

Village of Northbrook

Master Stormwater Management Plan

Master Stormwater Management Plan

The Master Stormwater Management Plan identifies twenty-two (22) projects intended to help reduce flooding in the Village of Northbrook. Each project from the Master Stormwater Management Plan has been placed into the Village's Capital Improvement Plan format. A summary of the estimated costs for each project is provided below.

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	Total
Techny Drain Phase III	\$135,000	\$4,275,000							\$4,410,000
Wescott Park		\$50,000	\$550,000	\$550,000	\$3,550,000	\$3,550,000			\$8,250,000
Shermer Road Overflow Sewer		\$182,000	\$1,145,000						\$1,327,000
Techny Drain Phase IV	\$78,000		\$684,000						\$762,000
Cedar Lane (816-869)		\$14,000	\$28,000						\$42,000
Cherry Lane Underpass		\$41,000	\$205,000						\$246,000
Church Street (Near Chapel Court)			\$19,000	\$61,000					\$80,000
Curb Failure Along WFNCR			\$5,000	\$36,000					\$41,000
Dehne Subdivision								\$109,000	\$109,000
Dundee Road & Skokie Blvd						\$7,000	\$44,000		\$51,000
Keystone and Chartres Drive					\$60,000	\$40,000	\$535,000		\$635,000
Northbrook East	\$90,215	\$624,000							\$714,215
Northbrook Manor			\$446,000						\$446,000
Ridge Road and Lee Road		\$60,000							\$60,000
Shermer Road Outlet	\$13,000								\$13,000
Shermer Road Underpass		\$43,000	\$289,000						\$332,000
Sunny Acres				\$614,000					\$614,000
Sunset Lane			\$20,000	\$417,000					\$437,000
Techny Drain Basin Expansion		\$268,000							\$268,000
Weller's Subdivision			\$400,000	\$314,000					\$714,000
Western and Oak Avenues	\$83,000	\$548,000							\$631,000
Williamsburg Drive/Old Post Road		\$21,500	\$16,500	\$217,000					\$255,000
Woodlawn Road								\$255,000	\$255,000
Fiscal Year Totals	\$316,215	\$5,099,000	\$2,111,500	\$2,806,500	\$2,269,000	\$3,590,000	\$4,092,000	\$408,000	\$20,692,215

Village of Northbrook Master Stormwater Management Plan

Project: Wescott Park Underground Storage

Project Number: 1

Project Ranking: 4

Project Description: This project includes the construction of 20 acre-feet of underground storage at Wescott Park and is intended to reduce flooding impacts for the Illinois Road watershed. It is recommended by the Stormwater Management Commission and Village staff that further evaluation is needed in the form of an additional study due to the size, cost and complexity of this project as compared to the others. The intent of the additional study is not to modify the conceptual design, but to identify additional benefits, refine costs, explore additional funding opportunities and to determine if there are any additional ways to further value engineer the project. It also needs to be understood that a lot of different variations to this project were evaluated as well as many alternative projects. Following all of this analysis, this improvement was determined to be the most cost effective. It also needs to be pointed out that this project replaces the sewer extension alternative that was to connect to the Techny Drain relief sewer. Providing storage at Wescott Park was determined through the analysis associated with the New Plan to also be the most cost effective and beneficial means to reduce flooding conditions for the Sunset Fields and Northbrook Park subdivisions.

Locations Impacted by the Project: Sunset Fields and Northbrook Park Subdivisions.

Properties Impacted: 91 properties will experience a reduction in flooding.

Structures Impacted: 12 of the 91 properties will experience a reduction in structure flooding.

Additional Study Needed: Additional study is needed due to the complexity and magnitude of this project to identify additional benefits, further refine project costs, and explore additional funding mechanisms for this project.

Design: Design of the Wescott Park project is anticipated to take 1 year.

Construction: Construction of the Wescott Park Project is anticipated to take 1 year.

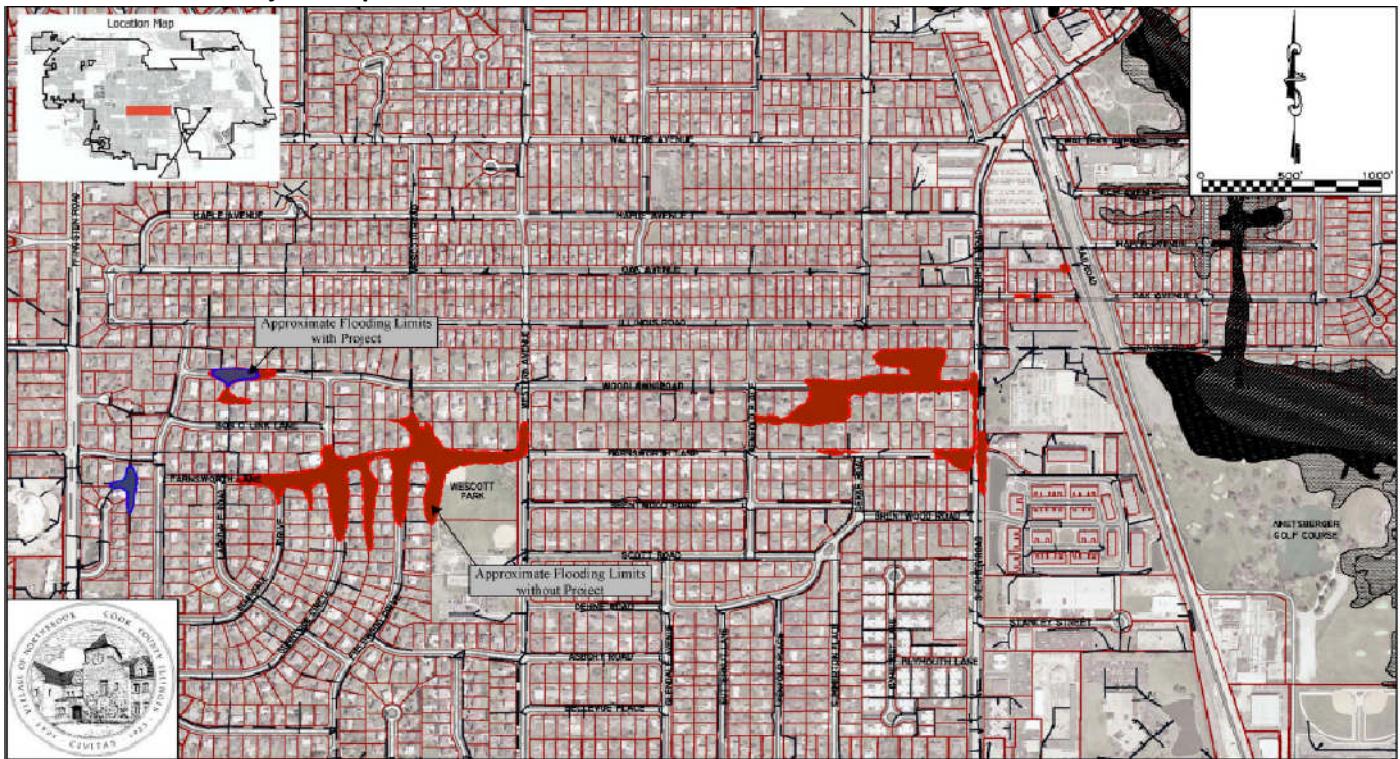
External Factors Affecting Design and Construction Timelines: Wescott Park is owned, operated, and is a highly programmed facility for the Northbrook Park District. The Village will work with the Northbrook Park District to create a double use for this facility – a park on the surface with underground stormwater detention. An intergovernmental agreement between the Village of Northbrook and the Northbrook Park District will be needed for the project.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Wescott Park Project Map:



Project Funding:

Stormwater Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition									\$0
Design (Also Includes Additional Study Needed)			\$50,000	\$550,000	\$550,000				\$1,150,000
Construction						\$3,550,000	\$3,550,000		\$7,100,000
Fiscal Year Totals	\$0	\$0	\$50,000	\$550,000	\$550,000	\$3,550,000	\$3,550,000	\$0	\$8,250,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook Master Stormwater Management Plan

Project: Shermer Road Overflow Sewer

Project Number: 2

Project Ranking: 2

Project Description: To help mitigate flooding in the Shermer Road/Woodlawn Road area, a 72-inch diameter storm sewer will be constructed to convey water to the West Fork of the North Branch of the Chicago River and replace the current overland drainage flow that extends through the opening at the Canadian Pacific Railroad and Metra rail line embankment, which is known as the “Cattlepass.” The project is intended to mitigate flooding impacts up to a 50-year storm.

Locations Impacted by the Project: Shermer Road Corridor and Northbrook manor Subdivision.

Properties Impacted: 22 properties will experience a reduction in flooding.

Structures Impacted: 17 of the 22 properties will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Shermer Road Overflow Sewer project is anticipated to take 1 year.

Construction: Construction of the Shermer Road Overflow Sewer project is anticipated to take 1 year.

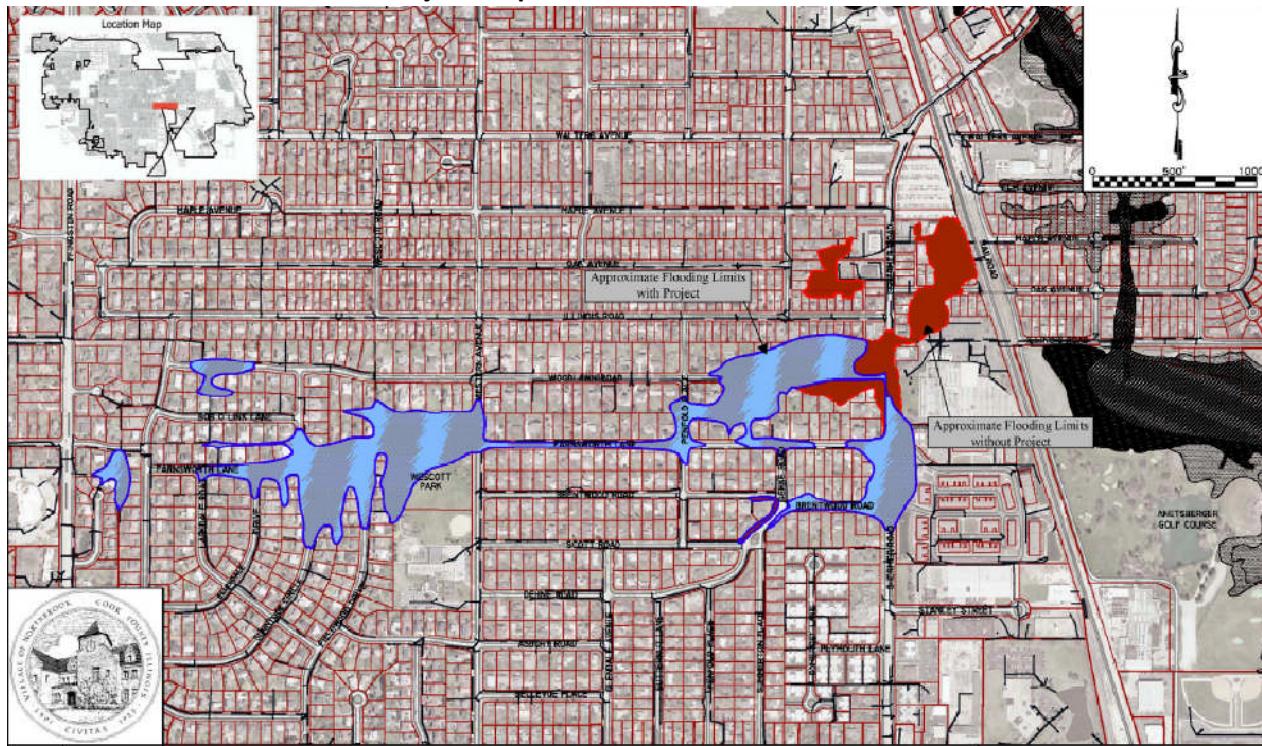
External Factors Affecting Design and Construction Timelines: The Shermer Road Overflow sewer will require license agreements from the Canadian Pacific Railroad and Metra, and an easement from the Grainger property for the construction of the proposed sewer.

