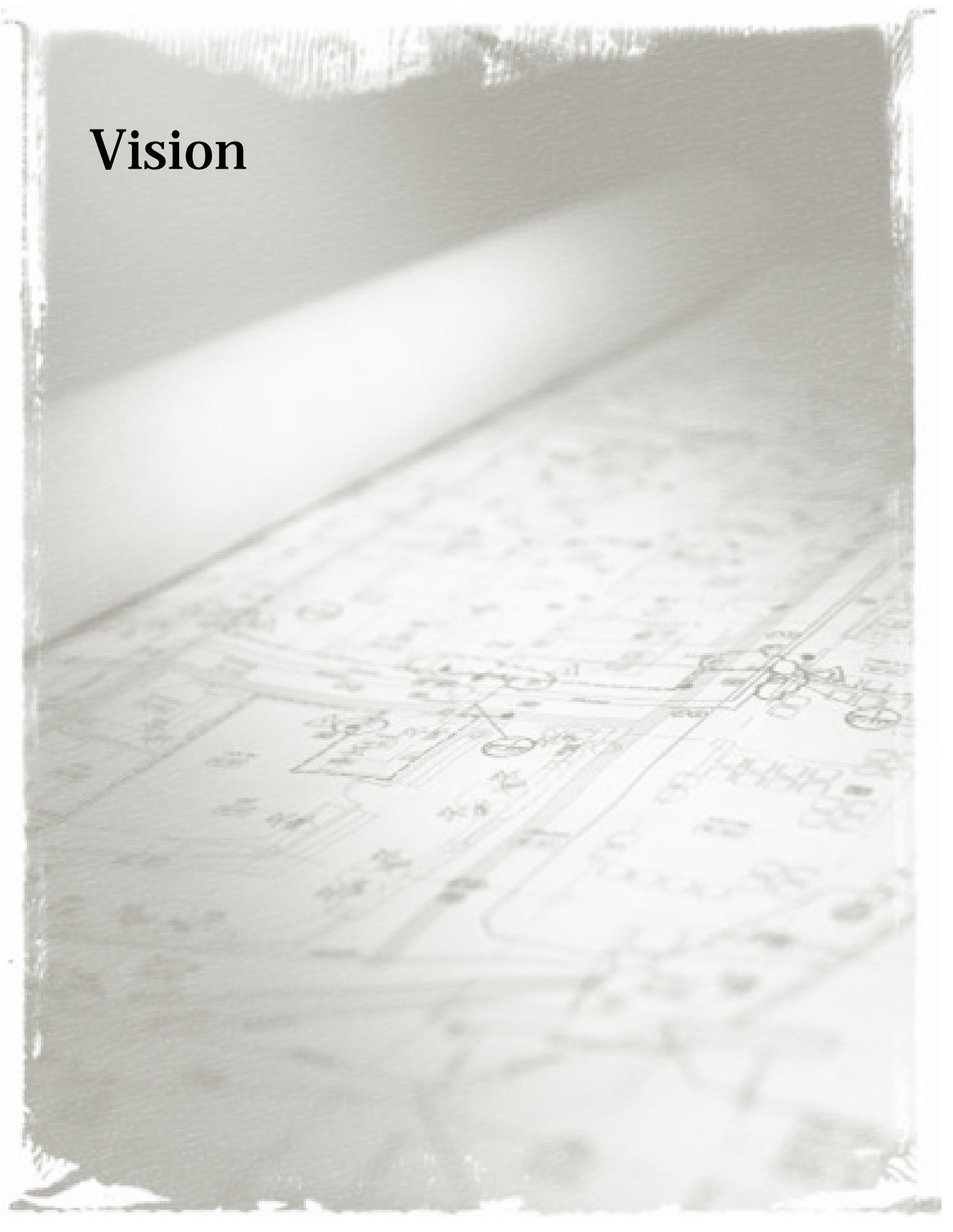




McNEIL ENGINEERING



Vision



McNeil Engineering's mission is to be the engineering firm of choice and to use our extensive experience to deliver innovative and cost effective results to our clients. We are committed to maintaining excellence, respect, and integrity in all aspects of our operation and our professional and business conduct. We strive to reflect the highest ethical standards in our relationships with our clients and to exceed their expectations and gaining their trust through exceptional performance by every member of our team.

