# STORMWATER & DRAINAGE

# Assessment & Billing Manual









# **TABLE OF CONTENTS**

Overview2
Introduction3
Stormwater Costs Determination4
Development Impacts5
Calculation of Equivalent Acreage for Stormwater Charge6
How to Request Stormwater Rate Review7
Runoff Volume Credits8
Runoff Coefficients for Developed Areas9
APPENDIX A: Runoff Coefficients for Developed Areas13
APPENDIX B: Stormwater Credit or Billing Adjustment Application 14

Being primarily an urban area, the City of Highland Park consists mainly of impervious surfaces, such as large buildings, parking lots with asphalt and concrete pavement, large industrial and commercial complexes, and major and local roadways. As such, there are few places where precipitation or stormwater runoff from rain or snow events (wet weather) can infiltrate the soil, nourish plants, and remain part of the natural system. Without green space to help absorb it, most of the runoff enters

the combined sewer system where it mixes with sewage and must be treated by the Great Lakes Water Authority (GLWA). Once the runoff enters the sewer in Highland Park, it is "combined" with other two other main components of sewer volume. The first component is sanitary (also called dry weather) flow from liquid and solid waste from customer's toilets, showers, floor

The City of Highland
Park is committed
to protecting,
conserving, and
managing our
combined sewer
system for all to enjoy.

drains, and other sources. Another component of the combined sewer volume is inflow/infiltration (I/I). I/I consist mainly of groundwater or treated water from water main leaks entering the sewer system primarily through cracks and poor joints in sewer pipe below ground, and manhole covers from the surface. Of the three main components of sewer flow in the combined sewer system in Highland Park—sanitary, stormwater runoff, and I/I—stormwater runoff makes up the largest portion of wastewater GLWA charges the City of Highland Park annually to treat.

The City of Highland Park has approximately fifty-seven (57) miles of sewer lines and related structures. As a primary goal of the Stormwater & Drainage Assessment and Billing Manual, the Water Department strives to equitably calculate runoff for each property owner contributing runoff to the combined sewer system and to fairly distribute charges accordingly for treatment of wastewater and

the general maintenance and repair of the combined sewer system. While the City of Highland Park continues its Return to Excellence, management of the combined sewer system along with fair and equitable billing methods to ensure timely payment of monthly sewer charges by GLWA is essential to rebuilding the sewer infrastructure and the community.

The City of Highland Park sincerely intends this Stormwater & Drainage Assessment and Billing

Manual to assist property owners with understanding the what, why, and how drainage and stormwater charges are determined, as well as methods for each property owner to receive credits and billing adjustments due to reductions in their overall contribution of stormwater runoff into the combined sewer system. These reductions help the City of Highland Park with reducing the overall volume of wastewater treated by GLWA, thereby

reducing the overall amount the City of Highland Park is charged annually, which then allows the City to pass along reductions and credits to property owners.



The City of Highland Park Stormwater & Drainage Assessment and Billing Manual was created to equitably distribute charges related to treatment and maintenance of stormwater runoff to current property owners and government entities contributing to stormwater runoff to the combined sewer system, along with developers, engineers, and architects who may prepare future stormwater management or construction plans for properties contributing stormwater runoff to the combined sewer system.

The manual shall provide several Best Management Practices (BMPs) to control the stormwater-related impacts of public rights-of-way and industrial, commercial, and residential parcels in the City of Highland Park. Although this list is not all-inclusive, property owners will have a better understanding of various methods by which to reduce the stormwater runoff into the combined sewer system. The City of Highland Park's goal is to gradually incorporate more stringent stormwater management requirements into new development or redevelopment designs to achieve the overall goal of reducing stormwater runoff.





- Allow for the City of Highland Park's Water
  Department to be a resource and provide tools
  and guidelines necessary to comply with the
  Stormwater & Drainage Assessment and Billing
  Manual and the City of Highland Park Stormwater
  Ordinance Chapter 1045
- Provide, to residents, business owners, property owners, and governmental agencies who contribute to the combined sewer system, the methodology by which the City of Highland Park is assessed charges by GLWA and how the City of Highland Park determines individual property owner charges
- Provide multiple options for property owners to reduce impervious areas on property, reducing overall stormwater runoff to combined sewer system and therefore overall monthly drainage or stormwater charges

#### STORMWATER COSTS DETERMINATION

The City of Highland Park performed an examination of available information, including past drainage and stormwater studies, engineering reports, and various news articles published from several sources, to develop a new manual for stormwater runoff and billing for the City of Highland Park. The assessment included evaluating how the City was billed for wastewater treatment by other entities in the recent past, and most important, currently by GLWA.

