



City of Madison

City of Madison
Madison, WI 53703
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Master

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File Name: Stormwater Code Update

Final Action:

Title: Amending various sections of Chapter 37 of the Madison General Ordinances related to Public Stormwater System, including Erosion Control, to update certain Stormwater Code provisions.

Notes: 6929StormwaterCodeUpdate

Sponsors: Nikki Conklin

Effective Date:

Attachments: 86851 Body

Enactment Number:

Author: Doran Viste

Hearing Date:

Entered by: mglaeser@cityofmadison.com

Published Date:

History of Legislative File

Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
1	Attorney's Office	01/23/2025	Referred for Introduction				
	Action Text: This Ordinance was Referred for Introduction						
	Notes: Board of Public Works (2/12/25), Common Council (2/25/25)						

Text of Legislative File 86851

Fiscal Note

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Title

Amending various sections of Chapter 37 of the Madison General Ordinances related to Public Stormwater System, including Erosion Control, to update certain Stormwater Code provisions.

Body

DRAFTER'S ANALYSIS: This ordinance makes numerous changes to Chapter 37 to update the code requirements, as generally summarized as follows:

- 1) Updates to definitions for Green Infrastructure, Green Roof and Impervious Surface to clarify how these apply to requirements in the Stormwater Code.
- 2) Update to the definition of Greenway in Chapter 37 to match the requirements of Chapter 16.
- 3) Update to the definitions of Impervious and Pervious Surfaces to make the definitions

consistent with the accepted stormwater utility credit policy and Chapter 28 with regard to open space.

- 4) Addition of an exemption for compliance with stormwater treatment requirements in the case of redevelopment. After using the redevelopment stormwater requirements that were added into Chapter 37 in June of 2020, it has been found that exemptions need to be added for cases of redevelopment where the site has high groundwater and/or contaminated ground water combined with the situation where a full building structure is not being redone (which often prohibits the use of a green roof or water reuse).
- 5) Clarification of conditions where a Privilege in Streets permit will be required for private storm sewer being installed in the Public Right of Way.
- 6) Addition of exemptions for peak detention, infiltration and Total Suspended Solids (TSS) for public properties open to the public for sports courts, trails and bike paths.
- 7) Clarification of how to calculate detention required in areas that had "plat level detention" that was provided at a lower level than is currently required.
- 8) Clarification of when an access drive requires control of TSS such that our code is consistent with the interpretation of the Wisconsin Department of Natural Resources (WDNR).
- 9) Typo correction and minor edits and clarifications throughout the Stormwater Code.
- 10) These changes will go into effect on April 1, 2025.

Please see Legistar File No. 86851 Body in Attachments.

CITY OF MADISON, WISCONSIN

AN ORDINANCE _____

PRESENTED
REFERRAL(S)

February 11, 2025

Board of Public Works (2/12/25),
Common Council (2/25/25)

Amending various sections of Chapter 37 of the Madison General Ordinances related to Public Stormwater System, including Erosion Control, to update certain Stormwater Code provisions.

86851

Drafted by: Doran Viste

Date: March 17, 2025

SPONSOR(S): Alders Conklin, Gueguierre

DRAFTER'S ANALYSIS: This ordinance makes numerous changes to Chapter 37 to update the code requirements, as generally summarized as follows:

- 1) Updates to definitions for Green Infrastructure, Green Roof and Impervious Surface to clarify how these apply to requirements in the Stormwater Code.
- 2) Update to the definition of Greenway in Chapter 37 to match the requirements of Chapter 16.
- 3) Update to the definitions of Impervious and Pervious Surfaces to make the definitions consistent with the accepted stormwater utility credit policy and Chapter 28 with regard to open space.
- 4) Addition of an exemption for compliance with stormwater treatment requirements in the case of redevelopment. After using the redevelopment stormwater requirements that were added into Chapter 37 in June of 2020, it has been found that exemptions need to be added for cases of redevelopment where the site has high groundwater and/or contaminated ground water combined with the situation where a full building structure is not being redone (which often prohibits the use of a green roof or water reuse).
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- 9) Typo correction and minor edits and clarifications throughout the Stormwater Code.
- 10) These changes will go into effect on April 1, 2025.

The Common Council of the City of Madison do hereby ordain as follows:

Approved as to form:

1. Subsection (2) of Section 37.02 entitled "Finding and Declaration of Purpose" of the Madison General Ordinances is hereby amended as follows:

"(2) This ordinance is intended to regulate erosion and stormwater runoff, to accomplish the following objectives:

- (a) Promote regional stormwater management by watershed;
- (b) Minimize sedimentation, water pollution from nutrients, heavy metals, chemical and petroleum products and other contaminants, flooding and thermal impacts to the waters of the state;
- (c) Promote infiltration and groundwater recharge;
- (d) Protect functional values of natural watercourses and wetlands;
- (e) Provide a set of performance standards that are at least as protective of the environment and natural resources as and not in conflict with the standards set forth by Dane County and the Wisconsin Department of Natural Resources;
- (f) Achieve an eighty percent (80%) reduction in total suspended solids load to waters of the state as compared to no controls for all new development, a forty percent (40%) reduction in total suspended solids load compared to no controls for all redevelopment and street reconstruction. Further, on a municipality-wide basis, achieve a twenty percent (20%) reduction total suspended solids load compared to no controls for existing developments by 2007; a forty percent (40%) reduction in total suspended solids load compared to no controls by 2011;
- (g) Ensure no increase in the rate of surface water drainage from sites during or after construction;
- (h) Control exceedance of the safe capacity of existing drainage facilities and receiving water bodies;
- (i) Protect public and private property from damage resulting from runoff or erosion;
- (j) Ensure no increase in temperature of post-construction stormwater in order to protect cold-water communities;
- (k) Protect spawning grounds, fish and aquatic life;
- (l) Preserve ground cover and scenic beauty, and; Promote soil stabilizing ground cover and biodiverse native ecosystems tolerant of fluctuating stormwater conditions;
- (m) Promote widespread use of distributed Green Infrastructure; and,
- (~~nn~~) Promote sustainable and resilient sound economic growth and protect the tax base."

2. Section 37.04 entitled "Definitions" of the Madison General Ordinances is hereby amended as follows:

"Green Infrastructure or Distributed Green Infrastructure is means any of the range of measures/devices/systems that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or ~~evapotranspire~~ evapotranspire stormwater and reduce flows, thereby reducing discharge to sewer systems or to surface waters. Green infrastructure includes, but is not limited to, the following practices: rainwater harvesting/reuse, rain gardens, bioretention systems, infiltration basins, underground infiltration fields (note these may be Class V injection

wells), planters that are connected to roof drainage, bioswales, permeable pavement, green roofs, and rain barrels.