Services



From the private sector to local, state and federal agencies, McNeil Engineering works with clients of all sizes across multiple industries. We provide services in everything from land planning, civil and structural engineering, land surveying & laser scanning, landscape architecture, roofing & paving consulting and construction management.

Civil Engineering

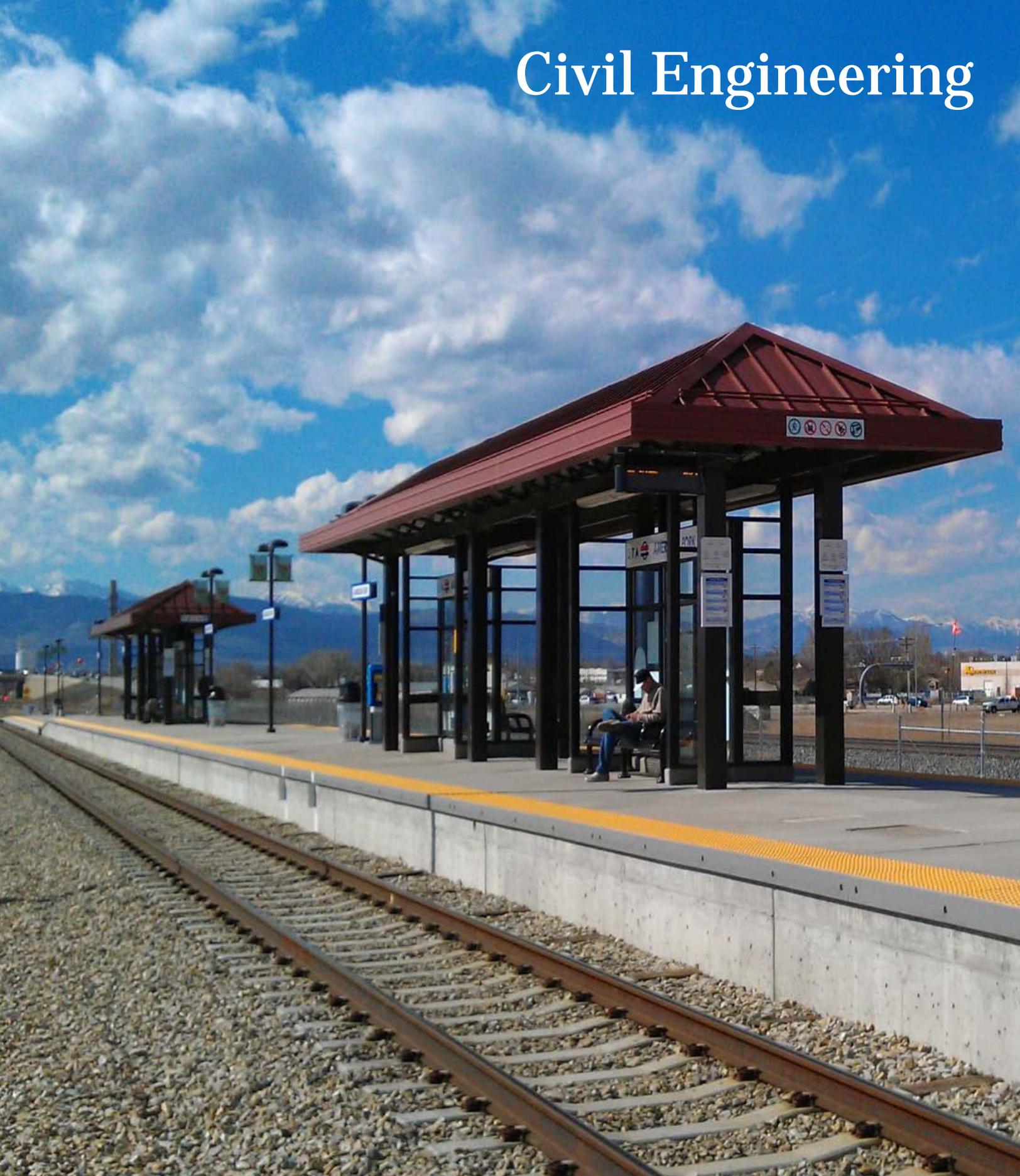
Consulting &
Landscape
Architecture



Structural
Engineering

Laser Scanning &
Land Surveying

Civil Engineering



FrontRunner South...McNeil Engineering provided civil engineering for park-and-ride stations associated with the UTA FrontRunner project from Salt Lake to Provo. McNeil's services include site layout, grading, drainage, storm water detention system and design for parking areas, bus loop and pedestrian walkways. McNeil Engineering provided assistance for review and approvals with the various cities and utility providers.

McNeil Engineering provides civil engineering and site engineering design services for private and public projects. We have expertise ranging from small residential projects to regional shopping centers and mixed-use village centers. Our experience includes retail, office, restaurant, industrial, manufacturing, institutional, transportation, residential and mixed-use projects.

Design Services

- Land development services
- Site feasibility studies and due diligence analysis
- Site layout
- Road design
- Grading design and earthwork analysis
- Drainage analysis and storm drain system design
- Storm water detention system analysis and design
- Erosion control measures & SWPPP
- Water system analysis and design
- Sanitary sewer system design
- Subdivision design
- 3D models
- Permitting and Entitlement assistance with cities, counties and state agencies

Fashion Place General Growth Properties undertook significant changes to Fashion Place Mall beginning in 2005. The new shopping mall includes over one million square feet of retail space including a new Nordstrom, Crate & Barrel, North Face, H&M, Cheesecake Factory and Lifestyle Center. McNeil Engineering provided all of the surveying and civil engineering for the reconstruction and expansion of the mall. Services included design for the roadways, parking lots, sidewalks and plazas, grading and drainage, water system facilities, sanitary sewer facilities.

