

# CITY OF BEECH GROVE, INDIANA STORMWATER UTILITY

## POLICY AND PROCEDURES MANUAL

**Prepared for:**

City of Beech Grove  
Stormwater Utility

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## Chapter 1: Introduction

The purpose of this manual is to establish policies and procedures for the City of Beech Grove Storm Water Management District (known herein as the Stormwater Utility) for determining impervious surface area (ISA), establishing the Equivalent Residential Unit (ERU) and multiplier for stormwater users, billing and collection, and the credit process.

The City of Beech Grove intends to operate its Stormwater Utility under provisions of IC 8-1.5-5, which enables an Indiana municipality to establish a stormwater management district. The Stormwater Utility will be responsible for the operation, maintenance and management of the public stormwater facilities and will fund stormwater management activities by charging user fees to the owner of each property containing ISA within the corporate limits of the City of Beech Grove.

Within the City of Beech Grove, the City of Indianapolis is responsible for Construction Site Runoff Control and Post-Construction Management as they pertain to the City of Indianapolis Storm Water Design and Construction Specifications Manual, the review, granting and enforcement of Storm Water Permits and inspection of the same per the conditions of Indiana Code IC 36-1-7-2 and an interlocal agreement between the City of Indianapolis and the City of Beech Grove. As required by Phase II of the National Pollutant Discharge Elimination System (NPDES) authorized by the 1972 amendments to the Clean Water Act, the Indiana Department of Environmental Management's (IDEM's) Rule 13 (327 IAC 1513) and the IDEM's Rule 5 (327 IAC 155), the City of Beech Grove is responsible for the following:

1. Public education and public involvement to inform the general public about stormwater pollution and ways to improve stormwater quality,
2. Discharges of prohibited non-stormwater flows into the stormwater conveyance system,
3. Preventing or reducing polluted runoff from municipal operations within the City, and
4. Inspection, maintenance, record keeping, and reporting of the above.

In November 2013 an Advisory Committee was assembled to assist in the process of forming a Stormwater Utility. Wessler Engineering, engineering consultant, and Crowe Horwath, rate consultant, provided technical assistance. The content of this Policy and Procedures Manual was studied and developed by the committee.



## Chapter 2: Definitions and Acronyms

### 2.1 Definitions

As used in this manual, the following terms shall have meanings attributed to them as follows:

As-Built Plans – a drawing or drawings accurately indicating the location and design details of all improvements installed in relation to development of a property or site.

Best Management Practice (BMP) – schedule of activities, prohibition of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

Board of Public Works and Safety (Board) – the City of Beech Grove Board of Public Works and Safety in Beech Grove, Indiana.

Business – the purchase, sale, or exchange of goods or services, or the maintenance for profit of offices or recreational or amusement enterprises.

Compacted Gravel – a gravel, crushed stone, or rock surface that impedes or prevents the infiltration of stormwater into the soil. Such surfaces are subject to vehicular or equipment traffic or may be used as a roadway, driveway, alley or parking surface.

Conveyance – any structural facility for transferring stormwater between two (2) points, including public streets, roads, alleyways, and highways; curb and gutter; inlets, catch basins, manholes, and structures; pumping stations; pipes and culverts; outfalls; channels, legal drains, creeks, ditches, swales, and streams; retention or detention facilities; and other structural components and equipment that transport, move or regulate stormwater.

Credit – a reduction in the stormwater user fee for a stormwater user, based upon the attainment of criteria specified in Chapter 6 of this manual.

Detention Facility – a facility that collects and stores stormwater runoff thereby reducing the rate at which runoff is discharged from the property.

Discharge – the flow of any stormwater runoff, pollutant, or other substance into or from the stormwater system.

Equivalent Residential Unit (ERU) – the average amount of impervious surface area for a single-family residential property located within the corporate limits of the City of Beech Grove. The ERU

for the City is 2,620 square feet and shall be used in calculating user fees for non-residential properties.

Home Occupation Property – a property where an occupation or business activity is carried on within a legally established dwelling unit or an associated accessory structure (in those cases where the business activity is a legally established nonconforming occupation which occupies such associated accessory structure), by a resident of said dwelling, where the occupation or business activity is clearly incidental and subordinate to the residential use and does not alter the character thereof, in accordance with Indianapolis - Marion County, Indiana, Code of Ordinances § 731-220. The business or profession must clearly be subordinate to a residential use, operated by occupants of the residence on the premises. All other properties in which business is conducted will be categorized as Non-Residential properties.

Impervious Surface Area (ISA) – the horizontal surface area of property covered with materials that include, but are not limited to, concrete, asphalt, rooftop, blacktop, and compacted gravel, such that the infiltration of stormwater is prevented or impeded. The total amount of ISA located on a property without regard to topographic features of the property is included. Driveways, roadways, parking lots and other areas used for vehicular traffic are considered ISA. Low-impact development surfaces such as pervious pavements and green roofs will be measured as ISA but may be eligible for a stormwater user fee credit as described in Chapter 6. Undisturbed land, tilled agricultural land, ponds, lawns and fields are not considered ISA for ISA calculations.

Infiltration – passage or movement of water into the soil.

Low-Impact Development – systems and practices that mimic a site's pre-development condition by using design techniques to infiltrate, filter, store, evaporate, detain, and reuse stormwater runoff on the site where it is generated. Low-impact development practices result in less surface runoff and less pollution to streams, rivers, lakes, and other waterways.

