



7 November 2024

PUBLIC SAFETY BUILDING CONSTRUCTION PHASING STUDY UPDATE

PURPOSE

This report reviewed the implementation of the possible revisions to Phase 3 and Phase 4 of the adopted 2022 Facilities Master Plan as outlined in the August 9, 2024 “New City Hall Option” report. This report evaluated the feasibility of constructing a Public Safety Building as Phase 4 and whether the Fire Department and Police Department could remain in their current location at the City of West University Place Municipal Building during the construction. This study evaluated how the two options for Phase 4 (Public Safety Building Option) could be constructed and how the phasing would impact the ability of the Fire Department and Police Department to remain operational in the building using temporary conditions throughout the construction period as opposed to relocation to another temporary site.

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2022 FACILITIES MASTER PLAN

The 2022 Facilities Master Plan proposed a four phased implementation of the City of West University Place facility improvements located within the Civic Center area. The Civic Center area is defined by Rice Boulevard to the north, Auden Street to the east, University Boulevard to the south and College Street to west.

- Phase 1 would construct a new Public Works Operations and Maintenance Facility located on the City owned property (Dincans Street) just outside the City. This will create two vacated areas for future City facilities and/or additional parking in the Civic Center. Information Technology (IT) and Public Works Administration/Community Development will be relocated to temporary facilities until work is completed in future phases.
- Phase 2 would construct a new Community Building, Seniors Center and Library on the site previously occupied by the Public Works Administration Building and Operations Buildings between Milton Street and Amherst Street. The City owned property north of Milton Street is proposed to be converted to an off-street parking lot. The pump room for the City’s small above ground water storage tank would be relocated to allow for the construction of an open green space recommended by the 2024 Urban Planning studies.
- Phase 3 would construct a new Fire Station at the corner of Rice Boulevard and Auden Street.

- Phase 4 would renovate the existing Municipal Building for Community Development, City Administration, Public Works Administration, Municipal Courts, Finance, Human Resources, IT Department, and expand the Police Station within the existing Municipal Building footprint.

During the conceptual design process for Phase 2, the City Council requested evaluating changes to Phases 3 and 4 of the original 2022 Facilities Master Plan as follows:

- Phase 3: Construct a new City Hall to include City Administration, Public Works Administration, Community Development, Municipal Courts, Finance, Human Resources in a two story building at the corner of Rice Boulevard and Auden Street.
- Phase 4: Renovate the existing Municipal Building to become the new Public Safety Building. This building would include the expanded Police Station, reconstructed Fire Station, Emergency Operations Center (EOC) and IT Department.

BACKGROUND

The West University Place Fire Department is located in a section of the existing Municipal City Hall building that was constructed in 1954. Over the years, additions were added to the building in 1998 and 2011. The Fire Department is located on both the first and second floor of the building using approximately 9,112 DSF, not counting shared spaces such as restrooms, locker rooms, MEP spaces, emergency operations, meeting and training rooms, stairs and shared circulation.

The renovation and addition work in 1998 added space for the Council Chambers, moved City Administration to the first floor and did cosmetic renovations for the Fire Departments living space. In 2011, the City completed an addition for the Police Station to the existing building and did some cosmetic renovation to the Fire Department living space and increased the height of the fire bay doors of the Fire Department to install the water cannons on top of the pumper trucks.

Prior to the 2011 renovation, the Fire Station had three apparatus bays and one garage for parking of a command vehicle, a coed dormitory sleeping room shared by shift personnel, staff offices, a day room, support spaces and a single locker room shared by male and female shift personnel. The station was located on two different floors with the apparatus bays, gear storage, staff offices, EMT storage, exercise and support spaces located on the first floor and day room and a shared sleeping quarters located on the second floor. A portion of one of the apparatus bays was is as a wellness area. The width and height of the three existing apparatus bays doors were well below standards for modern fire stations, as well as, the City's existing fire apparatus. The clearance height of the bay doors prevented the City from installing the water cannons on top of the pumper trucks. The second floor was accessed by two stairs, one that was accessed from inside

of City Hall at the front and one that exited through the apparatus bays. The second floor was not accessed by an elevator, while compliant with the current Texas Department of Licensing and Regulations (TDLR) at the time of construction, it is no longer compliant with the current TDLR and ANSI requirements. The building did not have a fire sprinkler system. The building was partially served by an emergency generator.

