## The Right Choice

By Jamie Scott

or those in the watershape, skate park, and other recreational industries, shotcrete's advantages over the form-and-pour method are numerous and well documented. In my view as a project manager, however, one set of advantages does not get the credit it should. The shotcrete process—by default—incorporates the conveyance of concrete to the point of use, placement of the concrete, and the finishing work. This combined process is of great benefit for those who have the responsibility of assembling a team to build a project.



Foundation exposed down to footing drains



Bluestone deck and rear garden

For me, this became an eye-opening realization as I was considering how I would handle the concrete work on several renovation projects. One of the decisions to be made was whether to use shotcrete or poured-in-place concrete. It didn't take long before I realized that I would have to hire and coordinate multiple trades if I were to use the poured concrete option. Rather than just relying on my dry-method shotcreter, I would need to bring together a ready mix company plus a pump truck plus concrete placers and finishers. The decision became obvious.

Renovation projects, in particular, benefit greatly from shotcrete, as truck access to the project area is usually limited or nonexistent. There's no need to hire a separate pump truck when shotcreting—it's all part of the process. The two projects listed in the following will help amplify this point.

One renovation project entailed exposing a foundation of an old residential estate in Scarsdale, NY. The inside of the house had recently been renovated. However, water was now coming into the rear basement rooms when it rained, which had to be addressed. It was fairly evident that we had to get to the foundation and footing drains.

This area of the house was completely cut off from the driveway or any other access. So, a great deal of hand labor was going to be called for—starting with the excavation work. After the footing drains were repaired and the foundation was waterproofed, everyone had had enough of hand work! It was now time to reinstall a very large Bluestone deck over the space, which called for a subgrade reinforced concrete slab. To avoid having to hand-carry the concrete materials up a long stone staircase to the project area, we brought in the shotcrete contractor. Not only did it save labor, it also took a quarter of the time it would have taken otherwise—a great use of the shotcrete process.

Another renovation project was a swimming pool in Darien, CT. The pool had been built many years ago and although it was structurally sound, it was missing some desired amenities. The homeowner decided to add a large underwater bench, over which they could cantilever a boulder and pipe water to create the sight and sound of water falling.

We notched back into the pool shell a bit, so as to give the concrete an edge to stop against. Then, reinforcing steel was epoxied into place, taking care to have the electrician attach the bonding wire for safety. Again, access was nonexistent due to it being a developed, mature property. So, shotcrete was used to install the concrete to create the bench and produce a concrete footing for the boulder to sit on.

Shotcrete has proven to be the right process when access is limited and ease of application is desired.



Jamie Scott is a third-generation Watershape Designer and Builder who has worked in the swimming pool and landscape industries for 39 years. He received his BS in business and accounting from Southern Methodist University, Dallas,

TX. Scott co-owned a high-end pool and landscape firm until 1998, when he divested to found a new firm, Group Works LLC, based in Wilton, CT. Through Group Works LLC, Scott has aligned himself with Genesis 3 and other organizations that focus on continuing education and increasingly higher standards in the watershape industry. He is a Platinum Member of Genesis 3 and a certified member of the Society of Watershape Designers. Scott is also an APSP-Certified Professional Builder and an ASA member and has trained with the Portland Cement Association. Additionally, he is on track to become a licensed landscape architect. Scott and Group Works LLC have been featured in regional and national publications.



Pool shell ready for shotcrete



New bench and boulder