



## Green Solutions Funding Agreement

### **Kinnickinnic Avenue Silva Cells**

M03076P39

This Agreement is between the Milwaukee Metropolitan Sewerage District (District), 260 West Seeboth Street, Milwaukee, Wisconsin 53204-1446 and the City of Milwaukee, Department of Public Works (Milwaukee), 841 North Broadway, Milwaukee, Wisconsin 53202.

WHEREAS, Wisconsin law authorizes any municipality to establish an intergovernmental cooperation agreement with another municipality for the furnishing of services (Wis. Stat. sec. 66.0301); and

WHEREAS, the District is responsible for collecting and treating wastewater from locally-owned sewerage systems in the District's service area; and

WHEREAS, during wet weather, stormwater enters the sewerage system, increasing the volume of wastewater the District must collect and treat; and

WHEREAS, during wet weather, stormwater directly enters surface water, increasing pollution levels in those waterways and increasing the risk of flooding; and

WHEREAS, green infrastructure, such as constructed wetlands, rain gardens, green roofs, bioswales, and porous pavement, reduces the volume of stormwater in the sewerage system and the amount of pollutants discharged to surface waters; and

WHEREAS, the District's wastewater discharge permit requires the installation of twelve million gallons of new green infrastructure retention capacity before the end of 2017; and

WHEREAS, the District wants to expedite the amount of green infrastructure installed in its service area; and

WHEREAS, Milwaukee plans to install green infrastructure that supports the District's green infrastructure goals;

Now, therefore, for the consideration of the mutual promises made by the parties to this Agreement, the parties agree as follows.

#### **1. Date of Agreement**

This Agreement becomes effective immediately upon signature by both parties and ends when Milwaukee receives final payment from the District or when the parties terminate this Agreement according to sec. 12 of this Agreement.

## **2. District Funding**

The District will reimburse Milwaukee for the cost of the project described in the attached project description (Project), up to \$158,000. The District will provide funding after the District receives the Baseline Report and the signed Maintenance Covenant.

## **3. Location of the Project**

The Project is along South Kinnickinnic Avenue between East Lincoln Avenue and East Morgan Avenue.

## **4. Baseline Report**

After completion of the Project, Milwaukee will provide a Baseline Report using forms provided or approved by the District. The Baseline Report will include:

- (a) a site drawing, showing the Project as completed;
- (b) design specifications for the Project, including rainwater capture capacity (maximum per storm) and other information regarding runoff rate reduction or pollutant capture;
- (c) a legal description of the property where the Project is located;
- (d) photographs of the completed Project;
- (e) a maintenance plan;
- (f) an outreach and education strategy, including a description of events or activities completed or planned;
- (g) an itemization of all construction costs, with supporting documentation;
- (h) a W-9 Tax Identification Number form;
- (i) a Small, Veterans, Women, and Minority Business Enterprise Report; and
- (j) an Economic Impact Report, showing the total number of people and the estimated number of hours worked on design and construction of the Project by Milwaukee's employees, contractors, consultants, and volunteers.

## **5. Procedure for Payment**

Milwaukee will submit an invoice to the District for the amount to be reimbursed. The invoice will document all costs to be reimbursed. Invoices from consultants will provide: their hourly billing rates, if applicable; the hours worked, by individual; and a summary of the tasks accomplished.

Milwaukee will send the Baseline Report and the invoice to:

Andy Kaminski, Civil Engineer  
Milwaukee Metropolitan Sewerage District  
260 West Seeboth Street  
Milwaukee, Wisconsin 53204 – 1446

The District will not provide reimbursement until the Project is complete and the District has received all required deliverables.

**6. Changes in the Project and Modifications to the Agreement**

Any changes to the Project must be approved by the District in writing in advance. The District will not reimburse for work that is not described in the original project description unless Milwaukee obtains prior written approval from the District.

**7. Modifications to this Agreement**

Any modifications to this Agreement will be in writing and signed by both parties.

**8. Project Maintenance**

Milwaukee will maintain the Project for at least ten years. If the Project fails to perform as anticipated or if maintaining the Project is not feasible, then Milwaukee will provide a report to the District explaining the failure of the Project or why maintenance is not feasible. Failure to maintain the Project will make Milwaukee ineligible for future District funding until Milwaukee corrects the maintenance problems.

