CITY OF STRONGSVILLE, OHIO

ORDINANCE NO. 2022 – 051

By: Mayor Perciak and All Members of Council

AN ORDINANCE AMENDING CHAPTER 1058 OF TITLE FIVE OF PART TEN OF THE STREETS, UTILITIES AND PUBLIC SERVICES CODE OF THE CITY'S CODIFIED ORDINANCES CONCERNING STORM WATER MANAGEMENT AND SEDIMENT AND EROSION CONTROL, AND DECLARING AN EMERGENCY.

WHEREAS, by and through Ordinance No. 2011-003, this Council amended Chapter 1058 concerning Storm Water Management and Sediment and Erosion Control; and

WHEREAS, in order to remain in compliance with the City's NPDES Small MS4 General Permit (OHQ000004), the City is again required to update its MS4 Construction and Post-Construction ordinances to be equivalent with the NPDES Construction Storm Water General Permit by April 1, 2022, as found in the City's Chapter 1058 of its Codified Ordinances; and

WHEREAS, it is, therefore, recommended that the foregoing be accomplished through amendment of existing Chapter 1058 where required and/or appropriate.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF STRONGSVILLE, COUNTY OF CUYAHOGA AND STATE OF OHIO:

Section 1. That existing Chapter 1058 of Title Five of Part Ten of the Codified Ordinances of the City of Strongsville be and is hereby amended to read in its entirety as follows:

CHAPTER 1058
STORM WATER MANAGEMENT AND SEDIMENT AND EROSION CONTROL

1058.01 PURPOSE.

The intent of this chapter is to establish consistent, technically feasible and operationally practical regulations and standards to achieve a level of storm water management, and erosion and sediment control that will minimize damage to public and private property and the degradation of water resources, and will promote and maintain the health, safety, and welfare of the residents of the City of Strongsville.

The purpose includes, but is not limited, to:

(a) Allow development while minimizing increases in downstream flooding, erosion, and sedimentation.

(b) Reduce water quality impacts to receiving water resources and drainage systems that may be caused by new development or redevelopment activities.

(c) Control storm water runoff resulting from activities disturbing the soil.

(d) Assure that development site owners control the volume and rate of storm water runoff originating from their property so that surface water and ground water are protected, soil erosion is controlled, and flooding potential is not increased.

(Ord. 2011-003. Passed 1-3-11.)

1058.02 SCOPE.

This chapter applies to development areas having new or relocated projects, one-half (1/2) acre in total area, or those involving highways, underground cables, pipelines, residential subdivisions, industrial projects, commercial projects, institutional projects, building activities on farms, general clearing, redevelopment of urban areas and all other land uses not specifically exempted. This chapter does not apply to:

(a) Land disturbing activities related to producing agricultural crops or silviculture operations regulated by the Ohio Agricultural Sediment Pollution Abatement Rules (1501:15-3-01 to 1501:15-3-09 of the Ohio Administrative Code) and existing at the time of passage of this chapter.

(b) Coal surface mining operations regulated by Chapter 1513 of the Ohio Revised Code and existing at the time of passage of this chapter.

(c) Other surface mining operations regulated by Chapter 1514 of the Ohio Revised Code and existing at the time of passage of this chapter.

(d) Construction activities, which do not include the installation of any impervious surface (e.g., soccer fields), abandoned mine reclamation activities regulated by the Ohio Department of Natural Resources, stream and wetland restoration activities, and wetland mitigation activities.

(e) Transportation projects that are subject to industry specific Ohio EPA Rules are exempt from these requirements.

(f) Development areas of less than one-half acre unless such areas consist of or drain to a sensitive area, in which case they do not apply to development areas of less than eight thousand (8,000) square feet provided, however, that the City Engineer shall enforce all other storm water management rules regardless of the size of the development area.
(Ord. 2011-003. Passed 1-3-11.)

1058.03 DEFINITIONS.

(a) ACRE: A measurement of area equaling 43,560 square feet.

(b) APPROVING AUTHORITY: The official responsible for administering the applicable program(s).

(c) ACCELERATED WATER EROSION: The wearing away of land surface by water, occurring at a more rapid rate than geologic or normal erosion, primarily as a result of the influence of human activities.

(d) APPROVING AGENCY: Either the City Engineer or other entity, agency, or official designated by the City Engineer.

(e) BEST MANAGEMENT PRACTICES (BMP): Any activities, prohibitions or practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

(f) CHANNEL: A natural stream that conveys water, or a ditch or channel excavated for the natural flow of water.

(g) CONCENTRATED STORM WATER RUNOFF: Surface water runoff which converges and flows primarily through water conveyance features such as swales, gullies, waterways, channels or storm sewers, and which exceeds the maximum specified flow rates of filters or perimeter controls intended to control sheet flow.

(h) CONSERVATION: The wise use and management of natural resources.

(i) CUT AND FILL SLOPES: A portion of land surface or area from which soil material is excavated and/or filled.

(j) DENUDED AREA: A portion of land surface on which the vegetation or other soil stabilization features have been removed, destroyed or covered, and which may result in or contribute to erosion and sedimentation.

(k) DETENTION BASIN: A storm water management pond that remains dry between storm events. Storm water management ponds include a properly engineered/designed volume which is dedicated to the temporary storage and slow release of runoff waters.

(l) DEVELOPMENT AREA: Any tract, lot, or parcel of land, or combination of tracts, lots or parcels of land, which are in one ownership, or are contiguous and in diverse ownership, where earth-disturbing activity is to be performed.

(m) DITCH: An excavation, either dug or natural, for the purpose of drainage or irrigation, and having intermittent flow.

(n) DUMPING: The grading, pushing, piling, throwing, unloading or placing of soil or other material.

(o) EARTH DISTURBING ACTIVITY: Any grading, excavating, filling, or other alteration of the earth's surface where natural or man-made ground cover is destroyed.

(p) EARTH MATERIAL: Soil, sediment, rock, sand, gravel, and organic material or residue associated with or attached to the soil.

(q) EROSION: The process by which the land surface is worn away by the action of water, wind, ice or gravity.

(r) EXISTING: In existence at the time of the passage of this Chapter.

(s) FREQUENCY STORM: A rainfall event of a magnitude having a specified average recurrence interval and calculated with the Natural Resources Conservation Service, USDA Type II twenty-four hour curves or depth-duration frequency curves.

(t) GRADING: Earth disturbing activity such as excavation, stripping, cutting, filling, stockpiling, or any combination thereof.

(u) GRUBBING: Removing, clearing or scalping material such as roots, stumps or sod.

(v) LARGER COMMON PLAN OF DEVELOPMENT OR SALE: A contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.

(w) LANDSLIDE: The rapid mass movement of soil and rock material downhill under the influence of gravity in which the movement of the soil mass occurs along an interior surface of sliding.

(x) LOCAL COUNTY SWCD: The local county Soil and Water Conservation District.

(y) NATURAL RESOURCES CONSERVATION SERVICE (NRCS): An agency of the United States Department of Agriculture, formerly known as the Soil Conservation Service (SCS).

(z) NPDES PERMIT: A National Pollutant Discharge Elimination System Permit issued by Ohio EPA under the authority of the USEPA, and derived from the Federal Clean Water Act.

(aa) OHIO EPA: The Ohio Environmental Protection Agency.

(bb) ORDINARY HIGH WATER MARK: The point of the bank or shore to which the presence and action of surface water is so continuous as to leave a district marked by erosion, destruction or prevention of woody terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristic.

(cc) OUTFALL: An area where water flows from a structure such as a conduit, storm sewer, improved channel or drain, and the area immediately beyond the structure which is impacted by the velocity of flow in the structure.

(dd) PERSON: Any individual, corporation, limited liability company, partnership, joint venture, agency, unincorporated association, other governmental entity, municipal corporation, township, county, state agency, the federal government, or any combination thereof.

(ee) PROFESSIONAL ENGINEER: A person currently registered in the State of Ohio as a Professional Engineer, with specific education and experience in water resources engineering, acting in strict conformance with the Code of Ethics of the Ohio Board of Registration for Engineers and Surveyors.

(ff) QUALIFIED INSPECTION PERSONNEL: A person knowledgeable in the principles and practice of erosion and sediment controls, who possesses the skills to assess all conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity.

(gg) REDEVELOPMENT: The demolition or removal of existing structures or land uses and construction of new ones.

(hh) RETENTION BASIN: A storm water management pond that maintains a permanent pool of water. Such storm water management ponds include a properly engineered/designed volume dedicated to the temporary storage and slow release of runoff waters.

(ii) RIPARIAN AREA: Naturally vegetated land adjacent to watercourses which, if appropriately sized, helps to, limit erosion, reduce flood flows, and/or filter and settle out runoff pollutants, or which performs other functions consistent with the purposes of this Chapter.

(jj) SEDIMENT: Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by wind, water, gravity or ice, and has come to rest on the earth's surface either on dry land or in a body of water.

(kk) SEDIMENT BASIN: A temporary sediment pond that releases runoff at a controlled rate. It is designed to slowly release runoff, detaining it long enough to allow most of the sediment to settle out of the water. The outlet structure is usually a designed pipe riser and barrel. The entire structure is removed after construction. Permanent storm water detention structures can be modified to function as temporary sediment basins.

(ll) SEDIMENT CONTROL: The limiting of sediment being transported by controlling erosion or detaining sediment-laden water and, allowing the sediment to settle out.