Photographs of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Shermer Road Overflow Sewer Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition				\$10,000					\$10,000
Design				\$172,000					\$172,000
Construction				\$1,145,000					\$1,145,000
Fiscal Year Totals	\$0	\$0	\$182,000	\$1,145,000	\$0	\$0	\$0	\$0	\$1,327,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

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Village of Northbrook Master Stormwater Management Plan

Project: Techny Drain Phase IV

Project Number: 3

Project Ranking: 1

Project Description: This project involves the construction of a 48-inch diameter storm sewer on Pfingsten Road that will divert drainage that currently enters the Techny Drain-South Fork and direct it to the new storm relief sewer on Techny Road. The relief sewer will be constructed as part of Phase III for the comprehensive Techny Drain project. The Phase IV project is currently under final engineering design and will be included as a bid alternate to the Phase III relief sewer and Techny Road (Shermer Rd. to Second St.) Jurisdictional Transfer project. Bids are anticipated to be opened by the end of this year, and if favorable the Board can decide to proceed.

Locations Impacted by the Project: Willow Creek Subdivision (Canterbury Drive, Greenview Road, Elm Ridge Road, and Wood Drive).

Properties Impacted: 82 properties will experience a reduction in flooding.

Structures Impacted: 10 of the 82 properties will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Currently underway.

Construction: This project will be a bid alternate to the Phase III project, and if bids are favorable and approved, construction is anticipated to begin in FY 2013/14 and take 6 months.

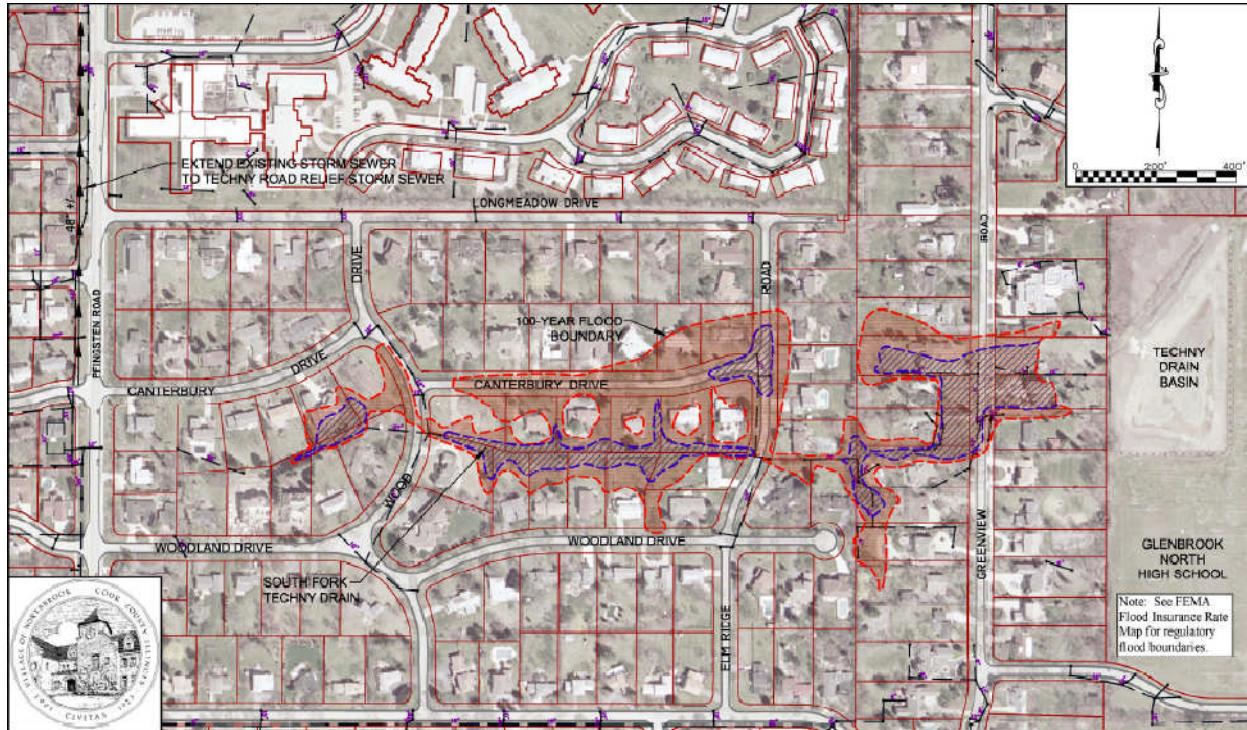
External Factors Affecting Design and Construction Timelines: Construction of the Techny Drain Phase IV project is contingent upon the completion of Phase III of the Techny Drain project. Phase III of the project is currently under design and will construction will be bid out in late 2011, early 2012.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Techny Drain Phase IV Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition									\$0
Design	\$78,000								\$78,000
Construction		\$684,000							\$684,000
Fiscal Year Totals	\$78,000	\$0	\$684,000	\$0	\$0	\$0	\$0	\$0	\$762,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook Master Stormwater Management Plan

Project: Cedar Lane (816 to 869)

Project Number: 4

Project Ranking: 16

Project Description: This project will reduce flooding impacts on the roadway and the front yards of the adjacent residential properties in front of 816 – 869 Cedar Lane. The existing side yard relief sewer will be extended along with an additional drainage structure and lateral pipe improvements.

Locations Impacted by the Project: 800 Block of Cedar Lane

Properties Impacted: 3 properties will experience a reduction in flooding.

Structures Impacted: Of the 3 properties impacted, none will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Cedar Lane (816-869) project is anticipated to take 1 year.

Construction: Construction of the Cedar Lane (816-869) project is anticipated to take 6 months.

External Factors Affecting Design and Construction Timelines: Construction of the Cedar Lane (816 – 869) project is contingent upon an easement being obtained from one of two properties so that the sewer may be extended to the West Fork of the North Branch of the Chicago River.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Cedar Lane (816-869) Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition			\$10,000						\$10,000
Design/Final Engineering			\$4,000						\$4,000
Construction			\$28,000						\$28,000
Fiscal Year Totals	\$0	\$14,000	\$28,000	\$0	\$0	\$0	\$0	\$0	\$42,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
		3							

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook Master Stormwater Management Plan

Project: Cherry Lane Underpass

Project Number: 5

Project Ranking: 8

Project Description: The Cherry Lane underpass, a very important thoroughfare for the Village, floods during high intensity rainfall events. The flooding is caused by a combination of the pumps not being able to discharge the water fast enough away and the West Fork overtopping into the underpass. The proposed project includes additional inlet capacity and a new conveyance storm sewer along Meadow Road.

Locations Impacted by the Project: Cherry Lane Underpass

Properties Impacted: 10 properties will experience a reduction in flooding.

Structures Impacted: 1 of the 10 properties impacted will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Cherry Lane Underpass project is anticipated to take 1 year.

Construction: Construction of the Cherry Lane Underpass project is anticipated to take 6 months.

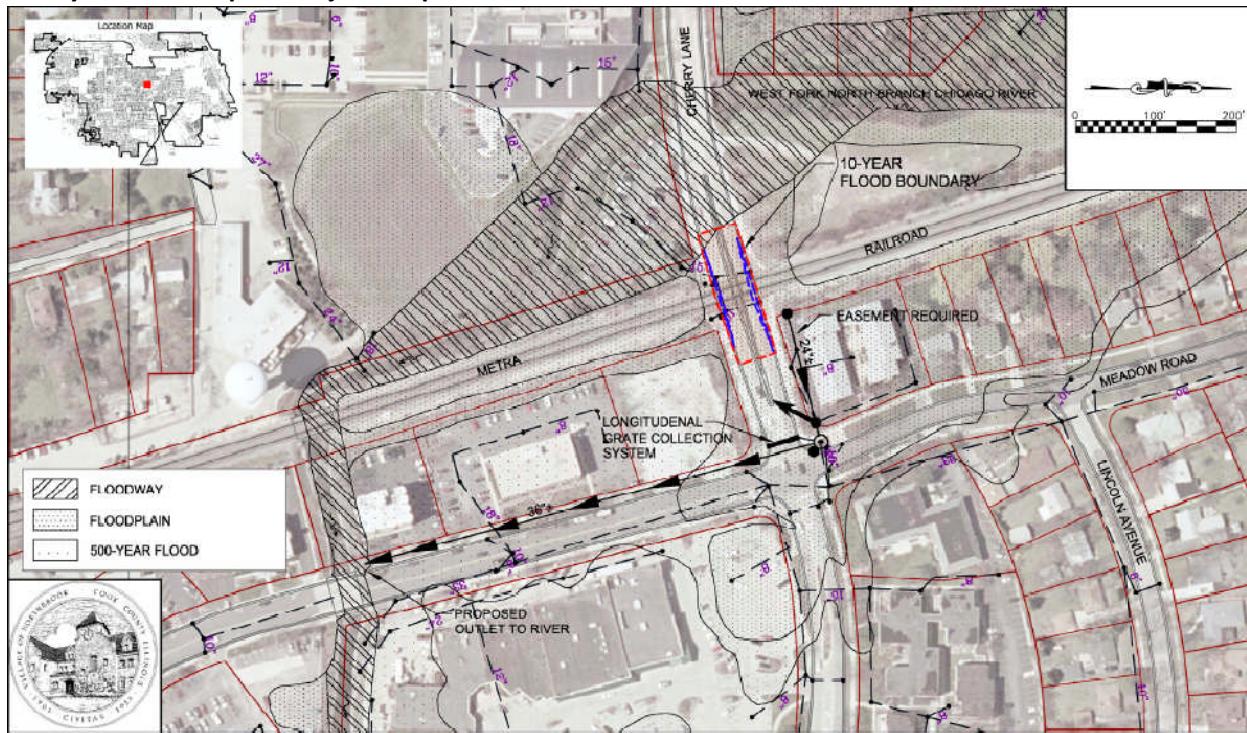
External Factors Affecting Design and Construction Timelines: To construct this project, the Village must obtain an easement from the condominiums at the northwest corner of Cherry Lane and Meadow Road.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Cherry Lane Underpass Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition			\$10,000						\$10,000
Design/Final Engineering			\$31,000						\$31,000
Construction				\$205,000					\$205,000
Fiscal Year Totals	\$0	\$0	\$41,000	\$205,000	\$0	\$0	\$0	\$0	\$246,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

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Village of Northbrook

Master Stormwater Management Plan

Project: Church Street (near Chapel Court)

Project Number: 6

Project Ranking: 15

Project Description: To reduce roadway pavement flooding impacts on Church Street and lawn areas on the adjacent properties near the Chapel Court intersection, a storm relief sewer and drainage structure improvements are proposed.

Locations Impacted by the Project: 1200 and 1300 blocks of Church Street

Properties Impacted: 5 properties will experience a reduction in flooding.

Structures Impacted: Of the 5 properties impacted, 0 structures will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Church Street project is anticipated to take 1 year.

Construction: Construction of the Church Street project is anticipated to take 3 months.