Mill Rock Technology Park McNeil Engineering was retained to provide civil engineering design services for an extremely challenging 21 acre site in the foothills of Holladay City. The 5-lot Technology Park includes 500,000 square feet of office space in 4 buildings terraced across a site with 150 feet of slope from east to west. Two parking structures were designed for the site containing 1700 parking stalls with at grade access to 5 different levels. The project was a tremendous success winning several industry awards including "Best of State Project" in 2009.

Lookout at Deer Valley A 44 acre overall site in Park City, Utah where 8 acres were developed with 35 home sites and a common clubhouse. The remaining 36 acres were dedicated as open space to enhance the area. These homes are all connected with a one-half mile private road winding through the developed area and connecting each end to a public road. Retaining walls up to 35 feet high were designed with the face in keeping with the mountain look. Construction assistance was provided to help maintain a constructible project with very strict parameters.



Structural Engineering



Sugarhouse Crossing project is a mixed Use 3 Levels Below Grade Parking, 1 Level at Grade Commercial, 5 Levels Timber Framed with 200 apartments. This was a \$40,000,000 project constructed in the heart of historic Sugar House, in Salt Lake City. McNeil Engineering provided the structural design for this project.

Our diverse staff of professional structural engineers, backed by many years of experience is uniquely qualified to offer specialized expertise in the planning, design and construction of structures for buildings and civil works projects. Successful projects for repeat clientele indicate our ability to analyze and design specialized structures and to solve unique structural or foundation problems. Our clients know that our professionalism, understanding of the construction process, and commitment to quality design provides them with the most efficient, economical and safe structures specifically suited to their needs.

Our Engineers utilize the latest in software innovation for analysis, design and drawing production. Knowledge and understanding of state-of-the-art software has given our professionals the ability to quickly investigate alternative structural systems and perform value engineering options in the early stages of design.

