

# Project Summary

Levy County, FL  
August 16, 2022



**INNOVASOIL**  
TECHNOLOGIES

## PILOT PROJECT

Soil Stabilization, Pavement Reinforcement, and Dust Suppression



# Why Innovasoil

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Innovasoil is a leader in providing pavement rehabilitation, reinforcement, soil stabilization, and dust suppression solutions.



Our technology was developed over 12 years of rigorous research & development, chemical trials, and field testing.



We provide soil engineering innovations that offer competitive and environmentally friendly solutions, delivering real savings in cost and time.



The technology, combined with the existing soil, interlocks permanently with aggregates to form a very strong stabilized layer.



Our technology applications provide a flexible, cement-like layer that exceeds the compressive strength parameters of Cement Treated Base (CTB).

# Levy County Pilot Project

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- **Location:** NE180th Avenue, Williston, Florida
- **Client:** Levy County
- **Project Type:** Pilot Project
- **Project Size:** 1,083 Yards [7,200 YD<sup>2</sup>]
- **Road Type:** Rural Dirt Road
- **Service:** Soil Stabilization, Reinforcement, and Dust Suppression
- **Application:** Innovasoil Technologies
- **Duration:** June 20, 2022 – June 26, 2022
- **Status:** Completed (In curing process)

# Background

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## NE180th Avenue, Williston, Florida



Average CBR along the entire road was approximately **9**, making the road susceptible to structural failure.



Road displayed rutting; potholes; dust; surface mud; puddling during rain events; and required regular maintenance.

# Pre-Application

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Samples were collected every 200 yards along the centerline between the two lanes in the project area.



Applied three different mix designs on three equidistant sections of the road before construction to identify the most suitable solution.



Results indicated that the addition of the available RAP and clay material along with the technology would provide the optimal mix design.

# Application



Spreading clay material



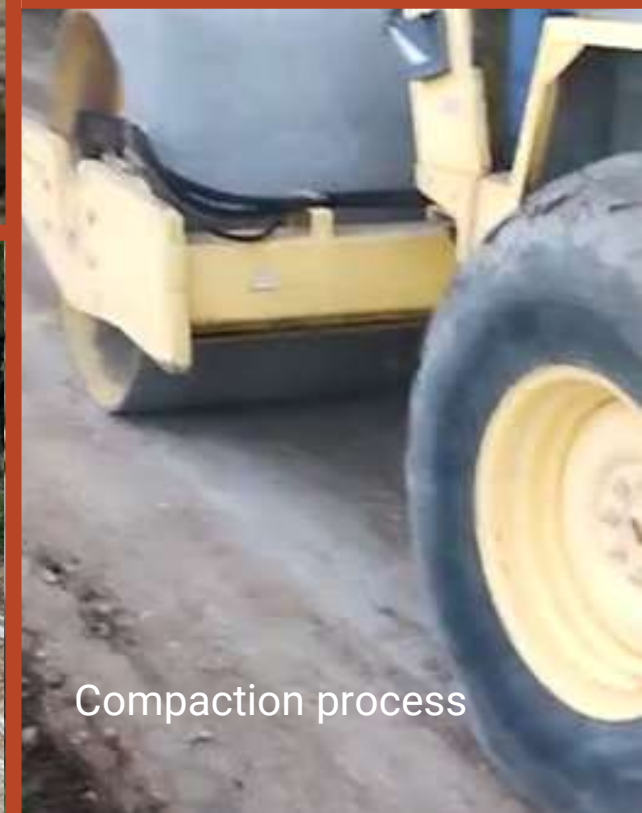
Spreading RAP material



Technology application



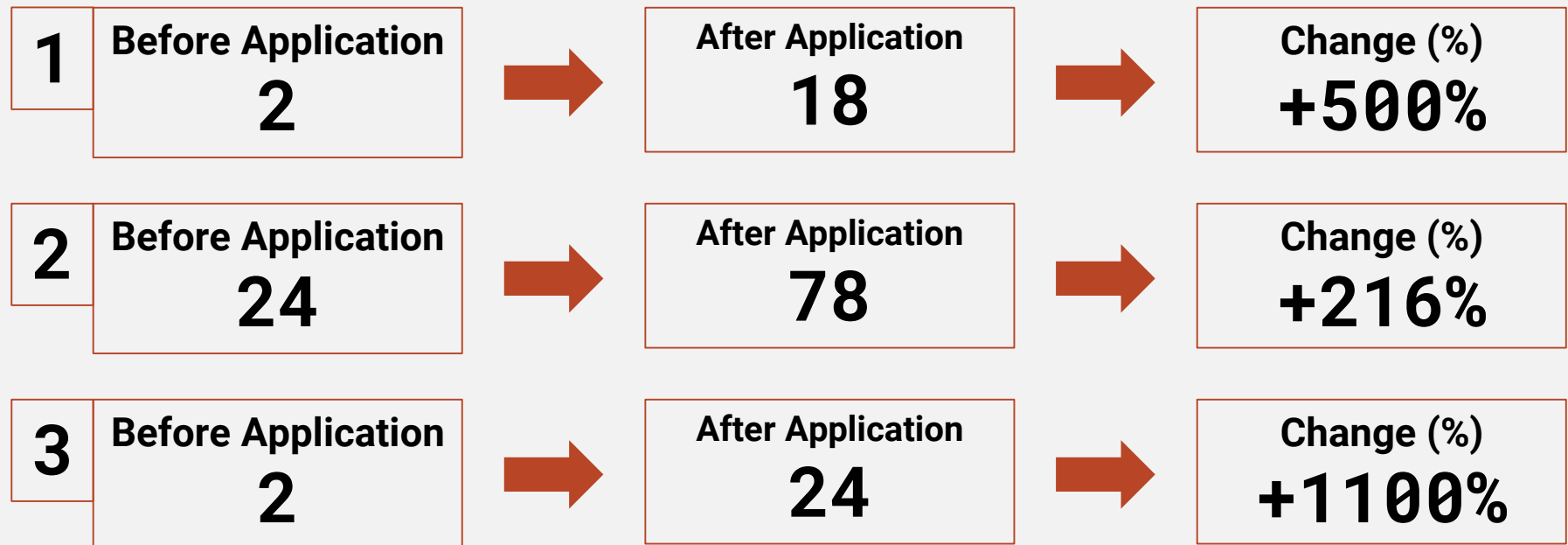
Mixing process



Compaction process

# CBR Analysis

## California Bearing Ratio (CBR) - 7 Days







# UCS Analysis

The Unconfined Compressive Strength is the maximum axial compressive stress that a cohesive soil specimen can bear under zero confining stress.

Average Innovasoil UCS

# 700psi

Note: Typical seven-day UCS for Cement Treated Base (CTB) range from 300 to 600 psi.



# Surface Results



**Cement-Like Sealed Surface**



**Highly Dense Base Layer**



**Hydrophobic Surface**



**Permanent Soil Bonding**

# Final Results

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Road presents an even and smooth driving surface



Road displays dust suppression characteristics through soil binding



Road presents above-average load-bearing capacity [CBR, UCS, Density]



Road presents a cement-like, sealed surface



Road displays extremely dense and impermeable layer (100% compaction)