

The background of the slide is a light gray gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered on the slide.

STORMS, SEWERS AND STREETS

THE FUNCTION OF INFRASTRUCTURE

DURING RAIN EVENTS

AND

THE VILLAGE'S PLAN FOR IMPROVEMENTS

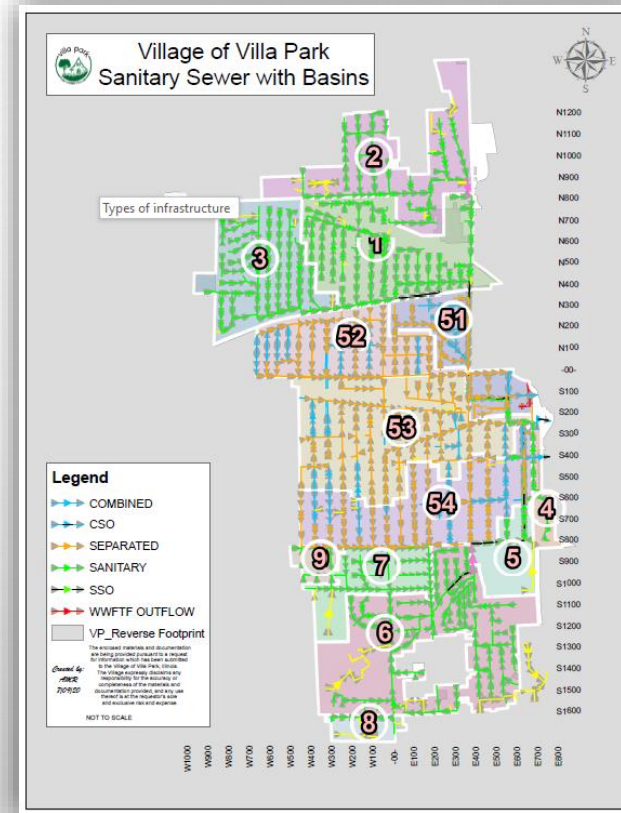
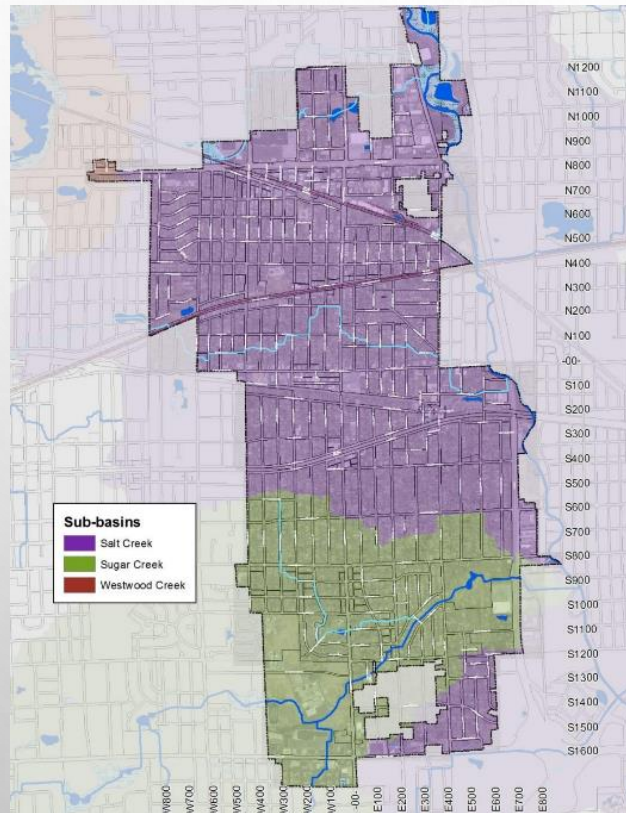
VILLAGE BOARD MEETING JULY 13, 2020

OUTLINE

- TYPES OF INFRASTRUCTURE IN VILLA PARK
 - SEWERS
 - STREETS
- HISTORICAL STORM EVENTS
- PROGRAMS OFFERED
 - DRAINAGE ASSISTANCE
 - SEWER REPAIR
- PLANNING
 - STORM SEWER PLAN
 - COMBINED SEWER PLAN
 - STREET PLAN

