

2021 Honorable Mention

# Grotto Falls Lagoon

By Dan Pitts



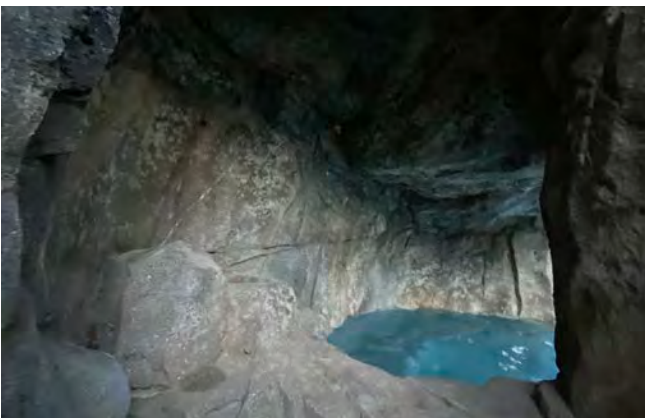
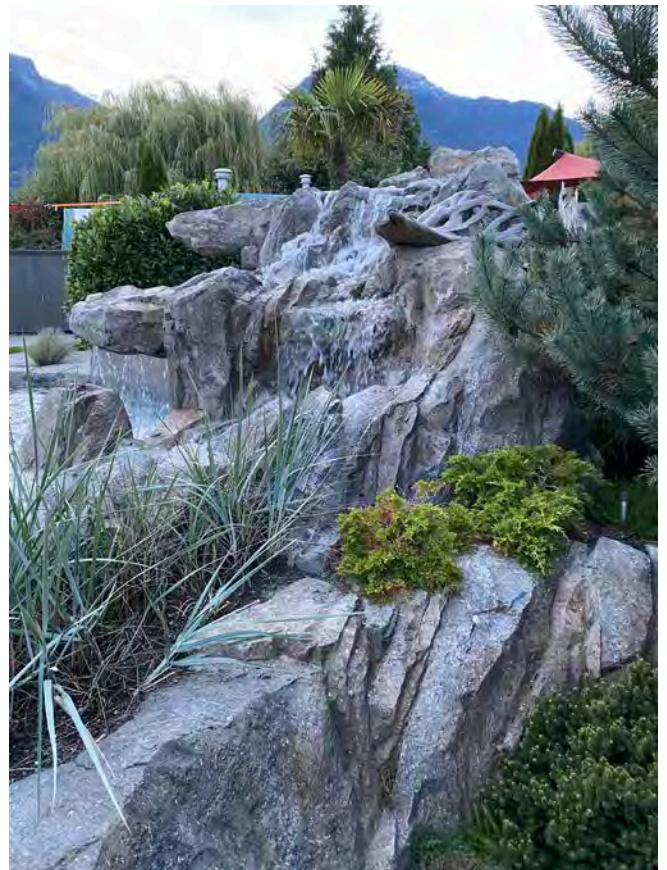
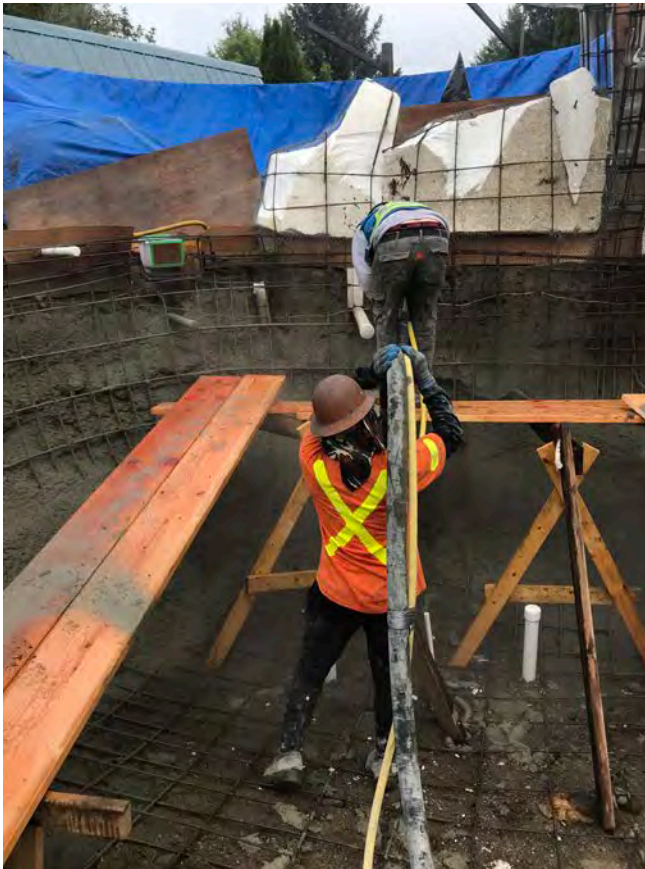
This project came to fruition when the homeowner enlisted us to create a unique pool that was inspired from the natural rock in the Squamish/Whistler area of British Columbia. The client had a vision of a pool that would remind them of when they would hang out in the local river pools of the glacier runoff amongst the waterfalls. However, not freezing their toes off with melted glacier water would be the best perk on their backyard pool.

The grotto aspect of the build was based on the dry and wet entry combination. The suspended slab for the grotto lid was built off the stacked columns of reinforcing bar at three points and the back supporting wall of the grotto. The steel for the rock armature was incorporated into the structure of the pool and angles of the waterfall. The spa sits elevated with a spillover into the pool and has an automated valve that controls the flow of the hot water waterfall return to the spa.

The design included a recently built firepit area as well as a koi pond. This resulted in a space challenge to be sure we would not damage the previous work and the aquatic life. We were able to complete the entire pool and grotto monolithically with the help of LRutt Contracting and a couple of their skilled finishers that came up for the day. After completing the shotcrete pool shell, we water cured it for seven days.







After pumping out the pool we started on our finish carving of the rockwork. The rock carving was completed in four days and then left to cure, while we were getting ready to color. We chose colors to represent the natural rock in the area by doing some reconnaissance missions and gathering physical samples and photos. We used the planters and waterfalls to our advantage when coloring. Streaks of color were added



to model the iron oxide runs found in the natural surrounding rock. We also simulated lichen and mineral stain from plants and runoff. After completing the coloring, it was time for the plaster surface coating. The final stages came together to reveal the client's dream pool. Plants were placed around pockets in the pool deck to help break up the visual impact of the rockwork. Afterwards, trees were dropped into the big planters with heavy machinery before the pool deck flatwork was completed. Everything came together quite seamlessly without encountering any major issues.



**Dan Pittls** Owner/Operator of Ocean Rock Industries, Squamish, British Columbia, Canada. Ocean Rock Art specializes in artisanal concrete rock environments. Everything we do is custom designed and hand-crafted to ensure the perfect fit for your landscaping or construction project. With years of experience and top notch concrete artists, Ocean Rock is ready to build the rock environment of your dreams.

## 2021 HONORABLE MENTION

*Project Name*

**Grotto Falls Lagoon**

*Location*

**British Columbia, Canada**

*Shotcrete Contractor*

**Ocean Rock Art Ltd/LRutt Contracting Ltd**

*Architect/Engineer Company*

**Kontur Geotechnical**

*Material Supplier*

**Cardinal Concrete**

*Equipment Manufacturer Company*

**Putzmeister**

*General Contractor Company*

**Ocean Rock Art Ltd**

*Project Owner*

**Krista Biggard**

**WARNING:**  
DUE TO HIGH LINE  
PRESSURE, SERIOUS  
ACCIDENTS  
AND INJURIES  
CAN OCCUR IN  
SHOTCRETE  
APPLICATIONS!



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