



PUBLIC WORKS MAINTENANCE PLAN

2025

Prepared by:

Jeff Frid, Public Works Superintendent

March 20, 2025

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Total 2025 PWMP Estimated Labor Hours = 19,817

There are four types of labor resources utilized by the Public Works Department and referenced throughout the 2025 Public Works Maintenance Plan. Listed below are those resource types and the abbreviation for each:

- Full-time Public Works staff (FTE)
- Seasonal part-time staff (SPT)
- Institution Community Work Crews (ICWC)
- Volunteer organizations, groups and/or individuals (VOL)

2025 Parks Maintenance Plan

Maintaining the City parks and City-owned property is outlined in the Parks Maintenance Policy (Parks MP, last revised in 2010) and outlines four levels of service. Some of the maintenance and techniques have changed since the last revision to this policy, to create a more efficient workflow. Examples of those changes include utilization of current PW equipment, staffing, and products on the market. An update to the Parks Maintenance Policy is recommended following the completion of the Parks System Master Plan project.

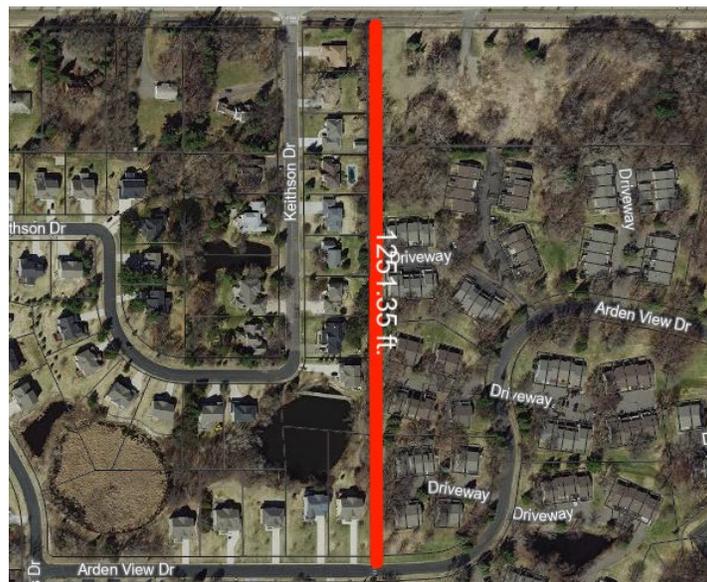
Routine Park Maintenance 960 FTE labor hours estimated; 3 FTEs required; high priority.

Based on the level of service assigned in the Parks MP, each park will receive routine mowing, trimming, trash pickup, and snow plowing of paved trails (excluding minimum maintenance trails (Arden View Dr to Colleen Ave trail, Cummings Park to Lexington Ave trail, Cummings Park/ North Water Tower to Hamline Ave) and other miscellaneous maintenance, if needed. Roadside sidewalk plowing is completed in conjunction with street plowing; refer to the City of Arden Hills Snowplowing, Snow Removal and Ice Control Policy for details.

Onboarding and Training of Seasonal Staff 80 FTE labor hours estimated; 2 FTEs required; high priority

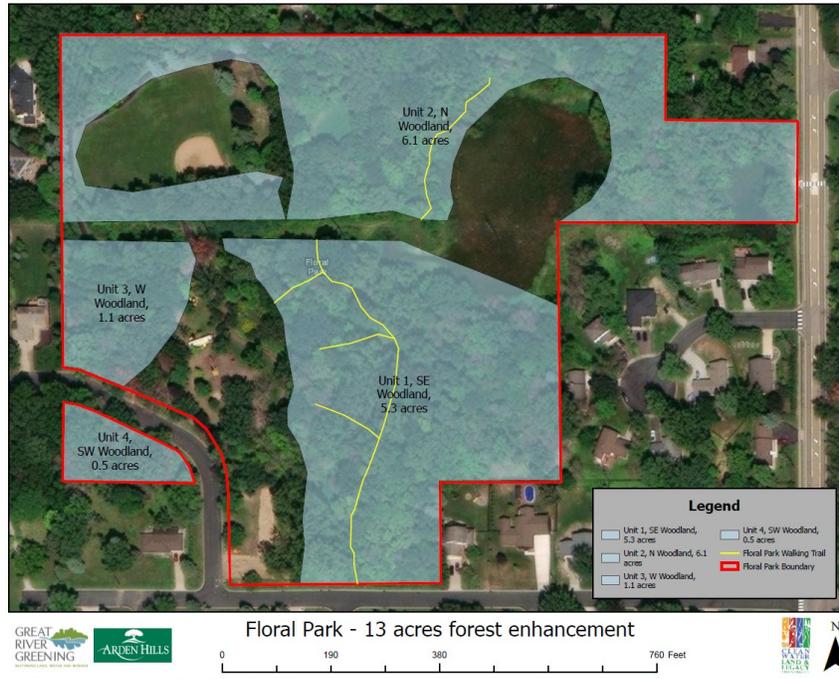
Arden View Dr North Trail Paving Project (see map below) 240 FTE labor hours estimated; 6 FTEs required; high priority

This project will include paving the red highlighted trail as shown on the map. For that section of the trail, crews will either pave over the existing trail or reclaim and then pave in some areas. All dead or diseased trees, along with those needing trimming or removal for preventative maintenance, will be addressed before the trail project begins. Restoration of green space disturbed by the project will take place after the paving is complete. Park benches within the work area will be assessed for repair or replacement as part of this project. There are also two small retaining walls that need blocks replaced prior to paving.



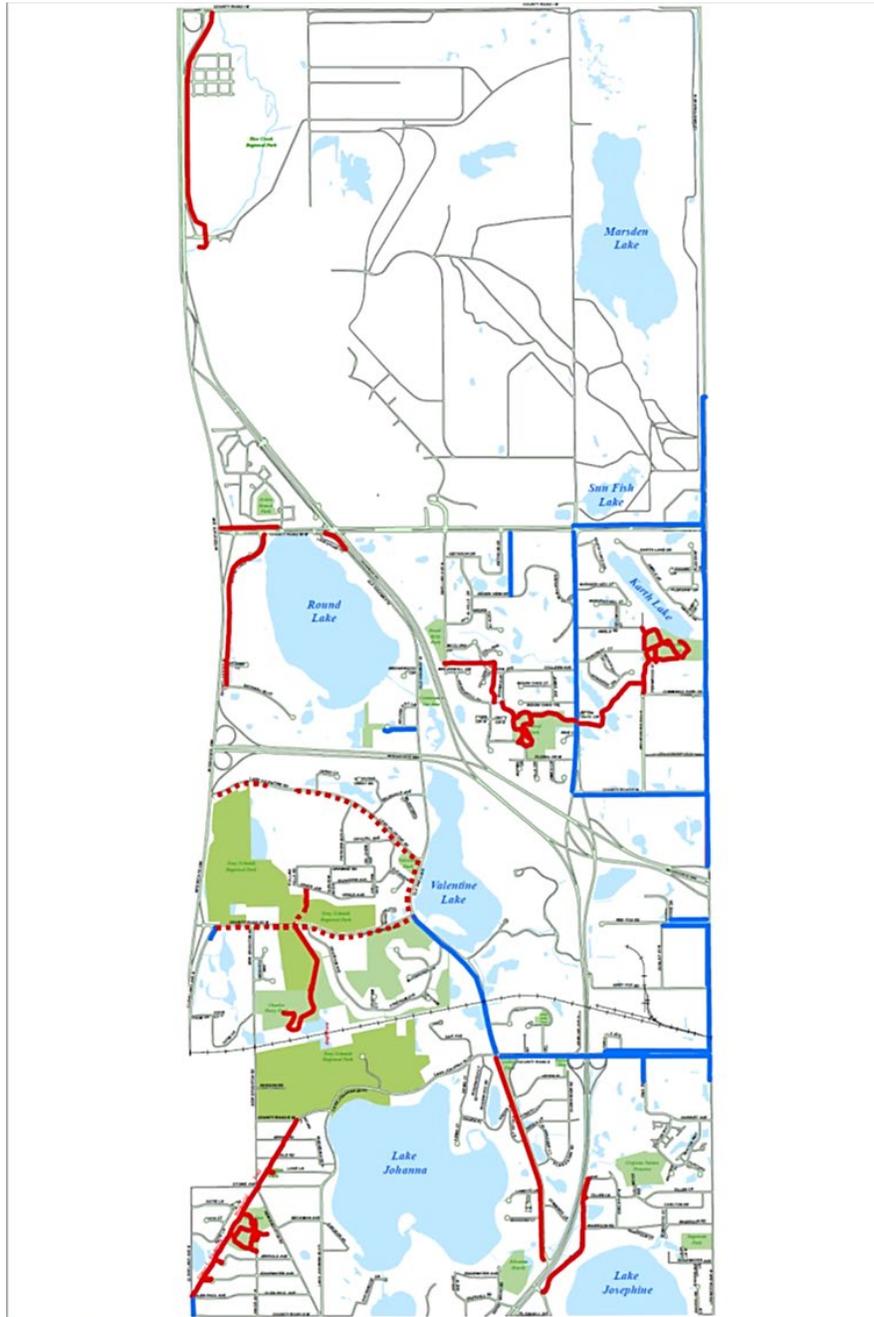
Great River Greening Forest Rehab Project 80 FTE labor hours estimated; 2 FTEs (potentially); high priority.

The work for this project will take place at Floral and Hazelnut Parks with a joint effort between the City and Great River Greening to remove invasive plants, such as buckthorn, from park property. The labor efforts are contracted, and Public Works coordination will be on an as-needed basis.



Snow Plowing Operations for Trails 320 FTE labor hours estimated per event; 2 FTEs required; high priority.

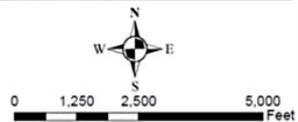
The map, shown below, is for snowplow Route 4 which includes park system trails and street-side sidewalks. The operator for this route also plows and salts the City Hall parking lot and sidewalks. When a full citywide plow event takes place, Route 4 is completed alongside the street routes when Public Works is fully staffed.



TRAIL PLOW ROUTES (4)

••• Truck Priority (7:00am) — Truck

— Tool Cat



Irrigation System 320 FTE labor hours required; 2 FTEs required High Priority.

Maintenance for irrigation systems begins in the spring and the systems are winterized in the fall. During spring startup, PW FTE's test each system to ensure proper operation and make any repairs as needed. Throughout the summer months, the irrigation systems need to be periodically checked for efficient watering and adjusted/ repaired as needed. Listed below are the parks and City-owned properties maintained by PW:

- City Hall
- Highway 96 median gardens (between Highway 10 and Lexington Ave)
- Cummings Park
- Perry Park
- Hazelnut Park
- Triangle monument sign property
- Lakeshore Place (system to be added in 2025)

Spot Planting Replacement and Addition of Irrigation to Lakeshore Place Landscaping. 80 FTE labor hours required; 2 FTEs required Medium Priority.

Our PW Tree Inspector completed an inspection of the landscaping in the Lakeshore Place area in 2023. There is a total of 35 arborvitae bushes that run along the east side of the roadway, 17 of which were replaced in 2024. PW will monitor the need for ongoing watering until the permanent irrigation system is installed.

Replacement of shrubs due to winter die-off will be assessed in the spring of 2025.

The irrigation system plan will include the spruce trees along the north end of Lakeshore Place. PW will also monitor the health of those spruce trees and water them, as needed, until the irrigation system is installed.

Highway 96 Median and City Hall Perennial Gardens 200 FTE labor hours required; 2 FTEs required Medium priority.

Scheduled for spot plant replacement or infill from dead plants. Ongoing weekly weeding is completed throughout the summer months.

Softball Infield Grading and Maintenance 180 FTE labor hours required; 1 FTEs required high priority.

This work will be completed in the spring, summer, and fall timeframe by FTE's and SPT staff. Field lighting, fencing, dugouts, bases, base boxes, trash/recycling receptacles and field signage will be inspected and repaired as needed. Ongoing maintenance, field preparation, prior to practices and games, is completed by SPT Staff. The park locations and number of fields are-listed below. Ongoing maintenance and field prep, per the recreations schedule, continues throughout spring, summer, and fall.

- Cummings Park (1 field)
- Royal Park (1 field)
- Floral Park (1 field)
- Perry Park (3 fields)
- Hazelnut Park (1 field)

Athletic Field Striping and Setup 180 FTE labor hours required; 1 FTEs required high priority.

Field striping and setup is completed for soccer and softball fields at the parks listed below throughout the spring, summer, and fall. This work includes the initial field layout and soccer goal setup completed by FTE's.

- Royal Park (foul lines)
- Cummings Park (foul lines, 2 adult soccer fields, 1 youth soccer field)
- Floral Park (foul lines)
- Perry Parks (foul lines, 3 fields)
- Hazelnut Park (foul lines, 2 adult soccer fields)
- Valentine Hills Elementary (running track)

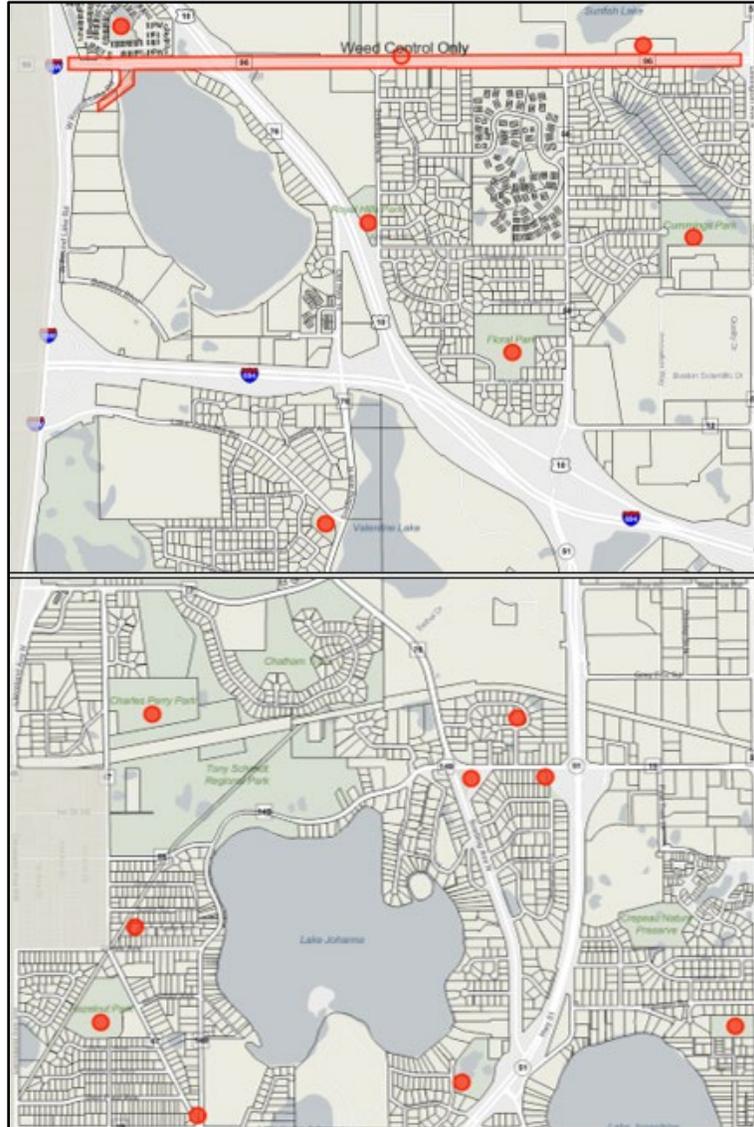
Floral Park Ball Field Drain Tile Improvements 10 FTE labor hours required; 1 FTEs required Low priority.

Create a plan for installation and determine budget amount to be considered for the 2026 budget.

Note, this needs to be determined by July 31st.

Weed Control, Aeration and Fertilization 160 FTE Labor Hours required; 2 FTEs required High priority.

