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New building unites *Word Alive church* under one roof.
“Connecting with God, People and Purpose” is the mission of Word Alive ministry group, based in Oxford, AL. At its main Coldwater campus, the church had grown throughout the years into three buildings covering about 44,000 square feet of space. While there was a good amount of space for its activities, churchgoers had to walk outside between buildings to move from Bible study to church services and other activities. Church leaders wanted to unite the facility.

Bringing everything under one roof and providing additional space for fellowship before and after activities was a key goal, said Jo Lynn Yoder, project architect with R. Messner Construction, which provided turnkey design and build services for the church’s expansion. Additionally, she said, it was important to unify the look of the three existing buildings so everything would blend into one cohesive design.

Plans included the construction of a new 52,000-square-foot building, which includes a large open common area/foyer, a gymnasium and additional classrooms. The new building – actually called The Connection by the church – is located in the center of the three older buildings and is attached to them to create one facility. Project challenges included tying together several different floor elevations, remodeling the exteriors of the existing buildings for a consistent appearance, and making the entire facility accessible to everyone. Work on the new and renovated facilities was completed in early 2010.

Concrete was a key player in both the new construction and the renovation, with materials including colored architectural split-face block, concrete masonry, standard gray block, ready-mix concrete and decorative stained concrete floors. Large quantities of colored split face architectural units were used to create the low-maintenance exterior that tied the design together. “It was many thousands of blocks,” said Jay Howard of Webb Concrete & Building Materials.

“Concrete was chosen based on durability and longevity, with the lowest possible amount of maintenance on the interior and exterior,” said Beverly Mattox, co-Pastor of the church with her husband, Kent. The church was founded in December 2000, and its first building could hold about 500 people. Growing quickly, the church soon added a new sanctuary in 2002 and a children’s ministry building.
called Kidz Alive in 2004, and modified the facilities several times throughout the years to accommodate new programs, services and members.

“At the end of our first eight years, we had three very functional but unconnected spaces,” said Mattox. “We built the church with one word from God telling us to build it and they would come. It was very ‘Field of Dreams,’” she said.

“Connecting existing exteriors can be somewhat of a challenge,” said Mattox. “But because we had predetermined the façade that we wanted to create, the rest of the architectural design fell into place with relative ease. A welcoming, warm exterior with a contemporary, modern sense was our goal. We kept the lines crisp and clean and added the tri-colors for additional warmth. The contrast of the large, smooth river rocks in our landscaping design seems to bring the perfect balance between the clean lines of the building and the smooth surface of the surrounding rock.”

“We did a major remodel of the exteriors of all three existing buildings so they all now look like one unit,” Yoder explained. “There’s an exterior wainscot along the new building that extends around the entire facility that really ties the look together. And, now everything is enclosed and church members can easily move between the facilities and activities.”

A spectacular feature of the new building’s interior is a stained and stamped decorative concrete floor throughout the entire mall area. A stain was applied to the concrete after it was poured, featuring several colors, and it also was stamped and etched. A diamond pattern runs throughout the foyer, beginning at the stained concrete floor and echoing in the molding surrounding the light features and insets on upper wall panels that bring the design to completion.

“Utilizing the vast amount of concrete was a given,” Mattox said. “Purely from a practical perspective there was just too much of it to not do something creative with it. Marble, granite or even tile would have pushed the budget over the top so after researching the options, stained concrete gave us the diversity to incorporate the artistic creativity we sought while keeping the expenditure for that statement element in check.”
“It has a unique look and it is absolutely stunning to see the finishes in that foyer,” Yoder says. “Not only is it beautiful and interesting, it’s easy to upkeep; maintenance is low and yet it really looks nice. It’s truly the best of both worlds.”

Mr. Howard agrees, saying, “Much of the interior concrete was stained, creating very attractive and low-maintenance flooring. It’s really hard to describe how great it looks without seeing it in person!”

Mattox said people are constantly asking about the floor. “The concrete floors are one of the most unusual features in our new construction,” she says. “We receive many questions and comments about the process and what is the upkeep and maintenance for the floor in such a large space. Many developers, interior designers and home owners have asked about the process and have utilized concrete in projects they had not considered prior to viewing how beautifully it enhanced our interior.”