Green Roof means a roofing system with a layer of vegetation planted over a waterproofing system that is installed on top of a flat or slightly sloped roof. Documentation of the treatment capacity of a green roof shall be completed in accordance with the methodology documented in the Dane County Stormwater Manual. A link to the specific method is provided here: https://danecountystormwatermanual.com/doku.php?id=green_roof. NOTE: this methodology is based upon the standard created via the State of Wisconsin Green Tier process. They fall into two main categories—extensive and intensive.

~~An extensive green roof has a shallow growing medium—usually less than six (6) inches thick—with a modest roof load, limited plant diversity, and minimal watering requirements.~~

~~An intensive green roof has a minimum twelve (12) inch thick growing medium, though it may range upwards to several feet. This depth of growing medium can support a more diverse plant selection, including small trees.~~

Greenway is defined at Sec. 16.23(2), and is an open area of land, the primary purpose of which is to carry storm water on the ground surface in lieu of an enclosed storm sewer. Greenways can include channels, ponds, bioretention basins, rain gardens and other stormwater treatment and conveyance facilities. Secondary uses of these lands are possible and include uses such as conservation, recreation, and/or pedestrian transportation. Greenways are identified in the City's Parks and Open Space Plan: <https://www.cityofmadison.com/parks/about/parksopenspaceplan.cfm>.

Impervious Surface means an area that releases as run-off all or a large portion of the precipitation that falls on it, except for frozen soil. Rooftops, sidewalks, driveways, parking lots, gravel storage areas, underground structures with less than two (2.0) feet of pervious material installed above the outside top of the concrete structure and streets are examples of surfaces that typically are impervious.

Note: Pervious/permeable pavement constructed in accordance with WDNR Technical Standard # 1008 to meet the requirements of an Ordinance stormwater management requirement shall not be considered pervious for the purposes of Stormwater Utility Charges, nor for calculation of hydrologic calculations or composite curve numbers as part of stormwater management requirements. See note under definition of "Pervious Surface" below. Pervious/permeable pavement may be counted as "usable open space" under MGO 28.140(b) (Usable Open Space) provided it meets the other requirements of that section. However if constructed meeting SOC #1008 this type of pavement may meet Zoning code requirements for greenspace.

Infill Development, for the purposes of design standards for new sewer additions to the storm sewer system, shall be considered to apply only to lots created by a GSM-Certified Survey Map or Plat prior to October 1, 2004.

Pervious Area means an area that releases as runoff a small portion of the precipitation that falls on it and shall be a minimum of two (2.0) feet deep. Lawns, gardens, parks, forests or similar vegetated areas are examples of surfaces that typically are pervious.

Note: Pervious/permeable pavement construction in accordance with WDNR Technical Standard #1008 to meet the requirements of this Chapter shall not be considered pervious for the purposes of Stormwater Utility Charges, nor for the hydrologic calculations or composite curve numbers as part of stormwater management requirements. Pervious/permeable pavement may be counted as "usable open space" under MGO 28.140(b) (Usable Open Space) provided it meets the other requirements of that section. Pervious pavement installed outside of the requirements of this chapter will be treated as pervious for the purposes the Stormwater Utility Charges.

~~Additionally, pervious pavement areas (concrete, asphalt or modular block), which are specifically designed to infiltrate stormwater may be considered to be pervious but may not be considered to be a best management practice.~~

~~Pervious/Permeable Pavement shall be pavement that is constructed in accord with WDNR Technical Standard # 1008 to meet this Ordinance's stormwater management requirements. If constructed to meet a requirement of this Ordinance, it shall not be considered pervious for the purposes of Stormwater Utility Charges nor for calculation of composite curve numbers as part of stormwater management requirements.~~ pervious pavement that is designed and maintained to allow precipitation to infiltrate into the ground, in order to reduce the volume and velocity of stormwater runoff. Pervious pavement materials may include, without limitation, porous asphalt, permeable concrete, pervious interlocking paving blocks, grid pavers, or perforated brick. However, if constructed meeting WDNR Technical Standard #1008 this type of pavement may be considered to meet lot coverage standards under Chapter 28 provided it meets the other requirements of that section.

Redevelopment means any of the following activities:

- (a) Construction, alteration or improvement exceeding ten thousand (10,000) square feet of land disturbance performed on sites where the existing site is predominantly developed as commercial, industrial, institutional or multifamily residential uses and the proposed development is replacing older development.
- (b) Construction, alteration or improvement exceeding ten thousand (10,000) square feet of land disturbance performed on sites where the existing site is predominantly developed as commercial, industrial, institutional or multifamily residential uses and the creation or expansion of impervious surface physically cannot exceed twenty thousand (20,000) square feet beginning August 22, 2001.
- (c) Any combination of (a) and (b) above. Should the site have twenty thousand (20,000) square feet or more of land available for the creation or expansion of impervious surface since August 22, 2001 then the project may include a mix of new development and redevelopment.
- (d) ~~Resurfacing of a parking lot or maintenance of parking facilities where there is no change to layout, circulation or entrances, and where the base course is not removed and the subgrade is not disturbed is not considered redevelopment for the purpose of this ordinance, nor is pulverizing and overlay of bituminous pavement. However, if base course subgrade (granular material below base course and pavement) is disturbed, added and/or removed, it is considered disturbance and the resurfacing shall be considered subject to redevelopment regulations."~~

3. Subdivision (b) entitled "Design Standards for Privately Financed Stormwater System Additions" of Subsection (6) entitled "Additions to the Public Stormwater System" of Section 37.05 entitled "The Public Stormwater System" of the Madison General Ordinances is hereby amended as follows:

"(b) Design Standards for Privately Financed Stormwater System Additions.

1. Applicability. The standards in this subdivision apply to privately financed Public Stormwater system additions as set forth in subd. (a)1.—5. above.
2. Compliance Required. ~~For new development, c~~Compliance with these standards shall be mandatory. ~~For In the case of redevelopment and/or infill development, compliance shall be considered a goal~~ exemptions may be provided upon demonstration that, in the opinion of the Administrative Authority, compliance is not reasonably achievable.
3. System Determination. A determination of the type or types of storm drainage system to be used shall be made by the Administrative Authority on the basis of required capacity, economics, and use of abutting lands.
4. Standards. Additions to the Public Stormwater System for new development shall, in general, be designed and constructed to convey stormwater in accordance with the following:
 - a. General storm design shall convey the runoff that would drain from upstream lands during the 10-year storm event.
 - b. Culvert crossings in greenway drainage systems shall be designed to convey runoff created during a 100-year storm event that uniformly impacts the watershed draining to said road crossing, without road overtopping.
 - c. Enclosed Depressions, whether existing or created shall be designed to convey the runoff that can be expected to result from a 100-year storm event or larger depending on the risk of property damage and public safety, as determined by the Administrative Authority. For design purposes, the acceptable flooding area associated with this design event shall not leave the public right of way, public lands as approved by the Administrative Authority, or public easements. This shall be applied and reviewed within the limits of the development.
 - d. ~~In new development areas, d~~Design of the road system shall be such that during pipe capacity exceeding storm events the combination of the stormwater pipe system and road surface flow system shall adequately convey the runoff from the 100-year storm event within the Right of Way or publicly owned outlots/greenways. Provision of public easements shall not be allowed for this purpose. The 500-year event shall be conveyed using a combination of pipes and surface flow such that it may use both public and private property for surface flow but shall not impact private structures. This shall be applied and reviewed within the limits of the development under review.
 - e. Emergency overflows for ponds shall be designed to be utilized only in events exceeding a 100-year storm event.
 - f. Inlet design shall include a clogging factor of 50% occluded for inlets at low points with the ability to pond one half (0.5) foot or more without overtopping or 25% for all other inlets, when determining the number of inlets required as part of the storm sewer system.
 - g. Inlets shall be installed behind the sidewalk on dedicated easements as deemed necessary by the Administrative Authority to accept private drainage prior to it impacting the public sidewalk.

