



## Professional Background

Mr. Migl is a Senior Project Manager specializing in water resources engineering. He has extensive experience as a design engineer and Project Manager in the production of civil construction documents for shopping centers, apartment complexes, parking lots, and roadways within city, county and state jurisdictions. Construction documents consists of erosion and sedimentation controls, drainage area maps, layout plans, storm sewer and wastewater collection system layouts and profiles, paving plans, associated details and specification notes. In addition, site development experience consists of hydrologic analysis of watersheds in pre and post developed conditions as well as hydraulic analysis of storm sewer systems, water quality systems (Best Management Practices) and stormwater detention systems using Pond Pack 2, Flowmaster, and HEC-HMS computer programs. Mr. Migl has supervised and performed extensive drainage analyses using the U. S. Army Corps of Engineers HEC-1 and HEC-2 computer programs. His experience also includes technical report writing and review of TPDES Stormwater Pollution Prevention Plans, Water Pollution Abatement Plan (WPAP) reports, Sewage Collection System (SCS) reports, for the Texas Commission on Environmental Quality (TCEQ) and various drainage reports for Counties and Municipalities. Mr Migl has experience with site design build projects incorporating Leadership in Energy and Environmental Design (LEED) objectives.

## Education

B.S. in Civil Engineering,  
Texas A&M University, 1994

## Professional Licensure

State of Texas (#94854)

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## Relevant Experience

**Green Square Office Condominiums, Round Rock, Texas** A private funded LEED Certified Multi-Building Office Complex. development permitting was provided by Mr. Migl. The design required a TCEQ SCS application for approximately 1000 linear feet of 8-inch sanitary sewer over the Edwards Aquifer Recharge Zone. Sewer piping was sized based on estimated loading from seven buildings within the Office Park. The site also included approximately 2000 linear feet of 8-inch ductile iron water pipe. System capacity was analyzed to provide fire flows based on the current International Fire Code. The system design allowed for the connection to an existing asbestos cement (AC) water main.

### **Arbors at Stonegate North, Austin, Texas**

Multi-phase medical office park containing approximately 1280 linear feet of 6-inch gravity sewer, 1000 linear feet of 1 1/2-inch sewer forcemain, private lift station and 1135 linear feet of 8-inch water line. The waterline was dedicated to the City of Austin and contained with an approved easement. The water line design addressed connecting to an existing 18-inch Cylindrical Steel Concrete pipe

**Dell Pediatric Research Institute, Austin, Texas.** The first building in a fast track development of what is to become the 15.8-acre LEED Certified UT Health Research Campus located on the Robert Mueller Municipal Airport Reuse (RMMA) and Redevelopment Tract. The initial site plan consisted of a premier 150,000 square foot vivarium



lab, office space, receiving and disposal dock with an emergency power pack onsite, associated parking and internal circulation corridor in accordance with the overall RMMA Redevelopment Plan. Mr. Migl was the project manager for the civil development package. Almost all development issues resolved with the City of Austin in a two and half month time frame. The only outstanding issue was the details for a water meter and reduced pressure zone (RPZ) backflow preventor when the UT System decided to use reclaimed water on the site. The City of Austin was still ironing out the meter and RPZ details and sampling requirements. A sampling agreement was under review to formalize yearly sampling procedures for verification a cross connection with potable and reclaimed water has not occurred.

**City of Austin, Clean Water Program, Austin, Texas.** Project manager for the Program Management Team, created to comply with the USEPA-issued administrative order to eliminate sanitary sewer overflows (SSOs) from the wastewater collection system. Managing design and construction of improvements to the collection system. Developed a city-wide, annual contract for televising and cleaning of wastewater lines. Managed research of enhanced maintenance products and methodologies developed for the rehabilitation of existing wastewater collection systems. Assisted the city in preparation of and negotiating supplemental amendments to the rotation list design consultant contract. Tracked contract status, funding and possible requirements for additional funding. Assisted the rotation list design consultant in developing schedules and budgets in conformance with project tracking requirements. Managed periodic and milestone meetings with the rotation list design consultant. Reviewed surveying, geotechnical and topographic requests by the rotation list design consultant. Coordinated implementation of "front end" documents by the rotation list design consultant. Coordinated rotation list design consultants activities with Utility Coordination Council. Coordinated and assisted in review of 30%, 60%, 90% and final design documents. Provide rotation list design consultant with a constraints map and worked with the rotation list design consultant to identify special requirements such as permit issues, neighborhood concerns, possible easements or land acquisitions, right-of-entry issues, special ordinance issues, requests for additional flow monitoring or other investigations, and soils, archeological and/or geotechnical investigations. Provided construction management services for the city of Austin by processing and tracking timely review of construction product submittals, requests for information, change orders, claims, and pay applications. Conduct construction meetings with contractor, inspectors, and design consultants. Provide weekly progress reports and track the minority participation goals for work performed by the contractor. Coordinate final walkthrough of construction site and update construction documents for acceptance as record drawings. The following projects were developed under the supervision of Mr. Migl:

- Upper Shoal - Lower Hancock Branch
- Upper Shoal - Upper Hancock Branch
- Upper Shoal – Spicewood Branch at Wood Hollow Dr.
- Upper Shoal – Spicewood Branch at Foster Lane
- Upper Shoal – Spicewood Branch West of Mesa Dr.
- Little Walnut/Buttermilk at Colony Creek South
- Little Walnut/Buttermilk at Colony Creek North
- Govalle 1 West of Lamar Road

**Crossing Place –Culvert Improvements, City of Austin, Austin, Texas,** Mr. Thomas Migl was the design engineer for the project. The Preliminary phase of the project provided the City of Austin with varied culvert options and stream bank stabilization methods from gabion baskets, geocells to earthen embankments. The design incorporated a geomorphology and sediment transport analysis and mitigated an identified wetland per the City of Austin Watershed Department. Mr. Migl supervised the submittal of the revised stream bank section to the US Army Corps of Engineers for wetland mitigation and a Conditional Letter of Map Revision (CLOMR) for floodplain elevations. The project involved the relocation of an 8-inch waterline below the proposed culvert improvements for the City of Austin. A shutout test was conducted to verify impact to area utility customers. It was determined the relocated segment could be isolated and constructed without impact to utility customers. The project also required the installation of traffic and pedestrian control measures per the Manual on Uniform Traffic Control Devices (MUTCD).



**Lower Colorado River Authority, Northwest Travis County Regional Wastewater System, Austin, Texas.** Project engineer for the study of a large land area in Northwest Travis County, which is largely tributary to the north side of Lake Travis. The LCRA managed the project study, in conjunction with the cities of Cedar Park, Jonestown, Lago Vista and Leander and the Point Venture Water Control and Improvement District (WCID). The political subdivisions, in conjunction with the LCRA, proposed to evaluate the feasibility of a regional wastewater collection and treatment system in Northwest Travis County. Current regulations no longer allow the discharge of wastewater effluent into Lake Travis.

**Round Rock Independent School District, Round Rock, Texas.** Project team leader for consulting services for the construction of three elementary and two middle schools; conducted hydrologic and hydraulic analyses of waterways subject to FEMA authority; and mitigated floodplains through the FEMA CLOMR and LOMR processes. Supervised and provided technical assistance within a team atmosphere in the design and production of construction documents, such as grading, balancing of cut/fill, hydrologic and hydraulic calculations, water quality controls, water distribution and wastewater collection systems, and compliance with government regulations. Responsible for design team coordination, permitting, and construction administration. Developed project work plans to accomplish team objectives including deadlines, budgets, efficiency of production, and quality of service.

**City of Austin, Robert Mueller Municipal Airport Reuse and Redevelopment Plan, Austin, Texas.** Provided preliminary layout and sizing of proposed utilities, storm water detention and water quality structures, and a preliminary construction cost estimate of internal and peripheral site infrastructure. Infrastructure items consisted of: Demolition of existing structures and reclamation of airport site. Perimeter and site street and intersection improvements. Storm drainage systems with wet ponds for detention and water quality. Water, wastewater, and reclaimed water distribution and collection systems. Green space and park space allocations with associated facilities. Estimated living unit equivalents (LUEs) and calculated water and wastewater demands for the various proposed developments within RMMA. Water demand calculations and distribution system design was supported by a Kentucky-pipe model, a computer model program for a piped water distribution system. A preliminary wastewater collection system was designed in accordance to state and city guidelines calculating anticipated minimum flows, average and peak dry weather flows, inflow and infiltration, and peak wet weather flow.

**Lions Municipal Golf Course, City of Austin Parks and Recreation Department, Austin, Texas, Mr. Thomas Migl** was the design engineer for the hydrologic, hydraulic analysis, water quality facilities design i.e. calculations for vegetative filter strips. The design facilitated a new entrance drive to the Lions club house and parking lot, minor improvements to the parking lot and ADA compliant accessible routes from the parking lot to the club house and cart path improvements for the majority of the existing paths. The increase in impervious cover was incorporated into a hydrologic and hydraulic computer model in order to satisfy the City of Austin's Land Development. The hydraulic model identified the limits of the critical water quality zones and established net site area calculations applicable to the tract. The majority of the development runoff was routed through existing series of ponds located on the golf course. The analysis found that there was not an appreciable increase in runoff from the golf course and water surface elevations as the runoff crossed Lake Austin Boulevard. A small portion of the golf course did drain to the east into the Johnson Creek Watershed however, this watershed did contain impaired flood zones so a detention facility was design to detain the increase in runoff. The facility was design with minimal impact to the golf course and hidden within the existing course. The pond is located just to the north of the number 9 tee box.