**9. Permits, Certificates, and Licenses**

Milwaukee is solely responsible for compliance with all federal, state, and local laws and any required permits, certificates, or licenses.

**10. Public Bidding**

Milwaukee must select professional service providers according to Milwaukee’s ordinances and policies. Milwaukee must procure all non-professional services, such as construction, sewer inspection, and post-construction restoration, according to State of Wisconsin statutes and regulations and Milwaukee’s ordinances and policies. Whenever work valued over \$25,000 is procured without the use of a public sealed bidding process, the District may request and Milwaukee must provide an opinion from a licensed attorney representing Milwaukee explaining why the procurement complies with State of Wisconsin law and Milwaukee’s ordinances.

**11. Responsibility for Work, Insurance, and Indemnification**

Milwaukee is solely responsible for planning, design, construction and maintenance of the Project, including the selection of and payment for consultants, contractors, and materials.

Milwaukee is solely responsible for ensuring compliance with Wisconsin prevailing wage law.

The District will not provide any insurance coverage of any kind for the Project or Milwaukee.

Milwaukee will defend, indemnify, and hold harmless the District and its Commissioners, employees, and agents against any and all damages, costs, liability, and expenses, including attorney’s fees and related disbursements, arising from or connected with the planning, design, construction, operation, or maintenance of the Project.

**12. Terminating this Agreement**

The District may terminate this Agreement at any time before the commencement of construction. After the commencement of construction, the District may terminate this Agreement only for good cause, including, but not limited to, breach of this Agreement by Milwaukee. Milwaukee may terminate this Agreement at any time, but will not receive any payment from the District if Milwaukee does not complete the Project.

**13. Maintenance Covenant**

After the completion of construction, the District must receive a Maintenance Covenant from Milwaukee. The Maintenance Covenant will be limited to the Project. The term of the Maintenance Covenant will be ten years.

**14. Exclusive Agreement**

This Agreement is the entire agreement between Milwaukee and the District.

**15. Severability**

If a court holds any part of this Agreement unenforceable, then the remainder of the Agreement will continue in effect.

**16. Applicable Law**

The laws of the State of Wisconsin apply to this Agreement.

**17. Resolving Disputes**

If a dispute arises under this Agreement, then the parties will try to resolve the dispute with the help of a mutually agreed-upon mediator in Milwaukee County. The parties will equally share the costs and fees associated with the mediation, other than attorney's fees. If the dispute is not resolved within 30 days after it is referred to the mediator, then either party may take the matter to court.

**18. Notices**

All notices and other communications in connection with this Agreement will be in writing and will be considered given as follows:

- (a) when delivered personally to the recipient's address as stated on this Agreement; or
- (b) three days after being deposited in the United States mail, with postage prepaid to the recipient's address as stated on this Agreement.

**19. Independence of the Parties**

This Agreement does not create a partnership. Milwaukee does not have authority to make promises binding upon the District or otherwise have authority to enter into contracts on the District's behalf.

**20. Assignment**

Milwaukee may not assign any rights or obligations under this Agreement without the District's prior written approval.

**21. Public Records**

Milwaukee will produce any records in the possession of Milwaukee that are subject to disclosure by the District pursuant to the State of Wisconsin's Open Records Law, Wis. Stats. secs. 19.31 to 19.39. Milwaukee will indemnify the District against any and all claims, demands, or causes of action resulting from Milwaukee's failure to comply with this requirement.

**Signatures on Next Page**

**MILWAUKEE METROPOLITAN  
SEWERAGE DISTRICT**

**CITY OF MILWAUKEE  
DEPARTMENT OF PUBLIC WORKS**

By: \_\_\_\_\_

Kevin L. Shafer, P.E.  
Executive Director

By: \_\_\_\_\_

Ghassan Korban, P.E.  
Commissioner

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Approved as to Form

By: \_\_\_\_\_

Attorney for the District

## Green Solutions Funding Agreement

### **Kinnickinnic Avenue Silva Cells**

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#### **Project Description**

Milwaukee will install twenty-three (23) storm water trees within eight (8) Silva Cell® Systems (SCSs) within the sidewalk areas of South Kinnickinnic Avenue between East Lincoln Avenue and East Morgan Avenue. The SCS is a proprietary suspended pavement system that routes storm water runoff through an underground soil and tree root matrix located below a pavement to create a vegetated subsurface treatment system with runoff detention and pollutant removal processes similar to a bioretention system. Approximately 1,900 square feet of SCS will be constructed.

