

SUBDIVISION REGULATIONS

of Lorain County, Ohio

Board of County Commissioners:

Matt Lundy

Lori Kokoski

Sharon Sweda

Lorain County Planning Commission:

Dick Heidecker

Dennis Finkel

Amy Szmanla

Richard Knechtges

Bernie Nirode

Don Mould

Dennis Abraham

Jean Haight

Berry Taylor

Jim Cordes

Prepared by the Lorain County Planning Commission

Designee with input from:

Lorain County Planning Commission

Lorain County Community Development Department

Lorain County Prosecutor's Office

Lorain County Engineer's Office

Administrator:

Lorain County Community Development Department

226 Middle Ave, Fifth Floor

Elyria, OH 44035

(440)328-2322

FAX (440) 328-2349

Effective: September 4, 2019

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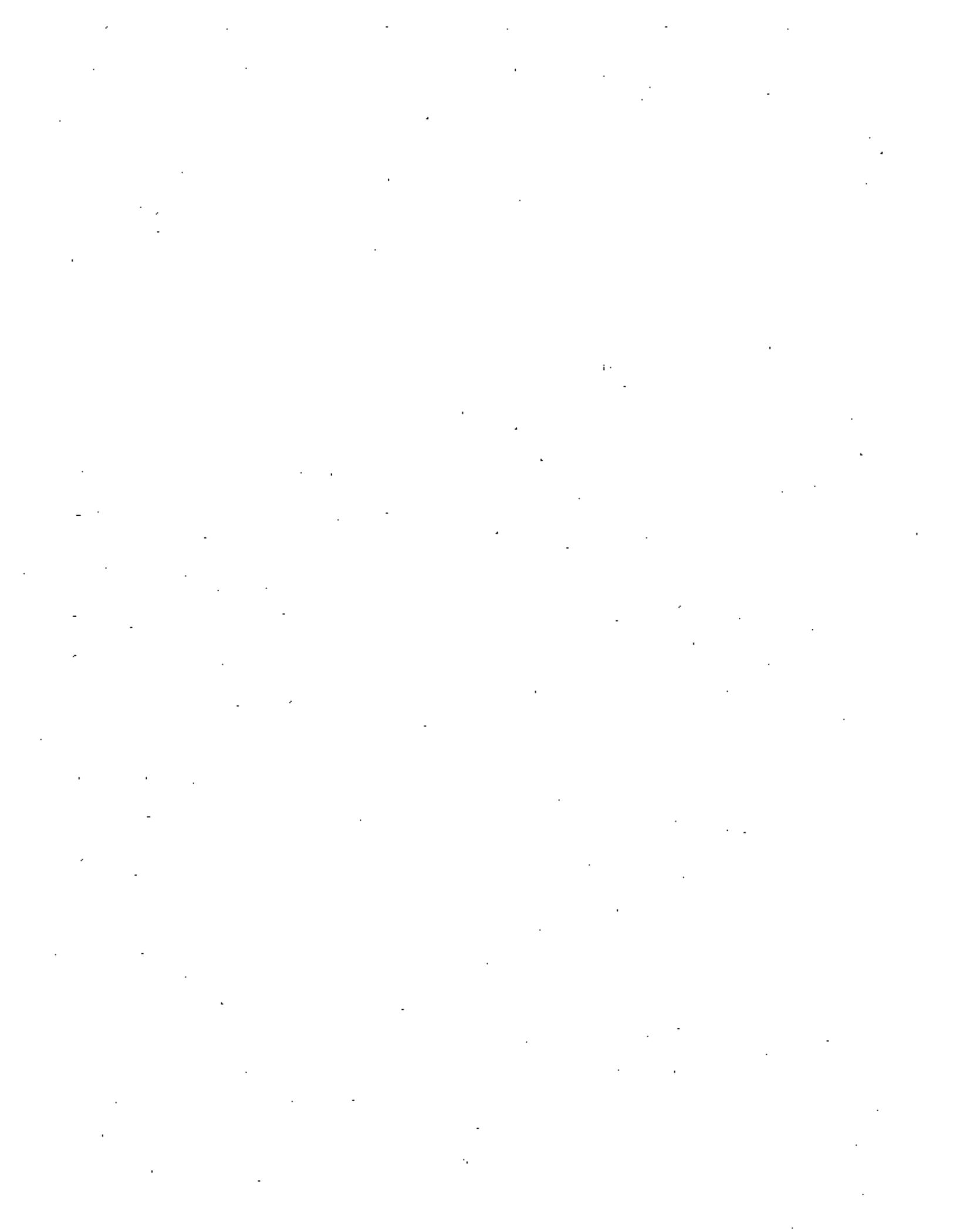
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ARTICLE I – INTRODUCTION

101 AUTHORITY

The Lorain County Planning Commission, hereinafter known as "the Commission", derives its authority to regulate subdivisions of land by virtue of Section 711 of the Ohio Revised Code. The Commission is authorized to adopt rules and regulations governing plats and subdivision of land, and to approve, conditionally approve or disapprove plats or subdivisions of land falling within its jurisdiction.