(mm) SEDIMENT BARRIER: A sediment control device such as a geotextile Silt Fence or a grass Filter Strip, usually capable of controlling only small flow rates. (Straw bale barriers are not acceptable.)

(nn) SEDIMENT POLLUTION: A failure to use management or conservation practices to control wind or water erosion of the soil and to minimize the degradation of water resources by soil sediment in conjunction with land grading, excavating, filling, or other soil disturbing

activities on land used or being developed for commercial, industrial, residential, or other non-farm purposes.

(oo) SENSITIVE AREA: An area or water resource that requires special management because of its susceptibility to sediment pollution, or because of its importance to the well-being of the surrounding communities, region, or the state and includes, but is not limited to, the following:

(1) Ponds, wetlands or small lakes with less than five acres of surface area;
(2) Small streams with gradients less than ten feet per mile with average annual flows of less than 3.5 feet per second containing sand or gravel bottoms;
(3) Drainage areas of a locally or Ohio designated Scenic River;
(4) Riparian and wetland areas.

(pp) SETTLING POND: A runoff detention structure, such as a Sediment Basin or Sediment Trap, which detains sediment-laden runoff, allowing sediment to settle out.

(qq) SHEET FLOW: Water runoff in a thin uniform layer or rills and which is of small enough quantity to be treated by sediment barriers.

(rr) SLIP: A landslide as defined under "Landslides."

(ss) SLOUGHING: A slip or downward movement of an extended layer of soil resulting from the undermining action of water or the earth disturbing activity of man.

(tt) SOIL: Unconsolidated erodible earth material consisting of minerals and/or organics.

(uu) SOIL CONSERVATION SERVICE, USDA: The federal agency now titled the "Natural Resources Conservation Service," which is an agency of the United States Department of Agriculture.

(vv) SOIL EROSION AND SEDIMENT CONTROL PLAN: A written and/or drawn soil erosion and sediment pollution control plan to minimize erosion and prevent off-site sedimentation throughout all earth disturbing activities in a development area.

(ww) SOIL EROSION AND SEDIMENT CONTROL PRACTICES: Conservation measures used to control sediment pollution and including structural practices, vegetative practices and management techniques.

(xx) SOIL STABILIZATION: Vegetative or structural soil cover that controls erosion, and includes permanent and temporary seeding, mulch, sod, pavement, etc.

(yy) SOIL SURVEY: The official soil survey produced by the Natural Resources Conservation Service, USDA in cooperation with the Division of Soil and Water Conservation, ODNR and the local Board of County Commissioners.

(zz) STORM WATER CONTROL STRUCTURE: Practice used to control accelerated storm water runoff from development areas.

(aaa) STORM WATER CONVEYANCE: All storm sewers, channels, streams, ponds, lakes, etc., used for conveying concentrated storm water runoff, or for storing storm water runoff.

(bbb) STORM WATER POLLUTION PREVENTION PLAN (SWP3): The plan required by Ohio EPA to meet the requirements of its National Pollutant Discharge Elimination System (NPDES) Permit program for construction activities.

(ccc) STREAM: A body of water running or flowing on the earth's surface, or a channel with a defined bed and banks in which such flow occurs even if seasonally intermittent.

(ddd) UNSTABLE SOIL: A portion of land surface or area which is prone to slipping, sloughing or landslides, or is identified by Natural Resources Conservation Service methodology as having a low soil strength.

(eee) USEPA: The United States Environmental Protection Agency.

(fff) WASTEWATER: Any water that is contaminated with gasoline, fuel oil, hydrocarbon based chemicals, paint, paint washing liquids or other paint wastes, sanitary wastes, or any other Ohio EPA regulated contaminants.

(ggg) WATERCOURSE: Any natural, perennial, or intermittent channel with a defined bed and banks, stream, river or brook.

(hhh) WATER RESOURCES: All streams, lakes, ponds, wetlands, water courses, waterways, drainage systems, and all other bodies or accumulations of surface water, either natural or artificial, which are situated wholly or partly within, or border upon this state, or are within its jurisdiction, except those private waters which do not combine or affect a junction with natural surface waters.

(iii) WETLAND: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas. (40 Codified Federal Register (CFR) 232, as amended). Wetlands shall be delineated by a site survey submitted to the City using delineation protocols accepted by the U.S. Army Corps of Engineers and the Ohio EPA at the time of application of this Chapter. If a conflict exists between the delineation protocols of these two agencies, the delineation protocol that results in the most inclusive area of wetlands shall apply.

(jjj) WETLAND SETBACK: Those lands adjacent to wetlands where earth disturbing activities will not take place and natural vegetation will not be removed.
(Ord. 2011-003. Passed 1-3-11.)

1058.04 STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL PLAN.

In order to control potential storm water damage and sediment pollution of water resources, wetlands, riparian areas, other natural areas, and public and private lands, the owner of each development area shall be responsible for developing a comprehensive Storm Water Management and Erosion and Sediment Control Plan. This plan will address storm water management (volume and peak rate of runoff), soil erosion, sediment and other wastes control. Such plan also must contain a description of controls appropriate for each construction

operation covered by this Chapter; and the operator must implement the planned controls in a timely manner. The plans and BMPs used to satisfy the conditions of this Chapter shall meet the standards and specifications in the current edition of the Ohio *Rain Water and Land Development* manual issued and made available by the Ohio Department of Natural Resources, or standards of the Ohio EPA, whichever are most stringent. The plans must make use of the practices that preserve the existing natural condition to the maximum extent practicable. The Plan shall identify the subcontractors engaged in activities that could impact storm water runoff. The Plan shall contain signatures from all of the identified subcontractors indicating that they have been informed and understand their roles and responsibilities in complying with the Storm Water Management and Erosion and Sediment Control Plan.

(a) Development Sites 1/2 (One-half) Acre In Size or Larger. All developments that have a common plan of development or sale equal to or larger than one-half (1/2) acre in size of disturbed area are subject to this ordinance and shall follow all of the requirements set forth in this ordinance.

(1) Description of the plan of construction. The following information shall be included in the Storm Water Management and Erosion and Sediment Control Plan and submitted to the City prior to final Planning Commission approval:

A. Site Description:

1. A description of the prior land uses of the site.
2. A description of the nature and type of construction activity (for example, low density residential, shopping mall, highway, etc.).
3. A description of the total area of the site and the area of the site that is expected to be disturbed (namely, grubbing, clearing, excavating, filling or grading, including off-site borrow, fill or spoil areas and off-site utility installation areas).
4. An estimate of the impervious area and percent of imperviousness created by the construction activity.
5. The types of soils within, or affected by, the development area, and the location of all highly erodible or unstable soils as determined by the most current edition of the soil survey of the County, by the Natural Resources Conservation Service (NRCS).
6. An onsite, detailed soils engineering report if required by the City Engineer.
7. The name and/or location of the immediate receiving stream or surface water(s) and the first subsequent named receiving water and the major river watersheds in which it is located.

B. A vicinity sketch locating:

1. The larger common plan of development or sale;
2. The development area;
3. All pertinent surrounding natural features within 200 feet of the development site including, but not limited to:
   a. Water resources such as wetlands, springs, lakes, ponds, rivers and streams (including intermittent streams with a defined bed and bank);
   b. Conservation easements;
   c. Other sensitive natural resources;

d. The sensitive areas receiving runoff from the development.

4. All off-site borrow or spoil areas;
5. All off-site utility installation areas that are related to the planned project.

C. The existing and proposed topography shown in the appropriate contour intervals as approved by the City Engineer (generally one-foot contours are used).

D. The location and description of existing and proposed drainage patterns and facilities, including any allied drainage facilities beyond the development area and the larger common plan of development or sale.

E. Existing and proposed watershed boundary lines, direction of flow and watershed acreage.

F. The person or entity responsible for continued maintenance of all vegetative and/or mechanical BMPs for both the construction and post-construction phases of the development.

G. Long-term maintenance requirements and schedules of all BMPs for both the construction and post-construction phases of the development will be provided as a stand alone document to the Post Construction operator and the City of Strongsville.

H. This plan will identify the person or entity that will serve as the Post-Construction operator who will be financially responsible for maintaining the perpetual inspection and maintenance of permanent storm water conveyance and storage structures and other conservation practices.

I. Maintenance plans must ensure that pollutants collected within structural Post-Construction practices be disposed of in accordance with local, state, and federal regulations.

J. Long-term maintenance inspection schedules and method of implementation.

K. The method of ensuring that funding will be available to conduct the long-term maintenance and inspections of all permanent storm water, soil erosion and sediment control, and water quality practices.

L. The location of any existing or planned riparian and/or wetland setback areas on the property.

M. The plan must clearly describe, for each major construction activity, the appropriate BMPs and the general timing (or sequence) during the construction process of when the measures will be implemented; and, who (which contractor) will be responsible for implementation (for example, Contractor A will clear, grub and install perimeter controls and Contractor B will maintain perimeter controls until final stabilization; Contractor C will conduct and document the scheduled inspections.)

N. Location and description of any storm water discharges associated with dedicated asphalt and concrete plants covered by this regulation and the Best Management Practices to address pollutants in these storm water discharges.

