

# Village of Lindenhurst



## 2020 Capital Improvement Plan (CIP)

# 2020 Capital Improvement Plan



## Introduction

The purpose of the Village's Capital Improvement Plan (CIP) is to establish a long range planning tool to provide for the investment in major community infrastructure improvements and the maintenance/repair/replacement of existing Village facilities and equipment.

The Village currently uses various capital funds for infrastructure and community improvements. These include:

- Community Capital Fund
- Water/Sewer Capital Fund
- Motor Fuel Tax Fund
- Public Works Vehicle Replacement Fund
- Police Squad Car Replacement Fund

More specifically, the Capital Improvement Plan will:

1. Identify existing major infrastructure and facilities.
2. Describe the CIP planning process.
3. Identify needed capital improvement projects over the next 20 years.
4. Provide a summary of current debt obligations.
5. Identify, categorize and describe potential future community improvement projects.
6. Make recommendations to maximize community improvement spending.

When planning for capital projects, the Village uses five primary objectives when evaluating the priority of projects:

1. Continuation of Maintenance and Replacement of Village Infrastructure to Address Essential Community Infrastructure Needs
2. Improvements to Technology to Increase Operational Efficiencies or Increase Data Driven Decision-Making
3. Enhances Quality of Life Elements and Improves Property Values
4. Improve Citizen Engagement in order to Establish Future Goal Setting and/or Comprehensive Planning
5. Enhance Public Safety

To reinforce the themes outlined in this memo, there will be corresponding numeration in the capital improvement projection.

## Planning Process

The planning process for the Capital Improvement Plan is a multi-step process and includes the following steps.

1. Annually, staff will prepare a draft CIP that includes revenue projections and proposed projects and costs.
2. The Draft CIP will be reviewed annually by the Village Board.
3. After this review, the Village Board will consider taking action as specified in the Recommendation section of the CIP.
4. Staff will prepare a final CIP to include any Village Board decisions/modifications.
5. Staff will begin preparation of capital projects to be included in the next budget year.

## Existing Village Infrastructure, Facilities and Major Equipment

- Well water distribution system that includes 6 well houses, 9 wells, two water towers that hold 750,000 and 500,000 gallons, a 1,000,000 gallon reservoir, and 62 miles of watermain.
- Wastewater treatment system that includes, 11 lift stations, 65 miles of sanitary sewer lines and a waste water treatment facility that can treat 2.0 million gallons per day.
- 94.3 lane miles of streets and rights of way.
- 5,312 parkway trees.
- 134 Village-owned streetlights.
- 728 fire hydrants.
- Village Hall and Garage area
- Public Safety Building
  - Radio antenna
- Public Works Garage
  - Salt dome
  - Material storage area
  - Fuel station (limited use)
- Veteran's Memorial
- 8 police vehicles
- Public Works Vehicles & Major Equipment
  - 2 Public Works sport utility vehicles
  - 5 Public Works pick-up trucks
  - 2 – 2 yard dump trucks
  - 6 – 5 yard dump trucks
  - 1 – 10 yard dump truck
  - Backhoe, Jetter, Loader, Vector, Roller, Trash Pump
- 4 Lakes
  - Lake Potomac (14 acres)
  - Waterford (67 acres)
  - Linden (31 acres)
  - Springledge (5 acres)

# 2020 Capital Improvement Plan



---

## Project Types

Village capital improvement projects will be identified into the following areas:

- Road Improvements
- Storm water
- Water & Wastewater
- Bike Paths and Sidewalks
- Village facilities
- Vehicle replacement
- Miscellaneous

Some projects will require design and construction engineering services. Where possible, these costs will be listed separately.

Capital improvement projects can be listed as any of the following:

- **Engineering Design** –Involves the design of a project.
- **Major Equipment Replacement** – Occurs when a piece of equipment exceeds its useful life and needs to be replaced.
- **Capital Improvement or Expansion** – Any project that enhances or improves the community such as a new bike path, providing additional storm water capacity, or the addition of decorative street lights.
- **New Equipment** – The purchase of new equipment. These items (or systems/networks of items) are typically in excess of \$5,000.

# 2020 Capital Improvement Plan



---

## Community Capital

The Community Capital Fund typically funds storm water improvements, bike path and sidewalk improvements, municipal facility improvements, a portion of road improvements and other miscellaneous improvements as determined by the Village Board.