These types of landscape maintenance are completed at the City-owned property locations shown on the map below. PW staff completes that work throughout the city, annually, using a concentrated liquid herbicide and a slow-release granular fertilizer. This project is typically completed in early summer and again in late summer.



Tree and Miscellaneous Watering 320 FTE labor hours required; 2 FTEs required High priority.

Tree watering is completed with tree bags during the first 2-3 years after planting. New trees that were planted in 2022 and 2024 will receive tree bags and will be fertilized on a routine basis throughout the growing season. The majority of new trees were planted in Cummings and Floral Parks and along Highway 96. The tanker truck will be used in an effort to establish grass within PW project areas where restoration was completed all divisions. Other park plantings may also be watered using the tanker truck depending on seasonal rainfall.

Newly planted trees that were planted in 2024 and are still under warranty will be inspected and replaced as PW staff and the contractor agree as warrantee work.

Tree Mulching 60 FTE labor hours required; 2 FTEs required Medium priority.

Top dressing will be applied around all trees located along Highway 96 and within the ROW between Highway 10 and Lexington Ave (per direction from the City Council in 2022). The Lakeshore Place trees and shrubs now also includes mulching annually.

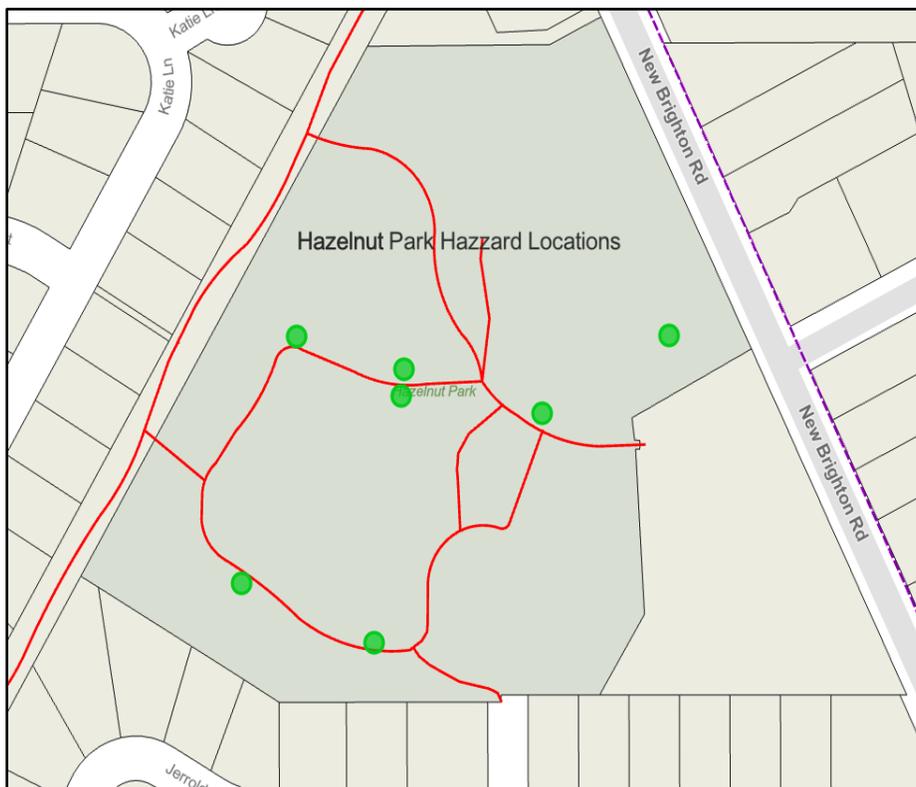
Rough Mowing – Easement Clearing Areas 280 FTE labor hours required; 2 FTEs required Medium priority.

Create brush clearing map for easements and City-owned property to be completed, as needed, with the Mini X or Altoz brush mowers. This map will be used by the operator as direction in the field annually. The map should identify mowing frequency, boundaries, and track the last time mowed.

Trail/Park Tree Trimming and Diseased/Hazard Tree Removal 300 FTE labor hours estimated; 3 FTEs required Medium Priority.

This work will be focused on Arden View Dr. trail, Floral Park, Hazelnut Park, Freeway Park, and Arden Oaks Park. All stumps located in green/mowed spaces will be ground and restored. A tree contractor will remove trees larger than 12" in diameter.

Hazard Tree Removals at Floral and Hazelnut Parks (see the maps below) 640 FTE labor hours estimated; 4 FTEs required High priority.



Freeway Park: 20 FTE labor hours estimated; 1 FTEs required High Priority.

3 Large cottonwood trees and 1 ash tree (EAB diseased tree near the warming house) to be removed by a contractor in the spring of 2025. This project will need assistance from PW Staff for coordination.



Tree Replanting Plan: 60 FTE Labor Hours estimated; 2 FTEs required Medium Priority.

- Hazard trees to be removed in 2025 are substantial. The replanting plan will be developed in 2025 for planting in 2026. Floral and Hazelnut parks are undergoing a large-scale reforestation project removing buckthorn. PW and Great River Greening will need to evaluate locations of new trees, species, and cost to the city. *** Note-a quote and new tree location map will be completed by June 1st for budgeting **and** planning.***
- A tree planting plan for Arden Oaks and Freeway Parks to be developed in 2025 for planting in the fall of 2025.
- Replace tree that was removed at South Point Park. (see the map below)



Stump Grinding for Trees Removed Along Hwy-96 and Round Lake Rd 180 FTE Labor Hours estimated; 3 FTEs required Medium Priority.

In 2024, PW removed approx. 40 dead or diseased trees from the Highway 96 and Round Lake Rd boulevard. At this point, Council direction is to not replace the trees that were removed. The stumps for the removed trees are planned to be ground and restored in 2025.

Diseased/Hazard Tree Inspections 100 FTE Labor Hours estimated; 1 FTEs required High Priority.

Tree inspections requested by property owners is offered between the end of May 30th through November 7th in 2025. A hazard tree concern will be assessed on a case-by-case basis and completed as needed for public safety throughout the year.

The process for tree inspection and the rating system used by our 3 PW licensed tree inspectors is the same for both proactive and reactive (resident-requested) tree inspections. Using a mobile GIS application, our inspector uses guidelines and reviews research from the MN Department of Agriculture and personal experience to assess the overall health of each tree on both private and public property. Ultimately, during the inspection we are looking for trees that are a health/safety hazard or trees that are diseased and have the potential of spreading the disease to surrounding trees. PW understands the importance of habitat dead trees provide to wildlife.

Lakeshore Place Shoulder Maintenance 20 FTE Labor Hours estimated; 2 FTEs required High Priority.

Install shouldering materials along Lakeshore Place from pavement edge to new mulch edge prior to crack seal, chip seal and fog seal JPA Project.

Buckthorn and Invasive Species Removal (outside of GRG project) 120 FTE Labor Hours estimated; 3 FTEs required Low Priority. are generally completed by the ICWC and/or VOL's groups, with the assistance of FTE's. The highlighted areas on the maps (shown below) of Ingerson Park and Chatham Open Space indicate where invasive plants can be removed, as time, resources and ICWC availability allow, in 2025.

Note: Chatham Open Space had significant amounts of buckthorn removed by volunteers and the goat grazing project in 2023. Goat grazing in the Chatham Open Space is (TBD in 2025). Buckthorn removal continued to be an ongoing effort for volunteers and the Institution Community Work Crews (ICWC) crew as time allowed. There was more progress made in the Chatham Open Space and areas in 2024, but more work will continue as time and resources are available in 2025.



Hockey Board Preventative Maintenance 60 FTE Labor Hours estimated; 2 FTEs required Low Priority.

This work will include pressure washing and sealing the boards with a clear sealer at Hazelnut Park. This project can be completed by volunteers with the assistance of FTE's. The Hazelnut Park hockey rink is highlighted below.



Freeway Park and Perry Park Hockey Rink Condition Evaluation 10 FTE Labor Hours estimated; 1 FTEs required Medium Priority.

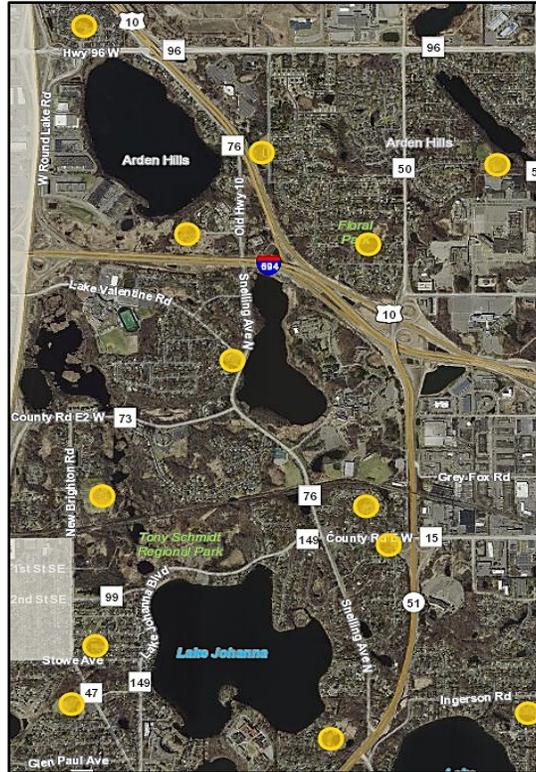
The hockey boards are approaching the end of useful life, evaluate the condition of the hockey rink elements (boards, fencing, posts, gravel, grading, etc.) and prepare recommendations for rehabilitation project. *** NOTE- this evaluation should be complete by June 1 for budgeting.***

Play Structure Inspections and Wood Fiber/Mulch Maintenance 160 FTE Labor Hours estimated; 2 FTEs required High Priority.

This work will be completed based on the spring playground inspection measurements of mulch depth. Monthly play structure inspections are completed during the spring, summer, and fall months. During inspections, damaged or vandalized equipment will be replaced, and the structure is checked for overall safety. Arden Oaks and Freeway Parks will have mulch replaced as part of the improvement project in 2025.

A full replacement of the play structure fiber mulch is scheduled for every 10 years as a guideline. Valentine Park is proposed for 2025. **120 FTE Labor Hours estimated; 3 FTEs required Medium Priority.**

The map below outlines all play structures citywide.



Park Building Maintenance – 640 FTE Labor Hours estimated; 2 FTEs required High Priority.

Monthly inspections, and project details below.

- **Cummings Pavilion**
 - Pavilion full roof replacement spring 2025.
 - Remove rain shelter.
 - Pressure wash concrete patio, sidewalks, picnic tables, and exterior of the building.
 - Replace furnace and water fountain filters.
 - Contract to clean HVAC duct system.
 - Sanitize and deodorize interior rubber flooring.
- **Perry Pavilion**
 - Pressure wash concrete patio/ sidewalks, picnic tables, and exterior of the building.
 - Paint walls in the restrooms and kitchen.
 - Open the building and turn on plumbing in the spring. Winterize plumbing in the fall.
- **Perry Warming House**
 - Inspect roof.
 - Sanitize and deodorize interior rubber flooring.
- **Freeway Warming House**
 - Roof inspection, complete as-needed roof repairs.
 - Pressure wash exterior.
 - Spot replacement of the siding, soffits, fascia and paint exterior.
 - Sanitize and deodorize interior rubber flooring.

The list below are parks with rain shelters. Rain shelters will be inspected annually, and inspection results will be tracked for preventative maintenance and annual budgeting/planning.

- Arden Manor Park
- Royal Hills Park
- Floral Park
- Cummings Park
- Hazelnut Park
- Ingerson Park
- Johanna Marsh

Hard Court Maintenance 120 FTE Labor Hours estimated; 2 FTEs required Medium Priority.

For each location below:

- **Cummings Park**, double tennis court and attached basketball court. Last resurfaced- 2020
 - Install tennis nets, remove debris, crack fill courts (contractor).
- **Arden Manor Park**, basketball court
 - Reconstruction potentially in 2025
 - Add a “rules and park hours sign” at the Arden Manor Park Basketball Court at the request of the Arden Manor Homes Manager.
- **Royal Park**, tennis and basketball court. Reconstructed in 2020
 - Install tennis nets, remove debris, crack fill (contractor).
- **Floral Park**, tennis and basketball court
 - Install tennis nets, remove debris
- **Hazelnut Park**, tennis and basketball court
 - Install tennis nets, remove debris
 - Scheduled for 2025 pavement rehabilitation
- **Arden Oaks**, basketball court
 - Resurface/contracted park project in 2025.
- **Freeway Park**, basketball court
 - Resurface/contracted park project in 2025.
- **Ingerson Park**, basketball court (last cracked filled in 2018)
 - Pressure wash and crack fill court (contractor) Assess the condition, this park is scheduled for a rehab project in 2027.

Pleasure and Hockey Rink Maintenance 1,920 FTE Labor Hours estimated; 3 FTEs required High Priority.

This work typically begins in November to build ice, with the goal of having a solid ice base in time for the holiday season. Prior to establishing ice, PW staff completes the below items to prepare for skating season.

- Coordinate temporary warming house delivery and electrical connection to Hazelnut skating rink.
- Inspects, cleans, and delivers needed supplies to the warming houses.
- Inspect and repair rink lighting, damaged hockey boards, back stops, and grade inside the rink if needed.

Once ice is established, PW cleans and floods the ice daily, Monday – Friday. PW coordinates with the Recreation Manager to ensure the warming houses are staffed with attendants during rink hours.

Hazelnut Park Sledding Hill 20 FTE Labor Hours estimated; 2 FTEs required Medium Priority.

Added in 2023, Public Works will continue to maintain this space for sledding activities in the winter months. Maintenance includes brush/tall grass cutting and removal of woody vegetation. This maintenance will be completed by October 31st.

Ingerson Park and Sampson Park (scheduled for a rehab project in 2027) 15 FTE Labor Hours estimated; 1 FTEs required High Priority. Inspect all park facilities and develop a list to incorporate in the capital improvement planning.

PTRC-Inspired Projects:

Perry Dog Park Water Source Project (PTRC recommendation from 2022) 80 FTE labor hours required; 2 FTEs required Low Priority.

An improvement to the Perry Dog Park can be made, if time allows, to tap-off of the existing irrigation system to supply a water source for public use while the dog park is open.

Potential Volunteer projects:

- Park bench cleaning
- Buckthorn removal, small plant pulling.
- Install sealer on gaga ball pits. Hazelnut, Cummings, Arden Manor, Floral.
- CNP natural wood chip installation on trails, continued from chips installed in 2024.
- Weed/ replant as needed gardens at Johanna Marsh Park.
- Weed play structure mulch

Citywide Municipal Trail Inspections 40 FTE Labor Hours estimated; 1 FTEs required Medium Priority. – In 2024 Public Works completed half of the trail system, in 2025 PW will inspect the remainder of the trails system and update the condition ratings to assist in planning for maintenance repairs and rehabilitation schedule.

Citywide Bench Inspection 60 FTE Labor Hours estimated; 1 FTEs required Low Priority.

Bench inventory and map need to be updated. Once created, determine inspection cycle for each bench. Identify “advertisement type” benches, those should be inspected annually.

2025 Parks Improvement Projects (Freeway and Arden Oaks Parks) PW Responsibility 480 FTE Labor Hours required; 3 FTEs required High Priority. (coordinate projects based on the contracted project start date.)

- Freeway Park
 - Tree removals 3 cottonwood clusters, 1 EAB ash, trim 1 maple near play structure.
 - Remove guardrail at lower area
 - Tentative- removals of the existing play structure.
 - Tentative- fiber mulch to be installed by PW/ICWC.
 - Tentative removal of other site amenities (benches, tables, hoops, etc....). Coordinate with project plans.

- Arden Oaks Park
 - One tree removal and stump grinding near existing swing set container.
 - Tentative- removals of the existing play structure.
 - Tentative- fiber mulch to be installed by PW/ICWC.

Assistance with the Parks Master Plan as needed 40 FTE Labor Hours required; 1 FTEs required Medium Priority.