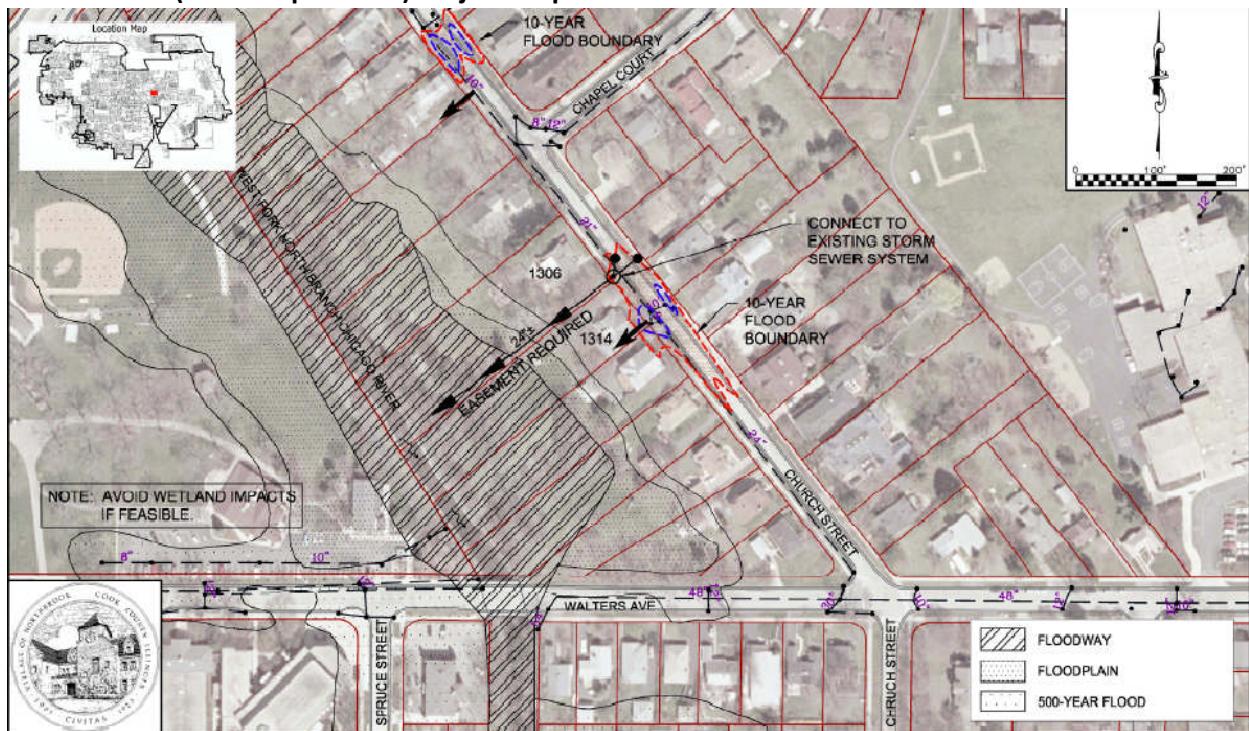
External Factors Affecting Design and Construction Timelines: The Church Street project will require an easement for the extension of a storm sewer to the West Fork of the North Branch of the Chicago River.

Photos of Flooding in the Project Area:

At this time, staff does not have photos documenting the flooding conditions in this location.

Village of Northbrook Master Stormwater Management Plan

Church Street (near Chapel Court) Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition				\$10,000					\$10,000
Design/Final Engineering				\$9,000					\$9,000
Construction					\$61,000				\$61,000
Fiscal Year Totals	\$0	\$0	\$0	\$19,000	\$61,000	\$0	\$0	\$0	\$80,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

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Village of Northbrook Master Stormwater Management Plan

Project: Curb Failure along West Fork of the North Branch of the Chicago River

Project Number: 7

Project Ranking: 20

Project Description: To reduce roadway pavement flooding impacts on Church Street and lawn areas on the adjacent properties near the Chapel Court intersection, a storm relief sewer and drainage structure improvements are proposed. 5 properties will benefit as a result of the project.

Locations Impacted by the Project: 1941 Cherry Lane

Properties Impacted: 0 properties will experience a reduction in flooding.

Structures Impacted: 0 structures will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design for the Curb Failure along West Fork of the North Branch of the Chicago River project is anticipated to take 6 months.

Construction: Construction of the Curb Failure along West Fork of the North Branch of the Chicago River project is anticipated to take 3 months.

External Factors Affecting Design and Construction Timelines: To complete this work, the Village must first obtain a permit from the Army Corps of Engineers.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Curb Failure along West Fork of the North Branch of the Chicago River Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition									\$0
Design/Final Engineering				\$5,000					\$5,000
Construction					\$36,000				\$36,000
Fiscal Year Totals	\$0	\$0	\$0	\$5,000	\$36,000	\$0	\$0	\$0	\$41,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

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Village of Northbrook Master Stormwater Management Plan

Project: Dehne Subdivision (Dehne and Brentwood Roads)

Project Number: 8

Project Ranking: 18

Project Description: To address street and yard flooding on Brentwood Road, this project includes regrading the existing ditch system, reinstating culverts and providing additional drainage structures between Shermer and Dehne Roads. Eight properties will be benefitted by the project. Similar to the Woodlawn Road project, this project should not be completed until the Westcott Park Storage, Shermer Road Overflow Sewer, Shermer Road Outlet and Northbrook Manor Subdivision projects are all in place.

Locations Impacted by the Project: 2000 block of Brentwood Road and 2100 block of Dehne Road

Properties Impacted: 8 properties will experience a reduction in flooding.

Structures Impacted: Of those 8 properties impacted, 0 structures will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Dehne Subdivision project is anticipated to take 6 months.

Construction: Construction of the Dehne Subdivision project is anticipated to take 6 months.

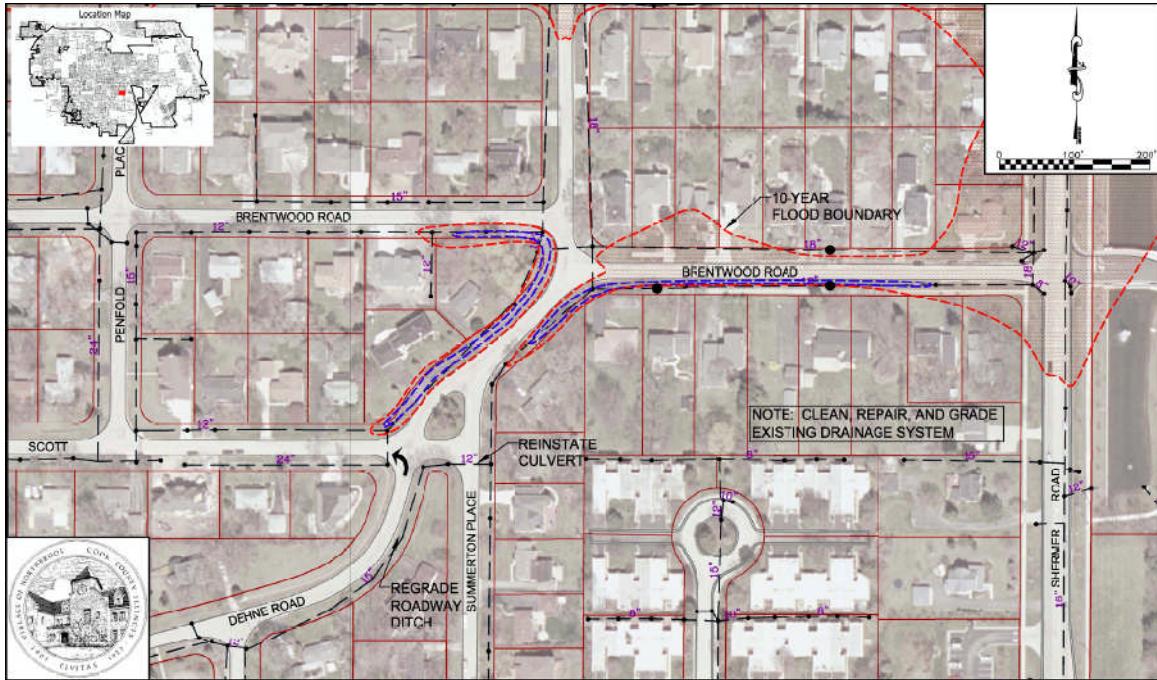
External Factors Affecting Design and Construction Timelines: The Dehne Subdivision project is contingent upon the construction of the Northbrook Manor (Project #12), Shermer Road Outlet (Project #14), Shermer Road Overflow (Project #2), and Wescott Park (Project #1) Projects being constructed.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Dehne Subdivision Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition									\$0
Design/Final Engineering								\$14,000	\$14,000
Construction								\$95,000	\$95,000
Fiscal Year Totals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$109,000	\$109,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

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Village of Northbrook

Master Stormwater Management Plan

Project: Dundee Road/Skokie Boulevard

Project Number: 9

Project Ranking: 14

Project Description: This project involves coordinating with the Illinois Department of Transportation (IDOT), who maintains the drainage system that serves this intersection, to schedule the necessary maintenance work. This will include cleaning and re-establishing positive drainage in the receiving ditch system that serves the intersection and re-instating the overflow route. Additional work will include increasing the inlet grate capacities to have water enter the system sooner. Roadway pavement flooding at the intersection will be reduced and 4 properties will benefit as a result of the project.

Locations Impacted by the Project: Intersection of Skokie Boulevard and Dundee Road

Properties Impacted: 8 properties will experience a reduction in flooding.

Structures Impacted: Of those 8 properties impacted, 0 will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Dundee Road/Skokie Boulevard project is anticipated to take 6 months.

Construction: Construction of the Dundee Road/Skokie Boulevard project is anticipated to take 3 months.

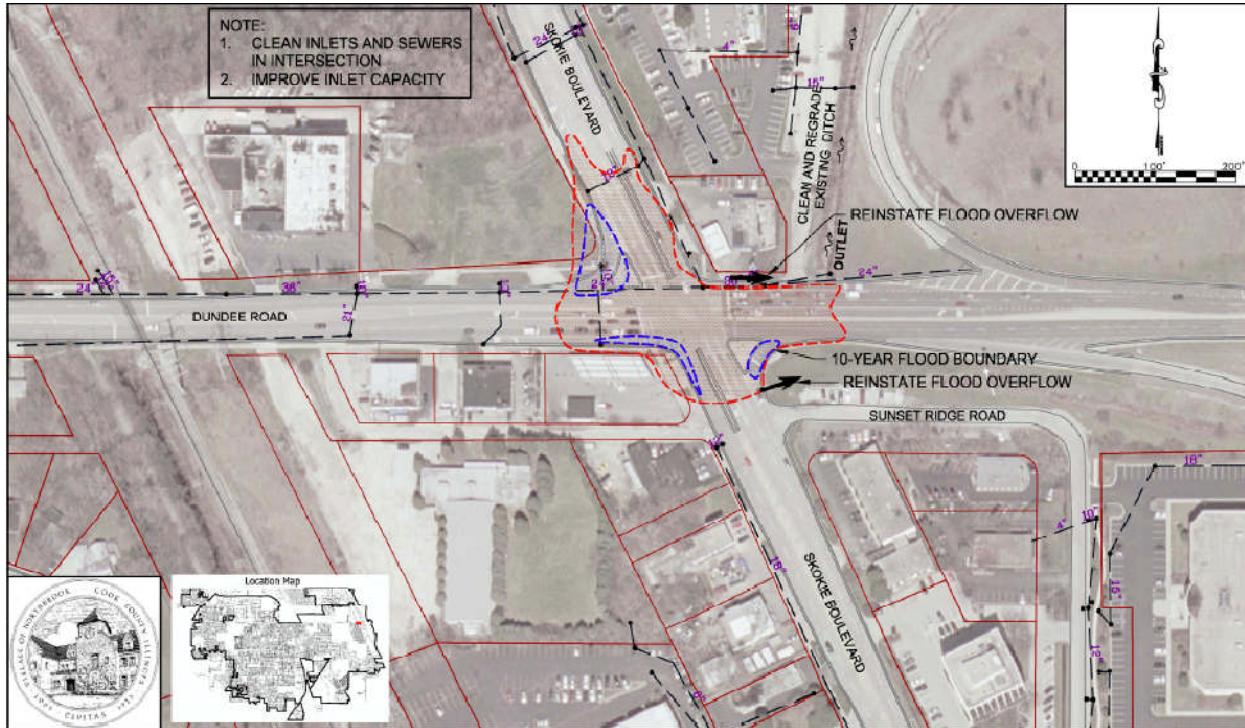
External Factors Affecting Design and Construction Timelines: The Illinois Department of Transportation owns and maintains drainage system that serves the intersection of Dundee Road and Skokie Boulevard and the Village will work with this agency to complete the necessary work to improve drainage at this intersection.

