

Sustainability Summary

Rumanza Golf and Country Club
Multan, Pakistan

Produced by:



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“Rumanza provides a tranquil and serene escape from the hectic pace of work and city life through a grand luxurious combination of modern and traditional design. Perfect management and vigilance provide an exceptional sense of security for the community – where you, your family, and your friends are all welcome. Mango, citrus & lychee orchards enchant visitors and offer shade to ardent golfers and perfect habitat to wildlife. The Woodlands takes golfers through thick trees that guard the fairways.”

Rumanza Golf & Country Club



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Rumanza Golf and Country Club
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Executive Summary

As a Sir Nick Faldo signature course in an emerging golf nation, Rumanza really stands out as the world-class, championship course that it is, and is more than capable of inspiring future generations of Pakistani golfers. Working closely with the government and the DHA Multan this 18-hole course has been created in keeping with the natural character and charm of the region while also being able to host professional tour level events.

As a former agricultural field, the regeneration of natural & native habitats within the site were an import factor in making the course feel like it is a part of the wider landscape and has been for many years.

The club has truly created a hub for the future of golf in Pakistan while giving back to the local community. The creation of a nationally leading Centre of Excellence secures the progression of the sport in the country.

The club have invested in the best-in-class technologies to control inputs to the golf course ensuring there is the minimal wastage possible as well as using locally sourced materials where available.



Project Description

Located around 15km North of Central Multan the par 72 course is nestled within 444 acres of land. The championship course can stretch to over 7,500 yards with less than a quarter of the total area being managed turfgrass. The project is part of a wider multi-use development plan with the other phases coming at a later date (not set).

The goal behind this project was to create a championship course, capable of hosting professional tournaments and providing a challenging round for the worlds best golfers while also being a safe and fun environment for beginners to learn the sport. It is safe to say that the course has achieved this.

The project aimed to and succeeded in rejuvenating the surrounding area through its land improvements. Reinstating the natural and native habitats has allowed a number of species to return to the area, giving a great biodiversity boost from the previous agricultural land.

The project includes:

- 18-hole championship golf course
- Driving range
- Practice greens
- Maintenance facility
- Two halfway houses
- Short course (Added in construction)



"The golf course is a transformation from old agricultural fields to a championship standard golf course capable of hosting elite level events. Native landscapes and soils have been used to provide a golf course wrapped in its local environment."

Rumanza Golf and Country Club

"Throughout my time working with this project and my visits to the site I have seen the site transform into an excellent golf course which has benefited the natural environment seeing an increase in biodiversity in the area. The regeneration of land here is a great example of how golf can be a positive and beneficial use of land."

Alexandra Betâmio de Almeida - Independent Verifier - Rumanza Golf Course



Key Achievements

Helping to provide the opportunity for the growth of the game in Pakistan by providing world class facilities, in a restored landscape and series of native habitats and wetlands. The golfing facilities are accessible for all, and can support elite level golfers - making the course a front runner in terms of sustainable design and positive community impact.

The project has been an environmental enhancement scheme first and foremost in the largest sense - a collection of former agricultural cereal crop fields and intensive orchards have been rehabilitated to a mosaic of native habitats and wetland area attracting new birdlife and increasing overall net biodiversity levels. The project has given a flagship for Pakistani golf to follow and opened the sport up to be more accessible for many future generations.



- Ensuring the golf course style is compatible and influenced by the landscape context of the rural land around Multan.
- Retaining 5 hectares of high-quality existing orchard tree plantings.
- Creating large and viable habitat patches within the golf course to create quality new habitat for flora and fauna to thrive.



- Reused the valuable soil found on site whenever possible to provide a suitable growing medium for playing surfaces with minimal ameliorants added over the smallest area possible.
- Invested in the best-in-class technologies, including satellite-controlled irrigation system with individual head control to reduce water wastage.



- Forged knowledge sharing partnership with local universities to share the land and open space asset that the golf course will secure for the long-term future of the area.
- Established a nationally leading Centre of Excellence practice facility aimed at new players, set up within the extensive driving range area and short game facility.