(2) Storm Water Management and Erosion and Sediment Control Plan. The Storm Water Management and Erosion and Sediment Control Plan shall include, at a minimum, the following information:

A. The Storm Water Management and Erosion and Sediment Control Plan shall include a map showing the location of:
   1. The limits of earth disturbing activity including excavations, filling, grading or clearing.
   2. Drainage patterns during major phases of construction.
   3. The location of each proposed soil erosion and sediment control BMP, including:
      a. Permanent soil erosion control practices to be left in place after construction operations have been completed (for example, level spreaders, permanent erosion control matting, gabions, rock lined channels, etc.),
      b. Areas likely to require temporary stabilization during the course of site development,
      c. Designated construction entrances where vehicles will access the construction site,
      d. In-stream activities including stream crossings,
      e. Areas designated for the storage or disposal of solid, sanitary and toxic wastes,
      f. Temporary dumpsters,
      g. Cement truck washout,
      h. Fuel tanks,
      i. BMPs that divert runoff away from disturbed areas and steep slopes where practicable, including rock check dams, pipe slope drains, diversions to direct flow away from exposed soils, and protective grading practices,
      j. Sediment settling ponds drawn to scale.
   4. Existing and proposed locations of buildings, roads, parking facilities and utilities.
   5. Boundaries of wetlands and stream channels the owner intends to fill or relocate for which the owner is seeking approval from the U.S. Army Corps of Engineers and/or Ohio EPA.

B. The Storm Water Management and Erosion and Sediment Control Plan shall include a list of soil erosion and sediment control BMPs being used and the standards and specifications, including detailed drawings, for each BMP. This list shall include:
   1. Methods of controlling the flow of runoff from disturbed areas so as to prevent or minimize erosion.
   2. Identification of the Structural Practices to be used to control erosion and trap sediment from a site remaining disturbed for more than 14 days. A description shall be included of how each selected control will store runoff so as to let sediments settle out and/or divert flows away from exposed soils or act to limit runoff from exposed areas.
   3. Identification for each Structural Practice of its size, detail drawings, maintenance requirements and design calculations.
   4. The type and amount of plant seed, live plants, fertilizer, agricultural ground limestone and mulch to be used. Specification of soil testing requirements for fertility and

lime requirements will be included. Specification for the use of perennial grass seed will also be included.

5. Settling ponds will be identified with basic dimensions and the calculations for size and volume.
6. Detailed drawings and installation requirements of all other structural control BMPs.
7. Any other soil erosion and sediment control related BMPs and items that are required by the City Engineer.
8. For developments where the overall plan does not call for centralized sediment control capable of controlling multiple individual lots, a detailed drawing of a project specific typical individual lot showing standard individual lot soil erosion and sediment control practices and the sequence and timing of BMP installation for the individual lots shall be provided. This does not remove or eliminate the responsibility to designate and install specific soil erosion and sediment control practices for the storm water discharges.

C. The Storm Water Management and Erosion and Sediment Control Plan shall include the scheduling, phasing, and coordination of construction operations and erosion and sediment control BMPs, including vegetative plantings and mulch.

(3) The Storm Water Management and Erosion and Sediment Control Plan shall include a description of the Storm Water Management (SWM) practices to be used on the site. The SWM element of the Plan shall include, at a minimum, the following:

A. A map showing the location, drawn to scale, of permanent SWM conveyance, detention and retention structures, other SWM control structures and the SWM easements.

B. A general description of the SWM strategy proposed to meet this chapter.

C. Hydraulic and Hydrologic calculations for all permanent SWM conveyance, detention and retention structures, and other SWM control structures.

1. The storm water conveyance system calculations shall establish the adequacy of the storm water conveyance system to carry the design frequency storm. The flow route and drainage way necessary to convey the 100-year storm (emergency flow way) through the development shall be shown. The storm water conveyance system shall be designed per the requirements set forth in the latest edition of *The Uniform Standards for Sewerage Improvements*, and all, applicable, standards, regulations, ordinances, and policies, of the City of Strongsville. Storm water management detention and retention structures shall be designed in accordance with Section 1058.06.
2. The hydraulic and hydrologic calculations shall establish the adequacy of the conveyance system to receive and convey storm water from the up-stream property.
3. The hydraulic and hydrologic calculations shall establish the adequacy of the downstream drainage facilities to

receive and convey storm water exiting the proposed development.

4. Submittals for review shall include but not be limited to:
   a. A soils map of appropriate scale showing; contours at 2' intervals, soils types, ground cover and woodlands; the total drainage area tributary to the project, both before and after the proposed development, legend noting the soils area in acres by soils group, copy of the U.S. Department of Agriculture SCS Soil Survey of Cuyahoga County, latest addition, showing the entire drainage area.
   b. Drainage area map of appropriate scale showing; contours at 2' intervals, all existing drainage facilities, all natural waterways, all proposed drainage facilities, emergency flow way.
   c. Type II rainfall distribution and City of Strongsville rainfall data.
   d. Runoff curve summary showing pre and post development conditions.
   e. Runoff calculations.
   f. Travel time and time of concentration calculations.
   g. Calculations on peak discharge and discharge volume.
   h. Pre and post development hydrographs.
   i. Storage volume requirements.
   j. Routing through proposed drainage facility using storage indication method.
   k. Soil Conservation District Technical Release No. 55 or other method approved by the City Engineer must be utilized to produce the above

D. Any other SWM related items required by the City Engineer.
(Ord. 2011-003. Passed 1-3-11.)

1058.05 EROSION AND SEDIMENT CONTROL MINIMUM STANDARDS.

In order to control sediment pollution of water resources, the owner or person responsible for the development area shall use conservation planning and practices to maintain the level of conservation established in the following standards.

Soil erosion and sediment control practices used to satisfy these standards shall meet the standards and specifications in the current edition of the Ohio *Rainwater and Land Development* manual, the NRCS Field Office Technical Guide for the Cuyahoga County, or the Ohio EPA standards, whichever are more stringent. The construction of new roads and roadway improvement projects by public entities shall implement post-construction BMPs in compliance with the current version (as of the effective date of the permit) of the Ohio Department of Transportation's "Location and Design Manual, Volume Two Drainage Design" that has been accepted by Ohio EPA.

These standards are general guidelines and shall not limit the right of the City Engineer to impose at any time additional, more stringent requirements, nor shall the standards limit the right of the City Engineer to waive, in writing, individual requirements where reasonably necessary and based upon sound engineering practice.

Soil limitations shall be determined by using the current edition of the County soil survey written by the NRCS, USDA.

(a) The Storm Water Management and Erosion and Sediment Control Plan shall include measures that control the flow of runoff from disturbed areas so as to prevent soil erosion from occurring.

(b) Structural Practices shall be used to control erosion and trap sediment from areas remaining disturbed for more than 14 days.

(c) Sediment Barriers **and Diversions**. ~~Sheet flow runoff from denuded areas shall be intercepted by silt fence or diversions to protect adjacent properties and water resources from sediment. Where intended to provide sediment control, Silt Fence shall be placed on a level contour. The relationship between the maximum drainage areas to Silt Fence for a particular slope is shown in the table below. (Placing Silt Fence in a parallel series does not extend the size of the drainage area.)~~ **Sheet flow runoff from denuded areas shall be intercepted by sediment barriers or diversions to protect adjacent properties and water resources from sediment transported via sheet flow. Where intended to provide sediment control, silt fence shall be placed on a level contour downslope of the disturbed area. For most applications, standard silt fence may be substituted with a 12-inch diameter sediment barrier. The relationship between the maximum drainage area to sediment barrier for a particular slope range is shown in the following table:**

Table 1: Silt Fence Applicability

Maximum drainage area (in acres) to 100 linear feet of Silt Fence	Range of slope for a particular drainage area (in percent)
0.5	< 2%
0.25	≥ 2% but < 20%
0.125	≥ 20% but < 50%

This does not preclude the use of other sediment barriers designed to control sheet flow runoff. The total runoff flow treated by a sediment barrier shall not exceed the design capacity for that sediment barrier. Straw bale barriers are not acceptable.

(d) Storm Water Diversion Practices. Storm water diversion practices shall be used to keep runoff away from disturbed areas and steep slopes where practicable. Such practices, which include swales, dikes or berms, pipe slope drains and diversions, may receive storm water runoff from areas up to ten (10) acres. Storm water diversion practices alone are not considered a sediment control practice unless those are used in conjunction with a sediment settling pond.

(e) All Sediment Control Practices must be capable of ponding runoff in order to be considered functional.

(f) Clearing and Grubbing will be done in two (2) or more phases. The first phase will include only those locations necessary to install the perimeter soil erosion, sediment and storm water control BMPs. After the perimeter controls are in place and functioning, the remaining phase(s) of clearing and grubbing may continue.

(g) Timing of Sediment Trapping Practices. Sediment control practices shall be functional throughout all phases of earth disturbing activity. Settling facilities, perimeter controls and other practices intended to trap sediment shall be implemented prior to grading and within seven (7) days from the start of grubbing. They shall continue to function until the up slope development area is

permanently restabilized. As construction progresses and the topography is altered, appropriate controls must be constructed or existing controls altered to address the changing drainage patterns.

