



# City of Seguin

## Case Study





## Overview

### From Guesswork to Street-to-Strand Visualization

The City of Seguin, Texas, home to 30,000 residents and spanning 38 square miles, needed a better way to manage its fiber network.

Justin Ramirez, the city's IT manager, and his team were aware they had a leg up with some documentation ready, something many other communities don't have at all. However, creating and updating that documentation involved a lot of manual effort and was incredibly time-consuming.

Having accurate records in place was important, but with a small team and limited time, it just couldn't be a main priority. They needed a solution that would help them get their fiber documented within the constraints of their time, team size, and budget.

After a search for the right solution, Seguin chose netTerrain for its usability and adaptability, and ability to accurately map the city's intricate fiber optic network in rich detail. The software's usability made it easy for the team to jump right in and start documenting right away.

netTerrain delivered: it streamlined the documentation and visualization processes for both aerial and underground fiber paths and made it easier to plan and collaborate on the city's infrastructure projects. Thanks to Justin and his team, the city can now visualize the infrastructure, from street-to-stand, plan for growth, retain knowledge, save time, and increase efficiency.





## Before netTerrain

### Manual Documentation vs. Expanding Infrastructure

The team of eleven were tasked with managing numerous large projects simultaneously. They used a mix of spreadsheets, paper drawings, and Visio to document not only Seguin's municipal buildings but also the infrastructure of a subsidiary.

However, this manual system was both time-consuming and labor-intensive. Without solid visualization and documentation in place, the team often had to trek out into the field and physically look at sites to get the information they needed.

With Seguin's many new and ongoing construction projects, manual documentation was becoming increasingly challenging to manage and keep up-to-date. The existing method was not sustainable in the face of the city's rapid development and the increasing complexity of projects.

As the growing city's infrastructure only continued to expand, the need for precise visualization became even more important but even more difficult to achieve. The team knew they needed to upgrade to a more efficient and automatic system that could save them time and make their work easier.

## Goal

### Streamlined Documentation & Management

This lean and busy team had their hands full, juggling multiple big projects at once: they needed software that would simplify their work and not add even more complexity.

They wanted to:

- Visualize the infrastructure all the way down to strand termination points
- Get accurate locations in clicks
- Easily document the plant without a huge learning curve
- Have the option to scale projects up as needed
- Integrate with other IT tools they used



## Challenge

### Finding Detailed, Scalable, User-Friendly Visualization

The Seguin team faced a challenge. They needed flexible software which could give them detailed and accurate street-to-strand visualization, could seamlessly integrate with their existing tools, and not break the bank.

Specifically, they were looking for a way to:

- Map their infrastructure down to the strand levels
- Zero in on specific spots quickly and accurately.
- View their entire setup in clicks - from the big picture to termination points
- Work seamlessly with their other systems and tools
- Make documentation easy so as to not overcomplicate their already large workload

## Solution

### Detailed, Adaptable Fiber Mapping Software

After a comprehensive search for a documentation tool that could meet their needs, the City of Seguin selected netTerrain due to its user-friendliness, adaptability, and precise mapping capabilities.

netTerrain stood out for its ability to handle the intricate details of the city's fiber optic network, from strand-level documentation to citywide map views. Additionally, it could integrate with other tools the city used, such as arcGIS.

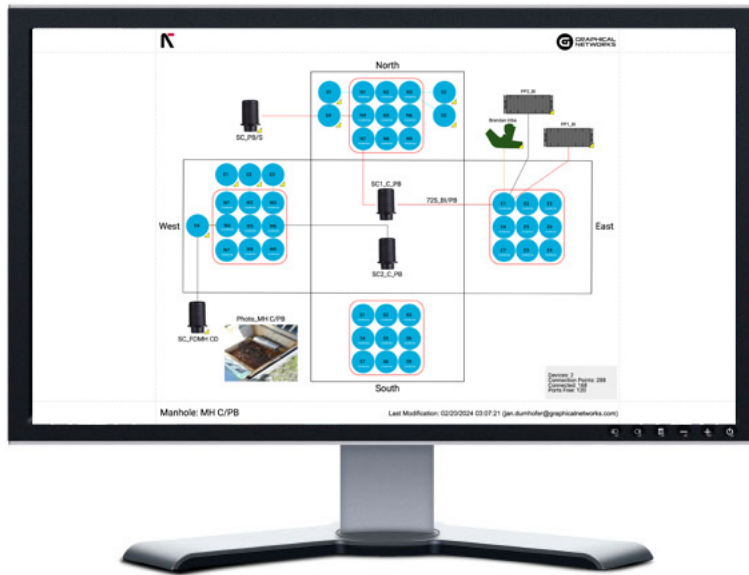
## Implementation

### Efficient Implementation & Customization

The team was able to hit the ground running with netTerrain. Starting with aerial infrastructure, the team meticulously mapped out existing pathways, integrating netTerrain into their workflow.

Despite the small team size and the breadth of the project, the transition to netTerrain was smooth, with the software's flexibility allowing for a tailored approach that fit the city's unique requirements. Getting custom devices modeled was easy – they could either have the Graphical Networks team do it as needed or use the modeling tool included with netTerrain.





## Results

### Time Savings, Efficiency, & Accurate Planning

With netTerrain, the team has streamlined documentation for both aerial and underground fiber paths, enhancing planning and collaboration for city infrastructure projects. They can now pinpoint termination locations and slack areas, eliminating guesswork and collaborate across departments as needed.

With accurate asset location data and eliminating guesswork, the team can now plan for growth, retain team knowledge in a centralized repository, and make better decisions within their time and budget constraints.

With netTerrain in place, the team is saving time, achieving efficiency, and planning future expansions with confidence.

**"We gained a complete view of our infrastructure and the location of our assets. It's more than just documentation; we now have the capability to accurately and precisely plan for projects, expansions, and new construction."**

- Justin Ramirez,  
Information Technology Manager,  
City of Seguin, Texas.



### **Learn More**

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