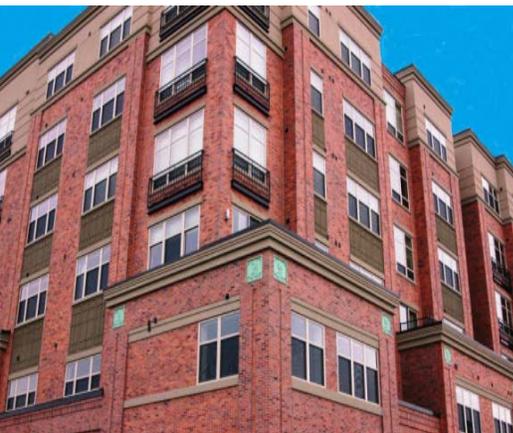
Services Provide

- Constructability Analysis
- Seismic Analysis
- Force Protection Blast Analysis and Design
- Alternative Designs for Construction Cost and Time Savings
- Structural Analysis, Design, Specifications and Construction Documentation
- Field Observation and Construction Management
- Reinforced, Precast Tilt Up and Prestressed Concrete
- Precast Concrete Production, Transport and Erection
- Post Tension Concrete Design
- Steel, Masonry and Timber Design
- Construction Products and Materials Development
- Structural Investigation and Reports
- Structural Damage and Failure Analysis
- Repair, Re-strengthening and Retrofitting of Structures
- HUD Permanent Foundation Analysis

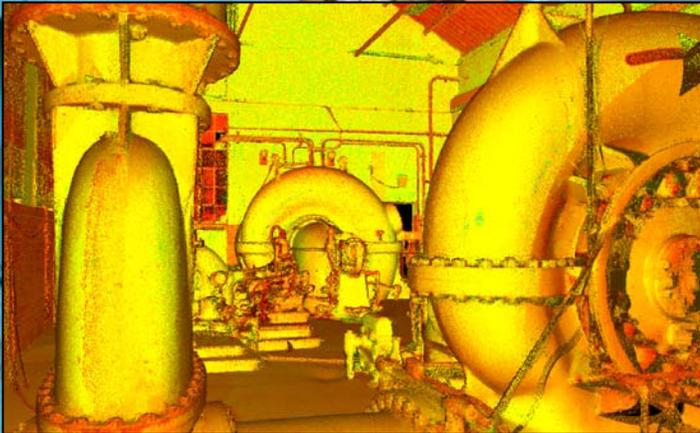
Multifamily Design McNeil Engineering has designed over \$600 million worth of apartment buildings in the last 5 years from three story timber framed apartment structures to mixed use developments with multistory parking, commercial and residential components. McNeil Engineering provides design services for structures using CAD software to include Revit Structures, a fully integrated physical and analytical modeling program for use in BIM design.

Cable Mountain Lodge McNeil Engineering provided the structural engineering design services for multiple two story hotel buildings for Cable Mountain Lodge. This project consisted of several structural challenges This project was designed to meet the 2006 International Building Code and was designed for seismic design category D, one of the highest categories in the country.

Ashley Valley Ballpark McNeil Engineering provided the structural engineering design services for this two story concession stand and announcing booth for the Ashley Valley Park in Vernal, Utah. Some of the challenges presented on this project were structurally tying the multiple construction systems together and providing space for duct work for the mechanical systems and at the same time providing maximum window space at the announcing booth. This project was designed for seismic design category D.



Laser Scanning & Land Surveying



The powerhouse was built in 1923 by Logan City and is located about two miles up Logan Canyon. McNeil Engineering used 3D Laser Scanning technology (LiDAR Scanning) on this project to create a highly accurate representation of the existing conditions of the powerhouse to aid in the design and installation of new mechanical equipment and future modifications.

McNeil Engineering is leading the State of Utah by pioneering the uses of Laser Scanning (LiDAR) and surveying technology. We can accurately capture all available visual information of a site or building with this amazing technology. Millions of captured data points are stitched together to create a virtual representation of the site or structure, with each point capable to being accessed and examined individually.