Photos of Flooding in the Project Area:

At this time, staff does not have photos documenting the flooding conditions in this location.

Village of Northbrook Master Stormwater Management Plan

Dundee Road/Skokie Boulevard Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition									\$0
Design/Final Engineering							\$7,000	\$7,000	
Construction								\$44,000	\$44,000
Fiscal Year Totals	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000	\$44,000	\$51,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

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Village of Northbrook Master Stormwater Management Plan

Project: Keystone Road/Chartres Drive

Project Number: 10

Project Ranking: 5

Project Description: This project includes the construction of an approximate 24-inch storm relief sewer extending from the Keystone Road/Chartres Drive intersection to West Park, where an approximate 6 acre-foot expansion of the existing detention basin is required for mitigation.

Locations Impacted by the Project: 3000 Block of Keystone, 500 Block of Chartres Drive, and 3000 Block of Rennes Court

Properties Impacted: 17 properties will experience a reduction in flooding.

Structures Impacted: 5 of the 17 properties impacted will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Keystone Road/Chartres Drive project is anticipated to take 18 months.

Construction: Construction of the Keystone Road/Chartres Drive project is anticipated to take 1 year.

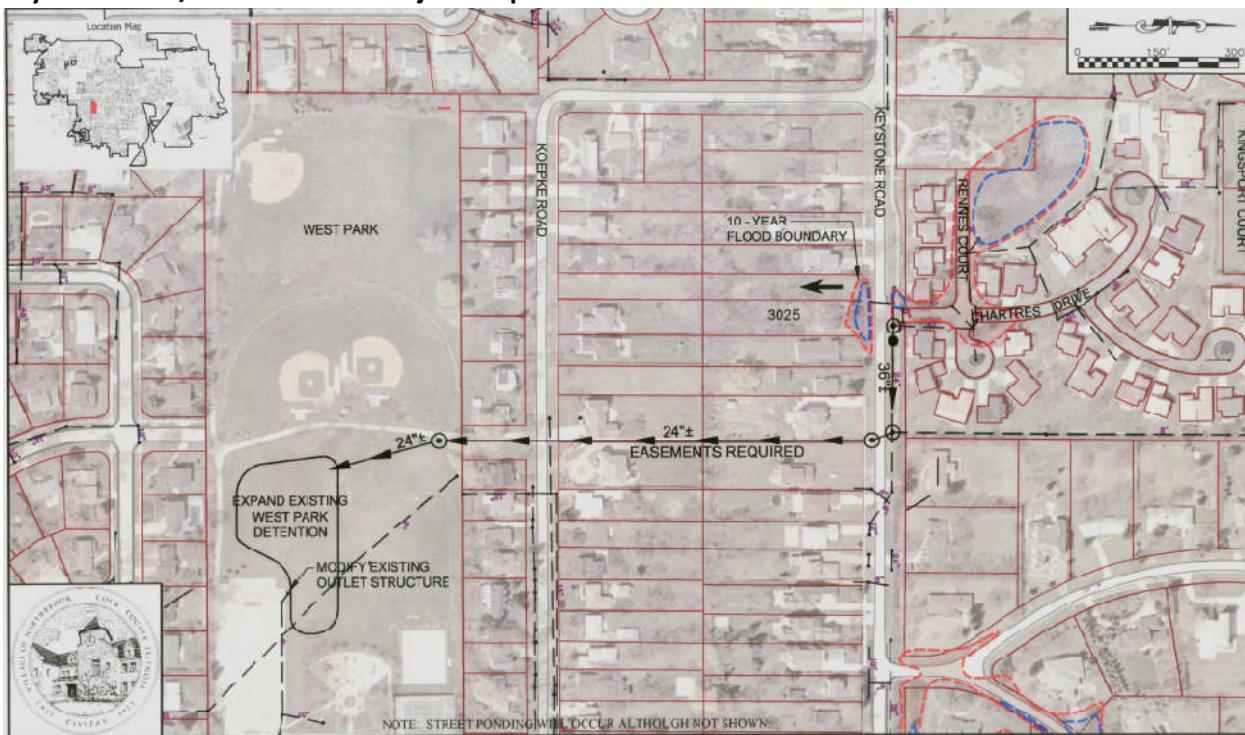
External Factors Affecting Design and Construction Timelines: This project will require the Village to obtain easements from up to four properties. The project necessitates that the Village obtain a license agreement with the Northbrook Park District for expansion of detention at West Park.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Keystone Road/Chartres Drive Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition					\$20,000				\$20,000
Design/Final Engineering				\$40,000	\$40,000				\$80,000
Construction						\$535,000			\$535,000
Fiscal Year Totals	\$0	\$0	\$0	\$0	\$60,000	\$40,000	\$535,000	\$0	\$635,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

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Village of Northbrook Master Stormwater Management Plan

Project: Northbrook East (Midway Road/Whitfield Road South Intersection)

Project Number: 11

Project Ranking: 3

Project Description: This project involves the construction of a 3.5 acre-foot detention facility on Village owned property located between Dell and Sunset Ridge Roads in the southern section of the Northbrook East subdivision. Final engineering has been authorized by Resolution 11-R-58 and is currently underway.

Locations Impacted by the Project: 1100 Blocks of Midway, Whitfield, and Dell Roads.

Properties Impacted: 29 properties will experience a reduction in flooding.

Structures Impacted: 11 of the 29 properties impacted will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Northbrook East project is anticipated to take 9 months.

Construction: Construction of the Northbrook East project is anticipated to take 9 months.

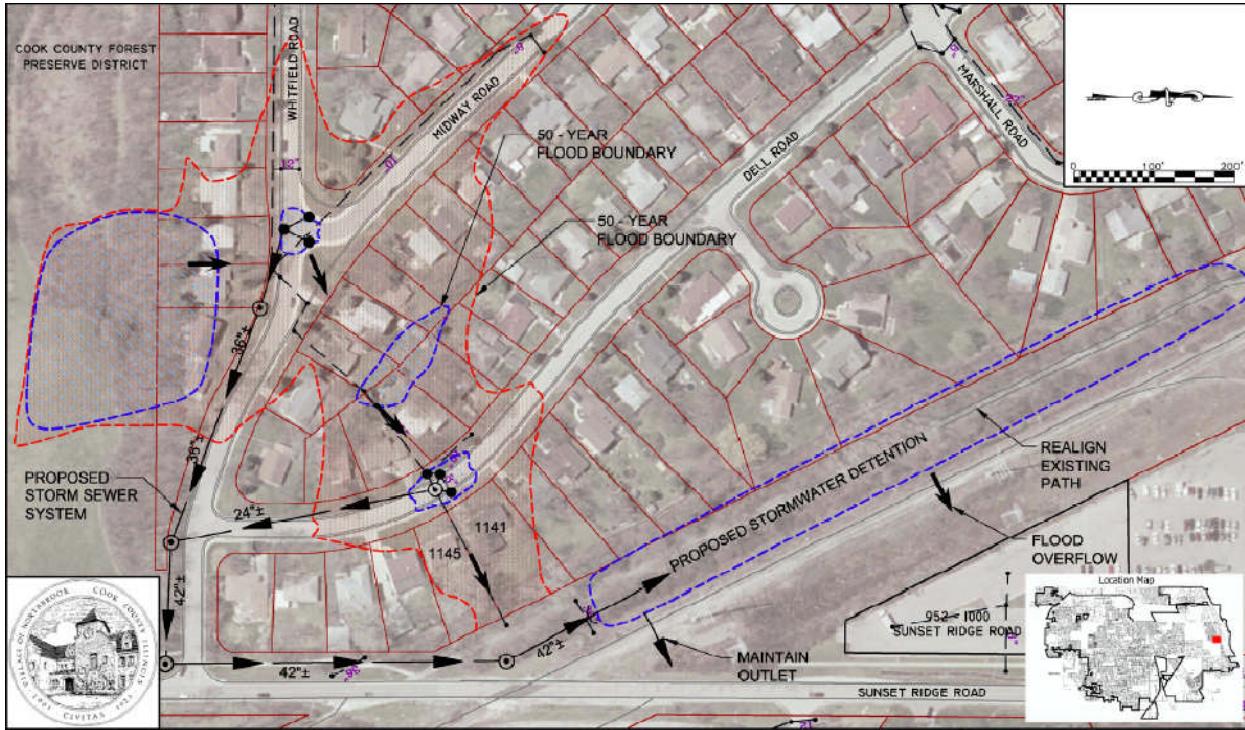
External Factors Affecting Design and Construction Timelines: There are no external factors affecting design and construction of this project.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Northbrook East Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition									\$0
Design/Final Engineering	\$90,215								\$90,215
Construction		\$624,000							\$624,000
Fiscal Year Totals	\$90,215	\$624,000	\$0	\$0	\$0	\$0	\$0	\$0	\$714,215

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook Master Stormwater Management Plan

Project: Northbrook Manor

Project Number: 12

Project Ranking: 12

Project Description: This project includes the construction of a 4-foot diameter relief sewer along Spruce Street between Illinois Road and Maple Avenue. The new sewer will allow for the removal of the flap gates on the existing 3-foot and 5-foot diameter storm trunk lines on Illinois Road. The flap gates do cause conveyance concerns during storm events where the water levels in the West Fork are low.

Locations Impacted by the Project: 1800 Blocks of Oak Avenue, Illinois Road, Maple Avenue, 1900 Block of Oak, and 1487 to 1499 Shermer Road.

Properties Impacted: 60 properties will experience a reduction in flooding.

Structures Impacted: Of the 60 properties impacted, 0 will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Northbrook Manor project is anticipated to take 6 months.

Construction: Construction of the Northbrook Manor project is anticipated to take 6 months.