(h) Stabilization of Denuded Areas. Disturbed areas must be stabilized as specified in the tables below, or according to the Ohio EPA NPDES Storm Water Permit Rules, whichever are most restrictive:

Table 2: Permanent Stabilization

Area requiring permanent stabilization	Time frame to apply erosion controls
Any areas that will lie dormant for one (1) year or more	Within seven (7) days of the most recent disturbance
Any areas within fifty (50) feet of a stream and at final grade	Within two (2) days of reaching final grade
Any other areas at final grade	Within seven (7) days of reaching final grade within that area

Table 3: Temporary Stabilization

Area requiring temporary stabilization	Time frame to apply erosion controls
Any disturbed areas within 50 feet of a stream and not at final grade	Within two days of the most recent disturbance if the area will remain idle for more than ~~21~~14 days.
For all construction activities, any disturbed areas that will be dormant for more than ~~21~~14 days but less than one year, and not within 50 feet of a stream	Within seven days of the most recent disturbance within the area For residential subdivisions, disturbed areas must be stabilized at least seven days prior to transfer of NPDES permit coverage for the individual lot(s). Proof of permit coverage transfer from Ohio EPA must be submitted to the City Engineer. The City Engineer shall then inspect the lot to ensure that the temporary seeding has been done.
Disturbed areas that will be idle over winter	Prior to the onset of winter weather

Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed.

(i) Sediment Settling Ponds. A sediment settling pond is required for any one of the following conditions:

- Concentrated storm water runoff (e.g., storm sewer or ditch);
- Runoff from drainage areas, which exceed the design capacity of silt fence or other sediment barriers;
- Runoff from drainage areas that exceed the design capacity of inlet protection; or

- Runoff from common drainage locations with 10 or more acres of disturbed land.

(1) Where storm sewer drainage areas include 10 or more acres disturbed at one time, a temporary (or permanent) sediment settling pond must be provided until final stabilization of the site. In single-family residential construction, final stabilization is after the houses are built and permanent landscaping is done.

A. Alternative controls can be used if the owner can show, in writing, that the Ohio EPA approved the use of alternatives that the owner demonstrated to be equivalent in effectiveness to a sediment settling pond.

B. It is recommended that for drainage locations of less than 10 acres, smaller sediment settling basins and/or Sediment Traps be used.

(2) Each facility's storage capacity shall be no less than 1800 cubic feet of dewatering zone area per acre of total contributing drainage area and 1000 cubic feet of sediment storage zone area per disturbed acre within the watershed of the basin. The storage volume will be measured from the bottom of the basin to the top of the primary (principal) spillway.

(3) Permanent storm water management ponds that are designed to trap sediment during construction shall be designed to provide for a slow release of sediment-laden water. The draw down time must be at least 48 hours, or meet the criteria in the Ohio *Rainwater and Land Development* manual whichever is most stringent.

(4) The design configuration between inlet(s) and the outlet of settling ponds must provide at least four units of length for each one unit of width (> 4:1 length to width ratio). A length to width ratio of 4:1 is recommended.

(5) The depth of the dewatering zone of the sediment settling pond must be less than or equal to five (5) feet.

(6) Sediment must be removed from the sediment settling ponds when the design capacity has been reduced by 40%.

(7) Public safety, especially as it relates to children, must be considered in the design. Alternative sediment controls must be used where site limitations would preclude a safe design.

(8) Temporary sediment settling ponds will not be constructed in any stream channel.

(j) Storm Sewer Inlet Protection.

(1) All storm sewer inlets that accept water runoff from the development area shall be protected so that sediment-laden water will not enter the storm sewer, unless the storm drain system drains to a Sediment Settling Pond and is exempted in writing by the City Engineer. In areas where construction will be ongoing, such as subdivisions, the storm sewer protection shall be maintained until all up slope areas reach final stabilization, as determined by the City Engineer.

(2) All inlets receiving runoff from drainage areas of one or more acres will require a sediment settling pond.

(3) Once final stabilization is accomplished, the developer/owner shall remove the inlet protection devices and hydraulically clean the storm sewers to the satisfaction of the City Engineer and Service Director. All sediment shall be removed from the system and shall not be flushed downstream.

(k) Storm Sewer and Other Drainage Outlets. All storm sewers, footer drains, roof gutter drains and all other drains will be outletted at the bottom of the slope. The slope below the outlet will be able to control the water being drained through the storm sewer or other drains without causing erosion of the stream, channel banks, channel bottom or other areas in which the water is outletted.

(l) Working Near, Or Crossing Streams and Wetlands.

(1) Construction vehicles shall avoid water resources, wetlands, riparian areas, and their setbacks. If construction vehicles must cross such areas during construction, an approved temporary crossing shall be constructed. Streams, including intermittent streams with a defined bed and banks, shall be restabilized immediately after in-channel work is completed, interrupted, or stopped. Erodible materials will not be used in making stream crossings.

(2) No soil, rock, debris, or any other material shall be dumped or placed into a water resource or into such proximity that it may slough, slip, or erode into a water resource, unless such dumping or placing is authorized by the approving authority and, when applicable, the U.S. Army Corps of Engineers and Ohio EPA, for such purposes as, but not limited to, constructing bridges, culverts, and erosion or sediment control structures.

(3) If construction activities disturb areas adjacent to streams, structural practices shall be designed and implemented on site to protect the adjacent streams from the impacts of sediment runoff.

(4) No temporary or permanent sediment controls will be constructed in a stream channel.

(5) Structural post-construction BMPs cannot be installed within a State surface water (e.g., wetland or stream) unless it is authorized by a Clean Water Act Section 401 water quality certification and/or Clean Water Act Section 404 Permit.

(m) Construction Entrance.

(1) Measures shall be taken to prevent soil transport onto public roads, or surfaces where runoff is not checked by sediment controls.

(2) Stone with geotextile construction entrance(s) shall be implemented as required by the City Engineer and the Ohio EPA. These will be planned and installed according to the requirements in the most recent edition of the Ohio Rainwater and Land Development manual.

(3) Where soil is transported onto a public road surface, the roads shall be cleaned thoroughly at the end of each day, or more frequently, in order to ensure public safety. Soil shall be removed from paved surfaces by shoveling or sweeping. Street washing shall be allowed only after shoveling or sweeping has removed most of the sediment and street sewer inlet protection is properly installed.

(4) Erodible material ramps in streets will not be used to enable equipment to cross curbs. Non-erosive materials (for example, wood and stone) can be used.

(n) Unstable Soils.

(1) Unstable soils will be as determined by the local county Soil Survey or by a detailed soils report.

(2) The City Engineer may require detailed soil reports when deemed necessary.

(3) Unstable soils prone to slipping or land sliding shall not be graded, excavated, filled or have loads imposed upon them unless the work is performed in accordance with a qualified professional engineer's

recommendations to correct, eliminate, or adequately address the problems.

(o) Cut And Fill Slopes. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion and slippage. Consideration shall be given to the length and steepness of the slope, soil type, up slope drainage area, groundwater conditions and slope stabilization. The minimum final unreinforced soil slopes will have a horizontal to vertical ratio of 3:1 (the horizontal will be three (3) times the vertical).

(p) Stabilization of Outfalls and Channels. Outfalls and constructed or modified channels shall be designed and constructed to withstand the expected velocity of flow from the planned post-development frequency storm without eroding. The planned post-construction velocity and flow shall include the entire contributing watershed. Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide non-erosive velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected.

(q) Establishment of Permanent Vegetation. A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until ground cover is achieved which, in the opinion of the City Engineer, has 80% vegetative density over the entire disturbed area, provides adequate cover, and is mature enough to satisfactorily control soil erosion and survive adverse weather conditions.

(r) Disposition of Temporary Practices. All temporary soil erosion and sediment control practices shall be disposed of immediately after final site stabilization is achieved or after the temporary practices are no longer needed, unless otherwise required by the City Engineer. Trapped sediment shall be permanently stabilized to prevent further erosion.

(s) Underground Utility Construction. The construction of underground utility lines, pipes, etc. shall be subject to the following criteria:

(1) Trenches shall remain open for no more than five days.

(2) There shall be no turbid discharges to surface waters resulting from dewatering activities. If trench or ground water contains sediment, it must pass through a sediment settling pond or other equally effective sediment control device, prior to being discharged from the construction site or to waters of the state.

(3) When discharging clean ground water, care must be taken to ensure that it does not become pollutant laden by crossing over disturbed soils or other pollutant sources.

(t) Inspections.

(1) If inspections or other information indicates a control has been used inappropriately or incorrectly or it has failed, it must be replaced or modified for the site conditions.

(2) The owner of the development area shall have the site inspected for soil erosion, sediment control and other environmental concerns every seven (7) calendar days, and within twenty-four (24) hours of a 0.5 inch or greater rainfall event until the City Engineer or designee inspects and verifies the site as being stable. Such verification does not relieve the permittee from meeting the Ohio EPA NPDES inspection requirements.

(3) The inspection frequency may be reduced to at least once every month if the entire site is temporarily stabilized or runoff is unlikely due to weather conditions (e.g., the site is covered with snow, ice, or the ground is frozen.) A waiver of inspection requirements is available until one month

before thawing conditions are expected to result in a discharge if all of the following conditions are met: the project is located in an area where frozen conditions are anticipated to continue for extended periods of time (i.e., more than one month); land disturbance activities have been suspended; and the beginning and ending dates of the waiver period are documented. Once a definable area has been fully stabilized, such may be marked on the plans and no further inspection requirements apply to that portion of the site.

