



RANCHO SANTANA

Area: Rancho Santana is a world-class resort and residential community located on Nicaragua's pristine Emerald Coast. "The Ranch" boasts 2,700 acres of rolling hills, five unique beaches, a variety of dining options, and a myriad of activities from adventure sports to spa treatments.

Situated on the Southwest Pacific coast between the vast Pacific Ocean and Lake Nicaragua, The Ranch is located on one of the Pacific's only isthmuses. Bordered on both sides by water, Rancho Santana enjoys the distinction of nearly constant offshore breezes.

Background: Due to an increase in traffic from the influx of visitors, tourists and locals there was a growing concern with the trafficability of the roads as they were showing signs of corrugation, rutting, loose surface material and mainly generating lots of dust.

Soil Solutions was contacted by Rancho Santana's Chief Engineer, Alan Vilchez, looking for a solution that would provide a smooth driving surface with reduced maintenance which was water resistant and most importantly would reduce the dust for better visibility for drivers and the safety of the community.

It was decided that an EBS Surface Seal would be the ideal solution to improve the road surfaces for Rancho Santana. Despite the challenges presented by the COVID-19 pandemic and the resulting lockdown an order was placed, product was delivered, spray bars were constructed and the EBS applied using several means of communication to achieve a successful application.

The improved road surfaces will only add to the amazing features and experiences that can be had with a visit to this wonderful resort.

Project Name: Rancho Santana Road Upgrade

Location: Nicaragua

Date: May 2020 to present

Client: Rancho Santana Resort



Project Description: Application of an EBS Surface Seal to improve the road surface, prevent dust and reduce the maintenance requirement.



Application: The existing surface was skimmed, then shaped to provide proper drainage, compacted to a smooth finish then sealed with the EBS Soil Stabilizer using multiple coats until the point of refusal was reached. The EBS was applied in a manner that allowed for traffic flow during application.

Result: a sealed surface layer providing complete dust elimination, improved skid resistance, total preservation of fines and material, is non-slippery, water and UV resistant, free from the formation of potholes, rutting and corrugation, and a reduced environmental impact.

THE EBS SURFACE SEALED ROAD SURFACE IS NEVER TO BE GRADED OR WATERED ... The objective of the EBS Surface Seal is to eliminate the requirement for any future remedial works including the importation of material, regravelling, watering or grading of the surface.

After 18 months (or when required) the surface may need a maintenance application of EBS at a reduced application rate.



Our experienced team and civil engineers at Soil Solutions® will assist with Value Engineered Design Improvements using a combination of technologies to deliver effective and efficient construction methodologies for economically viable Intelligent Roads Solution.

CONTACT SOIL SOLUTIONS TODAY FOR OUR SPECIFICALLY TAILORED SOLUTIONS FOR YOUR ROAD, RUNWAY OR RAIL PROJECT.

CONTACT US.

Soil Solutions provides Value Engineered Solutions, which incorporate the latest technologies and an improved road surface using the innovative methodology developed by Soil Solutions completely eliminates the requirement for any further remedial works to the surface including grading, compacting and watering for dust mitigation purposes. Only an as and when required maintenance application is required at a reduced rate.

The EBS Surface Seal will provide for the following:

- Reduced amount of aggregate required for layer works
- Reduced budgets for construction and maintenance
- Significantly reduced water usage
- Maximum efficiency, reduced maintenance and expanded lifespan of the road surface
- Opportunity for job creation and skills transfer for product application and the development of a community-based maintenance programme

Additional benefits from the EBS Surface Sealed roads include:

Benefits of EBS Surface Sealed Gravel Roads

- ✓ Important and substantial cost savings for governments and municipalities in terms of Gravel Road Maintenance
- ✓ After an EBS Surface Seal, these Gravel Roads will NEVER need to be Graded or Compacted Again.
- ✓ The road will have a longer life and only requires spot maintenance every few years instead of major maintenance on a regular basis.
- ✓ The road surface will be protected from erosion and any material loss.
- ✓ There will be No dust and increased safety.
- ✓ This provides a valuable solution for governments and increasing service delivery – while decreasing costs to do so.
- ✓ This is also a perfect solution for Environmentally sensitive areas as this solution reduces Environmental Impact.

Soil Solutions is on a journey to make a difference through the implementation of alternative innovative technologies and methodologies to achieve results that provide sustainability and allow Governments and rural areas to improve their infrastructure in order to provide healthier, safer and economically and socially improved communities.

At Soil Solutions, we value the growth, pride and success that we experience with each and every project. From the beginning of our journey and as we continue to grow, we remain dedicated to making a difference in a positive way with every project and every client. This personalized hands-on and service orientated approach has allowed us to experience great satisfaction in our successes with what we have delivered to our clients.

Smarter, Safer, Increased Value, through value engineered solutions that lead to, improved safety, reduced maintenance, cost reduction, expanded lifespan and reduced environmental impact only provided by the leading innovator in intelligent road improvement technology:

Soil Solutions. *Consider it Solved.*

**RANCHO
SANTANA**