### Regular Revenue & Expenses

#### *Regular Revenue*

Transportation & Facilities Fee  
Cell Antenna Lease Fees  
Income Tax (10% of total)  
Sales Tax (10% of total)  
Public Facility Donation  
Video Gaming Revenues  
Interest  
General Operating Fund Transfer<sup>1</sup> \$TBD

#### *Regular Expenses*

Refunding Bonds Series 2013  
Misc. Equipment

---

<sup>1</sup> At the end of each fiscal year, any available dollars in excess of the General Fund Target balance are transferred into the Community Capital Fund.

# 2020 Capital Improvement Plan



You may notice the color coding used in the capital improvement projections. Because of the nature of capital projects, I have highlighted projects based on their disposition. The color codes correspond as follows:

Peach	Long-Term Capital Projects and/or Part of an Agreement
Lavender	Previously Approved Projects Underway
Olive	Proposed Projects for Current Year
Salmon	Future Projects

## **“Peach” Projects**

These projects we conduct annually or were agreed to in previous years. For example, engineering and the Village Board’s commitment to additional investment in road resurfacing is included in this section. Sidewalk replacement and pavement patching expenses are also listed here.

This section includes our contributions to the rebuilds of Grand Avenue and US 45. The projection includes our contribution to each project respectively. Each project must be paid 80% upfront, and in the case of Grand Avenue an estimate included for utility relocation. This year, these projects also include stormwater improvements. Finally, in order to track and account for Ziegler’s sales tax rebate, that amount is estimated and included in the Capital Project expenses.

## **“Lavender” Projects**

The projects in this section are ones previously committed to by the Village Board in previous budgets. Some of these costs will be adjusted based on future information. Moving forward, policy decisions will need to be made regarding the future of these projects. Often projects that are carried over from the previous fiscal year fall into this category. In 2020, one example includes the Hazelwood Path contribution to Lake County Forest Preserve District.

## **“Olive” Projects**

Olive projects represent those capital items recommended by the staff for expensing this year. These projects reflect some of the goals outlined earlier.

## **“Salmon” Projects**

These projects are projects that should be considered for future year funding. Many costs are estimated at this time.

# 2020 Capital Improvement Plan



## Community Capital Fund FY 2020/2021 Programming

Est. Balance as of 4-30-2020	\$2,369,130
Regular Revenues	\$518,025
Operating Transfer (General Fund)	
<b>Available Funds</b>	<b>\$2,887,155</b>

<b>Peach Projects</b>	Long-Term Projects/Previous Contractual Agreement
Road Program Design Engineering	\$0
Additional Road Resurfacing	\$525,000
Annual Pavement Patching	\$100,000
Sidewalk Replacement and Repairs	\$35,000
Stormwater Management Projects	\$100,000
Emerald Ash Borer Program	\$15,000
Grand Avenue Village Contribution	\$260,689
Route 45 Village Contribution	\$130,696
Zeigler Sales Tax Rebate	\$110,000
<b>Subtotal</b>	<b>\$1,276,385</b>

<b>Lavender Projects</b>	Village Previously Approved Projects
Lindenhurst Drive Flood Design Engineering	\$175,000
Lakeshore to Hawthorne FAU Design Ph. II	\$170,000
Emerald Ridge Sidewalk Linkage	\$190,000
Hastings Lake Bike Path Connection	\$19,450
<b>Subtotal</b>	<b>\$554,450</b>

<b>Olive Projects</b>	Proposed Projects for Upcoming Fiscal Year
Sand Lake Rd. Crosswalk Beacons	\$25,000
Police Department Briefing Room Furniture	\$13,500
Police Department Sallyport Door Replacement	\$7,000
Public Works Office Furniture Replacement	\$14,200
Liquid De-Icing Agent Equipment	\$15,000
<b>Subtotal</b>	<b>\$74,700</b>



# 2020 Capital Improvement Plan



<b>Salmon Projects</b>		Future Projects
Village Entry Sign Replacement	FY 22	\$42,000
In-Squad Camera Replacement	FY 22-24	\$44,000
Community Survey	FY 22	\$11,000
Pavement Management Assessment	FY 24	\$30,000
PD Evidence Storage Security Upgrades	FY 22	\$100,000
Grand Avenue Streetscaping Elements	FY 22	\$150,000
Village Hall Parking Lot Resurfacing	FY 22	\$230,000
Lake Shore Drive. Reconstruction FAU Match	FY 22-23	\$1,040,000
Sand Lake Road Sidewalk Design Engineering	FY 23	\$176,000
US 45 from Rt. 173 to Rt. 132 Expansion	FY 25	\$101,269
<b>Subtotal</b>		<b>\$1,924,269</b>
Misc. Equipment/Projects	FY 21	\$25,000
Debt Service Expense	FY 21	\$54,374
<b>TOTAL FY 21 COMMUNITY CAPITAL EXPENSE</b>		<b>\$1,984,909</b>
<b>YE FY21 COMMUNITY CAPITAL BALANCE</b>		<b>\$902,246</b>