102 TITLE

The official name of these regulations and this document shall be "Subdivision Regulations of Lorain County, Ohio", hereinafter known as "Regulations".

103 PURPOSE

These Regulations are adopted for the following purposes:

1. To protect and provide for the public health, safety and general welfare of the County.
2. To guide the future growth and development of the County in accordance with the Lorain County Comprehensive Plan.
3. To insure that provisions are made for adequate and convenient open spaces for traffic, utilities, access of fire fighting apparatus, recreation, light, air and for the avoidance of congestion of population.
4. To insure the proper arrangement of streets or other highways in relation to existing or planned streets or highways or to regional plans.
5. To establish standards of design and procedures for subdivisions and re-subdivisions, in order to further the orderly layout and use of land; and to insure proper legal description and monumenting of subdivided land.
6. To insure that public facilities are available and will have a sufficient capacity to serve the proposed subdivision.
7. To prevent the pollution of air, streams and ponds; to assure the adequacy of drainage facilities; to safeguard the water table; and to encourage the wise use and management of natural resources in order to preserve the stability, topography, beauty and the value of the land.
8. To minimize environmental disruption and provide safety for life and properties from natural calamities, such as fire, flood and other dangers.

ARTICLE I – INTRODUCTION

104 JURISDICTION

104.01 These Regulations shall apply to all subdivisions hereinafter made of all land in the unincorporated area of Lorain County, as provided for in Chapter 711 of the Ohio Revised Code.

104.02 No building permit, certificate of occupancy or zoning permit shall be issued for any parcel or plat of land which is created after the effective date of these Regulations by a subdivision which is not in conformity with the provisions of these Regulations. No excavation of land or construction of any public or private improvements shall take place or be commenced except in conformity with these Regulations, and except as subject to any provisions of local zoning resolutions pertaining to previously existing nonconforming lots.

105 INTERPRETATION

In their interpretation and application, the provisions of these Regulations shall be considered the minimum requirements. Where any provisions of these Regulations impose restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, whichever provisions are more restrictive or impose higher standards shall control.

106 SCOPE

These Regulations are not intended to interfere with, abrogate or annul any other ordinance, rule or regulations, statute or other provision of law. These Regulations are not intended to abrogate any easement, covenant or any other private agreement or restriction provided that where the provisions of these Regulations are more restrictive or impose higher standards or regulations than such easement, covenant or other private agreement or restrictions, the requirements of these Regulations shall govern. Where the provision of the easement, covenant or private agreement or restriction impose duties and obligations more restrictive, or higher standards than the requirements of these Regulations, or the determinations of the Commission or other agency having approval or jurisdiction over said subdivision, and such private provisions are not inconsistent with the general purpose or intent of these Regulations or determinations then such private provisions shall be operative and supplemental to these Regulations and determinations made thereunder.

107 VALIDITY

If any section, clause, phrase, word, provision or portion of these Regulations shall be held to be unconstitutional or invalid by any court or competent jurisdiction, such holding or decision shall not affect the validity of these Regulations as a whole, or any part thereof other than the section, clause, word, provision or portion so held to be invalid.

ARTICLE I – INTRODUCTION

108 RELATIONSHIP TO RURAL ZONING

Whenever a proposed subdivision or lot split is located in an area that is zoned under the provisions of Chapters 303 or 519 of the Ohio Revised Code, it shall conform to the requirements of the Ohio Revised Code, it shall conform to the requirements of the zoning plan except as specified in Section 105 and Section 106 of these Regulations.

109 SAVING PROVISION

These Regulations shall not be construed as abating any action now pending under or by virtue of prior existing subdivision regulations or as discontinuing, abating, modifying or altering any penalty accruing or about to accrue; or as affecting the liability of any person, firm or corporation; or as waiving any right of the County or its agents under any section or provision existing at the time of adoption of these Regulations; or as vacating or annulling any rights obtained by any person, firm or corporation, by lawful action of the County or its agents except as shall be expressly provided for in these Regulations.

