



**CASE STUDY:** Spectrum's office building was exhibiting signs of settlement distress and UMA was retained to correct the problem with High Density Polymer Resin (HDPR) injections.

## HIGH-DENSITY POLYURETHANE RESIN (HDPR) INJECTION

### THE PROJECT

Spectrum, owned by Charter Communications, is an internet provider operating out of a multi-story office building in Greensboro, N.C. The structure was experiencing signs of settlement distress along the northern, western, and southern walls of the building at 721A Regional Road. This settlement caused cracking in the structure's precast panels, and also caused the rear patio to move.

### THE CHALLENGE

Based on observations of the physical settlement damage, conversations with the client, and the provided limited building distress study by S&ME dated August 5, 2020, UMA chose to utilize HDPR injections along the foundation of the northern, western, and southern walls.

#### The Customer

Charter  
Communications, Inc.

#### Location

Greensboro,  
North Carolina

#### Type

Commercial

#### Date of Project Completion

Fall 2021

#### Interesting Fact

Spectrum project was a prime example of how settlement sometimes only affects a portion of a structure.



# CASE STUDY

## THE SOLUTION

We injected HDPR for soil improvement by performing a series of UMA Deep Injections (UDI) to approximate depths of four, seven, and 10 feet below grade along the foundation of the north, south, and west walls that were being treated.

## THE RESULTS

Our crews avoided disrupting Spectrum's operations during construction. We also left the site cleaner since HDPR Injection is a minimally invasive process that allows us to repair foundations without mass excavation. UMA's deep injections were intended to consolidate and improve loose materials and create a HDPR/soil matrix to help mitigate future settlement in this area. Not only did we eliminate the physical signs of distress eliminated at the Spectrum building, but we also left the structure on a stronger foundation.



8815 Neville Road, Colfax, NC 27235 | P.O. Box 1070, Kernersville, NC 27285  
o- 336.992.0746 f- 336.996.8573 [team-uma.com](http://team-uma.com)