Services Provided

- Right of Way Surveys
- 3D Laser scanning/3D Modeling services
- Boundary and topographic surveys
- A.L.T.A./A.C.S.M. Land Title Surveys
- Legal descriptions and sketches
- Construction surveying
- Subdivision Platting
- GPS services
- Deed research
- Boundary dispute resolutions

Laser Scanning – Some of the Industries Served

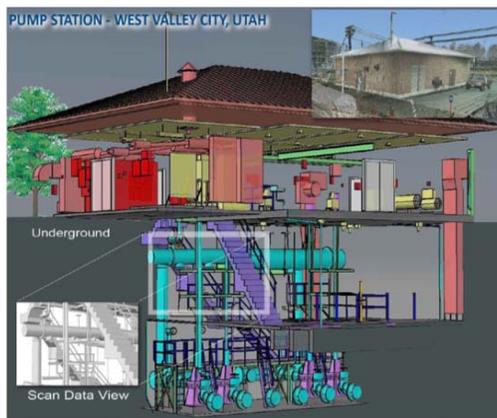
- Transportation/Airports
- Historic Preservation
- Industrial/Refineries
- Mining
- Project Documentation/3D Modeling
- BIM Surveying
- Residential

Ogden LDS Temple Reconstruction

Richardson Design Partnership contracted with McNeil to perform a Boundary/Topographic survey of the entire Temple Block in Ogden, Utah, including the Temple, Tabernacle, and the Daughter's of Utah Pioneer (DUP) Building. Survey data was collected on existing improvements and utilities on the entire site, as well as surrounding roadways using LiDAR Technology.

Pump Station McNeil Engineering aided Bowen Collins and Associates with a redesign for an addition to an existing pump station. Details for the pumps, piping and pump house were captured and modeled by McNeil survey and modeling departments. Bowen Collins & Associates then imported their plans into the as-built documents provided by McNeil Engineering to evaluate project plans and determine if the new plans/structures and equipment would clash with existing items.

McNeil Engineering is fast becoming the expert in **refinery scanning** in the intermountain area. Here are some of the customers we have scanned refineries for: Red Giant Oil, Holly Refinery's Salt Lake City and Cheyenne, Wyoming locations, Tesoro Refinery, Big West Oil, Quality Oil, National Oil Well Varco, and PacifiCorp. The use of Laser Scanning technology creates a highly accurate representation of existing conditions of the refinery to aid in the design and installation of new equipment and future modifications.



Consulting



At the end of 2012, McNeil Engineering was approached by the LDS Church to take a close look at one of their church buildings in Salt Lake City, Utah. However, this particular building has been around for nearly 100 years and occupies a very prominent piece of property directly across the street from the Utah State Capitol. This is currently on the Utah, national and LDS Church's historical list. To say this church is historically important would be an understatement.

Our Roofing Consulting Department was tasked to replace a synthetic tile roofing system that had been installed to replace the original roof. The synthetic tiles failed and had been leaking for several years. We were asked to design a new roofing system to comply with the original architectural and historical period style and to provide quality control during the construction to make sure that the system was installed properly.

We designed a slate tile roofing system to bring the look of the building back to its original look and to give it the longevity that only a slate tile system can give. A quarry in Vermont was used to cut and shape the tiles to the designed shape. They were able to also supply the colors of tile that were chosen by the historical departments from the state and LDS church that would best match the original roof.

Roofing Consulting

Since 1984, State and Local Municipalities, major Property Management corporations, Hospitals, Religious Organizations, and School Districts have looked to McNeil Engineering for their roofing design, repair, and maintenance needs.

As a full service Roofing Consulting Firm, we specialize in the entire building envelope and all aspects of roofing design and architecture, from existing condition evaluations to designs for complete replacements, construction management, and observations during construction.

Services Provided

- New Roof System Designs and Construction Oversight
- Design and Construction Oversight for Replacement of Existing Roof Systems
- Roof Overbuild Design
- Existing Roof Condition Analysis
- Project Scoping and Opinion of Probable Costs
- Recommendations and Instruction for Roof Systems Maintenance
- Humidity/Condensation Analysis

Paving Consulting

As a full service Pavement Consulting Firm, we specialize in all aspects of concrete, asphalt, recycled materials, and other pavement systems. We can provide all of your pavement design needs, from existing condition evaluations and estimates for recommended repairs, to complete replacement design, documentation, and project management.

