

Giving Back to the Community High Schoolers Learn Construction with Hands-on Experiences

For many years, GH Phipps has participated in Career Days events offering high school students the opportunity to explore various areas of construction-related careers. Hands-on activities provide insights into opportunities in the industry. Both the AGC Colorado Construction Career Days and the Colorado Construction Career Days of Southern Colorado were well attended by enthusiastic high school students.

During the Colorado Springs/Southern Colorado event, GH Phipps provided two CAD/BIM hands-on activities with carpenters available to help students build wooden boxes.

During the Denver event, students were exposed to a puzzle asking students to balance 35 nails on a single nail embedded in a 2x4. This exercise dem-

onstrated the connection between planning (design) and execution (building) and the importance of communication.

Construction careers are very diverse and a skilled workforce is needed as industry growth and retirements continue to create job openings. GH Phipps is committed to helping high school students understand the opportunities available in the construction industry,



GH Phipps offered hands-on CAD/BIM activities for high school students during the Colorado Construction Career Days of Southern Colorado.

GH Phipps First of its Kind Healthcare Training Gets a Facelift

GH Phipps has completed an overhaul of its comprehensive healthcare construction safety awareness training provided to supervisors, employees, owners, architects, engineers and subcontractors. It will be introduced to our clients in early summer 2011.

The new program came about after input was collected from leadership and field personnel with the goal of creating the most effective and advanced tool for awareness and comprehension of the unique aspects of healthcare construction. GH Phipps consulted with a company that focuses on designing educational modules with the adult learner in mind.

This multilingual training ensures that critical information is absorbed about behaviors and performance when working on healthcare construction projects.

The new training is electronic and interactive, with learning checkpoints and competency testing during the coursework.

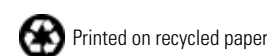
The availability of the training as an interactive pc-based module enables portability to job sites rather than having personnel travel to an office setting for training.

Prior approaches addressed more of the scientific and disease containment aspects of healthcare construction. The new modules focus on why an individual builds differently, and behavior enhancements that are required in the workplace in a healthcare environment. Content was developed to meet the needs of a very specific targeted audience. Advanced modules for supervisors are under development.



After the training, any of GH Phipps' personnel can answer how they work differently in healthcare construction. The pc-based training tests competencies at learning checkpoints throughout the modules. The enhancements to the training ensure that personnel completely understand their responsibilities unique to healthcare construction projects.

To contact GH Phipps Construction Companies, call 1-877-5PHIPPS or visit www.GHPhipps.com



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GH Phipps Advanced Technology Building Facilities for Cutting Edge Scientific Breakthroughs

State of Wyoming Joint Labs and University of Wyoming Veterinary Lab

The completion of the new joint labs in Wyoming offers improved testing and communication among several agencies.

presentation of the conclusions reached for investigative or intelligence purposes or for use in court.

State of Wyoming Joint Labs Facility

The 118,000 square foot state-of-the-art space centralizes three agencies' labs which were located at different sites in Cheyenne. This project combined:

1. The Department of Environmental Quality which conducts assessments of the different environmental issues for the state including air quality, water quality, solid and hazardous waste, active mine reclamation, abandoned mine lands, industrial siting and administration.
2. The Wyoming Public Health Laboratory which serves as the state's advanced level diagnostic facility to alert physicians and epidemiologists to outbreaks, provides technical advice, recognizes disease patterns and new pathogens. It includes walk-in coolers/freezer for storage of samples, an industrial deionized water system, laboratory gas system and a BSL-3 lab.
3. The Wyoming State Crime Laboratory which is a forensic science laboratory including recovery of evidence, laboratory examinations, interpretation of findings and

The mechanical systems are state-of-the-art with differential pressure allowing each lab space the proper air cascade to accommodate the materials that are being handled by each group.