(4) Following each inspection, a checklist must be completed and signed by the qualified inspection personnel representative. At a minimum, the inspection report must include:

A. The inspection date;
B. Names, titles, and qualifications of personnel making the inspection;
C. Weather information for the period since the last inspection;
D. Weather information and a description of any discharges occurring at the time of the inspection;
E. Location(s) of discharges of sediment or other pollutants from the site;
F. Location(s) of BMPs that need to be maintained.
G. Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;
H. Location(s) where additional BMPs are needed that did not exist at the time of the inspection;
I. Corrective action required including any changes to the Comprehensive Storm Water Management Plan necessary and implementation dates.

(5) The owner, or owner's designated representative, shall keep a written log of each inspection and any subsequent improvements to the soil erosion, sediment control or other environmental controls. The inspections shall include the date of inspection, the name of the inspector, weather conditions, and the actions needed to correct the identified problems.

(6) The inspection log will include the date and actions taken to correct problems noted in past inspection logs.

(7) If the construction site is subject to Ohio EPA's National Pollutant Discharge Elimination System (NPDES) permit for construction activity, a copy of all the required inspection sheets will be submitted to the City Engineer within three (3) working days of the date that the inspection was conducted.

(8) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system.

(9) Erosion and sediment controls identified in the Storm Water Management and Sediment and Erosion Control Plan shall be observed to ensure that they are operating correctly.

(10) Discharge locations shall be inspected to ascertain whether erosion and sediment control measures are effective in preventing significant impacts to the receiving waters.

(11) Locations where vehicles enter or exit the site shall be inspected for evidence of off-site vehicle tracking.

(12) Sensitive areas including riparian and wetland setbacks shall be observed to ensure that they remain well marked and undisturbed.

(13) If the inspection reveals that a control practice is in need of repair or maintenance, with the exception of sediment settling ponds, it must be repaired or maintained within three (3) days of the inspection. Sediment settling ponds must be repaired or maintained within ten (10) days of the inspection.

(14) If any inspection reveals that a control practice fails to perform its intended function and that another, more appropriate control practice is required, the Storm Water Management and Sediment and Erosion Control Plan must be amended and the new control practice must be installed within 10 days of the inspection.

(15) If the inspection reveals that a control practice has not been implemented in the time required by this chapter it must be installed within ten (10) days from the date of inspection.

(16) If the inspection reveals that a planned control practice is not needed, the record must contain a statement of explanation as to why the control practice is not needed.

(u) Control of Materials and Debris. Site management practices shall be implemented to prevent toxic materials, hazardous materials, or other debris from entering the City of Strongsville's water resources or wetlands. These practices shall include, but are not limited to, the following:

(1) A covered dumpster shall be made available for the proper disposal of construction site waste materials, garbage, plaster, drywall, grout, gypsum and other such materials. A second covered dumpster will be provided for the proper disposal of toxic and hazardous wastes.

(2) Excess concrete material shall not be washed into a street, catch basin, other public facility or natural resource. A designated area shall be made available and used for all concrete washouts.

(3) All fuel tanks and drums shall be stored in a marked storage area. A dike shall be constructed around this storage area with a minimum capacity equal to 110% of the volume of the largest container in the storage area. All additional requirements of the local fire authority must be followed. If the fuel tanks have a self-contained "dike," the plug will be maintained in the "dike" tank at all times.

(4) Any toxic or hazardous wastes and/or contaminated soils must be disposed of according to all applicable environmental laws and statutes. Local health districts and Ohio EPA can provide guidance on these issues.

(5) On a site with a prior industrial landuse or a site that is contaminated with gasoline, fuel oil, hydrocarbon based chemicals or other Ohio EPA regulated contaminants, the storm water is considered wastewater. A permit from Ohio EPA is required to address these sites.

(6) Proper permits shall be obtained for development projects on solid waste landfill sites.

(7) Paint, paint washing liquids, excess paints and other paint wastes are considered solid wastes and shall be disposed of in accordance with applicable state regulations. Appropriate handling of these wastes shall occur at the site so as to prevent the discharge of such wastes into surface or ground waters.

A. Water based paint washing liquids and small quantities of excess water based paints may be disposed of by flushing down a connected sanitary sewer but may not be disposed of in an on-lot disposal system.

B. All other paints, paint thinners, and paint cleaning materials will be disposed of in the site's hazardous waste disposal dumpster.

(8) Restroom facilities will be provided for site workers at all times that workers are present on the site and during all phases of the construction.

(9) All required permits from appropriate federal, state, or local agencies are required to develop land with a previous industrial or commercial use or another use that may have led to soil contamination by a regulated pollutant.

(v) Pre-winter Stabilization. If the development area will, or is planned to remain, active through the winter months, the owner of the development area shall hold a pre-winter stabilization meeting before October 1st. The owner shall invite the operator, developer, engineer, contractor, City Engineer and anyone else requested by the City Engineer to the meeting.
~~(Ord. 2011-003. Passed 1-3-11.)~~

1058.06 STORM WATER MANAGEMENT DESIGN CRITERIA

Methods for controlling increases in storm water runoff peaks and volumes may include, but are not limited to permanent retention ponds and lakes, dry detention basins, and subsurface detention tanks.

(a) Storm Water Basins.

(1) Pool geometry. The recommended length-to-width ratio for the pond is 3:1 (the length will be three (3) times the width).

(2) Riser in embankment. The riser shall be located within the embankment for purposes of maintenance access. Access to the riser will be by manholes.

(3) Water drains. Each retention basin shall have a drainpipe that can completely drain the pond. The drain shall have an elbow within the pond to prevent sediment deposits from plugging the drain.

(4) Adjustable gate valves. Both the storm water management and water quality basin drains shall have adjustable gate valves. Valves shall be located inside the riser at a point where they will remain dry and can be operated in a safe and convenient manner. During annual inspections the valves shall be fully opened and closed at least once, and the certifying official shall attest to this on the inspection form. To prevent vandalism, the handwheel shall be chained to a ringbolt or manhole step.

(5) Principal spillway. Each principal spillway shall be designed in accordance with the NRCS standards and specifications for the office serving the county. Each principal spillway shall have the capacity to pass the 100-year design storm flow. The inlet or riser size for the pipe drops shall be designed so that the flow through the structure goes from weir flow control to pipe flow control without going into orifice control in the riser. The crest elevation of the primary spillway shall be no less than one foot below the emergency spillway crest. Premium joint pipe is required and a removable trash rack shall be installed at each location. Anti-seep collars shall be provided for all pipe conduits through an embankment.

(6) Emergency spillway. An emergency spillway shall be provided on each storm water management basin. Emergency spillways shall convey flood flows safely past the embankment, and shall be designed in accordance with NRCS standards and specifications for the office serving the local county. Emergency spillways shall have a 100-year design storm capacity unless exempted in writing by the City Engineer.

(b) Embankments. Each dam embankment shall be designed in accordance with the standards and specifications in the current edition of the Ohio *Rainwater and Land Development* manual, the NRCS Field Office Technical Guide for Cuyahoga County, the Ohio EPA standards, and Chapter 1059, Ponds, Lakes, Embankments, Reservoirs or Other Impoundments of Water, whichever are more stringent. Anti-seep collars shall be provided for all pipe conduits through an embankment.

(1) Safety features.

A. The primary spillway opening shall not permit access to the public and other non-maintenance personnel.

B. The perimeter of all water pool areas that are deeper than three (3) feet shall be surrounded by benches that meet the following:

1. A safety bench, with a maximum slope of 3%, which extends outward, on dry land, from the shoreline. This bench will be a minimum of 25 feet wide to provide for the safety of individuals and maintenance vehicles that are adjacent to the water pool. The safety bench may be landscaped, without the use of structures, to prevent access to the water pool.
2. Side slopes between the safety bench and the aquatic bench shall not be steeper than 3:1 (3 feet horizontal for every 1 foot vertical).
3. An aquatic bench that extends inward from the shoreline far enough to ensure public safety and has a maximum depth of 15 inches below the normal water surface elevations. The aquatic bench may be landscaped to prevent access to the deeper water pool.
4. Side slopes beyond the aquatic bench and below the permanent water level shall not be steeper than 2:1 (2 feet horizontal for every 1 foot vertical).
5. The contours of the pond will be designed and managed to eliminate drop-offs and other hazards.
6. Side slopes getting to the pond shall not exceed 3:1 and shall terminate on a safety bench.

(c) Runoff Rate. The peak runoff rate from the development area shall not be greater after development than it was before development. The applicant shall provide calculations demonstrating no increases in the runoff rates from the one (1), two (2), five (5), ten (10), twenty-five (25), fifty (50) and one hundred (100) year storms.

(d) Runoff Volume. Increases in the runoff volume shall be offset by further restricting runoff rates. Based on the increase in runoff volume, the applicant shall determine the critical storm for the development area. The runoff rate from the critical storm shall be restricted to the one (1) year pre-development storm runoff rate. The critical storm shall be calculated as follows:

(1) Determine the total volume of runoff from a one-year frequency, twenty-four hour storm, occurring on the development area before and after development.

(2) From the volumes in paragraph (1) determine the percent of increase in volume of runoff due to development (2) using this percentage, select the critical storm from this table:

Table 4: Critical Storm Selection

The Percentage Increase In Volume Of Runoff Is:		
Equal To Or Greater Than	**And Less Than**	**The 24-Hour "Critical Storm" For Discharge Will Be**
0	10	1 Year
10	20	2 Years
20	50	5 Years
50	100	10 Years
100	250	25 Years
250	500	50 Years
500	----	100 Years

(e) Water Quality. To meet the post-construction requirements of this Chapter, the Storm Water Management and Erosion and Sediment Control Plan must contain a description of the Post-Construction Best Management Practices (BMPs) that will be installed during construction for the site and the rationale for their selection. The rationale must address the anticipated impacts on the channel and floodplain morphology, hydrology, and water quality.

