

Safety

The workforce has significantly increased from an average of 50 men and women per day in May to approximately 150 in July with 12 -15 various subcontractors on site any given day. This can provide a challenge in a small footprint to coordinate the wide array of activities and materials needed to construct the new clinic. It also has the potential to increase the risk of injury.

Good communication is essential. Daily reminders and weekly work plans are developed by all subcontractors and communicated regularly to help reduce any potential hazards and risks between the various types of work being done simultaneously.



208 days
w/o a lost
time injury

Staying Safe in the Heat ...

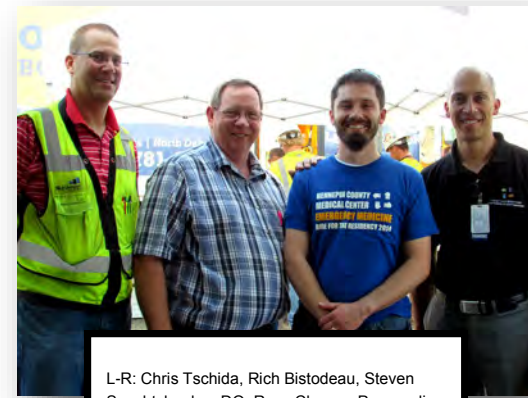


HCMC 3rd year resident, Steven Souchtchenko, DO, provided team members a brief overview of heat related illness, signs, symptoms and treatment. An

appropriate topic given the extreme heat and humidity that week. Dr. Souchtchenko stated, "by the time you're thirsty, you're probably already dehydrated."

Keeping hydrated, taking more frequent breaks in the shade or a cooler area and watching out for your co-workers were the main points of his message. Individuals should avoid caffeine and alcohol which can exacerbate the effects of heat.

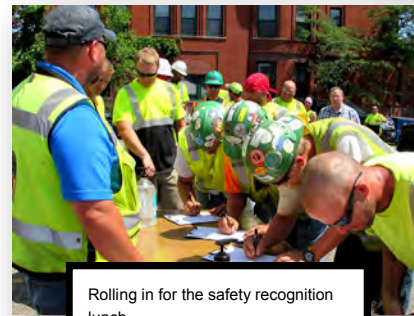
Wearing light weight breathable fabrics to allow your body to sweat and cool down can be helpful. Left untreated excessive heat can lead to heat exhaustion, stroke and even death. If you or a co-worker shows signs of heat related illness you should move to a cooler place and call for assistance when needed.



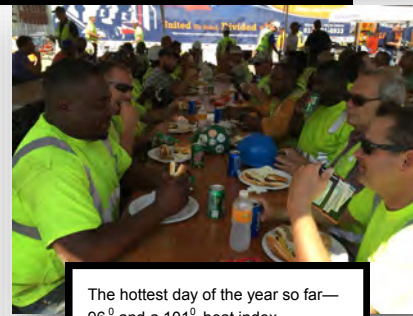
L-R: Chris Tschida, Rich Bistodeau, Steven Souchtchenko, DO, Ross Chavez, Paramedic



Local 563 Laborer's Union brought in the big rig and grilled lunch for nearly 200 of the HCMC Project team members.



Rolling in for the safety recognition lunch



The hottest day of the year so far—96° and a 101° heat index




Interns Trevor Solie and Eric Brothers looking for some shade.



Well deserved picnic lunch in the shade.

Stay up to date on the progress of the new HCMC Clinic and Specialty Center via the webcam.



<http://www.earthcam.net/projects/mortenson/hcmc/>

Contact Us

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HCMC CLINIC AND SPECIALITY CENTER

Hennepin County Medical Center—Clinic and Specialty Center August 2016

Project Overview

The project continues to progress in all directions with concrete pours on the third and fourth levels and connections below ground with the tunnel.

The main building includes columns and decking to support the six floors of the new HCMC Clinic and Specialty Center. Each support column is 4.95 cubic yards of concrete which is hoisted by the tower crane in a bucket that holds three cubic yards of concrete and weighs approximately 12,150 pounds. From extended scissor lifts, workers assist the tower crane operator to maneuver the bucket to the correct position and carefully open the jaws to release the concrete, ensuring that it flows smoothly down the chute into the column forms. The process resembles aerial choreography.



Underground work on the tunnel connecting the existing HCMC facility to the new building under 8th street is making significant strides. The tunnel which is 170 ft. long, x 15 ft. wide x 9 ft. tall (*interior measurements*), is constructed with 300 cubic yards of concrete and 40 tons of rebar. To create the tunnel extension a number of existing conditions needed to be taken into account.



- Support of 2,500 gallon fuel tank that feeds emergency generators
- Re-routing primary & secondary electrical power feeds
- Re-routing water main under tunnel (*installed in 1907*)
- Re-routing active sewer line (*installed in 1896 made of hand-laid brick*)
- Suspend 75 ft. of communication cable from the duct bank (*installed in early 1900's*)
- Re-route 16 in. gas main over the tunnel
- Remove and re-install all existing storm water drains

Some of the biggest challenges in constructing the connecting tunnel are; a) keeping traffic open during the construction process, b) re-routing utilities over and under the tunnel while keeping them active, and c) preventing the tunnel from flooding during heavy rain events due to a 300 ft. downhill slope from both Chicago Avenue and 8th street. The entire process is estimated to take 24 weeks with completion expected by mid-September.

