

Category: 3 – Meeting the Challenge of a Difficult Job

Contractor: Nunn Construction

Project Name: Genoa-Hugo PK-12 School Project

Pricing escalation, busy subs, lack of manpower, supply delays, remote location, and fast track, that's nothing, try adding on Floods, a Tornado, and a ¼ mil of hidden asbestos.

During early 2013, Nunn Construction pursued a \$16M multi-phased school renovation and addition project in Hugo Colorado.

Little did we know what can of worms was soon to be opened and what was hidden within the walls of the Genoa-Hugo PK-12 School Project.

The Genoa-Hugo School, located in Hugo Colorado, approximately 2 hours east of Colorado Springs was in dire need of a face lift, functional enhancements and usable space. The existing 1968 school had several inches of settling in the walls and foundations causing hazardous areas within the school.

Not only did the original school need a complete new mechanical, electrical, and life safety systems, but with the structural integrity of the north wing of the school (approx. 25,000sf) being questionable, a large demolition and classroom/office addition would also be needed.

Without another location to move students and staff during the 11 month construction duration, the District needed to utilize the school while all of this work was happening. This required many phases on the project. These complex phases within the active school included:

- Asbestos Abatement
- Relocate a Full Active Kitchen needed for School Lunches
- Upgrade and Remodel the Auditorium
- Add Sprinkler Systems
- Convert the Shop into the Library
- Upgrade and Remodel the School Gym

- Upgrade the Science Rooms
- Relocate the Existing Elevator
- Upgrade the Utilities and Mechanical Systems

All of these occurred while kids were in class and the school was in progress.

The project construction start date was in October of 2013 with the opening of the new school scheduled for August of 2014 (Approx 11 mos). Nunn Construction knew this would be a challenge but with a highly experience team felt assured it could be accomplished.

Here Comes the Fun

Everything was progressing on schedule until the beginning of June 2014 when the “Shit Hit the Fan”. On the Morning of June 5th, 9 News reported that a tornado touched down in the Town of Hugo with 111 MPH winds. When the owners of Nunn Construction became aware of the incident, they had fear of the wellbeing of the personnel, school, etc. The project team was in the middle of the issue and managing what started off as chaos. Upon entering the school after the tornado had passed a disaster was found. Water was still pouring into the building, finished floors were found that looked more like ponds of water, ceiling and ceiling insulation collapsed on the floor, and drywall walls were soaked.

The mechanical penthouse walls that were covered by the temporary roof were crushed by the weight of the extreme downpour and ripped open by the tornadic winds. The site, which was formed and ready to pour curb and gutter was completely washed out and trailers were flipped over. The Nunn team focused on the most critical items first. Our priority was getting the water out of the building, removing wet drywall and flooring, and re-protecting the exposed roof in case another incident came. Items like the gym floor which was to remain already starting swelling from the moisture and have to be replaced at a later date. Nunn in an effort to ensure prolonged wellbeing of the kids and staff called in a water mitigation specialist to help with moisture testing in the building and ensure all risk of mold was mitigated.

This tornado caused several hundreds of thousands of dollars’ worth of damage and created extensive delays in finishing the project. With only 2-1/2 months left until substantial

completion, the team was now concerned that they wouldn't be able to open the project by the substantial completion date of Aug 28th, 2014.

Across the town, people were doing cleanup of fallen trees, accessing damage to buildings and discussing items like the local veterinarian going out to the pastures to stitch up holes in the cows created from high velocity hailstones. After letting the dust settle for several days and getting the majority of the mess cleaned up, the Owner/Architect/Contractor team discussed the situation at hand and agreed that we would push the schedule as hard as we could and re-evaluate the schedule impact at a later date to determine if we needed to push back our Temporary Certificate of Occupancy (TCO) date.

When it Rains it Pours

As soon as we start to get the project dried out and progress moving forward again full steam we get hit with another flood on June 8th, only 4 days later. Dealing again with around 1" of rain, water in the building and a washed out site created a lump in our throat knowing that was even going to be more difficult to get our TCO by Aug 28th, 2014. As soon as we again thought we were out of the woods, we would get hit by another flood. We had a total of five (5) rain events in the last 4 months of the project averaging 1" of rain within 90 minutes per occurrence.

Let's not Stop with Just the Tornado and Floods, Lets Add \$300,000 of Unknown Asbestos in the Last 3 Months of the Project

Through the project we had carefully planned out the different sequence of events in which we would do the asbestos removal prior to working in an area in an effort to minimize the impact on the students and staff. That worked great until the Asbestos Consultant went to Colorado Department of Public Health (CDPHE) on June 18, 2014 to get the North Wing Asbestos Signed off and North wing cleared for Demolition. On this day that we thought we were going to start mass demolition on the North Wing, CDPHE said "What about the asbestos in the CMU block filler". This asbestos was unknown to everybody on the team and CDPHE would not grant the demo permit until more testing had been done. The block filler was tested and found to contain hazardous asbestos. CDPHE required that all of the CMU block be carefully dismantled, air

quality testing to occur and the CMU block of the entire North Wing to be Burrito Wrapped and taken to a hazardous waste site in Denver nearly 2hrs away. These additional measures cost \$190,000 alone. This pushed the completion of the demo of the North Wing out from July 1st to July 19th causing nearly a 3 week delay before we could even start construction on the new North Vestibule and Entrance to the School. We were worried that without having the North Entrance Opened Up, we would not have the required means of egress for the students and the staff and not be able to achieve our TCO.