TYPES OF INFRASTRUCTURE

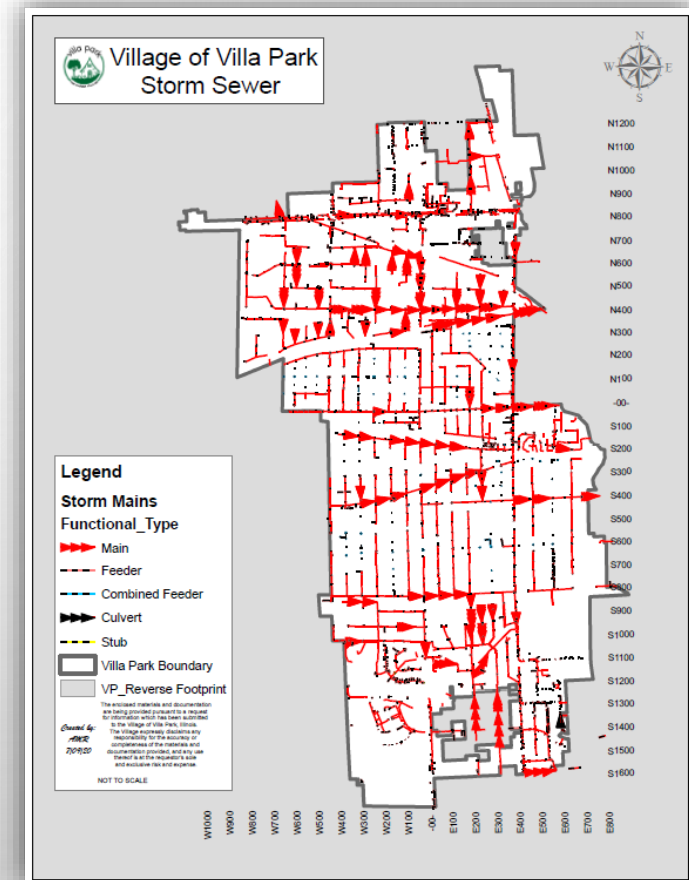
THE VILLAGE UTILIZES A SYSTEM OF ROADS, DITCHES AND SEWERS TO CONVEY STORM WATER TO SALT CREEK AND SUGAR CREEK TO DRAIN THE COMMUNITY



TYPES OF INFRASTRUCTURE

STORM SEWERS

- STORM SEWER & ROADWAY DITCHES
 - A SYSTEM DESIGNED TO CARRY RAINFALL RUNOFF AND OTHER DRAINAGE TO LOCAL STREAMS, RIVERS OR OTHER BODIES OF WATER
 - VILLAGE HAS 75 MILES OF STORM SEWERS
 - 9 MILES OF DITCHES AND CULVERTS
 - VILLAGE HAS 5 DETENTION/RETENTION PONDS



TYPES OF INFRASTRUCTURE

COMBINED SEWERS

➤ COMBINATION SEWER

- A SEWAGE COLLECTION SYSTEM OF PIPES AND TUNNELS DESIGNED TO SIMULTANEOUSLY COLLECT SURFACE RUNOFF AND SEWAGE WATER IN A SHARED SYSTEM
- VILLAGE HAS 9 MILES OF COMBINED SEWERS REMAINING (PREVIOUSLY 33 MILES)
- WET WEATHER FLOW TREATMENT FACILITY



Photo courtesy from (ecologywa.blogspot.com)

TYPES OF INFRASTRUCTURE

SANITARY SEWERS

- SANITARY SEWERS
 - AN UNDERGROUND PIPE OR TUNNEL SYSTEM FOR TRANSPORTING SEWAGE FROM HOUSES AND COMMERCIAL BUILDINGS TO TREATMENT FACILITIES FOR DISPOSAL
 - VILLAGE HAS 73 MILES OF SANITARY SEWERS