## Project Descriptions

### **Additional Village Street Resurfacing** *(Objective 1)*

The coming fiscal year will represent the construction year of our biennial road resurfacing project. Because of our desire to make a larger investment in our Village roads over the next six years, we are adding an additional \$525,000 from Community Capital to approximately \$830,000 from MFT and \$200,000 from the Refuse and Recycling Fund to resurface over \$1.5M worth of roadway. With this amount of funding, we are able to resurface almost 2.75 miles of road (14,210 feet).

### **Stormwater Management Projects** *(Objective 1)*

The Village is continually making strides to address drainage issues in various parts of the community. The Village has spent part of 2018 identifying areas throughout the Village with the greatest stormwater impacts and has assigned a design engineering/construction cost to each of those projects. Projects will be prioritized by the Village Board on an annual basis to eliminate those stormwater projects over the course of time, reducing the possibility of large unexpected expenses to address these needs.

### **Grand Avenue (Route 132) Pedestrian Path and Traffic Signal Local Cost Share** *(Objective 1 & 4)*

As part of IDOT's planned improvements to Route 132 (Grand Avenue) from Sand Lake Road to Munn Road, the Village can elect to have pedestrian pathways installed as part of the project. This involves the construction of a sidewalk on one side of the road and a bike path on the other side. IDOT will pay for 80% of the cost and the Village would need to pay for the remaining 20%. This total cost of \$843,082 is split over the two construction seasons and includes additional funds for construction oversight. The largest portion of this cost is the associated sanitary sewer and water main relocation needed within the State's right-of-way. The Village has incurred some disputed costs during the project which will have to be settled out at the end of the project. We believe that amount to be around \$100,000, but the State has indicated that we will likely be billed for that in the following fiscal year. We have paid the majority of this project off in the current fiscal year, but approximately \$261,000 remains in our contribution.

### **Route 45 Contribution** *(Objective 1 & 4)*

This project involves the Village's contribution towards pedestrian paths and preemption lights included in the IDOT/LCDOT Route 45 Bypass Project. The Village's estimated local cost share is \$95,735. We have paid a portion of this amount in FY 19 and may be billed for the remainder within the next fiscal year. The remaining balance of our contribution is \$68,696.

We have received resident comments regarding visibility and lighting at the intersections of Haven Lane/US 45 and Independence Boulevard/US 45. We received quotes for installation of

# 2020 Capital Improvement Plan

---



intersection lighting at those areas which is estimated at \$62,000. Combining the cost of the intersection lighting and the remaining balance for the Village's portion of the Bypass Project, our estimated expense totals \$130,696.

The Village Board has agreed to contribute to this installation of bike paths and sidewalks for the expansion of US 45 south of the Milburn Bypass. Per the agreement made in October, the Village's contribution is \$101,269. That amount is programmed tentatively for FY 24/25 because this project was not funded in IDOTs most recent Multi Year Road Plan from 2020-2025.

## **Zeigler Economic Incentive Payment** *(Objective 3)*

Per the Board approved revisions to the Economic Incentive Agreement between the Village and Zeigler Nissan, the Village has committed to ongoing rebates of 50% of sales tax generated by the project. This is estimated for FY 21 at \$110,000.

## **Lindenhurst Drive Flood Mitigation Phase II** *(Objectives 1&3)*

As noted above, FEMA did not allow site grading, storm sewer improvements and the creation of a storm water detention area to be included in the grant eligible portion of the project. As a result, in order to complete the improvements the Village would need to perform the remaining improvements with Village funds. The remaining work is estimated at \$175,000.

## **Lake Shore Drive Design Engineering Ph. II** *(Objectives 1&3)*

The Beck Road Reconstruction project improvements ended at Beck Road and Lake Shore Drive. Lake Shore Drive is also a FAU designated route making it eligible for 80% federal funding. Lake Shore Drive is in need of resurfacing, curb replacement, and completion of curb improvements in locations currently without. The Village is seeking Federal funding for the construction of this project and awaits the scoring of the project at the Lake County Council of Mayors. The estimated remaining cost of the Phase II engineering is \$170,000.

