



AGENDA MEMORANDUM

Action Item for the City Council Meeting March 18, 2025

DATE: March 18, 2025

TO: Peter Zanoni, City Manager

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Construction Change Orders
Alameda St. - Louisiana Ave. to Texan Trail - Bond 2018/2020

CAPTION:

Motion authorizing the approval of Change Order No. 3 with Reytec Construction Resources of Houston, Texas, for changes to the pavement structure on Alameda Street, from Louisiana Ave to Texan Trail, in the amount of \$1,524,245.99 for a total amount not to exceed \$16,937,904.07, with funding available from Bond 2018.

SUMMARY:

This change order authorizes an increase in contract value to convert the pavement structure from a jointed plain concrete pavement to a continuously reinforced concrete pavement.

BACKGROUND AND FINDINGS:

Construction on the Alameda Street project began in late 2023. The design called for jointed plain concrete pavement. This is a pavement type frequently used on highways that does not use steel reinforcement within the concrete panels but does use steel dowel bars to transfer vehicle loads from one panel to the next longitudinally. Jointed Plain Concrete is a pavement design that is used by TXDOT and other highway departments and is allowed under the November 2022 edition of the City's Infrastructure Design Manual.

The first concrete pour for the Joint Plane Concrete Pavement was on July 23, 2024. On July 24, 2024, Engineering Services noticed visible premature cracking and began monitoring the pavement. After noticing the cracks from the first concrete pour continued to widen, staff decided to pause the project to conduct a thorough evaluation of the design and work quality. Staff engaged a third-party engineer, Muñoz Engineering, in August 2024 to review the design and observe the next concrete placement. Muñoz Engineering made several observations regarding construction and design deficiencies that might potentially decrease premature cracking by as

much as 80%. Muñoz Engineering suggested transitioning to a Continuously Reinforced Concrete pavement to achieve an 80% decrease in premature cracking. The pavements are designed to crack, yet they contain enough steel to keep the cracks intact. The concern with the Jointed Plain Concrete was the cracks could expand over time, leading to water intrusion and the possibility of experiencing unacceptable levels of failure.

In consultation with executive leadership, a decision was made to convert to Continuously Reinforced Concrete for the remaining scope of work. This change order would raise the overall project cost from \$15.4 million to \$16.9 million. However, the design engineer (HDR), Muñoz Engineering, staff and executive leadership all believed that the additional expense would be justified for better pavement performance. The Engineering Services department issued a field change directive to Reytec Construction in September 2024 to make the change to Continuously Reinforced Concrete.

Beginning last Fall, the Engineering Services department started negotiations over the unit price increase with Reytec. Reytec has agreed to perform the Continuously Reinforced Concrete pavement for a competitively bid unit price which is \$136 per square yard. Reytec's bid price for Jointed Plain Concrete pavement was \$91 per square yard. The revised bid price was calculated based on the Bond 2018 McArdle Road project, which is another street project constructed by Rectec. The cost of Continuously Reinforced Concrete for McArdle Street project is \$117 per square yard. Staff believe \$136 per square yard is a reasonable price in consideration of additional materials, labor, extended equipment rental fee, and overhead expenses.

The original substantial completion was September 26, 2025. With the change order to perform the Continuously Reinforced Concrete pavement, the new estimated substantial completion is December 15, 2025.

ALTERNATIVES:

Council can elect not to authorize the change order. That would require staff to delete other work from the contract to stay within the contract value. That would involve changing the project limits and/or converting back to the jointed plain concrete pavement.

FINANCIAL IMPACT:

The fiscal impact for FY 2025 is an amount of \$1,524,245.99 with funding available from the Bond 2018 reserve.

FUNDING DETAIL:

Fund:	ST2020 Bd18 P1 (Fund 3556)
Department:	Streets (33)
Organization:	Grants & Capital Projects (89)
Project:	Alameda St. - Louisiana Ave. to Texan Trail (Project No. 18005A)
Account:	Construction (550910)
Activity:	18005A-3556-EXP
Amount:	\$1,524,245.99

TOTAL \$1,524,245.99

RECOMMENDATION:

Staff recommends approval of the change order. Staff also recommends revisiting the question of appropriate conditions for jointed plain concrete pavement in the next revision of the

Infrastructure Design Manual.

LIST OF SUPPORTING DOCUMENTS:

Change Order

Location and Vicinity Maps

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