110 RESERVATIONS

Upon the adoption of these Regulations, according to law, the "Subdivision Regulations of Lorain County, Ohio", adopted April 24, 1987, as amended, are hereby repealed, except as to such sections expressly retained herein.

111 CONDITIONS

Regulation of the subdivision of land and the attachments of reasonable conditions to land subdivision is a valid exercise of police power delegated by the State of Ohio to the Board of Commissioners of Lorain County and the County Planning Commission. The developer has the duty of compliance with reasonable conditions laid down by the Commission for the use of the land so as to conform to the physical and economical development of the unincorporated areas of the County and to the health, safety and general welfare of the County at large.

112 SCHEDULE OF FEES

The Board of County Commissioners of Lorain County shall establish a fixed schedule of fees and collection procedures for same and other matters pertaining to these Regulations. The schedule of fees shall be available in the offices of the Commission's Designee. Until all applicable fees have been paid in full, no action shall be taken on any subdivision.

113 EFFECTIVE DATE

These Regulations shall be in effect immediately following approval by the Commission and adoption by the Board of Commissioners of Lorain County, Ohio.



ARTICLE II – GENERAL PROVISIONS

201 DEFINITION OF A SUBDIVISION

In accordance with Section 711, Ohio Revised Code, a subdivision shall be defined for the purposes of these Regulations as:

- 201.01 The division of any parcel of land shown as a unit or as contiguous units on the last preceding tax roll, into two or more parcels, sites or lots, any one of which is less than five (5) acres for the purpose, whether immediate or future, of transfer of ownership, provided, however, that the division or partition of land into parcels of more than five (5) acres not involving any new streets or easements of access, and the sale or exchange of parcels between adjoining lot owners where such sale or exchange does not create additional building sites, shall be exempted; or
- 201.02 The improvement of one or more parcels of land for residential, commercial or industrial structures or groups of structures involving the division or allocation of land for the opening, widening or extension of any street or streets, except private streets serving industrial structures; the division or allocation of land as open spaces for common use by owners, occupants or lease holders or as easements for the extension and maintenance of public sewer, water, storm drainage or other public facilities.

202 DIVISIONS OF LAND EXEMPT FROM THE DEFINITION OF A SUBDIVISION

- 202.01 The division or partition of land into parcels of more than five (5) acres not involving any new streets or easements of access.
- 202.02 The sale or exchange of parcels between adjoining lot owners where such sale or exchange does not create additional building sites as defined by the applicable township's zoning or these Regulations, or reduce the original tract below the requirements of the applicable Township's zoning or these Regulations.
- 202.01 The establishment of private streets serving industrial structures on their own property.

203 CONFORMITY WITH THESE REGULATIONS

- 203.01 All divisions of land as set forth in Section 201 of these Regulations and which are not specifically exempted by Section 202 shall be subject to all the provisions of these Regulations.
- 203.02 Divisions of land exempt from the statutory definition of a subdivision, as listed in Section 202, will not be required to meet the platting requirements of these Regulations.

ARTICLE II – GENERAL PROVISIONS

204 EXEMPTION FOR PRIVATE STREETS SERVING INDUSTRIAL STRUCTURES

The exemption regarding private streets serving industrial structures on their own property, Section 202.03, shall apply only to such private streets contained within the boundaries of an industrial site that is currently zoned for such use. If spot zoning has been granted to provide access to industrial sites, the proposed design of the roadway shall be submitted to the Commission for review. Review shall include the application of standards, which safeguard property values, safety and the general welfare of adjoining properties, and shall follow the procedures as established in Article V, Major Subdivision Procedures, of these Regulations.

205 DETERMINATION OF THE NUMBER OF LOTS SUBDIVIDED

The number of lots created from an original tract shall be considered the number of new parcels plus the remaining parcel. If an owner subdivides four (4) lots from his/her original tract, the remaining parcel shall be considered the "fifth" lot if it is under five (5) Acres in size. All lots five (5) Acres or greater are exempt from the count.

206 RE-SUBDIVISION OF LAND

Any change in a map of an approved or recorded subdivision plat shall be submitted to the Commission for approval under the rules and regulations established by the Commission.

207 VACATION OF PLATS

207.01 Any plat or any part of any plat may be vacated by the owner of the premises, at any time before the sale of any lot therein and before the construction of any improvements, by a written instrument, to which a copy of such a plat shall be attached, declaring the same to be vacated.

207.02 Such an instrument shall be approved by the Commission in like manner as plats for subdivisions, and in accordance with Chapters 711.17 through 711.40, Ohio Revised Code, inclusive. The Commission may reject any such instrument which abridges or destroys any public rights in any public uses, improvements, streets or alleys.

