

Fire Station #4 (Page 1)







Location: 910 East Fayle Avenue.

Description: Replace aging fire station with new fire station.

Benefits: New fire station will comply with new health standards for fire fighters and provide greater

operational efficiency.

Project Timeline

Grant Application	Grant Award	Design Start	Construction Start
N/A	N/A	N/A	N/A

Project Budget

\$4,250,000 (Design and Land Acquisition)

Bond Funding \$4,250,000
Grant Funding \$0

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Additional Information

Space Limitations and Operational Challenges

The current facility at Fire Station 4 faces significant limitations due to its aging infrastructure and lack of space. Key challenges include:

Apparatus Bay and Vehicle Access

- The station is situated on a small corner lot, limiting access and maneuverability.
- The existing drive-through bay is not large enough to accommodate the increasing size
 of modern fire apparatus, leading to several instances where vehicles have struck the
 building while entering or exiting.
- The front apron is short, further complicating apparatus ingress and egress, which impacts operational efficiency.

Inadequate Facilities for Personnel

- The station's original design included a shared bunkroom, which no longer meets the needs of a diverse and growing workforce.
- Modifications were made to expand the living area and add separate facilities for female firefighters, but these changes resulted in further space constraints within the living areas of the building and in the apparatus bay.
- Dormitory and restroom facilities are overcrowded and lack privacy, which impairs both operational readiness and the well-being of the staff.

Storage and Support Spaces

 There is no dedicated room for PPE storage that meets NFPA 1851 standards, such as moisture control and ventilation. Gear is stored in shared spaces, which increases the risk of contamination and reduces the lifespan of protective equipment.

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The station does not have adequate space for a fitness area, maintenance room, or
proper storage for tools and equipment, resulting in the use of the apparatus bay for
these functions. This practice is not in alignment with NFPA standards and affects both
safety and efficiency.

Administrative Space

 Space for supervisory/administrative functions is minimal, which restricts the ability to manage daily operations effectively. This limited space also reduces privacy for officers, affecting overall efficiency and morale.

Compliance with NFPA Standards

The current station design does not meet several key National Fire Protection Association (NFPA) standards, including:

- NFPA 1851 Protective gear storage: The current facility does not have the necessary space or conditions to clean, store, and dry PPE in compliance with moisture control and ventilation requirements.
- NFPA 1550 Diesel exhaust emissions: The station does not have a source-capture
 exhaust system, which exposes personnel to diesel fumes. Without proper ventilation
 and filtration, these emissions affect both the operational and living spaces.
- NFPA 1585 Contamination control: The station lacks the required separation between clean and contaminated zones, compromising decontamination efforts and creating exposure risks for both personnel and equipment.

Future Needs and Service Demands

With the growth of the population and ongoing development in Baytown, Fire Station 4 must evolve to meet the increasing service demands. The current facility is ill-equipped to manage the projected growth and the expanding needs of the fire service.

- Capacity for Additional Apparatus and Personnel: The current station lacks the capacity
 to accommodate additional fire apparatus or specialized vehicles, and it is not designed
 to house a growing workforce.
- Modern Training and Wellness Needs: The station's design does not provide space for modern training programs, including those that focus on physical fitness and wellness, which are essential for firefighter performance and health.
 - Increased Storage and Operational Space: The facility does not provide adequate space for necessary storage or functions required for modern fire service operations.

Conclusion

The current Fire Station 4 is no longer adequate to meet the demands of modern fire service. The facility's space limitations hinder operational efficiency and prevent compliance with critical NFPA standards. A new fire station will address these deficiencies, allowing for:

- Improved apparatus access and operational efficiency
- · Expanded personnel facilities that meet modern staffing needs
- Compliance with NFPA standards for PPE storage, exhaust management, and contamination control
- · Increased capacity to support growth and future service demands

A new Fire Station 4 will ensure that the department remains fully equipped to protect the community effectively, both now and in the future.