The next asbestos question came up around the end of June 2014: “What about the roofing material?” The roof was tested and also found to have “hot” asbestos. This slowed down the removal of the existing roof and getting the entire building dried back in. This roofing delay along with the floods caused a seemingly unsurmountable obstacle for the project team. This team, hung in there, tried to keep their spirits high, and dealt professionally with the endless issues always keeping in focus their ultimate driver of doing what’s best for the customer, students and staff of the school.

With keeping the Aug 28th TCO goal in mind and working every weekend and evening in the last 3 months of the job, the team pulled out a miracle and got the Temporary Certificate of Completion on August 27th, 2014. Just one day prior to the original TCO deadline.

Our team along with the owners, architects, and subcontractors, through dedication and determination, achieved what seemed an impossible act. Along the way tempers rose, voices were raised, and extreme frustration occurred, but at the end of the day the accomplishment was remarkable and great friendships were made. When the community entered the building, the comments came pouring in. Comments like: “We never thought you would be able to get there”; “You accomplished way more than we thought possible”; “I can’t believe how much you got done”; and “The School looks Beautiful”.

The Genoa-Hugo Project was an accomplishment that will be long remembered.

Screenshot from Newscast After the Tornado

Multi-vortex tornado 1 of 6 reported overnight



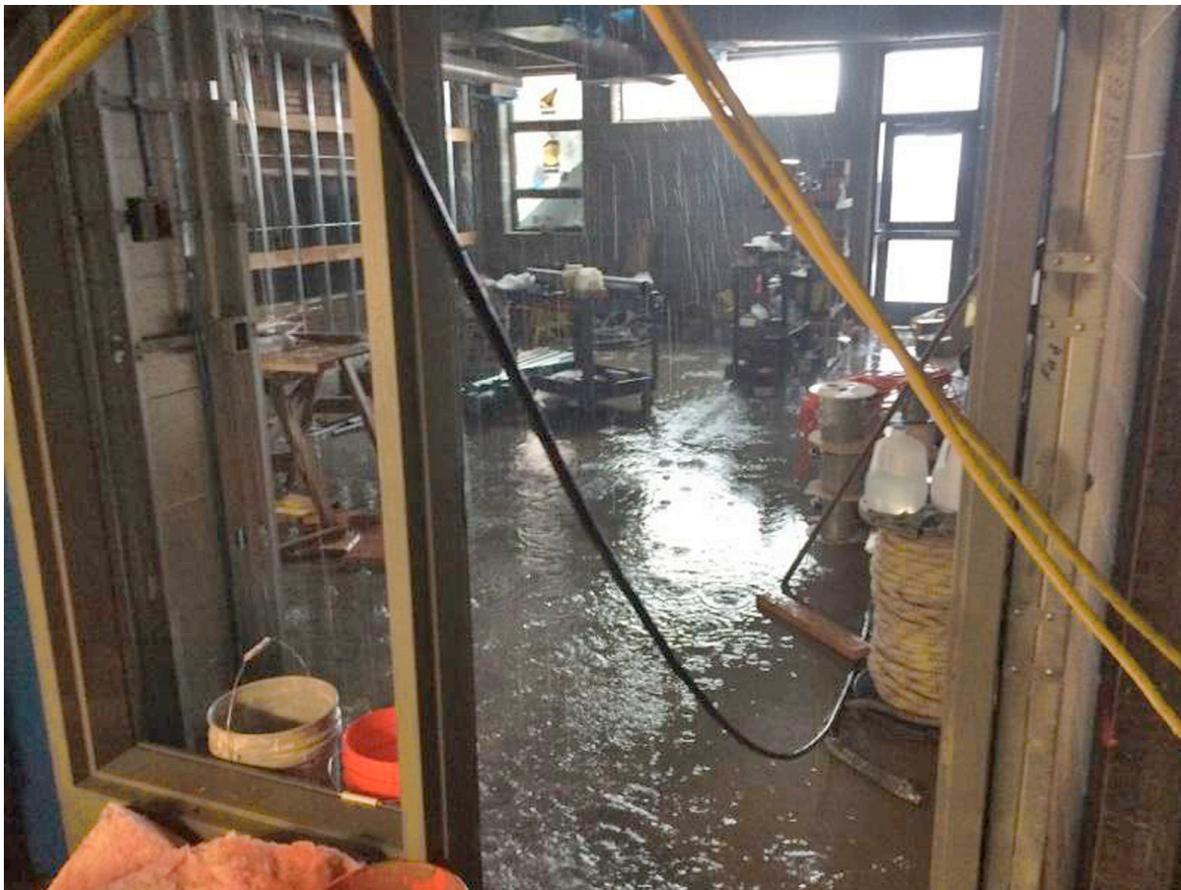
Photo of the Genoa-Hugo Project site after the storm



Photo of water flooding the building after the storm



Photo of water flooding the building after the storm



The Picture of Genoa-Hugo PK-12 School before the Renovation/ Addition.



The Picture of Genoa-Hugo PK-12 School after the Renovation/ Addition.