Services Provided

- New Parking Lot Design
- Re-Engineering of Existing Parking Lots
- Existing Condition Analysis
- Project Scoping and Opinion of Probable Costs
- Drainage and Slope Solutions
- Concrete Parking Structure Evaluation
- Pavement Structure Analysis and Design

Manti LDS Temple: McNeil Engineering design paving around the existing greenhouse as well as designed the repaving of the main approach and pavement around the temple.

Snow College Business Building Re-Roof

Complete a re-roofing project that had been started the previous year. The prior contractor did not complete the project and we were asked to include as a part of our scope of work to finish off the uncompleted portions, as well as remove and replace the existing low-slope roofing system.

Calvin L. Rampton Complex Paving and Landscaping This facility has been around for over 25 years, and the paving was the original installation, with some additions over the years. We received a request to survey and look at providing some much needed paving repair services for the site. This project was completed in 3 separate phases.



Landscape Architecture



In 2006, McNeil Engineering was commissioned by the San Francisco based architectural firm, Anshen + Allen (currently Stantec) as the Landscape Architectural consultant for the proposed Intermountain Healthcare Riverton Hospital. Located just off Bangerter Highway and 12600 South, Riverton, Utah in the rapidly growing section of Salt Lake County.

The hospital is located on a sixty-seven (67) acre site and provides southwest valley residents with access to a full range of clinical services from outpatient radiology to general surgery to women's and birthing services. The campus includes a four-story hospital, a four-story Primary Children's Medical Center outpatient facility and a four-story physician office building.

The owner and consultant team worked closely with the city to meet local ordinances as well as develop a facility that will stand as a beacon to quality healthcare for years to come.

In 2014, McNeil Engineering was again commissioned by HDR Architecture to provide Landscape Architectural consulting services for a 4-story Outpatient Building Expansion. This addition included the expansion of parking lots and landscaping as well as the development of an outdoor Physical Therapy Courtyard. Sustainable design practices were implemented throughout the site and landscape design and the project is expected to obtain a Silver LEED rating when completed.

McNeil Engineering's Landscape Architecture and Land Planning division is a service-oriented firm offering award winning planning and design services throughout the Western United States. Our studio consists of a highly qualified professional staff of landscape architects, planners, and graphic designers who combine their skill, talent, education, and experience to allow us to explore the broadest range of solutions for our client's specific needs.

Our firm's desire for exceptional creativity and performance also incorporates fiscal reality. We are committed to establishing the most reasonable fees possible and insuring that each phase of a project is managed in the most cost effective manner. The result is an exceptional product for a superior value.

McNeil Engineering is philosophically and realistically committed to providing our clients and ultimately the public with sensitive and responsive planning and design solutions that enhance our communities and our lives. We sincerely believe that the ultimate responsibility of our firm is to provide thoughtful and creative planning and design solutions that not only meet the needs of our client, but benefits society as a whole.

Services Provided

- Site Planning and Design
- Planting & Irrigation Design
- Water-Wise Xeriscape Design
- Water Management Services
- Site Paving & Amenities Plans
- Construction Administration
- Cost Estimating & Budgeting
- Governmental Approvals & Permitting
- Illustrative & Graphic Design
- ADA Access Planning & Design
- Parks & Recreation Planning & Design
- Urban Design
- Signage & Gateway Design

21 & View is a sustainable mixed-use apartment and commercial development. McNeil Engineering created the vision for the contemporary site and landscape design found on this prime piece of real estate that overlooks Sugar House Park. The site consists of two buildings containing 29 luxury apartments and roughly 3,500 square feet of commercial space connected by an open-air walkway.

McNeil Engineering was initially contacted by **Weber State University** to lead the planning and design efforts for a proposed landscape remodel at the north entrance into the Student Services Center (SSC). The success of the initial remodel at the SSC completed during the summer of 2013 has led to an on-going working relationship with WSU CPC and its staff and the completion of several more landscape and site upgrade projects throughout the campus.

