

lanced at from a distant boat out on the waters of Lake Saint Louis, the "Manoir Sur Le Lac" (Manor on the Lake) could be mistaken for an unusual rock formation rising out of a break in the tree line. On closer inspection, it is revealed as a stunning combination of stone and slate, a sprawling residence of nearly 40,000 square feet that is the biggest thing to hit this St. Charles County community since its founding in 1966. The chateauesque style building sits on ten acres of lakefront property. It serves dual purposes — as residence of the Lewis family and headquarters of the National Sports Agency, a sports service agency founded by Harold Lewis in 1982.

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2014-15 SEMINAR SCHEDULE

INSERT

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OLD WORLD STYLE meets NEW WORLD SETTING

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The design intent for the manor was to create a unique structure that evoked the feel of a European-style home that had been standing for hundreds of years. "The original owner loved the Biltmore mansion

ABOVE: THE ARCHED ENTRY IS INDIANA LIMESTONE. COLUMNS WERE MADE AS SINGLE PIECES IN ORDER TO REDUCE THE NUMBER OF VISIBLE JOINTS.

in North Carolina," said **David Schaub**, **Schaub** & **Srote Architects.** "They did not want something that looked brand new."

Schaub knew immediately masonry was the most suitable building material to achieve the owner's vision. "It is a more substantial property when you use stone." Schaub credits the participation of **Rick Frisch**, **Frisch Masonry**, as invaluable from the design stage through the project's completion. "We thought we had considered all the details, but Rick came in with suggestions to make it an even better project. He is a dedicated craftsman. His workers in the field are very professional, and he demands the closest attention to detail be followed."

Owner Harold Lewis echoed the architect's praise for Frisch Masonry. "They exhibit an attention to detail like nothing I have seen before. I feel so good about what they did here that I would recommend him to anybody needing masonry work done."

EXTERIOR FEATURES

A project of this magnitude had its share of challenges, but they only served to make the successful outcome more impressive. The owner liked the color scheme in the masonry of the buildings on the grounds of the Winged Foot Country Club in Westchester County, New York. Frisch Masonry built numerous test walls

with a combination of different types of limestone to help them achieve their vision. The rubble stone used in the walls of the house is a combination of five different types of limestone. **Earthworks** provided stone from quarries in Missouri, Quebec and Wisconsin to create the blend.

"We like to hear an owner say the home we are helping to build is their lifetime dream," said Frisch. "Our goal is to make dreams come true. We will do whatever it takes to make that happen."



THE IDEA TO ALTERNATE STONE AND ORNAMENTAL IRON BALUSTERS WAS DONE TO CONFORM TO CODE WHILE GIVING THE BALUSTRADE A MORE OPEN FEEL.

The arches on the front porch are all made out of solid block limestone pieces. An "X" stone banding runs across the front of the house and around the porte cochere. Each "X" is made up of individual pieces supplied by Earthworks and attached with veneer anchors by Frisch Masonry. This detail was also used at the front gate.

Commitment to the Old World look is seen in the technique used to set the window frames. Frisch recommended eliminating any exposed steel lintels or I-beams. To help





NEW WORLD IN-GROUND POOL MEETS OLD WORLD

STONE DETAILING AND CRAFTSMANSHIP

AT THE REAR OF THE HOME.

accomplish this, holes were drilled into the mortar joints and stainless steel anchors were used to fasten the stone window trim to the steel behind so no supporting steel was left exposed. Frisch also recommended alternating stone and iron balusters to give exterior railings a more open feel while satisfying code spacing requirements.

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ON THE CARPORT ENTRYWAY, A CUT LIMESTONE ARCH IS HELD IN-PLACE BY STAINLESS STEEL ANCHORS WELDED TO A STEEL BEAM. NOTE THE DECORATIVE X-BAND ABOVE.

FIREPLACES

A key feature of the home's interior is the role the custom fireplaces play in setting the mood for different rooms. The grand salon — a two-story sitting room featuring a spiral marble staircase, ornamental ceiling coffers and a floor to ceiling window — has as its centerpiece a two-story fireplace of carved Indiana Limestone. "We recommended making the pieces of the fireplace as large as possible to minimize the number of joints required," said Frisch. "For the centerpiece of the grand salon fireplace, we scored the stone to make it appear as if several small stones were laid at a

BOTH THE GRAND SALON FIREPLACE AND FORMAL DINING ROOM SHOWN HERE CONTAINED STONES WEIGHING UP TO 3,000 LBS., AND WERE SET IN PLACE USING A RIG CONSTRUCTED OF SCAFFOLDING, BEAMS AND PULLEYS.

45-degree angle. We anchored that piece to the block work and then built everything around it."

The lions that ornament the base of this fireplace are hand-carved. The problem of integrating the top of the fireplace into the ornamental molding of the ceiling was solved by hand carving a piece of limestone to match the wood trim. The Corinthian columns surrounding the centerpiece above the hearth are carved from single twenty foot long pieces of limestone to eliminate the need for mortar joints.



HAND-CARVED INDIANA CUT LIMESTONE. FRISCH MASONRY RECOMMENDED MAKING THE PIECES OF THE FIREPLACE AS LARGE AS POSSIBLE IN ORDER TO ELIMINATE JOINTS.

Both the grand salon fireplace and the

fireplace in the formal dining room required a special rigging system fashioned from scaffolding, beams and pulleys in order to handle and set stones that weighed up to 3,000 lbs. "Sometimes you have to get back to basics and think like an Egyptian!" commented Frisch.

The formal dining room's fireplace does not sit on the home's foundation.

It occupies an area above a two-lane bowling alley in the lower level. This required additional structural posts and beams to support the load of the hearth and sculpture above. The ornamental details include two fleur-de-lis and a family crest. These custom carvings were created in the shop of the stone cutter. Just off the kitchen, the hearth room's fireplace blends the exterior rubble stone mix with Indiana Limestone around the hearth and mantel that has been rock faced and pillowed on site.

CONTINUED ON BACK COVER



General Contractor: Brinkmann Constructors

FH Terbrock & Sons

Greg Terbrock Design Build

Architect: Schaub & Srote

Mason Contractor: Frisch Masonry, Inc.

Foremen: Ray Frisch, Mike Orlando

Exterior Cut Stone: Earthworks

Lager Monument

Interior Cut Stone: St. Louis Stone

Rubble-stone: Earthworks

Fireplace/Mortar

& Grout Materials: Brentwood Building Supply

Raineri Building Materials

Accessories: Irwin Products

Caulking: Frisch Masonry, Inc.

AT A George McDonnell & Sons

GLANCE...

A WARM AND COZY FEEL WAS ACHIEVED BY USING RUBBLE STONE AND A CUT-STONE ARCH IN THIS LOWER LEVEL REC ROOM FIREPLACE.



leaders joined officials from Quik Trip to cut the ribbons on their new convenience store at the corner of Big Bend and Manchester Roads.

The corner site of the Maplewood store was formerly home to an auto dealership, which was demolished in November, 2013. The Maplewood location now features a Generation 3 store, which is the new prototype for Quik Trip. At 5,700 square feet, 'Gen 3' stores have a bigger footprint enabling the company to expand its product offerings, including hot, cold and frozen beverages, and a unique kitchen section with a variety of prepared foods and indoor and outdoor seating. The site also features 16 customer bays for dispensing gasoline.

"This will be what all our stores will look like," explained **Jacob Wilhoit**, St. Louis construction manager for Quik Trip. Of the 74 Quik Trip stores in the St. Louis region, the Maplewood location is the seventh 'Gen 3' type constructed. Several more new and retrofitted stores are planned for the near future.

"The Gen 3 stores have a much more detailed architectural finish," added Wilhoit. The store features brick walls, complemented by stacked stone pilasters on the front and back, a feature required by the City of Maplewood. "Brick has always been our trademark," said Wilhoit. "It gives us a sturdier structure as well as the right architectural look we're seeking."

For the construction crew that had spent seven months battling tough building conditions, the warm spring ribbon cutting marked a welcomed conclusion to one of the most difficult projects they had ever encountered. "It was the worst winter we've had in 30 years," said Derek Barton, construction superintendent on the project for Limbaugh Construction, the general contractor. "The building schedule was 18 weeks long from the time the footings were in place. That's not a lot of time, then we ran into seven weeks of delays due to rain, snow, ice, and extremely cold temperatures. Our subcontractors really knocked it out, though. They worked nights and weekends, whatever it took to keep things moving." "It was a very rough winter," agreed Wilhoit. "However, despite the weather, it was a very smooth project. I credit that to Derek and all the subcontractors. They did a phenomenal job."

Neither Cold nor Snow nor Dark of Night...

CONTINUED FROM PAGE 5

Rick Swanson, President of Swanson Masonry, echoed their comments. "Sure it was cold, but with the proper cold weather protections in place, we just kept moving. We understood we were on the critical path to getting the roof on as quickly as possible."

In fact, Swanson's masonry crew, which includes **Bricklayers' Local #1 of Missouri** and **Mason Tenders** from the **Eastern Missouri District Council**, set a record for constructing the load bearing brick walls, taking only nine days to complete the shell so the roof could be set. The previous Quik Trip construction record had been 11 days, set in sunny Arizona.