- h. Development Site Plans shall be reviewed by Engineering staff for compliance with stormwater overflow routes. Where these overflow routes are known and established as part of a stormwater management plan, the building elevations shall be reviewed and approved by the City Engineer prior to issuance of building permits to confirm that the proposed structure elevations are compliant with the design overflow conveyance during the 500-year storm event. Where overflow routes have not been established by a stormwater management plan, Engineering staff shall use reported flood information as a basis for review. Site plans shall include USGS datum elevations."

4. Subdivision (c) entitled "Inspection of Additions to the Public Stormwater System" of Subsection (6) entitled "Additions to the Public Stormwater System" of Section 37.05 entitled "The Public Stormwater System" of the Madison General Ordinances is hereby amended as follows:

- "(c) Inspection of Additions to the Public Stormwater System. The Administrative Authority shall inspect the construction of all public sewers and ~~all~~ private sewers, including building sewers, from the property line to the public stormwater system and shall inspect the construction of private sewers and best management practices within private property when deemed necessary by the Administrative Authority."

5. Paragraph 1 entitled "General Requirements" of Subdivision (a) entitled "Permit Required for Connection, Disconnection or Abandonment" of Subsection (7) entitled "Connection to the Public Stormwater System" of Section 37.05 entitled "The Public Stormwater System" of the Madison General Ordinances is hereby amended as follows:

- "1. General Requirements. No person shall do any work whatsoever for the purpose of connecting, disconnecting or abandoning an existing connection to the public stormwater system or existing building sewers or existing private sewers, or for the purpose of laying building sewers or private sewers, without first obtaining from the Administrative Authority a written permit to connect, disconnect or abandon a connection to the public stormwater system. The street curb and gutter is considered to be part of the stormwater conveyance system. Curb discharges via pipes, tubes, flumes or "curb scupper" devices of any type of discharge, including sump pumps, roof drains or any other discharge, shall require a permit to connect to the stormwater system.

All private sewers and all building sewers between the property line and terminating at the public stormwater system shall be either installed by City forces, City contract, contract under the supervision of the Board of Public Works, or by a Contractor approved by the Board of Public Works for sewer construction, or a plumber qualified by the Board of Public Works ~~(terrace only)~~ and inspected by City forces. All work shall comply with the City of Madison Standard Street and Sewer Specifications and General Conditions."

6. Subparagraph b of Paragraph 3 entitled "Stormwater System Disconnection or Abandonment Permit" of Subdivision (a) entitled "Permit Required for Connection, Disconnection or Abandonment" of Subsection (7) entitled "Connection to the Public Stormwater

System" of Section 37.05 entitled "The Public Stormwater System" of the Madison General Ordinances is hereby amended as follows:

- "b. As connections to the public stormwater system come in ~~infinite~~ numerous-almost infinite types and combinations, the approved method of disconnection or abandonment shall be clearly defined in the permit conditions."

7. Subdivision (b) entitled "Private Site Plan and Treatment System Design, Review, Maintenance and Enforcement" of Subsection (7) entitled "Connection to the Public Stormwater System" of Section 37.05 entitled "The Public Stormwater System" of the Madison General Ordinances is hereby amended as follows:

"(b) Private Site Plan and Treatment System Design, Review, Maintenance and Enforcement.

The Administrative Authority shall review all parking facility permit applications and applications for "commercial sites" as defined by Sec. 10.08, MGO, hereinafter termed the "site." Single and two family detached dwellings shall be reviewed by the Director of the Building Inspection Division.

1. All sites, which include ten thousand (10,000) square feet or less of impervious surface, may be permitted to drain over the sidewalk with the provision that the site shall be graded so that the resultant flow shall be distributed over at least ten (10) linear feet of sidewalk.
2. All sites, which include over ten thousand (10,000) square feet of impervious surface, shall be designed to convey stormwater drainage to the public stormwater system by means of a private storm sewer or storm building sewer.
3. As part of all plat or CSM developments, where the area draining to a single discharge point from a swale or other conveyance to a sidewalk or driveway exceeds fifty-five thousand (55,000) square feet the area shall be served with public storm sewer prior to the discharge to the public right-of-way. Serving of this area with storm sewer shall be at the expense of the developer proposing the improvement.
4. When the Administrative Authority deems that the existing storm sewer is unavailable, or that connection to the storm sewer is not in the public interest, ~~he/she the Administrative Authority~~ he/she the Administrative Authority may permit drainage across the sidewalk on a temporary or permanent basis.
5. When a site being reviewed by the Administrative Authority proposes to continue existing drainage patterns and discharge stormwater runoff onto property neither under the applicants control (via ownership, easement or agreement) nor onto property under the control of the City of Madison, the Administrative Authority shall require the applicant to provide documentation that they have made significant efforts to obtain the right to discharge this stormwater onto this property. If no right can be obtained, the applicant shall be required to mitigate the increased volume of discharge on their property prior to making this discharge. Mitigation shall consist of implementation of a stormwater practice that shall match the existing volumetric discharges from the applicant's property to other lands not under their control in storm events including the 1, 2, 5 and 10-year storm events. If the proposed discharge is to an area that is an enclosed depression, this requirement shall be increased to include the 25 and 100-year storm events.
6. The Administrative Authority shall review and approve the location, direction of flow, depth, size and type of material to be used in the private storm sewer or storm building sewer. No storm sewer lateral shall be less than six (6) inches in diameter. In the event of a new connection to the storm system where the site

requires connection to a pipe or structure in the pavement structure (not a curb inlet or structure), or if in the case of limited pavement, that the private connection exceeds 15 feet in length, the applicant shall have the following choices:

- a. The applicant, at a minimum, may construct a public inlet or structure in the curb line or near the edge of pavement (at a location approved by the Engineer) nearest the development generating the discharge and connect their private pipe to that public inlet or structure. The applicant shall then construct a new public pipe from this inlet to the public storm sewer in the pavement structure. Construction of these public improvements shall require at a minimum a Permit to Excavate in the Right of Way under Sec. 10.05 and potentially a development agreement with the City.
 - b. The applicant may run a private pipe from their property directly to the public storm sewer in the pavement structure. That pipe will then be private and require a privilege in streets pursuant to Sec. 10.31. The connection to the public pipe shall be made in accordance with the requirements of the Standard Specifications for Public Works Construction applicable to such right-of-way work. Construction of these improvements shall require at a minimum a Permit to Excavate in the Right of Way under Sec. 10.05."
7. The property owner shall be responsible for the cost of installation of the private storm sewer or storm building sewer from ~~his/her~~ the property line to the public stormwater system. The cost of installation shall include excavation, pipe laying, backfilling, and street restoration where required under the supervision of the Administrative Authority and in accordance with the City of Madison Street and Sewer Specifications.
 8. The maintenance of the private storm sewer, storm building sewer, and/or best management practices shall be the responsibility of the property owner on whose property they exist. Every private storm sewer, storm building sewer, and best management practice shall be properly installed in accordance with the plans approved by City Engineering and shall be maintained in good working condition, free from defects, leaks and obstructions, and in accord with the maintenance agreement recorded against the property, if applicable.
 - a. Where existing City-approved private storm sewer, storm building sewer, and/or best management practices are in a state of disrepair, not constructed in accord with approved plans, or present an obstruction to the drainage system, and the resulting drainage overflows cause damage to the roadway or adjacent public or private lands, or are determined a hazard, the Administrative Authority is authorized to resolve the drainage problem such that the system is functioning in accord with the approved design. Authorized actions include, but are not limited to: removal of any drainage obstructions (at existing inlets, at existing ditch lines and similar locations); regrading of existing ditch lines; repairing best management practices to bring them into compliance with the approved design; and construction of improvements to the stormwater management systems such that they are constructed in accordance with the approved plans. The Administrative Authority may proceed as follows to complete the work:
 - i. Where, in the opinion of the Administrative Authority, a situation exists that could adversely affect the health and safety of the public and/or cause significant damage to public or private property other than the property in question, the Administrative Authority may proceed in accordance with Sec. 27.05, MGO, and

order the owner of the property causing the problem to correct the situation. If the property owner fails to resolve the issue within the time limitations, the Administrative Authority is authorized to enter private property and correct the situation. The City shall special charge the full cost of the completed work in accord with Sec. 4.09(13), MGO.

- ii. Where, in the opinion of the Administrative Authority, the situation affects only the property on which the problem exists, the Administrative Authority may proceed in accord with Sec. 27.05, MGO, and order the owner of the property causing the problem to correct the situation.
- iii. Where, in the opinion of the Administrative Authority, ~~the situation~~ a property with a private storm sewer or building storm sewer on one (1) property affects the drainage on other properties but does not threaten the health and safety of the public or threaten to cause significant damage to public or private property, or where the required maintenance is on a best management practice that is part of the approved stormwater management plan, the Administrative Authority may proceed in accord with Sec. 27.05, MGO, and order the owner of the property causing the problem to correct the situation.

- b. Any property owner required to have a Best Management Practice or a maintenance agreement on the property shall submit to the City Engineer an annual report reviewing the condition of that practice and the maintenance performed during the past calendar year. This report shall be submitted by June 1 and be sealed by a Professional Engineer currently licensed in the State of Wisconsin.

Where a recorded maintenance agreement exists, which specifies the annual inspection requirements, that agreement shall be the minimum information required. Where a maintenance agreement does not exist, the City Engineer shall make available inspection forms and maintenance guidelines for the most common types of stormwater management BMP's. These will be considered the minimum inspection and maintenance standards acceptable for the specific sites developed prior to maintenance agreements being required. Inspection forms will also be accepted for those properties with maintenance agreements, provided the minimum inspection and maintenance standards match that proscribed in the agreement."

8. Subdivision (b) (intro) entitled "Existing Private Drainage Systems" of Subsection (9) entitled "Vehicular and Pedestrian Crossings of the Public Stormwater System" of Section 37.05 entitled "The Public Stormwater System" of the Madison General Ordinances is hereby amended as follows:

- "(b) Existing Private Drainage Systems. The maintenance, repair and replacement of private crossings of the drainage systems, including, but not limited to, pipes, culverts for private driveways, and roadside ditches along unimproved public roadways, are the responsibility of the adjacent private property owner. Where existing private drainage systems present an obstruction to the drainage system, and the resulting drainage overflows cause damage to the roadway or adjacent public or private lands, or create a hazard, the Administrative Authority is authorized to correct any drainage obstruction.

Authorized actions include but are not limited to removal of any drainage obstructions in existing ditch lines and regrading of existing ditch lines to allow for positive drainage. The Administrative Authority may proceed as follows to complete the following work:"

9. Subsection (2) entitled "Land-Disturbing Activities Subject to Erosion Control" of Section 37.06 entitled "Land-Disturbing Activities Subject to Erosion Control and Stormwater Management" of the Madison General Ordinances is hereby amended as follows:

- "(2) Land-Disturbing Activities Subject to Erosion Control. Unless expressly exempted by Sec. 37.06(4), an erosion control permit under Sec. 37.11 shall be required and the erosion control provisions of Sec. 37.08 shall apply to any of the following activities in the City:
- (a) Land-disturbing activity in excess of four thousand (4,000) square feet resulting in the loss or removal of protective ground cover or vegetation;
 - (b) Land-disturbing activity that involves the excavation or filling, or any combination thereof, in excess of four hundred (400) cubic yards of material;
 - (c) Any public (federal, state or local) street, road or highway that is constructed, enlarged, relocated or substantially reconstructed;
 - (d) Any new public or private roads or access drives longer than one hundred twenty-five (125) feet;
 - (e) Land-disturbing activity that disturbs more than one hundred (100) lineal feet of road ditch, grass waterway or other land area where surface drainage flows in a defined open channel; including the placement, repair or removal of any underground pipe, utility or other facility within the cross-section of the channel;
 - (f) Any subdivision of land as defined by Sec. 16.23, MGO, entitled "Land Subdivision Regulations" which requires plat approval or any certified survey;
 - (g) Any use by a unit of government or by public or private utilities in which underground pipe or facilities will be laid, repaired, replaced or enlarged by open cut construction for a distance of over three hundred (300) feet;
 - (h) Land-disturbing activity that disturbs less than four thousand (4,000) square feet of land, including the installation of access drives, that the Administrative Authority determines to have a high risk of soil erosion or water pollution, or that may significantly impact a lake, stream, wetland, or other sensitive area. Examples of activities with a high risk of soil erosion or water pollution may include, but are not limited to, land disturbance on erodible soil or disturbance adjacent to lakes, rivers, streams or wetlands. All such determinations made by the Administrative Authority shall be in writing, unless waived by applicant. Sites are exempt if they fall under 37.06(4)(b)1."

