

# BUILDING DESIGN & ARCHITECTURE

## Crossroads Christian Church Grand Prairie, TX

Prepared civil engineering planning and design documents for development of a 116-acre tract. Scope of work included preparing site development plans, utilities, and designing roadway/parking facilities. Services also included the design and layout of new storm drain systems that encompassed hydrological and hydraulic considerations and, earthen detention/retention facilities.



Extensive coordination with regulatory agencies was also a primary concern. Regulations and code requirements mandated from the city of Grand Prairie, the Trinity River Authority, and the U.S. Army Corps of Engineers were incorporated into the final construction documents. Design of acceleration and deceleration lanes, traffic control plans for State Highway 360 and impact analysis were also included in the complete scope of professional engineering services.

The scope of this project increased to include a \$140 million expansion package to include softball/soccer fields; recreation center; auditorium; and, four additional school/classroom buildings. This new phase and scope included preparing complete civil engineering plans that involved hydrologic/hydraulic analyses and surveying services.

Crossroads Christian Church is continuously upgrading and adding on to their facilities. We continue to work closely with them on design and construction of new paving design, renovation to the sanctuary choir loft and are currently working on new youth centers.





### **Texas Catholic Community Credit Union – Fort Worth, TX**

Prepared construction documents for the site development and construction of a new banking facility (Credit Union Building) in Fort Worth under a “Design/Build” agreement.

Design services included: the building design layout for the new facility; Geotechnical Investigations and Phase I environmental studies; preparing structural steel framing plans; designing the building’s foundation support system; and, preparing Civil Engineering plans and specifications for the site.

Construction aspects of the project involved: installing public and franchise utilities; stormwater facilities; reinforced concrete pavement; and, erecting the building’s steel framework and building finish-out. Other construction responsibilities included contract administration; on-site construction management; and, general coordination and conferences with city officials and client representatives.

### **Bardin Professional Center - Grand Prairie, TX**

Engineering services included preparing complete site development plans consisting of: site utilities; paving; storm drain design; and, parking area lighting layout and design. As part of our overall services, geotechnical investigations were performed for the design of a two-story building foundation system. Construction documents were prepared for the new office building, which included the architectural layout design; building steel framework; structural design; and, mechanical, electrical and plumbing systems.



### **Church at Burlleson - Burlleson, TX**

Developed architectural and engineering plan documents for construction of a new sanctuary and renovations of existing building.

Architectural aspects involved master planning and designing a new 18,000 sq. ft. sanctuary, children’s ministry classrooms and site development. Specific areas considered during the “master planning” process were investigating site development issues/constraints; building program; and, incorporating overall church needs.

Civil Engineering services consisted of site plan development including preparation of storm drain plans, design and layout of new parking facilities; and, public utility design. Structural elements included design and layout of a new 70 ft. span steel frame pedestrian bridge; building foundation system design; and, designing bridge abutments.



### **Saint Matthew Catholic Church - Arlington, TX**

Construction documents prepared for a new, 20,000 sq. ft. parking area for Saint Matthew Catholic Church in Arlington, Texas. The complete construction documents included the demolition of existing pavement, extending new sanitary sewer and water lines, and preparing plans for new parking area lighting.



**Ruthe Jackson Center (RJC) Gardens**  
**Grand Prairie, TX**



Planning, and design new facilities to enhance the amenities of the City's Ruthe Jackson Center centering around a cascading meandering water feature (reinforced concrete).

In addition to designing the Center's water feature, services included the design and layout of a concrete patio, structural design of foundation support systems for a new Pavilion/Chapel Building, elevated pedestrian walkway/bridge structure, retaining wall design and the structural design of a new fireplace/chimney.

Other elements of the project's design included storm drain system design, public utility design and sub-grade stabilization.

Overall responsibilities consisted of coordination with the Texas Department of Licensing and Regulation and franchise utilities and construction oversight.

Design work for the Ruthe Jackson Center Gardens earned a nomination for the 2009 Golden Trowel Award in the Hardscape/Landscape Category through the Masonry Contractors Association.





### **Bowles Park – Grand Prairie, TX**

Prepared Plans, Specifications, and Cost Estimate (PSE) documents for the layout and construction of an approximate one (1) mile meandering 8' wide concrete park trail, and concrete vehicle parking area under Community Development Block Grant (CDBG) funding. Requirements consisted of meeting ADA requirements and, creating access to an existing Pavilion and Life Center facilities and adjacent buildings. Additionally, we performed geotechnical investigations; topographic surveys; the design and layout of reinforced concrete pavement; drainage and grading analysis (i.e.: storm drain design; channel modifications, etc.) and administered the bidding and construction process.



Construction administration involved construction observations; review the contractors' submission of documents (i.e.: verification of project material specifications; change orders; contractor payment applications; etc.). Special requirements also included reviewing the Contractor's compliance with Federal regulations (i.e.: Compliance with the Davis-Bacon Act by conducting employee/labor interviews; etc.). The complete contract administration was required under the CDBG mandates promulgated under the Housing and Urban Development (HUD) program.



### **The Ranch at Cedar Hill- Cedar Hill, TX**

Design and develop a master plan for a new 27,000 sq. ft. upscale retail shopping center. Architectural aspects included preparing building construction documents, featuring decorative masonry exterior walls; interior layout and décor; and, overall construction management/administration. Structural engineering involved designing "timber" roof trusses to span approximately 40 feet; foundation support systems; and, designing building framework elements. The project involved conducting formal investigational studies of site issues/constraints, building program, and the owner's needs and assessment.



### **Progressive Office/Warehouse Facility – Arlington, TX**

Developed architectural and engineering construction documents for construction of new 8,000 sq. ft. office/warehouse facility. Architectural aspects involved preparation of building schematics and building design and layouts; planning office/warehouse for four individual units; and, develop exterior building features.

Engineering services included civil site plan development; framework and tilt wall structural design; and, foundation support system design.



### **Pioneer Bible Translators – Dallas, TX**

Completed first of three phases of the project. Phase I consisted of developing a comprehensive "master site development" for a five (5) acre track; and, preparing architectural conceptual building schematics and building features. Overall, the development will consist of three new multi-story building facilities; landscape features; new parking facilities; and, storm drain systems and detention areas.