## **Emerald Ridge Sidewalk Linkage** *(Objective 3)*

With the completion of the Grand Avenue pedestrian underpass, several residents from the Emerald Ridge neighborhood have requested the Village explore options to provide a pedestrian connection to the Millennium Trail system. Currently, there are no pedestrian paths to connect the neighborhood to any of the area trails. In addition, a sidewalk linkage would provide pedestrian access from the future Grand Avenue pathways to the Forest Preserve's Millennium Trail system. The Village has evaluated options and a sidewalk could be installed along Grand Avenue at a cost of approximately \$190,000.

## **Hazelwood Path Construction (Objective 3)**

Last year, the Lake County Forest Preserves completed the construction of the pedestrian path in the fall of 2019, but the Village remains unbilled for the materials. The remaining expense is \$19,450.

## **Public Works Furniture Replacement (Objective 1)**

Public Works budgeted for replacement of office equipment for the supervisors' offices, break room, and map room. Based on costs, we chose to perform this replacement in two-phases. In FY 19/20, we replaced the furniture in the break room and one of the supervisor's office. For FY 20/21, we propose to complete the furniture replacement with the 2<sup>nd</sup> supervisor's office and the map room.

## **Sand Lake Road Pedestrian Crosswalk Beacons (Objective 1 & 4)**

The Village has received numerous safety concerns regarding the pedestrian crossing at the intersection of Sand Lake Road and Country Place. Some pedestrians have been concerned about their ability to cross with the amount of traffic on Sand Lake Road. This is a popular intersection because of the amount of people living in this area and due to its location on the Millennium Trail. Public Works investigated the type of signage needed and worked with the County for a solution. What is recommended by Lake County DOT is a flashing beacon atop of a pedestrian crossing sign to be in compliance with uniform traffic code. The lights would be powered by a flashing light that would be triggered by people entering the crosswalk. The approximate cost of two signs, materials, and installation is \$25,000.

## **Police Station Sally Port Door Replacement (Objective 1)**

The Police Department has been facing increased maintenance and repair costs of their two Sally port doors over the past two budgets. The primary reason for the increased maintenance is that the doors are not built for an industrial-type use like a Sally port. The mechanics of the current doors are more analogous to a residential garage door which has led to quicker wear and tear on the equipment. The Police Department is proposing to replace the doors with something heavier that will reduce maintenance costs and be longer lasting.

## **Police Station Briefing Room Furniture Replacement (Objective 5)**

The furniture in the Briefing Room was purchased in 1999 when the police department was first built. Since then, many of the chairs and tables have fallen in disrepair from use over the last 20 years. As you know, the briefing room was remodeled last year, leaving only the furniture left to be updated. Replacing the old furniture will allow the Department to better facilitate its use as a community room, in-service training, meetings, hosting outside training classes, and its use as

# 2020 Capital Improvement Plan



a Village warming center. It is therefore recommended that all of the furniture replaced at a cost not to exceed \$13,500. This cost includes 15 tables, 30 chairs, power strips, and accessories.

## **Liquid De-Icing Agent Equipment (Objective 1)**

Public Works has had a successful year utilizing the salt brine equipment and truck mounted sprayer to minimize salt utilization and help improve our efficacy in snow plowing. Because it takes a single employee an entire day to apply our liquid salt brine to all Village streets, Public Works would like to invest in a second, larger pallet mounted tank and sprayer to reduce the amount of time a single employee would need to fill, apply, refill, and repeat. This would be adding a 1,200 gallon tank and sprayer to our de-icing equipment. Our current tank is 300 gallons. Our time applying brine would move from 9 hours to 6 hours. The total cost of equipment is \$15,000.

## **US 45 from Route 173 to Route 132 Expansion**

The Village Board approved an agreement with IDOT which includes the Village's contribution toward sidewalks and pedestrian paths when the State moves forward with the expansion and reconstruction of US 45 between Route 173 and Grand Avenue. This project was not included in IDOT's multi-year funding program and could be included in the FY 25 budget at the earliest.