Past monthly sewer bills to the City of Highland Park were evaluated for the purposes of reviewing stormwater volumes, drainage related charges, and overall volumes of wastewater generated. The City of Highland Park is billed based on an estimated and calculated annual combined wastewater volume sent to GI WA for treatment



City of Highland Park Water Department 14110 Woodward Ave Highland Park, MI 48203

In continued efforts to better communicate to our customers. Highland Park Water Department has updated and improved its water bill.

#### SERVICE INFORMATION:

information.
You can find the following items in this section:
Account Number
Service Address:
(address of where usage occurs)

Billing Period .ast payment information

#### 2. USAGE HISTORY

2. USAGE HISTORY This section is a graphical representation of your property total water usage over a 12-month period of time. This allows the you to compare each month of usage, as well as iden-tify, much earlier, any leak issues or discrepan-cies in billed usage amounts.

- 4a. CURRENT BILL DETAILS

   Water Reads total units used during billing period

   Service Description, Units, Unit Rate, Charges:
- Service Description, Units, Unit Rate, Charges:

  i. Service description list of the individual
  billing items charged to a particular property's).

  i. Water/Sewer the amount of water used
  during the billing period by the oustomer

  2. Drainage/Stormwater Charge charge for
  runoff estimated to enter the combined sewer
- system from the property

  3. Billing Charge department administrative and management services, mailings, and
- 4. WRTS/SRTS (Water/Sewer Ready to Serve) Charge charge for general over maintenance and repair of the public wat
- iv. Charges total charge to customer

- . PAYMENT DETAILS

  Current Amount Due Current charges
  from current billing period due by customer.
  Amount does not include approved payment
- Amount does not include approved payment arrangements a mount Past Due Amount Total account balance and unpaid charges, including amounts in approved payment arrangements and Past Due Amount to be paid by ous tomer. Amount may differ from approved payment arrangement amount. Due Date Date payment must be received by water department.

# Water/Sewer Bill nly E-billing of your water bill is now available. e contact customer service at 313-865-1876 if you terested in this feature. 5 PAYMENT PLAN CUSTOMERS ustomers with payment plan arrangements, please ne current amount due on this bill in addition to monthly payment plan amount. You must remain nt with your payment plan arrangement in order to Highland Park, MI 48203

#### 5. PAYMENT PLAN CUSTOMERS

If you're on a payment plan, general inform regarding arrangements and bill payment v be placed here.

#### 6. PAYMENT SLIP

Need to mail in a payment or want to make payments easier when paying in person? Use this slip to mail your payment or take to the customer service center when paying in person for faster transaction

It is our goal for the customer to understand billing and usage charges. If you have any suggestion, questions or concerns please feel free to contact the Water Department. Need to update your information? Please visit the Customer Service Center to have your information updated.

For wet weather volume calculations, GLWA assumes all properties in the City of Highland Park contribute runoff, which is one of three components in the total wastewater volume treated. Based on this premise, all properties and rights-of-way within the municipal boundary are to be assessed monthly stormwater or drainage charges accordingly by the City of Highland Park Water Department. This charge, which is a result of several factors and calculations for all contributors to the combined sewer system, allows for shared responsibility for all who contribute stormwater runoff to the combined sewer system. This charge will be shown on a customer's monthly bill from the Water Department. Unless other contractual obligations or limitations exist between the City of Highland Park and an entity, stormwater and drainage charges shall be evaluated and assessed to all property owners as follows:

- All properties shall be assessed a monthly stormwater or drainage charge based upon the parcel's total acreage and the imperviousness of its surfaces, reduced to "equivalent 100% impervious acreage"
- This charge shall be called a "stormwater" charge for industrial, commercial, and other nonresidential properties
- This charge shall be called a "drainage" charge for residential properties (single or two-family homes, or property zoned or designated to be used residential)
- All individual properties and rights-of-way in the City of Highland Park will be evaluated annually using Geographic Information System (GIS) and other technology available to the Water Department to evaluate impervious surfaces



The impacts from development occur both during construction and after the development is complete. The conversion of pervious land to impervious surfaces results in increased rate and/or volume of stormwater runoff, reductions in groundwater recharge, and reduction of evapotranspiration. These new impervious surfaces change the hydrologic characteristics of the landscape by reducing infiltration into the soil and the evapotranspiration from vegetation (See Figure 1).