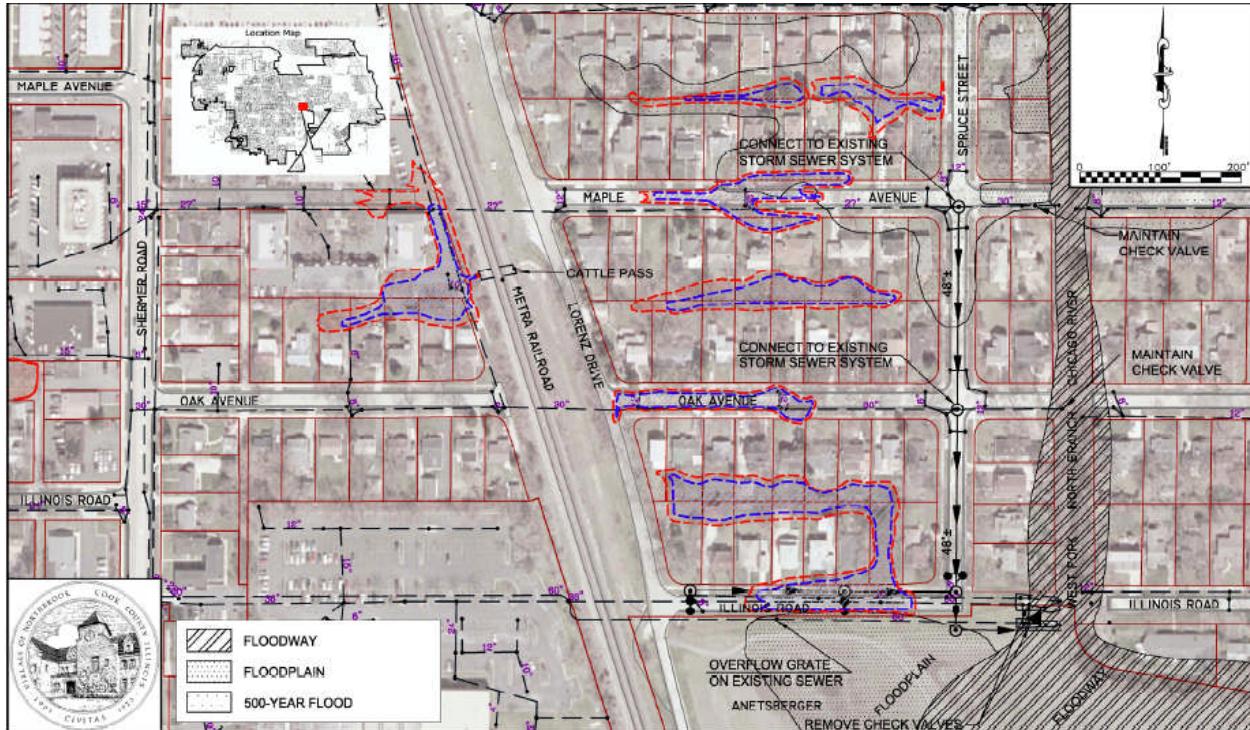
External Factors Affecting Design and Construction Timelines: There are no external factors affecting design and construction of this project.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Northbrook Manor Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition									\$0
Design/Final Engineering				\$58,000					\$58,000
Construction					\$388,000				\$388,000
Fiscal Year Totals	\$0	\$0	\$0	\$446,000	\$0	\$0	\$0	\$0	\$446,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook Master Stormwater Management Plan

Project: Ridge Road/Lee Road

Project Number: 13

Project Ranking: 17

Project Description: The intersection of Ridge and Lee Roads floods during heavy rain fall events. The roadway flooding limits extend on Ridge Road all the way to the Daryl Road intersection and also include the front yards of several properties. The proposed project includes a larger storm sewer with inlet improvements to connect to the now larger existing receiving storm sewer on Lee Road that was constructed as part of the Jurisdictional Transfer project with Cook County a few years ago. Three properties will benefit as a result of the project.

Locations Impacted by the Project: 1216 to 1250 Ridge Road, 1132 to 1140 Lee Road, 1180 Daryl Road

Properties Impacted: 3 properties will experience a reduction in flooding.

Structures Impacted: Of the 3 properties impacted, 0 will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Ridge Road/Lee Road project is anticipated to take 6 months.

Construction: Construction of the Ridge Road/Lee Road project is anticipated to take 3 months.

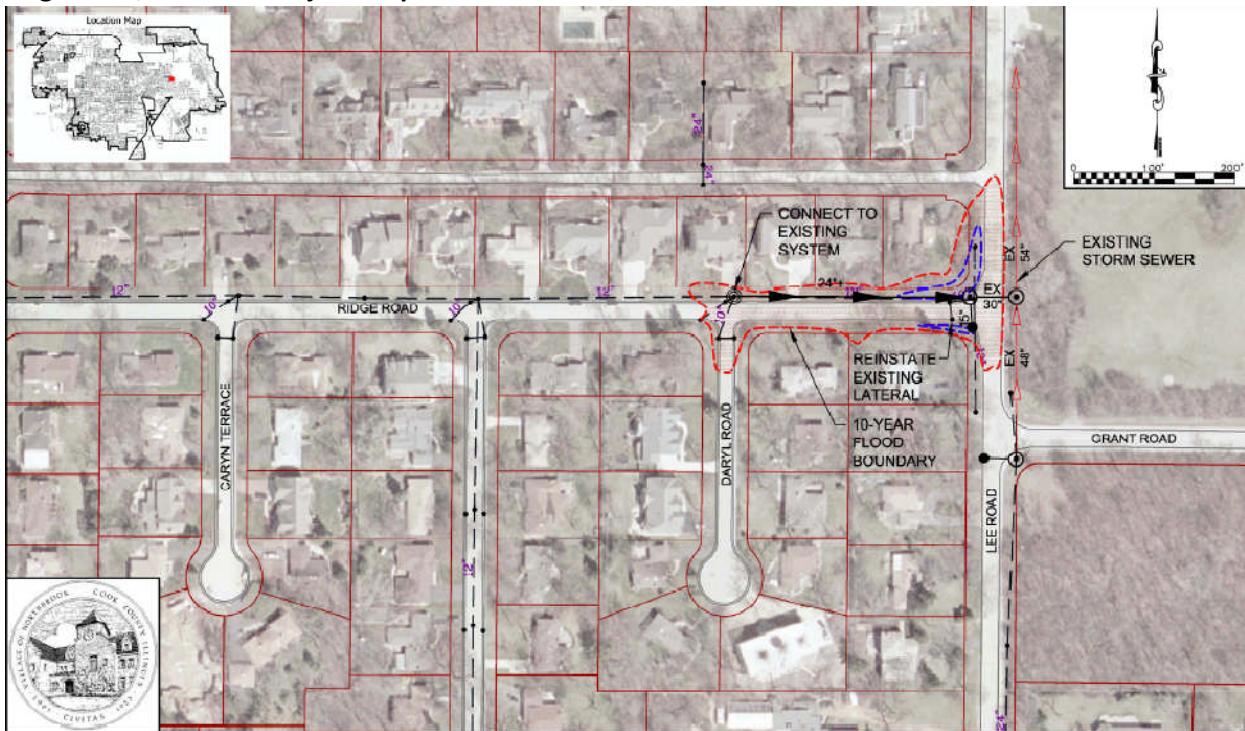
External Factors Affecting Design and Construction Timelines: There are no external factors affecting design and construction of this project.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Ridge Road/Lee Road Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition									\$0
Design/Final Engineering		\$8,000							\$8,000
Construction		\$52,000							\$52,000
Fiscal Year Totals	\$0	\$60,000	\$0	\$0	\$0	\$0	\$0	\$0	\$60,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook Master Stormwater Management Plan

Project: Shermer Road Outlet

Project Number: 14

Project Ranking: 7

Project Description: This project includes the removal of a flap-gate valve (i.e. backflow prevention device) on a segment of the Shermer Road storm sewer that was installed as part of the roadway reconstruction and widening project that was completed in the 1990's. It has been determined that the valve is causing back pressures and conveyance concerns. An overflow (surcharge) grate on the existing 60-inch diameter storm sewer on Illinois Road will also be upgraded. This work will be completed by the Public Works Department's sewer crew in FY2011-2012.

Locations Impacted by the Project: Areas along Shermer Road, west side, between Illinois and Farnsworth Roads and the Northbrook Manor Subdivision.

Properties Impacted: 42 properties will experience a reduction in flooding.

Structures Impacted: Of the 42 properties impacted, 0 will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: No design is needed for the Shermer Road Outlet project.

Construction: Construction of the Shermer Road Outlet project is anticipated to take 3 months.

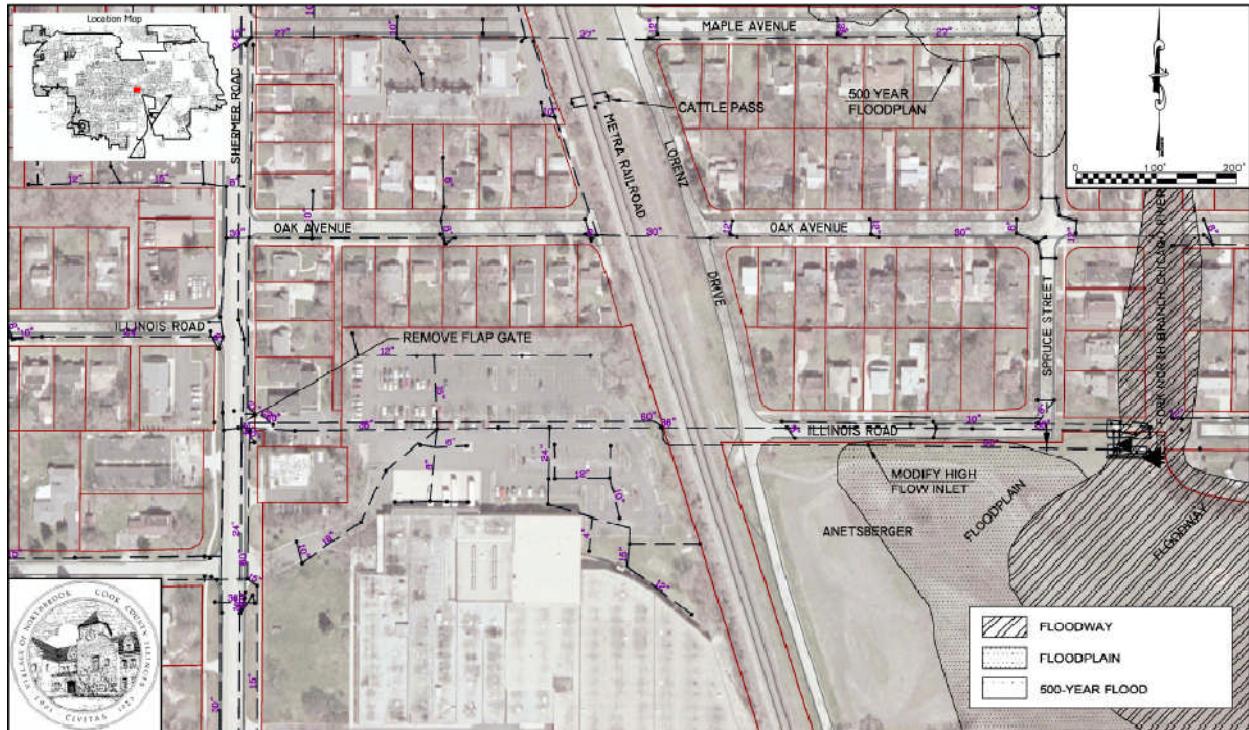
External Factors Affecting Design and Construction Timelines: There are no external factors affecting design and construction of this project.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Shermer Road Outlet Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2012-19 Total
Property and Easement Acquisition									\$0
Design/Final Engineering	\$2,000								\$2,000
Construction	\$11,000								\$11,000
Fiscal Year Totals	\$13,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2012-19 Total

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook Master Stormwater Management Plan

Project: Shermer Road Underpass

Project Number: 15

Project Ranking: 22

Project Description: This project involves coordinating with the Illinois Department of Transportation (IDOT), who maintains the roadway and drainage system that serves this location, to construct the necessary storm sewer extension and drainage structure improvements. This will include a new 3-foot diameter storm sewer that will extend from the underpass to the Willow Road storm sewer system. When the underpass is flooded, direct access to the commercial and industrial properties on Shermer and Holste Roads is impacted. The only alternative access to these properties is from the south through the Village of Glenview.