10. Subdivision (a) (intro) of Subsection (1) entitled "Control Plan Required" of Section 37.08 entitled "Erosion Control Plan Requirements" of the Madison General Ordinances is hereby amended as follows:

- "(a) Every applicant for an erosion control permit shall submit ~~both a paper copy, 11" x 17", and~~ a PDF copy of a plan to control erosion, sedimentation and runoff to the Administrative Authority. These plans shall be at a 40:1 or larger scale and include the information described in Sec. 37.08(2). Plans shall be submitted when the proposed activity:"

11. Subdivision (o) of Subsection (2) entitled “Plan Materials” of Section 37.08 entitled “Erosion Control Plan Requirements” of the Madison General Ordinances is hereby amended as follows:

- “(o) Provision for sequential steps mitigating erosive effect of land-disturbing activities to be followed in appropriate order and in a manner consistent with accepted erosion control methodology suitable to proposed sites and amenable to prompt re-vegetation. Practices shall be installed consistent with Wisconsin Department of Natural Resources' guidance in Stormwater Management Technical Standards as provided on the website as follows:
https://dnr.wi.gov/topic/stormwater/standards/const_standards.html
<https://dnr.wisconsin.gov/topic/surfacewater>.”

12. Subdivision (b) (intro) of Subsection (4) entitled “Erosion Control Performance Standards” of Section 37.08 entitled “Erosion Control Plan Requirements” of the Madison General Ordinances is hereby amended as follows:

- “(b) Limit total off-site permissible annual aggregate soil loss for exposed areas resulting from sheet and rill erosion to an annual, cumulative rate not to exceed ~~seven point five (7.5) tons per acre per year (also referred to as five (5.0) tons of sediment yield per acre annually)~~ five (5.0) tons per acre per year. These rates shall be determined using the U.S. Natural Resources Conservation Service Technical Guide or another commonly accepted soil erosion methodology approved by the City Engineer that considers season of year, site characteristics, soil erodibility and slope. The approved plan shall prevent or reduce all of the following:”

13. Paragraph 5 of Subdivision (f) entitled “Implementation” of Subsection (4) entitled “Erosion Control Performance Standards” of Section 37.08 entitled “Erosion Control Plan Requirements” of the Madison General Ordinances is hereby amended as follows:

- “5. BMPs that are no longer necessary for erosion and sediment control shall be removed by the Applicant or their designee.”

14. Subdivision (d) entitled “Non-Compliance” of Subsection (6) entitled “Additional Requirements” of Section 37.08 entitled “Erosion Control Plan Requirements” of the Madison General Ordinances is hereby amended as follows:

- “(d) Non-Compliance. Upon written or verbal notice by an agent of the City of Madison to the applicant, or the applicant's designated representative, regarding an erosion control action or repair needed to bring the site into compliance, the applicant has not less than twenty-four (24) nor more than seventy-two (72) hours to bring the project site into compliance and document those subsequent actions with the Administrative Authority. The time allotted to bring the site into compliance shall be noted on the notice and/or issued citation.”

15. Subparagraph c of Paragraph 4 of Subdivision (e) of Subsection (2) entitled “Plan Contents” of Section 37.09 entitled “Stormwater Management Plan Requirements” of the Madison General Ordinances is hereby created as follows:

- “c. RCNs for redevelopment sites where soil has been previously disturbed shall not require the Hydrologic Soil Group to change from pre to post development as long as methods are taken to reduce compaction of the site and included on the plan set.”

16. Subdivision (n) of Subsection (2) entitled “Plan Contents” of Section 37.09 entitled “Stormwater Management Plan Requirements” of the Madison General Ordinances is hereby created as follows:

- “(n) Where the area being developed includes using existing privately maintained stormwater management practices to meet new stormwater management metrics, an inspection report completed within the last year showing the existing stormwater management practices are in good working condition shall be provided. If the inspection report shows the practices require maintenance, provisions shall be included within the proposed plan.”

17. Paragraph 3 of Subdivision (a) entitled “Sediment Control” of Subsection (3) entitled “Stormwater Performance Standards” of Section 37.09 entitled “Stormwater Management Plan Requirements” of the Madison General Ordinances is hereby amended as follows:

- “3. For redevelopment and/or resurfacing by design for sites located within the Rock River TMDL:

Reduce, to the maximum extent practicable, total suspended solids (TSS) loads leaving the redeveloped or resurfaced site by eighty percent (80%), based on average annual rainfall, as compared to the existing conditions of the site prior to the proposed redevelopment and/or resurfacing. This shall require the use of a continuous model such as SLAMM, P8 or equivalent, and the use of approved grain size distribution curves and rainfall data. These files are managed and maintained by the Wisconsin Department of Natural Resources and are available on its website (<https://dnr.wi.gov/topic/stormwater/>). Changes in TSS loading as compared to the existing site are expected to be met from land use changes and stormwater management practices.

This requirement shall be considered met if the eighty percent (80%) reduction requirement is met for the site or all new exposed parking areas and access drives that exceed 200 feet in length reach a sixty percent (60%) total suspended solids reduction, as compared to no controls. The analysis needed for this shall use approved procedures and assume no re-suspension of particles. If the applicant proposes to use treatment devices in series, then the analysis shall require the use of a modeling program that provides for tracking of the particulates trapped by each device used in series. If a program tracking particulate distributions is not used, then the Administrative Authority shall not allow the use of serial redundant devices.”

18. Paragraph 5 of Subdivision (a) entitled "Sediment Control" of Subsection (3) entitled "Stormwater Performance Standards" of Section 37.09 entitled "Stormwater Management Plan Requirements" of the Madison General Ordinances is hereby created as follows:

- "5. Public trails and sport courts, including public paved bike paths, walking paths or multi use paths that have pavement 20 feet or less in width and have a turf buffer or ditch / swale, shall be exempted from peak detention, infiltration and TSS requirements. For public properties or features that are open to the public via agreement, the TSS reduction requirements shall be exempted for sport courts if the sport court paved area is less than 5,000 square feet or there is a minimum of 30 feet of turf area as a buffer around the courts."

19. Subdivision (c) entitled "Runoff Rate Control" of Subsection (3) entitled "Stormwater Performance Standards" of Section 37.09 entitled "Stormwater Management Plan Requirements" of the Madison General Ordinances is hereby amended as follows:

"(c) Runoff Rate Control.

1. General. Runoff rate control is required for new development and redevelopment upon an incremental cumulative increase in new impervious area equal or exceeding twenty thousand (20,000) square feet. Incremental increases over a period of years since August 22, 2001, such that multiple small incremental increases in new impervious area eventually exceeds the twenty thousand (20,000) square foot criteria, shall be retroactively controlled once the cumulative increase in new impervious area meets or exceeds twenty thousand (20,000) square feet.

Sites being developed within a Plat or CSM having a stormwater management plan previously approved for rate control at the Plat/CSM level, with rate control standards that include a maximum control requirement of the 10-year storm event, shall comply with 37.09(3)(c)2.e. and f.

Sites being developed within a Plat or CSM having a stormwater management plan previously approved for rate control at the Plat/CSM level, with rate control standards that include a maximum control requirement of the 100-year storm event, shall comply with 37.09(3)(c)2.f.