- Update/revise Parks Maintenance Policy to set standards and expectations of service reflected in the Parks Master Plan

Miscellaneous Carryover Projects from 2024

- A proposal was made in the 2024 PWWP to tap off the irrigation for a water source at the Perry Dog Park. This item will be added to the 2025 PWWP to be completed as time allows.
- Continue efforts to add a drain tile system to the ball field at Floral Park which will discharge water into the newly installed 2024 PMP drainage system.
- Buckthorn removal continued to be an ongoing effort for volunteers and the Institution Community Work Crews (ICWC) crew as time allowed. There was more progress made in the Chatham Open Space and Cummings Park areas in 2024, but more work will continue as time and resources are available. The Floral Park buckthorn removal is now planned to be completed with the Green Rivers Greening project scope in early 2025.
- Irrigation/drip line was not installed along Lake Shore Pl. retaining wall – to be completed Spring 2025.
- Full replacement of the mulch at the Valentine Park play structure
- Contracting the HVAC duct cleaning at the Cummings Park Pavilion.

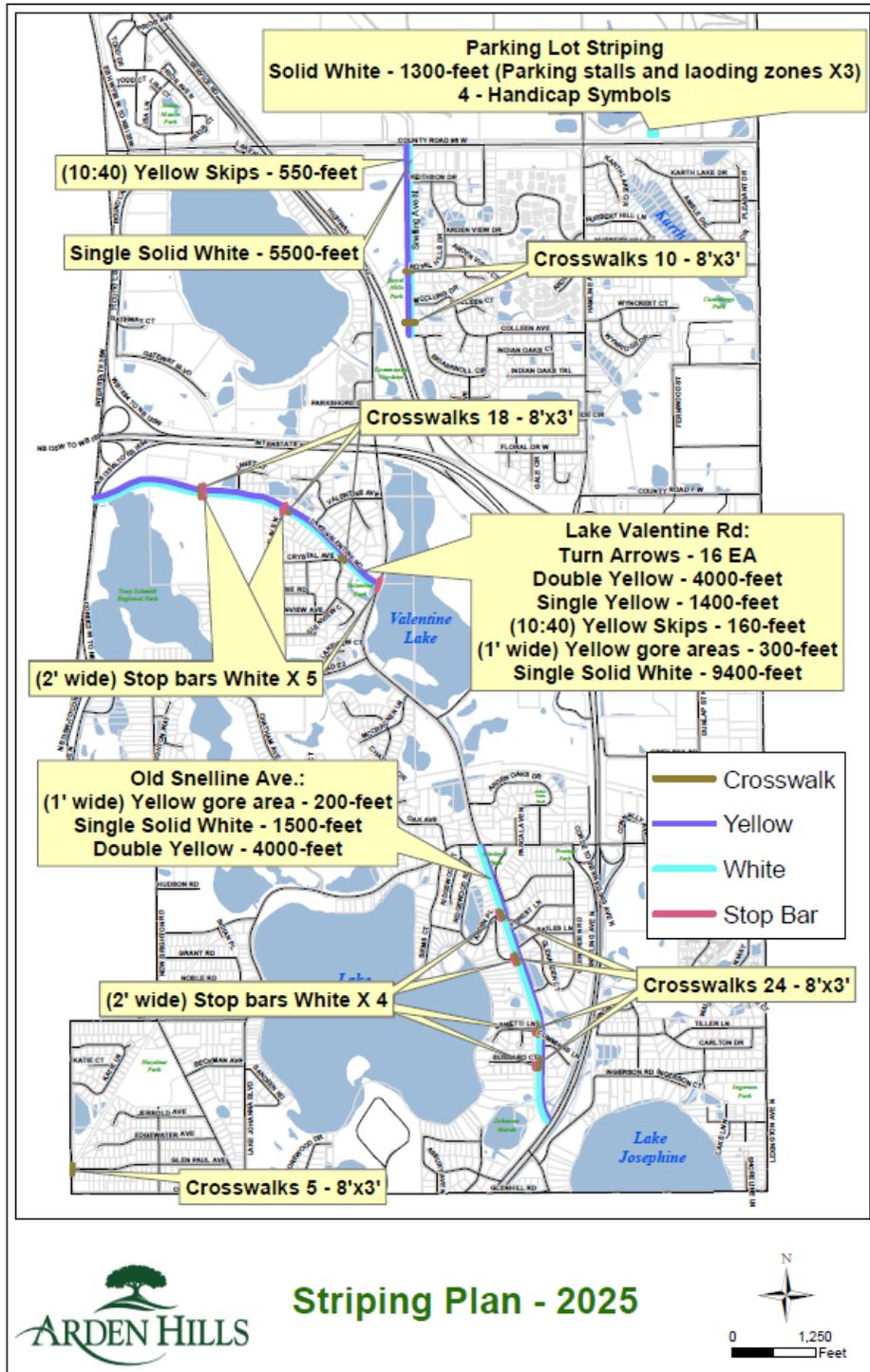
Create a Full Park Asset List 60 FTE Labor Hours required; 1 FTEs required Low Priority.

- Include install year, determine useful life and proposed replacement date. Update assets into GIS.

The PW Parks Lead Worker will track items throughout the year that can be added to the 2026 PWMP. If the items are special projects, have budget estimates and quantities to the PW Superintendent by July 1st, 2025.

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Pavement Markings – Street striping and symbols are maintained every other year. This work is typically coordinated with Ramsey County and/or the JPA Coon Rapids project. An assessment of street symbols will be completed in 2025 and added to the 2026 street maintenance plan. Streets with striping and symbols within a PMP area are generally completed as part of the PMP contract.

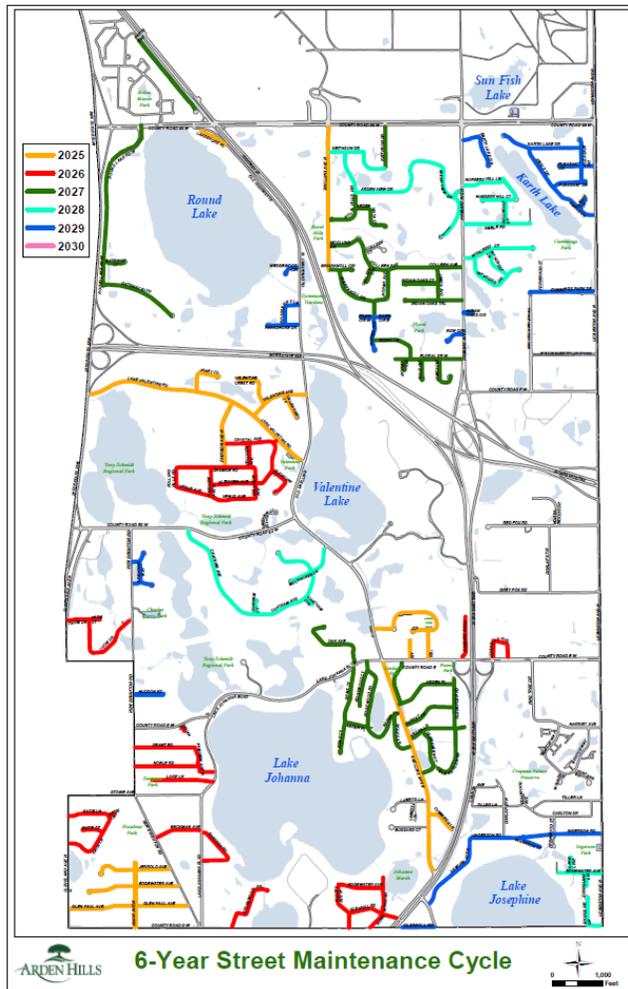


Misc. to be completed prior to June 1st JPA Street Maintenance **120 FTE Labor Hours required; 3 FTEs required High Priority.**

- Clean out riprap of sediment at City Hall parking lot prior to JPA Fog Seal.
- Shouldering install on Lakeshore Place prior to JPA Fog Seal.
- Street repairs to Snelling Ave N prior to JPA Fog Seal.

Pothole Patching 480 FTE Labor Hours required; 4 FTEs required High Priority. – Public Works fills potholes citywide twice annually. Operations begin as temperatures start to rise at the end of winter and potholes begin to form. In the early weeks, Public Works will use a “cold-mix” type of fill material to fill in severe potholes until bituminous plants open (usually late March/early April) and we can purchase “hot-mix” material. The next full citywide pothole patching operations will happen in the fall to prepare for winter plowing. Throughout the summer months Public Works will address potholes as they are noticed or reported.

Spot mill and patching 480 FTE Labor Hours required; 4 FTEs required High Priority. - will be completed by PW staff within the red highlighted streets on the map below. This work is in preparation for the 2026 seal coating/crack filling maintenance project. The projected 6-year street maintenance cycle is primarily for sealcoat and crack filling maintenance planning.



Note: Look ahead to County project work impacting city utilities on County Rd D and New Brighton Rd for County Project scheduled for 2026.

Street Sweeping **480 FTE Labor Hours required; 2 FTEs required High Priority.** – Public Works performs street sweeping operations citywide twice annually. Operations occur in the spring typically as the snow has melted away from the curb line and again in the fall towards the end of leaves falling. Sweeping occurs as needed during the summer months primarily as a result of storm damage. Street sweeping is a large contributor of improved water quality and also included in our MS4 permitting process. If time allows, Public Works will perform an additional round of sweeping in the fall within areas of heavy foliage and spot sweeping after summer storms.

- *Create a map of the heavy foliage areas.*

2026 PMP – Public Works Maintenance Involvement **80 FTE Labor Hours required; 2 FTEs required High Priority.**

- Utility locating and other misc. needs during the feasibility process.
- Field inspect street signage within the project corridor and report replacement needs
- Measure sanitary sewer structure ring stack thickness in inches, update on Collector

Vegetation Removal **180 FTE Labor Hours required; 3 FTEs required Medium Priority.** – Right-of-Way (ROW) tree trimming or tree removal if needed. This includes tree limbs that could damage street maintenance equipment, public safety related trimming, and trees blocking street signage. ROW ground cover mowing is completed along city owned boulevards and utility easements to keep vegetation from growing over the roadway. Attention is also given as needed to intersections where sight lines and motorist/ pedestrian safety is a factor.

Street Signage- **120 FTE Labor Hours required; 2 FTEs required High Priority.** – Throughout the year, PW repairs damaged signage from storms, vehicle accidents, vandalism, and other misc. reasons. The MUTCD requires cities to follow retro reflectivity guidelines per our adopted policy. The city chose the replacement method-

“Expected Sign Life. The installation date is labeled or recorded when a sign is installed, so that the age of any given sign is known. The age of the sign is compared to the expected sign life. The expected sign life is based on the experience of sign retro reflectivity degradation in the City. Signs older than the expected life will be replaced.”

Carryover from 2024- Staff will utilize our current data to prioritize a small sign replacement project for 2025. In addition, a replacement project will be created for 2026.

Weight Restriction Signage - **21 FTE Labor Hours required; 7 FTEs required High Priority.**

Inspect the split rail fencing along the Siems Court neighborhood retaining walls. **5 FTE Labor Hours required; 1 FTEs required Medium Priority.** - The fencing will be inspected in 2025 and replaced if it's found to be in disrepair. If the fencing can wait until 2026, the replacement will be added to that PWMP as we will be in the area for street repairs on our maintenance cycle.

Curb repair at 1931 Noble Rd. 5 FTE Labor Hours required; 1 FTEs required Low Priority



Resident Request

Zoom to Pan

Description	Repair cracked curb with sealant. Call David Swearingen prior to work. I put a tube of concrete sealant on your table to try. Call Jeff with any questions. Fit this job in when available between locates.
Notes	Needs more than just crack filler
Status	Completed
Priority	High
Location	1931 Noble Rd
Assigned on Date	6/5/2023, 8:53 AM
Editor	Joe.Mooney
Creator	David.Swearingen



Lake Johanna Blvd. Plastic Bollards (Coordinated with Ramsey County) (per event) 64 FTE Labor Hours estimated; 4 FTEs required; Low Priority.— In 2024, plastic bollards were installed along the northbound shoulder on LJB near Stowe Ave to County Rd E at the request of City Council. Ramsey County provides the material and performs the installation and removal of the bollards annually outside of Winter months. Arden Hills PW is responsible for any repairs needed during the time at which they are installed. The repair operations require multiple staff to perform the repair and traffic control (flagging).

Solicitation Signs Code Enforcement (per policy created in 2023) 25 FTE Labor Hours estimated; 1 FTE required; Medium Priority.

Rain Gardens – **160 FTE Labor Hours required; 2 FTEs required Low Priority.** Typical maintenance activities include, pruning (spring/fall), replacing plants, adding mulch, pulling weeds, removing sediment, removing trash and inspection. Per the Municipal Separate Storm Sewer System (MS4) Permit, inspection of rain gardens should occur annually. Public Works needs to develop an updated rain garden location map and create a plan for future maintenance. Current maintenance is ordered “as needed”, addressed with the Street Maintenance Plan areas or at rain gardens in highly visible areas.

Surface Water Ponds – **160 FTE Labor Hours required; 2 FTEs required Medium Priority.** Maintenance activities include removal of excessive vegetation, removal of trash/debris and removal of sedimentation or dredging. Adequate access must be provided for inspection, maintenance, and landscaping upkeep, including appropriate access needs for equipment and vehicles for when more extensive repairs are required. Primary issues we look for during inspections is clogging of the inlets and outlet, weir structure condition, erosion and gulley formation, sedimentation build up and undercut of adjacent roadways or trails. Per the MS4 Permit, inspection of surface water ponds should occur once with each permit cycle which is typically 5 years. Public Works needs to develop an updated surface water pond map and create a plan for future maintenance and rehabilitation projects. Currently, pond maintenance and rehabilitation is included in the City’s PMP projects. Pond elevation control points were installed at ponds dredged during the 2024 PMP.

Outfall condition Inspection – **80 FTE Labor Hours required; 1 FTEs required High Priority** Following the MS4 Permit, the City is required to inspect every municipal outfall (outlet/inlet) once with each permit cycle which is typically 5 years. Arden Hills currently has 439 outfalls inventoried so we will inspect roughly 90 structures each year. Through inspection, a report is created to address condition, repairs needed, odor detection or inflow & infiltration concerns.

Grit Chambers – **180 FTE Labor Hours required; 3 FTEs required High Priority.** Public Works inspects and cleans every grit chamber annually. Grit chambers can be in the form of a baffled structure, separated tanks or a simple sump style. It is important to clean these structures more frequently as they are an important factor in promoting water quality by separating sediment and other debris before reaching our water bodies. These are also typically installed directly upstream from ponds to help reduce prolong the time needed for costly dredging activities. Public Works is currently updating inventory of existing grit chamber structures.

Open Ditches & infiltration basins **120 FTE Labor Hours required; 3 FTEs required High Priority.** follow the same maintenance activities. Inspection for repairs or erosion issues, remove debris and vegetation removal.

Catch Basins – **240 FTE Labor Hours required; 3 FTEs required High Priority.** Public Works conducts full structure inspections every 5 years to address any repair needs. Issues to look for are inflow & infiltration, settling of surrounding pavement or curb, cracking of interior structure concrete, drain tile cleaning and any blockage with flow.

Storm sewer mainlines – **120 FTE Labor Hours required; 2 FTEs required High Priority.** Inspection via televising camera is conducted on an as-needed basis. Full inspections are completed prior to Pavement Management Program (PMP) projects to identify any structural repairs needed. A jurisdictional map needs to be created that identifies City/County/MnDOT/Private ownership of storm sewer.

Grading and Erosion Control Permit management – Following City Ordinance Chapter 15 (Erosion and Sediment Control) along with MS4 requirements, construction site inspections are conducted for all land disturbance activities for both residential projects and developments as defined within the ordinance. These inspections ensure that the permit holder is staying in compliance with what is required for erosion control and helps promote water quality.

Gopher State One Call locates for structures, sewer main along both City and County roads.

- Same details as Water division section.

2026 PMP Stormwater Inspections **30 FTE Labor Hours required; 1 FTEs required High Priority.**– Public Works will be inspecting all stormwater elements within the 2026 PMP corridor to determine needs while developing and budgeting for that project. The 2026 PMP is located around the Karth Lake neighborhood (inspection maps not currently created).

