DWSD Drainage Program
6425 Huber Street
Detroit, MI 48211
313-267-8000 (option 6)
drainage@detroitmi.gov

Drainage Charge Credit Application

For information on green stormwater infrastructure (GSI), green credit calculations, green credit information, and direct discharge, please review the Drainage Program Guide on our website at: https://detroitmi.gov/drainage-guides-and-forms

Email completed application and supporting documentation to:
drainage@detroitmi.gov or fax to: 313-842-6495

Alternatively, applications can be mailed to:
DWSD Drainage Program
6425 Huber Street
Detroit, MI 48211

1. **Property Owner**: _____
2. **Mailing Address**: _____
   Street Address City Zip
3. **Phone:** _____ 4. **Email:** _____
5. **Authorized Representative (name, address, email, contact number):**

   _____

   _____

6. **For each parcel, include the Service Address, Parcel Number and DWSD Account Number. Attach separate list if necessary:**

Item	Service Address	Parcel Number	DWSD Account Number
1			
2			
3			
4			
5			

***7.* This submittal is for a(n):**

Non-Engineered Designed Practice

☐ Downspout Disconnection [Complete Sections – 8, 9, 10, 11, 18]

☐ Disconnected Impervious [Complete Sections – 8, 9, 10, 11, 18]

Engineered Designed Practice

☐ Retention Practice [Complete Sections – 8, 9, 10, 12, 13, 18]

☐ Detention Practice [Complete Sections – 8, 9, 10, 12, 13, 18]

☐ Green Roof [Complete Sections – 8, 9, 10, 13, 14, 18]

☐ Water Reuse [Complete Sections – 8, 9, 10, 15, 18]

☐ Other [See Section – 17]

Direct Discharge to Receiving Surface Waters (Detroit/Rouge River)

☐ External/Visible Stormwater Conveyance System [Complete Sections – 8, 9, 10, 16, 18]
(Including sheet flow, external downspouts, and overland channels to the River)

☐ Internal/Underground Stormwater Conveyance System [Complete Sections – 8, 9, 10, 16, 18]
(Pipe systems and internal downspouts with outlets to the River)

8. Description of stormwater management practice(s) project:

Provide a brief narrative description of the project you are proposing or have installed that provides stormwater management and is thus eligible for credits(s).

9. **Complete table of Overall Site Data. This table should be completed for all parcels in which a credit is sought. Attach a separate sheet, if needed.**

Overall Site Data

(Note: Use consistent units as appropriate based on parcel size. Acres should be shown to the 0.01 acre)

Parcel Number	Total Site Area (Acres or ft^2)	Total Impervious Area (Acres or ft^2)	Managed Impervious Area (Acres or ft^2)

10. **List proposed stormwater management practice(s) and the calculated amount of credit(s). Attach a separate sheet, if needed.**

Managed Impervious Area for each Practice (Acres or ft^2)	Stormwater Management Practice (Acres or ft^2)	Site Credit for Each Practice (%)

Total Site Credit: _____%

For practices that are across multiple parcels, the total site credit will need to be calculated for each parcel.

11. Complete this section for disconnected impervious and downspout disconnection:

☐ Prepare a map of the property (can use a google earth image, sketch, parcel viewer image, etc.) that identifies the impervious area that generates stormwater runoff, the pervious area accepting the storm water runoff and how the stormwater runoff is transferred.

☐ Provide site photographs for each disconnected impervious area or downspout disconnection that is discharging to a pervious area.

☐ Number each of the roofs/impervious areas on the map of the property that discharge to pervious area and fill out the table below.

Chapter 4 of the Drainage Program Guide outlines the criteria required for disconnected impervious and downspout disconnection to be credit eligible.

Note: For Downspout Disconnection, the "total receiving pervious area" typically considered can be measured from the end of the downspout to the edge of the property measured along the path that water will flow multiplied by an assumed width equal to 5 feet.

Note: For Disconnected Impervious, the "total receiving pervious area" typically considered is based on the width of the sheet flow when it leaves the impervious surface multiplied by the length of the flow path in the pervious area.