Locations Impacted by the Project: 2700 to 3000 Blocks of Shermer Road, 1800 and 1900 Blocks of Holste and Old Willow

Properties Impacted: 1 property will experience a reduction in flooding.

Structures Impacted: No properties will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Shermer Road Underpass project is expected to take 1 year.

Construction: Construction of the Shermer Road Underpass project is anticipated to take 6 months.

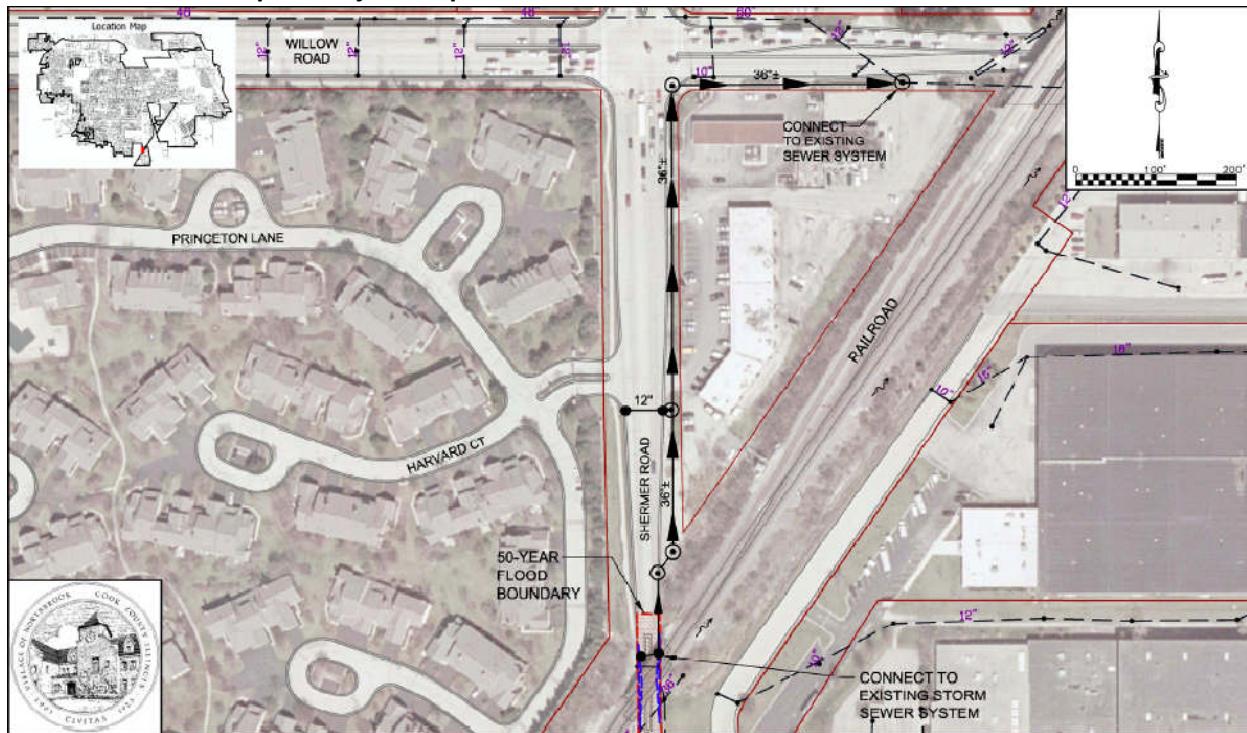
External Factors Affecting Design and Construction Timelines: The Illinois Department of Transportation (IDOT) owns and maintains the section of Shermer Road, south of Willow Road, and the drainage system serving this area. The Village will work with IDOT will work with this agency to complete the necessary storm sewer work. Additionally, Northbrook will have to work with the Village of Glenview to complete the work to complete its permitting process as the storm sewer is extended to the Willow Road sewer.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Shermer Road Underpass Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition									\$0
Design/Final Engineering		\$43,000							\$43,000
Construction			\$289,000						\$289,000
Fiscal Year Totals	\$0	\$43,000	\$289,000	\$0	\$0	\$0	\$0	\$0	\$332,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook

Master Stormwater Management Plan

Project: Sunny Acres (Pamella Lane, Constance Lane)

Project Number: 16

Project Ranking: 6

Project Description: This project involves the construction of storm sewer improvements and an approximate one acre-foot detention basin for mitigation to improve flooding conditions for residential properties on Pamella and Constance Lanes. In addition, it will be attempted to obtain an easement from one or two properties in order to construct a storm sewer for the low flow discharge from the Rosewood Care Facility site, which is currently flowing overland and causing a nuisance drainage problem.

Locations Impacted by the Project: 4000 and 4100 blocks of Pamella and Phyllis Lanes, 0 block of Constance Lane Lane.

Properties Impacted: 14 properties will experience a reduction in flooding.

Structures Impacted: 3 of the 14 properties impacted will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Sunny Acres project is expected to take 6 months.

Construction: Construction of the Sunny Acres project is anticipated to take 6 months.

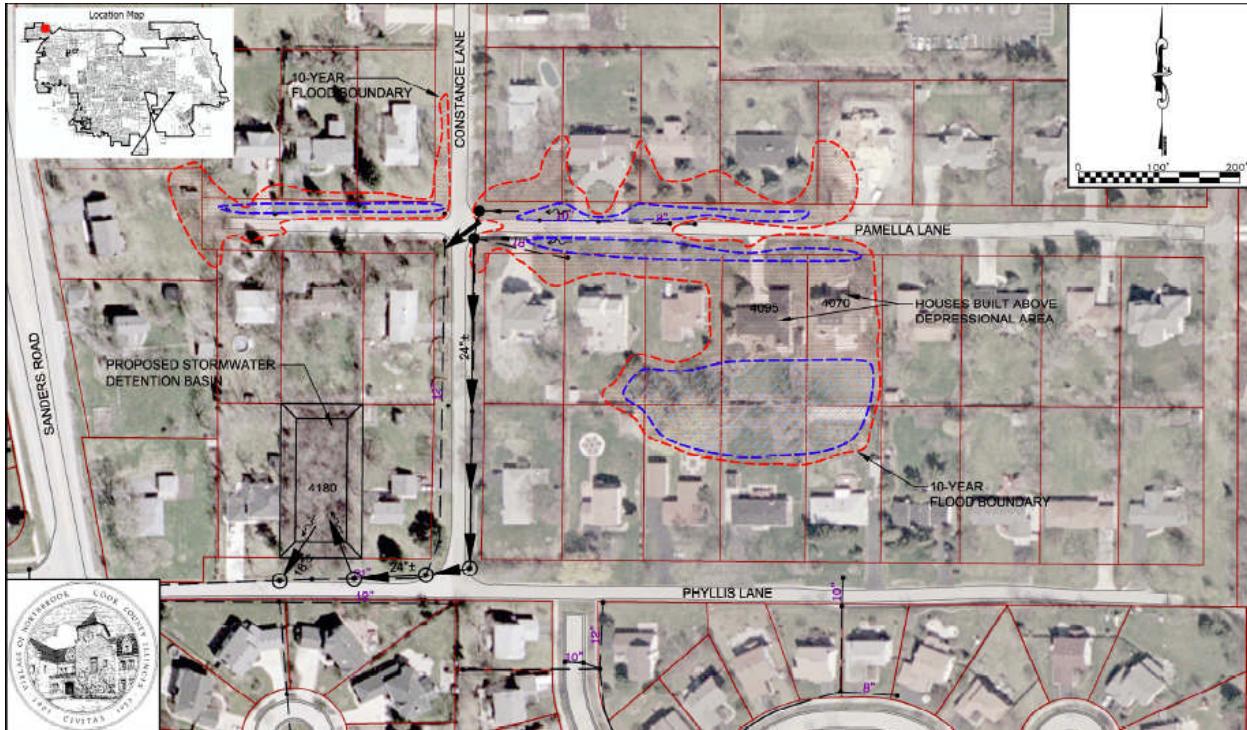
External Factors Affecting Design and Construction Timelines: The Village will must acquire property to construct the planned detention basin for this project. The Village will also seek easements from 1 or 2 properties to construct a storm sewer connecting Rosewood Care Facility to the planned detention basin.

Photos of Flooding in the Project Area:

At this time, staff does not have photos documenting the flooding conditions in this location.

Village of Northbrook Master Stormwater Management Plan

Sunny Acres Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition					\$400,000				\$400,000
Design/Final Engineering					\$28,000				\$28,000
Construction					\$186,000				\$186,000
Fiscal Year Totals	\$0	\$0	\$0	\$0	\$614,000	\$0	\$0	\$0	\$614,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook

Master Stormwater Management Plan

Project: Sunset Lane

Project Number: 17

Project Ranking: 19

Project Description: This project includes the construction of a 3-foot diameter storm sewer that will extend between Sunset Lane to the existing detention basin on Commercial Avenue, which will be expanded by 2.5 acre-feet to mitigate the increased flow from the new sewer. The new sewer will reduce flooding conditions on the roadway and front yards on Sunset Lane.

Locations Impacted by the Project: 3900 and 4000 Block of Sunset Lane

Properties Impacted: 13 properties will experience a reduction in flooding.

Structures Impacted: Of the 13 properties impacted, 0 will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Sunset Lane project is expected to take 6 months.

Construction: Construction of the Sunset Lane project is anticipated to take 3 months.

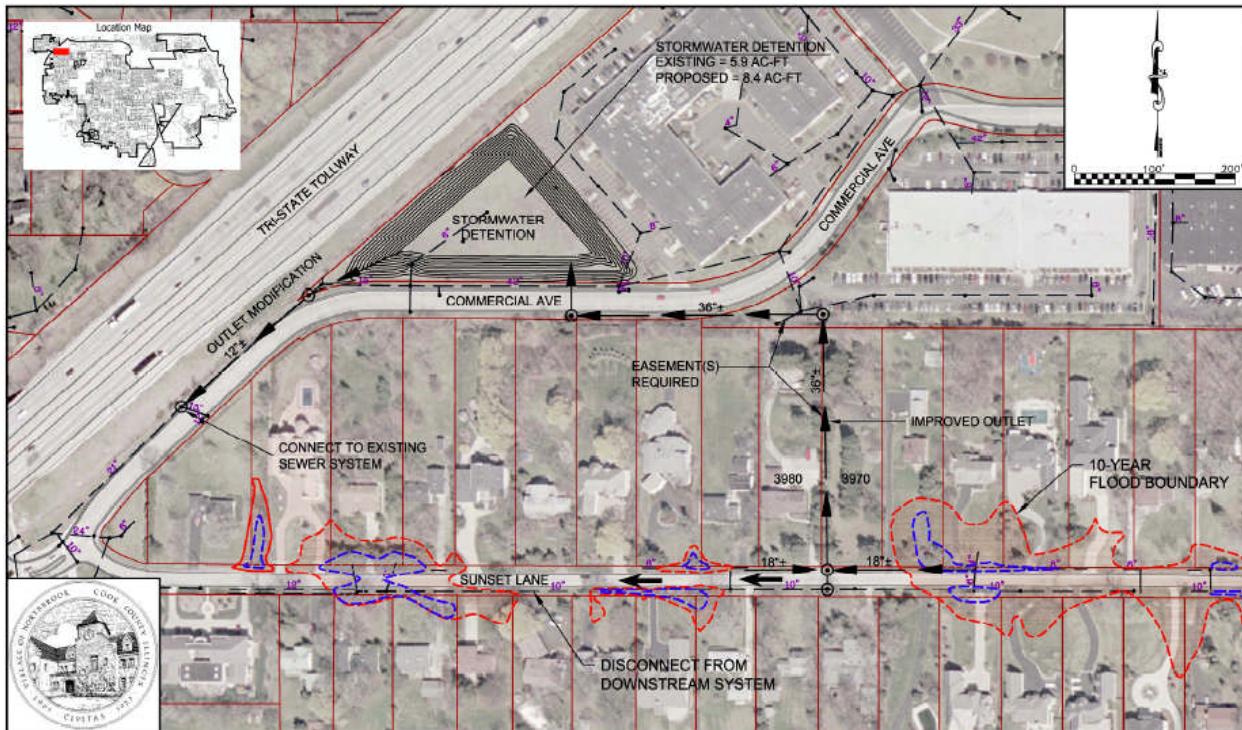
External Factors Affecting Design and Construction Timelines: Easements are needed from two to three properties in order for the Sunset Lane project to be completed.