Culvert Rehabilitation at Chatham Open Space – Through inspections, Public Works has identified 4 culverts within the Chatham Open Space that are in need of rehabilitation. The amount of work is substantial and will require planning and budgeting over 2025 to plan for the work to be done in 2026. This should be completed by June 1st.

Drainage Maintenance near 3270 ½ Old Snelling Ave to the MNDOT/ Highway 51 ditch will be explored by PW and Engineering in 2025. Depending on the cost of the project, this may have to be budgeted for 2026 completion.

Carryover Projects from 2024 (Priority scheduling for spring/early summer for these projects)

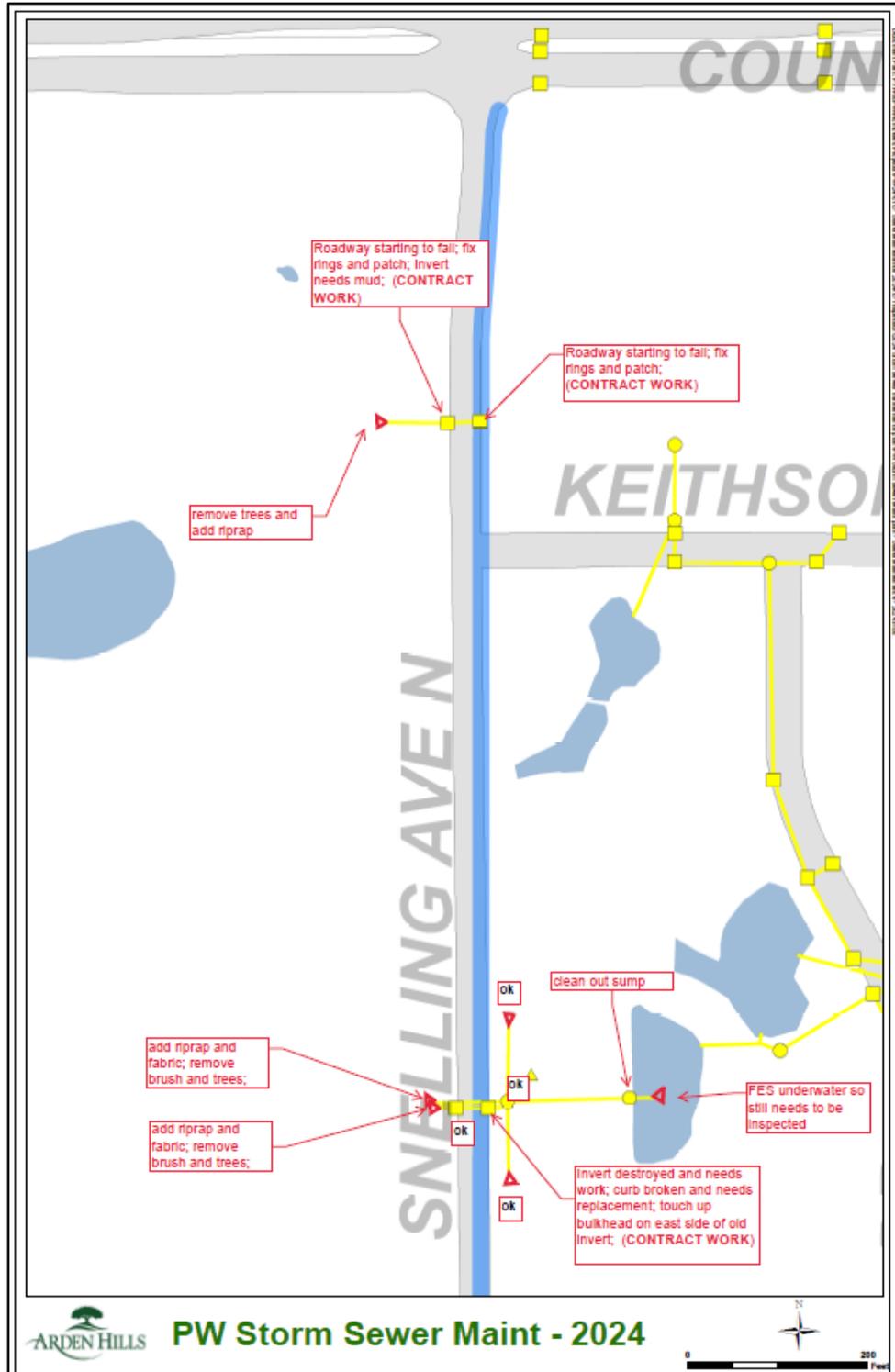
PW will review the missing SAFL baffle within the CB on Glenview Ave that discharges to Valentine Park. (Carryover from 2024) **20 FTE Labor Hours required; 2 FTEs required High Priority.**



The pond located at Cummings Park Dr and Lexington Ave was identified as needed the below work done, sediment removal and outfall maintenance that was not completed in 2024. **60 FTE Labor Hours required; 3 FTEs required High Priority.**

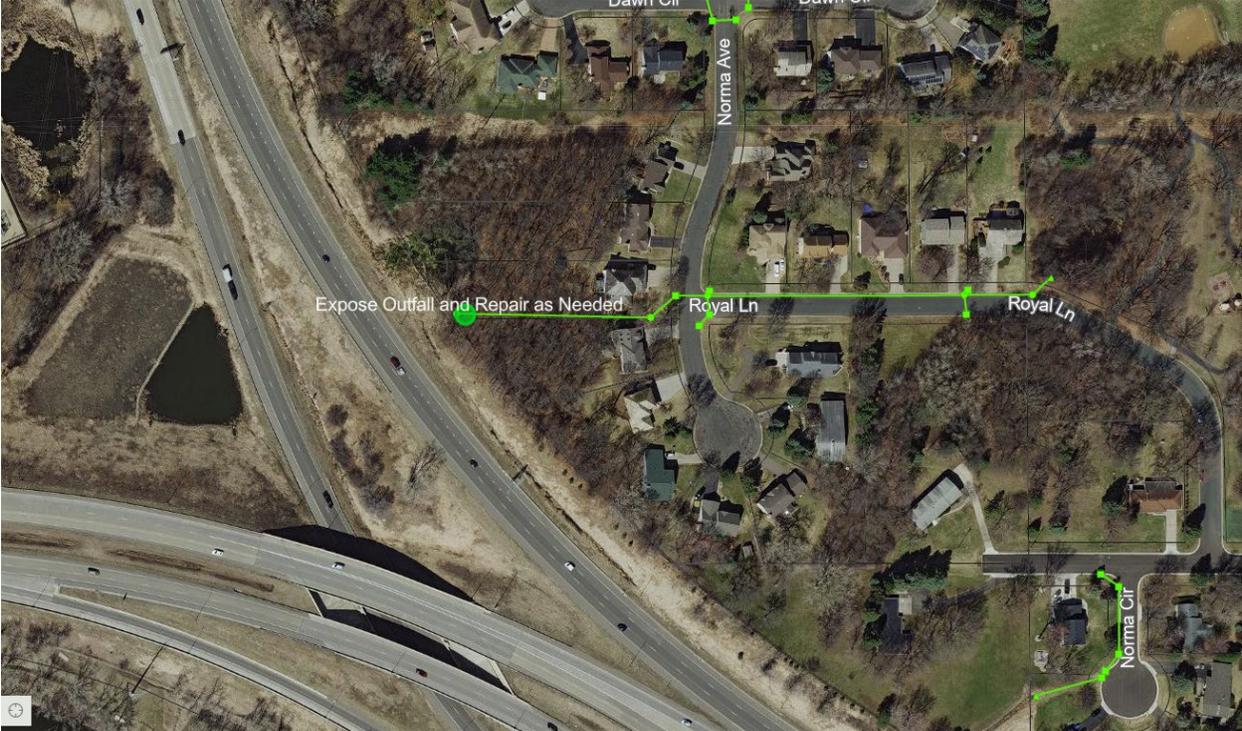


Repair catch basins along Snelling Ave **120 FTE Labor Hours required; 3 FTEs required High Priority.** as called out on the below map. This is a carryover from 2024 and prioritized for spring of 2025 prior to JPA street maintenance. This work may conflict with the proposed trail improvements on the west side of Snelling Ave N. related to the North Heights Apartments development. Coordination will be necessary. Work on the east side of Snelling Ave can still take place prior to JPA work, ideally.



Storm Structure Repair- The map below outlines a project related to the 2024 PMP that PW was unable to completed in 2024. The structure highlighted is a possible contractor projects that would be coordinated through PW.

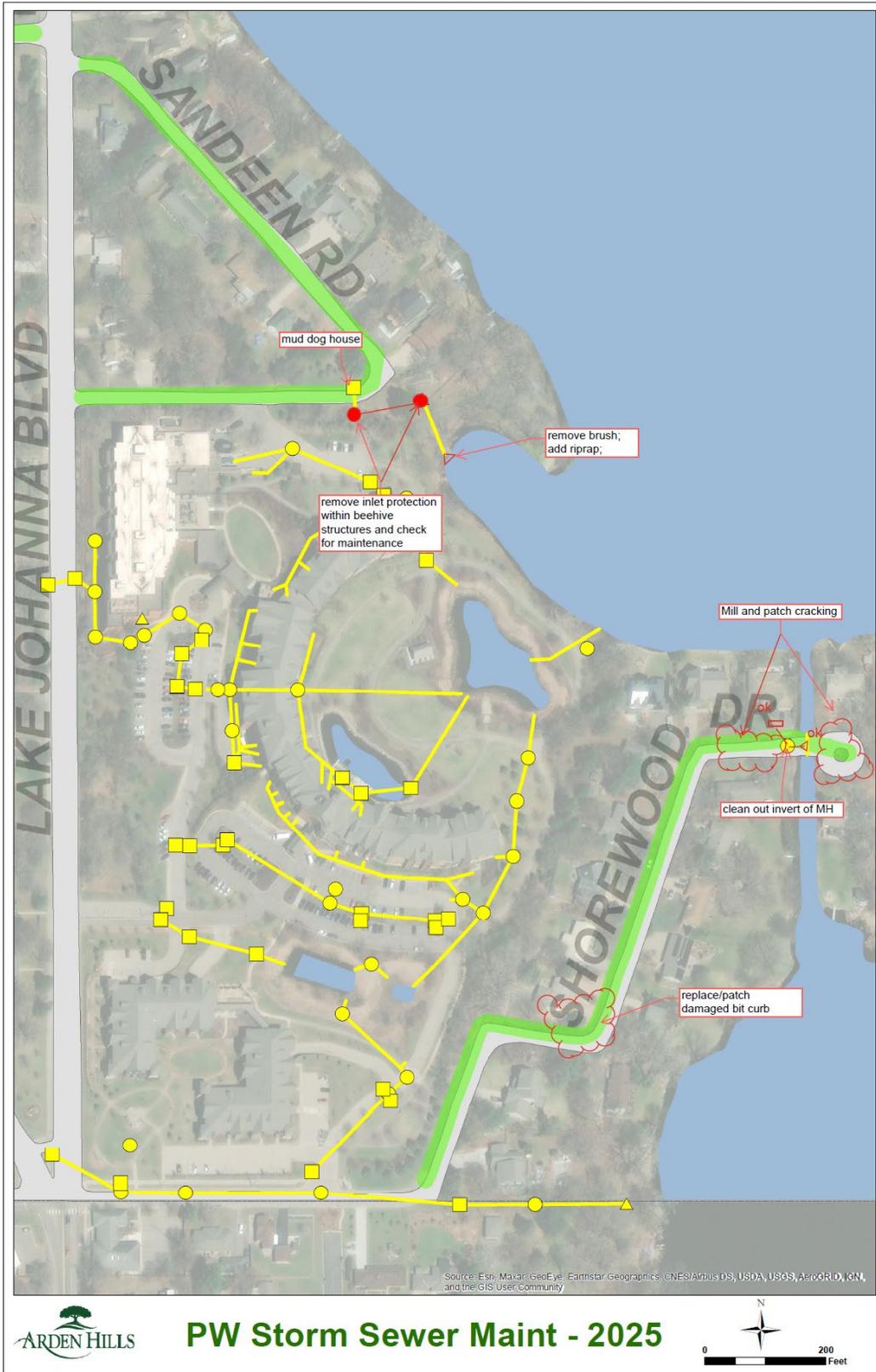
20 FTE Labor Hours required; 2 FTEs required High Priority.



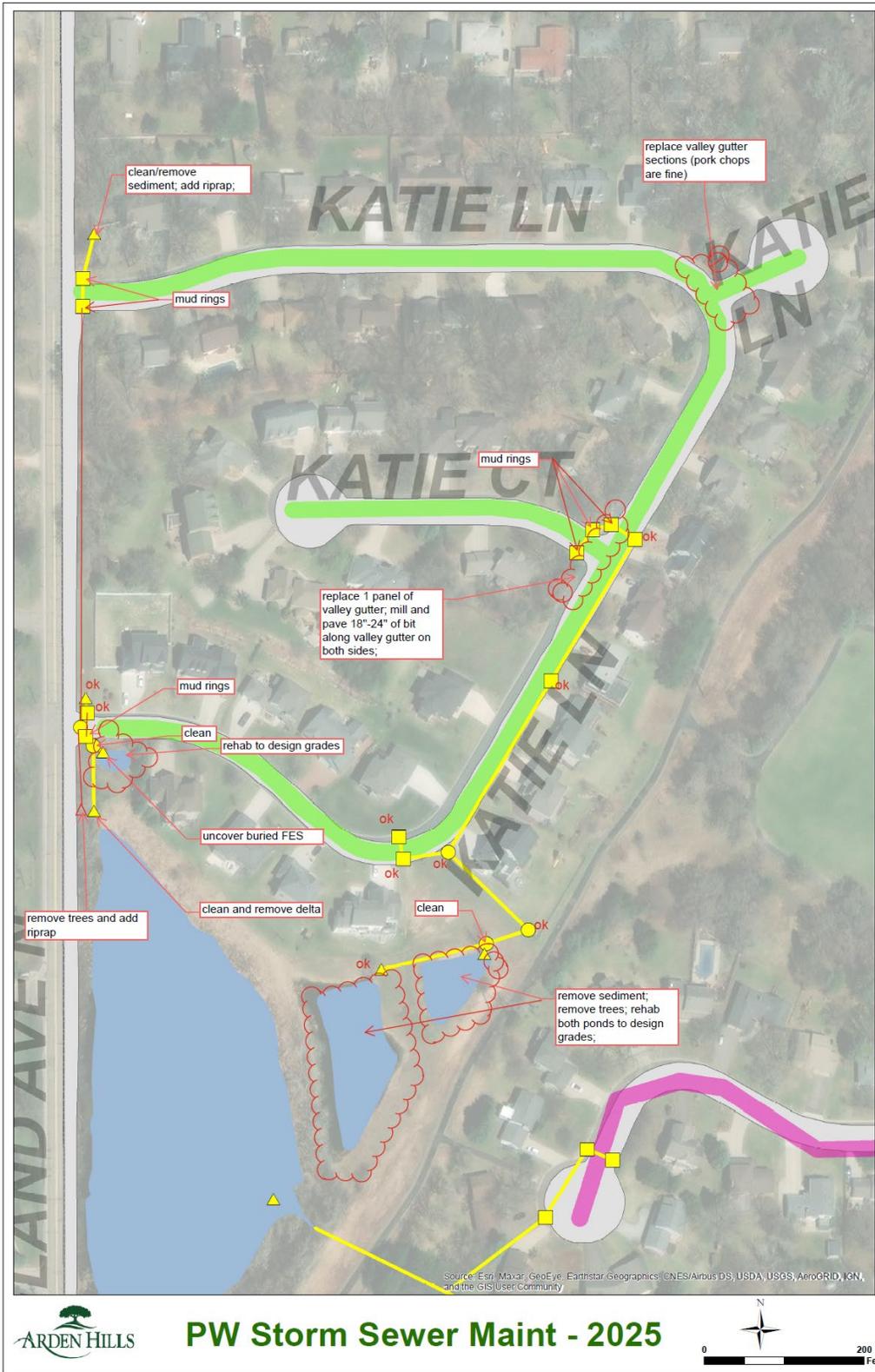
Surface water field inspection maps aid PW in completing the maintenance work in an organized fashion. The maps below include the inspection results gathered in 2024 and are the proposed work plan for surface water maintenance to be completed in 2025. The estimated PW Staffing and labor hours are noted for each map below.