Today more than 4,000 people call Word Alive International Outreach their church home. The church holds regular worship services and Bible studies at its main Coldwater campus and also at a satellite location in Gadsden, Ala. Additionally, it operates many outreach programs, including addiction recovery, worship and arts, Messianic Jewish ministry, a school and foreign ministries in Argentina, Peru, India and Tanzania.

The Kidz Alive building houses Word Alive Academy, where there are 150 students ranging in ages from newborns to sixth-grade level receiving academic and spiritual education during the week. As many as 500 children attend Sunday school at the facility. The former sanctuary now serves as a multi-purpose facility for a variety of programs and classes, with youth programs held in the adjacent space dubbed The Warehouse. The new building, The Connection, houses a gymnasium, indoor playground, café and bookstore.

Church leaders and members couldn’t be happier with their new, expanded and united facility.

“Children can enjoy a myriad of activities while Mom and Dad stop in for a latte and a pleasant lunch. For multi-taskers, childcare, lunch and shopping can be combined in one stop. The Connection has quickly become a very sought-after venue for weddings, rehearsal dinners, birthdays, anniversaries and other celebratory events,” Mattox says. ■ Wendi Lewis
Super NATURAL

Estes, Sanders & Williams, LLC.
Vestavia Hills, AL
When the attorneys at Estes, Sanders & Williams in Vestavia Hills were looking to build a new office, they had a list of priorities and needs to be filled. They turned to architect Brian Roberson with bDot Architecture for a solution, and for one of the major items on their wish list, he turned to pervious concrete. "It was very important to the client that this project be as environmentally friendly as possible," he said. "It is not LEED certified, but we wanted to get as close as we could to that designation. They also wanted the office to look like it truly fit in with the natural surroundings. It is a very wooded area, and we left lots of trees."

The 12,000-square-foot office space was completed in October 2010, and with its steep roof pitches and multiple angles, it makes quite a statement. But to find the concrete on this project, you’ll have to take your eyes off the stunning structure and look back to where you left your car. The 28-space parking lot is made of pervious concrete and stone gravel, and according to Roberson, pervious concrete turned out to be the natural choice, even if it was not the first choice. "We began with plans for an asphalt parking lot with curb and gutters and a storm drain," he said. "Storm water was a big issue because the building and lot were going on such a difficult site. We had to undercut six feet under the whole property and bring in engineered fill for the entire site. It is an odd-shaped lot, and there was no room to do a retention pond. The water level wouldn’t let us do the retention underground."

There is a creek running nearby, and both Roberson and the client were concerned about the possibility of storm runoff from the parking lot flowing into the water — as was the city of Vestavia Hills. "The creek is only 10 yards from one side of building, so it was a very crucial issue, and we were very sensitive to that. We wanted to be as careful as possible, and the city has strict regulations in place that we had to follow as well," Roberson said.

As Roberson and his team went through the pricing for the asphalt
The cost was equal to the asphalt scenario, and it was great to find that out. Many probably think that pervious concrete would be more expensive, but since you don’t have to do curb and gutters it equals out.
lot and the measures they’d need to put in place to adequately deal with the storm water runoff, it quickly became clear that asphalt was not the way to go for this project, particularly from a cost-effectiveness standpoint. To ensure that they could work pervious concrete into the budget, Roberson and the client came up with an innovative way to incorporate the material. “So we went with a combo of pervious concrete in the drive lanes, and the parking spaces are actually stone gravel, which I’ve not seen done before,” Roberson said. “The cost was equal to the asphalt scenario, and it was great to find that out. Many probably think that pervious concrete would be more expensive, but since you don’t have to do curb and gutters it equals out.”

And then there are the many added benefits that pervious concrete brings to the equation. They may be harder to put a price tag on, but for many, including Roberson’s clients, they are worth a lot. “The pervious concrete and stone gravel mix gives the parking lot a beautiful, natural look, which is in keeping with the office building and is just what the client wanted,” he said. “So from an aesthetic perspective, the pervious was a really great fit. It worked much better than asphalt would have.” Pervious concrete is also a “green product.” “It naturally filters the water,” Roberson said. “And it is inherently a more natural product than asphalt, which is petroleum based.”

