT CODE VARIANCE	ISSUED	NOT ISSUED
25-5-44 Previously Approved Site Plans – Allows multiple active site plans	X	
25-5-81 Site Plan Expiration – Allows site plans to have no expiration date		X
25-8-261 CWQZ – Allows construction of a flood wall in the critical water quality zone	X	
25-8-264 & 25-8-263 Heritage Trees – Allows removal of heritage trees		X
25-8-301 Construction on Slopes – Allows construction on slopes in excess of 15%		X
25-8-341 Cut Requirements – Allows cut up to 25 feet as needed to construct the facility	X	
25-8-342 Fill Requirements – Allows fill up to 25 feet as needed to construct the facility	X	
25-12-54 Floodplain – Removes requirement for a public hearing	X	

Environmental Commission Recommendation

5. **Incorporate natural elements and native Texas plants along the base of the floodwall.**
   - Native plantings are required by City of Austin Standard Technical Specification Item 609: *Native Seeding and Planting for Restoration*.
6. **Incorporate a tree management plan for heritage and mitigation trees.**
   - Two heritage trees determined by the City Arborist to be in poor condition were removed. The project has paid the required mitigation fees for the removal of existing trees on site in accordance with City Code.
7. **Reduce light pollution with dark skies lighting.**
   - Dark sky compliance is required per City Code Title 25-2, Article 2.5.

Environmental Commission Recommendation

8. **Prioritize purchasing adjacent properties to increase the CWQZ.**
    - The project included 11 acres of pre-existing development, constructed before the CWQZ Ordinance was adopted, which were accounted for in the CWQZ 150% mitigation.
9. **Extend the CWQZ on Walnut Creek from 150% to 200%.**
    - Project implemented 150% mitigation of CWQZ as determined by Watershed Protection to provide the greatest environmental benefit, in accordance with the Environmental Criteria Manual Section 1.5.2.
10. **Enhance public benefit with birding, walking, and nature exploration.**
    - In addition to the existing public open space and pond along MLK Blvd., Austin Water has engaged with the City's Art in Public Places program for an art project on the proposed Flood Wall.
11. **Require solar panels for onsite or regional energy.**
    - Solar Panels were previous reviewed with Austin Energy for available land suitable for solar panels at plant facilities. No suitable area was available.

Environmental Commission Recommendation

12. Annual report at the Environmental Commission through project completion.

- First annual report December 2, 2026.