240 FTE Labor Hours required; 3 FTEs required High Priority.



120 FTE Labor Hours required; 3 FTEs required High Priority.

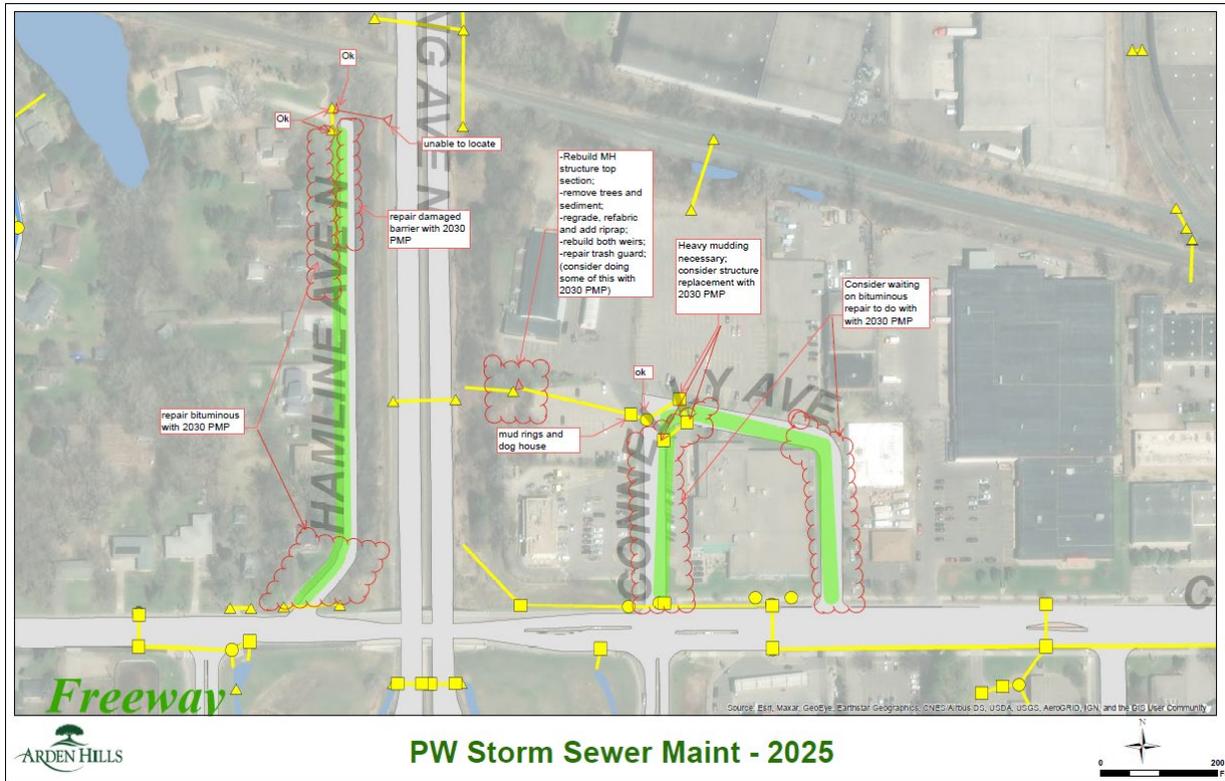
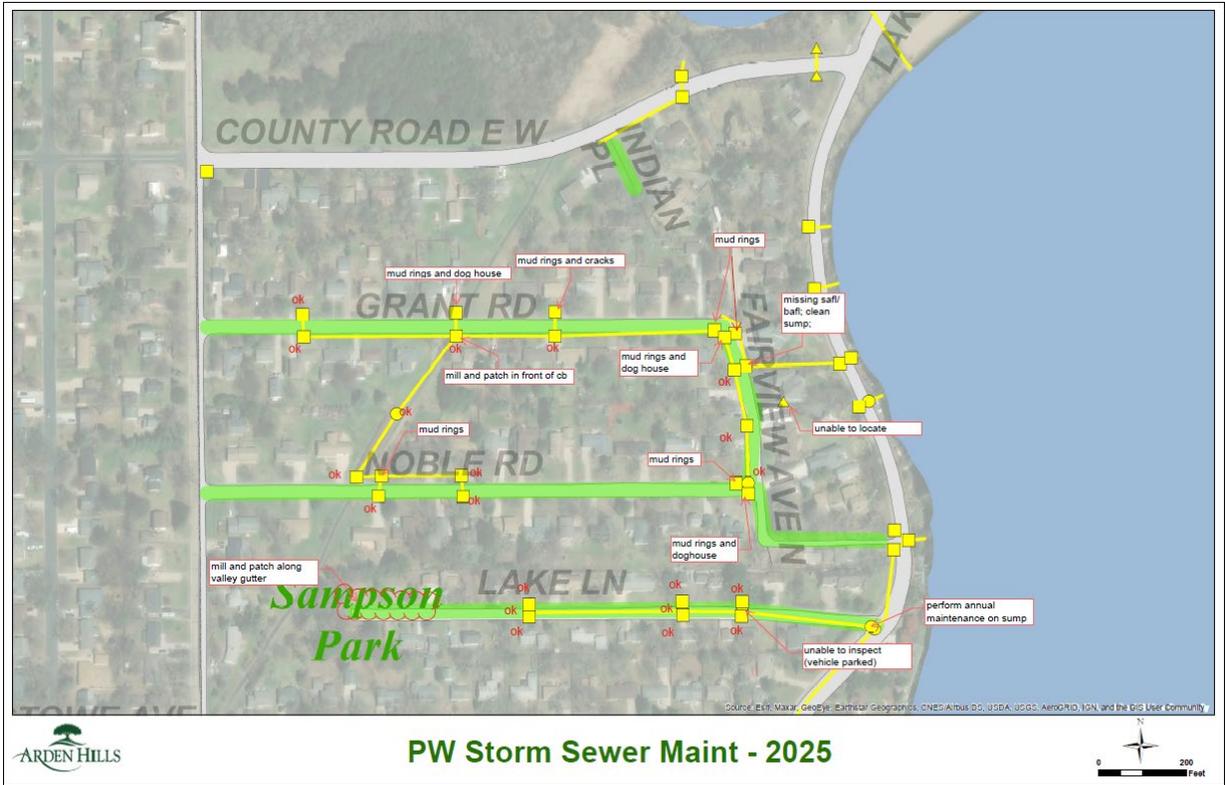


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PW Storm Sewer Maint - 2025

120 FTE Labor Hours required; 3 FTEs required High Priority.



Both maps combined- 360 FTE Labor Hours required; 3 FTEs required High Priority.

2025 Water Distribution Maintenance Plan

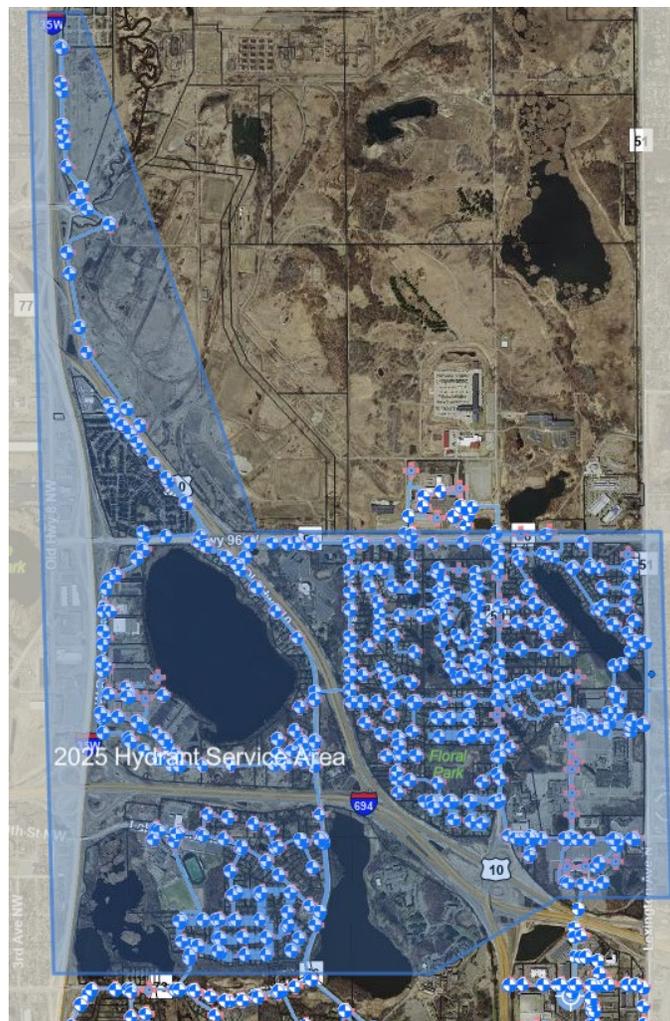
Hydrant Servicing Area 360 FTE labor hours required, 2 FTEs required, high priority.

Servicing hydrants includes - oiling the top operating nut, oiling the nozzle section (where applicable), and oiling the nozzle threads and caps. Hydrant servicing also includes checking for proper hydrant operation, flushing the hydrant, inspecting the hydrant flag, and exercising the isolation gate valve.

NOTE – Lake Johanna Fire Department will require hydrant servicing as follows: 50% of public hydrants in 2025, 75% of public hydrants in 2026, and 100% of public hydrants in 2027 and beyond. Currently, Public Works service 33% of the hydrants on an annual rotation (i.e. Public Works services one-third of the public hydrants in our city each year). The new requirements put forth by Lake Johanna Fire Department will significantly increase the amount of labor hours needed to complete the task by our Public Works maintenance staff.

The Utilities Lead

Develop a list of necessary hydrant repairs identified during hydrant servicing and assist in scheduling that work.



Dead End Hydrant Flushing 160 FTE labor hours required, 2 FTEs required, high priority.

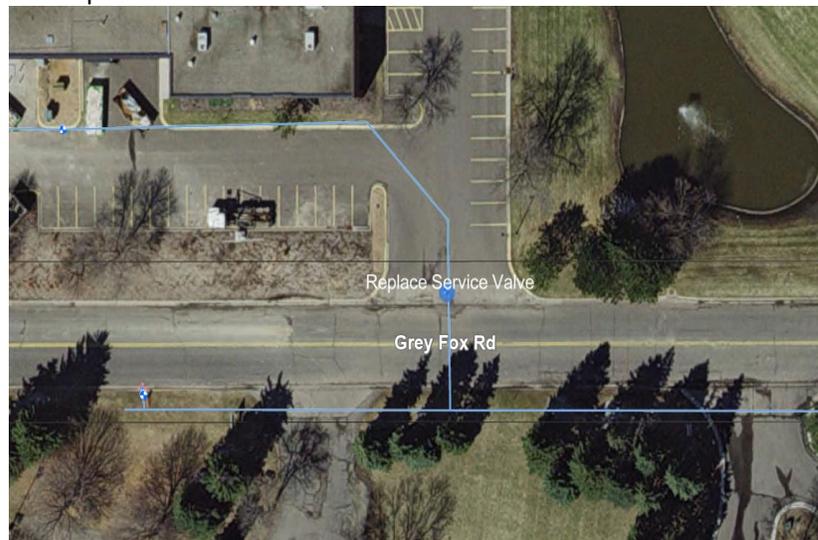
Complete citywide in conjunction with the hydrant servicing each year. This flushing is necessary to remove stagnant water from the watermain system. The stagnant water can give off an odor and have a discoloration if not flushed annually.

Flush the Emergency Interconnect from Shoreview 40 FTE labor hours required, 2 FTEs required, medium priority. Create a plan and coordinate with Shoreview PW to flush the interconnect near 3751 Lexington Ave.

Gate Valve/Curb Stop Repairs 160 FTE Labor Hours required; 4 FTEs required High Priority.

The necessary repairs are outlined below.

- Smith Medical Campus west service GV replacement. 1265 Grey Fox Rd. Unable to key, the GV may still function. Excavate down to the valve and inspect operation. Replace standpipe and driveway concrete apron.



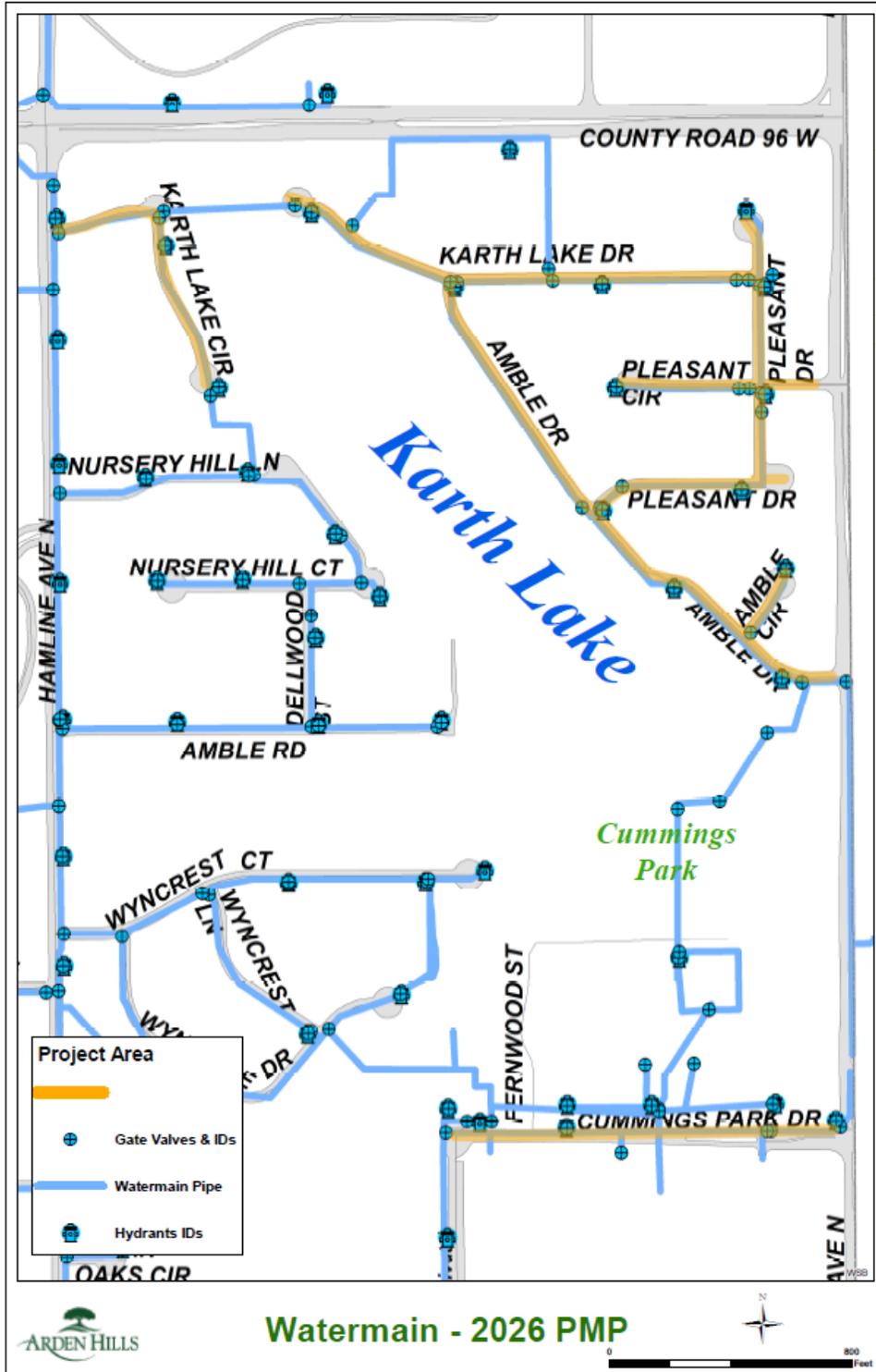
- Replace leaking 12" gate valve, north of the boat launch driveway, along Lake Johanna Blvd.