"This might be the biggest transformation (and we anticipate biodiversity boost) we've seen on a new golf development. A former monoculture of industrial scale, flat arable agricultural fields – the native sands beneath have been used to shape a dramatic golf course with the highest standards of practice grounds and entry level facilities. The course is wrapped with native landscape grown on at the client's nursery, and local building materials and techniques have been used to create pathways, steps and restore original farming structures [Deras] around the golf course property. The course continues to improve and we expect to see it go from strength to strength."

Sam Thomas - Sustainable Golf - Developments Director, GEO Foundation



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Design Stage

Overview

It was important to design the course in tandem with the land around it, ensuring that the natural environment played a big part in the journey of the golfer. *"In order to create interest and variety throughout the 18 holes the golf course was routed so that each of the nine holes experienced the area occupied by orchards as well as the more open land "* Faldo Design.

It was recognized that through the design stage there could be a number of savings made in the resources used in construction and operation. Not only would this save money on the development but it would also create a more sustainable and efficient build.



The enhancement and rehabilitation of the natural habitats within and surrounding the golf course saw 50 hectares of what was previously cereal crop, reverted back to the diverse habitats of the local region, increasing the biodiversity in the process.



With water in the region being a finite resources, and critical to course establishment and future maintenance - the design focused on capturing all surface water run off to recharge groundwater and lake stores. A treated sewage water pipeline will capture this source from the future development areas.



Within the golf course there is an intention to, breakdown some of the barriers between golf and it's immediate neighbors; to provide a training ground for the future golfers of Pakistan and to foster an atmosphere of community at the golf course and its associated facilities.



Photo credit: GEO Foundation

Activities

The following section outlines the process that went into designing Rumanza Golf Club to make it a pioneer in sustainability and golf in Pakistan. It illustrates the commitment and careful consideration of the project team's objectives and vision throughout the early stages of the project's life.



Nature

Throughout the development it was imperative to design a course that not only is good for the player but also good for the natural environment. It was a main goal of the development to use this as an opportunity to improve the surrounding environment and return it to a good ecological standard. Part of the design was to use native species to ensure that they are suited to the climate, there is an increase in net biodiversity across the site and the golf course and surrounding habitats blend seamlessly with each other.

New aquatic habitats were designed to further diversify the habitats across the development, creating an attractive stopover for migrating birds.

**50 hectares
of cereal crop
regenerated into
new diverse habitats**



Resources

From the outset a key factor in the success of this development was the smart use of water. Clever water recycling techniques were designed throughout the course including the recycling of surface water run-off to recharge ground water stores and lakes.

After testing, the soils on site were identified as a suitable growing medium for the golf course. Where possible this material was used. This benefits the development not only in financial terms but also reduces the carbon emissions in what would have been a carbon intensive process, enforcing the sustainability focus of the development.

A decision was made to inject local character, colour and textures into the landscape of the golf course, reinforcing the contextual response of the golf course style and experience for the golfer. Ensuring that this course was an authentic Pakistani course appreciating the traditional materials was a major part of the design process.



Photo Credit: Rumanza Golf and Country Club

**12,000m³
of topsoil
sourced from
onsite**



"The restoration of the landscape and ecosystems were at the heart of the planning and design work and here we saw a real opportunity to boost biodiversity and encourage the natural vegetation back. We're now seeing the native soils regenerating with native seeds, with the treated water and irrigation system encourages diverse vegetation and wildlife back to the land. We believe retention of the best existing trees, a thoughtful approach to the landscape as a whole, together with retained vernacular structures and traditional brick pathways around the course, creates an unmistakably authentic experience."

Andy Haggar - Faldo Design, Rumanza Golf and Country Club



Community

A major goal of this development is to breakdown the barriers between golf and its neighbors here. Rumanza Golf Club wants to foster an atmosphere of community within the club and its facilities.