## **In-Squad Camera Replacement (Objective 2 & 5)**

Our Watch Guard in-squad video cameras are in the fifth year of their warranty, which will expire in March 2021. While we could purchase a sixth year of warranty, it is more cost effective to budget for repairs than purchase the warranty. Our police officers have been pleased with our cameras and would like to continue their use. We expect that Watch Guard will release new video software in early 2021, and it is unknown if, or how long, the current video software will be supported. The Police Department is not suggesting to begin the replacement of cameras immediately, but to begin this process in FY 22. My recommendation is to replace these cameras as we replace the vehicles. Therefore, the cameras would follow the vehicle replacement schedule. This means we would purchase two cameras next year, and three in the following two years. All cameras would be replaced by FY 24.

## **Village Entry Sign Replacement**

We anticipate replacing these signs around the community and in front of Village Hall once the Grand Avenue project is complete.

## **Sand Lake Road Sidewalk/Pedestrian Trail**

Provide funding to create a pedestrian trail along Sand Lake Road between Route 45 and Grand Avenue. Cost unknown. In FY 16/17, the Village submitted a grant application for Congestion

# 2020 Capital Improvement Plan

---



Mitigation and Air Quality (CMAQ) funds, but the application was denied. This year's plan includes funds for engineering. The Village and County are continuing discussion on funding options and timing of the construction.

## **Community Survey**

In an effort to measure our efforts and continuously engage our residents a follow-up survey is budgeted in the future years.

## **Pavement Management Assessment**

To measure our road network after resurfacing improvements to re-assess conditions and prioritize resources.

## **Police Department Evidence Storage Security Upgrades**

Enhancements to the security measures, access, and organization of the evidence storage area are needed to improve evidence chain of command integrity. Additionally, work safety elements including ventilation may be needed due to noxious odors of certain evidence.

## **Grand Avenue Streetscaping**

This project involves enhancing the visual appearance of Grand Avenue from Sand Lake Road to Lindenhurst Drive with decorative street lights, banners, burial of electricity wires, decorative benches, trash cans and pedestrian walkways. This opportunity to create a commercial focal point will run in conjunction with the Illinois Department of Transportation's (IDOT) plan to add a center median to this section of Grand Avenue. Additional information on this project has been included in this year's plan.

## **Lake Shore Drive Reconstruction FAU Match**

This includes the funds necessary to meet the 20% for construction of the Lake Shore/Sprucewood/Hawthorn Reconstruction project based on a project cost of \$5.2M.

## **Sediment Removal – Lake Potomac**

Remove sediment accumulation from the bottom of Lake Potomac.

## **Sediment Removal – Lake Waterford**

Remove sediment accumulation from the bottom of Lake Waterford.

## **Sediment Removal – Springledge Lake**

Remove sediment accumulation from the bottom of Springledge Lake.

## **Sediment Removal – Lake Linden**

# 2020 Capital Improvement Plan



Remove sediment accumulation from the bottom of Lake Linden.

## Water/Sewer Capital

The Water/Sewer Capital Fund typically funds water and wastewater improvements/replacements including watermains, lift stations, pump stations, etc.

### Regular Revenue & Expenses

#### *Revenue*

W/S Tap on Fees \$0

Interest \$30,000

#### *Expenses*

Projects & Debt \$293,713



# 2020 Capital Improvement Plan



## Water & Sewer Capital FY 2019/2020 Program Evaluation

<b>Balance as of 4-30-2020</b>		\$287,949
<b>Regular Revenues</b>		\$30,000
<b>Operating Transfer (Utility Fund)</b>		
<b><i>Available Funds</i></b>		<b><i>\$317,949</i></b>

Debt Service Expense	FY 21	\$293,713
Misc. Equipment		\$0
<b><i>TOTAL FY 20 WATER/SEWER CAPITAL EXPENSE</i></b>		<b><i>\$293,713</i></b>

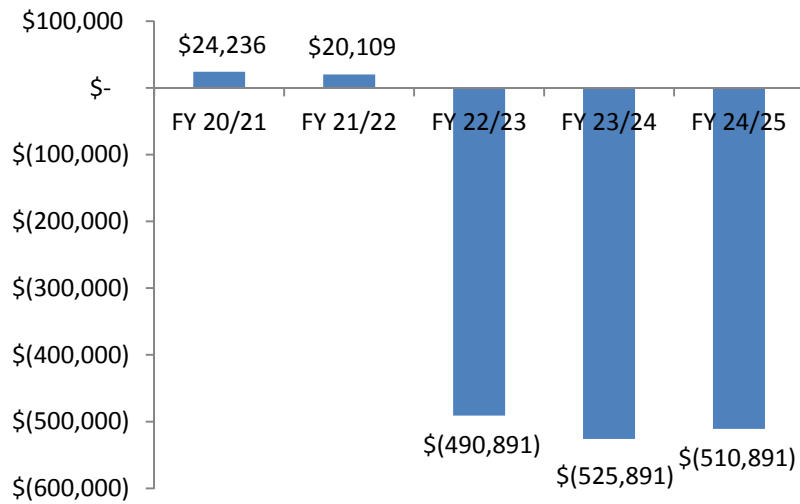
**END WATER/SEWER CAPITAL FUND BALANCE** **\$24,236**