- 1120 Benton Way - Adjust gate valve box down in front of the hydrant located in the center island.

2026 PMP Street Project

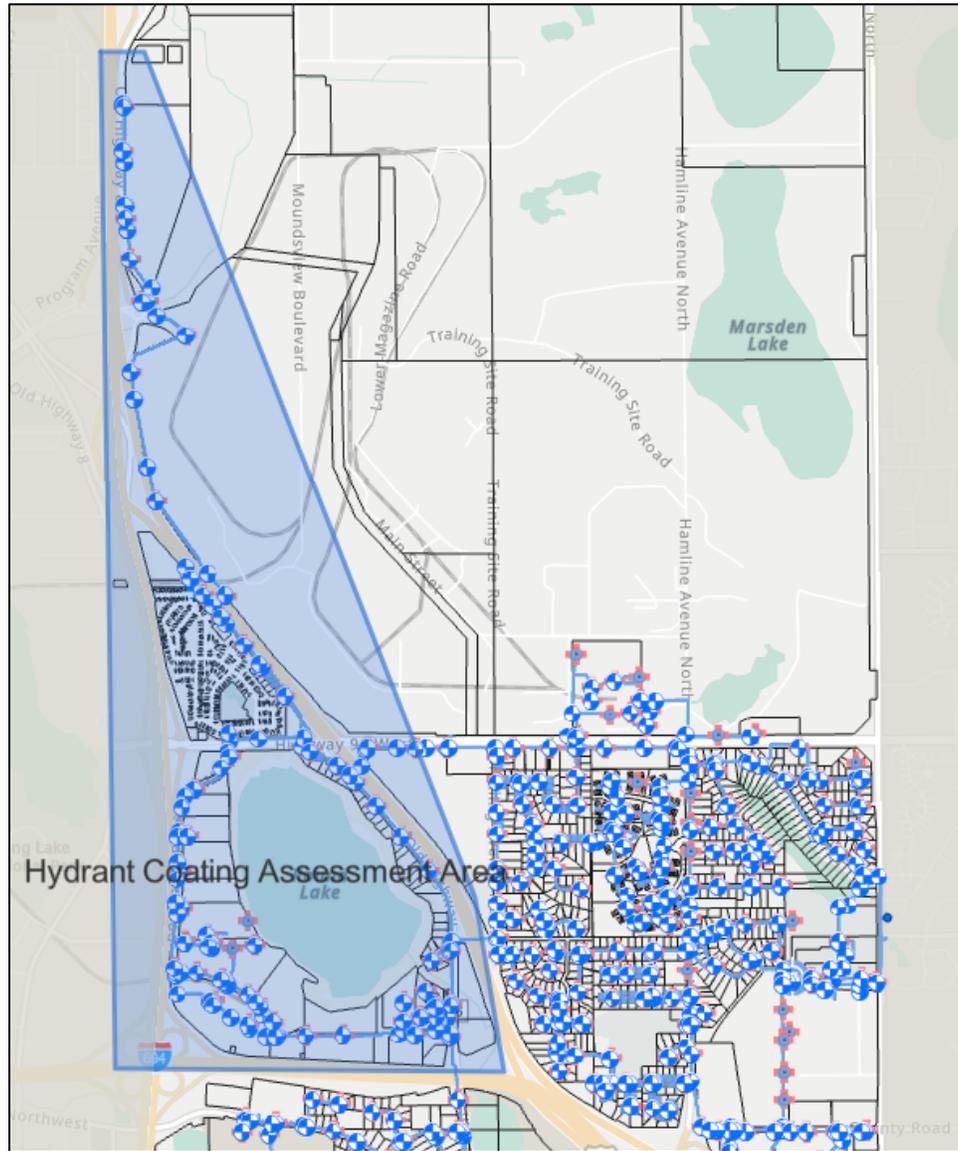
This project is currently in the feasibility process for 2025 and is planned for construction in 2026. PW will assist Bolton & Menk with field locating, minor repairs, and additional background information on the water system within the project area.



Citywide Watermain Condition Assessment – Public Works and the Engineering departments need to create a citywide watermain management plan to assist in future project planning, budgeting and to be proactive in preventing watermain breaks which results in loss of service to the residents.

Hydrant Assessment *160 FTE labor hours required, 2 FTEs required, medium priority.*

PW will target corroded hydrants with paint failure. Hydrant coating assessment will be done during 2025 hydrant servicing within the blue highlighted area and added to the 2026 PW Annual Work Plan.

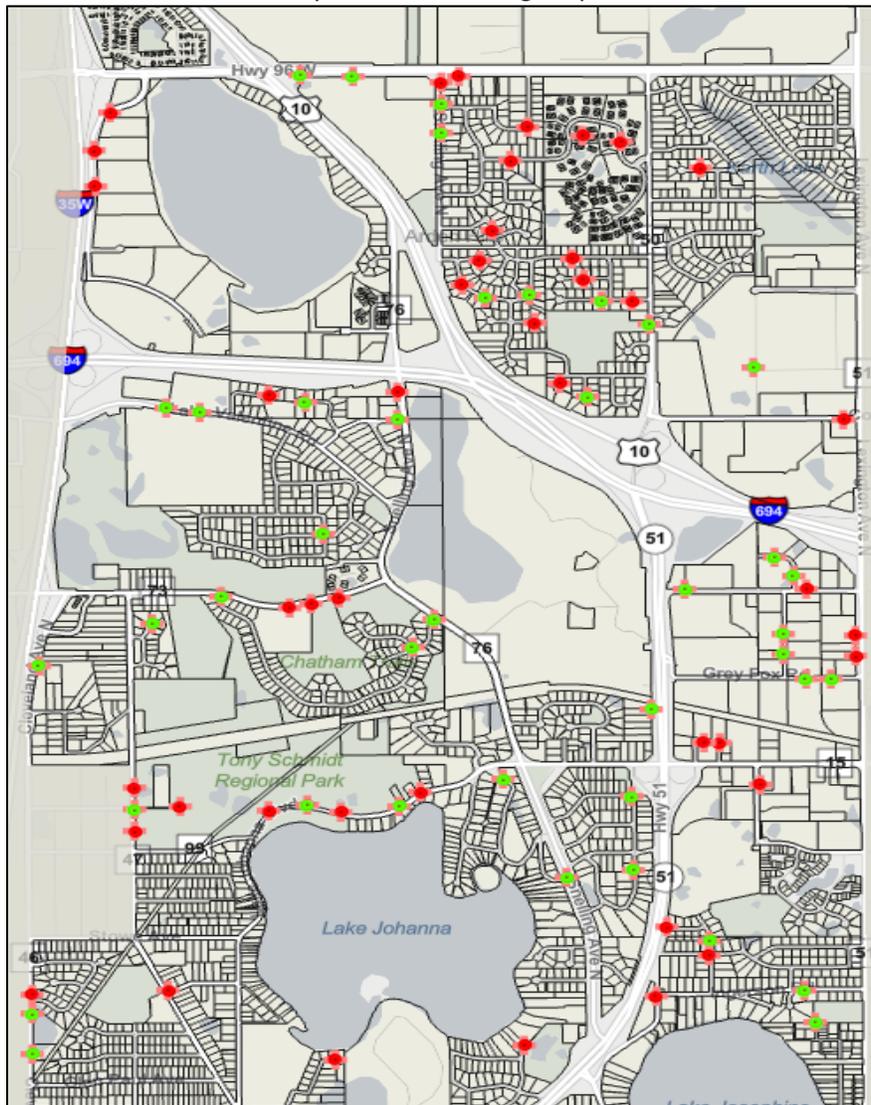


Hydrant Winterizing 160 FTE labor hours required, 2 FTEs required, high priority.

Red top hydrants (43 hydrants citywide) have a plug at the elbow, below grade. The reason for the plug is normally because of a high level of ground water in that area. If a plugged hydrant is not checked, there is a possibility that the barrel will remain wet, not drain properly and could freeze during the winter months. A frozen hydrant barrel can cause damage to the hydrant, making it inoperable for use in the winter months.

Green top hydrants (40 hydrants citywide) are similar to red top hydrants as it is also necessary to check for ground water in the hydrant barrel of those hydrants. Green top hydrants are not plugged; instead, the ground water seeps into the barrel and can cause the barrel to freeze during the winter months. PW staff measures the amount of ground water in the barrel and adds the appropriate amount of a food grade anti-freeze. Like red tops hydrants, if this process isn't completed annually, before the winter months, the hydrant barrel could freeze, damaging the hydrant and making it inoperable for use in the winter months.

Hydrant Winterizing Map



Hydrant Road Salt Protection 30 FTE labor hours required, 1 FTEs required, medium priority.

Red plastic bags are generally installed in late fall and removed in early spring. The red bags are placed over hydrants located along County roads and higher volume city streets where more road salt is used for deicing during the winter months.

Hydrant Vegetation Trimming 120 FTE labor hours required, 2 FTEs required, medium priority.

Trimming of vegetation around hydrants is generally completed for hydrants on government-owned land and in easement areas where regular mowing does not occur. This work is completed on an as-needed basis, to aid in fire department use and as a general maintenance practice. Trimming of vegetation around hydrants on private property are the responsibility of the property owners.

Hydrant Snow Removal - Along City Property) 80 FTE labor hours required, 2 FTEs required, medium priority.

Staff will assess and develop a map for implementation identifying hydrants along government property in 2026. When snowbanks reach a height of 3-4 feet (or higher) in snow storage areas near hydrants, PW will clear the snow from around hydrants, citywide and as time allows, for public safety. Private property owners are responsible for clearing the snow around hydrants on their property, per the City's Snowplowing, Snow Removal and Ice Control policy.

Water Monitoring and Sampling 30 FTE labor hours required, 1 FTE required, high priority.

The Minnesota Department of Health requires monthly water monitoring and sampling of 10 predetermined sample sites within the city. These samples are coordinated through Pace Analytical, and results are submitted on the City's behalf to the MDH. Each month, Pace Analytical staff visit the sites, collect a water sample from each and submit the samples for bacteria and chlorine residual testing. Additional samples are collected, quarterly, by PW staff and submitted directly to the MDH. The MDH also requires, the Consumer Confidence Report be mailed to property owners in July each year. This information is gathered by and mailed, with the property owner's utility bill, by the Utility Billing department.

Lead and Copper Rule Inventory 40 FTE labor hours required, 1 FTEs required, high priority.

Public Works will complete and submit to the state a lead service line inventory by April 30, 2025. Public Works will assist by gathering data and performing site inspections as needed. Data from this project was already submitted to the MDH but, additional work is needed to identify private lead services.

Lead and Copper Sampling - 20 Locations Citywide Required Every 3 Years 60 FTE labor hours required, 2 FTEs required, high priority.

This process was last completed in 2022. PW will complete the sampling of 20 private property sample sites based on the new guidelines set forth by the EPA. These requirements target areas of the city, based on the lead and copper inventory work that began in 2024. Coordination of the significant amount of work for the Lead and Copper Rule Inventory and the Lead and Copper Sampling is required by the City's administrative staff and the PW staff, in 2025, and is a substantial undertaking.

Booster Station Routine Maintenance and Inspections 60 FTE labor hours required, 1 FTE required, high priority.

This work is completed as follows:

- Daily – Checking pump run times. This aids in proactively diagnosing any pump-related issues.
- Monthly – Greasing pumps. The Utilities Lead will ensure the pump greasing is completed and documented onsite.
- Monthly – Inspection and test run the diesel-powered standby generator and auto transfer switch. The key items inspected are fluid levels, starting battery, battery charging system, coolant circulator (assists in cold weather starting), fuel level, and the overall condition of the site/ enclosure. Ensuring the equipment is secure and ready for emergency service.
- Perform condition assessments to determine any future rehabilitation needs.
- Prepare 2026 Capital Project needs

Booster Station Improvement Project

This project is scheduled to be completed in 2026 and will be wrapping into the addition of a new booster station on Old Snelling, south of Hwy 694 (this is related to the master TCAAP project). Proposals were gathered in 2024 for improvements to the Red Fox Rd Booster Station and budgeted for 2025. Due to the proposed additional booster station, PW recommends combining both projects for improvements to the south booster station and construction of the additional booster station near Old Snelling and Hwy 694.

Project Related to the Proposed Additional Booster Station for TCAAP 80 FTE labor hours required, 2 FTEs required, medium priority.

Pump down existing water meter/booster pit south of Hwy 694 in preparation for Old Highway 10 trail from Lake Valentine Road to Hwy 96 to add structure to SRF design and provide necessary information to them.

South Water Tower Rehab 80 FTE labor hours required, 2 FTEs required, high priority.

Scheduled to be completed in 2025. This project will include spot repair of the tower coatings which are mainly within the wet areas of the tower that experience more moisture. The inspection for this work was completed in late 2022 and a report was generated at that time. The photos below are sample pictures taken from the inspection report.

CITY OF ARDEN HILLS, MN
South Tower



Photo No. 2
Interior roof conditions and coating failures on the drywell tube.



Photo No. 3
Excellent condition of the coating around the roof to drywell tube connection.

HYDROPILLAR INSPECTION REPORT

Water Tower Maintenance and Inspection 80 FTE labor hours required, 2 FTEs required, high priority.

– Shown below is a list of routine items to be completed at each water tower.

- Daily inspection of telemetry readings (tower levels). Intrusion alarms on tower entry doors are also monitored.
- Grounds maintenance, mowing, trimming, tree trimming and snow plowing.
- Repairs and painting are needed to the wood fence at the North Tower. This will be coordinated with the cell service provider, per the lease agreement.
- Current guidelines recommend a full inspection (float down inspection) of the tower structure, coatings, and OSHA safety requirements every 5 years. This includes draining the tower to roughly 50% and completing a thorough inspection of the wet area. The remainder of the tower, referred to as the dry area, is also inspected. Both of the City's water towers are constructed from steel, making corrosion a major concern. Correcting the tower coating and paint as those needs arise helps to prevent costly repairs in the future.
 - The final warranty repairs for the North Tower repainting project were completed in 2021. The next float down inspection is expected in 2026.
 - The South Tower will be repaired in 2025 and the next float down inspection is expected in 2025 or 2026 depending on any warranty work completed.

Water Distribution Repairs and Restoration 120 FTE labor hours required, 3 FTEs required, high priority. This work will be completed at the following locations:

- 3991 Fairview Ave – Concrete curbing, apron, asphalt, and minor behind-the-curb restoration
- 1939 Thom Dr – Asphalt patching and behind-the-curb restoration
- 1666 Lake Johanna Blvd – County road asphalt patching and ditch rehabilitation

Gate Valve Exercising 120 FTE labor hours required, 2 FTEs required, medium priority.

This work will be completed on valves that were installed in 2013 or newer. The process of gate valve exercising is important for the overall functionality of the City's water distribution system. PW staff ensures that the valve box is clear of debris, accessible to operate and that the valve fully opens and closes without leaking. Operating the valve also removes deposits that build up along the gate guides. Exercising valves is a proactive method to ensure the valves will function properly when needed during emergency watermain repairs.

- Update current gate valve history map, last update was done in 2013. The Utilities Lead will add feedback on developing the updated map for field staff to use moving forward.

Emergency Water Distribution System Repairs (per event) 60 FTE labor hours require, 5-6 FTEs required, high priority.

Although this work is not something we schedule, it is important to include it in the annual work plan. In 2024, PW staff responded to 7 emergency repairs and 2 repairs that were able to be scheduled shortly after the problem was identified. Excavations use staff time and resources both before and after the actual repair. Many factors are taken into consideration for these types of repairs such as assessing public safety, property loss, staffing, equipment needs, time of day, weather conditions, property owner needs, and public notification.