According to Roberson, though the parking lot won’t have to be re-paved like an asphalt lot would at some point, there is some basic maintenance that must be done to ensure the pervious concrete’s effectiveness. “They will have to be careful since they have the gravel parking spaces,” he said. “You don’t want gravel pieces to migrate over and cover the openings of the pervious concrete. They will have to watch that and keep it clean, and they know that. And once a year, a company will come and vacuum it.”

The attorneys will also have to make sure that large, heavy trucks aren’t routinely driving on the pervious portions of the parking lot. “It’s not really a drawback, especially for the type of traffic this lot will have, but they do have to be aware of it,” Roberson said.

Roberson’s clients are very satisfied with the outcome of the project on all three levels: cost, function and looks. “The owners are extremely pleased,” he said. “The pervious concrete works exactly as it should and matches the surroundings perfectly.” — Jennifer Kornegay
Concrete makes the grade

Goldsmith Schiffman Elementary School
Huntsville, AL
In the last few decades, some notable new concrete products have come into the market; and they’ve added to concrete’s usability repertoire but will never replace the basics. It may be about as “old school” as concrete gets, but concrete block is still used quite consistently in many large-scale, institutional projects. Therefore, if the project on order is a structure required to house hundreds of energetic kids safely and securely and last for many years to come, concrete block is often the go-to material. According to Robert Mercer, Senior Architect at Chapman Sisson Architects in Huntsville, concrete block is the building material that best meets the needs of constructing schools that will stand the test of time as well as the inevitable wear and tear brought on by hundreds of young students using the building daily. “Some people use gypsum board and metal framed board in schools,” Mercer said. “But over and over again, we’ve found that you just can’t beat concrete block for durability, and so it is the material of choice for schools since they house so many kids. It just holds up better and longer.”

So when Huntsville City Schools asked Chapman Sisson to create a new elementary school, it was concrete block, as well as a few other forms of concrete, that topped the materials list and influenced the design. Mercer was the project architect/designer on the project. Completed in December 2010, the 126,000-square-foot school building can accommodate up to 800 students and took 18 months to construct. Mercer’s experience with projects of this type and the material he most often uses for them made the entire process a smooth one. “Our firm does a lot of institutional work including churches, airports and buildings for the healthcare industry, so we are very familiar with concrete products and the benefits they bring to
Mercer said, “The majority of this school is concrete block with brick veneer with precast concrete water tables and window heads.”

The use of concrete, especially the concrete block, allowed Mercer to complete the project with less hassle and under budget. “Concrete can help keep costs down,” he explained. “The school came in $1.8 million under budget, and the concrete block was a part of that. Using concrete also limited the trades utilized on this project. When you use only concrete and brick, your major materials are masonry and concrete, so you keep the number of subcontractors needed down and that makes the project easier to manage.”

While the use of concrete was an easy decision for the school, some of the other accent elements are less common in school settings and add to this structure’s appeal. “Many school districts use a standard prototype from which all schools in the district are designed and constructed,” Mercer said. “But in Huntsville, it’s not like that. Huntsville City Schools likes each school to look different and truly have its own character.”

This allowed Mercer some freedom of expression, and when he sat down to draft his vision of the school, he let its surroundings guide his hand. “This school is located near a nature preserve, so I tried to incorporate as many natural elements as I could into the design of school,” Mercer said. “I wanted to highlight the front entry, so we did tapered stone columns and laminated timber beams.” This natural wood and stone look was carried inside the building throughout the lobby and in the cafeteria.

Stained concrete was also incorporated into the cafeteria. “In a school, easy clean-up and maintenance are key, so many of our decisions were based on that. In light of that, the stained concrete in the cafeteria area was a simple choice,” Mercer said.

Incorporating cast stone accents on the exterior was also an effortless decision, as Mercer explained. “The cast stone sits in great contrast to the brick, so it made sense from an aesthetic perspective,” he said. “It offers a really natural look and helped the building blend in... The school came in $1.8 million under budget, and the concrete block was a part of that.
1 + 1 = 2
1 + 2 = 3
1 + 3 = 4
2 + 1 = 3
2 + 2 = 4
2 + 3 = 5
with its surroundings. Of course, being concrete, it made sense from a durability perspective as well. And it was cost-effective too. In the amount we used it, it was no more expensive than using brick.”