For sites noted above that are within developments that had some level of detention at the plat level, the required volume of detention to be provided shall be calculated by the following method:

- a. Determine the runoff from the undeveloped site in compliance with design storms used for the regional/plat runoff models when smaller than the standards of this ordinance. Otherwise, determine the runoff from the undeveloped site in compliance with the standards of this ordinance for the 10, 100 and 200 year events.
- b. Determine the runoff from the proposed site in the 10, 100 and 200 year events.
- c. Complete a TR-55 based analysis to determine the volume of detention storage theoretically required to detain the post development 10, 100 and 200 year storm events to the predevelopment discharge rates.
- d. If the development provided 10-year detention at the plat level, subtract is designed to meet 10 year runoff rate controls for developed lots and the proposed development does not exceed the curve number for the

developed site in the plat stormwater management report, complete the following: for the site only, complete modelling calculations per 37.09(3)(c)1.a-c., then subtract the volume needed by the 10 year event from the volume needed by the 200 year event. That volume shall be provided on site and an outlet structure shall be designed to use that ~~The site shall provide detention volume equal to the difference in calculated volume in the.~~ Design the detention device(s) to fill during the post development 100-year event.

- e. ~~If the development provided 100 year detention at the plat level, subtract is designed to meet 100 year runoff rate controls for developed lots and the proposed development does not exceed the curve number for the developed site in the plat stormwater management report, complete the following. For the site only, complete modelling calculations per 37.09(3)(c)1.a-c. Subtract the volume needed by the 100 10 year event from the volume needed by the 200 year event. That volume shall be provided on site and an outlet structure shall be designed to use that~~ The site shall provide detention volume equal to the difference in calculated volume in. Design the detention device(s) to fill during the post development 100-year event.
- f. For Closed Watersheds, predevelopment modeling shall include closed watershed areas. Sites that drain to closed watersheds must be designed with: (i) an emergency drawdown or pumping plan, and (ii) detention storage capacity for back to back 100-year 24-hour design storms.
- g. For residential areas being re-platted prior to any development occurring on the lands and for which a regional stormwater management plan was approved at the level of the initial plat or preliminary plat meeting the detention requirements for the 100-year event, no recalculation or upsizing of the existing stormwater management features shall be required to accommodate the 200-year event provided the re-platted development pattern does not exceed the proposed CN in the original stormwater management plan and the re-plat occurs within 7-years of the effective date of this ordinance. If the CN for the re-platted area does increase above that submitted as part of originally approved submittal, the change in volume of required to detain the additional impervious area to the 100-year event shall be provided on a lot by lot basis with distributed infrastructure ~~infra-structure~~.

Hydrologic calculations for event driven analysis shall be completed according to the methodology described in the Natural Resources Conservation Service's Technical Release 55, "Urban Hydrology for Small Watersheds" (commonly known as TR-55), for analysis requiring average annual results SLAMM or other Technical Standards and Specifications as provided in Sec. 37.10(5). Runoff curve numbers for vegetated areas shall comply with 37.09(2)(e). The TR-55-specified curve numbers for other land uses shall be used.

- 2. New Development. All stormwater facilities for new development shall be designed, installed and maintained to effectively accomplish the following:
 - a. Maintain predevelopment peak runoff rates for the 1-year, 24-hour storm event (2.49 inches over 24 hours duration using the MSE4 NRCS Rainfall Distribution).
 - b. Maintain predevelopment peak runoff rates for the 2-year, 24-hour storm event (2.84 inches over 24 hours duration using the t4 NRCS Rainfall Distribution).

- c. Maintain predevelopment peak runoff rates for the 5-year, 24-hour storm event (3.45 inches over 24 hours duration using the MSE4 NRCS Rainfall Distribution).
- d. Maintain predevelopment peak runoff rates for the 10-year, 24-hour storm event (4.09 inches over 24 hours duration using the MSE4 NRCS Rainfall Distribution).
- e. Maintain predevelopment peak runoff rates for the 100-year, 24-hour storm event (6.66 inches over 24 hours duration using the MSE4 NRCS Rainfall Distribution).
- f. Maintain predevelopment peak runoff rates for the 200-year, 24-hour storm event (7.53 inches over 24 hours duration using the MSE4 NRCS Rainfall Distribution).
- g. Safely pass the 500-year, 24-hour storm event (8.94 inches over 24 hours duration using the MSE4 NRCS Rainfall Distribution).
- h. Pre-existing detention (intended or unintended) on the site shall be taken into account as part of proposed detention calculations. At a minimum, the pre-existing detention volume shall be estimated and shall be considered to be a base amount of storage required for the site prior to completing any pre- to post-storm rate matching, including capacity reductions from existing culverts/stormsewer leaving the site. Effectively the pre-existing detention volume shall be added to the volume required to meet the pre- to post-rate controls.
- i. Downstream system capacity shall be analyzed to determine the safe capacity of the off-site drainage system. No release rates in excess of this safe capacity shall be allowed. The existing safe release rates are one method that may be used to determine the pre-existing detention volume for the site.
- j. Overflow elevations shall be calculated through the development to assure that the 100-year event flows through the streets and is confined to the public Right-of-Way. Further the 500-year event flood elevation shall be routed through the development to determine flood elevations. The 500-year event is allowed to flood private property but lowest entrance elevations of structures shall be set to prevent structural flooding during the 500-year event.
- ~~k. The required rate and volume reductions shall be completed, using green infrastructure that captures at least the first ½ inch of rainfall over the total site impervious area. If additional stormwater controls are necessary beyond the first ½ inch of rainfall, either green or non-green infrastructure may be used.~~
- ~~l. Regardless of how or what green infrastructure features are used to meet the above requirements, they shall require the recording of a maintenance agreement for the features against the appropriate parcel. The following guidance shall be used in interpreting this code:~~
 - ~~i. An intensive green roof with a media depth of 12" shall have a CN of 68.~~
 - ~~ii. An extensive green roof with media depth of a minimum of 4" shall have a runoff CN for this type of feature of 76.~~
 - ~~iii. Pervious pavement designed to comply with the Wisconsin WDNR's guidance for post construction stormwater practices shall have a runoff CN of 74.~~
- ~~m. Regardless of how or what green infrastructure features are used to meet the above requirements, the Administrative Authority shall require the~~

~~recording of a maintenance agreement for the features against the appropriate parcel.~~

3. Redevelopment. If the redevelopment project has a proposed impervious cover ~~that exceeds~~ which reduces impervious cover for the total site area (measured by the parcel area) to 80% of the existing site impervious cover, then the site shall be considered to have met the Redevelopment runoff rate standards. For sites that are not reducing total impervious cover to this extent, they shall be required to meet the following criteria:
 - a. Reduce peak runoff rates from the site by 15% compared to existing conditions during a 10-year design storm.
 - b. Reduce runoff volumes from the site by 5% compared to existing conditions during a 10-year design storm. However, if, in the opinion of the Administrative Authority, this volume reduction requirement is not reasonably feasible due to conditions including, but not limited to, high groundwater, contaminated soils, contaminated groundwater, limitations of water reuse due to the anticipated land use, and inability to support a green roof due to structure reuse, this volume reduction requirement may be waived by the Administrative Authority. It is the Developer's responsibility to establish that conditions make volume reduction not reasonably feasible.
 - c. The required rate and volume reductions shall be completed, using green infrastructure that captures at least the first 1/2 inch of rainfall over the total site impervious area. If additional stormwater controls are necessary beyond the first 1/2 inch of rainfall, either green or non-green infrastructure may be used. Calculations documenting achievement of this level of treatment shall utilize one of the methods detailed in the Dane County Stormwater manual. A link to that documentation is provided here: https://danecountystormwatermanual.com/doku.php?id=green_infrastruct
ure.
 - d. The following guidance shall be used in interpreting these requirements:
 - i. ~~An intensive green roof with a media depth of 12" or more shall have a runoff CN of 68. Existing open space (not including green roofs or pervious pavement) shall be modeled with a curve number of 74 both pre and post development.~~
 - ii. ~~An extensive green roof with media depth of a minimum of 4" shall have a runoff CN of 76. Documentation of the treatment capacity of a green roof shall be completed in accord with the methodology documented in the Dane County Stormwater Manual. A link to the specific method is provided here: https://danecountystormwatermanual.com/doku.php?id=green_roof~~
f.
 - NOTE: this methodology is based upon the standard created by the State of Wisconsin Green Tier process.
 - iii. ~~Pervious pavement designed to comply with the Wisconsin WDNR's guidance for post construction stormwater practices shall have a runoff CN of 74.~~
 - e. Regardless of how or what green infrastructure features are used to meet the above requirements (37.09(3)(c)3.a., b. and c.), they shall require the recording of a maintenance agreement for the features against the appropriate parcel."

4. Flood Prone Watersheds. For lands known to the City Engineer to be within watersheds or subwatersheds experiencing flooding, development and redevelopment shall comply with the detention/storage and/or necessary system/pipe upgrade requirements identified in individual watershed plans. These watershed plans shall be accepted by the Board of Public Works and placed on file with the City Engineer. Maps showing these areas, when available, shall be posted on the City of Madison Website, <https://www.cityofmadison.com/engineering/stormwater/> .

In the absence of a completed and accepted watershed plan for a watershed known to be experiencing flooding, new development or redevelopment shall comply with the requirements of 37.09(3)(c)2. and 3., as applicable.

5. Discharge Off-Site to Other Private Lands . When a site being reviewed by the Administrative Authority proposes to continue existing drainage patterns and discharge stormwater runoff onto property neither under the applicant's control (via ownership, easement or agreement) nor onto property under the control of the City of Madison, the Administrative Authority shall require the applicant to provide documentation that they have made significant efforts to obtain the right to discharge stormwater onto this property.

If no such right can be obtained, the applicant shall be required to mitigate the increased volume of discharge on their property prior to making this discharge. Mitigation shall consist of implementation of a stormwater practice that shall match the existing volumetric discharges from the applicant's property to other lands not under their control in storm events including the 1-, 2-, 5- and 10-year storm events. If the proposed discharge is to an area that is an enclosed depression, this requirement shall be increased to include the 25 and 100-year storm events."

20. Subdivision (d) entitled "Outlets" of Subsection (3) entitled "Stormwater Performance Standards" of Section 37.09 entitled "Stormwater Management Plan Requirements" of the Madison General Ordinances is hereby amended as follows:

- "(d) Outlets. Discharges from post-construction sites must have a stable outlet capable of carrying designed flow as required in Sec. 37.09(3)(c), at a non-erosive velocity. Outlet design must consider flow capacity and flow duration. This requirement applies to both the site outlet and the ultimate outlet to stormwater conveyance or water body. A minimum of 0.5' of freeboard shall be provided from the design peak elevation at the outlet of the basin compared to the elevation controls surrounding the basin (berms)."

21. Paragraph 1 entitled "All Developments" of Subdivision (e) entitled "Infiltration" of Subsection (3) entitled "Stormwater Performance Standards" of Section 37.09 entitled "Stormwater Management Plan Requirements" of the Madison General Ordinances is hereby amended as follows:

- "1. All Developments. Developments within the City of Madison, regardless of development type, shall be required to infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least ninety percent (90%) of the pre-development infiltration volume, based on an average annual rainfall, regardless of area necessary for this requirement. Should the applicant prove to

not be able to meet the infiltration requirement without dedicating more than two percent (2%) of the ~~site lot~~ area for this purpose, they may optionally choose to meet the secondary recharge standard.”

22. Paragraph 2 entitled “Secondary Recharge Standard” of Subdivision (e) entitled “Infiltration” of Subsection (3) entitled “Stormwater Performance Standards” of Section 37.09 entitled “Stormwater Management Plan Requirements” of the Madison General Ordinances is hereby amended as follows:

- “2. Secondary Recharge Standard. If the infiltration standard cannot be met by the developer with dedication of two percent (2%) or less of the ~~site lot~~ area, the developer may choose to design an infiltration system and pervious surfaces to meet or exceed the estimated average annual recharge rate as determined from the Wisconsin Geological and Natural History Survey's 2009 report, Groundwater Recharge in Dane County, Estimated by a GIS-Based Water Balanced Model or subsequent updates to this report, or by a site specific analysis using other appropriate techniques. If this alternative design approach is taken, at least two percent (2%) of the site area shall be dedicated as part of the effective infiltration area.”

23. Paragraph 3 entitled “Distributed Best Management Practices” of Subdivision (e) entitled “Infiltration” of Subsection (3) entitled “Stormwater Performance Standards” of Section 37.09 entitled “Stormwater Management Plan Requirements” of the Madison General Ordinances is hereby amended as follows:

- “3. Distributed Best Management Practices. If the applicant proposes to use distributed practices (e.g. rain gardens) to meet infiltration requirements, a deed restriction and maintenance agreement will be required. These shall be recorded against individual parcels. ~~If these devices are utilized to meet infiltration requirements, no credit shall be given towards the volume requirements for Runoff Rate Control in Sec. 37.09(3)(e).~~”

24. Subsection (7) entitled “Annual Stormwater Management Report” of Section 37.09 entitled “Stormwater Management Plan Requirements” of the Madison General Ordinances is hereby amended as follows:

- “(7) Annual Stormwater Management Report. Each applicant who is granted a stormwater management permit, and who has signed and recorded the required maintenance agreement, shall submit to the City Engineer an annual report on the condition of the site's stormwater management devices.
The annual report shall include the following:
- (a) Documentation of the completion of the required annual maintenance, including copies of receipts (actual prices paid need not be reported) from agents hired to perform the work and the date the work was completed;
 - (b) Photos of the management device at the time of inspection. This shall include photos of existing conditions and photos after the completion of any required maintenance.
- This report shall be submitted by June 1 of each year following closure of the Stormwater Management Permit required under Sec. 37.09(6). ~~Because of the change~~

~~of the report due date, no annual report submittal will be required for the calendar year 2013.~~ The annual report shall be completed and sealed by a Professional Engineer currently licensed in the State of Wisconsin, on forms provided by the City Engineer. The requirement that the annual report be sealed by a Professional Engineer may be omitted in the case of a stormwater management plan consisting solely of storm sewer inlet filters ~~and/or catchbasin sumps, or underground tanks,~~ provided that the applicant can provide the appropriate documentation and dated photos as outlined in Secs. 37.09(7)(a) and (b). For sites with more extensive stormwater management systems, the Administrative Authority may allow other appropriately credentialed professionals to complete this work at their discretion.