(1) Structural BMPs. Structural (designed) Post-Construction storm water treatment practices shall be incorporated into the permanent drainage system for the site.

A. Properly Sized BMPs. The BMP(s) chosen must be sized to treat the water quality volume (WQv) and ensure compliance with Ohio's Water Quality Standards in OAC Chapter 3745-1. The WQv shall be equivalent to the volume of runoff from a ~~0.75~~**0.90**-inch rainfall and shall be determined according to the following equation:

$$WQv = \text{~~C~~}\mathbf{Rv} * P * A / 12 \qquad \textbf{(Equation 1)}$$

where:
WQv = water quality volume in acre-feet
~~C = runoff coefficient appropriate for storms less than 1 inch (see Table 5) (or the following formula:~~
~~$C = 0.858i^3 - 0.78i^2 + 0.774i + .04$,~~
~~where i = fraction of post construction impervious area)~~
Rv = the volumetric runoff coefficient calculated using Equation 2
P = ~~0.75~~**0.90** inch precipitation depth
A = area draining into the BMP in acres.

$$\mathbf{Rv = 0.05 + 0.9i} \qquad \textbf{(Equation 2)}$$

where i = fraction of post-construction impervious surface

~~Table 5 Runoff Coefficients Based on the Type of Land Use~~

~~Land Use~~	~~Runoff Coefficient~~
~~Industrial & Commercial~~	~~0.8~~
~~High Density Residential (>8 dwellings/acre)~~	~~0.5~~
~~Medium Density Residential (4 to 8 dwellings/acre)~~	~~0.4~~
~~Low Density Residential (<4 dwellings/acre)~~	~~0.3~~
~~Open Space and Recreational Areas~~	~~0.2~~

~~B. Where the land use will be mixed, the runoff coefficient should be calculated using a weighted average. For example, if 60% of the contributing drainage area to the storm water treatment structure is Low Density Residential, 30% is High Density Residential, and 10% is Open Space, the runoff coefficient is calculated as follows (0.6)(0.3) + (0.3)(0.5) + (0.1)(0.2) = 0.35.~~

~~C~~**B**. An additional volume equal to 20 percent of the WQv shall be incorporated into the BMP for sediment storage and/or reduced infiltration capacity. The BMPs will be designed according to the methodology included in the Ohio Rainwater and Land Development manual, ODOT Post-Construction storm water standards, or other manual that is acceptable to Ohio EPA.

~~D~~**C**. The BMPs listed in ~~Table 6~~**Tables 5a and 5b** below shall be considered standard BMPs approved for general use. However, communities with a regulated MS4 may limit the use of some of these BMPs. BMPs shall be designed such that the drain time is long enough to provide treatment, but short enough to provide storage available for successive rainfall events and avoid the creation of nuisance conditions. The outlet structure for the post-construction BMP must not discharge more than the first half of the WQv in less than one-third of the drain time. **The WQv is the volume of storm water runoff that must be detained by a post-construction practice specified by the most recent edition of the *Rainwater and Land Development* manual.**

D. Post-construction practices shall be sized to treat 100% of the WQv associated with their contributing drainage area. If there is an existing post-construction BMP that treats runoff from the disturbed area and the BMP meets the post-construction requirements of this permit, no additional post-construction BMP will be required. A regional storm water BMP may be used to meet the post-construction requirement if: (1) the BMP meets the design requirements for treating the WQv; and (2) a legal agreement is established through which the regional BMP owner or operator agrees to provide this service in the long term. Design information for such facilities such as contributing drainage areas, capacities, elevations, outlet details and drain times shall be included in the SWP3.

Table 5a Extended Detention Post-Construction Practices With Minimum Drain Times

Extended Detention Practices	Minimum Drain Time of WQv
Wet Extended Detention Basin[1,2]	24 hours
Constructed Extended Detention Wetland[1,2]	24 hours
Dry Extended Detention Basin[1,3]	48 hours
Permeable Pavement – Extended Detention[1]	24 hours
Underground Storage – Extended Detention[1,4]	24 hours
Sand & Other Media Filtration – Extended Detention[1,5]	24 hours

Notes:

1. The outlet structure shall not discharge more than the first half of the WQv in less than one-third of the drain time.
2. Provide a permanent pool with a minimum volume equal to the WQv and an extended detention volume above the permanent pool equal to 1.0 x WQv.
3. Dry basins must include a forebay and a micropool each sized at a minimum of 0.1 x WQv and a protected outlet, or include acceptable pretreatment and a protected outlet.
4. Underground storage must have pretreatment for removal of suspended sediments included in the design and documented in the SWP3. This pretreatment shall concentrate sediment in a location where it can be readily removed. For non-infiltrating, underground extended detention systems, pretreatment shall be 50% effective at capturing total suspended solids according to the testing protocol established in the Alternative Post-Construction BMP Testing Protocol.
5. The WQv ponding area shall completely empty between 24 and 72 hours.

Table 5b Extended Detention Post-Construction Practices With Minimum Drain Times

Infiltration Practices	Maximum Drain Time of WQv
Bioretention Area/Cell[1,2]	24 hours
Infiltration Basin[2]	24 hours
Infiltration Trench[3]	48 hours
Permeable Pavement – Infiltration[3]	48 hours
Underground Storage – Infiltration[3,4]	48 hours

Notes:

1. Bioretention soil media shall have a permeability of approximately 1 – 4 in/hr. Meeting the soil media specifications in the Rainwater and Land Development manual is considered compliant with this requirement. Bioretention cells must have underdrains unless in-situ conditions allow for the WQv (surface ponding) plus the bioretention soil (to a depth of 24 inches) to drain completely within 48 hours.
2. Infiltrating practices with the WQv stored aboveground (bioretention, infiltration basin) shall fully drain the WQv within 24 hours to minimize nuisance effects of standing water and to promote vigorous communities of appropriate vegetation.
3. Subsurface practices designed to fully infiltrate the WQv (infiltration trench, permeable pavement with infiltration, underground storage with infiltration) shall empty within 48 hours to recover storage for subsequent storm events.
4. Underground storage systems with infiltration must have adequate pretreatment of suspended sediments included in the design and documented in the SWP3 in order to minimize clogging of the infiltrating surface. Pretreatment shall concentrate sediment in a location where it can be readily removed. Examples include media filters situated upstream of the storage or other suitable alternative approved by Ohio EPA. For infiltrating underground systems, pretreatment shall be 80% effective at capturing total suspended solids according to the testing protocol established in the Alternative Post-Construction BMP Testing Protocol.

~~Table 6: Structural Post-Construction BMPs & Associated Drain (Drawdown) Times~~

~~Best Management Practice~~	~~Drain Time of WQv~~
~~Infiltration Basin^Δ~~	~~24 - 48 hours~~
~~Enhanced Water Quality Swale~~	~~24 hours~~
~~Dry Extended Detention Basin*~~	~~48 hours~~
~~Wet Extended Detention Basin**~~	~~24 hours~~
~~Constructed Wetland (above permanent pool)+~~	~~24 hours~~
~~Sand & Other Media Filtration~~	~~40 hours~~
~~Bioretention Cell#~~	~~40 hours~~
~~Pocket Wetland#~~	~~24 hours~~
~~Vegetated Filter Strip~~	~~24 hours~~

~~*Dry basins must include forebay and micropool each sized at 10% of the WQv.~~
~~**Provide both a permanent pool and an EDv above the permanent pool, each sized at 0.75 * WQv.~~
~~+Extended detention shall be provided for the full WQv above the permanent water pool.~~
~~ΔThe WQv shall completely infiltrate within 48 hours so there is no standing or residual water in the BMP.~~

~~#Pocket wetlands must have a wet pool equal to the WQv, with 25% of the WQv in a pool and 75% in marshes. The EDv above the permanent pool must be equal to the WQv.~~

E. ~~The owner may request approval from the City Engineer to utilize alternative structural Post-Construction BMPs if the owner can demonstrate, in a way that is consistent with Ohio EPA rules and regulations that the alternative BMPs are equivalent in effectiveness to those listed in Table 6 above. The use of alternative or vendor supplied Post-Construction BMPs should be limited to redevelopment projects where justification is provided that the traditional BMPs in Table 6 are technically and economically unfeasible.~~**The owner may request approval from the City Engineer to utilize innovative or experimental post-construction storm water management technologies.**

1. **Alternative post-construction BMPs shall previously have been tested to confirm storm water treatment efficacy equivalent to those BMPs listed in Tables 5a and 5b using the protocol described in this section. BMP testing may include laboratory testing, field testing, or both.**
2. **Permittees shall request approval from Ohio EPA to use alternative post-construction BMPs on a case-by-case basis. To use an alternative post-construction BMP, the permittee must demonstrate that use of a BMP listed in Tables 5a and 5b is not feasible and the proposed alternative post-construction BMP meets the minimum treatment criteria as described in this section. The permittee shall submit an application to Ohio EPA for any proposed alternative post-construction BMP. Where the development project is located within a regulated municipal separate storm sewer system (MS4) community, the use of an alternative practice requires pre-approval by the MS4 before submittal of the Ohio EPA permit application. Ohio EPA requires that approvals for alternative post-construction BMPs are finalized before permittees submit an NOI for permit coverage.**
3. **In addition to meeting sediment removal criteria, the discharge rate from the proposed alternative practice shall be reduced to prevent stream bed erosion and protect the physical and biological stream integrity unless there will be negligible hydrological impact to the receiving surface water of the state. Discharge rate is considered to have a negligible impact if the permittee can demonstrate that one of the following three conditions exist:**

   a. **The entire WQv is recharged to groundwater;**
   b. **The larger common plan of development or sale will create less than one acre of impervious surface;**

c. The storm water drainage system of the development discharges directly into a large river with drainage area equal to 100 square miles or larger upstream of the development site or to a lake where the development area is less than 5 percent of the watershed area, unless a TMDL has identified water quality problems into the receiving surface waters of the state.

