



PROJECT OVERVIEW

The Federico F. Pena Southwest Family Health Center and Urgent Care Clinic project is special because it resurrects a brownfield site and provides a facility that serves the underprivileged community in southwest Denver that is facing significant healthcare issues, and provides Denver Health with additional clinical capacity for overcrowded facilities in west Denver. Understanding the speed-to-market premise for the facility, Hensel Phelps incorporated a collaborative effort with Denver Health and the architect to successfully deliver this project. The notice to proceed was issued five months after the notice of award. During that time, Denver Health significantly added to the scope of the project that grew the size of the building and included the addition of a 5,800 SF Urgent Care program, as well as increasing the quality of the finishes and exposed structure throughout the public lobby/waiting spaces. The larger building footprint also required the building to be relocated to the north end of the lot to meet zoning requirements, requiring substantial soils import to elevate the building properly.

This project consisted of the construction of the Southwest Family Health Center, a new 45,600 SF, single-story public health clinic built with a structural steel and architectural glu-lam frame on the site of an abandoned grocery store in Denver. Being the third redevelopment of the site, remnants of two vacated gasoline filling stations were found at both street corners of the lot, requiring minor remediation.

SOLUTIONS OF SPECIAL PROJECTS

Demolition: During demolition and removal of the existing grocery store parking lot, Hensel Phelps discovered an abandoned house foundation, old water well and partial gas station foundation that had previously been buried and covered with paving. The old well had to be filled with gravel and capped with several feet of concrete. The foundations were excavated and removed from the site. The civil engineer, geotechnical engineer, Hensel Phelps, and Denver Health worked together as a team to make timely decisions and come up with the above solutions. This allowed us to move forward quickly with construction and mitigate any schedule impact due to these unforeseen conditions.



Difficulties | Extenuating Circumstances: A record amount of rain was experienced in May and June while trying to place the concrete slabs. To remediate the situation, it was decided to erect the structural steel prior to placing the slabs. This allowed us to begin other elements of the building, such as exterior framing and roofing, while underground utilities and the slab were placed. This coordination effort minimized the impacts to the schedule due to this record spring rainfall, and there were no injuries as we dealt with the mud and water.

Third-Party Consultant: Hensel Phelps also used the services of the consulting engineer as a third-party water infiltration consultant for review of the contract documents. Working together with the design team, we implemented several flashing and weather barrier suggestions into the design. The participation from the design team and third-party consultant during the construction and review of the exterior mockup were key to implementing these ideas.

EXCELLENCE IN PROJECT EXECUTION AND MANAGEMENT/TEAM APPROACH

Recognized by Health Links™ as a Healthy Business Certified Leader™, Denver Health has been identified as a champion for health, safety, and wellbeing in the industry and community. Aligning with Hensel Phelps' philosophy of championing the delivery of more than concrete, steel and mortar, and building the type of commitment, trust and partnership that gives our clients real peace of mind, Hensel Phelps provided CM/GC services for this project. Our clients have referred to this approach as "*The Hensel Phelps Way*," where we **Plan** with ingenuity, **Build** with integrity, and **Manage** with assurance, and where the tenets of construction best practices are applied. In the words of Denver Health and Hospital Authority's Project Manager Todd Genenbacher, "*... the team demonstrated great leadership and flexibility as [Denver Health] made modifications to scope and process throughout the course of this project. They have provided realistic recommendations through constructability reviews and cost evaluations ... All quality and team performance expectations were exceeded. I would highly recommend Hensel Phelps and this team for any project....*"



CONSTRUCTION INNOVATIONS / STATE-OF-THE-ART ADVANCEMENT

Quality Control: The fundamental objective of the Hensel Phelps quality control program is to focus the team’s effort on planning and preparation in order to perform the work correctly the first time. Beginning during the preconstruction phase and working closely with the project team, the following program was implemented:

- Project-Specific CQC Plan that involved the entire team
- A proactive 6-Step Quality / Safety control process that addressed each Definable Feature of Work (DFOW)
- A Quality Process Log (QPL), which monitored the status of each step of the process for each DFOW
- Standardized procedures for documentation of testing, inspections, deficiencies, and as-built conditions
- Regular Quality Audits performed by executive management to ensure compliance and course correction
- A Quality Incentive Plan that rewarded quality workmanship at the craft levels

- 1 Purchasing Meeting
- 2 Pre-Mobilization Meeting
- 3 Preparatory Meeting
- 4 Initial Inspection
- 5 Follow-up Inspection
- 6 Final Inspection

Mockup: A significant step toward ensuring quality soundness and to assure a weathertight building for Denver Health and this new facility, was to provide an extensive mockup that was designed, carefully coordinated, and built to better understand the challenging exterior skin that was comprised of masonry veneer brick and block, insulated metal panels, cement stucco, and glazing systems that included curtain wall and storefront systems with 1” insulated low E glazing units. This step was unique due to the level of detail to which it was executed. It involved not only the exterior skin trades, but also the MEP trades that had penetrations through the wall. The consulting engineer was involved in the design and coordination of the exterior skin to ensure everything was done correctly.



Matterport: This new technology enables users to create cloud-based 3D models of real-world spaces and allows people to walk through, modify, and share digital environments on devices, such as laptops and iPads. Matterport was used as a scanning tool on this project to capture in-wall rough-in as-built information. These scans can later be used to look at the in-wall locations of plumbing, electrical, backing, etc., which information can be very useful for the end user when their vendors come in and need to know where the backing was installed. The view to the right demonstrates a screenshot of a Matterport scan showing wood backing for upper and lower cabinets along with electrical in-wall rough-in.



MEO Technology: Hensel Phelps' real-time, cloud-based, integrated building and management technology solution is affectionately known as MEO, which stands for Modular Electronic Office. Available from anywhere there was an Internet connection, MEO is a suite of innovative tools and best practices that enhance project management, and ensure real-time communication and collaboration – so obstacles are eliminated and opportunities are quickly seized.

ENVIRONMENTAL / SAFETY

Lean Design Process: To meet the healthcare needs of the patients, the first step in the architect's design process was an immersion phase, involving several days at the existing clinic to observe staff and patient movement, and have one-on-one discussions about level of care and services. The next step was a multi-day 3P (Production, Preparation, and Process) Lean Design event that included all stakeholders in the project. The goal was to analyze the health center's current processes and workflow. The event also determined how to most effectively meet the healthcare team's needs to provide the best care for patients with the least amount of waste.



Nothing is more important than sending everyone home each day without bodily injury.

An overview of the Hensel Phelps Safety Accountability for Everyone (SAFE) Program includes the following:

- A project-specific Safety and Health Management Plan.
- Safety training conducted on a weekly basis for all on-site personnel, including supervisors, to review the owner's specific requirements.
- All subcontractor employees were required to complete a job-specific orientation program and participate in monthly job-wide safety training sessions.
- Daily safety inspections were performed for all activities by supervisory personnel.



All levels of management, supervisory and field personnel were fully committed to this safety program. The implementation of this program resulted in ZERO OSHA-recordable accidents, ZERO OSHA-restricted day cases, and ZERO OSHA lost-time accidents.

EXCELLENCE IN CLIENT SERVICE AND/OR CONTRIBUTION TO COMMUNITY

SBE/MWBE: A small business participation goal of 15% was set for this project. Hensel Phelps committed to a 20% goal and exceeded that with an achieved 23% participation level. This success came from having an intimate knowledge of special barriers that businesses and communities face by mentoring and equipping those firms with the tools necessary to remove those barriers to success. In an effort to ensure maximum participation of M/WBE, SBE, and DBE subcontractors and suppliers, Hensel Phelps facilitated existing M/WBE relationships, as well as other certified eligible subcontractors from the City and County of Denver directory.