The existing Municipal Building was renovated in 2011 which included adding the Police Station and renovating a portion of the Fire Station. The renovation brought the Fire Station into compliance with the current 2006 IBC building code and 2008 TDLR requirements at the time. During that renovation, several Fire Department deficiencies were addressed which included the following:

- Changed apparatus bay doors to sectional doors to gain 3 inches in door height clearance which was the highest it could be raised without altering the building structure. This resulted in a clear opening of 10'-0" which is still 4 feet lower than current standards.
- Relocated the Fire Chief's office into City Hall where existing space was subdivided and repurposed for this new office. This created additional staff office on first floor.
- Added exterior access to the front stair allowing for access to the second floor without traveling through the City Hall.
- Converted open coed dorm room sleeping into 7 individual dorm rooms.
- Renovated the Captain's Quarters
- Renovated the Day Room
- Added a shared (with Police) men's and women's locker room and restrooms in the new Police Department addition.
- Added fire sprinklers to the fire apparatus and sleeping dorms only. The City's Building Department did not require the entire building to be fire sprinklered. Only the new addition and a portion of the fire department was required to be fire sprinklered.
- An exterior covered equipment storage and parking was added to improve protection from elements for the fire equipment.

The 2011 renovation did not provide elevator access to the existing second floor of the Fire Station to the new shared restrooms and locker rooms because the 2008 TDLR regulations still had an exception for fire stations and did not require it. The new Police Station addition was elevated higher than the existing Municipal Building (Fire Station) to prevent future flooding of the facility that happened during Tropical Storm Allison. This increased height resulted in the new second floor restrooms and locker rooms being higher than the finish floor elevation of the existing second floor of the Fire Station and not compliant with current TDLR and American with Disabilities Act (ADA).

The fire apparatus bays and doors were still undersized but the height was increased as high as possible without rebuilding the entire apparatus bay structure. Rebuilding and remaining within the existing footprint could have solved the height problem but would have resulted in losing one of the existing bays to provide appropriate bay width, which would have resulted in the loss of the existing parking space for the command vehicle and wellness area due to lack of weight or cardio room in the facility **itself**.

Many industry standard fire station's required spaces were not included in the 2011 project due to lack of space in the existing building or site footprint. These spaces included the following:

- Fire dedicated restrooms and locker rooms
- Weight and cardio room
- Decontamination room
- Elevator access to station second floor
- Adequate gear locker room
- Adequate laundry facilities
- Cascade and extractor facilities
- Adequate fire gear storage
- Adequate training space
- Emergency Management storage
- Equipment storage
- Supplies storage
- Watch room for emergency call response
- Emergency medical service (EMS) exam room
- Fourth apparatus bay

Two options for creation of a Phase 4 Public Safety Building (Option A and Option B) were developed and presented in the August 9, 2024 memo for the creation of the Public Safety Building option.

OPTION A - RENOVATED MUNICIPAL BUILDING WITHIN EXISTING FOOTPRINT TO BECOME A PUBLIC SAFETY BUILDING

The existing Municipal Building would then be renovated to house the Police Department, Fire Department, EOC and IT within the existing building footprint. Under this option, the majority of the original 1954 building would be maintained except for the apparatus bays. The existing apparatus bays (4,213 SF) would be demolished and replaced with a new two story building attached to the original 1954 building. Under this option, the finish floor of the second floor of the new addition would be approximately 8 feet higher than the second floor of the original 1954 building and approximately 4 feet higher than the second floor of the 2011 building addition. This is being driven by the required height of apparatus located in the bays below. This option would relocate the majority of the Fire Department staff on the first floor along with 3 new apparatus bays

with doors sized for modern apparatus. The Fire Station's sleeping and living areas will be located next to the apparatus bays on the first floor.