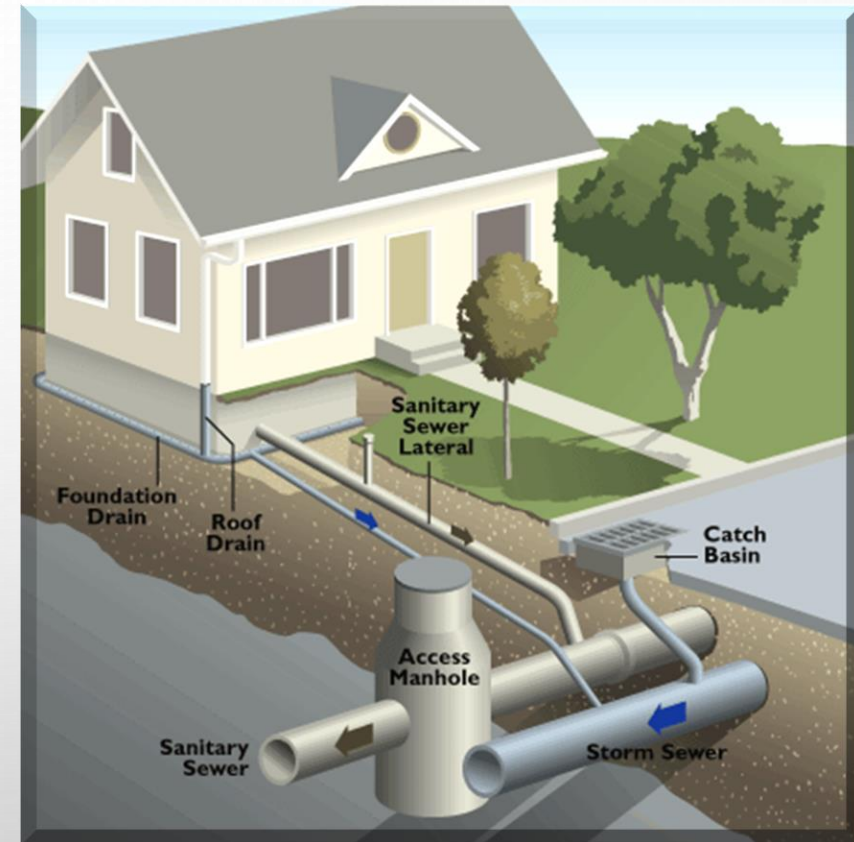
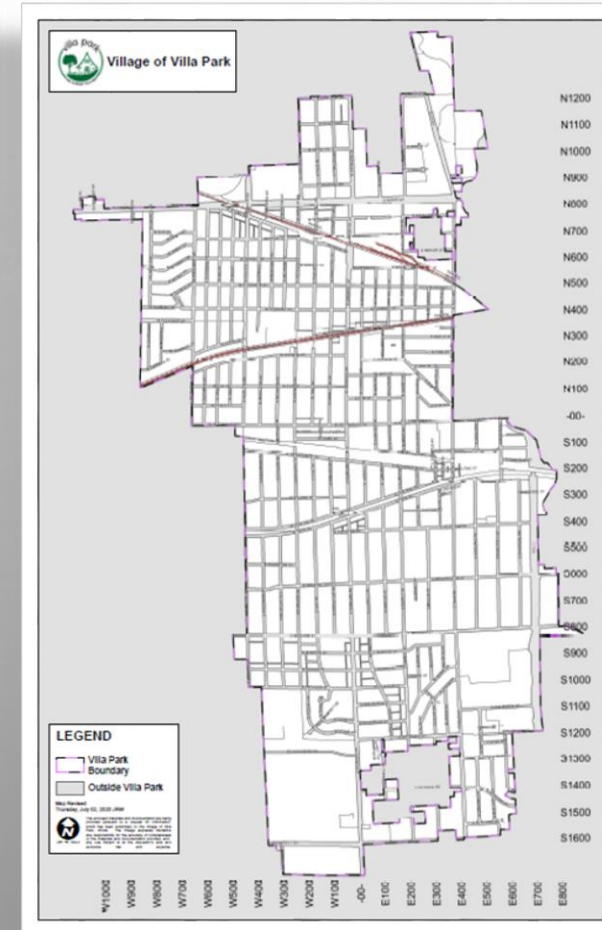


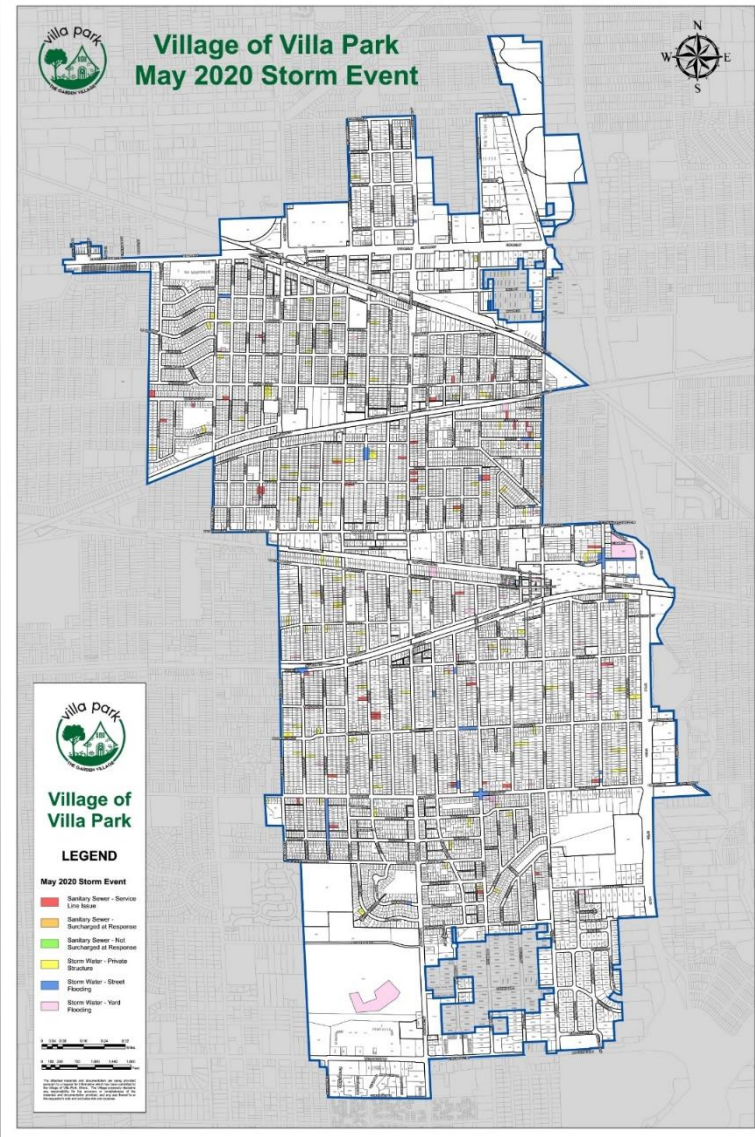
Photo courtesy from (vil.spencerport.ny.us)