Multi-Family Property – a lot or parcel on which a building is situated containing two (2) residential units shall be billed as a residential property and bills shall be sent to the owner of the property. A multi-family lot or parcel containing three (3) or more units shall be classified and billed as non-residential property.

Non-Residential Property – all lots or parcels not categorized as Residential Properties. Non-residential properties shall include, but are not limited to, the following:

- Agricultural property
- Business or commercial property
- Church or other place of religious affiliation
- Community center
- Federal, state, and local government property
- Hospitals or medical center
- Industrial property
- Multi-family property which contains three (3) or more units
- Retirement center
- Schools, college, or university
- Common areas of residential developments including, but not limited to, parking, recreational, maintenance, and office areas and all other areas not occupied by residential units

Pervious Surface Area – the horizontal surface area of property covered with materials that include, but are not limited to, undisturbed land, tilled agricultural land, ponds, lawns (grass and landscaped areas), and fields, such that the infiltration of stormwater is allowed or encouraged.

Post-Development Condition – the condition of a site which has been developed.

Pre-Development Condition – the condition of a site prior to land altering activities.

Property Owner – the individual, partnership, corporation, or other legal entity holding the deed or record of title to the property. A contract purchaser whose contract has been recorded shall be considered a property owner.

Public Stormwater Facilities – facilities designed to transport, move or regulate stormwater that are subject to the control and/or under the ownership of the local, state or federal government. This shall include facilities in the right-of-way.

Residential Property – a lot or parcel of real estate on which a building is situated containing a group of rooms forming a single inhabitable dwelling unit with facilities intended primarily for living, sleeping, cooking, and eating in which a single family resides including home occupation properties allowed without a permit as defined in § 731-220 of the Marion County Zoning Code. A Multi-Family Property consisting of two (2) residential units in a single building shall also qualify as a single Residential Property.

Retention Facility – a facility that collects stormwater runoff without releasing it. The stormwater infiltrates into the ground or evaporates.

Runoff – the portion of precipitation that flows from a drainage area on the land surface, in open channels, or in the stormwater conveyance system.

Sediment – solid material (both mineral and organic) that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface.

Storm Sewer – a sewer (underground piped system) which carries storm and surface water and drainage, but excludes sewage and industrial wastes, other than unpolluted cooling water and which is part of the stormwater conveyance system. Also called a Storm Drain.

Stormwater – any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Stormwater Conveyance System – all publicly-owned facilities and conveyances used for collecting and conveying stormwater to, through and from drainage areas to the point of final outlet. Also called a Storm Drainage System.

Stormwater Facilities – all stormwater and drainage components subject to the control of and/or under the ownership of the City of Beech Grove used for collecting and conveying stormwater including but not limited to conduits and appurtenant features; public streets, roads, alleyways, and highways; gutters; curbs; inlets, catch basins, manholes, and structures; pumping stations; pipes and culverts; outfalls; natural and human-made or altered channels, creeks, ditches, swales, and streams; retention or detention facilities; and other structural components and equipment that transport, move or regulate stormwater.

Stormwater Management Activities – Activities conducted by the Stormwater Utility and the City of Beech Grove that benefit Stormwater Utility customers and allow the City to comply with federal and state laws and regulations. Some of the activities of the Stormwater Utility include: stormwater monitoring and sampling; storm drain marking; street sweeping; public stormwater facilities maintenance and cleaning; capital improvement projects for flood control; stormwater quality education; erosion and sediment control; post-construction stormwater quality; illicit discharge detection and elimination; and utility administrative functions.

Stormwater Quality – a measurement of pollutant loadings from stormwater runoff. An increase in stormwater quality is a reduction of the amount of pollutants in the stormwater runoff.

Stormwater User Fee – a charge imposed by the Stormwater Utility for the funding of Stormwater Management Activities.

User – the owner and/or tenant of a property, lot, parcel of land, building or premises within the City of Beech Grove corporation limits and containing impervious surface area. Also called a Customer.

## **2.2 Acronyms**

BMP	Best Management Practice
EPA	United States Environmental Protection Agency
ERU	Equivalent Residential Unit
FEMA	Federal Emergency Management Agency
IC	Indiana Code
IDEM	Indiana Department of Environmental Management

IDOE	Indiana Department of Education
IDNR	Indiana Department of Natural Resources
ISA	Impervious Surface Area
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
TSS	Total Suspended Solids
USDA	United States Department of Agriculture
USGS	United States Geological Survey



## **Chapter 3: Stormwater User Fee Determination**

### **3.1 Impervious Surface Measurements**

All impervious surface areas (ISA) within the parcel boundaries of a property shall be measured, with the exception of those surfaces located within the public right-of-way. Public streets and sidewalks parallel to public streets within the right-of-way shall not be used in the calculation of the ISA of a property for purposes of determining the stormwater user fee applicable to it. Access drives to individual properties shall be measured to the edge of the public right-of-way and used in the calculation of the ISA for the property to determine the stormwater user fee. ISA shall be measured without regard to topography (i.e. angled rooftops shall be measured as if they were flat).

When demolition occurs on or improvements are made to non-residential properties, the property owner/developer shall report the ISA measurements (in square feet) for the completed project. The ISA measurements shall be recorded on the applicable commercial demolition or building permit. Approved permits will be routed to the Sewage Works Clerk in order for that property's measurements to be updated and to be accurately billed.

### **3.2 ERU Determination**

The ERU for the City of Beech Grove is 2,620 square feet, and shall be used in calculating user fees for non-residential properties.

### **3.3 Stormwater User Fees**

Stormwater user fees shall be charged according to the total ISA on the lot or parcel. The user fee for one (1) ERU shall be established by ordinance. This user fee may be changed from time to time by the City Council by ordinance.

Stormwater user fees do not relieve any property owner from compliance with the City of Beech Grove, City of Indianapolis, and/or Marion County ordinances or other applicable state and federal laws and regulations.

### **3.4 Residential vs. Non-Residential Properties**

The monthly user fee for residential properties (including multi-family properties and home occupation properties that are defined as residential properties in the definitions section of this manual) will be the uniform stormwater user fee for one (1) ERU. This acknowledges that all users within the City of Beech Grove place demands on the public stormwater conveyance system and benefit from stormwater management activities.

The monthly user fee for non-residential properties varies as described below. All non-residential properties will be charged the uniform stormwater user fee per ERU. The ERU for a non-residential property (including multi-family properties that are defined as non-residential properties in the definitions section of this manual) shall be based upon the amount of ISA (measured in square feet)

contained within the lot or parcel. ERUs for non-residential properties are determined using an ERU multiplier, which is calculated by dividing the total ISA within the property by the base ERU of 2,620 square feet. This method allows for the non-residential property user fees to be based upon the amount of ISA within the property as compared to the amount of ISA of the average residential property. The ERU multiplier shall be rounded to one decimal place and the minimum shall be one (1.0) ERU. The ERU multiplier is then multiplied by the current fee for one (1) ERU to determine the actual user fee in dollars.

EXAMPLE 1: A non-residential property has 2,000 square feet of ISA. Therefore:

*(2,000 square feet ISA) / (2,620 square feet per ERU) = 0.763 ERU < 1 → rounded to 1.0 ERU.*

EXAMPLE 2: A non-residential property has 10,000 square feet of ISA. Therefore:

*(10,000 square feet ISA) / (2,620 square feet per ERU) = 3.817 ERU > 1 → rounded to 3.8 ERU.*

## **Chapter 4: Billing and Collection**

A stormwater user fee shall be imposed on each and every property, lot, parcel of land, building or premises that contains impervious surface area (ISA). All stormwater user fees shall be calculated monthly.

Charges for stormwater service shall be billed by and through Beech Grove City Utilities on the monthly utility bill. Billing and collection for the Stormwater Utility shall be in accordance with the City of Beech Grove's current sewage works billing and collection policies as described in Beech Grove, IN Code of Ordinances Chapter 50: Sewers.

For sewer users normally receiving monthly utility bills for City services, the stormwater utility fee shall be included in the monthly bill rendered to the established customer. For properties not receiving monthly utility bills for City services, the bill or statement for the stormwater utility user fee shall be sent to the property owner as identified by property tax records.

If sewer or trash service is cancelled, the stormwater user fee shall continue to be charged monthly.

A user's account shall be considered delinquent if charges for services are not paid by the due date on the utility bill. Delinquent charges and all applied penalties and fees may be made a lien upon the property and may be collected in accordance with Beech Grove, IN Code of Ordinances Chapter 50: Sewers (§ 50.085) and IC 36-9-23-31 through 36-9-23-34. Delinquent accounts and accounts with outstanding liens are not eligible to petition for an appeal as described in Chapter 5 or for stormwater user fee credits as described in Chapter 6.



## Chapter 5: Appeals Process

Non-residential property owners may petition the City of Beech Grove Board of Public Works and Safety for a stormwater user fee billing adjustment if the property classification assigned to the property is inaccurate, if sufficient cause exists to believe the property's ERUs were determined erroneously, or if alteration to the property has been made that might be expected to have changed the property's ERU determination. One appeal will be allowed per property owner or per property alteration. The petitioner must not be delinquent and must file the petition within ninety (90) days of receiving the stormwater user fee bill in question to have fees in that bill subject to adjustment (i.e. bills prior to 90 days before the filing of a petition are not subject to adjustment). The petitioner shall state in writing why it is believed an adjustment is justified and shall include any supporting evidence, clearly defined, with the petition.

The Board or an appointed reviewer shall examine the petition and any submitted documentation, make a determination as to whether the petitioner is entitled to an adjustment of the ERU determination, and notify the petitioner in writing of the decision and the basis of the decision within sixty (60) days. The reviewer may grant, deny, or modify the adjustment requested in the petition; the reviewer's decision shall be final. If it is determined that the petitioner is entitled to an adjustment of the property classification or ERU determination based on the appeal, the adjustments will be made in the form of a refund for any overpayment of stormwater user fees or may be given as a credit against future utility bills.

Petitions for appeal of a property's user fee credit determination or credit revocation must be received in writing by the Board within sixty (60) days of the receipt of the credit determination or revocation letter. Credit appeals shall follow the same procedures as for billing adjustment appeals, as outlined above.



## Chapter 6: Stormwater User Fee Credits

### 6.1 Available Credits

A reduction in the stormwater user fee, or credit, may be available to users based on specific qualifying conditions defined in this chapter that mitigate the effects of increased stormwater runoff and stormwater pollution from a property and for qualifying educational activities. If it is determined that a user fee credit is to be granted, the adjustments will be made in the form of a credit against future stormwater user fees. Final approval of all credits will be at the discretion of the Board of Public Works and Safety (Board).

Credit procedures outlined in this chapter are not intended to be all-inclusive. Upon approval by the Board, stormwater user fee credits may be allowed for circumstances not described in this chapter.

#### 6.1.1 Education Credits

Eligible Users:	Public/private school properties
Credit Type:	Annual, expires June 30
Maximum Credit:	Tier One: 10%, Tier Two: 25%
Application Fee:	\$25.00
Renewal Fee:	\$25.00

Education credits are available to all public and private schools or school systems that are accredited by the Indiana Department of Education (IDOE). In order for a school or school system to receive a stormwater user fee education credit, the school must implement an educational program that educates and informs the students on the importance of preserving and restoring the source and integrity of water resources (stormwater, ground water and/or surface waters).

The educational program may include educational posters, take-home materials, classroom lessons, field trips, etc. Programs may be developed by the Indiana Department of Environmental Management (IDEM), the Indiana Department of Natural Resources (IDNR), the United States Environmental Protection Agency (EPA) the United States Geological Survey (USGS), or a school official. Some resources and example materials can be found at:

- IDEM Classroom Resources (<http://www.in.gov/idem/nps/3459.htm>)
- IDNR Project WET (<http://www.in.gov/dnr/fishwild/7546.htm>)
- EPA NPDES Stormwater Outreach Materials and Reference Documents (<http://cfpub.epa.gov/npdes/stormwatermonth.cfm#materials>)
- EPA Teacher Resources and Lesson Plans (<http://www.epa.gov/students/teachers.html>)
- EPA Water Science and Technology for Students and Educators (<http://water.epa.gov/learn/resources/>)
- USGS Education Resources (<http://education.usgs.gov/>)

To qualify for the credit, the educational program must be approved by the Board or designated representative. The program may be taught in grades Kindergarten (K) through twelve (12).

The maximum credit for a school or school system shall be applied to the original stormwater user fee determined in accordance with this manual for the corresponding property or properties, and will be tiered based on the proportion of grade levels taught as compared to the total number of grade levels within the school, as described below. The education credit shall only be applied to the portion of the property which serves the school (e.g. a church building on the same parcel would not be eligible). The Board will make the final decision on the total credit awarded.

- A. Tier One Education Credit: A ten percent (10%) Tier One Education Credit is available to a school or school system for an approved educational program which educates 50% to 74% of the grade levels within the school or school system.
- B. Tier Two Education Credit: A twenty-five percent (25%) Tier Two Education Credit is available to a school or school system for an approved educational program which educates 75% to 100% of the grade levels within the school or school system.

EXAMPLE 1: An approved educational program is completed for two (2) of four (4) grades levels in a school. Therefore:

*(50% of grade levels) = Tier One Education Credit = 10% total education credit*

EXAMPLE 2: An approved educational program is completed for all grade levels in a school. Therefore:

*(100% of grade levels) = Tier Two Education Credit = 25% total education credit*

For the first year of the Stormwater Utility, on or before June 1, 2014, the qualifying school shall certify with the Board or designated representative the programs that were taught in the previous year. The first year credit will expire on June 30, 2015. In future years, the certification must occur on or before June 30, annually. A credit approval letter will be forwarded to the Beech Grove Utilities so that appropriate billing adjustments may be made.

Applications for education credits must contain a completed general stormwater user fee credit application form, a completed Education Program Application, and the application fee before the application will be considered complete. Applications for credit renewal must contain a completed Education Program Application and the renewal fee before the application will be considered complete. Incomplete applications will not be reviewed.

### 6.1.2 Low-Impact Development Credits

Eligible Users:	Non-residential properties with low-impact development facilities
Credit Type:	On-going, no renewal required
Maximum Credit:	10%
Application Fee:	\$150.00
Renewal Fee:	N/A

Low-impact development credits are available to non-residential properties that implement low-impact practices which eliminate stormwater runoff from the site for all storms up to and including the 10-year, 24-hour storm and encourage infiltration (where soils are appropriate for infiltration practices) or reuse of captured stormwater. Credit will also be considered on a case-by-case basis for other types of stormwater facilities or control devices which reduce stormwater runoff to the municipal stormwater conveyance system.

Low-impact development facilities should minimize site disturbance, preserve and recreate natural landscape features, reduce impervious surfaces, increase drainage flow paths, increase or enhance off-line stormwater storage, encourage detention and infiltration, and utilize native, drought-tolerant plants. General guidelines for infiltration and runoff reduction are available through the EPA and in IDEM's *Indiana Storm Water Quality Manual*.

The maximum low-impact development credit shall be ten percent (10%) of the original stormwater user fee determined in accordance with this manual for a non-residential property. The total credit shall be based on the amount of impervious surface area (ISA) that flows to the low-impact facility as compared to the total ISA within the property, rounded to the nearest whole percent.

**EXAMPLE 1:** A non-residential property with 10,000 square feet of ISA installs a rain garden which handles stormwater runoff flows from a parking lot with an area of 2,000 square feet (20% of the ISA on the property). Therefore:

$$(20\% \text{ of total ISA}) \times (10\% \text{ maximum credit}) = \underline{2\% \text{ total low-impact development credit}}$$

**EXAMPLE 2:** A non-residential property installs rain gardens and cisterns which handle the stormwater runoff flows from 100% of the ISA on the property. Therefore:

$$(100\% \text{ of total ISA}) \times (10\% \text{ maximum credit}) = \underline{10\% \text{ total low-impact development credit}}$$

Applications for low-impact development credits must contain a completed general stormwater user fee credit application form, the application fee, and all detailed technical information listed below before the application will be considered complete. Incomplete applications will not be reviewed.

- As-built plans (signed and sealed by a licensed surveyor or professional engineer, registered in the State of Indiana) at an appropriate scale and showing the site, topographic details, 100-year flood elevation, stormwater facilities, and the surrounding area

- Maps delineating drainage areas and watersheds, indicating overland flow paths, drainage flow arrows, and which impervious areas flow to the low-impact development facilities
- Calculations (signed and sealed by a licensed surveyor or professional engineer, registered in the State of Indiana) to verify that the drainage system has adequate capacity to meet the design criteria for the credit which the owner is requesting
- Operation and Maintenance manual, including proposed maintenance schedule that describes in detail the property owner's maintenance activities for the stormwater facility

For new facilities, design plans (signed and sealed by a licensed surveyor or professional engineer, registered in the State of Indiana) at an appropriate scale and showing the site, topographic details, 100-year flood elevation, stormwater facilities, and the surrounding area may be submitted for credit consideration. The property owner must submit as-built plans following construction in order to qualify for the credit.

### 6.1.3 Quality Improvement Credit

Eligible Users: Non-residential properties with BMPs  
 Credit Type: On-going, no renewal required  
 Maximum Credit: 5%  
 Application Fee: \$50.00  
 Renewal Fee: N/A

Quality improvement credits are available to properties that provide a water quality Best Management Practice (BMP). Eligible BMPs must be designed, constructed and maintained according to Chapter 700 (Stormwater Quality) of the Indianapolis Stormwater Design and Construction Specifications Manual. In accordance with Chapter 700, the BMP, or combination of BMPs, must be designed to remove eighty percent (80%) of the total suspended solids (TSS).

The maximum quality improvement credit shall be five percent (5%) of the original stormwater user fee determined in accordance with this manual for a non-residential property. The total quality improvement credit shall be based on the amount of impervious surface area (ISA) that flows to the BMP for which the credit would be applied as compared to the total ISA within the property, rounded to the nearest whole percent. The Board will make the final decision on the total credit awarded.

**EXAMPLE 1:** A non-residential property with 5,000 square feet of total ISA installs a stormwater treatment unit BMP which treats and handles stormwater runoff flows from a parking lot with an area of 1,000 square feet (20% of the ISA on the property). Therefore:

$$(20\% \text{ of total ISA}) \times (5\% \text{ maximum credit}) = \underline{1\% \text{ total quality improvement credit}}$$

**EXAMPLE 2:** A non-residential property with 5,000 square feet of total ISA installs multiple stormwater treatment unit BMPs, which together treat and handle 100% of the ISA on the property. Therefore:

$$(100\% \text{ of total ISA}) \times (5\% \text{ maximum credit}) = \underline{5\% \text{ total quality improvement credit}}$$

Applications for quality improvement credits must contain a completed general stormwater user fee credit application form, the application fee, and all detailed technical information listed below before the application will be considered complete. Incomplete applications will not be reviewed.

- As-built plans (signed and sealed by a licensed surveyor or professional engineer, registered in the State of Indiana) at an appropriate scale and showing the site, topographic details, impervious areas, pervious areas, total parcel(s) area, 100-year flood elevation, location of the BMP (s), dimensions of the BMP(s), and all other stormwater facilities
- Maps delineating drainage areas and watersheds, indicating overland flow paths, drainage flow arrows, and which impervious areas flow to the BMP (s)
- Calculations (signed and sealed by a licensed surveyor or professional engineer, registered in the State of Indiana) including BMP sizing and performance calculations.
- Floodplain and floodway information for the site, including 100-year flood elevation
- Operation and Maintenance manual, including proposed maintenance schedule that describes in detail the property owner's maintenance activities for the BMP

#### **6.1.4 Quantity Reduction Credit**

Eligible Users: Non-residential properties with detention facilities  
Credit Type: On-going, no renewal required  
Maximum Credit: Tier One: 10%, Tier Two: 15%  
Application Fee: \$250.00  
Renewal Fee: N/A

Quantity reduction credits are available to non-residential properties that detain stormwater runoff prior to discharging from the property. Eligible detention/retention facilities must be designed, constructed and maintained in accordance with the Indianapolis Stormwater Design and Construction Specifications Manual.

The maximum quantity reduction credit for a detention/retention facility shall be applied to the original stormwater user fee determined in accordance with this manual for the corresponding property or properties, and will be tiered, as described below. The total quantity reduction credit shall be based on the amount of impervious surface area (ISA) that flows to the BMP for which the credit would be applied as compared to the total ISA within the property, rounded to the nearest whole percent. The Board will make the final decision on the total credit awarded.

- Tier One Standard Quantity Reduction Credit: A ten percent (10%) Tier One Standard Quantity Reduction Credit is available to properties with stormwater facilities that control the post-development peak stormwater runoff rate to the pre-development rates for the two (2), ten (10), and one-hundred (100) year design storms.
- Tier Two Additional Quantity Reduction Credit: An additional five percent (5%) Tier Two Additional Quantity Reduction Credit is available to properties with stormwater facilities that comply with the Standard Quantity Reduction Credit criteria and provide additional detention/retention capacity to further reduce the post-development peak stormwater runoff

rate for the 100-year design storm. The total additional quantity reduction credit shall be based on the peak rate reduction (PRR) and the amount of impervious surface area (ISA) that flows to the detention facility for which the credit would be applied as compared to the total ISA within the property, rounded to the nearest whole percent.

The peak rate reduction (PRR) shall be:

$$PRR = \frac{(Pre\text{-}development\ 100\text{-}year\ Peak\ Rate) - (Post\text{-}development\ 100\text{-}year\ Peak\ Rate)}{(Pre\text{-}development\ 100\text{-}year\ Peak\ Rate)}$$

**EXAMPLE 1:** A non-residential property with 20,000 square feet of ISA installs a detention facility which receives stormwater runoff flows from a building and parking lot with a total of 10,000 square feet of ISA (50% of the ISA on the property). The peak runoff rates are noted in the table below.

Design Storm	Pre-Development Peak Rate	Post-development Peak Rate (with detention)
2-year	13 cfs	12 cfs
10-year	20 cfs	18 cfs
100-year	29 cfs	29 cfs

The comparison of pre-development peak stormwater runoff rates to post-development rates demonstrates that the detention facility provides control for all of the required design storm events and qualifies for the Tier One Standard Quantity Reduction Credit. Therefore:

$$(50\% \text{ of total ISA}) \times (10\% \text{ Tier One Standard Quantity Reduction Credit}) = \underline{5\% \text{ total quantity reduction credit}}$$

**EXAMPLE 2:** A non-residential property with 50,000 square feet of ISA installs a detention facility which receives stormwater runoff flows from 30,000 square feet of pavement (60% of the ISA on the property). The peak runoff rates are noted in the table below.

Design Storm	Pre-Development Peak Rate	Post-development Peak Rate (with detention)
2-year	23 cfs	19 cfs
10-year	36 cfs	31 cfs
100-year	52 cfs	44 cfs

The comparison of pre-development peak stormwater runoff rates to post-development rates demonstrates that the detention facility provides control for all of the required design storm events and qualifies for the Tier One Standard Quantity Reduction Credit. Additionally, the detention facility reduces the post-development peak stormwater runoff rate for the 100-year design storm below the pre-development rate and qualifies for the Tier Two Additional Quantity Reduction Credit. Therefore:

$$\text{PRR} = \frac{(52 \text{ cfs}) - (44 \text{ cfs})}{(52 \text{ cfs})} = 15\%$$

*(60% of total ISA) x (10% Tier One Standard Quantity Reduction Credit) + (60% of total ISA) x (15% PRR) x (5% Tier Two Additional Quantity Reduction Credit) = 9% total quantity reduction credit*

Applications for quantity reduction credits must contain a completed general stormwater user fee credit application form, the application fee, and all detailed technical information listed below before the application will be considered complete. Incomplete applications will not be reviewed.

- As-built plans (signed and sealed by a licensed surveyor or professional engineer, registered in the State of Indiana) at an appropriate scale and showing the site, topographic details, 100-year flood elevation, stormwater facilities, effective limits of stormwater detention facilities, outlet size and location, emergency spillway configuration, and the surrounding area
- Maps delineating drainage areas and watersheds, indicating overland flow paths, drainage flow arrows, and which impervious areas flow to the detention facilities
- Calculations (signed and sealed by a licensed surveyor or professional engineer, registered in the State of Indiana) including:
  - pre-developed and post-developed runoff rates for the two (2), ten (10), and one-hundred (100) year design storms
  - results of routing the stormwater runoff for the two (2), ten (10), and one-hundred (100) year design storms through the facility or control
  - total storage volume
  - principal outlet size and type
  - emergency spillway size, type, and configuration
- Floodplain and floodway information for the site, including 100-year flood elevation
- Operation and Maintenance manual, including proposed maintenance schedule that describes in detail the property owner's maintenance activities for the stormwater facility

For new facilities, design plans (signed and sealed by a licensed surveyor or professional engineer, registered in the State of Indiana) at an appropriate scale and showing the site, topographic details, 100-year flood elevation, stormwater facilities, effective limits of stormwater detention facilities, outlet size and location, emergency spillway configuration, and the surrounding area may be submitted for credit consideration. The property owner must submit as-built plans following construction in order to qualify for the credit.

## **6.2 Maximum Credit**

The maximum aggregate stormwater user fee credit for any individual property is twenty-five percent (25%) of the original stormwater user fee determined in accordance with this manual, regardless of how many individual credits for which the property qualifies.

## **6.3 Application Process**

For credit review, the property owner must submit the General Application accompanied by the application review fee and all required documentation to the Beech Grove Clerk-Treasurer's Office. Credit applications will be reviewed by the Board or a designated representative. The application process does not relieve the property owner of payment of stormwater user fees during the review process.

The Board will give written notification of the credit determination within sixty (60) days upon receipt of a complete credit application package. The written notification shall state the conditions of the issuance of the user fee credit and effective date of the credit. Any applicant who does not submit a complete application package will be notified in writing of deficiencies. Deficiencies shall be submitted within ninety (90) days of notification of deficiencies, or the applicant will be required to file a new application. If all deficiencies are submitted within ninety (90) days and application for credits are approved, credits will take effect on the initial application date.

The Board and Stormwater Utility staff reserve the right to review for accuracy all plans, materials, and documentation related to the application. If, after review, the application or documentation is found to be inaccurate, the applicant will be notified in writing and given thirty (30) days to correct the deficiency. The applicant must provide written documentation to the Board within thirty (30) days of the original notice that the deficiency has been corrected. If, in the opinion of the Board, the deficiency is not satisfactorily corrected, the user fee credit currently applied to the property will be terminated effective the following billing cycle.

Appeals of credit determination shall follow the same procedures as outlined in Chapter 5 of this manual.

## **6.4 Credit Expiration, Termination, and Renewals**

Stormwater User Fee Credits will expire at the end of their renewal period or when a property changes ownership, whichever comes first. New property owners will need to apply in order to be eligible for the credit.

Upon written notice, the Stormwater Utility may revoke a credit for good reason including, but not limited to, delinquency, failure to meet credit conditions, or failure to meet minimum maintenance requirements.

Appeals of credit revocation shall follow the same procedures as outlined in Chapter 5 of this manual.

# **APPENDIX A**

## **STORMWATER USER FEE CREDIT FORMS**



# City of Beech Grove

## Application for Stormwater User Fee Credit – General Application

Check One: <input type="checkbox"/> Initial Application <input type="checkbox"/> Reapplication <input type="checkbox"/> Renewal (Education Credits Only)		
Owner or Owner's Representative (Contact):	Utility Account Number:	Property Parcel Number:
Property/Service Address:		
Contact Phone Number:	Contact Email:	
Contact Mailing Address (if different than property address):		

**Credit for Consideration (check all that apply):**

<input type="checkbox"/> <b>Education Credit</b> <ul style="list-style-type: none"> <li>• Attach:           <ul style="list-style-type: none"> <li><input type="checkbox"/> Education Program Application</li> <li><input type="checkbox"/> \$25 Application/Renewal Fee</li> </ul> </li> </ul>	<input type="checkbox"/> <b>Quality Improvement Credit</b> <ul style="list-style-type: none"> <li>• Attach:           <ul style="list-style-type: none"> <li><input type="checkbox"/> As-Built Plans (signed and sealed)</li> <li><input type="checkbox"/> Drainage Area &amp; Watershed Maps</li> <li><input type="checkbox"/> Calculations (signed and sealed)</li> <li><input type="checkbox"/> Floodplain/Floodway Map</li> <li><input type="checkbox"/> Operation &amp; Maintenance Manual</li> <li><input type="checkbox"/> Right-of-Entry Agreement</li> <li><input type="checkbox"/> Indemnification Agreement</li> <li><input type="checkbox"/> \$50 Application Fee</li> </ul> </li> <li>• ISA to Facility: _____ ft<sup>2</sup></li> <li>• Total ISA: _____ ft<sup>2</sup></li> </ul>
<input type="checkbox"/> <b>Low-Impact Development Credit</b> <ul style="list-style-type: none"> <li>• Attach:           <ul style="list-style-type: none"> <li><input type="checkbox"/> As-Built Plans (signed and sealed)</li> <li><input type="checkbox"/> Drainage Area &amp; Watershed Maps</li> <li><input type="checkbox"/> Calculations (signed and sealed)</li> <li><input type="checkbox"/> Operation &amp; Maintenance Manual</li> <li><input type="checkbox"/> Right-of-Entry Agreement</li> <li><input type="checkbox"/> Indemnification Agreement</li> <li><input type="checkbox"/> \$150 Application Fee</li> </ul> </li> <li>• ISA to Facility: _____ ft<sup>2</sup></li> <li>• Total ISA: _____ ft<sup>2</sup></li> </ul>	<input type="checkbox"/> <b>Quantity Reduction Credit</b> <ul style="list-style-type: none"> <li>• Attach:           <ul style="list-style-type: none"> <li><input type="checkbox"/> As-Built Plans (signed and sealed)</li> <li><input type="checkbox"/> Drainage Area &amp; Watershed Maps</li> <li><input type="checkbox"/> Calculations (signed and sealed)</li> <li><input type="checkbox"/> Floodplain/Floodway Map</li> <li><input type="checkbox"/> Operation &amp; Maintenance Manual</li> <li><input type="checkbox"/> Right-of-Entry Agreement</li> <li><input type="checkbox"/> Indemnification Agreement</li> <li><input type="checkbox"/> \$250 Application Fee</li> </ul> </li> <li>• ISA to Facility: _____ ft<sup>2</sup></li> <li>• Total ISA: _____ ft<sup>2</sup></li> </ul>

**SIGNATURE:**

*Under penalty of perjury, I swear or affirm that the information on this form is true and correct as to every material matter.*

Owner's Signature	Print Name	Title	Date
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**Instructions to Applicants:**

1. Fill out this form completely. A separate application must be made for each separate parcel. One application can be made for multiple stormwater facilities to be inspected on the same parcel.
2. Applicants are encouraged to review the credit manual, which can be found on the City's website, to ensure that they have all the required information necessary to submit their application credits.
3. Mail the completed form, appropriate attachments, and a check for the appropriate amount to:

Clerk-Treasurer's Office  
806 Main Street  
Beech Grove, IN 46107





# City of Beech Grove

## Right-of-Entry Agreement

I/We, \_\_\_\_\_, owner(s) of the real property commonly known as \_\_\_\_\_ (hereafter "property"), in the City of Beech Grove, Marion County, Indiana, in consideration of possible credit against stormwater user fees due for the property payable to the City of Beech Grove, Indiana, do hereby grant and freely give without coercion the right of access and entry to said property at reasonable times to the City of Beech Grove, its employees, agents, representatives, contractors and subcontractors, for the purpose of performing necessary inspections of onsite stormwater management controls and site activities related to stormwater runoff management on the property.

The undersigned hereby affirm/affirms that he/she/they is/are the owner(s) of the above-referenced property and has/have authority to enter into this Agreement and grant Right-of-Entry.

The undersigned agree/agrees and warrant/warrants to waive, and to hold harmless the City of Beech Grove, its employees, agents, representatives, contractors and subcontractors from any and all claims or actions, legal or equitable, arising from, out of, or related to the inspection activities on the property performed by the City of Beech Grove, its employees, agents, representatives, contractors and subcontractors pursuant to this Right-of-Entry Agreement.

The City of Beech Grove, in consideration of the rights granted to it herein, the sufficiency and receipt of which are hereby acknowledged, agrees to limit the inspection activities to visual inspections and review of relevant records necessary to verify stormwater credit eligibility.

I/We have not received, nor shall I/We receive, any compensation for this Right-of-Entry Agreement.

For the consideration and purposes set forth herein, I/We set my/our hand/hands this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Owner: \_\_\_\_\_

Printed: \_\_\_\_\_

Owner: \_\_\_\_\_

Printed: \_\_\_\_\_

STATE OF INDIANA        )  
  ) SS:  
COUNTY OF MARION    )

Before me, the undersigned, a Notary Public in and for the said County and State, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared \_\_\_\_\_, Owner/Owners and acknowledged the execution of the foregoing Right-of-Entry Agreement as his/her/their voluntary act and deed.

My Commission Expires: \_\_\_\_\_  
\_\_\_\_\_, Notary Public  
\_\_\_\_\_  
Resident of \_\_\_\_\_ County

City of Beech Grove:

\_\_\_\_\_  
Printed: \_\_\_\_\_  
Title: \_\_\_\_\_

STATE OF INDIANA        )  
  ) SS:  
COUNTY OF MARION    )

Before me, the undersigned, a Notary Public in and for the said County and State, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared \_\_\_\_\_, Owner/Owners and acknowledged the execution of the foregoing Right-of-Entry Agreement as his/her/their voluntary act and deed.

My Commission Expires: \_\_\_\_\_  
\_\_\_\_\_, Notary Public  
\_\_\_\_\_  
Resident of \_\_\_\_\_ County

# City of Beech Grove

## Indemnification Agreement

In consideration for permission to construct or install a stormwater improvement / best management practice (BMP) to their property, \_\_\_\_\_ (“Owners”) herby agree to and acknowledge the following:

1. Owners shall construct or install a stormwater improvement / BMP in substantial compliance with the City of Indianapolis Storm Water Design and Construction Specifications Manual, on the following described real estate and premises situated in the City of Beech Grove, Marion County, Indiana, to wit:

See legal description(s) attached as Exhibit A.

2. After completion of the construction or installation by Owners and approval by the City, the stormwater improvement / BMP shall remain a privately owned and maintained stormwater improvement / BMP, shall not be accepted by the City, and shall not become a part of the maintenance program of the Beech Grove Stormwater Utility. All maintenance responsibility and liability shall be and remain with the Owners, their personal representatives, heirs, grantees, successors, and assigns.
3. Owners, their personal representatives, heirs, grantees, successors, and assigns shall indemnify and hold harmless the City of Beech Grove, its officers, agents, and employees from any and all claims, actions, causes of action, judgments, damages, losses, costs, and expenses (including attorney's fees) arising out of or resulting from the construction, installation, maintenance, or operation of the stormwater improvement / BMP.
4. This Agreement shall run with the real estate described above and shall be binding upon Owners, their personal representatives, heirs, grantees, successors, and assigns so long as the stormwater improvement / BMP or any part of it shall be used by them. At such time as the stormwater improvement / BMP shall cease to be so used, this Agreement shall immediately terminate, and this instrument shall be of no further force and effect.
5. Owners warrant that they are the owners in fee simple of the above-described real estate, are lawfully seized thereof, and have the legal authority to execute this Agreement, and affirm that no unauthorized alterations of this document have taken place.

IN WITNESS WHEREOF, Owners and the City have executed this Agreement on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Signature of Owner

\_\_\_\_\_  
Signature of Owner

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Printed Name

STATE OF INDIANA        )  
  ) SS:  
COUNTY OF MARION    )

Before me, the undersigned, a Notary Public in and for the said County and State, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared \_\_\_\_\_, Owner/Owners and acknowledged the execution of the foregoing Indemnification Agreement as his/her/their voluntary act and deed.

My Commission Expires: \_\_\_\_\_  
\_\_\_\_\_, Notary Public  
Resident of \_\_\_\_\_ County

City of Beech Grove:

\_\_\_\_\_  
Printed: \_\_\_\_\_  
Title: \_\_\_\_\_

STATE OF INDIANA        )  
  ) SS:  
COUNTY OF MARION    )

Before me, the undersigned, a Notary Public in and for the said County and State, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared \_\_\_\_\_, Owner/Owners and acknowledged the execution of the foregoing Indemnification Agreement as his/her/their voluntary act and deed.

My Commission Expires: \_\_\_\_\_  
\_\_\_\_\_, Notary Public  
Resident of \_\_\_\_\_ County