The Police Department would expand into the current City Council Chambers area as well as on the second floor. The existing restrooms and locker room would be used exclusively for the Police Department. The existing locker rooms would be renovated to better accommodate police requirements. The EOC and IT would be relocated into the second floor of the original building, along with administrative and training space. This option would create approximately 2,800 SF of future expansion space on the second floor and a total of 6,111 SF of new overall space in the building. The new second floor would be served by two new stairs and a new elevator. A new stair and elevator would be required to accommodate the second floor of the original building. A more secure separation between the Police Department and other building users would be created.

This option may allow for a more phased approach to construction and may allow more easily for the fire department to remain in the building during construction. This would need to be vetted further to confirm it will result in a workable condition for the fire department and the construction activity.

OPTION B - RENOVATED AND REBUILT MUNICIPAL BUILDING TO BECOME A PUBLIC SAFETY BUILDING

The existing Municipal Building would then be renovated and rebuilt to house the Police Department, Fire Department, EOC and IT. Under this option, the majority of the original 1954 building would be demolished and replaced with a new two story building attached to the 2011 building addition. This option attempts to create more square footage on the second floor on the same elevation that would result in not needing an extra stair and elevator. This option would locate the majority of the Fire Department on the first floor along with 3 new apparatus bays with doors sized for modern apparatus. The Fire Department's sleeping and living areas will be located next to the apparatus bays on the first floor.

The Police Department would expand into the current City Council Chambers area as well as on the second floor. The existing restrooms and locker room would be used exclusively for the Police Department. The EOC and IT would be relocated into the new second floor area, along with administrative and training space. This option would create approximately 2,800 SF of future expansion space on the second floor and a total of 6,111 SF of new overall space in the building. The new second floor would be served by two new stairs and a new elevator. A more secure separation between the Police Department and other building users would be created. This option would require the fire department to be relocated during construction.

The proposed alternates to the 2022 Facilities Master Plan – Phases 3 & 4 dated August 9, 2024 Options A and B, attempted to satisfy the Fire Station deficiencies identified above. Under this alternate approach, significant portions of the existing Municipal Building that currently houses the Fire Department, City Administration, Finance, Municipal Courts and Human Resources would be either renovated or demolished and

replaced with new construction to better align the finish floors with the 2011 Police Department Addition. By better aligning the finish floors of the second floor, the need for additional internal stairs and multiple elevators could be avoided.

Under these two alternative approaches, the Fire Department would be relocated entirely to the ground floor of the building including the dorms, day room, locker rooms and command offices. New apparatus bays with proper bay door heights would be constructed. The second floor of the new construction would extent over the new apparatus bays and provide space for a new relocated EOC, IT offices, training room and much needed expansion space.

The Police Department would expand into the balance of the second floor previously occupied by the EOC. The existing second floor restrooms and lockers would be modified to become Police Department only spaces. The first floor of the existing 2011 addition would be partially renovated to allow for needed expansion of the Police Station. The current council chambers would be renovated to become part of the expanded Police Station. The jail, sally port, property rooms, restrooms, mechanical spaces in the 2011 addition would remain in place in the finished project.

These two proposed options would be disruptive to both Police Department and Fire Department operations during construction. The idea of relocation of the Fire Department to an off -site location was discussed and included in the August 9, 2024 report project budgets and assumed to be approximately \$1,500,000.00.

Relocation of the Fire Department to another location created some operational concerns that resulted in this study to consider if the Fire Department and Police Department could remain on-site during the entire construction period and remain in operation in either or both Options A and B.

PHASE 4 – OCCUPANCY DURING CONSTRUCTION (OPTION A)

The construction of the proposed Public Safety Building Option A as Phase 4 of the 2022 Facilities Master Plan would require implementation in micro phases to accommodate occupancy during construction. The new City Hall (Phase 3) is assumed to be completed and occupied prior to the start of construction of Phase 4. This means that the area occupied by the City Administration, Finance, Human Resources, Municipal Court, Council Chambers would be vacant. The recommended approach for phasing construction in Option A would be to construct the Public Safety Building in six micro (A-F) phases.

