City of Franklin
Municipal Storm Water Management Facilities

The City currently owns and maintains fourteen storm water management facilities. City Staff inspects these facilities a minimum of twice annually (spring and fall). If deficiencies are identified during inspection they are addressed promptly following the proper maintenance procedures.

	Location	Address	Facility Type
1	Business/Industrial Park	S. 54th St. and Ashland Way	Wet Retention Pond
2	Business/Industrial Park	S. 52nd St. and W. Oakwood Park Dr.	Wet Retention Pond
3	Business/Industrial Park	W. Franklin Dr. and Ironwood Dr., NW	Wet Retention Pond
4	Business/Industrial Park	W. Franklin Dr. and Ironwood Dr., E	Wet Retention Pond
5	Franklin DPW	Southeast Corner of Property	Wet Retention Pond
6	Franklin FD #2	S. 60th Street - Rear of Property	Wet Retention Pond
7	Franklin Library	S. Legend Drive and Schlueter Pkwy.	Wet Retention Pond
8	Franklin PD	South of Buildings	Wet Retention Pond
9	Franklin Sewer and Water Building	5550 W. Airways Ave.	Permeable Pavers
10	Franklin Sewer and Water Building	5550 W. Airways Ave.	Bio-Infiltration Basin
11	Franklin Woods/ Kayla's Park	S. 35th St. and W. Puetz Rd.	Permeable Pavers
12	Lake Ernie	S. Scepter Dr. and W. Beacon Hill Dr.	Natural Pond
13	Pleasant View Park	SE of W. Evergreen St. Cul-de-sac	Wet Retention Pond
14	Workman Park	S. 35th St. and W. Forest Hill Ave.	Forebay, Natural Pond

Green Infrastructure

Kayla's Playground at Franklin Woods

The City of Franklin constructed a playground within Franklin Woods Nature Preserve at 3723 W. Puetz Rd. A storm water management plan was implemented to reduce flow and total suspended solids (TSS) discharged from the site with the use of green infrastructure elements. Specifically, the project uses permeable pavers.

The project was publicly bid. Wilkomm Excavating was the low bidder for the pavers (materials and installation) and Home Depot was the low bidder for the filter fabric.

The pavers and stone storage area will reduce storm water runoff and filter storm water, removing particulates and pollutants. The project included construction of an all-accessible playground and patio area with associated parking areas, restrooms, and landscaping. 6,000 square feet of permeable pavers were installed.

The Milwaukee Metropolitan Sewerage District Green Solution Program agreed to a reimbursement of $87,355, as broken down below:

- 6,000 Sq. Ft. Pavers: $48,000.00
- Stone: $6,394.50
- Underdrain System: $500.00
- Filter Fabric: $2,222.33
- Concrete Curbing to Contain Pavers: $6,240.00
- Sidewalk to Contain Pavers: $18,998.00
- City DPW Labor: $5,000.00
- **Project Total: $87,354.83**

North End of Pavers (looking south)

South End of Pavers (looking north)

Southwest Corner of Pavers (looking northeast)

Water and Wastewater Operations and Maintenance Facility

In 2015, the City of Franklin completed an addition to the City's Water and Wastewater Operations and Maintenance Facility at 5550 West Airways Drive in the City's Business Park. Utilizing a grant from the Milwaukee Metropolitan Sewerage District, the City and Miron Construction installed Green Infrastructure (GI) elements to manage storm water. These GI elements include two biofiltration basins and two porous paver parking areas.

The biofiltration basins consist of native plants that help to retain rainwater runoff and remove impurities. As the water filters through the subgrade materials, impurities are removed and the volume of water entering the storm drainage system is reduced.

The porous paver parking areas prevent rainwater from running into the street. Each parking area has an underground stone reservoir that allows for groundwater to recharge. The porous paver system provides the structural support of conventional pavement.

The project included an addition and renovation to the Water and Wastewater Operations and Maintenance building with associated parking lots and drives, combined with a series of sustainable porous pavers and biofiltration basins. The green infrastructure BMP's were installed as proposed and as shown on the attached exhibits. Specifically, the green infrastructure BMP's are:

- Porous Pavers (north) – 4,800 square feet
- Porous Pavers (south) – 875 square feet
- Biofiltration basin (west) – 3540 sf (top), 1430 sf (bottom), 4" underdrain, 5.33 ft thick stone/soil section, 4" ponding depth above soil
- Biofiltration basin (east) – 3270 sf (top), 1480 sf (bottom), 4" underdrain, 5.33 ft thick stone/soil section, 4" ponding depth above soil

The Milwaukee Metropolitan Sewerage District Green Solution Program agreed to a reimbursement of $77,950.00, as broken down below:

- Engineering and Design: $3,000
- City Staff Grant Preparation: $500
- Construction: $74,450
    - Permeable Pavers: $43,850
    - Biofiltration Basins:
        - Layout: $600
        - Excavation Costs: $5,300
        - Concrete Curb Cuts: $1,500
        - Landscaping Costs: $15,450
        - Stone Mulch Costs: $5,200
        - Overflow Piping: $2,550
- **Project Total: $77,950**

East Porous Paver Parking Area

West Porous Paver Parking Area

West Biofiltration Basin

East Biofiltration Basin

StormGUARDens at City Hall

Franklin City Hall has two StormGUARDens located on the backside near the lower level parking lot. StormGUARDen™ is an innovative rainwater harvest solution that combines a rain garden and rain barrel into one eco-friendly gardening system. It is an excellent, sustainable alternative to traditional rain barrels or rain gardens.

Rainwater runoff from City Hall's roof flows through downspouts into a stone-filled trough that redirects the water into removable planting compartments. These compartments contain an engineered soil designed to filter pollutants and grow plants. Below this soil lies a layer of stone for water storage, giving plants access to water during dry weather. Excess water from the planting compartments overflows into an open reservoir below the soil. As the reservoir fills, water is slowly released through a set of small outlets and drains. Valves and plugs can also be added for water storage during dry conditions. StormGUARDen has the added benefit of being self-discharging, meaning it will always have the capacity to take on water from the next storm.