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VDC Update

Mortenson started the Virtual Design and Construction process on the AOSC Building well before construction started. The process will continue as construction progresses with the model falling into three broad categories:

Coordination: The process brings Mechanical, Electrical, Plumbing and Fire Protection systems together with Mortenson's concrete construction in the 3D coordination process. This model is used for fabrication and installation and is an exact digital representation of the



Model view of 3rd floor pediatric physical therapy room

actual building. The goal of this process is to eliminate clashes between disciplines and plan the installation of equipment efficiently with no rework. The team has completed coordination through the third floor, and the process will continue until all floors and the mechanical level are fully coordinated.

Integration with Facilities Maintenance: Members of the coordination team were among the first contractors to adopt the VDC process more than ten years ago, and have worked together on multiple projects since then. In those years, the emphasis of the process has shifted from strictly coordination to providing model content that is useful to the owner for maintaining the facility. As a result, the coordination team is currently working on how to integrate the model into the owner's facilities maintenance program.

Previewing the building in the virtual environment:

Foremen from trade partners Harris, Parsons, and others have been making extensive use of the mobile versions of the model for their work in the field. HCMC's facilities team also has access so they can get to know the building from a maintenance and serviceability perspective.

Quality Update

The Mortenson Quality program includes both **Quality Control** – verifying quality on site during construction – and **Quality Assurance** – the planning process used by the team prior to construction as a prevention measure.

The first step in the process is reviewing the construction documents and specifications to identify the activities that should be tracked more closely from a quality perspective.

Activities with significant safety concerns including:

- Hoisting & installation of large or heavy equipment
- Structural concrete
- Foundation waterproofing
- Curtainwall system

Other activities:

- Long lead time items (*potential for causing delays*)
- Materials with unique specifications for installation

All of these activities are identified in a "Definable Features of Work" (DFW) log and monitored weekly by the project team. The DFW log is closely tied to the schedule. Tracking and monitoring identified activities allows the project team the opportunity to intervene quickly to ensure quality is maintained throughout the process.

Lean Innovation—Weekly Work Planning

The project team and subcontractors meet weekly to review a 6-week schedule and coordinate planned activities. During the weekly session, individuals are assigned responsibility for task completion,

potential constraints and variances are identified and resolutions are determined that will maintain the schedule. Particular attention is paid to the 6th week of the schedule which is

new each week as the project advances. This way of managing the schedule encourages open and clear communication between the different trades and group consensus on solutions.



Rebar as of 7-26-16

- ◆ 301.14 miles
- ◆ 1.6 M linear feet
- ◆ 1203.1 tons

After three decades working as a union Iron Worker, Larry Woodbury founded Woody's Rebar in 1998. In 2003 Larry's daughter, Heidi Gunderson, purchased the majority share of the firm and currently serves as its President. Woody's is a proud union employer with Iron Workers that install Rebar, Post Tensioned Cables and Mesh for concrete reinforcement.



Over 300 miles of rebar would stretch from Minneapolis to Green Bay.



Coordination of rebar installation with mechanical and electrical embeds

At the HCMC Clinic and Specialty Center project, Woody's employees will install 2,250 tons of Rebar and 63,000 pounds of PT Cables. To date there are 34 employees on site who have worked a total of 6887 hours with minorities making up 37 % and women 8% of their workforce .



Various sizes and weights of rebar used to reinforce concrete structures throughout the building

"The biggest challenge at the HCMC project is lack of storage space for our product. All rebar deliveries have to be coordinated "just in time". The bars

literally have to be removed from the truck and placed in the work area. There is no room to store deliveries that aren't ready for immediate installation. With an ever changing schedule, weekly, daily and sometimes hourly, this can pose quite a challenge." - Dewey Porter, General Foreman

Woody's Rebar is based in Vadnais Heights, MN. The company serves a five state area including Minnesota, Wisconsin, Iowa, North and South Dakota.

Welcome Zivan Robinson ...

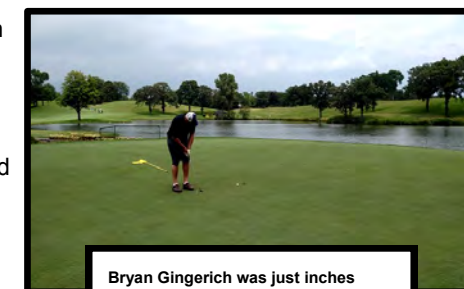
Zivan joins us from Tri-Construction. He is our new assistant superintendent. Zivan is originally from Chicago and moved to Minnesota about 10 years ago. He has over 20 years experience in various aspects of the industry.

When not on the job, he enjoys spending time with his fiancé and family. They are planning an October wedding.



9th Annual Minneapolis Police K9 Foundation Charity Golf Event—

Harris and Mortenson project team members enjoyed some friendly competition for a good cause at the charity golf outing on July 11th at the Midland Hills Golf Course in Roseville.



Bryan Gingerich was just inches away from a \$20,000 hole-in-one.