



COLUMBIA FIRE DEPARTMENT

CONCEPTUAL SITE MASTER PLAN

City of Columbia, Missouri

Public Works

City of Columbia Fire Department Conceptual Site Master Plan

The Columbia Fire Department has a need to provide additional capabilities for emergency response personnel and administrative staff as a result of our rapid community growth. With exceptional growth along the east-central corridor of the city it was determined that an additional fire station at this site would provide coverage and keep pace with our ability to provide adequate fire response and office space for additional staff.

With the purchase of this 4.64 acre property, the city was able to procure a major asset in the site - an existing building, formally a church located on the north end of the site. We desire to utilize this site as offices for our Fire Marshal's Division as well as a home away from home for our firefighters. The ability to utilize the lower level of this existing building as an interim fire station would allow the fire department to improve response times to this growing area as well as provide design and develop a permanent fire station co-located on the site. Following completion of the new fire station, the lower-level would be re-purposed for office and conference space and back-up apparatus and equipment storage to be utilized by the Fire Department.

The site is on property located at El Chaparral Avenue and East Broadway. Primary access to the site is to the West from El Chaparral Avenue. Emergency vehicles will depart the site onto El Chaparral. The Fire Department seeks to present a welcoming feeling and belonging to the neighborhood and area while developing the buildings to provide important life safety facilities that will serve the community. The living areas for the interim and permanent fire station will be in scale with typical residential housing found in the area. Building material considerations shall be guided by the importance that the designs of the buildings represent a feeling of belonging in the neighborhood.

The buildings and site will provide economical, reliable, sustainable, and innovative organizational and infrastructure foundations for the efficient delivery of municipal services to meet the current and future needs of our residents and visitors.

- Development of building plans that are resilient to anticipated future conditions.
- Development of the site to prioritize safety and convenience while contributing to a bikable and walkable community.
- Designed to maintain maximum existing natural areas to enhance and maintain diverse native communities and landscape connectivity with the use of native plants in landscaping. Implement strategies to mitigate storm water impacts due to development.
- Extensive use of regionally sourced materials having the greatest recycled content where possible. Reduce landfill waste by diverting construction and demolition waste.
- Design facilities with highest feasible energy efficiency with on-site renewable energy HVAC & lighting systems and control installations that exceed minimum code requirements. Air conditioning units to use refrigerants with low global warming potential (e.g., carbon dioxide or ammonia instead of hydrofluorocarbons). Systems designed to manage energy demand to reduce peak energy use.
- Design facilities and install solar panels if feasible or construct to be solar ready.
- Design facilities using water conservation fixtures, such as low-flow urinals, toilets, showers and faucets; determine feasibility for rainwater harvesting for use in urinal & toilet flushing.
- The permanent fire station will provide space for living, sleeping, office work, training, and storage space with 3 apparatus bays. Additional square footage will provide for mezzanine storage and group training activities as well as mechanical systems.

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