TYPES OF INFRASTRUCTURE STREETS

- A PUBLIC ROAD IN A CITY OR TOWN, TYPICALLY WITH HOUSES AND BUILDINGS ON ONE OR BOTH SIDES
- SECONDARY COVENANCE FOR STORM WATER
- VILLA PARK HAS-
- *≈ 70 MILES OF STREETS*
- *≈ 4 MILES OF ALLEYS*



HISTORICAL STORM EVENTS



- SEPTEMBER 12-14, 2008
 - TOTAL OF 7.5 INCHES OF RAIN
- JULY 23-24, 2010
 - TOTAL OF 6.84 INCHES OF RAIN
- APRIL 17-18, 2013
 - TOTAL OF 9.41 INCHES OF RAIN
- MAY 14-17TH, 2020
 - TOTAL OF 7 INCHES OF RAIN
 - OVERALL 218 LOCATIONS EXPERIENCED ISSUES*
 - 41 SANITARY SEWER ISSUES
 - 27 STREET FLOODING ISSUES
 - 50 YARD FLOODING ISSUES
 - 100 STRUCTURES (BUILDINGS) RECEIVING WATER
 - ❖ BASED ON CALL LOGS, REQUESTS FOR SOLID WASTE PICKUP AND CORRESPONDENCES TO STAFF

RESPONSE TO THE STORMS

PROGRAMS OFFERED

➤ SANITARY/CSO

➤ SEWER REPAIR ASSISTANCE

- ONE TIME REIMBURSEMENT OF 50% OF COST OF REPAIRS/INSTALLATION OF BACKFLOW CHECK VALVE
 - MAXIMUM \$1,000

➤ I & I INSPECTION REQUIREMENTS

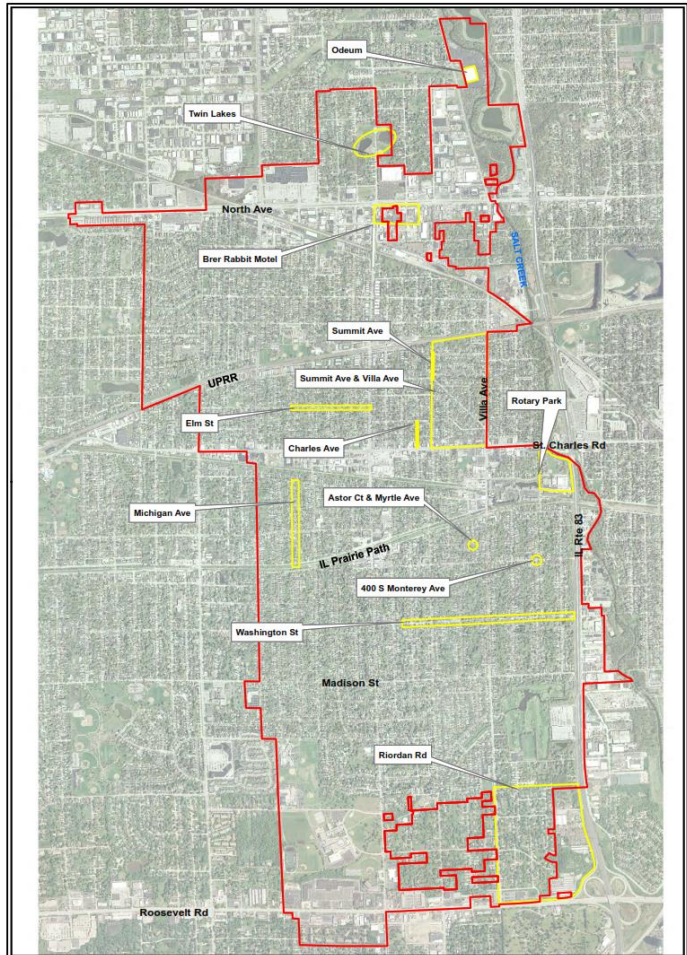
- SALE OF PROPERTY
- SEWER REPAIR ASSISTANCE PROGRAM