Photos of Flooding in the Project Area:

At this time, staff does not have photos documenting the flooding conditions in this location.

Village of Northbrook Master Stormwater Management Plan

Sunset Lane Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition				\$20,000					\$20,000
Design/Final Engineering					\$54,000				\$54,000
Construction					\$363,000				\$363,000
Fiscal Year Totals	\$0	\$0	\$0	\$20,000	\$417,000	\$0	\$0	\$0	\$437,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook

Master Stormwater Management Plan

Project: Techny Drain Basin Expansion

Project Number: 18

Project Ranking: 10

Project Description: This project involves expanding the existing Techny Drain basin located behind Glenbrook North High School to provide an additional 2.5 acre-feet of storage.

Locations Impacted by the Project: This project will supply additional storage for the Techny Drain watershed.

Properties Impacted: 60 properties will experience a reduction in flooding.

Structures Impacted: Of the 60 properties impacted, 0 will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Techny Drain Basin Expansion project is expected to take 6 months.

Construction: Construction of the Techny Drain Basin Expansion project is anticipated to take 6 months.

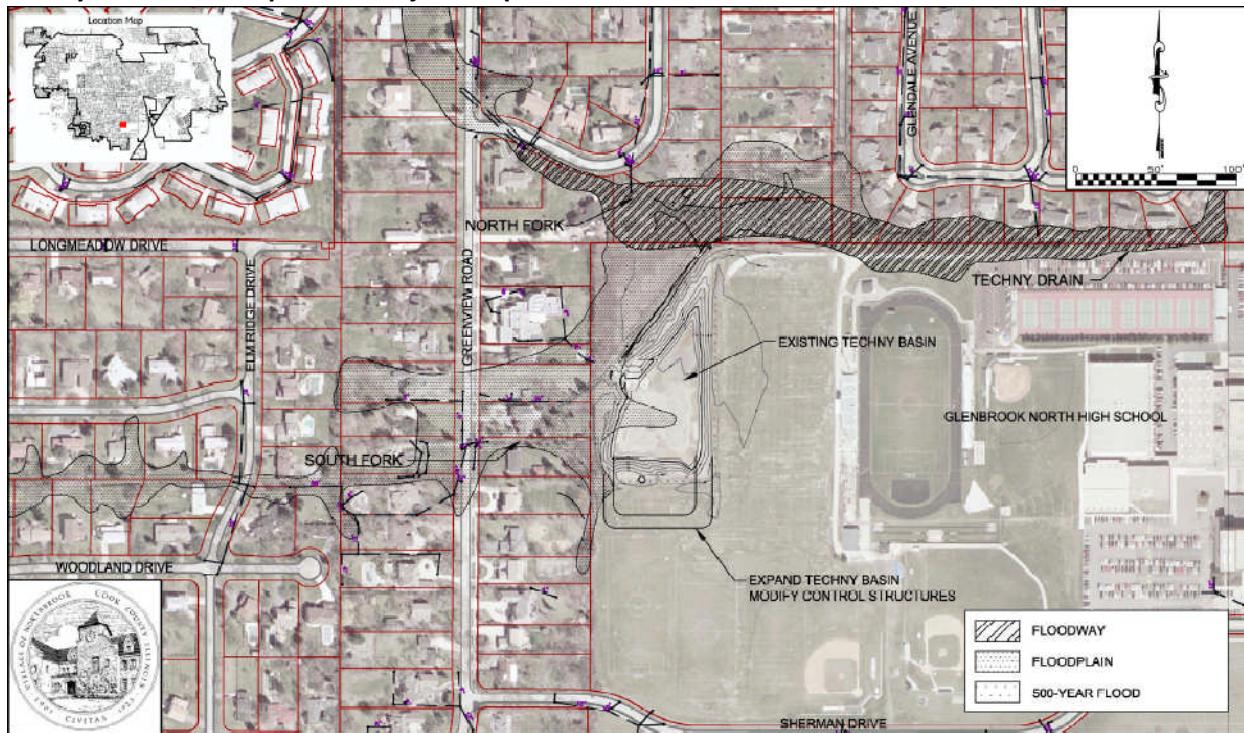
External Factors Affecting Design and Construction Timelines: Easements and coordination with the Glenbrook High School are necessary for the Techny Drain Basin Expansion project to be completed.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Techny Drain Basin Expansion Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 12-19 Total
Property and Easement Acquisition									\$0
Design/Final Engineering			\$35,000						\$35,000
Construction			\$233,000						\$233,000
Fiscal Year Totals	\$0	\$0	\$268,000	\$0	\$0	\$0	\$0	\$0	\$268,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 12-19 Total

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook Master Stormwater Management Plan

Project: Weller's Subdivision (Weller, Hillcrest, and Christina Lanes)

Project Number: 18

Project Ranking: 21

Project Description: This project will address street and yard flooding on Weller Lane that is being caused by a very poorly draining storm sewer outlet. It is proposed to construct a new conveyance storm sewer with inlet improvements along with a 1.8 acre-foot detention facility for mitigation.

Locations Impacted by the Project: 2800 and 2900 blocks of Weller Lane, 1500 block of Christina Lane, and 2800 block of Keystone Road.

Properties Impacted: 7 properties will experience a reduction in flooding.

Structures Impacted: Of those 7 properties impacted, 0 will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Weller's Subdivision project is expected to take 12 months.

Construction: Construction of the Weller's Subdivision project is anticipated to take 6 months.

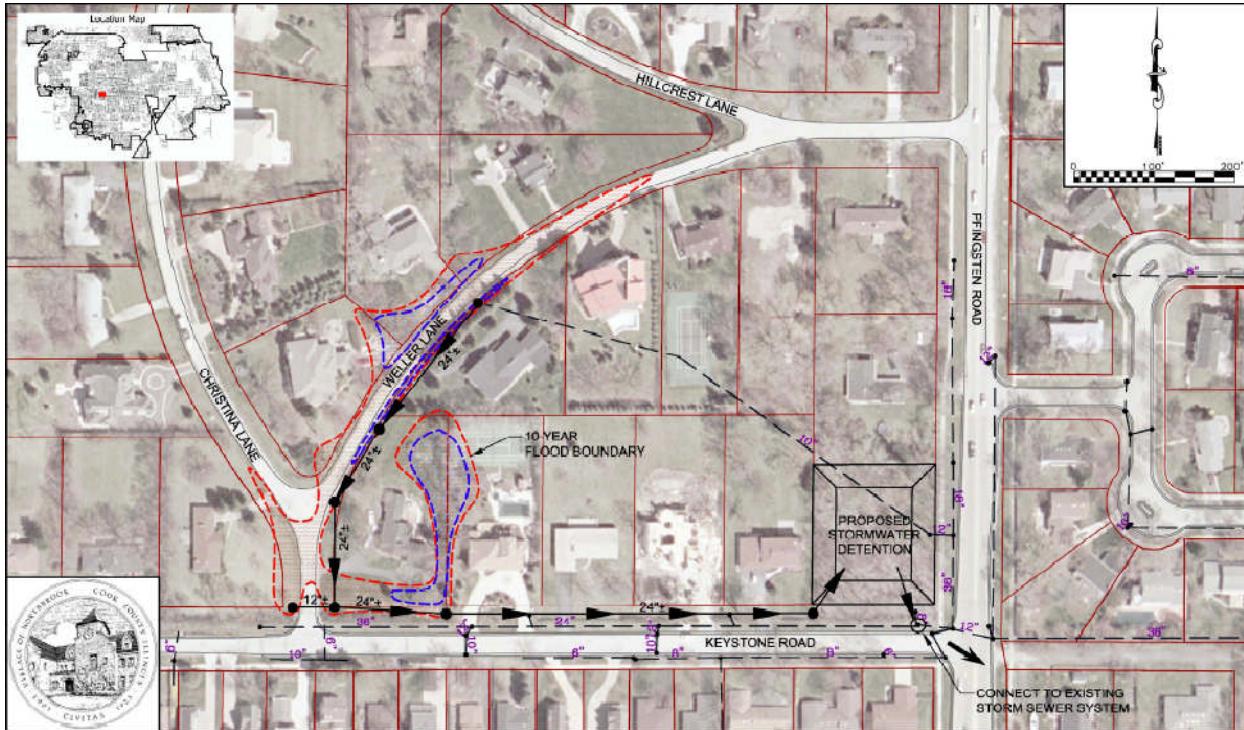
External Factors Affecting Design and Construction Timelines: The Village must acquire one property for the construction of the detention basin as part of this project.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Weller's Subdivision Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition				\$400,000					\$400,000
Design/Final Engineering					\$41,000				\$41,000
Construction					\$273,000				\$273,000
Fiscal Year Totals	\$0	\$0	\$0	\$400,000	\$314,000	\$0	\$0	\$0	\$714,000

Planned Financing

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook Master Stormwater Management Plan

Project: Western Avenue/Oak Avenue (Wescott Road to Shermer Road)

Project Number: 20

Project Ranking: 9

Project Description: This project includes the construction of long segments of 4-foot diameter storm sewer pipe with inlet improvements in strategic locations (roadway sags) along Oak Avenue between Royal Drive and Cedar Lane. These extremely long segments of pipe will provide additional storage of surface runoff during high intensity storms.

Locations Impacted by the Project: 2100, 2200, 2400 and 2500 blocks of Maple Avenue, 2100, 2200, 2300, 2400, 2500, and 2600 Blocks of Oak Avenue, 1400 block of Wescott Road; and 1400 block of Cedar Lane.

Properties Impacted: 106 properties will experience a reduction in flooding.

Structures Impacted: Of the 106 properties impacted, 0 structures will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Western Avenue/Oak Avenue project is expected to take 6 months.

Construction: Construction of the Western Avenue/Oak Avenue project is anticipated to take 12 months.