Veterinary Lab

The second facility is located in Laramie, Wyoming on the University of Wyoming campus. The 5,860 square-foot renovation of the existing Department of Veterinary Sciences building, housing the Wyoming State Veterinary Laboratory, includes modifications of the existing BSL-2 lab, conference and administrative offices. The 20,000 square-foot addition contains a 1,280 square-foot BSL-3 lab, a 2,600 square-foot BSL-2 lab plus other work rooms. The Wyoming State Veterinary Laboratory is designed to meet the



needs of animal owners, government agencies and others interested in animal health, animal disease and food quality in Wyoming.

carpenter and maintained a successful safety record status for the project. This project had no lost time accidents.

Safety and Quality

As in every project performed by GH Phipps, safety was a very important part of the Combined Laboratories Facility project. The project had some unusual safety elements that had to be coordinated as the project was bid to subcontractors. The winds in Cheyenne and Laramie required necessary measures for securing materials and scaffolding, and to use extreme caution while hoisting anything. In addition, special attention was paid to the size of overhead systems. Phipps monitored safety with a full-time, on-site safety

Quality Control began long before a shovel ever hit the ground. GH Phipps provided Constructability Reviews at the design phase to increase project flow and create the most buildable schedule that also resulted in less duplication, and a fully-coordinated job.



Lockheed Martin Collaborative Human Immersive Lab

The Collaborative Human Immersive Lab (CHIL) is an immersive virtual reality lab offering cost and time saving technologies enabled by the ability to fine-tune a virtual version of a product before production or development begins.

GH Phipps expertise in building complex, highly advanced technology spaces was instrumental in fulfilling the requirements for this renovation.

In one space, a room has large display walls where the user can be immersed and move around the environment in a different perspective. In another room, the users are like human models in a virtual environment. By donning motion-capture tracking suits, the user can



interact in the environment and see the virtual environment interact with them.

This project was built with a "High Security" rating from Lockheed Martin. The entire space was constructed to a STC 50 rating (a Sound Transmission Class rating of 50 blocks approximately 50 dB from transmitting through the partition). This included installing Quiet Rock embedded

in sound caulking on all the perimeter walls, and installing sound attenuators on eight supply and return ducts which crossed above the room. The sound attenuators required welded security bars to be installed at each perimeter wall penetration to keep intruders from climbing through the ductwork. Due to the STC rating, no interior walls were allowed to have conduit penetrations. All of the piping was surface mounted.

Two twenty-foot overhead garage doors were installed and two doors were re-installed to meet the STC 50 rating to allow access for Flight Hardware to be brought into the CHIL. Due to the security level, dedicated and non-dedicated IT systems were installed for CHIL operations.

The CHIL interior has vinyl composition tile carpet for flooring. Sound panels and flat black paint was used for the interior walls. A challenging aspect of the project was keeping the flat black walls clean. No one was allowed to touch, lean or even look at the freshly painted walls. Flat black acoustic lay-in ceilings were also installed.

Once the space was completed, Lockheed Martin's subcontractors moved in to construct the motion capture system. An uninterrupted power supply was installed to maintain all power to critical computers and software.

GH Phipps also built a Battery Lab used to simulate battery activities in space, testing them for durability and longevity.

Grand Opening

UCCS Heller Center for the Arts & Humanities

The Heller Center for Arts & Humanities was founded in 2002 at the bequest of Mrs. Dorothy Heller for use as a nature preserve to support local arts and humanities education as part of the University of Colorado at Colorado Springs (UCCS). Following a 60-year residency, the Heller Center continues its legacy of a gathering place for arts and humanities-related activities.



Substantial donors helped UCCS accomplish the transformation into an inviting and usable art space. The donors received the honors of being the first people to view the completed project by Chancellor Pam Shockley-Zalabak and The Heller Center officially opened to the campus on October 6.

Lawrence Heller, an artist and filmmaker, began building the house in 1930 using locally-obtained materials. The house was constructed from adobe in the Pueblo Revival style. While the structure suited the Heller's, it needed to be renovated in order to be used as a public space. The building lacked modern electrical and plumbing systems, did not meet fire and safety codes, and the doorways and stairway treads were not standard heights.