As part of the project, existing concrete sidewalk areas will be removed and underlying materials excavated to install the SCS. The SCS will support the above sidewalk while creating a void where the materials of the vegetated subsurface treatment system will be installed. Depths and materials of the system vary from location to location. In general the project consists of the following components:

- Granular Base Course/Washed Stone Bedding Layer: Structural bedding materials to support the SCS.
- SCS: Proprietary suspended pavement system (Silva Cell 2® by DeepRoot Green Infrastructure, LLC) to create a void area beneath the existing sidewalk where the vegetated subsurface treatment system will be installed.
- Catch Basins: Structures installed to capture storm water runoff from Kinnickinnic Avenue that will be distributed throughout the vegetated subsurface treatment system.
- Perforated PVC Distribution Pipe: Perforated piping installed to convey and distribute storm water runoff from the catch basins throughout the vegetated subsurface treatment system.
- Perforated PVC Underdrain Pipe: At locations directly adjacent to buildings, perforated underdrain piping is installed to remove excess storm water from the vegetated subsurface treatment system and convey it to the combined sewer system. This will protect adjacent building foundations by preventing periods of extended soil saturation.
- 6-inch Diameter PVC Cleanout: Structures installed to clean and maintain the perforated distribution and underdrain piping.
- Geomembrane Barrier: At locations directly adjacent to buildings, HDPE sheeting will provide a waterproof barrier between the vegetated subsurface treatment system and adjacent buildings foundations. The barrier will also deflect growing tree roots away from building foundations.

- Engineered Soil: Soil Media composed of a 70/30 ratio of sand installed to compost to filter and absorb storm water.
- Geogrid: The sides of the SCS are wrapped in geogrid to provide stability to the system
- Geotextile Fabric: The SCS system is wrapped in geotextile fabric to create an interface between the system and adjacent fill/native materials
- Trees

### Budget

Total project cost is estimated to be \$332,079.

### Estimated Construction Costs

QUANT.	UNIT	ITEM	UNIT PRICE	TOTAL
1	Lump Sum	BARRICADING	\$8,000	\$8,000
1	Lump Sum	Erosion Control	\$4,000	\$4,000
17	Sq. Yds.	Type "A" Lawn Replacement	\$14	\$238
42	Each	Pavement Dowels	\$11	\$462
625	Ln. Ft.	Pavement Sawing	\$9	\$5,625
70	Ln. Ft.	Concrete Curb & Gutter	\$64	\$4,480
3679	Sq. Ft.	Concrete Walk	\$12	\$44,148
7	Each	2'X2' Storm Water Curb Inlet	\$3,500	\$24,500
7	Each	Inlet Frame and Grate, MS 51 & MS 57	\$700	\$4,900
11	Each	6" Dia. PVC Cleanout	\$160	\$1,760
198	Each	Urban Tree Planting Cell System	\$800	\$158,400
240	Ln. Ft.	Geomembrane Barrier	\$18	\$4,320
32	Ton	Decorative Landscape Crushed Stone	\$88	\$2,816
384	Ln. Ft.	6" Dia. Perforated Distribution PVC Pipe and Rock Collar	\$55	\$21,120
206	Ln. Ft.	6" Dia. Perforated Underdrain PVC Pipe and Rock Collar	\$45	\$9,270
425	Cu. Yds.	Remove and Dispose Excess Excavated Material	\$48	\$20,400
225	Cu. Yds.	Engineered Soil	\$48	\$10,800
152	Ln. Ft.	6" Dia. Storm Drain, Class "C" Bedding	\$45	\$6,840
<b>TOTAL CONSTRUCTION COST</b>				<b>\$332,079</b>

### Schedule

The contract for the project will be awarded in 2016 and construction will be completed in 2016.

### **Anticipated Results**

In the project area, the peak flow to the combined sewers will be reduced as a result of the SCS installed as part of this project. Approximately 15,500 gallons of available storage will be provided within the storage layers of the vegetated subsurface treatment systems and tree canopies. This storage will allow storm water runoff to be absorbed by the soil thus promoting uptake of the water by the trees and infiltration into adjacent native soils and removing it from the combined sewer system. In addition to storing and removing storm water from the combined sewer system, this project will improve water quality by reducing the amount of total suspended solids (TSS) in the runoff.