The result of development increases the runoff rate and/or runoff volume from a designated property. New impervious surfaces, compaction of soils, and loss of native vegetation reduce the amount of

precipitation that infiltrates into the ground. Without adequate stormwater management controls, an additional burden is created for the combined sewer system. The already aged system may experience flooding or surcharged sewers and combined sewer overflows. Uncontrolled, the impacts of development on stormwater runoff can lead to increased flooding, combined sewer overflows, increased maintenance costs, and increased sewer charges for treatment of wastewater. With the assistance of the City Engineering and Water Departments, property and parcel owners may reduce stormwater and drainage charges by implementing various volume control best management practices.

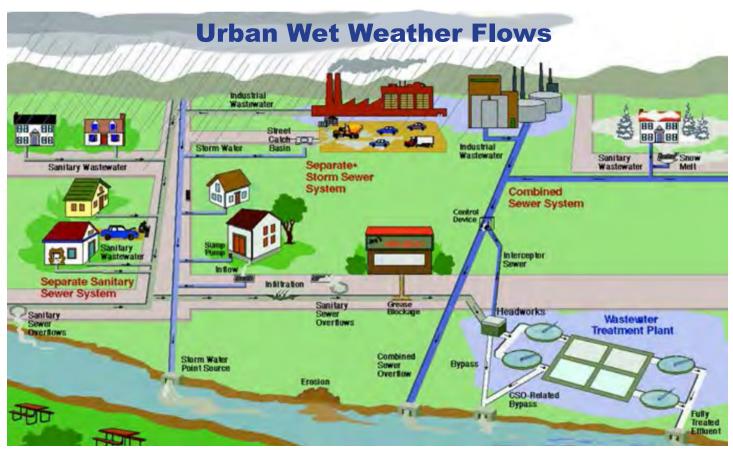


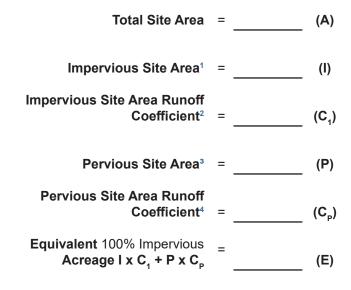
FIGURE 1. THE HYDROLOGIC CYCLE

#### CALCULATION OF EQUIVALENT ACREAGE FOR STORMWATER CHARGE

Each surface type within the runoff area has an impervious percentage, often referred to as the runoff coefficient (C) in engineering terminology, which is used to determine the weighted runoff coefficient composite value for each parcel. The runoff coefficient (C) represents the portion of stormwater not infiltrating or evaporating. Pervious areas, which include natural vegetation, grass, or landscaping, are given a conservative C-factor of 0.25. Impervious areas, which include buildings, rooftops, pavement, and other non-porous surfaces, are given a conservative runoff coefficient C-factor of 0.95.

The Water Department takes this approach one step further to calculate the equivalent 100% impervious acreage for each property. This Equivalent Acreage equates to the amount of site areas with a C-factor of 1 (totally impervious) that would produce the same volume of runoff as the actual site given its weighted runoff coefficient (C) value due to its mixture of pervious and impervious areas. For example, a one-acre parcel with a weighted C-value of 0.75 would have an equivalent 100% impervious acreage of 0.75 acres. This equivalent acreage is utilized to determine the monthly charge for all properties and rights-of-way in the City of Highland Park for billing purposes.

