

June 17, 2022

Nexus Creative Design Architecture, Planning & Design 100 White Plains Road Tarrytown, NY 10591

Dear Jaclyn,

Thank you for contacting me regarding your coastal pool project at 921 Soundview Drive. The focus of my remarks are directed at how to mitigate the risk and impact to the existing environment, within normally prescribed swimming pool practices.

It is viable to install a lower weight pool shell onto a structural platform, so as to lessen the load on the platform, and thus have lesser disturbance with the platform. Vinyl liner and single piece fiberglass pool shells are very common in this area and have a long history of performance. There are also single piece pool shells made from stainless steel that are available.

The plumbing lines can be schedule 80 PVC which is typically used for commercial pools, but the thicker walls of the pipe and fittings will make for a more durable system. Where out of the ground, the pipes should be fastened to the superstructure and blocked at changes of direction. As is good practice, the plumbing system should be pressure tested continuously throughout any backfill, to prove system integrity.

A cartridge filter should be used for the pool, so that backwashing is not an issue. The cartridges are simply washed off once or twice a season to remove dirt and grime. Cartridge pool filters are readily available and widely used.

A swimming pool does not have to be emptied unless there is a significant maintenance issue to address. And the pool shells that you are considering do not need acid washing. In cases where the pool may have to be drained, the same tanker trucks that bring water can be hired to pump out water and take away. This is done in other similar local areas.

In regards to sanitization, you should consider using ozone/UV sanitizer. It is a powerful oxidizer, and along with the automatic pool cover, will help keep the pool water balanced so that less overall chemicals will be required. The ozone/UV system does it work at the equipment, and there is nothing (no chemicals) to spill. Any pool will still need a small amount of sanitizer residual in the water. A salt water chlorine generator will provide that residual. Salt is added to the water initially so that the achieves approximately 3,000 ppm salinity - which is approximately 1/10 of ocean water.

The pH, total alkalinity and calcium hardness levels also need to stay in balance for a pool. Pool service companies can bring any/all pool chemicals with them and not store on site. Therefore there are no chemicals to spill. Alternatively, if the chemicals are to be kept on site for whatever reason, there are watertight containers made for such purposes.

If I can provide additional information or be of help in any other way, please do not hesitate to contact me.

Sincerely,

James Scott

Watershape University PHTA NESPA