207.03 Such an instrument shall be executed, acknowledged or approved, and recorded or filed, in like manner as plats for subdivisions; and being duly recorded and filed shall operate to destroy the force and effect of the recording of the plat as vacated, and to divest all public rights in the streets, alleys, public grounds and all dedications laid out or described in such plat.

207.04 When lots have been sold, the plat may be vacated in the manner herein provided by all the owners of the lots in such plat joining in the execution of such writing.

ARTICLE II -- GENERAL PROVISIONS

208 VARIANCES

208.01 Application Procedure

- (A) Requests for variances shall be made by written application to the Planning Commission, fully stating the grounds and facts relied upon by applicant. A nonrefundable application fee, as established by the Board of Commissioners by Resolution, shall accompany the application.
- (B) Applications must be made at least seven (7) working days prior to the regularly scheduled Planning Commission Meeting. The variance request shall be heard at the next regularly scheduled meeting of the County Planning Commission.

208.02 Guidelines for Granting a Variance

- (A) A variance may be granted by the Planning Commission if the applicant shows one or more of the following:
 - 1. Unnecessary hardship or practical difficulties may result from strict compliance. (These terms shall have the same general meaning as construed with reference to zoning to the extent applicable to these Regulations.)
 - 2. The purpose and spirit of the Regulations will be served to a greater extent by an alternative proposal.
 - 3. Substantial justice and the public interest will be accomplished.
- (B) A variance shall not be approved unless the Planning Commission finds:
 - 1. The granting of the variance will not be detrimental to the public safety, health or welfare or injurious to adjoining property.
 - 2. The conditions upon which the request for a variance is based are unique to the property for which the variance is sought and are not applicable generally to other property.
 - 3. Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these Regulations are carried out.

209 PARTITIONS

Wherever land is to be divided by the process of partition in court pursuant to Section 5307.06 of the Ohio Revised Code, all petitions for the partition shall be

ARTICLE II – GENERAL PROVISIONS

submitted to the Commission which shall take action thereon within thirty (30) days or within such time as agreed upon by the petitioners.

210 ADMINISTRATION AND ENFORCEMENT

- 210.01 It shall be the duty of the Administrative Officer of the Lorain County Planning Commission to administer these Regulations and to bring to the attention of any other approving agency, affected board of township trustees and the County Prosecutor, any violations or lack of compliance herewith when known.
- 210.02 No owner, or agent of the owner, who has caused any parcel of land to be divided shall transfer or sell such land before a plat or deed of such divisions has been approved by the Planning Commission, in accordance with the provisions of these Regulations, and filed with the County Recorder.
- 210.03 The subdivision of any lot or parcel of land, by the use of metes and bounds description for the purpose of sale, transfer or lease with the intent of evading these Regulations, shall not be permitted. All such described subdivisions shall be subject to all of the requirements contained in these Regulations.
- 210.04 No building permit (where applicable), zoning certificate or occupancy permit, shall be issued for the construction of any building or structure located on a lot or plat subdivided or sold in violation of the provisions of these Regulations.

211 AMENDMENTS

For the purpose of providing the public health, safety and general welfare, the Commission may from time to time amend the provisions imposed by these Regulations. Public hearings on all proposed amendments shall be held by the Board of Commissioners of Lorain County in the manner prescribed by law.

212 PENALTIES

Any violation of Chapter 711.102 of the Ohio Revised Code or these Regulations is subject to the penalties as set forth in Chapter 711.102 Ohio Revised Code.

213 RIGHTS TO APPEAL

Rights of appeal shall be as set forth in Chapter 711.05 of the Ohio Revised Code or other applicable sections of the Ohio Revised Code.

214 CIVIL ENFORCEMENT

Appropriate actions and proceedings may be taken by law or in equity to prevent any violation of these Regulations; to prevent unlawful construction, to recover damages, to restrain, correct or abate a violation and to prevent illegal occupancy

ARTICLE II – GENERAL PROVISIONS

of a building structure or premises. These remedies shall be in addition to the penalties described in Section 212.00, Penalties.

215 NOTICES

The County Prosecutor shall serve a written notice or order upon the person responsible whenever he is satisfied that any work is being done or transactions are being made in violation of the provisions of these Regulations or in violation of a detailed statement or plan submitted and approved by him. Such notice shall direct the discontinuance of any illegal action and the remedying of the condition that is in violation of the provisions and requirements of these Regulations. In case such notice or order is not promptly complied with, the County Prosecutor may institute the appropriate action or proceedings at law or equity to restrain, correct, remove or prosecute such violation.