The building was historically preserved as much as possible. Original ceilings were refurbished and a secondary roof that was installed in the 1940's was removed and reinstalled as flooring for the Directors Office and a staff workstation. The electrical upgrade was concealed in the existing CMU walls and original light fixtures handmade by Mr. Heller were reinstalled.

New water and plumbing mains were brought in and two bathrooms were upgraded along with a new HVAC system. Existing doorways and stairs were remodeled to meet code requirements.



UCCS Chancellor Pam Shockley-Zalabak welcomes a crowd of well-wishers at the grand opening of The Heller Center for the Arts & Humanities.

Summer Crunch for Cherry Creek Schools

When summer break arrived, GH Phipps went into high gear to complete renovations at four schools in the Cherry Creek School District so students would not be impacted upon returning to classes in the Fall.

In just nine weeks, Campus Middle School received a new front entry, fresh new carpet, paint and ceilings throughout the school, upgraded science rooms and bathrooms, and a new gym floor. Extensive landscaping was also completed. An antiquated mechanical and electrical system was replaced and lighting upgraded throughout.

Three additional elementary schools were also renovated at the same time! Cottonwood Creek, Homestead and Willow Creek Elementary Schools were 80% gutted to change open classrooms to walled classrooms. The new layouts required relocating underground plumbing for new bathrooms. Tubular skylights were added to interior classrooms and offices to provide natural light and enable energy savings for the school district.

GH Phipps ran two shifts to make sure the projects met the stringent deadline. The Phipps' employees that worked on these projects gave up their summer to be a part of the "2010 Summer Crunch" and all students were back to school on time as a result of their hard work.

The Children's Hospital Expands to Meet Demand



The Children's Hospital in Aurora, Colorado is building a new tower in order to meet the demand for treating children in state and the region. In 2009, the hospital served approximately 150,000 infants, children and teens, a number that included about 12,800 inpatient visits and about 452,000 outpatient visits. This summer The Children's Hospital broke ground on a ten story, 350,000 square foot tower. The new tower will add 124 beds with the option to develop shelled space, bringing its total bed count to more than 500. The new space includes additional support for cancer, advanced maternal fetal medicine center, heart and rehabilitation medicine. GH Phipps has teamed with McCarthy Construction and expects to complete the East Tower by the end of 2012.

GH Phipps Moves its Northern Colorado Office

GH Phipps' office in Loveland, Colorado was relocated to Fort Collins. With the acquisition of Delta Construction, resources were consolidated to better serve our clients. The new address is 208 Racquette Drive, Fort Collins, CO 80524, 970-776-5500.

Awards

Congratulations to the Denver Botanic Gardens for a well-deserved ACE Award and Gold Hard Hat Award

The Denver Botanic Gardens received well-deserved recognition for the amazing transformation of this cultural icon in the community. Both the ACE Award for Construction Excellence 2010, *Project of the Year (\$30-\$60M) General Contractor* and the Gold Hard Hat Award for *Best Overall Project of 2010, Outstanding Cultural Project* were a result of the complexity and diversity of the improvements which required constant communication and teamwork between GH Phipps, Denver Botanic Gardens, the architect, engineers and subcontractors.



Colorado, Kansas, Nebraska, North and South Dakota.

The projects for the Denver Botanic Gardens were extremely varied—from a Greenhouse complex to a new parking structure to a warm and welcoming Visitor's Center.

The complexity of the projects was compounded by the fact that the facility had to remain open and fully operational during the construction period, with up to 15,000 visitors a day on the premises. In addition was the integration of a significant presentation of works by acclaimed 20th century British sculptor Henry Moore, which were installed throughout the gardens.

The AGC (Associated General Contractors of Colorado) ACE Awards, held each year, pick the "best of the best" Colorado construction projects and firms. The Award for Construction Excellence (ACE) is an annual recognition program that recognizes AGC members for their projects based on many facets of construction—dynamic design, quality, skill, strength and performance.



