



BMW OF DALLAS

70,000 Square Feet of Permeable Pavers Provide Stormwater Management Solution for Additional Parking

LOCATION:

Dallas, Texas

PRODUCTS:

Aqua-Roc™ Permeable Pavers

COLORS:

Napoli

INSTALLED AREA:

70,000 sq. ft.

INSTALLER:

Concrete Paver Systems
Duncanville, Texas



Background

When AutoNation purchased an existing dealership at 6200 Lemmon Ave. in Dallas, Texas, they knew they would need to create additional parking to accommodate the expected influx of customers and inventory.

The Challenge

The property that would come to be BMW of Dallas only had one area available for the extra parking: a grassy lot. Developing additional impervious cover to this area would have created more stormwater runoff than government restrictions allowed.

Across the country, urban sprawl and the proliferation of impervious surfaces over the

land, plus the transportation of rain water via urban infrastructure have produced grave consequences to the natural hydrological cycle. This rising impermeability of surfaces has limited the recharging of soil water reserves, thus drying out the soils from which plant roots draw their nutrients. Dry soils also become more prone to erosion. Unable to leech down through the surface, rain water gathers sediments and ground pollutants as they dramatically increase surface runoffs through urban infrastructure, flowing down to receiving waters. This issue has affected the population at the expense of the environment, as well as economically, raising costs of development and maintenance of infrastructures. Landscape architects and contractors are becoming more aware of

their environmental footprint and seeking out solutions that not only comply with government restrictions, but also decrease their negative impact. Careful stormwater planning helps to account for Mother Nature's needs while still developing land for our use.

The Solution

A Belgard® Permeable Interlocking Concrete Pavement (PICP) system was chosen by installer Concrete Paver Systems to address the rising land development issue and stay within the existing footprint of the BMW of Dallas site. Permeable pavements answer both qualitative and quantitative needs for stormwater management. As water rains on the pavement, it seeps through to

BMW OF DALLAS

the ground, reducing surface flows, often even eliminating the need for sewers and manholes. The 70,000 sq. ft. PICP system installed at BMW of Dallas allowed for stormwater to be captured, detained and discharged in a controlled manner.

“As water rains down on the pavement, it begins its journey by seeping through the specially filled joints in the pavers, and then through the base aggregates, which naturally filter the pollutants,” said Chuck Taylor, Commercial Hardscapes Expert for Belgard. “As it travels down, the water is stored in the base, until it reaches the natural underlying soils and recharges the ground aquifers that filter the water while allowing pedestrian and vehicular traffic on the surface.”

Belgard ADA compliant Aqua-Roc™ pavers were chosen for a smooth, linear look that stands up to even the heaviest vehicular traffic. Aqua-Roc was chosen in Pewter with Charcoal accent pavers utilized to permanently mark parking stripes.

Belgard was a great choice for this project not only because the permeable pavers were an attractive solution to the need for additional parking, but we were also able to work with BMW of Dallas as an experienced commercial site solutions provider for their stormwater runoff issues.

*Micah North
Sales Representative for Belgard*

The Result

The BMW of Dallas parking lot is both environmentally friendly and visually appealing. “Belgard was a great choice for this project not only because the permeable pavers were an attractive solution to the need for additional parking, but we were also able to work with BMW of Dallas as an experienced commercial site solutions provider for their stormwater runoff issues,” said Micah North, Sales Representative for Belgard.

The project, which was completed in July 2010, has stood the test of time in being a viable solution to an ever-growing environmental problem. In May 2012, BMW of Dallas hosted a PICP demonstration for designers and city officials spraying over 500 gallons of water per minute on the permeable surface without any puddling or runoff.

About Belgard Commercial®

Belgard Commercial, part of Oldcastle® APG, offers a complete collection of paver and wall products for plazas, terraces, parking areas, roadways, rooftops and retaining walls. Available in a range of styles, premium Belgard Commercial products have been found in the nation's finest developments and award-winning commercial and retail properties since 1995.

Oldcastle APG is part of CRH's Building Products division. As the largest building materials company in North America, CRH provides a single-source solution for commercial construction projects with a full portfolio that also includes structural masonry, masonry veneers, dry mix products, hardscape jointing sands and sealants, stormwater management systems, concrete infrastructure, architectural glass, lawn & garden products, and composite decking.

