

Steam Leak Detection Pilot

New York City

This unique project featured the scanning of city streets containing subsurface steam pipelines for commercial building radiators. The pipelines inevitably leak some steam as they age, and while leaks tend to progressively get worse over time, they can go undetected for a long while. The client retained NEXCO to pilot a scanning of roadway area by infrared camera to attempt the detection of premature leakage.

The pilot project was a success. Using both visual and infrared imagery, irregular temperatures on the roadway surface were analyzed, and certain temperatures and/or signature patterns were indeed indicative of actual subsurface steam leaks.

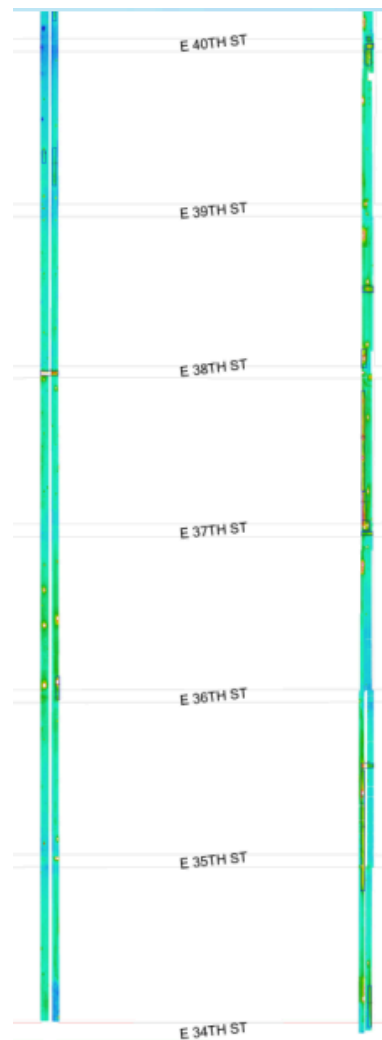
Findings Legend

Potential Detection	Steam Observed
Temperature differential which suggests unusual heating of roadway surface.	Visual confirmation could be a leak on side or beneath of ground steam can be seen in IR recording playback.

Scale



Color Legend (High Contrast View)



Automatically stitched IR image

Project Details

- Client : Utility Provider
- Reference : [withheld]
- Target Lengths: 45 city blocks, north south roads
- Used Technologies: Deck Top Scanning System(Visual + Infrared) D
- Project Period: October / 2024

Impression

NEXCO's IRT recording and processing software, IrSUITE, reduced a significant amount of manual work during this project by enabling automated IR image stitching by GPS and DMI information. The client received a full map of draft findings within a week's time and a fully revised report in two weeks' time.

The client was appreciative of the findings map because they could return to target locations and confirm utility leaks instead of visiting each and every access port in the city.