To secure the future of golf in the Pakistan a nationally leading Centre of Excellence practice facility to introduce new golfers to the sport as well as taking current players to the next level of the game through training. This training facility includes a short game area as well as an extensive driving range.

An accessible course created for all level of golfer



photo credit: GEO Foundation



On-site vegetation nursery established



“The Rumanza Golf Club has displayed a strong desire to help the local community and the entire country as far as they can throughout the project and going into the operation stage. The club has created numerous opportunities for local residents including extensive training to provide life long careers. The club is an excellent example of how to work alongside the local communities and national bodies to create an environment that benefits everyone.”

Alexandra Betâmio de Almeida - Independent Verifier - Rumanza Golf Course

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Construction Stage

Overview

Throughout the construction process there was close communication between the design and construction teams to ensure that the course was built to the best standard. There were a number of changes to the original design made during the construction stage. A good example of this being the introduction of an additional small golf course.

Although a lot of the surrounding habitats were restored and revitalized, some of the existing habitats on site were protected to enhance the local history. Over five hectares of existing orchard groves were retained and protected.

Well thought out roads and infrastructure were established at the start of construction. This allowed for efficient movements of materials around the site which reduces carbon emissions, the use of large vehicles to minimise the number of trips required also contributed to the efficiency of the build.

Although the construction was disrupted by the covid-19 pandemic, the project team must be commended on the high quality work carried out and the standard of the course that has been produced.

**100% of
golf and
maintenance
carts are
electric**

Construction





Photo credit: Rumanza Golf and Country Club

Activities

The following section outlines the construction process of Rumanza Golf Club. It illustrates the steps taken during construction to deliver the highest quality golf course in a responsible, practical and resourceful way.



Nature

The flexibility and continual review of the golf course during construction by the architect and construction team helped to refine the designs to reduce turfgrass, and increase native habitat areas. It involved close collaboration on the successful propagation of a large on-site nursery.

When planting the golf landscape native plants as well as species suited to the local climate were exclusively used. This gave them the best chance to establish themselves and allows them to enhance the surrounding area. Similarly, the turfgrass used - Paspalum Platinum TE - being suited to the climate provides the best playing surface and while requiring the least amount of inputs.

Resources



Throughout the construction stage there was a clever use of materials and resourcing. Recycled astroturf bunker construction usign Ecobunker. Bricks from local demolished buildings and buildings removed from the site were used across the site in the construction of cart paths. This adds to the character of the course

while also giving an impermeable surface. Walls around the course were finished in a local style, again creating the feeling of an established golf course while giving opportunities to local crafts and tradesmen.

The use of local materials throughout the construction period greatly decreased the amount of travel required to get the materials to site. Due to the quality of the soil on site it was able to be used to shape the holes. This, along with the implementation of state of the art irrigation system reduces the amount of resources required to be brought to site.



Community

A large percentage of the construction team were based locally, giving them a good working knowledge of the land. It is planned to establish caddy and other career training programs. This will not only provide jobs to locals but will also give them technical skills in a specialised area which can assist with careers to last a lifetime.

This development can and will be used as a demonstrator for sustainable construction and golf development throughout Pakistan and within groups such as the Pakistan Golf Federation, Asian Golf Media and the Public Office. This shows just how pioneering this development has been and how much it will contribute to the future of the country.

**250
construction
jobs created**

**Partnerships
formed
with local
universities**

Construction







"We are delighted to welcome the Sir Nick Faldo Signature golf course at Rumanza as the first GEO Certified® Development in Pakistan. Faced with a challenging site, the drive, creativity and determination of the whole project team and construction crew was amazing to see. Built under the extreme difficulties faced during COVID-19 pandemic, what has been achieved is remarkable – and special recognition should go to the construction team on the ground. In a relatively new market for golf, DHA Multan saw an opportunity to create a centre of excellence for elite and aspiring Pakistani golfers to train and perform at. We congratulate them on this achievement and look forward to seeing the sporting legacy of the project play out."

Jonathan Smith, Executive Director at GEO Foundation





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