Concrete added to the exterior in one more way. Poured in place, stained concrete was used for the columns of several drop-off canopies. “The columns really blend well and mimic the look of the rest of the school” Mercer said. “It was a very effective use of that material.”

The new Goldsmith-Schiffman Elementary School first welcomed approximately 430 excited K-5 students in early January 2011. With its rustic, yet refined look playing beautifully off the mountains rising in the background, the school has not a trace of the stereotypical “school” look. Its stunning appearance has certainly pleased the client. But, what do the kids who’ll see it and use it every day think? “The children, families, and our faculty and staff are extremely excited about making Goldsmith-Schiffman their new home,” said Brad Scott, principal of the school. “The children have particularly mentioned how cool it looks since it is similar to the appearance of a lodge. The warm earth tones accompanied by all of the wood and stone have also provided a nice feel to the building.”

At first glance, the wood timbers and imposing stone columns incorporated into the front exterior of the school especially stand out,
but Scott stressed that concrete, both what can and cannot be seen, was definitely the right choice here and a major player in the school’s appeal. “I believe that the building and its use of concrete, rocks and wood have provided a real showcase for our community to enjoy,” he said. “The use of concrete as a significant material in this building has worked well. More specifically, it adds a strong, modern appearance. In addition, I believe that it will be manageable in reference to maintenance, and it would be realistic to expect for it to be durable for generations to come.” — Jennifer Kornegay
Economy, longevity and a perfect solution to a variety of site challenges – these are some of the leading factors that made concrete a perfect choice for a recent project in Valley Head, AL. The job was a new gymnasium and parking lot for Valley Head High School, located at the base of the mountains at Mentone. The 17,000-square-foot gymnasium included a poured concrete slab and incorporated masonry block interior and exterior walls. The parking lot encompasses 70,000 square feet of concrete and 155 parking spaces, plus driveways.

In particular, the parking lot practically demanded the use of concrete, said Al Sanders, owner of A.E. Sanders Construction, who was the contractor for the job. During construction, the climate swung wildly between soaking rains and drying heat, and drainage issues on the site demanded a strong parking structure that would withstand soil changes after the job was completed.

Throughout his 22 years in business, Sanders has earned the reputation as being the guy to go to for impossible projects, he says. If a job is unusually located or has to be completed in a ridiculous
amount of time, he’s your guy. Through the years he’s carted concrete supplies by mule and horseback to shore up a foundation on a 150-foot drop to the river below and finished nine jobs in seven counties during the three-month span of school summer breaks.

While the Valley Head High School Gymnasium project didn’t seem to offer any big obstacles at the onset, Sanders was thankful for his experiences with challenges as construction progressed. The site where the school gymnasium and parking lot is located is surrounded by natural springs that come up out of the mountains and a deep valley. As a result, there are more than the usual amount of concerns about drainage for the site, Sanders explained.

Initial geotechnical work for the site was completed during a drought period, which showed no significant subsurface water, but by the time the project started, contractors had to install a French drain around the entire project 13 feet deep and four feet wide to keep the site properly drained.

Project owners had initially selected asphalt for the parking lot, but a decision was made to switch to concrete for both cost-saving and better long-term results. “They initially chose asphalt, but due to some cost savings, we were able to talk them into using concrete,” Sanders said.

“The original parking lot and drive areas were designed to be asphalt paving on a crushed stone base,” said Leon C. Cooper, architect, president and owner of Cooper & Associates Architects, LLC. The company has been in business for more than 40 years, with primary expertise in projects for schools, office buildings and churches. “During the construction, the General Contractor for the project proposed a change from the asphalt paving system to a concrete paving system for the parking and drive areas. He indicated that there would be some savings to the owner that could be applied to additions to the building.”

