



# MEMO

**To:** Mayor and Council  
**From:** Bert Lumbreras, City Manager  
**Date:** October 24, 2019  
**Re:** Fire Station #2 (LaCima) and Fire Station #6 (Trace)

---

The purpose of this memo is to provide background material for your consideration in preparation for an upcoming work session presentation followed by a related action item on November 6, 2019 related to the design and construction of the relocated La Cima Fire Station #2. It will also provide updated information on the status of the Trace Fire Station #6 project, the last remaining bond project related to the 2017 bond election. The work session presentation and this memo are intended to share information related to the following areas of interest: The location of Fire Stations #2 and #6, the projected cost of the stations, and the background of the anticipated budget increases over the initial projected budget.

## **Fire Station #2 location:**

The location for the planned La Cima Fire Station #2 relocation was presented to the voters in 2017 during a series of informational meetings conducted all across the city. The language copied below was used in the informational sessions with regard to the location of this station:

*Holland Fire Station # 2 relocation (Capital costs \$5.2 million): This project will relocate Fire Station #2 to a new site approved by the Task Force. The new facility will replace the 63 year old structure that the department has occupied since 1954. Over 76% of the existing Station's coverage area is overlapped by other stations which has resulted in a very low call volume. The station's new location was recommended by a fire consultant who specializes in Insurance Services Office ratings, which is one of the primary ways insurance companies develop fire insurance rates for residential and commercial customers. Constructing the new station at a location near Wonder World Drive and Old Ranch Road 12 improves the distribution of fire department facilities which will result in shorter response times for a larger portion of the overall community.*

The language copied below is the actual bond language presented to the voters:

*Shall the City Council of the City of San Marcos, Texas, be authorized to issue the bonds of the City, in one or more series, in the aggregate principal amount of \$17,450,000, with the bonds of each such series, respectively, to mature*

*serially within not to exceed thirty years from their date, and to be sold at such prices and bear interest at such rates, as shall be determined within the discretion of the City Council, in accordance with law at the time of issuance, for the purpose of constructing, improving, renovating and equipping Public Safety Facilities to include the police and fire departments and related emergency and training facilities, including improvements to the police station, construction of a new Fire Station No. 8 and replacing existing Fire Station No. 2 and the acquisition of any necessary sites and related water, wastewater, drainage, streets, sidewalks, parking, infrastructure and other related costs; and shall said City Council be authorized to levy and cause to be assessed and collected annual ad valorem taxes on all taxable property in the City in an amount sufficient to pay the annual interest on said bonds and provide a sinking fund to pay the bonds at maturity.*

Please note that the number of the second fire station referenced in the bond language has been changed from 8 to 6 in order to remain consistent with our current station numbering.

The SMFD Station Location Plan was updated in 2014 as part of a contract with Mike Pietsch, P.E. Consulting. The report written by Mr. Pietsch was solicited by the city as part of the periodic Insurance Service Office (ISO) rating process for the city. Mr. Pietsch is one of the foremost experts in the country as it relates to the ISO rating process. In his report, Mr. Pietsch determined that the existing Holland St. Fire Station #2 needed to be relocated, and that the ideal location for the new Station #2 would be a location near the intersection of Wonder World Dr. and Old RR12. After the report was accepted by the city, a 2.3 acre corner location was considered that was exactly at the intersection of Wonder World Dr. and Old RR12. Before the city could purchase that parcel of land, it was sold to another buyer. An image of this site is attached to this document and labeled as *Exhibit A*. Not long thereafter, the site within the LaCima subdivision was identified and was strongly considered due to the fact that the developer was willing to donate the land to the city as part of the development agreement. Before this location was finalized, Chief Stephens consulted with Mr. Pietsch to ensure that the location was close enough to his originally recommended site to still meet his recommendation. Mr. Pietsch gave direction that the site was well within the area of acceptability. A visual map of this location is attached as *Exhibit B*. The report completed by Mr. Pietsch is attached to this memo as *Exhibit C*.