Water Distribution-Related Appointments or Emergency Responses throughout the Year

- **Water Off/On (per event) 40 FTE labor hours required, 1 FTEs required, high priority**
Contractors and property owners notify PW, as the utility operator, to shut city water service off to building, sites throughout the year. This can be for either emergency or scheduled repairs on the building's plumbing or private watermain system within a larger campus.
- **Water Meter Service and New Installations (per event) 1 FTE labor hours required, 1 FTEs required, high priority (approx. 50 repairs per year) . Total estimated FTE labor hours= 50**

These appointments are the responsibility of PW and are generally scheduled by the contractor or property owner. As the City's water meter reading equipment ages, so does the functionality of the equipment. PW works with Utility Billing to schedule service appointments with accounts that are intermittently or no longer sending a reading. Our vendor (Badger) has provided a solution to upgrade existing equipment on an as-needed basis to cellular end points (meter reading equipment). The installation and programming of the updated equipment (located inside of the property or building) is performed by PW staff.

Flow Testing (per event) 15 FTE labor hours required, 1 FTE required, high priority (approx. 10 appts per year).

Flow testing is conducted by contractor or engineering firms onsite to take measurements of actual water flows. This is usually done for the purposes of fire suppression designs within a building. PW coordinates this work and operates the appropriate hydrant, or hydrants, identified by the PW Superintendent and the project engineer.

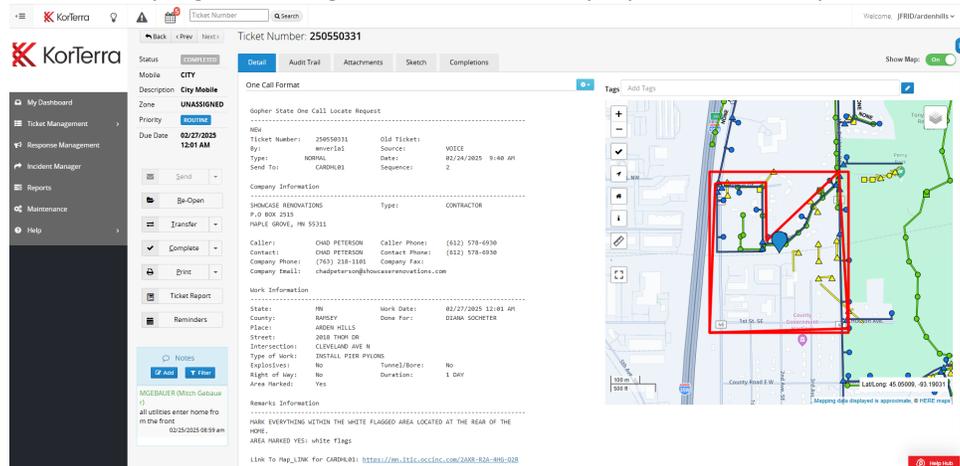
Private water service inspections are prompted by a utility repair permit and completed by PW staff.

Gopher State One Call (GSOC) Utility Locating 800 FTE labor hours required, 1 FTE required, high priority.

GSOC utility locating is mandated by law and completed during the normal work week. There are cases where an “emergency” locate is needed. In those cases, PW on-call staff respond outside of normal work hours.

- PW staff are responsible for locating and marking city-owned watermain, sanitary sewer, storm sewer, irrigation, city-owned electric, and/or city-owned fiber optic lines.
- In 2024, PW received 1,110 GSOC Utility Locate requests.

Below is a screenshot of the GSOC utility locating information PW staff uses to prioritize, document, and complete locate tickets that are mandated by MN state statute. PW staff have a unique login and password to access the program through a truck mounted laptop or via a smart phone.

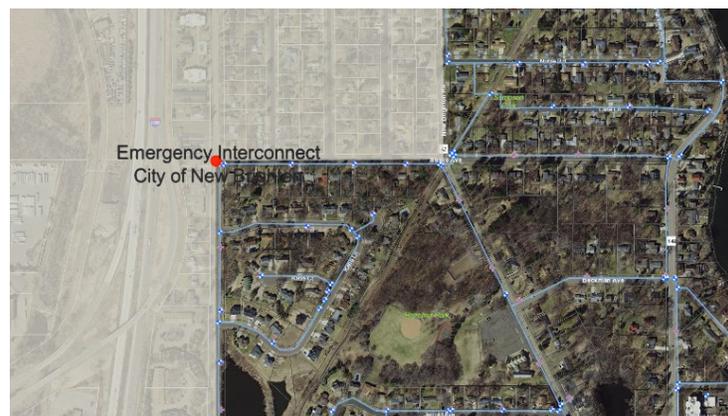
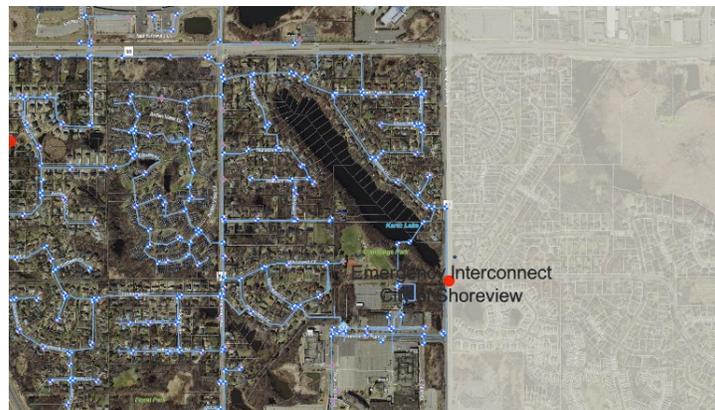


Emergency City Interconnects

There are 3 locations for emergency city interconnects in Arden Hills. The map below shows 2 connections to the City of Shoreview and 1 connection to the City of New Brighton.

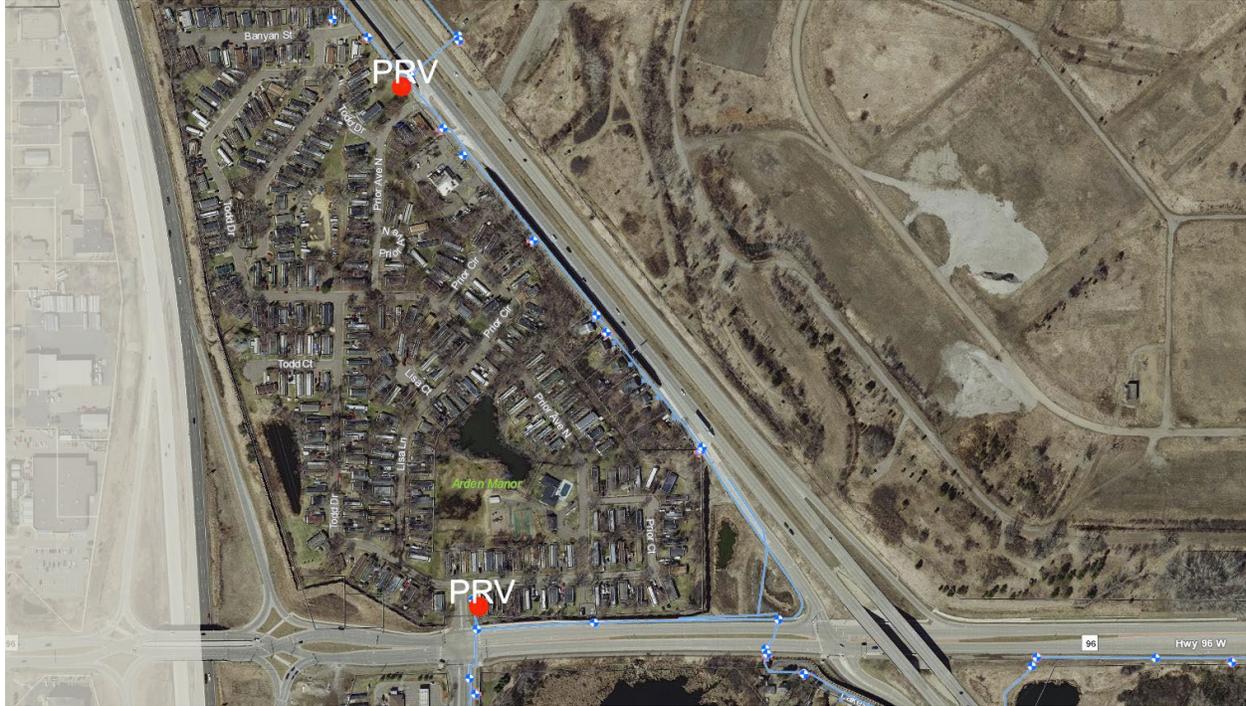
Maintenance of those interconnects is performed every 3 years. That work includes:

- Prepare improvements for the New Brighton interconnect, coordinate with the City of New Brighton. Plan for work to be performed in 2026.
- Review condition and assess the plan for the northern Shoreview interconnect.
- Perform maintenance on southern Shoreview interconnect, coordinate with the City of Shoreview.
- Public Works recommends developing an emergency interconnect playbook with step-by-step instruction of how to properly operate at each location.



Pressure Reducing Valves (PRV)

The map below shows the locations for the pressure reducing valves at each of the water meter structures that supply water to the private water system within the Arden Manor property. PRV's are scheduled for routine maintenance every 5 years. The PRV's were installed in 2019, and preventative maintenance was completed in 2024. The next scheduled maintenance for the PRV's will be in 2029.



Water Model for Trunk Main Upgrade Constructability 16 FTE labor hours required, 1 FTE required, high priority.

A water model is anticipated to support the trunk main upgrade project coordinated with the City of Roseville. Public Works may be requested to locate utilities and operate valves.

Water Loss Reporting

A leak detection audit program could be implemented if a significant amount of water loss is determined. Below is a list of PW tasks that are tracked to account for water loss:

- Sewer cleaning
- Tree watering
- Ice rink flooding
- Watermain break estimated water loss

The Utilities Lead will ensure the water loss is tracked in the field.

2025 Sanitary Sewer Maintenance Plan

Sewer Cleaning and Televising 840 FTE labor hours required, 3 FTEs required, high priority.

Below is a list of abbreviations and their meanings related to sanitary sewer maintenance and used in this document.

CIP = Cast Iron pipe

CIPP = Cured-in-Place Pipe or otherwise known as pipe lining

GIS = Geographic Information Systems/ mapping system

I&I = Inflow and Infiltration (groundwater and stormwater that enter a sewer system)

PVC = Polyvinyl Chloride (a common and durable type of pipe material)

MH = Manhole

RCP = Reinforced Concrete Pipe

VCP = Vitrified Clay Pipe

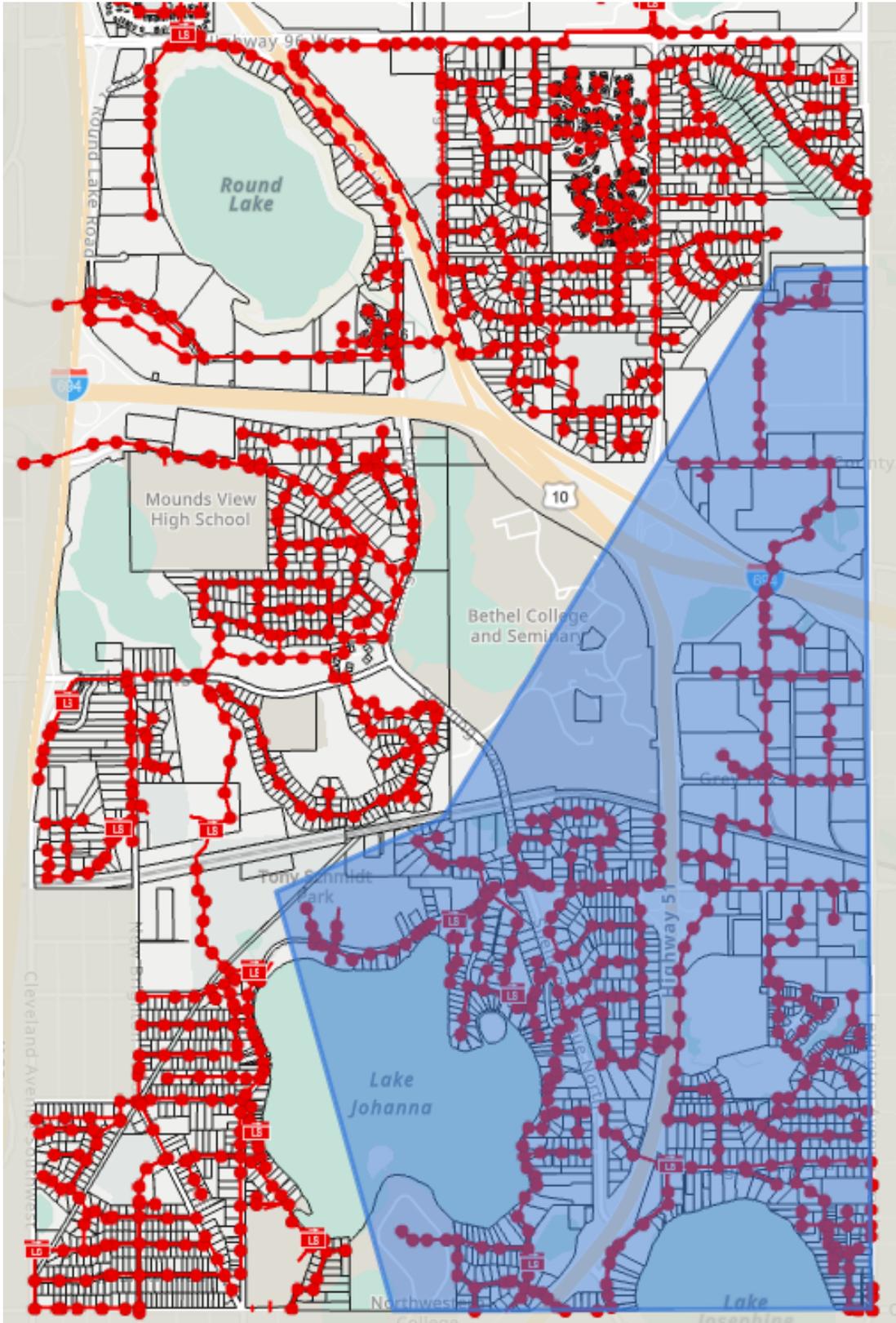
The 2025 sewer cleaning and televising work will take place in the southeast third of the city.

The city is divided into one-third sections. In 2025, PW staff will complete the southeast third of the city. Cleaning and televising all VCP (category 2 sewer mains) are on a 3-year cycle. This sets cleaning and televising efforts on a 3-year cycle to clean all VCP. While working in the southeast third, PW staff also assess category 1 and 3 for cleaning needs.

Shown below are the intervals followed for sanitary sewer cleaning and televising as outlined in the City's Sanitary Sewer Maintenance Policy and according to guidelines provided by the LMC.

- Every 3 Years
 - CIP and RCP will be televised and reviewed to determine if hydraulic cleaning and/or root cutting is needed.
 - VCP clean or televise. Root cut with hydraulic attachment and proofer as needed. Televising will be saved on the City's network drive and can determine if cleaning or root cutting is needed within a VCP mainline. Mainline cleaning data is saved from the field to the City's GIS database through a mobile application.
- Every 5 Years
 - PVC and CIPP clean and spot televise. Dead ends can be flushed using the tanker to "quick dump". This will be recorded as the mainline is "clean" up to 2 line segments downstream.