# 2020 Capital Improvement Plan



## Water & Sewer Capital Fund 5-Year Projection FY 20/21 - 24/25

Balance 4-30-2020	\$ 287,949				
	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>FY 23/24</b>	<b>FY 24/25</b>
<b>Regular Revenue</b>	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
<b>Transfer From Operating</b>					
<b>Transfer From Community Capital</b>	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Revenues</b>	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
<b>Expenses</b>					
1 Well Removal/Take-Down	\$ -	\$ -	\$ 50,000	\$ 50,000	\$ -
1 Pipeline Prioritization Study	\$ -	\$ -	\$ 36,000	\$ -	\$ -
1 Water Tower Painting	\$ -	\$ -	\$ 440,000	\$ -	\$ -
Misc. Equipment	\$ -	\$ 10,000	\$ 15,000	\$ 15,000	\$ 15,000
Debt Obligations (SE Utilities Extension)	\$ 293,713	\$ 24,127	\$ -	\$ -	\$ -
	\$ 293,713	\$ 34,127	\$ 541,000	\$ 65,000	\$ 15,000
<b>Available Dollars</b>	\$ 24,236	\$ 20,109	\$ (490,891)	\$ (525,891)	\$ (510,891)



## Project Descriptions

### **Pipeline Prioritization Study**

This will build on the work started by Wes with the goal of establishing a long-term plan for annual water main replacement. The plan will consider street condition, pipe age, pipe material, criticality, service records/breaks/leaks, among other criteria. The deliverable will be a report and CIP with implementation schedule and costs. The 2006 Water System Study should be updated with water use trends and facility assessments to include a schedule to water tower maintenance and painting. We also included costs to update the computerized hydraulic model. This cost is estimated at \$36,000.

### **Elevated Tank No. 2 Repainting**

The tank should be inspected the year prior to the repaint work. We typically generate an inspection report that evaluates the existing coatings to determine if overcoating is feasible and identify other improvements/repairs needed while the tank is out of service.

### **Interconnection Evaluation**

Given the unknowns surrounding the reliability of well #8, pipe improvements needed on the Lake Villa side, potential service to currently unincorporated areas along Deep Lake Road; the Village should look at all these factors before pursuing improvements to the existing interconnection. This cost is estimated at \$15,000.

## LIFT STATION REPLACEMENT LIST

### PUMP STATION INFORMATION

Pump Station No.	Location	Commission Year	Last Station Upgrade	Pump Qty.	Type of Controller	Pump Manufacturer & Model	Last Pump Replacement
1	1910 Elmwood Dr.	1969	1995	2	Consolidated Electric HMI Transducer w/backup float controls	8" Flygt Model No. NP-3153.095/2015	2015
2	227 Valley Dr.	1975	2002	2	PLTU/Transducer w/backup float controls	6" Flygt Model No. CP3153.091-0410	2012
3	2216 Rolling Ridge Ln.	1975	2002	2	PLTU/Transducer w/backup float controls	4" KJI HydroAire Model No. KSE-5-4T001	2008
4	205 Hickory Dr.	1978	2002	2	PLTU/Transducer w/backup float controls	3" Flygt Model No. CP3085.092	2020
5	3155 Haven Ln.	1995	2005	3	PLC/Transducer w/backup float controls	6" Flygt Model No. 3301.185-1470013	1999/2014/2015
6	1136 E. Grand Ave		2017	2	PLC/Transducer w/backup float controls	Flygt 3153.095	2017
7	618 Crosswinds Ln.	1996	1996	2	Float Control Only	Hydromatic Model No. S4M1000M3-4 50' cable	1997/2014
8	680 N. Beck Rd.	1991	1991	2	Float Control Only	1 1/4" Barnes Model No. SGVF2032L	1991/2014
9	2595 Emerald Ln.	1991	1991	2	Float Control Only	3" Hydromatic Pump 1-S200M3-4 Pump 2-S4N300M3-4	2012/2014
10	2455 Emerald Ln.	1991	1991	2	Float Control Only	3" Hydromatic Pump 2-S200M3-4 Pump -1 S4N300M3-4	2012/2014
11	401 Woodland Trail Ln.	2005	2005	2	Float Control Only	2" Hydromatic Grinder HPGFX300CC 50' cable 1 1/2" Grundfos Grinder SEG.A15.20.EX.2.1.603	2017