Additionally, Chief Stephens has worked with one of our COSM GIS Analysts to confirm the recommendations provided by Mr. Pietsch. She has studied multiple scenarios using GIS data and technology and confirms that this site meets the Fire Department's response time goals much better than the existing location of Holland St. Station #2. Attached are visual depictions created by the analyst that show heat maps of response times to various areas within the city from Station 1 (downtown), the current Holland St. Station 2 location, and the proposed new location for Station 2 just inside La Cima. A side-by-side comparison of these images shows that the new La Cima Station 2 location will provide a more broad distribution of the green and yellow areas, depicting a better distribution of lower response times. These documents are attached and labeled as *Exhibits D1-D3*.

One question that has been discussed in the past surrounds a parcel of property owned by the city in the 500 block of Craddock Ave. This site is not within an acceptable distance to the ideal site recommended by Mr. Pietsch because it is not far enough away from the existing Holland St. Station 2 to improve overall response times for the community. It is also too close to the Downtown Fire Station #1 to provide much relief from the current overlap in the response zones of stations 1 and 2. Finally, the size of this parcel is approximately 1.8 acres, a little more than 1 full acre less than the ideal size of a fire station site. A visual map of this location is included as *Exhibit E* to this memo

### **Fire Station #2 and Fire Station #6 budget information:**

In May 2017, voters approved the construction of Fire Stations #2 and #6. Station 6 is a new station that will be located in the Trace subdivision on the South end of the City. The Station 2 location plan within La Cima was discussed in the previous section of this memo.

The City constructed Fire Station #4 (East Wonder World Dr) in 2016-2018 at a hard construction cost of \$4,498,167.32 and total project cost around \$5.2 Million. The plans from this station were to be used as a prototype for future stations including both Stations 2 and 6.

The total project budget presented to voters in 2017 for Station 2 was \$5,200,000 and \$4,500,000 for Station 6. The proposed plan for Station 6 included an additional \$2,000,000 from the developer to purchase the required fire apparatus and assist with construction of the station. The total project budget allocated for the Station is \$5,500,000, not including the new fire apparatus. These project budgets were based on the estimate to build Station 4 in 2016 prior to beginning construction.

The design-builder's Guaranteed Maximum Price (GMP) proposal for construction of Station 2 is \$5,369,405 which brings the total project cost estimate to \$6,240,000. This is \$940,000 over the original project budget. There are several factors that have contributed to this cost escalation.

1. The Station 2 site is over the Edwards Aquifer Recharge Zone, which required a more extensive stormwater quality design and additional sitework adding about \$250,000 to the cost of work.
2. The original project budget was based on 2016 estimates. The construction industry in Texas has experienced an annual increase in cost of work between 4% - 5% over the past few years. Paul Acevedo with Jacobs Project Management estimated the total cumulative cost escalation between 2016 and 2020 at 17.38%. Using the final construction price for the new Fire Station #4, inflation in the construction market would account for \$560,000 - \$700,000 of the increased cost.

With the input of the Fire Chief Les Stephens, a list of non-program related scope items and design features were pulled from the project to reduce the Guaranteed Maximum Price (GMP) and help mitigate the cost overrun. The design team reduced the 2<sup>nd</sup> floor space by about 2,000 square ft, adjusted the preferred building footprint, and reduced the driveway footprint to save on earthwork and concrete costs. The design team also identified building finishes that were overdesigned on the prototype station such as door hardware and storefront framing and

replaced those finishes with other options that maintained durability and functionality at a reduced price. In total, the savings identified amounted to just over \$250,000. In addition to the cost savings design changes, the design builder presented a final GMP proposal with zero design-build contingency and reduced their prior approved general conditions fee by \$107,814.

We also have evaluated and recommended features that will extend the life of the facility and that will minimize maintenance cost in the future. For example, stucco instead of brick could be used for this facility resulting in a little over \$100,000 in savings, but the maintenance and upkeep of brick are substantially less over the life of the facility.