All individual properties in the City of Highland Park are evaluated using a Geographic Information System (GIS) to determine the relative impervious percentage of the parcel based on size of the property in acres, area of buildings and pavement, and the calculated vegetative ground cover for each of those properties. Taking this data, the Water Department uses the following methodology to calculate equivalent 100% impervious acreage for each property or right-of-way for billing purposes:



- 1. Includes paved areas, areas covered by buildings, and other impervious surfaces.
- Unless otherwise agreed upon by the Water Department, use 0.95 for buildings, pavement, gravel, and other asphalt and concrete surfaces. See Appendix A for typical C-values the Water Department will take into consideration for possible stormwater credits or bill adjustments.
- 3. Includes areas of vegetation, most unpaved or uncovered soil surfaces, and other pervious areas.
- 4. Unless otherwise agreed upon by the Water Department, use 0.25 for grass and other natural services. See Appendix A for typical C-values the Water Department will take into consideration for possible stormwater credits. Of note, even grassy and vegetated areas produce some runoff, so they are not 100% pervious and therefore have a C-factor greater than 0.

#### **HOW TO REQUEST STORMWATER RATE REVIEW**

If a property owner has reason to believe improvements have been made to property that reduce the impervious area, impervious area has been incorrectly identified, or any other matter exists that would result in a stormwater or drainage charge credit or billing adjustment, a property owner may take the following steps:

The City of Highland Water Department will review each parcel owner's documents and request and meet with the parcel owner as necessary. Upon completing the review process, the City of Highland Park Water Department shall return the results of the analysis in writing.

- 1. Complete a stormwater credit or billing adjustment application (Appendix B).
- If available, provide an aerial photograph of the subject parcel. Mark or identify the area(s) of the parcel(s) in question on the exhibit(s) in question or that have been improved or are in error.
- If a parcel owner believes a reduction is in order, he or she should take photos of the identified Best Management Practices (BMP) or areas where property owner believes impervious area(s) has been reduced.
- Schedule a meeting with the City of Highland Park Water Department to discuss the stormwater assessment exhibit for selected parcel(s) by contacting the Customer Service Center at (313) 865-1876 or HPWATERDEPARTMENT@metroca.net.



#### Mail the document(s) to:

City of Highland Park
Water Department
Customer Service Center
14110 Woodward Avenue
Highland Park, Michigan 48203



#### **RUNOFF VOLUME CREDITS**

The runoff potential for each parcel is based upon a combination of the parcel size and the composite runoff coefficient for each area. Parcels with the largest equivalent 100% impervious area (largest size and greatest amount of impervious area) contribute the largest amount of runoff volume. The actual stormwater runoff Volume for each of the individual properties is estimated using a technical approach called the Rational Method. The following equation is used to estimate the total average annual runoff volume of rainfall for all industrial, commercial, and residential properties:

Annual Rainfall Depth (in feet) <sup>1</sup>			(R)
Equivalent 100% Impervious Acreage	=		(E)
Conversion Factor (acres to square feet)	=	43560	(G)
Average Annual Runoff Volume (cubic feet) R x E x G	=		(V)

 Annual rainfall depth as provided by the Environmental Protection Agency National Stormwater Calculator for the surrounding communities of Detroit and the City of Mount Clemens

It is assumed all stormwater runoff enters into the City of Highland Park combined sewer system. Controlling the volume of stormwater runoff ensures existing, new, or redeveloped properties capture and retain a portion of the precipitation that would otherwise become runoff. This reduces the negative effects of new development or redeveloped properties, recharges groundwater, and provides water quality benefits. Volume control can help prevent sewer flooding and combined sewer overflows, as well as reduce the volume of runoff sent to the wastewater treatment plant, thereby reducing the community's overall sewer bill. A customer can calculate a property's volume credit reduction to its monthly bill as follows:

#### PERCENT VOLUME CREDIT

Percent Volume Credit\* = Average Annual Runoff Volume Reduced or Retained

Total Average Annual Runoff Volume for Property

\*maximum credit of 75% to account for shared stormwater cost

The following list of runoff volume control BMPs is not all-inclusive and has been provided by the Water Department for reference only. The Water Department will evaluate any and all stormwater management features and BMPs on a case-by-case basis to determine if the volume of runoff from a customer's property has been significantly reduced, eliminated, or otherwise impacted. The Water Department suggests each property owner provide a general overview and plan prior to implementation or extensive design investment.

The Water Department has identified the following common BMPs that can be implemented to meet the overall goals and objectives of the City of Highland Park.