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| Phase 4A: | Temporary relocate portions of Police Department to the first floor |
| Phase 4B: | Renovate portions of the Police Station area. Police Department moves into completed space following completion of Phase 4B. |

Phase 4C:	Temporary relocate Fire Department to the first floor and/or temporary location in parking lot along University Boulevard.
Phase 4D:	Renovate the Fire Station living quarter areas. Fire Department moves into the completed space following the completion of Phase 4D.
Phase 4E	Reconstruct the Fire Station apparatus bay areas. Fire Department moves into the completed space following the completion of Phase 4E.
Phase 4F	Renovate remaining temporary spaces to final configuration which would include the existing council chambers and parking lot areas.

- Phase 4A would temporarily relocate the Police Department into the spaces on the first floor, as required, where the council chamber, City Administration, Municipal Courts, Finance and Human Resources are currently located.
- Phase 4B would complete the final Police Station renovation with contractor working around an operational sally port, jail and property room. Once the renovation of the Police Station Phase 4B spaces are completed, the Police Department can move into their final location (4B). The Fire Department will continue to operate in their current condition and locations during Phase 4B.
- Phase 4C would relocate the Fire Department apparatus and equipment to the existing parking lot that faces University Boulevard using temporary shelters. The Fire Department dorms, day room, and command offices would relocate to either temporary trailers located in the parking lot adjacent to the temporary apparatus bays or be temporarily housed in the previous council chambers area in temporary quarters. The Fire Department would continue to use the existing locker rooms and showers located on the second floor of the building during this phase.
- Phase 4D would renovate the Municipal Court and Finance areas of the existing building and allow or the new living areas to be constructed. Phase 4D renovation would include the dorms, day room, command offices on the first floor and the new EOC, and IT offices on the second floor. Upon completion of Phase 4D, the Fire Department would move from the temporary quarters located on site and move into the final Phase 4D area.

- Phase 4E would allow construction on the new apparatus bays, training room and second floor space to begin, although this phase could overlap Phase 4D. Upon completion of Phase 4E, the Fire Department apparatus would move from the temporary on-site shelter to the new apparatus bays.
- Phase 4F would complete the renovations to ancillary spaces inside and outside of the building.

Important factors for consideration with this phased construction approach and occupancy plan is security of the site, available laydown areas for the contractor to build the project, parking for building users, residents and construction trades, noise and vibration from construction and added length to the construction period, and associated construction costs. Key departmental stakeholders for the project have reviewed the construction phasing approach, occupancy plan, site security, construction laydown yard, parking for building users, residents and construction trades, noise and vibration and deemed acceptable for the Police Department and Fire Department to remain on-site during construction and to be able to maintain the level of service that is expected from our City. The City Council still needs to discuss and approve this approach.

- Pros
 - Fire apparatus access remains in existing location
 - Police and Fire Departments have additional needed space
 - Creates secure separation of Police and Fire departments
 - Puts Fire living and dorms on first floor to improve response time
 - Creates more parking for community use in existing parking lot
 - Shorter construction time
 - Keeps Police and Fire Departments on site during construction
- Cons
 - Moves the operational dates for both Fire and Police expansion back into Phase 4
 - Requires additional stair and elevator to comply with ADA
 - Requires flood mitigation for the original portion of the building

PHASE 4 – OCCUPANCY DURING CONSTRUCTION (OPTION B)

The construction of the proposed Public Safety Building Option B as Phase 4 of the 2022 Facilities Master Plan would require implementation in micro phases to accommodate occupancy during construction. The new City Hall (Phase 3) is assumed to be completed and occupied prior to the start of construction of Phase 4. This means that the area occupied by the City Administration, Finance, Human Resources, Municipal Court and Council Chambers would be vacant. The recommended approach for phasing construction in Option B would be to construct the Public Safety Building in five micro phases.