McGraw Hill's Mountain States Construction annual Gold Hard Hat Awards is a competition to determine the best projects completed by firms in

The new three-level 320-space parking structure was designed with a low profile to be as unobtrusive as possible to the surrounding neighborhood. The structure sits on a strip of land between Josephine and York streets. An irregular opening in the center of the garage allows light to reach the lowest level. A tower crane with a long reach was positioned so as to handle materials and overcome the lack of staging and the impact of construction on street traffic flow. The exposed exterior walls are faced with aluminum lattice grating which will support plants creating "living walls" that give the structure a garden-like appearance.



The parking structure is tightly fit on the narrow, irregular strip of land between busy Josephine and York streets. A tower crane was positioned to handle materials and overcome the lack of a staging area.

temperature, humidity, irrigation, misting, fresh air and even levels of shading.

Site improvements involved five miles of new irrigation lines and the addition of telecom/data fiber optics to provide Wi-Fi access for visitors throughout Denver Botanic Gardens.

The new Visitor Center/Gift Shop/Welcoming Garden provides an inviting gateway into the gardens. It is highlighted by hand-crafted stone, water and light features, a garden and an LCD display wall. A photovoltaic array on the roof will contribute to the "green" environment Denver Botanic Gardens creates every day.

The three-acre Mordecai Children's Garden sits atop the parking structure. Highlights include rock structures over twenty feet tall, rock-like stamped concrete pathways, hanging rope bridges and swinging boardwalks. The irrigated garden depicts native Colorado landscapes from grasslands to alpine peaks.

Construction of the new greenhouse facility entailed a complex link to existing facilities including conversion of the historic Marnie's Orchid House to a two-story, cast-in-place, horticulture complex with an elaborate rock/waterfall feature. The greenhouse contains twelve bays each with separate systems to control

Executives' Corner



Kevin Barden, Vice President of Operations

Safety is Job One

In 2009, GH Phipps was awarded first place for safety and excellence in the category of Building Division, 700,001-1 million work hours by the Associated General Contractors of America (AGC).

Receiving this award was a real honor and made us want to do even more to make sure everyone goes home safely each day.

GH Phipps is committed to continuous improvements in safety and is a partici-



pant in the Colorado Occupational Safety and Health Administration's CHASE (Colorado Health and Safety Excellence) Program. To qualify, Phipps had to show exemplary safety and health programs, and site specific safety and health plans.

One of the main goals of the program is to reduce by 3% annually, the rate of injuries, illnesses and fatalities affecting participant employers, with an emphasis on reducing injuries and fatalities resulting from those hazards that are the four leading causes of death on construction sites (falls, struck-by, caught in/between and electrocutions).

The AGC of Colorado screens applicants for partnership and once a company qualifies, OSHA is notified of its intent to participate in the CHASE program at the Red, White or Blue level. Depending on the level, OSHA visits the firm to evaluate the company's safety program and jobsites. Once the firm has met OSHA's strict health and safety requirements, OSHA incentives are available to the contractor. GH Phipps expects to be at the blue level in the near future.

Reaching a Milestone

As a result of strict safety guidelines that are utilized on every project, GH Phipps hit 1,000,000 hours with no Lost Time Ac-

Achieving a Safety Milestone



cidents in early March. This is a milestone not only for any company in the industry, but is a proud achievement in the history of our company, especially considering the amount of self-perform work.

GH Phipps revamped its incentive program for safety milestones as well as ramped up safety meetings and risk/safety analysis for specific jobsite activities to make sure safety awareness and a safety culture is ingrained in all personnel. By creating a perpetual safety culture, all tasks are viewed from a safety viewpoint and not solely from an execution and production viewpoint. Safety is everyone's responsibility.