CH 01/20

### Station Upgrade Recommendations – These recommendations should be incorporated into CMOM Plan & Long Term Funding

1. Replace pumps at lifts 4, 7, 8, 9, 10, and 11 every 10 – 12 years
2. Replace pumps at lifts 2 and 3 every 17 – 20 years
3. Replace pumps at lifts 1, 5 and 6 every 20-25 years
4. Replace starters and breakers every 5 years at lift no. 1, 5 and 6
5. Work with integrator to upgrade all operating systems at pump stations. This will eliminate the costs incurred from an engineering firm which isn't necessary for these upgrades.
6. When upgrading of lift nos. 1 and 5 you might want to think about upgrading to VFD controls on the pumps.
7. When performing upgrades on any station think about including adding new level transducer and floats.
8. Recommend new control cabinets for station nos. 8, 9, 10 when upgraded.

# 2020 Capital Improvement Plan



ADJUSTED UPGRADE YEAR	PUMP STATION NO.	COMMENTS	ESTIMATED COST
2021	9	This station will need to be upgraded to 4 Hp pumps which will require larger starters, etc. Recommend using Flygt N-impellor pumps. Discount if performed with Lift Station no. 10.	\$40,000.00
2021	10	This station will need to be upgraded to 4 Hp pumps which will require larger starters, etc. Recommend using Flygt N-impellor pumps. Discount if performed with Lift Station no. 9.	\$40,000.00
2022	2	Proposal from Automatic Systems Co. Includes upgrading proprietary telemetry control system and incorporating into SCADA. Discount if performed with Lift Station no. 3.	\$35,000.00
2022	3	Proposal from Automatic Systems Co. Includes upgrading proprietary telemetry control system and incorporating into SCADA. Discount if performed with Lift Station no. 2.	\$35,000.00
2023	4	Proposal from Automatic Systems Co. Includes upgrading proprietary telemetry control system and incorporating into SCADA.	\$35,000.00
2024	5	This station already has a PLC so upgrading and incorporating into SCADA should be straight forward.	\$33,000.00
2025	1	Upgrade of controls	\$33,000.00
2026	8	This station will need to be upgraded to 4 Hp pumps which will require larger starters, etc. Recommend using Flygt N-impellor pumps. Control cabinet, pumps and guide rails	\$40,000.00
2027	7	This station will need to be upgraded to 4 Hp pumps which will require larger starters, etc. Recommend using Flygt N-impellor pumps.	\$40,000.00
2028	11	This station will need to be upgraded to 4 Hp pumps which will require larger starters, etc. Recommend using Flygt N-impellor pumps.	\$40,000.00
<b>Total Estimated Investment</b>			<b>\$371,000.00</b>

# 2020 Capital Improvement Plan



## Vehicle Replacement Fund

The Vehicle Replacement Fund providing funds, through contributions from the Street Maintenance and Water/Sewer Operating Funds, for the replacement of Public Works vehicles and major equipment. Village forecasting provides a 20 year projection of the fund including replacement costs and frequency and annual dollars needed to fund the replacements. Below is a general overview of the 20 year projections. In 2018, staff is recommending combining the previous separated replacement funds into a single fund for all fleet. The resulting cash balance increase strengthens the position of the fund and reduces overall contributions.

### ***Public Works***

#### Regular Revenue & Expenses

Fund Beginning Balance		\$411,704
<i>Revenue</i>		
Fund Contributions -	Street Maintenance -	\$68,500
	Water/Sewer -	\$0
	Police Department -	\$68,500
<i>Expenses</i>		
Public Works Vehicle	1 Pickup, and a 5 Ton	
Replacements -	Low-Profile at a cost of	\$253,500
Police Department Vehicle	1 Ford Explorer PI at a	
Replacements -	cost of \$39,795	
Projected Ending Fund Balance		\$255,409

# 2020 Capital Improvement Plan



## Motor Fuel Tax Fund

The Motor Fuel Tax Fund provides revenue for various street maintenance activities including road salt, asphalt and road resurfacing. Road resurfacing is the largest expense in this fund. Revenue received cannot support a recommended 20-year road resurfacing program. The Road Resurfacing schedule. Currently, the 20-year road resurfacing program is under-funded by \$4.7 million. The Village completed a network-wide road assessment in 2018 with the purpose of reevaluating our current 20-year plan and how we budget for necessary improvements. The estimated investment needed in the roadways over the next six years are listed below.