Choosing concrete also provided better control of the site’s moisture challenges, both during construction and for the long haul. “By doing concrete, we could play with the water a lot more, and manage it better,” Sanders explained. “The key is to keep water out of the subbase, to keep it from getting compromised and crumbling, which will cause the topping to crumble. As long as you keep the water out, it’s going to last.”
To do this for the Valley Head project, contractors came in and graded the site, and then divided it into sections, so that they could control the drainage and soil moisture as they worked on each section. Once the concrete was poured for a particular section and hardened enough, they sawed control joints to ¼-inch thickness of the concrete. After the concrete had cured for 30 days, they cleaned the joints, installed backer-rod and sealed the joints to prevent water from reaching the sub-base.

“We with concrete and joint seal you have better longevity. This is a long-term parking lot,” Sanders says. “This was affordable on the front end, too, better than we could have done with asphalt, and then you have the added benefit that it will last and will be much less likely to need repairs. You get a far better job with a concrete parking lot than asphalt. Oil leaking out of vehicles deteriorates asphalt, and you don’t have those concerns with concrete. This is especially good for a school, because they have to be especially conscious of the costs and budget, so this serves them well over time.”

Cooper says the concrete paving system used on this project was developed by the American Concrete Paving Association using data provided by the Geotechnical Engineering firm for the project. The proposed 5-inch thick fiber reinforced concrete section poured on the compacted earth subgrade with construction joints at 10 feet center each way also proved to provide savings on the project.

“The guidance and information provided to us by American Concrete Paving Association was instrumental in the decision to use concrete paving on this project,” Cooper said. “We plan to evaluate the use of concrete paving on future projects.”

Total cost for the gymnasium and parking lot totaled $2.3 million. The school can use the parking area around the gym for student parking as well as parking for athletic and special events at the facility. Valley Head School serves 522 young people from grades KG through twelfth grade. ■ Wendi Lewis
So many young people, and even some adults, struggle to find their calling and may spend years looking for the right way to combine what they like with what they’re good at. Then, they hope that the result is something they can actually get paid to do. There are the lucky few: those who were seemingly born to end up in their current profession. So it was for architect Chuck Penuel, principal and founding partner of Birchfield Penuel & Associates in Birmingham. It’s not hard to imagine him as a kid, sketching and doodling and stacking up skyscrapers with his alphabet blocks. “I always had an interest in both drawing and constructing, and those interests just grew as I grew,” he said. So when Penuel began pondering the proverbial question — “What do I want to be when I grow up?” — the answer came quite easily. “Architecture was just a natural combination of my two main interests, so I decided early on that that is what I wanted to do,” he said. “I feel fortunate to have found my place so quickly.” In finding his place, and filling it well, Penuel has hummed a happy tune ever since.

He often uses the precise timing and organization of disparate parts that are the hallmarks of great music to help others understand how he views his profession. “I sometimes talk to high school students who are considering becoming architects, and I try to describe what it really means to do this job,” Penuel said. “I often use an analogy where the architect
is the conductor of an orchestra. Through our education and experience, architects learn a little about a lot of things. Our role is to oversee and coordinate the experts who know a lot about fewer things ... to take all of those people and put their skills together to create a harmony."

Although Penuel began his formal education in his craft and first learned about creating that harmony when he entered architecture school at Auburn University, he had already spent time working in the building trade. As a teenager and during college, he spent summers and other free time working in the construction industry, something he feels gave him an important foundation on which to build his future career. "All my work experience prior to graduation was construction related," he said. "My partner has a similar background, and I have always felt that this gives us an intuitive understanding of what the people trying to build what we draw really face, and that it makes us better architects."

In 1987, he co-founded his firm with partner W. Clay Birchfield, and he joked about the beginning, when it was just the two of them. "One of us typed and the other answered the phone," he said. "But we have grown a lot over the years, and we have 28 people on staff now."

Today, Penuel and his firm primarily practice in the areas of healthcare, senior living and institutional projects, and they keep their focus close to home. "We limit most of our work to Alabama and don’t really practice out of state," he said. "We work with a lot of the local healthcare providers and universities including the University of Alabama at Birmingham, St. Vincent’s Hospital, the VA, the University of Alabama and Jackson Hospital in Montgomery."