Safety considerations include first aid, hearing and sight conservation, protective equipment, fire safety, hazardous materials handling, ventilation, fumes, signage, power tools, welding and cutting, scaffolds, cranes and derricks, concrete and concrete products, steel erection, underground construc-



tion, demolition, trenching, electrical, materials handling, confined spaces and communication.

It is also important to keep abreast of other safety concerns that might arise such as a pandemic flu outbreak, combustible dust materials and climate and weather surprises.

The employees actively participate in the safety program through training, hazard reporting, and various safety incentive programs that are directly affected by safe and unsafe work practices.

The management of GH Phipps is committed to providing employees a safe place to work. The project managers and superintendents along with our safety team at each job participate in a pre-job safety meeting to identify the hazards that will exist on the project and the tools, work processes, and programs needed to decrease and eliminate those hazards.

Kevin Barden
Vice President, Field Operations

No Project is Considered Ordinary for the Special Projects Team

Project size does not limit the creativity or complexity of a newly designed space. Special projects can range from \$500 and up, and can include quick turnaround, occupied work areas and special requirements. GH Phipps Special Projects group specializes in renovations, simple remodels and historic preservation.

A few projects of late demonstrate the versatility of the Special Projects team and their willingness to embrace even the smallest need a client might have.

El Paso County Household Hazardous Waste Facility

GH Phipps provided the design and construction of office and storage additions to the existing hazardous waste facility utilizing materials partially made of recycled materials.

Golden Armory Flooding Issues

Constructed in 1913, Golden's Armory remains one of the largest cobblestone buildings in the United States. Perimeter and underground drainage was installed to mitigate water infiltration. The State Historical Society was instrumental in verifying paint and caulk colors for the exterior rehabilitation.



Holocaust Memorial Amphitheater at the University of Denver



The Center for Judaic Studies Holocaust Memorial Social Action Site will honor the lives of those killed by creating a new amphitheater dedicated to learning and social justice. The seating and stage were locally sourced including sandstone from Lyons, Colorado and carved granite from Wyoming.

New Gift Shops at Presbyterian Saint Lukes Medical Center



Two gift shops managed by Sodexo inside the main hospital and the new Rocky Mountain Hospital for Children, were remodeled to enhance the interiors. Because both gift shops were constructed in a busy hospital setting, the projects required healthcare construction safety protocols including infection control and life safety measures.

Subcontracting on Oracle Project

The Special Projects group acted as a subcontractor under Murphy Company Mechanical Contractors who was installing above ceiling cooling units. The ceilings were torn out and replaced requiring dust control containment due to the close proximity of labs and equipment.

Canopy at Rose Medical Center

The exterior canopy at Rose Medical Center's Emergency Room ambulance drop off area did not extend far enough to adequately receive patients. A steel structure was installed while maintaining full access for ambulance arrivals and departures.

United States Air Force Academy Southeast Asia Memorial Pavilion

The Southeast Asia Memorial Pavilion was built to honor the graduates from the USAFA who served in the Vietnam War and included a black granite wall 70 feet long and 10 feet high.

University of Denver Renovations

Compressed schedules were essential for interior remodels of offices and classrooms in Daniels College of Business, and new theater space and classrooms requiring matching historic millwork



Boetcher Center

in Johnson and McFarlane Halls. The Boetcher Center project included demolition of one of three precast structures and renovation of the other two on a busy occupied campus.

Rose Medical Center Remodel of Neonatal Intensive Care Unit



The NICU was remodeled to create intimate patient rooms. During construction the area was cordoned off per healthcare construction safety measures and a temporary NICU and well baby area were utilized in the interim.

Site Upgrades at Lockheed Martin

Site upgrades included installing bollards for homeland security around main entrances as well as utility, storm sewer, drainage basins and repaving.

Jeffco Public Schools Backup Data Center Remodel

It was imperative to keep the main Jeffco School district's data center up and running while adding a backup data center with a new generator, uninterruptible power supply, computer room air conditioning and fire protection system.