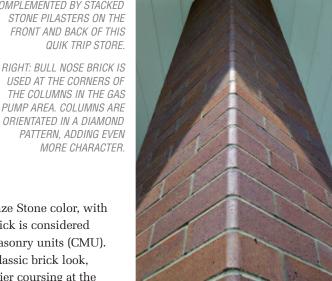
To meet the project's deadlines, Swanson's crew worked sunup to sundown, seven days a week, often relying on vehicle headlights to illuminate the project work site.

Swanson credits that success to careful planning by his team, as well as the teamwork exhibited by everyone working on the site. "Derek Barton was a jewel to work with," he noted. "Everyone was scheduled out seven days a week, which required detailed planning so everyone knew where to start, which direction to go in, the type of scaffolding to use, and so on."

To ensure uniformity of design and appearance in all its stores, Quik Trip supplies most of the materials, including the brick, which was shipped from Interstate Brick of Utah. "In addition to maintaining consistency, we also achieved economies of scale when we buy for hundreds of stores," said Wilhoit.

The Maplewood store features half high structural brick in Bronze Stone color, with Midnight Black action bands. The 8" x 4" x 16" half high clay brick is considered a hollow brick unit and can be reinforced similar to concrete masonry units (CMU). "The brick provides the load bearing capacity needed and the classic brick look, inside and out, all in one shot." The building also presents soldier coursing at the top and utilizes bull nose brick at the corners of the columns in the gas pump area.









ABOVE: THE MAPLEWOOD STORE FEATURES HALF HIGH STRUCTURAL BRICK IN BRONZE STONE COLOR, WITH MIDNIGHT BLACK ACTION BANDS.

RIGHT: THE BUILDING PRESENTS SOLDIER COURSING AT THE TOP.

BELOW: JUST A FEW MORE OF THE MANY ST. LOUIS-AREA GEN 3 QUIK TRIP STORES THAT HAVE OPENED RECENTLY, AND ONE UNDER CONSTRUCTION:





2791 DUNN RD. – JDS MASONRY, INC., PUGLISI CONSTRUCTION



5909 HOWDERSHELL RD. – JDS MASONRY, INC., PUGLISI CONSTRUCTION



10768 W. FLORISSANT AVE. – TOENGES BRICK CONTRACTING, BLANTON CONSTRUCTION



1530 S. HANLEY RD. – JDS MASONRY, INC., WRIGHT CONSTRUCTION SERVICES, INC.

The columns themselves are orientated in a diamond pattern adding even more character to a typically utilitarian area.

In all, more than nine tractor-trailer loads of brick and stone were delivered to the site, some of which had to be unloaded in driving snowstorms. Additional site work included constructing a stone retaining wall facing an adjoining high school, and a masonry screen wall to separate the site from a nearby apartment complex.

"Quik Trip is also big on monitoring all aspects of the job," Barton added. "SCI Engineering was on site almost every day inspecting the demolition, structural steel, masonry, concrete, soil bearing capacity, and compaction." Swanson coordinated early with SCI to discuss the special inspection reporting specified by the engineer of record. Swanson noted, "Nearly every trade on the jobsite today deals with special inspections and I have found communicating with the special inspector early in the process is one of the best practices a contractor can do today. The simple task of coordinating inspector visits really helped us to stay out in front of the general contractor's critical path schedule."

"This is the Taj Mahal of convenience stores," declared Swanson. "Over the years, Quik Trip has come to find masonry is their best value. This wall system performs very well for this customer and helps them achieve their recognizable brand. They know building it right at the beginning will lead to less maintenance down the road."

Owner: Quik Trip-Maplewood

Architect: Lickel Architecture

(Kansas City)

General Contractor: Limbaugh Construction

Mason Contractor: Swanson Masonry

Brick Supplier: Interstate Brick

Mortar Supplier: Spec Mix

Masonry Craft

Workers: Bricklayers' Union Local #1 of Missouri

Mason Tenders from the

Glance Eastern Missouri District Council



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The resulting manor definitely makes an impression when viewed from a distance, but it is the attention to detail on close inspection that reveals it as a true work of art.

"I have been all around the country, in every kind of home you can imagine, and I have never seen anything like the workmanship that was put in here," says homeowner Harold Lewis. "Everything from the most visible detail, right down

to the depth and quality of the caulking speaks to the level of masonry workmanship used throughout the project."

Rick Frisch was quick to give credit to his great staff and the skilled craft workers of **Bricklayers' Local #1 of Missouri** and **Mason Tenders from the Eastern Missouri District Council.** "You're only as good as the people you work with, and we work with the best!"

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