Funding Scenario	Total Six Year Costs (2019-2024)	Remaining M&R Backlog (2024)	Total Six-Year Cost	Projected PCI (2024)
\$800K/2YR (Existing Funding Level)	\$2.4M	\$19.4M	\$21.8M	47
\$400K/YR (Existing Funding Level Spent Annually)	\$2.4M	\$19.2M	\$21.6M	47
Maintain Current Conditions (\$833K/YR)	\$5.0M	\$15.3M	\$20.3M	55
Increase Overall PCI to 60 (\$1.2M/YR)	\$7.2M	\$12.6M	\$19.8M	60
Backlog Elimination (\$2.7M/YR)	\$16.2M	\$0	\$16.2M	86
No Major M&R	\$0	\$22.3M	\$22.3M	40

The current road network has a Pavement Condition Index score of 55, which rates it overall in a “Poor” category. Using the information above, the current funding of the biennial program would only maintain the current score of the overall network. There would be no net improvement. The Village Board in 2019 made a commitment of greater investment in our road network by adopting a six-year funding strategy. (CE means Construction Year.)

Funding Source	CY 20	CY 21	CY 22	CY 23	CY 24	CY 25
MFT Funding	\$830,000		\$855,000		\$865,000	
Community Capital Contribution	\$525,000			\$525,000		
Garbage Fund Contribution	\$200,000		\$200,000		\$200,000	
Patching and Maintenance Funding	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000
<b>Total Investment</b>	<b>\$1,685,000</b>	<b>\$130,000</b>	<b>\$1,185,000</b>	<b>\$655,000</b>	<b>\$1,195,000</b>	<b>\$130,000</b>

The total investment in our road network in this six-year window is \$4.98M. Under our old program the total funding would be \$3.93M. We can make an increased investment, in part, due to the increased Motor Fuel Tax passed by the state in 2019.

# 2020 Capital Improvement Plan



Fiscal Year 2021 will be a resurfacing year in our biennial program. In this year we plan to resurface the following streets:

- Independence Boulevard from Constitution Court to US 45 (including Concord Court, Windsor Court, Hancock Court)
- Penn Boulevard from Colony Avenue to Hamilton Drive
- Adams Drive from Monroe Avenue to Penn Boulevard
- Northgate Road from Beck Road to High Point Drive
- Meadowlark Circle
- Warbler Court and Thrush Circle

## Regular Revenue & Expenses

### *Revenue*

Motor Fuel Tax	\$549,990
Special Allocation	\$11,000
Interest	\$3,371

### *Capital Expenses*

2020 Resurfacing	\$830,000
------------------	-----------

### *Non-Capital Expenses*

Asphalt Products	\$28,840
De-Icing Material	\$110,107

## Summary

April '20 Fund Balance	\$581,463
Total Revenue Resurfacing (2019 – 2024)	\$4.98 Million
Projected Resurfacing Costs (Backlog Elimination)	\$16.2 Million
Available CIP Dollars (2019- 2024)	<b>-\$11.22 Million</b>



# 2020 Capital Improvement Plan



## Municipal Debt Obligations

Below is a summary of debt payments in the FY 20/21 Budget and when they expire.

Title	Amount	Fund	Expires	Purpose
<b>2013 Refunding</b>	\$54,374	Community Capital	2020/21	Police Facility Construction/Schiessle Settlement
<b>2013 Refunding</b>	\$37,786	W/S Operating	2020/21	Police Facility Construction/Schiessle Settlement
<b>2008</b>	\$175,880	W/S Operating	2022/23	Grand Ave. Phase I
<b>2010 IEPA</b>	\$44,364	W/S Operating	2030/31	Grand Ave Phase II
<b>2011 Sanitary District</b>	\$125,000	W/S Operating	2032/33	WWTF Phase II
<b>2016 IEPA 026</b>	\$404,995	W/S Operating	2035/36	Lake Michigan Improvements
<b>2016 IEPA 027</b>	\$667,666	W/S Operating	2036/37	Lake Michigan Improvements
<b>2016 Debt Cert</b>	\$293,713	W/S Capital	2021/22	Southeast Utilities Extension