Phase 4A:	Temporary relocate portions of Police Department to the first floor
Phase 4B:	Renovate portions of the Police Station area. Police Department moves into completed space following completion of Phase 4B.
Phase 4C:	Temporary relocate Fire Department to the first floor and/or temporary location in parking lot along University Boulevard.
Phase 4D:	Reconstruct the Fire Station areas. Fire Department moves into the completed space following the completion of Phase 4D.
Phase 4E	Renovate remaining temporary spaces to final configuration which would include the existing council chambers and parking lot areas.

- Phase 4A would temporarily relocate the Police Department into the spaces on the first floor, as required, where the council chamber, City Administration, Municipal Courts, Finance and Human Resources are currently located.
- Phase 4B would complete work on Police Station renovation with the contractor working around an operational sally port, jail and property room. Once the renovation of the Police Station Phase 4B spaces are completed, the Police Department can move into the final location in the completed Phase 4B area. The Fire Department will continue to operate in their current condition and locations during Phase 4B.
- Phase 4C would relocate the Fire Department apparatus and equipment to the existing parking lot that faces University Boulevard using temporary shelters. The Fire Department dorms, day room, and command offices would relocate to either temporary trailers located in the parking lot adjacent to the temporary apparatus bays or be temporarily housed in the previous council chambers area in temporary quarters. The Fire Department would continue to use the existing locker rooms and showers located on the second floor of the building during this phase.

- Phase 4D would demolish the existing apparatus bays, the Municipal Court and Finance areas of the existing building and allow or the new two story addition to be constructed. Phase 4D construction would include the new apparatus bays, dorms, day room, command offices on the first floor and the new EOC, training room, IT offices and expansion space on the second floor. Upon completion of Phase 4D, the Fire Department would move from the temporary quarters located on site and move into the final Phase 4D area.
- Phase 4E would complete the renovations to the ancillary spaces inside and outside of the building.

Important factors for consideration with this phased construction approach and occupancy plan is security of the site, available laydown areas for the contractor to build the project, parking for building users, residents and construction trades, noise and vibration from construction and added length to the construction period, and associated construction costs.

Key departmental stakeholders for the project have reviewed the construction phasing approach, occupancy plan, site security, construction laydown yard, parking for building users, residents and construction trades, noise and vibration and deemed acceptable for the Police Department and Fire Department to remain on-site during construction and to be able to maintain the level of service that is expected from our City. The City Council still needs to discuss and approve this approach.

- Pros
 - Fire apparatus access remains in existing location
 - Police and Fire Departments have needed expanded space
 - Eliminates the need for one elevator in renovated Municipal Building
 - Creates secure separation of Police and Fire departments
 - Puts Fire living and dorms on first floor to improve response time
 - Creates more parking for community use in existing parking lot
 - Keeps Police and Fire Departments on site during construction
- Cons
 - Moves the operational dates for both Fire and Police expansion back into Phase 4
 - Longer construction time

UPDATED PUBLIC SAFETY BUILDING (PHASE 4) - PROJECT COSTS

The budgets associated with new options are as followings:

Public Safety Building Option A - Renovated Public Safety Building within the existing footprint (Phase 4)

- 41,801 SF
- Provides full space program requirements for a modern fire station except with 3 apparatus bays only
- \$13,303,031.00 Does include \$650,000.00 for cost of temporary Fire Department during construction. This includes a temporary structure for apparatus, temporary security measures, and temporary buildouts during construction.

Public Safety Building Option B - Renovated and Rebuilt Public Safety Building (Phase 4)

- 39,801 SF
- Provides full space program requirements for a modern fire station except with 3 apparatus bays only
- \$18,195,942.00 Does includes \$650,000.00 for cost of temporary Fire Department during construction. This includes a temporary structure for apparatus, temporary security measures, and temporary buildouts during construction.

CONCLUSION

The existing Fire Department and Police Department could continue to operate out of the existing Municipal Building while either Option A or Option B is being constructed. The updated project budgets for the two options for Phase 4 (Public Safety Building) has been revised include a modified temporary construction cost of \$650,000.00. This represents a savings of approximately \$785,000.00 to the overall project budgets of those options. This assumes the phased construction and temporary construction approach is acceptable to the City.