Impervious Area Number	**Type of Impervious Area** (e.g., roof, sidewalk, pavement)	**Total Impervious Area** (acres or ft^2)	**Type of Pervious Area** (e.g., lawn, garden, landscape gravel)	**Total Receiving Pervious Area** (acres or ft^2)	**Practice Ratio** = $\frac{\text{Total Receiving Pervious Area}}{\text{Total Impervious Area}}$	**Individual Site Credit (%)***
Area 1						
Area 2						
Area 3						
Area 4						

*To assist with site credit calculation, the information from the table can be filled into the Credit Calculator tool on our website: https://detroitmi.gov/document/drainage-charge-credit-calculator

12. Provide performance data for the engineered practices. Each practice will require the following information. The information can be presented in a table, spreadsheet or in the credit calculator tool.

Information Required for Each Practice	Practice Includes Retention	Practice Includes Detention
Total Managed Area (acres or ft^2)	✔	✔
Managed Impervious Area (acres or ft^2)	✔	✔
Stormwater Practice Name	✔	✔
Stormwater Practice Area (acres or ft^2)	✔	✔
Retention Zone Equivalent Water Depth (inches)	✔	
Retention Zone Volume (generally this is a calculated value based on the practice area and the equivalent water depth).	✔	
Infiltration Rate Supported with On-Site Testing	✔	
Detention Zone Equivalent Water Depth (inches)		✔
Detention Zone Volume (generally this is a calculated value based on the practice area and the equivalent water depth)		✔

13. Provide supporting documentation required for engineered practices. Use the following check list to indicate the information that is included with the application.

Item	Checklist
Scaled Site Plan showing all parcels and surface features	☐
Complete engineered drawings stamped by a registered Professional Engineer or Landscape Architect.	☐
Existing roof drainage system defined (with drainage areas)	☐
Proposed roof drainage system defined (with drainage areas)	☐
Drainage areas to each practice defined	☐
Existing site drainage and sewer system defined (with drainage areas)	☐
Maintenance Plan	☐
Photographs clearly showing existing practices	☐
Environmental history of site	☐
Identification of proposed connections to DWSD Sewers, if applicable	☐
ALTA Survey, if applicable	☐
Complete listing of permits applied for/expected	☐
Geotechnical investigation results, if applicable	☐

14. Provide performance data for green roof and include the following information:

☐ Dimensional drawing of the portion of the roof that is green.

☐ Dimensional drawing of the green roof cross section.

☐ Calculations estimating performance (EPA national stormwater calculator is preferred), see Chapter 4 of the Drainage Program Guide.

15. Provide performance data for stormwater storage and reuse systems and include the following information:

☐ Total tributary area to the stormwater storage.

☐ Impervious area to the stormwater storage.

☐ Data for the water reuse. See Chapter 4 of the Drainage Program Guide for details on required information.

16. Provide supporting documentation for direct discharge to surface water:

Supporting Documentation for Direct Discharge	External/Visible Stormwater Conveyance System	Internal/Underground Stormwater Conveyance System
Map of the property that clearly identifies all impervious surfaces discharging with the conveyance system and all connections marked	✔	✔
Site photographs (photos of all visible connections and conveyance structures)	✔	✔
Dye Test Report or Engineered drawings of the conveyance system stamped by a registered Professional Surveyor, Professional Engineer or Landscape Architect		✔
Topographic Survey, if applicable	✔	✔
MDEQ/EGLE Permit, if available	✔	✔

17. For other systems of practices or for more complex sites, contact DWSD for additional information on submittal requirements.

18. Owner Certification and Right-Of-Entry

I certify that the above information is true to the best of my knowledge. I understand that any DWSD drainage credit awarded will be determined based on the information provided by me and other available information. DWSD reserves the right to revoke some or all of any credit(s) awarded if it later determines that the information relied upon in awarding the credit(s) is inaccurate. I further understand, in conducting a credit evaluation, DWSD reviews the entire parcel and therefore, the credit evaluation by DWSD may result in an increase of the impervious surfaces assessed for the site/parcel, thereby increasing my overall drainage charge.

In addition to the above certification, by signing below, I agree to allow DWSD or its designee on-site, if necessary, to review and verify the information provided by me in this application.

Signature of Owner/Authorized Representative

Print Name **Date**

DWSD may publish in any media of communication (print, news, television, radio, Internet, etc.) some or all of the information submitted in this application, including, but not limited to the amount of GSI credits awarded.