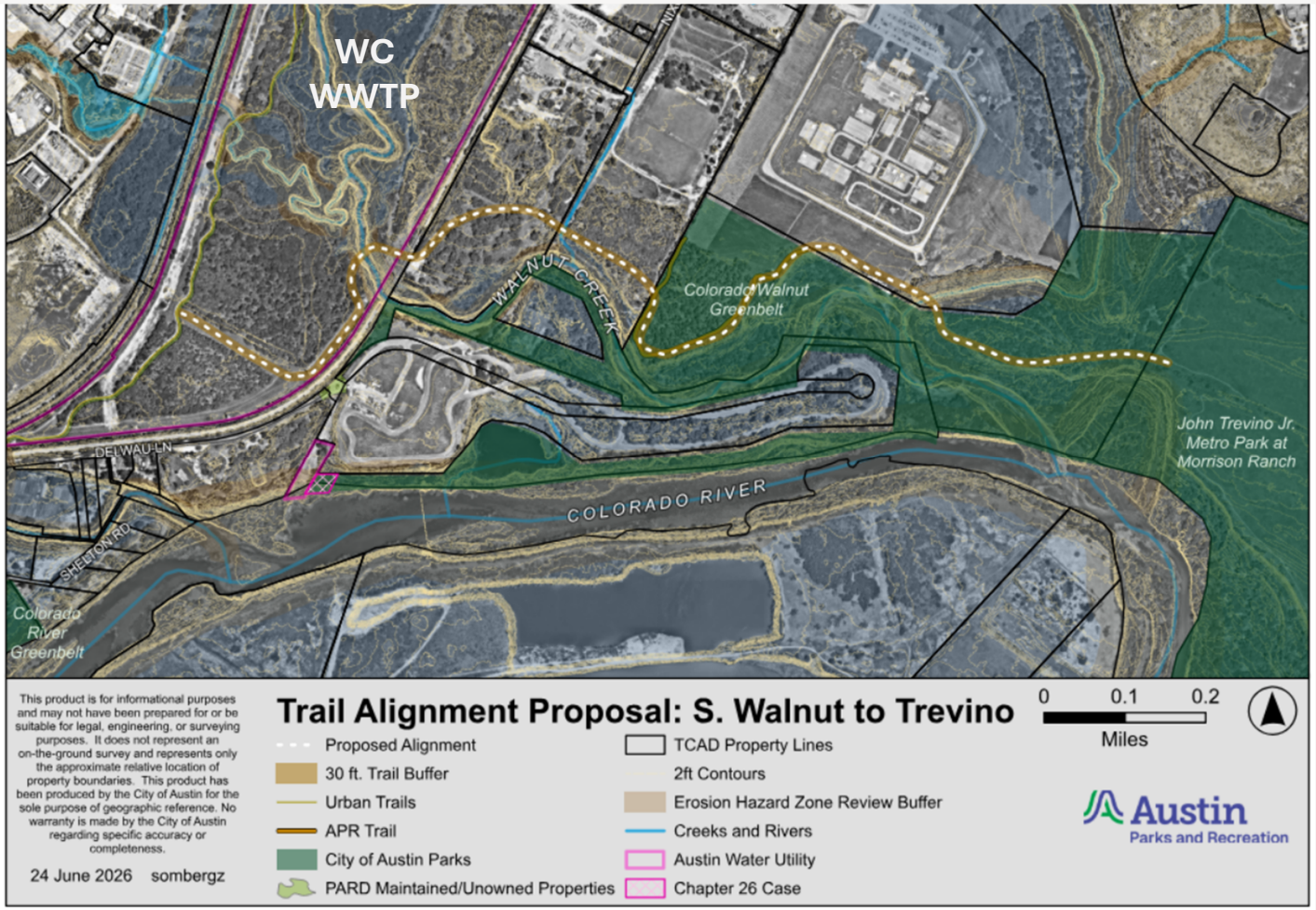
13. Utilize low-carbon concrete in the project.

- Austin Water will incorporate the City specification for low-carbon concrete where appropriate once it is finalized.

14. Explore feasibility of transferring 50 acres to Parks and Recreation as parkland.

- Austin Water and Austin Parks and Recreation have an agreement to dedicate land for a trail to John Treviño Jr. Metropolitan Park (see exhibit). This dedication also supports the goals of the Colorado River Parkland Acquisitions (Resolution No. 20241212-065) for trails along the Colorado River downstream of the Longhorn Dam.

Environmental Commission Recommendation



Envision Planning Update



The **Envision Infrastructure Rating System** is a comprehensive framework used to evaluate, rate, and recognize sustainable and resilient civil infrastructure projects.

Developed by the **Institute for Sustainable Infrastructure (ISI)**, which was established in 2010 by the **American Public Works Association (APWA)**, **American Society of Civil Engineers (ASCE)**, and **American Council of Engineering Companies (ACEC)**, the Envision program was created in collaboration with **Harvard University's Zofnass Program for Sustainable Infrastructure**.

This effort reflects Austin Water's commitment to incorporating sustainable practices and continuous environmental stewardship within its capital improvement and treatment plant operations.

Envision Planning Update

Award Recognition: Projects that undergo independent third-party verification by ISI may achieve recognition. The **Walnut Creek Wastewater Treatment Plant (WWTP)** has submitted its application for **Verified** status.

Sustainability Achievements:

- **Construction Recycling:** Achieved **97% waste diversion** from landfills
- **Advanced Processing:** UV disinfection and biological nutrient removal
- **Reduced Odor:** Odor control to support a more positive experience for the surrounding community
- **Reuse:** Salvage and reuse building components while maintaining an architectural character that is compatible with the surrounding community
- **Resilience:** The flood protection wall provides preparedness for extreme weather events
- **Community Advancement:** The expansion project, as well as Austin Water's Talent Apprentice Program (TAP) supports economic advancement, workforce development, and job creation within the community.
- **Sustainability Initiative:** Implementation of an equipment idling tracking program to reduce emissions

Proposed Additional Envision Projects:

- **Silver Envision Feasibility Project:** Pond Regeneration Zone Project

Building Austin's water future, together.

Austin

Environmental Commission

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