➤ STORM


- LIST OF HOT SPOTS TO CLEAN PRE & POST STORM – CURRENTLY 16 LOCATIONS
- DRAINAGE ASSISTANCE PROGRAM
- SANDBAGS – PRIOR TO STORM EVENTS SAND BAGS HAVE BEEN MADE AVAILABLE AT PUBLIC WORKS

PLANNING MOVING FORWARD

STORM SEWERS



- 2015 CBB COMPREHENSIVE STUDY
 - CONCEPTUAL COST ESTIMATES FOR THE PROPOSED IMPROVEMENTS FOR THE STUDY AREAS ARE UP TO \$46 MILLION BASED ON FINAL DESIGN RECOMMENDATIONS
 - RECOMMENDATIONS
 - RIORDAN RD
 - 400 S. MONTEREY AVE.
 - LIONS PARK DRAINAGE IMPROVEMENT
 - OVALTINE POND DRAINAGE IMPROVEMENT
 - ROTARY PARK DRAINAGE IMPROVEMENT
 - TWIN LAKES DRAINAGE IMPROVEMENT
 - VILLA AND SUMMIT DRAINAGE IMPROVEMENT
 - NORTH AVE DRAINAGE IMPROVEMENTS (BRER RABBIT MOTEL)
 - WASHINGTON STREET (ALSO INCLUDED IN COMBINED SEWER PLAN)
 - ASTOR CT. & MYRTLE (ALSO INCLUDED IN COMBINED SEWER PLAN)
 - MICHIGAN AVE (CENTRAL TO KENILWORTH) (ALSO INCLUDED IN COMBINED SEWER PLAN)
 - CHARLES AVE (ST. CHARLES TO OAK) (ALSO INCLUDED IN COMBINED SEWER PLAN)

	Christopher B. Burke Engineering, Ltd. 9575 West Higgins Road, Suite 600 Rosemont, IL 60018 (847) 823-0500 / FAX (847) 823-0520	DSGN.	JMG	CHKD.	GLR
		CLIENT	Village of Villa Park		PROJECT NO.
TITLE		Overall Study Area		DATE	03/27/15
				EXHIBIT 1	