By specializing in healthcare and senior living, Penuel and his firm have been ahead of a large, impending curve. With both the aging population of baby boomers and possible major changes in healthcare due to the new legislation now imminent, his expertise will probably be in more demand — and more valuable — than ever before. "Obviously one of the things we are watching closely is the evolution of the new healthcare law and how it may affect our clients and their facilities," Penuel said. "There’s also been a big spike in the demand for senior living facilities because of the baby boomers. I’ve practiced in the healthcare sector for 30 years and the senior living sector for 15 years, long before it became as immediate as it seems it will be, so I have a lot of experience."

His history with these two sectors has also given him a lot of experience working with concrete. "The nature of many of our projects in healthcare and senior living leads us straight to concrete," he said. "Our projects tend to be more complex in terms of fire resistance because, in these structures, it is more critical to protect the occupants who are less capable or incapable of evacuation in the event of a fire. That means our material of preference is concrete."

But it is more than concrete’s steadfast fire resistance that appeals to Penuel for many of the buildings and spaces he creates; its strength and
adaptability are factors as well. “We can achieve structural spans with concrete that we just can’t reach with structural steel,” he said. “And our exterior aesthetic on most projects is predetermined by the context of the surroundings; we need to fit the new structure in with the architecture that is already there. Concrete has evolved into a material that offers a lot in the way of color, texture and pattern, which was not the case decades ago. This often gives us flexibility when trying to blend nicely with the current buildings on a campus.”

While Penuel is ready for the expected uptick in the areas he knows quite a bit about, he’s actually ready for almost anything, thanks to the many years he’s now spent honing his skills as an architect and adapting to the inevitable changes that come with the march of time and progress. “I’ve been doing this a long time and there are always changes and challenges,” he said. “Some of the changes are bettering our process and our outcomes. At beginning of my practice, the profession was still completely hand drawn. Now, we are using building modeling computer software to better coordinate among the different disciplines. This improves the timeline as well as the quality control between the trades.
This is certainly a significant thing that technology has done for my profession.

One challenge facing Penuel’s firm, and just about every one in his industry, is the economy. The downturn and slow crawl back up has lead to increasingly leaner budgets. “In times like we’re seeing now, everyone is challenged from a budget standpoint,” he said. “Clients are looking for the best value and how to get everything they can for what they spend. They need a low initial cost, and to fulfill this requirement, concrete is a great choice. But they need the best long-term performance from the structure as well. Concrete’s durability and ease of maintenance is very important for our clients’ bottom line here. They operate on a 24/7, 365-days-a-year basis, so to keep costs down, they don’t want to need extra personnel just to maintain a facility.”

Concrete has always been a strong, durable and reliable material, but in the past few decades, architects and contractors have benefitted from advances leading to new and better concrete products. “The ability to do more and create a greater diversity of expression has increased in many building materials, but this is certainly the case when it comes to concrete,” Penuel said. “At the beginning of my career, the use of concrete was limited. It’s not the same today.”

But while some things change, others remain the same, including Penuel’s passion for his profession and satisfaction with his career. “It is very rewarding to see something go from just a concept of a solution to something that’s been realized out there on the landscape and the permanence of that type of thing,” he said. “I love to see the project evolve. It starts with the client expressing their goals. Then I take that information and combine it with the many, many other variables that have impact on the final outcome, things like budgets, zoning, the environment, etc. It is wonderful when the result achieves the clients’ goals, is appropriate to the context, and is satisfying to me.”

Penuel also finds gratification in the knowledge that his work at hospitals can play a part in patients’ recoveries. “Working so much in the healthcare arena where clearly the quality of the outcome can have direct impact on the wellness of a patient can be a big responsibility,” he said. “To know that you were able to create a space that was not institutional and was instead, welcoming and comforting and conducive to improving someone’s health is very satisfying.”

Like an exquisite painting or masterful symphony, Penuel’s works will outlive him; a fact that is simultaneously uplifting and grounding. “I’m constantly striving for quality outcomes,” he said. “The building is going to be there for many years to come, whether it was good solution or not.”

After three decades of hard work, Penuel admitted that his retirement is certainly getting closer. But for at least the next eight to 10 years, he’ll continue making beautiful music as he designs and brings to fruition structures that make his clients’ visions a tangible reality.

Jennifer Kornegay