Based on the final GMP proposal, the construction cost for Station 2 is estimated to be \$431/sqft. The final price per square ft is consistent with the costs other jurisdictions are experiencing on similar new fire station projects. Below is list of current fire station projects across the State and their respective construction cost per square foot totals. This information was provided by Mr. Tommy Abercrombie, our consultant working on the design of the Fire Department training facility. Mr. Abercrombie did not provide backup material but rather provided these construction cost estimates after speaking with the contractors working on the projects.

- Burleson Fire Station #2- \$430/sq ft
- Fort Worth Fire Station #45 - \$438/sq ft
- Frisco Fire Station #9 - \$428/sq ft
- Schertz Fire Station \$481/sq ft

Additionally, we requested and received similar information from JE Dunn Construction. The data provided was related to three recent fire station projects they have completed. The average construction cost per square foot for those projects was \$461.23. The document provided by JE Dunn is attached for reference and is labeled *Exhibit G*. After review of the design build team's GMP proposal against the updated design and current market conditions, the City staff recommends approval of the GMP amendment to move the project forward into the construction phase. To cover the budget increase, the City will use interest earned on the investment of funds to make up this shortfall. City funds are invested in secure investments until the funds are needed. Due to rising interest rates over the past several years, the investments have produced a higher rate of return than in the past 8 years. As a result, the City has accumulated close to \$1.0M in interest earnings on the invested proceeds from bond sales that can be used to fund projects. We will use this to cover the \$900K shortfall for Station 2. We will continue to earn interest on these investments and will use the amounts earned over the next 12-18 months prior to construction to fund the shortfall for Station 6.

In terms of the Trace Station #6, per the City's development agreement with Trace, Trace is not obligated to supply the additional project funds to the City related to Station 6 until certain milestones are met. Trace was required to send \$500,000 in Public Improvement District Bond proceeds to the City. This occurred in 2019. Trace is scheduled to make two remaining equal payments to the City as follows:

- \$750,000 within two years of the first certificate of occupancy
- \$750,000 within four years of the first certificate of occupancy

This last payment is not expected until 2022 so the City was originally planning on deferring the construction until a time closer to when we would receive the money. The first Certificate of Occupancy was at the end of 2018. However, due to the 4% to 5% annual escalation in construction prices, Jacobs and city staff recommend beginning the project as soon as possible. The City has the capacity to loan itself the funds and reimburse itself when the Trace funding is due.

Currently the estimated total project cost for the Trace Station 6 is \$7,285,000, which is \$785,000 over the original project budget. City staff recommends authorizing the design and construction of Station 6 beginning with contracting with the design team to design the Trace Fire Station. Once that is complete, the City recommends a Competitive Sealed Proposal (CSP) construction delivery method. The CSP contractor solicitation process ensures the City has the opportunity to select the most competitive pricing on the open market. A visual depiction of the Station 6 proposed location within the Trace subdivision is attached to this memo and is titled *Exhibit F*.

Reflecting on the lessons we have learned as we've worked through these bond projects, I've made two recommendations to staff that I would like to share in closing this memo. The first is that we will not make specific references to building numbers or names in future bond language. This will help to avoid confusion that happens when these factors inevitably change over time. The second is that we will make every attempt to have all projects as close as possible to shovel ready before seeking voter approval for bond funding. We hope this practice will minimize time delays and the associated budget overruns seen as a result of escalating costs over time.

In summary, both Jacobs and staff recommend moving forward on both the La Cima Station 2 and Trace Station 6 projects in the presently recommended locations as identified in this memo. Doing so holds true to the information we presented to the voters in 2017 and helps to avoid additional costs to the city in the form of land acquisition and land design costs by keeping these stations on land already owned by the city. Moving forward with the Trace Station #6 now also helps to minimize construction escalation costs that seem to be certain in the industry.