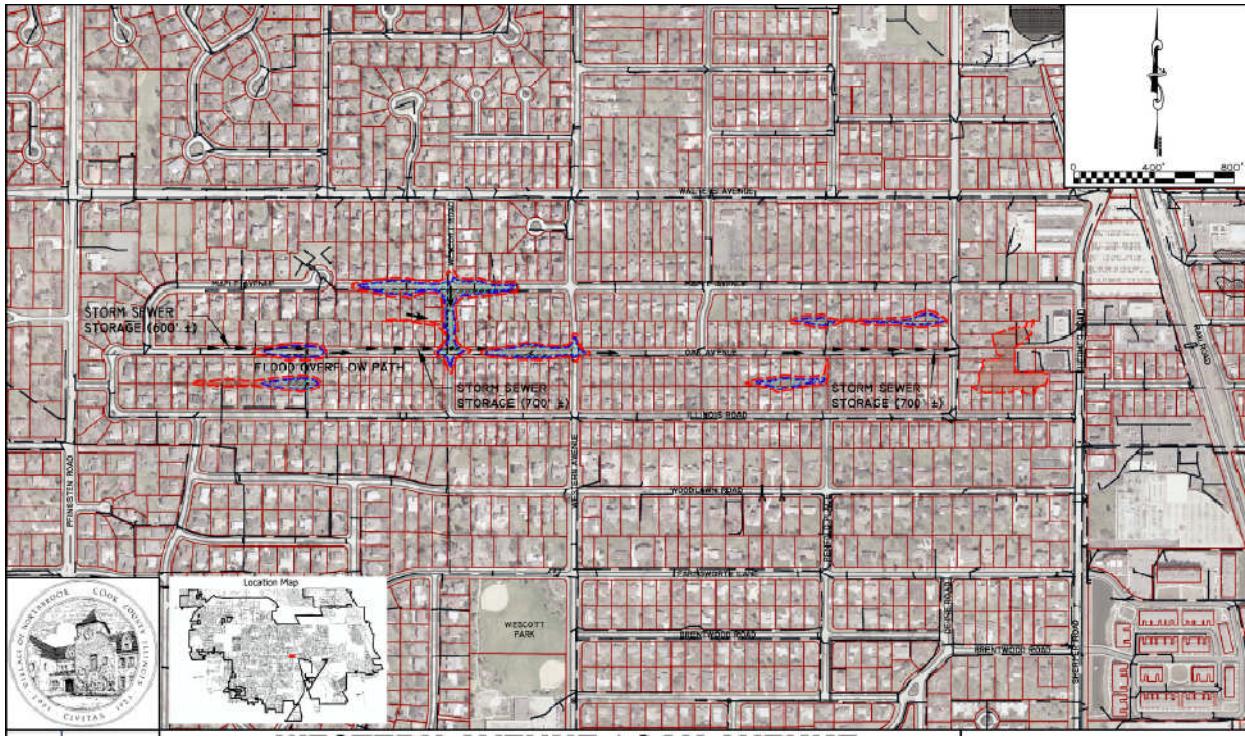
External Factors Affecting Design and Construction Timelines: There are no external factors impacting the implementation of the Western Avenue/Oak Avenue Project.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Western Avenue/Oak Avenue Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition									\$0
Design/Final Engineering	\$83,000								\$83,000
Construction		\$548,000							\$548,000
Fiscal Year Totals	\$0	\$83,000	\$548,000	\$0	\$0	\$0	\$0	\$0	\$631,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook Master Stormwater Management Plan

Project: Williamsburg Drive/Old Post Road

Project Number: 21

Project Ranking: 11

Project Description: This project involves the construction of a 2-foot and 3-foot diameter storm sewer line extending from the Williamsburg Drive/Old Post Road intersection to the adjacent Revere Drive retention pond, which will also be expanded by 1 acre-foot. Currently, this intersection experiences flooding of the roadway and parkway.

Locations Impacted by the Project: 1000 block of Williamsburg Drive and 200 block of Old Post Road

Properties Impacted: 18 properties will experience a reduction in flooding.

Structures Impacted: Of the 18 properties impacted, 2 will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Williamsburg Drive/Old Post Road project is expected to take 24 months.

Construction: Construction of the Western Avenue/Oak Avenue project is anticipated to take 6 months.

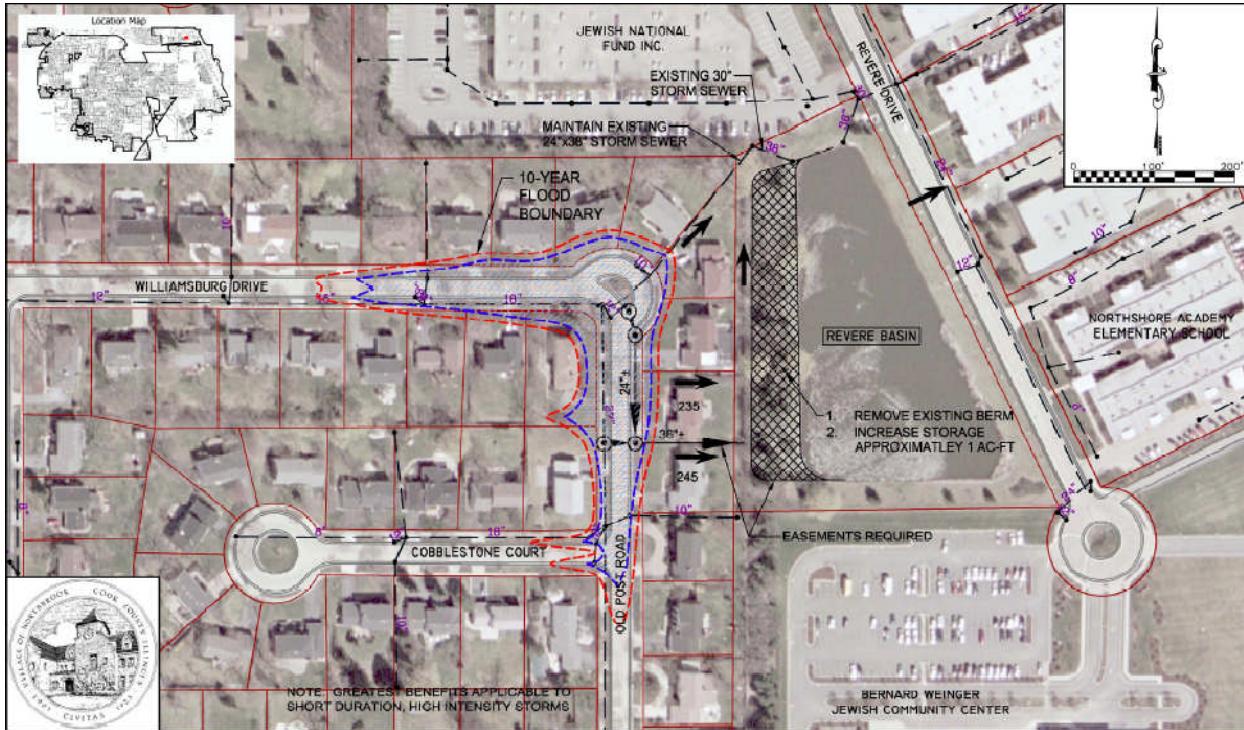
External Factors Affecting Design and Construction Timelines: The Village must acquire two easements, and either an additional easement or license agreement with the Revere Drive Business Association for the construction of a storm sewer and expansion of a retention pond for the Williamsburg Drive/Old Post Road project.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Williamsburg Drive/Old Post Road Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition			\$5,000						\$5,000
Design/Final Engineering			\$16,500	\$16,500					\$33,000
Construction					\$217,000				\$217,000
Fiscal Year Totals	\$0	\$0	\$21,500	\$16,500	\$217,000	\$0	\$0	\$0	\$255,000

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.

Village of Northbrook Master Stormwater Management Plan

Project: Woodlawn Road

Project Number: 22

Project Ranking: 13

Project Description: This project involves improving the existing roadway drainage system by adding inlet structures, regrading the ditch system to re-establish positive drainage by replacing undersized and deteriorated driveway culverts on Woodlawn Road between Shermer Road and Penfold Place.

Locations Impacted by the Project: 2000 and 2100 blocks of Woodlawn Road, 2100 block of Farnsworth Lane, and 1600 block of Penfold Place

Properties Impacted: 15 properties will experience a reduction in flooding.

Structures Impacted: Of the 15 properties impacted, 0 will experience a reduction in structure flooding.

Additional Study Needed: Additional study of this project is not needed.

Design: Design of the Woodlawn Road project is expected to take 6 months.

Construction: Construction of the Woodlawn Road project is anticipated to take 6 months.

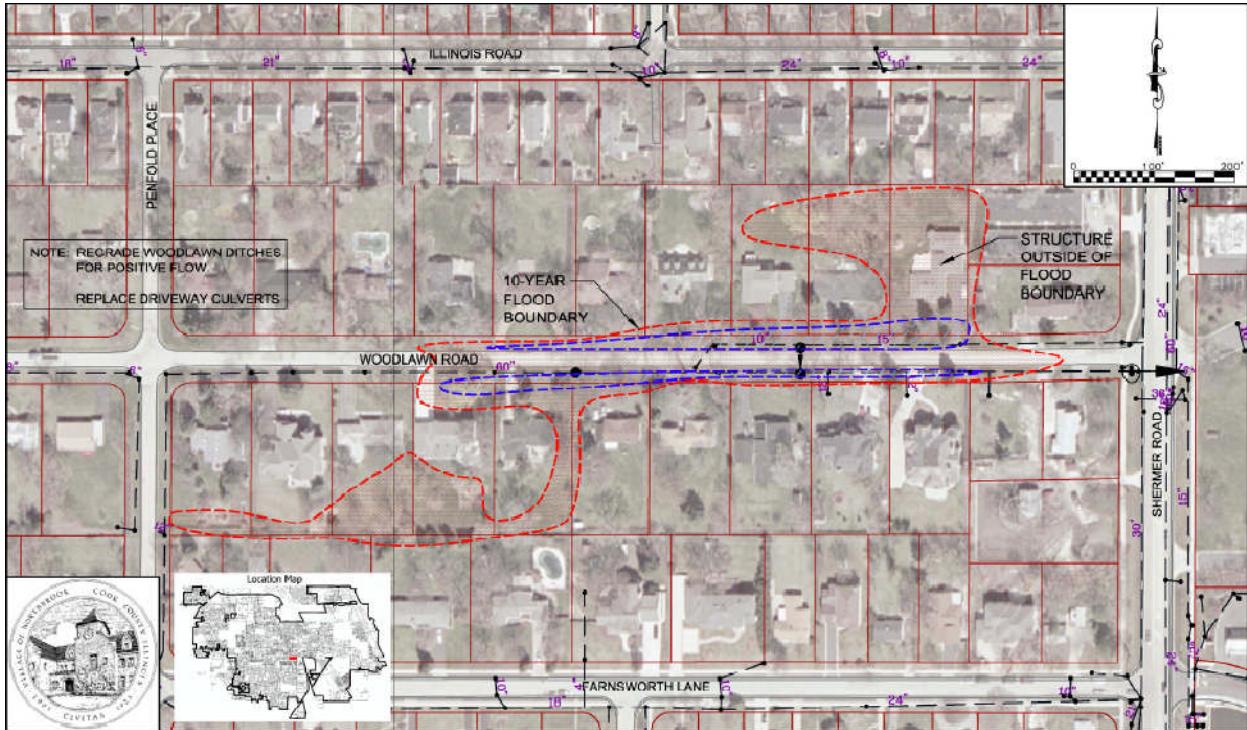
External Factors Affecting Design and Construction Timelines: Construction of the Woodlawn Road project is dependent on the Northbrook Manor, Shermer Road Outlet, Shermer Road Overflow, and Wescott Park projects being completed.

Photos of Flooding in the Project Area:



Village of Northbrook Master Stormwater Management Plan

Woodlawn Road (Penfold Place to Shermer Road) Project Map:



Project Funding:

Storm Water Management	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total
Property and Easement Acquisition									\$5,000 \$5,000
Design/Final Engineering									\$33,000 \$33,000
Construction									\$217,000 \$217,000
Fiscal Year Totals	\$0	\$255,000	\$255,000						

Planned Financing

Annual Funding	FY 2011/2012	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY12-19 Total

Financing and funding of those stormwater projects recommended by the Public Works Committee will be integrated into the Villages Capital Improvement Plan which will be discussed by the Administration and Finance Committee (serving in a Committee of the Whole capacity that includes the entire Village Board). That information will be added to the tables above after the Committee's discussion.