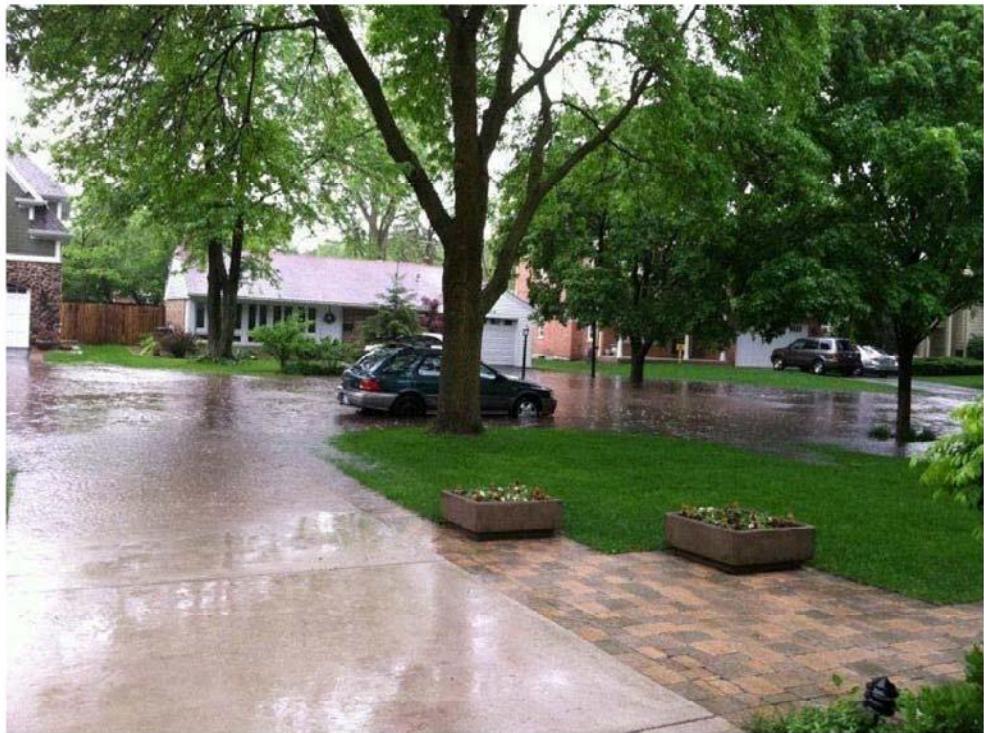


**Project 23
BLACKTHORN LANE**



1114 Blackthorn Lane looking West (May 25, 2011)



1108 and 1114 Blackthorn Lane looking Southwest (May 25, 2011)

PROJECT 23
BLACKTHORN LANE
(1100 Block)

Statement of Conditions:

The existing storm sewer drainage system is 50 to 60 years old. The system cannot adequately convey runoff from storms of moderate to high rainfall intensities and the receiving storm sewer system is undersized compared to today's standards. Blackthorn Lane and adjacent properties form a bowl-shaped area that functions like a stormwater detention basin. The drainage service area is $9 \pm$ acres with the possibility of receiving flood overflows from adjacent drainage systems. Increased flooding depths and related flooding of two structures have been reported.

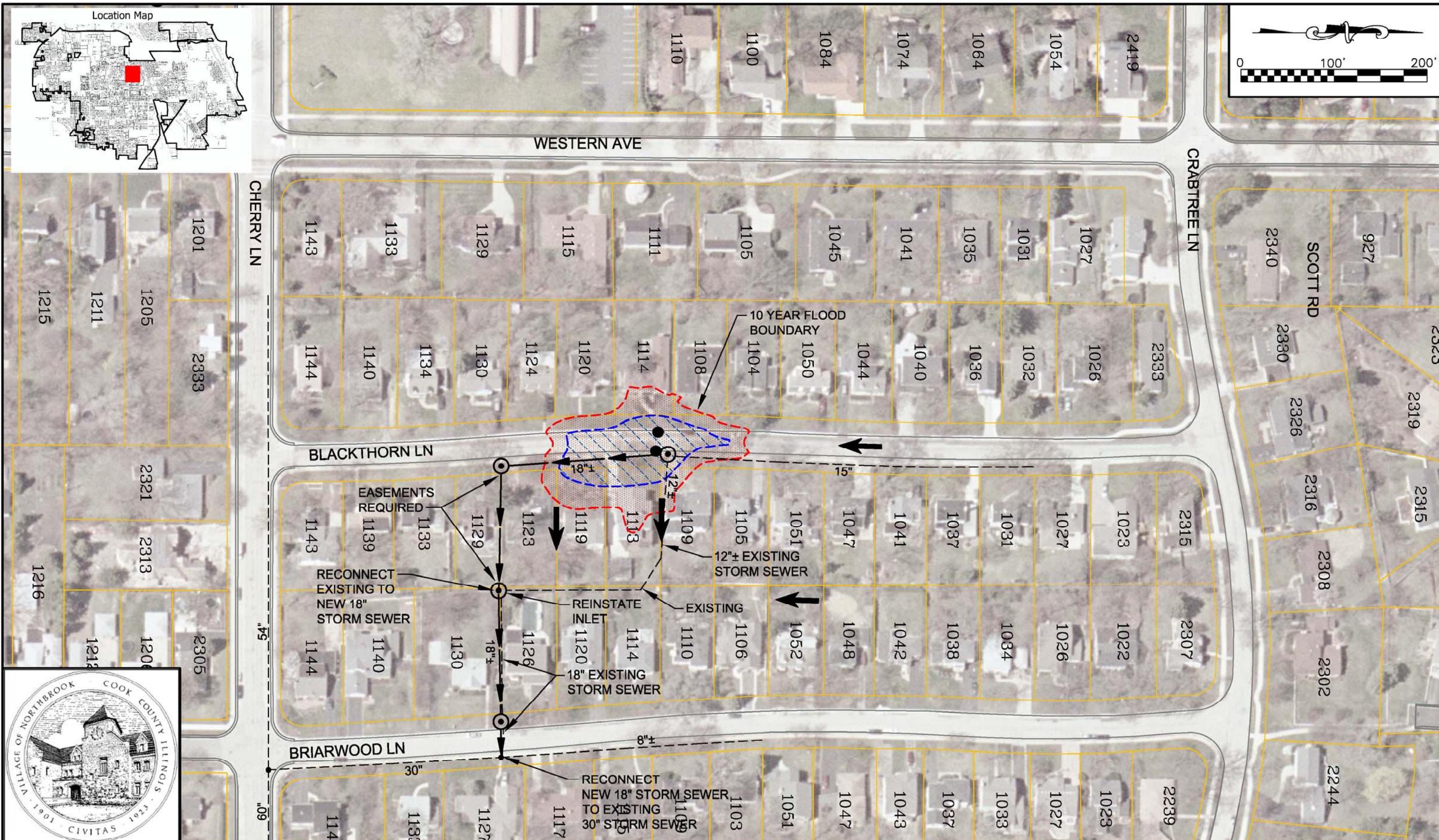
Problem Identification:

Street, front yard, back yard and structure flooding.

Recommended Plan:

- Improve street drainage collection system by increasing inlet capacity both along the street and within the low street area.
- Replace the old Blackthorn Lane corrugated metal pipe system with a new 18" diameter storm sewer.
- Construct storm water control structure with $12'' \pm$ orifice plate on Blackthorn Lane.
- Acquire drainage easements between two properties fronting on Blackthorn Lane to facilitate the construction of the new storm sewer to Briarwood Lane.
- Reconnect the rear yard drainage inlets to the new storm sewer.

Estimated Total Cost (w/o mitigation)	Construction Cost	Property Cost	Engineering Cost	B/C Ratio (with mitigation)	Optimum Protection
\$130,000	\$96,000	\$20,000	\$14,000	2.88	10-yr



BLACKTHORN LANE (1100 BLOCK)

PROJECT 23