Creekside Park The project team generated and presented several design concepts to the residents and city staff for review and comment. The final result was a design using innovative ideas and concepts to accomplish the city's and surrounding neighborhood's programming requirements. Specific program elements includes a new walking trail, interpretation signage, perimeter fencing, playground, climbing wall, shaded seating areas, a drinking fountain and landscaping all placed within the natural environment.



The McNeil Difference



What sets McNeil Engineering apart from the competition...

- We want to be a part of a great team and we understand great teams rely on **trusting teammates**. We understand that relationships are all about trust and that trust is hard to get and easy to lose. We strive to earn and keep relationships that are built on **trust** and **confidence**.
- Our vision and goals extend beyond one project - we are in the business of **building relationships**, not just projects. We recognize that the better we understand our clients and their objectives, the more effective and efficient we can be in our services. This often requires a longer-term relationship extending beyond one project.
- **Communication and Responsiveness:** The other day a client said, "one of the reasons I love working with McNeil is that I know they will call me back promptly." Everyone understands the frustration of not being able to get a simple response from someone in a reasonable amount of time. Lack of communication can create delays. We understand communication is critical to the success of a team, and our goal is to respond to all forms of communication (phone calls, emails, meetings, etc) as quickly as possible.
- We recognize the importance of getting the **approval entity** (the city, county or state) **involved** in the process early to weed out **potential issues** before they become a **crisis**. This is similar on the old phrase "you can pay it now or pay it later". In our experience, the sooner we can get feedback from the review authority, the better. While it may take a bit more time early in the project, it will almost always save time in the long term.
- We have a **proven ability** to bring **creative solutions** to the table for nearly any size project. We have been providing creative design solutions to our clients for more than 30 years.
- Our highly qualified staff is willing to look at **outside of the box solutions** - no cookie cutter solutions here. What works for one project may not work for the next. We spend a lot of time and effort evaluating alternatives for each project with the goal of providing informed choices for our clients.

What Others are Saying About McNeil Engineering...

"You guys have always been fair. That is why you do so much for me. I appreciate all you do!"

Jeff Scott, Construction Project Manager
The Church of Jesus Christ of Latter-Day Saints

"McNeil Engineering offers a complete line of engineering services that is both timely and affordable. The staff at McNeil Engineering takes the time to understand our company's systems and capabilities and offers ideas, suggestion and designs that work best for us. They are available for quick phone consultations as well as in depth design and analysis. There is never a job too small and as a small manufacturing company, that level of service is huge! They stay connected to our needs and are very thorough and complete. There are many design consultants available but McNeil's personal and professional approach makes them our Engineer of choice."

John Newton, Chief Estimator/Project Manager
Harper Precast

"McNeil Engineering are team players who can always be counted on to professionally accomplish tasks accurately and on time. I'm continually impressed with McNeil Engineering's ability to come with creative and cost-effective solutions to difficult or unusual engineering problems."

Rand Eardley, President
REA Architecture

"Sincere thanks to you for being honest and forthright in our dealings. I truly appreciate it."

Ned Stephenson
The Church of Jesus Christ of Latter-Day Saints

What Others are Saying About McNeil Engineering...

"I have had the privilege to see the dedication that the McNeil Engineering team provides on each of their projects."

Tena Campbell, P.E., Principal
Bowen Collins & Associates

"McNeil Engineering has always been competitive on cost and timing and are great to work with. They have the capability and the knowledge to work through any issues that may arise during the process."

Tara Jewkes
Western Capital Realty Advisors

"I have worked with McNeil Engineering over 20 year and appreciate them doing such a great job in providing great service to my Custom Carport Designs.

Ken Day
Custom Carports

"The Clawson Group has had a great relationship with McNeil Engineering over the past several years. It is my pleasure to recommend them to anyone that is looking for the services they have to offer. They primarily perform ALTA Surveys for us, and exceed our expectations time and time again."

Kevyn Aldrich
The Clawson Group



McNEIL ENGINEERING™

Economic and Sustainable Designs, Professionals You Know and Trust

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