2025 Sanitary Sewer Cleaning Map



Televising Trailer Equipment

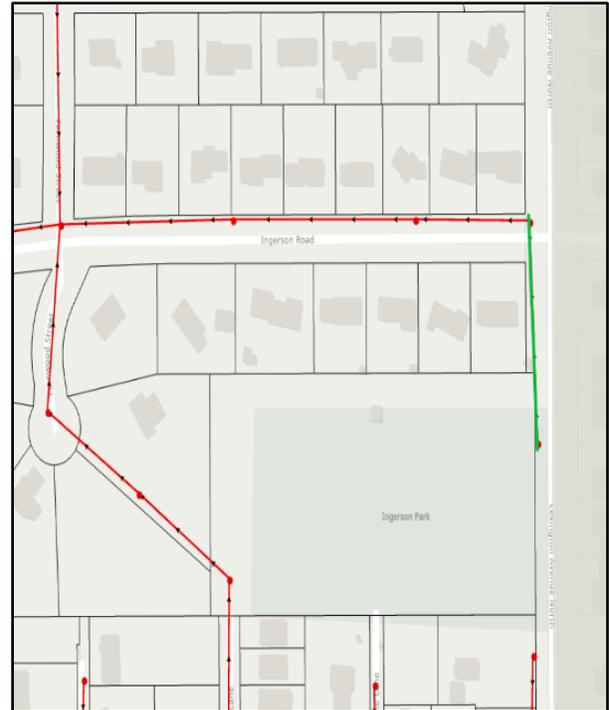
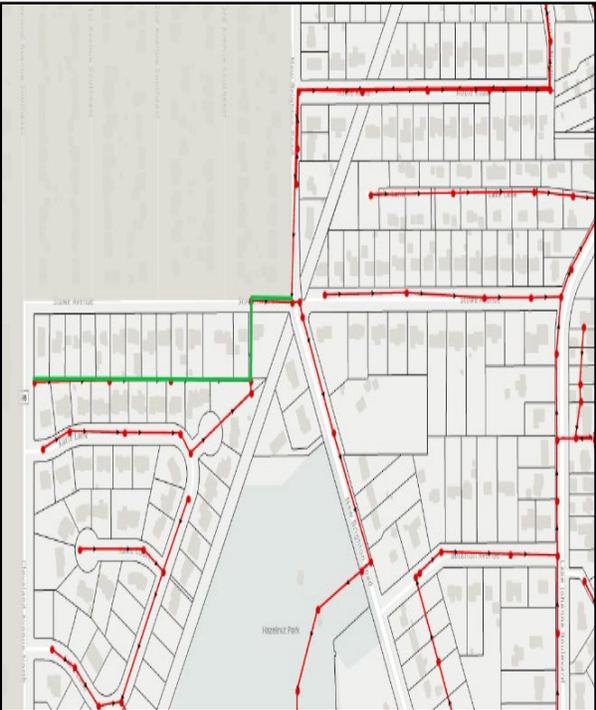
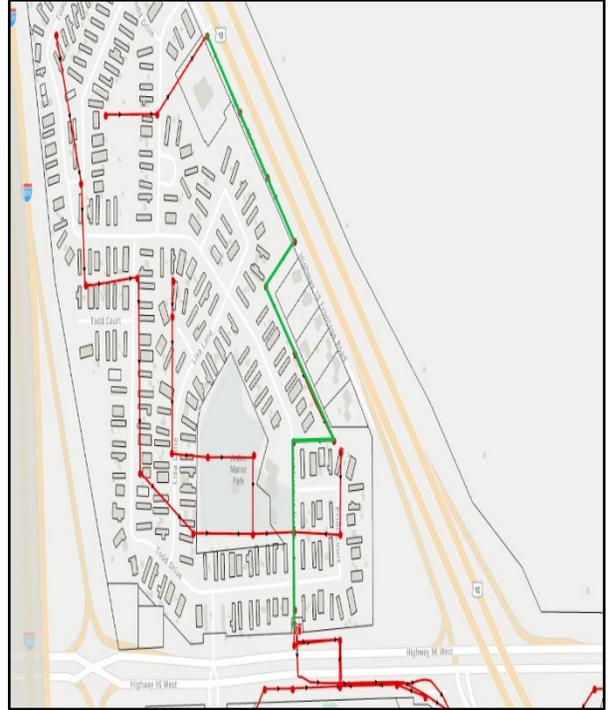
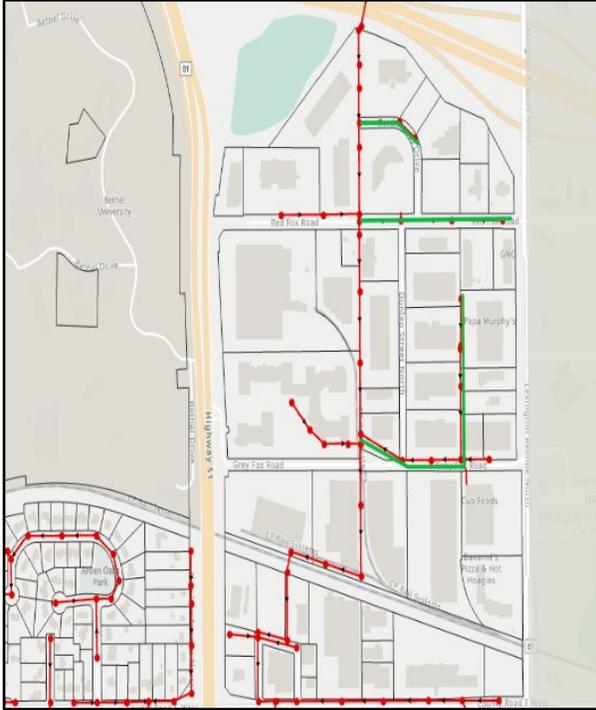


Jet-Vac Equipment



Annual Sanitary Sewer Cleaning 80 FTE labor hours required, 2 FTEs required, high priority.

The four maps below outline the sanitary sewer segments (shown in green) that are cleaned by PW on an annual basis due to excessive buildup, low flow, or flat grade which create the need for additional service to those lines each year.



Sanitary Sewer Lift Stations Preventative Maintenance- 300 FTE labor hours required, 1 FTE required, high priority.

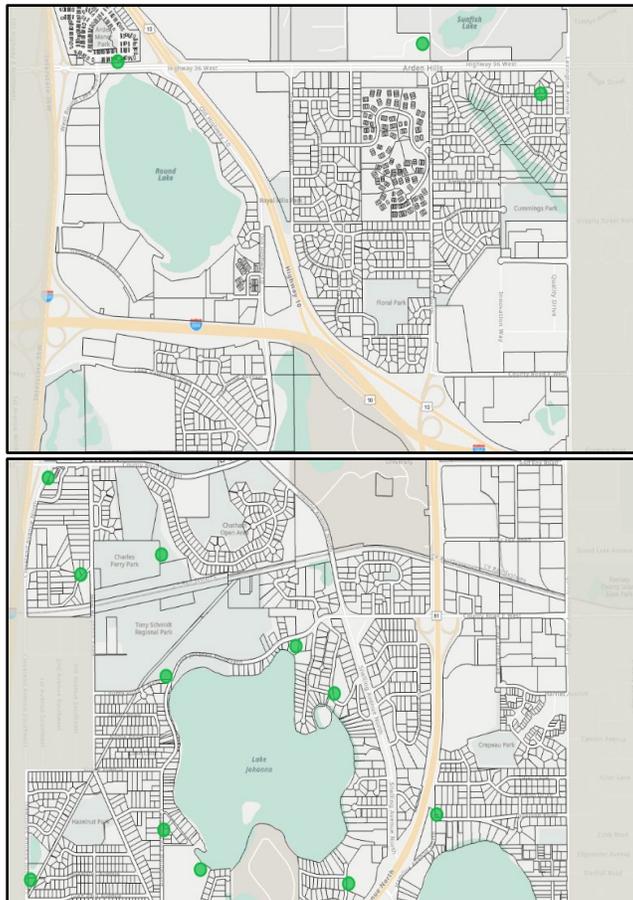
There are 14 lift stations in the City of Arden Hills. The City's lift stations are checked daily by the PW maintenance staff.

Lift Station Wet Well Cleaning and Pump Maintenance 360 FTE labor hours required, 3 FTEs required, high priority.

To ensure lift station wet wells are cleaned and their pumps are properly maintained, the PW maintenance staff performs the following duties in the spring and fall of each year:

- Clean wet wells.
- Remove grease, solids, and organics from floats, transducers, pumps, rails, walls and floors.
- Remove pumps and inspect tolerances, volutes, impellers, flush valves (where applicable) motor oil or coolant levels and quality.
- Create a plan for any part replacement needs as needed during inspection and make needed repairs.
- Test all alarms and verify the monitoring system is functioning properly.
- Inspect the control panel and report any issues in overall condition and functionality.

Lift Station Location Maps



Sanitary Sewer Manhole Inspections

This work is completed by PW maintenance staff while cleaning and televising the sanitary sewer in a designated one-third of the City. Listed below are few items that the PW maintenance staff are looking for during a manhole inspection.

- Evidence of inflow and infiltration (I&I)
- Tree root intrusion and the overall condition of the structure.
- Adjusting rings, mortar, or any other concrete repairs needs.

Once the manhole inspections are completed, the information is uploaded into the Collector software system/ GIS database.

Sanitary Manhole Rings - Replacement, Reset Casting and Pave (casting and lid replacement if needed) ***720 FTE labor hours required, 3 FTEs required, high priority.***

- MH A-165 (Replace adjusting rings and casting)
- MH 13-008 (Buried under asphalt patch)
- MH A-264 (Fix issue with cover)
- MH A-282 (Cover under seal coat)
- MH A-247A (Replace cracked casting)
- MH A-211 (Remove and address tree roots in structure)
- MH A-263 (Address infiltration above upstream pipe)
- MH A-047 (Plastic ring at casting is deformed)
- MH A-272 (Lid froze in casting)
- MH A-271 (Lid froze in casting)
- MH A-264 (Lid froze in casting)
- MH 2-057 (Inspection shows adjusting rings need to be redone. This should have been taken care of by the trail project in 2024. Update Collector with a new inspection.)
- MH 12-018 (MH currently buried, locate and raise)
- MH 2-004 (MH currently buried, locate and raise)
- MH 5-043 (MH currently buried, locate and raise)
- MH B-037 (Raise casting 12") Offroad)
- MH 5-056 (Offroad, raise casting)
- MH 5-055 (Reseal plastic top hat, I&I)
- MH 5-054 (Reseal plastic top hat, I&I, raise casting)
- MH 5-053 (Raise casting)
- PMP Projects

Manhole Inspections Process

Sanitary manholes will be inspected within the 2025 sewer cleaning area in conjunction with televising or cleaning mainlines. Identified structures that repairs will be added to the 2026 PW Maintenance Plan.

Manhole Preventative Maintenance 60 FTE labor hours required, 3 FTEs required, medium priority.

Add mud manhole adjusting rings for the structures listed below.

- MH 12-007 rated 3
 - MH 12-006 rated 3
 - MH 12-017 rated 3

Manhole Inflow and Infiltration (I&I)

I&I has been identified within the manholes listed below, which are located on the east side of State Highway 10. The ditch south of Highway 96 is usually very wet. The City Engineer will review options to seal the structures. A few potential solutions include grouting, epoxy coatings, excavate and wrap/seal from the outside of the structure.

- MH A-244
- MH A-243
- MH A-242
- MH A-241

Other candidates for MH sealing without excavation are:

- MH 2-030 (seal structure joints) rated 4
- MH 2-001- rated 4
- MH 2-013- rated 4
- MH 2-014 - rated 4
- MH 5-056 – rated 4
- MH 5-055 – rated 4
- MH 5-054 – rated 4
- MH 5-053 – rated 4
- MH 2-129 – rated 4

Structures with Tree Root Intrusion 30 FTE labor hours required; 3 FTEs required High Priority.

Can be chemically treated and roots removed. The list below should also be added to the manholes that need to be sealed due to I&I.

- MH 2-101 rated 4
- MH 12-010 rated 4
- MH A-211 (minor roots in MH)
- MH 13-032

Lift Station 5 Forcemain and Valve Vault Improvements 80 FTE labor hours required, 2 FTEs required, high priority. Staff worked with Bolton & Menk in 2024 to design construction for the replacement and rerouting of the forcemain for lift station 5. The new location will follow County Rd E west to the Elmer L. Anderson Memorial Trail and discharge into a rebuilt manhole at Stowe Ave and New Brighten Rd. The construction is scheduled for 2025.

Lift Station 1 and 9 Improvements 40 FTE labor hours required, 2 FTEs required, high priority.

The lift station improvements include pump replacement, guide rails, wet well plumbing, and floats/transducer replacement. Inspections will be conducted in 2025 for needs and budgeting. Construction of improvements is programmed for 2027. **(Proposals for LS 1 and LS 9 rehab are due by June 1st.)**

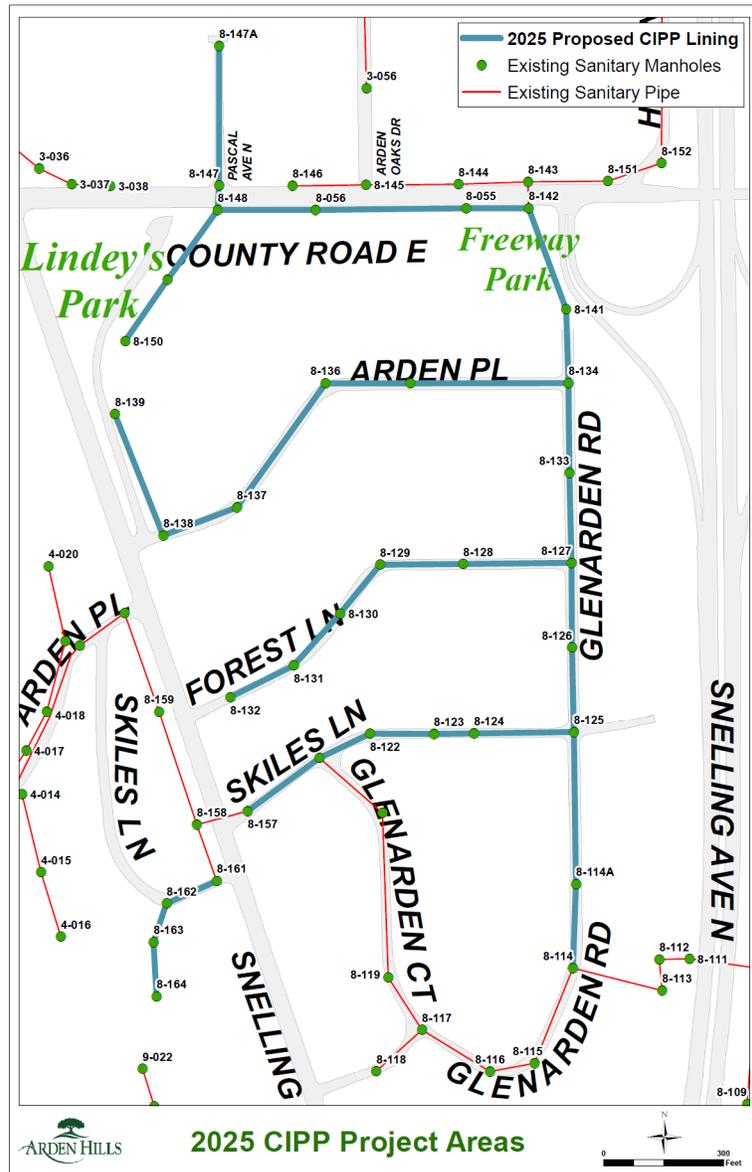
Forcemain Condition Assessment

An evaluation of all lift station forcemains is needed to determine future improvements needs and budgeting.

Mainline Tree Root Treatment

We will be combining a small list from 2025 with the 2026 list for a contractor to complete chemical root treatment. This process aids in tree root growth, stunting the growth for a period of time. In addition, our crew saves time by reducing the need to hydraulically cut the roots from the pipes.

Sanitary Sewer Lining in 2025 20 FTE labor hours required, 1 FTE required, high priority. The map below shows the proposed segments to be lined due to the condition of the existing 8 and 10-inch VCP pipe and numerous locations of tree root intrusion.



Private Sewer Service Inspections 1.5 FTE labor hours required, 1 FTE required, high priority (per event)

PW maintenance staff complete private sewer service inspections which are prompted by a utility repair permit.

Gopher State One Call (GSOC) Utility Locating is mandated by law and completed during the normal work week. There are cases where an “emergency” locate is needed, PW on-call staff respond outside of normal work hours.

- Same details as Water division section.