4. If the conditions above that minimize the potential for hydrological impact to the receiving surface water of the state do not exist, then the alternative post-construction BMP must prevent stream erosion by reducing the flow rate from the WQv. In such cases, discharge of the WQv must be controlled. A second storm water BMP that provides extended detention of the WQv may be needed to meet the post-construction criteria.

5. Alternative Post-Construction BMP Testing Protocol. For laboratory testing, the alternative BMP shall be tested using sediment with a specific gravity of 2.65, a particle size distribution closely matching the distribution shown in Table 6, and total suspended sediment (TSS) concentrations within 10% of 200 mg/L (180 mg/L – 220 mg/L TSS). For an alternative BMP to be acceptable, the test results must demonstrate that the minimum treatment rate is 80% TSS removal at the design flow rate for the tested BMP.

Table 6 Particle Size Distribution for Testing Alternative Post-Construction BMPs

Particle Size (microns)	Percent Finer (%)
1,000	100
500	95
250	90
150	75
100	60
75	50
50	45
20	35
8	20
5	10
2	5

a. For field testing, the alternative BMP shall be tested using storm water runoff from the field, not altered by adding aggregate or subjecting to unusually high sediment loads such as those

from unstabilized construction disturbance. The storm water runoff used for field testing shall be representative of runoff from the proposed installation site for the alternative BMP after all construction activities have ceased and the ground has been stabilized. The influent and effluent TSS concentrations of storm water runoff must be collected in the field. For an alternative BMP to be acceptable, the test results must demonstrate the minimum treatment rate is 80% TSS removal for influent concentrations equal to or greater than 100 mg/L TSS. If the influent concentration to the proposed alternative BMP is less than 100 mg/L TSS in the field, then the BMP must achieve an average effluent concentration less than or equal to 20 mg/L TSS;

b. Testing of alternative post-construction BMPs shall be performed or overseen by a qualified independent, third-party testing organization;

c. Testing shall demonstrate the maximum flow rate at which the alternative post-construction BMP can achieve the necessary treatment efficacy, including consideration for the potential of sediment resuspension;

d. Testing shall demonstrate the maximum volume of sediment and floatables that can be collected in the alternative post-construction BMP before pollutants must be removed to maintain 80% treatment efficacy;

e. Testing shall indicate the recommended maintenance frequency and maintenance protocol to ensure ongoing performance of the alternative post-construction BMP.

6. The alternative post-construction BMP testing protocol described in this section is similar to testing requirements specified by the New Jersey Department of Environmental Protection (NJDEP) for storm water Manufactured Treatment Devices (MTD) and therefore testing results certified by NJDEP shall be accepted by Ohio EPA. For examples of BMPs that have been tested using New Jersey Department of Environmental Protection's procedures, see the website: www.njstormwater.org.

7. Another nationally recognized storm water product testing procedure is the Technology Assessment Protocol – Ecology (TAPE) administered by the State of Washington, Department of Ecology. The TAPE testing procedure describes testing to achieve 80% TSS removal using a sediment mix with a particle size distribution with approximately 75% of the mass of the aggregate with particle diameters less than 45

microns. Overall, this particle size distribution is finer than the distribution in Table 5. Therefore, if TAPE testing results are available for a proposed alternative post-construction BMP, those results shall be accepted by Ohio EPA. The State of Washington, Department of Ecology website is https://ecology.wa.gov/.

8. Alternative BMPs that utilize treatment processes such as filtering or centrifugal separation, rather than a detention and settling volume, must be designed to ensure treatment of 90 percent of the average annual runoff volume. For the design of these BMPs, the water quality flow rate (WQF) considered equivalent to the Water Quality Volume (WQv) shall be determined utilizing the Rational Method (Equation 3) with an intensity (i) appropriate for the water quality precipitation event. This intensity shall be calculated using the table given in Appendix C.

WQF = C * i * A (Equation 3)

where

WQF = water quality flow rate in cubic feet per second (cfs)
C = rational method runoff coefficient
i = intensity (in/hr)
A = area draining to the BMP (acres)

9. Alternative post-construction BMPs may include, but are not limited to: vegetated swales, vegetated filter strips, hydrodynamic separators, high-flow media filters, cartridge filters, membrane filters, subsurface flow wetlands, multi-chamber treatment trains, road shoulder media filter drains, wetland channels, rain barrels, green roofs, and rain gardens. The Director may also consider non-structural post-construction approaches.

F. Construction activities shall be exempt from this condition if it can be demonstrated that the WQv is provided within an existing structural Post-Construction BMP which is part of a larger common plan of development or sale or if structural Post-Construction BMPs are addressed in a regional or local storm water management plan. A municipally operated regional storm water BMP can be used as a post-construction BMP provided that the BMP can detain the WQv from the entire drainage area and release it over a 24 hour period upon written permission from the Community Engineer.

G. ~~For redevelopment projects (namely, developments on previously developed property), Post-Construction practices shall either ensure a 20 percent net reduction of the site impervious area, provide for treatment of at least 20 percent of the WQv, or a combination of the two. A one-for-one credit towards the 20~~

~~percent reduction of impervious area can be obtained through the use of pervious pavement and/or green roofs. Where projects are a combination of new development and redevelopment the total WQv that must be treated shall be calculated by a weighted average based on acreage, with the new development at 100 percent WQv and redevelopment at 20 percent WQv.~~For a previously developed area, one or a combination of the following two conditions shall be met:

1. A 20 percent net reduction of the site's volumetric runoff coefficient through impervious area reduction with soil restoration or replacing impervious roof area with green roof area (for these purposes green roofs shall be considered pervious surface) or
2. Treatment of 20 percent of the WQv for the previously developed area using a practice meeting Table 5a/5b criteria.

H. Where there is a combination of redeveloped areas and new development, a weighted approached shall be used with the following equation:

$$WQv = P * A * [(Rv_1*0.2) + (Rv_2 – Rv_1)] / 12 \qquad \text{(Equation 4)}$$

where

P = 0.90 inches
A = area draining into the BMP in acres
Rv_1 = volumetric runoff coefficient for existing conditions (current site impervious area)
Rv_2 = volumetric runoff coefficient for proposed conditions (post-construction site impervious area)

I. Post-construction practices shall be located to treat impervious areas most likely to generate the highest pollutant load, such as parking lots or roadways, rather than areas predicted to be cleaner such as rooftops.

J. The size of structural post-construction practices used to capture and treat the WQv can be reduced by incorporating runoff reducing practices into the design of the site's drainage system. The approach to calculate and document runoff reduction is detailed in the ***Rainwater and Land Development*** manual. BMP-specific runoff reduction volumes are set by specifications in the Rainwater and Land Development Manual for the following practices:

1. Impervious surface disconnection
2. Rainwater harvesting
3. Bioretention
4. Infiltration basin
5. Infiltration trench
6. Permeable pavement with infiltration
7. Underground storage with infiltration
8. Grass swale
9. Sheet flow to filter strip
10. Sheet flow to conservation area

(2) Water ~~q~~Quality ~~b~~Basin. If a Water Quality Basin is needed and cannot be incorporated into an existing or planned Detention or Retention Basin then a separate Water Quality Basin will need to be planned, designed, constructed and maintained into perpetuity.

(f) The requirements shall be satisfied at each location where runoff leaves the development area. The runoff rates and volumes shall be considered for both the conditions before and after development at these locations.

(g) To ensure the continued functioning of storm water control structures, the following information shall be identified to the satisfaction of the City Engineer:

(1) The person or entity responsible for continued maintenance of the storm water control structure shall be identified to the satisfaction of the City Engineer.

(2) Maintenance requirements and schedules;

(3) Permanent access easements required for those conducting maintenance to perform inspection and maintenance of storm water control structures and storm water conveyance systems. The minimum size of an easement shall be approved by the City Engineer. Within such easements, no person shall plant trees, shrubbery, plantings, or construct buildings, fences, or walls, that obstruct free flow of storm water or obstruct the movement of construction equipment.

(4) An owner or owners of two or more existing or proposed lots may apply for approval of a SWM plan serving more than one lot. Such plan shall comply with applicable provisions of this chapter and all other relevant laws and ordinances. No subdivision of lands or building permit shall be approved under any multiple lot plan until owners of all affected lots have entered into a mutual agreement or formed an association for joint maintenance of the SWM facility and until all easements needed to effectuate the plan have been granted. The mutual agreement or association and the easements must be signed, acknowledged, delivered and recorded in the manner for documents relating to real estate titles.