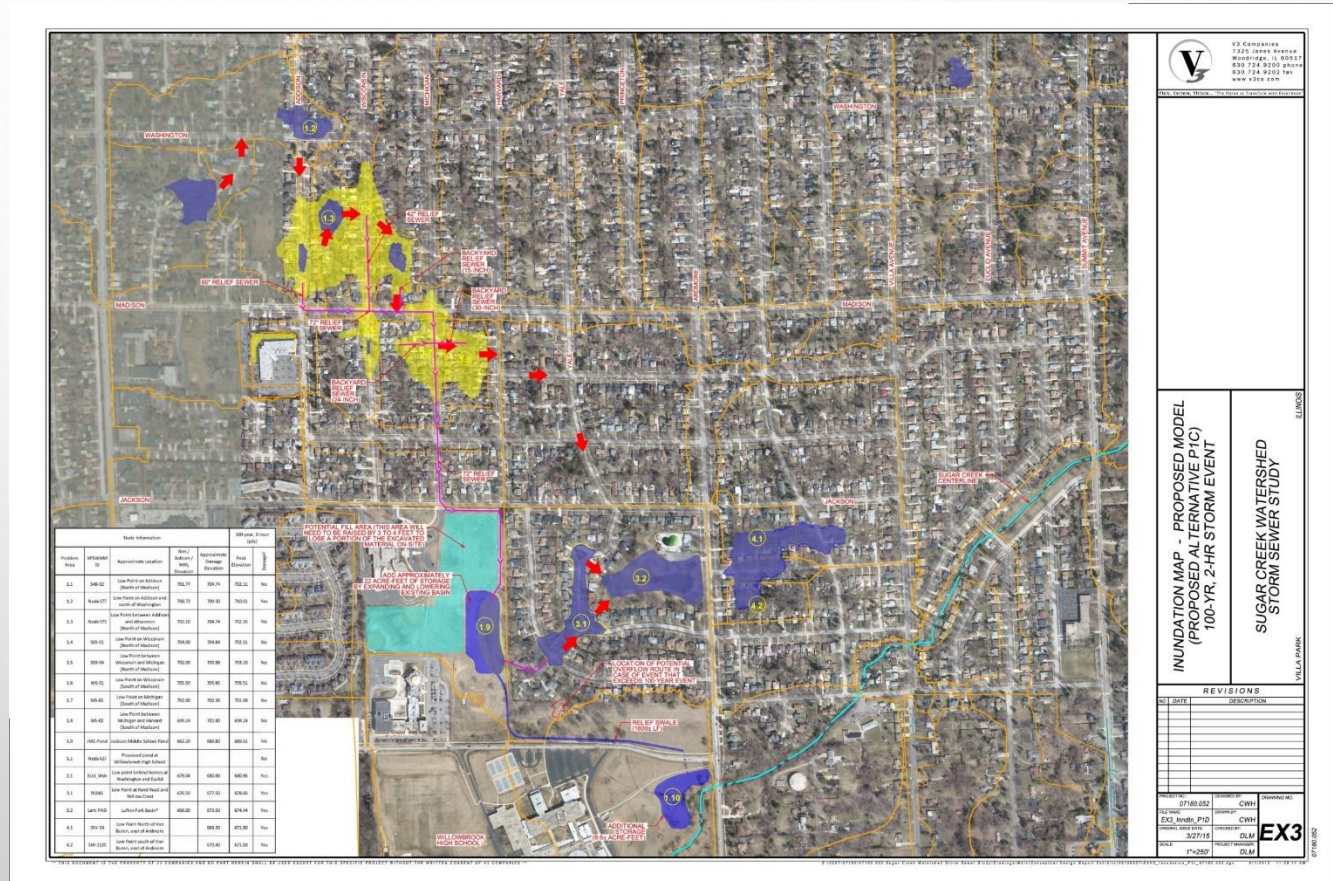
PLANNING MOVING FORWARD

STORM SEWERS

➤ 2015 SUGAR CREEK WATERSHED STUDY

➤ RECOMMENDATIONS

- JACKSON POND EXPANSION WITH OVERFLOW POND AND STORM SEWER IMPROVEMENTS \$6.8 MILLION
 - S. MICHIGAN (MADISON TO JACKSON)
 - S. WISCONSIN (MADISON TO JACKSON)
 - S. ADDISON AT MADISON
- LUFKIN POND DRAINAGE IMPROVEMENTS \$665,000
- RELIEF SEWER FOR VAN BUREN ST. \$1.9 MILLION
- WASHINGTON AND EUCLID STREET RELIEF (COMBINED WITH 2015 CBB STUDY)



PLANNING MOVING FORWARD

COMBINATION SEWERS

➤ STUDIES AND PLANS

- IEPA LONG TERM CONTROL PLAN (LTCP) FOR COMBINED SEWER OUTFALLS
– DRAFTED BY RJN IN 2016

Basin No.	Basin Name	CSO Outfall No.	Tributary Area (acres)	Tributary Parcels	Zoning / Land Use	CSO Control Structure ID	CSO Control Structure Location
54	Highland (Area 1)	001	345.8	1,122	Residential	CSO-12	Highland and Riverside
51	Wildwood (Area 2)	002	158.8	430	Residential/Commercial	51-2	East end of Wildwood
52	St. Charles (Area 3)	003	245.1	951	Residential	CSO-4	St. Charles and Monterey
53	Park Blvd. (Area 4)	004	467.8	1,428	Residential/Commercial	53-290	IL 83 and Park

➤ REQUIRED PROJECTS

- ASTOR/MYRTLE
- S. MICHIGAN (CENTRAL TO KENILWORTH)
- MAPLE ST.
- OAK ST.
- PINE ST.
- E. DIVISION
- MYRTLE (DIVISION TO OAK)
- N. SUMMIT
- N. BIERMANN (HOLLY TO DIVISION)
- S. WISCONSIN
- S. YALE
- N. WESTMORE
- VARIOUS STREETS

PLANNING MOVING FORWARD PROGRESS

➤ COMPLETED PROJECTS

- 2016
 - EAST PARK BLVD PROJECT \$1,352,517
- 2017
 - 546 S. EUCLID AVE. PROPERTY BUYOUT
 - N. BIERMANN AVE (HOLLY TO DIVISION) \$333,866
 - S. MICHIGAN AVE IMPROVEMENT (MADISON TO PARK) \$1,682,825
- 2018
 - S. MONTEREY STORM WATER QUALITY PROJECT \$64,622
 - S. MICHIGAN (JACKSON TO MADISON) \$1,407,195
 - WASHINGTON GREEN INFRASTRUCTURE PROJECT \$894,305
 - SECOND AVE COMBINED SEWER SEPARATION PROJECT \$718,993
- 2019
 - JACKSON POND OVERFLOW PROJECT \$2,042,733

➤ FUTURE CIP PROJECTS

➤ CURRENT 2020 PROJECTS

- ROTARY PARK FLOOD PLAIN MITIGATION \$244,388
- ASTOR MYRTLE PROJECT \$2,434,984
- S. MICHIGAN PROJECT (CENTRAL TO KENILWORTH) \$1,328,630
- CHARLES AVE. (ST. CHARLES TO OAK) - ESTIMATED \$1,788,726 - PENDING

➤ 2021 PLANNED PROJECTS

- MAPLE AREA IMPROVEMENTS (MAPLE, OAK, PINE, DIVISION, MYRTLE, SUMMIT) ESTIMATED AT \$3.5 MILLION – SUBMITTING IEPA LOAN APPLICATION
- THIRD AVE (HOLLY TO DIVISION) ESTIMATED \$600,000 – AWARDED CDBG FUNDING
- JACKSON POND EXPANSION ESTIMATED \$6.8 MILLION – REVIEWING ENGINEERING PROPOSALS
- WISCONSIN AVE. (JACKSON TO KENILWORTH) ESTIMATED \$4.1 MILLION – REVIEWING ENGINEERING PROPOSAL
- WASHINGTON AREA COMBINED SEWER SEPARATION ESTIMATED \$5.7 MILLION - PENDING
- WESTMORE AVE. (DIVISION TO ST. CHARLES) ESTIMATED \$800,000 - PENDING
- YALE AVE. (JACKSON TO MADISON) ESTIMATED \$900,000 - PENDING
- NORTH AVE. DRAINAGE IMPROVEMENTS (RABBIT MOTEL) ESTIMATED \$1.55 MILLION - PENDING

➤ 2022 PLANNED PROJECTS

- YALE AVE. (MADISON TO PARK) ESTIMATED AT \$1.7 MILLION

PLANNING MOVING FORWARD

SANITARY SEWERS

➤ STUDY PERFORMED

- SANITARY SEWER MASTER PLAN 2008 - PREPARED BY RJN
- COMPREHENSIVE PLAN APPENDIX CHAPTER B 2014 – PREPARED BY RJN

➤ RECOMMENDATIONS

- INFLOW AND INFILTRATION (I&I) REMOVAL
- CAPACITY IMPROVEMENTS
- STRUCTURAL IMPROVEMENTS

➤ COMPLETED PROJECTS

➤ 2009 SEWER LINING PROJECTS

- \$2,394,275 COST
- 54,074 FEET OF SEWER LINED
- 20 MANHOLES

➤ 2014 SEWER LINING PROJECTS

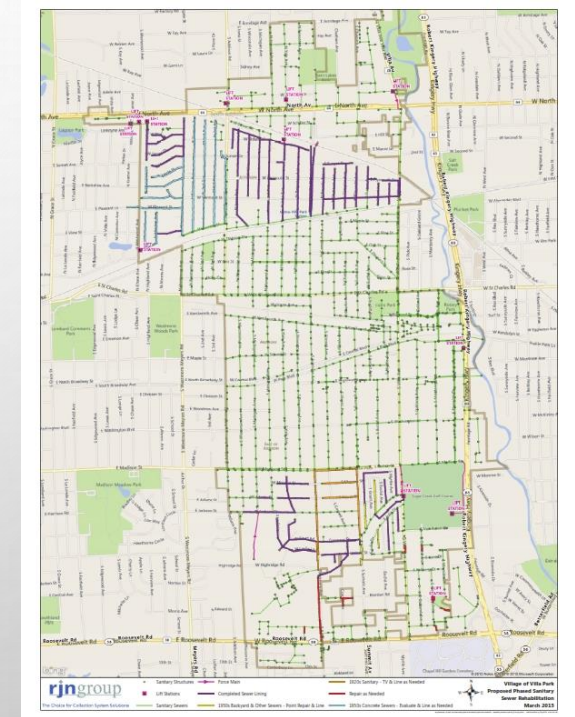
- \$212,888 COST
- 6,000 FEET OF SEWER LINED
- 2 POINT REPAIRS