**University of Texas, Blacklands Parking Improvements, Austin, Texas.** Design engineer for the production of construction documents for multiple parking lots located on the east side of Comal Street and south of Manor Street. Facilitated the vacation of utility easements and public right of way, as well as design of water quality facilities, and storm sewer systems. Designed a functional layout that exhibited effective vehicle circulation and ensured the preservation of existing trees found on site.



**Southwestern University, Water Pollution Abatement Plan, Georgetown, Texas.** Provided a comprehensive plan filed with the Texas Natural Resources Commission for several campus-wide improvements. Recorded the amount of impervious cover added to the campus and predicted when water quality ponds were required. Sized ponds to maintain state-regulated water quality standards for areas of development over the Edwards Aquifer recharge and transition zone.

**Southwestern University, Howery Center, Georgetown, Texas.** Design engineer for the construction of a new activity center. Provided drainage calculations for grading and drainage plans and designed the layout of all utilities including water and wastewater lines servicing the proposed building. The plans consisted of renovating the existing golf cart storage building and pro-shop, and adding on an activity center to the existing structure.

**H.E.B. Grocery Store, Waxahachie, Texas.** Conducted a drainage study for Mustang Creek (located adjacent to the proposed site) to determine a minimum finished floor elevation for the store above the 100-year stormwater elevation and provide documented information to the extent the proposed development did not adversely affect downstream floodwater elevations.

**H.E. Brodie Tract Condemnation Case, Austin, Texas.** Design engineer providing extensive hydrologic and hydraulic modeling of a waterway extending from the H.E. Brodie Tract to Barton Creek, for use in a condemnation case to determine whether or not construction improvements by the Texas Department of Transportation (TxDOT) restricted the development of the H.E. Brodie Tract. The analysis included the consideration of existing and developed conditions of the watershed. Prepared computer-generated stormwater runoff models for presentation to a jury, demonstrating that detention for the H.E. Brodie Tract would not be viable due to the location of the TxDOT improvements. As a result, the jury ruled in favor of the plaintiff and established that TxDOT was responsible for monetary compensation.

**Highland Mall, Austin, Texas.** Prepared and submitted a site plan exemption request for construction of a new solid waste disposal area and various areas where renovation of the existing parking areas were required. Both requests were accepted and approved by the city of Austin.

**F.M. 734 Addition of Left-turn Lane at McNeil Dr., Austin, Texas.** Design engineer responsible for the preparation of roadway construction drawings with drainage calculations and quantities for approval by Texas Department of Transportation, Austin District.

**H.E.B. Grocery Store, Georgetown #2, Georgetown, Texas.** Design engineer conducted preliminary design and layout of a wastewater collection main from Sequoia Spur to Hedgewood Drive, approximately 11,000 feet.

**Deerfield Multifamily, Austin, Texas.** Design engineer responsible for the design of an apartment complex with re-irrigation water quality and detention ponds. Prepared a HEC-1 computer model of the project site, and performed routing computations through both the water quality and detention ponds. Used the HEC-1 computer model to size and design the detention pond which detained runoff leaving the site for the 2-year, 10-year, 25-year and 100-year design storm events.

**H.E.B. Grocery Store, Austin #12, Austin, Texas.** Project engineer for design of a drive-through pharmacy window facility along the west wall of the store. Prepared and submitted a site plan correction to the city of Austin for review and approval. Prepared a grading plan, striping plan for traffic control, and a paving plan showing limits of demolition of existing asphalt and concrete curbing.

**Fazio No. 2 Golf Course Retention/Irrigation Ponds, Austin, Texas.** Design engineer of multiple retention/irrigation ponds throughout the Fazio No. 2 Golf Course of the Barton Creek Development. The project included six ponds ranging in volume from 3 to 28.8 acre-feet. Designed bypass structures for these ponds to convey the 100-year storm event. The design of the ponds included an extensive grey water irrigation system which included multiple pump stations. Mr. Migl performed a preliminary analysis of this



**Thomas Migl, P.E.**  
**Senior Project Manager**

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irrigation system using the KY-Pipe computer program to develop system curves and final selection of pump that meets the demand of the system.