



PROJECT SUMMARY

Ayla Oasis Golf Club

AGRONOMIST

Charles Graham,
On Course Project and
Agronomic Consulting

SENIOR OPERATIONS DIRECTOR

Dan Grassi,
Greg Norman
Golf Course Design

SUPERINTENDENT

Atilla Demirsoy,
Ayla Golf Club

PRODUCTS USED

Profile Porous Ceramic (PPC)
Profile Greens Grade™

BACKGROUND

The first 18-hole golf course in the country of Jordan, Ayla Oasis Golf Club is a unique course that sits on over 120 hectares of land, and despite the extreme dry environment, boasts lush landscapes and sensational waterfront views. The Greg Norman Signature design is the largest in the Levant region, with an 18-hole par-72 championship course, a nine-hole par-three practice course, maintenance facility, and Golf Academy.

Ayla Oasis sits within the community of Aqaba, which stretches across 17 kilometers of waterfront and, when complete, the development will claim 4,300,000 m² of residential and commercial space. An essential part of the community, which features hotels, retail markets, and a marina, the Ayla Oasis course is one of the major draws to residents and guests, making the success of its development crucial.

In order to deliver evergreen grass in Jordan's climate, finding solutions that would enable successful grow-in of the greens and long-term results was critical. Charles Graham of On Course Project and Agronomic Consulting, worked with Dan Grassi, Senior Operations Director of Greg Norman Golf Course Design, to carefully select and nurture the greens to ensure they would remain evergreen year-round.



CHALLENGES

Despite remarkable and extensive views of the coastline in Aqaba, Ayla Oasis faced a number of challenges in course design and development. Designers had planned to leverage the incredible waterfront views of the course and make water features an integral part of the facility. However, the extreme heat within the region made it nearly impossible to grow lush grass to complement the water features. What's more, the water available to the course was of extremely poor quality, with high levels of total dissolved salts (TDS) and other undesirable elements that can damage grass growth.

With extensive knowledge and experience specifying impressive greens and tees all over the world, Graham was brought into the project to develop a solution that would enable Grassi's team to grow-in tees and greens that could perform long term in Jordan's environment. It was not only necessary to have the grass grow-in successfully, but to ensure the greens could stand up to the heat and continue to flourish despite poor water quality. Furthermore, the team also hoped to leverage local materials in the course development and tasked Graham with finding a way to use native silica sand from the mountain region to build the greens.





"The Profile team was extremely helpful and passionate about finding a solution that could deliver the greens we desired," said Graham. "Gavin and Joe talked through everything and presented a few different options, tapping into experience they had on projects around the region, such as Dubai—which has a very similar climate to Jordan—to show how their solutions have performed with other courses."

– CHARLES GRAHAM, ON COURSE PROJECT AND AGRONOMIC CONSULTING

THE SOLUTION

Having worked with Profile Products on several other projects, Graham immediately tapped into the expertise of the Profile team and relied heavily on Profile's solutions to tackle the challenge ahead. To find a solution that would be viable in the region, Gavin Kelly and Joe Betulius of Profile travelled to Jordan to meet with Graham and Grassi and conduct testing on native sand varieties.

The testing from Profile revealed that a rootzone mix of 85% sand and 15% Profile Greens Grade™ would create viable and sustainable greens. The Profile Porous Ceramic (PPC) particle found in Greens Grade is 74% pore space with 39% capillary (water) pores and 35% non-capillary (air) pores. Blended with sand in a greens mix, it can improve water- and nutrient-holding capabilities, increase oxygen levels at the root zone, and facilitate drainage when soils are saturated.

Atilla Demirsoy, Class A Golf Course Superintendent, was brought into the project during the final phase of the construction to manage course conditions. The solution from Profile improved those course conditions by enabling the greens to drain water quickly, which is critical when working with poor water quality to prevent unwanted elements from penetrating. Furthermore, the PPC mix allows for improved water-holding capabilities—a characteristic that is essential to growing and maintaining grass in a dry and hot environment.

"One of the biggest challenges we faced on-site was the extreme environmental conditions—especially the summer temperatures with high, dry winds," comments Demirsoy. "Temperatures ranged between 42 degrees Celsius in the daytime and 29 degrees Celsius at night, and it was very dry with not much humidity. Basically, the sun feels really hot, plus the dry winds put a lot of heat stress on the plant. Profile improved the impact of this major issue we were facing."

RESULTS

Ayla Oasis has quickly established itself as the premier golf course in the country of Jordan, attracting players from around the world. The solution provided by Profile not only delivered evergreen grass during development, but the maintenance team also benefits from the consistency and quality of the greens year after year.

An online review of the course notes that with "unprecedented modern and natural lush landscape, the Ayla Golf course has become the new go-to destination for not only golf enthusiasts, but also tourists."



"Profile made a huge difference in water retention and water usage. Due to its porosity and retention properties, I have noticed around 20% less water usage for the same areas where we used Profile mix."

– ATILLA DEMIRSOY, GOLF COURSE SUPERINTENDENT, AYLA GOLF CLUB

The long-term results of Profile's solution can be seen throughout the course; in fact, according to Graham, "there was a huge issue with dry spots in the areas where we did not use the Profile mixture, while the greens with Profile had no problems whatsoever." Having permanently amended the structure of the greens with Profile, Ayla benefits from consistent and predictable maintenance, which provides long-term financial benefits by enabling the club to save time and money dedicated to maintenance needs.