вмр но.	ВМР
1	Removal of Deteriorated or Excessive Pavement, Demolition of Buildings, Residences, or Other Permanent Structures
2	Natural Landscaping
3	Downspout and Roof Drain Disconnection
4	Planter Boxes, Rain Barrels, and Cisterns
5	Above or Below Ground Retention Basins
6	Bioinfiltration Systems
7	Permeable Paving
8	Green Roofs

#### Removal of Deteriorated or Excessive Pavement, **Demolition of Buildings, Residences, or Other Permanent Structures**

Pavement removal increases the amount of ground cover with the ability to absorb some of the stormwater before it leaves the property. These areas could be converted to gardens, general landscaping, or permeable pavement areas if parking is still desired. A few areas where impervious features could be removed include:

- Unused sport play areas, including tennis courts, basketball courts, or school playgrounds
- Sections of a driveway not used for parking
- Patios and walkways no longer in use by property owner
- Demolition of abandoned, vacant, or burned out structures



**DEMOLITION OF BURNED OUT STRUCTURES** 

NATURAL LANDSCAPING

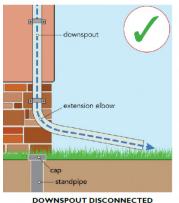
#### **Natural Landscaping**

Natural landscaping involves the planning and implementation of naturalized or native vegetation on permeable soils or prepared soils. Care must be taken to ensure that the proposed vegetation and existing soils are compatible. If existing soils are unsuitable for implementation of native vegetation, alternative landscaping plans should be devised, or a prepared soil should be brought to the site. Natural landscaping on prepared soils has a greater capacity to infiltrate stormwater than lawns on heavy soil. Natural landscaping can be an integral part of the design of other BMPs such as vegetated swales, filter strips, and bioinfiltration basins.

Trees in particular slow down rain from small storms, holding the water on leaves and branches and allowing the water to evaporate. Tree species must be chosen from the approved list provided by the City of Highland Park.

#### **Downspout and Roof Drain Disconnection**

A downspout is a pipe that carries rainwater or snowmelt from the roof of a building and is routed directly into a sewer system via a drain pipe connection. Disconnecting rooftop gutter downspouts can greatly reduce the amount of stormwater entering the combined sewer system. This can also aid in minimizing



FROM SEWER SYSTEM



DOWNSPOUT CONNECTED TO RAIN BARREI

DOWNSPOUT DISCONNECTION

or eliminating basement flooding. Although the City of Highland Park has already enacted a Downspout Disconnection Program, and all properties remain subject to its enforcement, the Water Department will encourage the further disconnection from the combined sewer system by offering a credit if other BMPs are installed in conjunction with the disconnection.

#### Planter Boxes, Rain Barrels, and Cisterns

Rooftop runoff BMPs include planter boxes and rain barrels. Planter boxes are used in heavily paved areas to reduce the amount of impervious surface. Planter boxes can be above ground or at grade and are designed to retain water in the substrate or in an underlying aggregate. Planter boxes come in a wide variety of shapes and sizes and may be planted with native or ornamental plants. Planter boxes at grade can be designed to drain part of the surrounding paved area. Planter boxes can also be designed to infiltrate water into the ground or to capture water through an underdrain system that discharges excess water into a sewer system.

Rain barrels collect and store stormwater runoff from rooftops. The volume of rain barrels or cisterns may be counted as volume control storage. Water collected in rain barrels can be used to water lawns and landscaped areas between storms. Rain barrels and cisterns are therefore most useful during the growing season. They require periodic cleaning to remove debris. Filters to keep out most debris can be installed, but periodic cleaning is still advised. In addition, rain barrels should be sealed to prevent mosquito breeding and must be drained before winter to prevent any damage from freezing and thawing.

A cistern is a container for holding and storing rainwater. They have a variety of uses. Depending on the quality of the water, cisterns can be used for everything from drinking water, washing clothes, and irrigation. Some cisterns are equipped with pumps and filters. Others are completely open while some are only partially covered from the elements.