For sites that have a stormwater management device (or devices) that require a topographic survey every three years, this survey requirement may be satisfied through the submittal of adequate photographic documentation. The acceptance of date stamped photographs in lieu of a topographic survey is at the discretion of the Administrative Authority. The topographic survey requirement waiver may only be applied to qualifying detention or infiltration basins.

~~Upon receipt of the annual report, if requested on the cover letter accompanying the report or by separate email, City Engineering staff shall provide an email response to the contact listed on the reporting forms stating that the report was received. This response from City Engineering shall be made within 15 working days of receiving the report.~~

For sites that have a stormwater management device (or devices) that infiltrate stormwater, the inspection shall be completed between 24-72 hours after a rainfall event > ½ inch to ensure it is draining down appropriately. Copy of a weather report with rainfall amount shall be included in the inspection report."

25. Subsection (2) entitled "Concrete Management" of Section 37.10 entitled "Standards and Specifications" of the Madison General Ordinances is hereby amended as follows:

"(2) Concrete Management. For plan approval and issuance of a permit, the applicant shall provide a plan for Engineering review and approval that documents methods to control and limit concrete waste material from leaving the site, discharging into the sewer, or infiltrating into the ground."

26. Subsection (6) entitled "Design Criteria" of Section 37.10 entitled "Standards and Specifications" of the Madison General Ordinances is hereby amended as follows:

"(6) Design Criteria. The applicant for a permit may employ structural or nonstructural measures necessary to achieve all applicable standards set out in this ordinance. However, these measures will be evaluated to determine that they follow currently accepted design criteria and engineering standards. The following general principles shall be used when evaluating control plans and granting permits under this ordinance:

- (a) The smallest area of land shall be exposed for the shortest period at any given time during development.
- (b) The rough grading of the lot shall include backfilling the basement and all excess earth shall be hauled off the lot.
- (c) Accommodation of the increased runoff caused by changed soil and surface conditions during and after development.
- (d) Permanent, final plant covering or structures shall be installed prior to final acceptance.

- (e) The plan of development shall relate to the topography and soils of the site so that the lowest potential for erosion is created.
- (f) All detention and retention basins shall first be constructed to act as a settling basin during plat grading, road and utility construction with later conversion to a permanent basin upon ~~seventy-five percent (75%) build-out of the area served by the basin~~ transfer of the site to Building Inspection for management of individual construction erosion control sites. Upon the transfer of erosion control oversight to Building Inspection, which coincides with building permit issuance, the basins shall no longer be allowed to serve for erosion control.
- (g) Prior to final acceptance by the City and not prior to substantial completion of the development within the plat; all public detention and retention basins shall provide to the Administrative Authority an 'as-built' survey stamped by a Professional Engineer or Professional Surveyor in ~~pdf and AutoCAD~~ a format as determined by the Administrative Authority.
- (h) The developer for all plats or phases thereof shall submit for approval a "Post Erosion Control Plan" that details structural measures and responsibility for erosion control after the initial improvements have been made. The Post Erosion Control Plan shall propose erosion control measures to protect all improvements and include a re-vegetation schedule for denuded areas that takes into account the time of year. This plan may accompany the initial plan or be submitted separately, but must be approved prior to the City's acceptance of the plat improvements and issuance of building permits."

27. Subdivision (k) of Subsection (4) entitled "Permit Conditions" of Section 37.11 entitled "Application Fees and Issuance of Permits" of the Madison General Ordinances is hereby amended as follows:

- "(k) All incidental vehicles exiting an active site must remain on stabilized areas prior to exiting the site to public thoroughfares or when crossing public rights-of-way. Tracking sediment off-site must be mitigated with effective trackout controls installed and maintained. Incidental mud-tracking off-site onto adjacent public thoroughfares shall be cleaned up frequently when visible, and all and removed by the end of each working day using proper cleaning and disposal methods."

28. Subdivision (f) of Subsection (3) entitled "Inspection Authority" of Section 37.12 entitled "Administration" of the Madison General Ordinances is hereby amended as follows:

- "(f) After notification by the owner/Applicant, the ~~The~~ Administrative Authority shall inspect the property to verify compliance with the stormwater management plan within ten (10) days ~~of notification.~~"

29. Subdivision (b) of Subsection (6) entitled "Enforcement Authority" of Section 37.12 entitled "Administration" of the Madison General Ordinances is hereby amended as follows:

- "(b) In addition to posting a stop work order, the Administrative Authority shall provide notification to the owner or contractor by personal service, written notice by certified mail, or ~~facsimile transmission~~ email to the permit applicant of record for the site."

30. Subdivision (a) of Subsection (7) entitled "Compliance Inspection Fees" of Section 37.12 entitled "Administration" of the Madison General Ordinances is hereby amended as follows:

- "(a) Any person who ~~shall fail or neglect~~ fails or neglects to comply with any lawful order of the Director of the Building Inspection Division issued pursuant to the provisions of this chapter may be assessed seventy-five dollars (\$75) per compliance inspection, as defined in Sec. 27.03(2), MGO, that does not result in compliance with the order."

31. This ordinance will be effective on April 1, 2025.

EDITOR'S NOTE:

Sec. 37.09(3)(e)1, which is being amended by Paragraph 21, was amended by ORD-24-00066 (Legistar File # 84571). That ordinance amendment does not become effective until April 1, 2025, which would correspond to the enactment of this ordinance. The change being made by Paragraph 21 will therefore be reflected in the updated language for this provision, which will read:

- "1. All Developments. Development applications received by the Planning Division shall be required to infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least ninety percent (90%) of the pre-development infiltration volume, based on an average annual rainfall, regardless of area necessary for this requirement. In accordance with Wisconsin DNR Post Construction Technical Standard 1002 (Site evaluation for stormwater infiltration), upon completion of site investigation (borings/pits) the infiltration system shall not be placed into amended or unamended loam (0.24 in/hr) or more restrictive soils if less restrictive unamended soils are readily available. Siting the location of the infiltration practices shall not interfere with other ordinances and pumping water shall not be required to meet this standard. Should the applicant prove to not be able to meet the infiltration requirement without dedicating more than two percent (2%) of the lot area for this purpose, they may optionally choose to meet the secondary recharge standard."