➤ 2019/2020 SEWER REHABILITATION

- \$1,156,040 COST
- 22,000 FEET OF SEWER LINED

➤ FUTURE CIP PROJECTS

- 2021 SANITARY SEWER REHABILITATION PLAN
- PARK BLVD SEWER REHABILITATION



PLANNING MOVING FORWARD

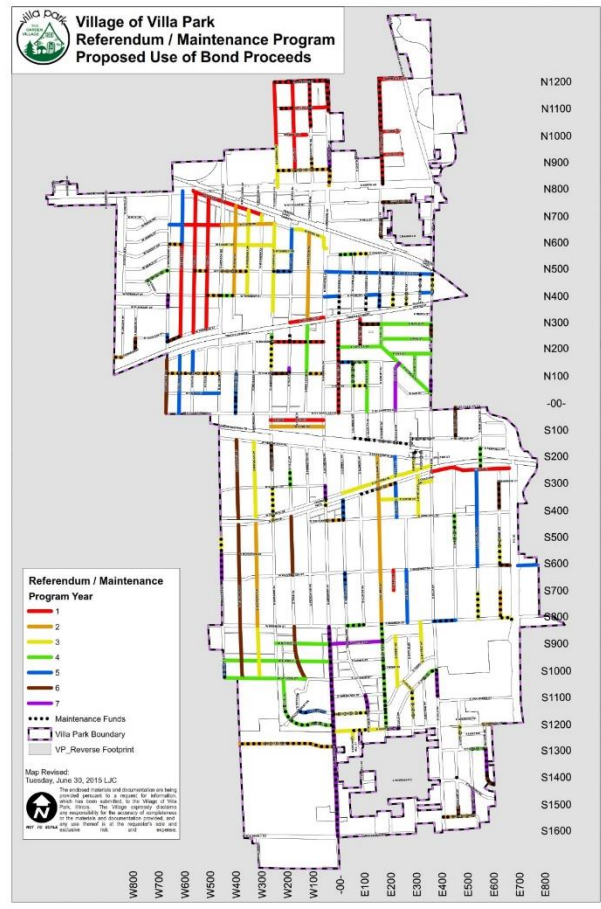
STREETS IMPROVEMENTS

COMPLETED PROJECTS

- 2015
 - 2015 CONCRETE STREETS IMPROVEMENT PROJECT (VARIOUS STREETS)
 - 2015 STREET RESURFACING PROJECT (VARIOUS STREETS)
 - 2015 TWIN LAKES STREET IMPROVEMENT PROJECT (VARIOUS STREETS)
- 2016
 - 2016 STREET IMPROVEMENT PROJECT (VARIOUS STREETS)
 - PARK BOULEVARD IMPROVEMENT PROJECT (VILLA TO EAST END)
 - PRINCETON AVENUE IMPROVEMENT PROJECT (TERRACE TO RIDGE)
- 2017
 - 2017 STREET IMPROVEMENT PROJECT (VARIOUS STREETS)
 - CENTRAL BOULEVARD IMPROVEMENT PROJECT (SUMMIT TO VILLA)
 - MICHIGAN AVENUE IMPROVEMENT PROJECT (MADISON TO PARK)
- 2018
 - 2018 STREET IMPROVEMENT PROJECT (VARIOUS STREETS)
 - RIDGE ROAD IMPROVEMENT PROJECT (YALE TO ARDMORE)
 - SECOND AVENUE IMPROVEMENT PROJECT (HOLLY TO DIVISION)
- 2019
 - PRINCETON AVENUE IMPROVEMENT PROJECT (ELM TO UNION PACIFIC)

CURRENT PROJECTS

- 2020
 - 2020 STREET IMPROVEMENT PROJECT (VARIOUS STREETS)
 - ASTOR, MYRTLE, AND EUCLID IMPROVEMENT PROJECT
 - MICHIGAN AVENUE IMPROVEMENT PROJECT (CENTRAL TO KENILWORTH)
 - YALE AVENUE IMPROVEMENT PROJECT (PLYMOUTH TO RIDGE)
- 2021
 - MONTEREY AVENUE IMPROVEMENTS (PARK TO WASHINGTON)
 - MAPLE AREA IMPROVEMENTS
 - WISCONSIN AVENUE (JACKSON TO KENILWORTH)
 - JACKSON STREET IMPROVEMENT (ADDISON TO YALE)
 - BIERMANN AVENUE IMPROVEMENT (SUNSET TO NORTH)
 - COLLEGE STREETS IMPROVEMENTS (VARIOUS STREETS)
 - EUCLID AVENUE IMPROVEMENT (MADISON TO HIGHLAND)
 - MYRTLE AVENUE IMPROVEMENT (TERRY TO MADISON)
 - WESTMORE AVENUE IMPROVEMENT (ST. CHARLES TO DIVISION)
- 2022
 - YALE AVENUE IMPROVEMENT (JACKSON TO MADISON)



QUESTIONS