#### **Above or Below Ground Retention Basin**

A detention basin with a rate-controlled outlet or a



PLANTER BOXES



**RAIN BARRELS** 



**CISTERN** 

retention basin with zero outlet is an excavated area or underground structure installed on a property to temporarily or semi-permanently store stormwater from a rain or snow event from a site for a predetermined period. Design standards and specifications for the detention or retention basin depend on the governmental agency with jurisdiction and the type of site the stormwater management feature will be constructed on. The basins are typically constructed during the development of a site or projects, including residential subdivisions, shopping centers, or other commercial sites, but can be designed and constructed post-development to reduce the rate at which stormwater is released from a site into the combined sewer system. Detention and retention ponds benefit a property owner by managing excess runoff generated from impervious and pervious surfaces, with detention ponds having the ability to control the peak discharge into the sewer system from a site.

#### **Bioinfiltration Systems**

Bioinfiltration systems are features such as basins or trenches collecting stormwater from surrounding impervious areas. A rain garden is a good example of a bioinfiltration system which is relatively easy to construct. Bioinfiltration is very effective at reducing runoff volume and removing pollutants, especially when used as parking lot islands. As with drainage swales and vegetated filter strips, bioinfiltration systems work best when used to collect runoff from small storm events. In some cases, bioinfiltration systems can be used in conjunction with sewer systems by incorporating underground perforated pipes or overflow inlets.

Bioinfiltration systems should be located away from structures so water does not drain into the foundations. As with other infiltration BMPs, the subsoils must have a permeability of at least 0.5 inches per hour. Bioinfiltration systems work best when pretreatment is provided in the form of drainage swales or vegetated filter strips to reduce the amount of sediment reaching the infiltration facility

#### **Permeable Paving**

Permeable paving provides many benefits in urban environments by reducing the quantity of stormwater



ABOVE GROUND RETENTION BASIN



**BELOW GROUND RETENTION BASIN** 



**BIOINFILTRATION** 

runoff and pollutants discharged from a site. Permeable pavement systems come in many different forms. The most common forms are paving blocks with a cutout to facilitate infiltration or grids that have openings filled with a porous material such as rock, sand, or soil. Paving blocks work best on areas that have sandy, permeable soils; however, they may also be implemented on low permeability soils by using aggregate and an underdrain system. Permeable pavement systems are most practical in areas not receiving high traffic volumes or heavy weight loads.

Areas of permeable pavement may be counted as permeable surfaces, unless the aggregate layer includes an underdrain system or the aggregate storage is being used for detention. In these cases, the permeable pavement should be treated as an impervious surface for volume control and detention requirements. The storage provided in permeable paving systems is based on the void space of the aggregate.

#### **Green Roofs**

In green roof systems, runoff is absorbed and retained by living vegetation installed on a rooftop. There are two types of green roof systems: extensive and intensive. Extensive systems usually contain shallower soil, put less weight on rooftops, and are easy to maintain. They generally contain shorter plants with shallower root systems. Intensive systems have deeper soil, add more weight to a rooftop, and generally contain a more diverse mixture of deep-rooted plants, trees, and shrubs. Intensive systems require more maintenance but provide added benefits in the form of water filtration and wildlife habitat. Green roof systems provide insulation and prolong the life of a roof by protecting it from the elements. Green roof systems also improve air quality by reducing the urban heat island effect. Maintenance of green roof systems is minimal and mostly involves watering and weed removal during the first few years of establishment. The green roof shall be counted as a pervious surface to aid in achieving the required impervious area reduction.