(h) Detention or retention basin exemption for redevelopment or for expansion of existing facilities:

(1) For any development regulated by this chapter, the construction of a detention or retention basin may not be required for the development if the post-development peak discharge for a 100 year frequency 24 hour storm causes no increase to the existing peak discharge using the TR-55 method of calculation or other method approved by the City Engineer.

1058.07 COMPLIANCE WITH STATE AND FEDERAL REGULATIONS.

(a) Ohio Dam Safety Laws. The provisions of the Ohio Dam Safety Laws shall be followed. Proof of compliance with the Ohio Dam Safety Law administered by the ODNR Division of Water shall be, but is not limited to, a copy of the ODNR Division of Water permit number, or a copy of the project approval letter from the ODNR Division of Water, or a letter from the site owner explaining why the Ohio Dam Safety Law is not applicable. Such written proof will be provided to the City Engineer before a construction permit will be issued.

(b) NPDES Permits. The provisions of the National Pollutant Discharge Elimination System (NPDES) Permits, issued by the Ohio EPA, shall be followed. Proof of compliance shall be, but is not limited to, a copy of the Ohio EPA NPDES Permit number, or a letter from the site owner explaining why the NPDES Permit is not applicable. Such written proof will be provided to the City Engineer before a construction permit will be issued.

(c) Federal and State Wetland Permits. The provisions of the U.S. Army Corps of Engineers dredge and fill permits for federally-protected wetlands shall be followed. The provisions of Ohio EPA's Isolated Wetlands Permits shall also be followed. Wetlands and other waters of the United States shall be delineated by protocols accepted by the U.S. Army Corps of Engineers and the Ohio EPA at the time of application of these regulations. Written proof of compliance with both permit programs will be provided to the City Engineer prior to final Planning Commission approval. Proof of compliance shall be, but is not limited to, the following:

(1) A copy of the U.S. Army Corps of Engineers Individual Permit, if required for the project, showing project approval and any restrictions that apply to site activities; or

(2) A site plan showing that any proposed fill of waters of the United States conforms to the general and specific conditions specified in the applicable Nationwide Permit; or

(3) A letter from the site owner verifying that a qualified professional has surveyed the site and found no wetlands or other waters of the United States. Such a letter shall be noted on site plans submitted to the City.
(Ord. 2011-003. Passed 1-3-11.)

1058.08 SENSITIVE AREA IMPACT CRITERIA.

(a) The control of sediment pollution of sensitive areas by accelerated erosion from earth-disturbing activity may require additional erosion and sediment control practices beyond those indicated in this Chapter. In such instances the developer/owner shall analyze potential impacts, potential erosion, and sediment control practices.

(b) Such analysis shall identify the following:

(1) Sensitive areas that receive drainage from the proposed development.

(2) Existing water uses and biological characteristics of receiving waters.

(3) The probability of sediment reaching sensitive areas.

(4) The percentage of the sensitive area's contributing drainage area that is proposed for the earth disturbing activity.

(c) Information gained by the analysis shall be incorporated into the erosion and sediment control plan, and taken into consideration by the City during the review process. The City Engineer shall make the final decision concerning the limits of any sensitive area.
(Ord. 2011-003. Passed 1-3-11.)

1058.09 CONTINUING DUTY TO MAINTAIN; NOTICE OF VIOLATION.

(a) Any portion of the drainage system on private property, including storm water storage facilities, shall be continuously maintained by the property owner, unless such system or portion thereof is officially accepted by the City for maintenance.

(b) The owner of a storage facility is charged with the duty of inspecting the system on an annual basis. An inspection report certified by a registered professional engineer, landscape architect, or certified professional in erosion and sediment control, shall be furnished to the City Engineer by May 1st each year. In the event that corrective measures are required, the City Engineer or Building Commissioner may issue a notice of violation which shall identify all deficiencies and designate a time frame for correction. If after subsequent inspection the corrections are not made, then the City Engineer or Building Commissioner may issue a citation for violations to the owner or person responsible for maintenance of the facility, in accordance with Section 1058.12 of this Chapter. If all corrections are not performed within a prescribed time period, the City may elect to pursue the matter as a nuisance abatement, make the

necessary corrections and assess the costs as a tax assessment/lien to the responsible party and property owner in accordance with Section 606.28 and otherwise pursuant to law.

(c) The developer shall cause the above maintenance and reporting obligations to be inserted into the chain of title to the affected lands as a covenant running with the land. Such documentation may include but not be limited to reference on a plat and/or inclusion in a declaration of covenants and restrictions for a subdivision.

(d) Upon notice from the City Engineer or Building Commissioner, or designated representative, that work is being performed contrary to this chapter, such work shall immediately stop. Such cease and desist notice shall be in writing and shall be given to the owner or other person responsible for the development area, or person performing the work, and shall state the conditions under which such work may be resumed; provided, however, in instances where immediate action is deemed necessary for public safety or the public interest, the City Engineer or Building Commissioner may require that work be stopped upon verbal order pending issuance of a written order.
(Ord. 2011-003. Passed 1-3-11.)

1058.10 CONFLICTS, SEVERABILITY, NUISANCES AND RESPONSIBILITY.

(a) Where this chapter imposes a greater restriction upon land than is imposed or required by other City provisions of law, ordinance, contract or deed, then in such event the provisions of this chapter shall prevail; in all other cases, the most stringent provision shall prevail.

(b) If a court of competent jurisdiction declares any clause, section, or provision of this chapter invalid or unconstitutional, the validity of the remainder shall not be affected thereby.

(c) This chapter shall not be construed as authorizing any person to maintain a private or public nuisance on their property. Compliance with the provisions of this chapter shall not be a defense in any action to abate such nuisance.

(d) Failure of the City to observe or recognize hazardous or unsightly conditions or to recommend corrective measures shall not relieve the owner from the responsibility for the condition or damage resulting therefrom, and shall not result in the City, its officers, employees, or agents being responsible for any condition or damage resulting therein.
(Ord. 2011-003. Passed 1-3-11.)

1058.11 APPEALS.

Any applicant or owner may appeal any decision of the City Engineer or Building Commissioner with regard to enforcement or interpretation of this chapter to the Board of Zoning and Building Code Appeals, in the manner provided by Chapter 1248 and otherwise by the Codified Ordinances and in accordance with law.
(Ord. 2011-003. Passed 1-3-11.)

1058.12 VIOLATIONS.

No person shall violate, or cause, or knowingly permit to be violated, any of the provisions of this chapter, or fail to comply with any such provisions or with any lawful requirements of any public authority made pursuant to this chapter, or knowingly use or cause or permit the use of any lands in violation of this chapter or in violation of any permit granted under this chapter.
(Ord. 2011-003. Passed 1-3-11.)

1058.99 PENALTY; REMEDIES.

(a) Whoever violates or fails to comply with any provision of this chapter is guilty of a misdemeanor of the fourth degree, and shall be fined not more than two hundred fifty dollars ($250.00), subject to organizational penalties in Section 698.04, or imprisoned not more than thirty (30) days, or both, for each offense. A separate offense shall be deemed committed each day during or on which a violation or non-compliance occurs or continues.

(b) The imposition of any other penalties provided herein shall not preclude the City, by or through its Law Director and/or any of his or her designees, from instituting an appropriate action or proceeding in a court of proper jurisdiction to prevent an unlawful development or to restrain, enjoin, correct or abate a violation, or to require compliance with the provisions of this chapter or other applicable laws, ordinances, rules or regulations or the lawful orders of the City Engineer or Building Commissioner; or to impose any other available civil remedy or sanction against any person or organization convicted of an offense under this chapter, either in addition to or in lieu of a fine imposed pursuant to this section, including the imposition upon the offender of liability to the City for any expense, loss or damage incurred by the City by reason of such violation.
(Ord. 2011-003. Passed 1-3-11.)

Section 2. That in case of conflict between any provision of this Ordinance and any other ordinance or resolution, or part thereof, the provisions of this Ordinance shall prevail and apply, unless a conflicting provision is deemed to be more restrictive.

Section 3. That any funds required for the operation of this Ordinance have been appropriated and shall be paid from the General Fund, Drainage Levy Fund and General Capital Improvement Fund.

Section 4. That it is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council; and that all deliberations of this Council, and any of its committees, that resulted in such formal action were in meetings open to the public in compliance with all legal requirements.

Section 5. That this Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of the City, and for the further reason that it is immediately necessary to update the City's Codified Ordinances concerning storm water management consistent with federal law and requirements, to ensure proper enforcement of applicable requirements, to protect property and serve the public. Therefore, provided this Ordinance receives the affirmative vote of two-thirds of all members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise from and after the earliest period allowed by law.

4/12/36 nc #125
President of Council

Approved: Thomas B. Perciak
Mayor

Date Passed: 03.21.2022

Date Approved: March 21, 2022

	Yea	Nay
Carbone	✓	
Clark	✓	
DeMio	✓	
Kaminski	✓	
Kosek	✓	
Roff	✓	
Short	✓	

Attest: Lisa Pisntka
Clerk of Council

ORD. No. 2022-051 Amended:
1st Rdg. 03-21-22 Ref:
2nd Rdg. Suspended Ref:
3rd Rdg. Suspended Ref:

Pub Hrg. Ref:
Adopted: 03-21-22 Defeated: