

Project 27
LONGVALLEY DRIVE – LONGVALLEY COURT
INTERSECTION



Drift line at 1673 Longvalley Drive (July 23, 2011)



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LONGVALLEY DRIVE – LONGVALLEY COURT
(Intersection)

Statement of Conditions:

The existing drainage system is over 40 years old. The Longvalley Drive storm sewer system cannot adequately convey storms of moderate to high rainfall intensities. Street flooding on Longvalley Drive at the intersection with Longvalley Court has been reported to have worsened over time such that one home may have recently experienced flooding. The intersection is located in a low area that could pond as deep as 2' before overflowing southerly and/or easterly along Longvalley Drive. The drainage service area is 9.1± acres. Flood overflows from a 3.9± acre unincorporated Northfield Township area located to the west and from the Prestwick Lane storm sewer system could contribute to intersection flooding for the larger storm events.

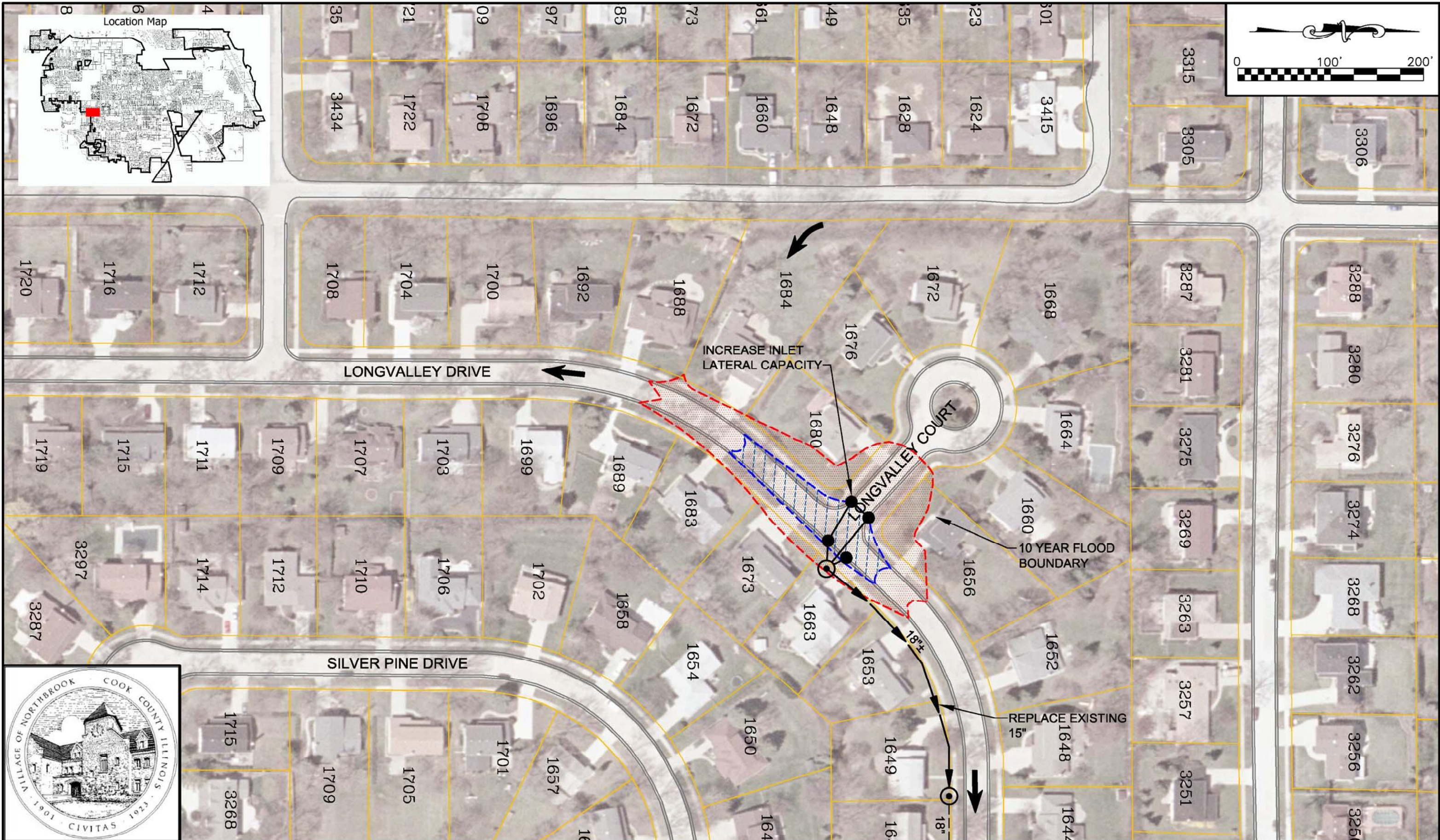
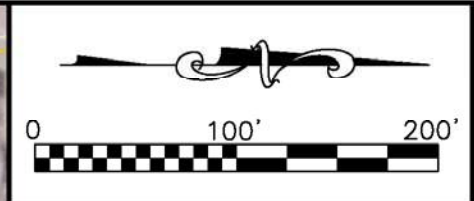
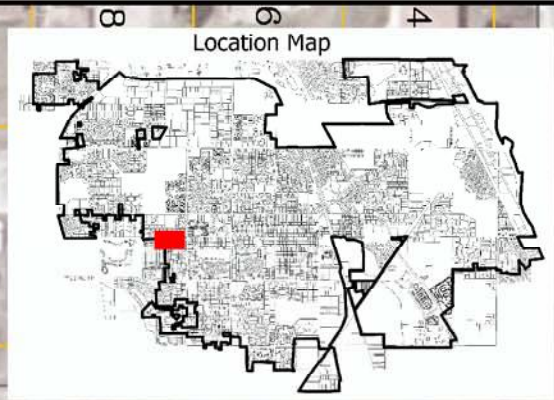
Problem Identification:

Street, front yard and structure flooding.

Recommended Plan:

- Improve intersection drainage collection system by increasing inlet capacity and related lateral storm sewer capacities.
- Replace 300' of existing 15" storm sewer with 18" storm sewer northeasterly from the intersection.
- Construct control structure with 15"± restrictor plate at beginning of the 18" storm sewer (5-year level of protection).

Estimated Total Cost (w/o mitigation)	Construction Cost	Property Cost	Engineering Cost	B/C Ratio (with mitigation)	Optimum Protection
\$95,000	\$83,000	N/A	\$12,000	1.74	10-yr



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