PERMEABLE DRIVEWAY PAVING



PERMEABLE PAVING

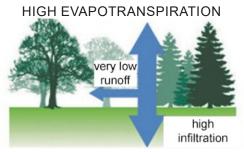


GREEN ROOF

## appendix A: RUNOFF COEFFICIENTS FOR DEVELOPED AREAS

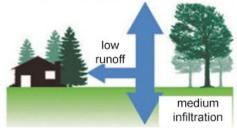
Type of	<sup>†</sup> Drainage	Runoff Coefficient
Business	;	
	Downtown areas	0.70 - 0.95
	Neighborhood areas	0.50 - 0.70
Resident	ial	
	Single-family areas	0.30 - 0.50
	Multi-units, detached	0.40 - 0.60
	Multi-units, attached	0.60 - 0.75
Suburbai	n	0.25 - 0.40
Apartment dwelling areas		0.50 - 0.70
Industria		
	Light industry	0.50 - 0.80
	Heavy industry	0.60 - 0.90
Parks, ce	emeteries	0.10 - 0.25
Playgrou	nds	0.20 - 0.40
Railroad yards		0.20 - 0.40
Unimproved areas		0.10 - 0.30
Lawns		
	Sandy soil, flat, 2%	0.05 - 0.10
	Sandy soil, avg., 2-7%	0.10 - 0.15
	Sandy soil, steep, 7%	0.15 - 0.20
	Heavy soil, flat, 2%	0.13 - 0.17
	Heavy soil, avg., 2-7%	0.18 - 0.22
	Heavy soil, steep, 7%	0.25 - 0.35
Streets:		
	Asphaltic	0.70 - 0.95
	Concrete	0.80 - 0.95
	Brick	0.70 - 0.85
	Drives and walks	0.75 - 0.85
Roofs		0.75 - 0.95

#### Effects of Imperviousness on Runoff & Infiltration



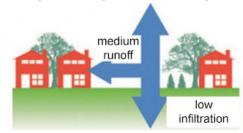
Natural Ground Cover 0% Impervious Surface

#### MEDIUM EVAPOTRANSPIRATION



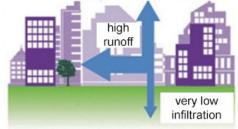
Low Density Residential (e.g. rural) 10-20% Impervious Surface

#### LOW EVAPOTRANSPIRATION



Medium Density Residential (e.g. subdivision) 30-50% Impervious Surface

#### VERY LOW EVAPOTRANSPIRATION



High Density
Residential / Industrial / Commercial
75-100% Impervious Surface

## appendix B: STORMWATER CREDIT OR BILLING ADJUSTMENT APPLICATION

City of Highland Park Water Department 14110 Woodward Avenue Highland Park, MI 48203



Customer Service Center Hours

M-TH 8:00AM – 4:30PM

FRI 8:00AM – 2:00PM

Phone (313) 865-1876

HPWATERDEPARTMENT@metroca.net

#### Stormwater Credit or Billing Adjustment Application

Today's Date: \_\_\_\_\_

	APPLICANT	INFORMATION	
Property Owner:			
City:	State:	Zip Code:	:
Phone:	Email: _		
Authorized Representativ	ve Name:		
Company or Affiliation: _			
Mailing Address:			
City:	State:	Zip Code:	
Phone:	Email: _		
SERVICE LOCATION INFORMATION			
Service Address:			
Parcel ID:	Water Dept. Account No.:		
Property Classification:			
☐ Industrial	☐ Residential	☐ Commercial	☐ Other
	REASON FOR AD	JUSTMENT REQUEST	
Provide a brief description of the adjustment(s) you are requesting in the space below. Refer to the information			
below for common appeal types and required back-up documentation:			

Send completed applications and supporting documentation to the City of Highland Park Water Department at the mailing address or email address listed at the top of this application form.



## STORMWATER CREDIT OR BILLING ADJUSTMENT APPLICATION

City of Highland Park Water Department 14110 Woodward Avenue Highland Park, MI 48203



Customer Service Center Hours
M-TH 8:00AM – 4:30PM
FRI 8:00AM – 2:00PM
Phone (313) 865-1876
HPWATERDEPARTMENT@metroca.net

## Stormwater Credit or Billing Adjustment Application

REASON FOR ADJUSTMENT REQUEST, CONTINUED			
Methods Used: (if customer removed surface classified as impervious)			
☐ Removal of paved or gravel surface	☐ Implementation of BMP		
☐ Landscaping additions	☐ Other:		
Supporting Documentation: (attach to application)			
☐ GIS map	☐ Drawing/sketch/plan with location and		
☐ Site Photographs	dimensions of impervious surfaces		
☐ Other:			
Owner Certification and Right-of-Entry  I certify that the above information is true to the best of my knowledge. I further understand that the stormwater charge will be based on the information provided. The Water Department may revoke the adjustment if it later determines that the information provided is inaccurate. I agree to allow Water Department staff or inspectors onsite to review and verify the information supplied by the applicant.			
Signature of Owner/Authorized Representative			
Print Name	Date		