ARTICLE III – DEFINITIONS

301 INTERPRETATION OF TERMS OR WORDS

Interpretation of terms or words: For the purpose of these Regulations, certain terms or words used herein shall be interpreted as follows:

1. The word "Commission", unless another local government agency having jurisdiction over a proposed subdivision is specifically mentioned, shall be construed as being the Lorain County Planning Commission.
2. The term "Regulations" shall mean the Subdivision Regulations of Lorain County, Ohio; the word "herein" means "In these Regulations".
3. The word "person" includes a firm association, organization, partnership, trust, company, or corporation as well as an individual.
4. The present tense includes the future tense, the singular number includes the plural, and the plural number includes the singular.
5. The word "shall" is a mandatory requirement, the word "may" is a permissive requirement, and the word "should" is a preferred requirement.
6. The words "used" or "occupied" include the words "intended, designed, or arranged to be used or occupied".
7. The word "lot" includes "plot" or "parcel".
8. The words "business days" and "working days" shall mean Monday through Friday excluding all federally recognized holidays.

DEFINITIONS

Administrative Officer: The officer(s) as appointed by the Director and approved by the Planning Commission, to administer these Regulations and to assist other Boards and Commissions of the local governments having jurisdiction or being directly affected or involved.

ADT: (Average Daily Traffic) The average 24 hour traffic volume for a given year.

Alley: See Thoroughfare.

Applicant: The owner(s) of land proposed to be subdivided or their legally constituted representative. Consent shall be required from the legal owner(s) of the land.

ARTICLE III – DEFINITIONS

Block: A tract of land bounded by streets, or by a combination of streets and public parks, cemeteries, railroad rights-of-way, shorelines of waterways, or boundary lines of municipalities.

Bond: A binding agreement pledging surety in the event of financial loss caused by the act or default of the person pledging the bond or by some contingency.

Buffer Zone: An area within a property or site, generally adjacent to and parallel with the property line, either consisting of natural existing vegetation or created by the use of trees, shrubs, fences and/or berms, designed to limit continuously the view of and/or sound from the site, to adjacent sites or properties.

Building: Any structure built for the support, shelter, enclosure of persons, animals, chattels or moveable property of any kind.

Building, Accessory: A subordinate building detached from, but located on the same lot as the principal building, the use of which is incidental and accessory to that of the main building or use.

Building, Principal: A building in which is conducted the main or principal use of the lot on which said building is situated.

Central Water System: A public or private water company formed by a developer to serve a new community development in an outlying area. It includes water treatment and distribution facilities.

Central Sewerage System: An approved sewage disposal system, which provides a collection network and disposal system and central sewage treatment facility for a single development, community or region.

Commission: The Lorain County Planning Commission.

Commission's Designee: The Lorain County Community Development Department or any future agency given the responsibility of enforcing these Regulations.

Comprehensive (General or Master) Plan: The plan made and adopted by the Commission and hereafter amended and supplemented indicating the general locations recommended for the principal streets, parks, public buildings, zoning districts, character and extent of community development and other physical aspects of urban and rural planning on file in the office of the Recorder of Lorain County, Ohio and in the office of the Commission. It shall also include those plans made by or for individual communities or Townships which have been adopted and are being used as guidelines for community development but which are not necessarily recorded in the office of the County Recorder of Lorain County, Ohio.

ARTICLE III – DEFINITIONS

Construction and/or Improvement Plans: The maps or drawings accompanying a Subdivision Final Plat and showing the specific location and design of Improvements to be installed in the subdivision.

Corner Lot: See "Lot Types".

County: Lorain County, State of Ohio.

County Engineer: The Lorain County Engineer, or his designated agent.

Covenant: A written promise or pledge.

Crosswalk: A right-of-way or easement which cuts across a block to facilitate pedestrian access to adjacent streets, schools, parks or playgrounds, or other public facilities for new subdivisions, such crosswalk shall be not less than twelve (12) nor more than thirty (30) feet in width.

Cul-de-sac: See "Thoroughfare".

Culvert: A transverse drain that runs under a bridge, street or driveway.

Dead-end Street: See "Thoroughfare".

Density: A unit of measurement which indicates the number of dwelling units per acre of land.

- a. Gross Density – The number of dwelling units per acre of the total land to be developed.
- b. Net Density – The number of dwelling units per acre of land when the acreage involved includes only the land devoted to residential uses.

Density, Low Residential: Land to be used for residential purposes where there is only one (1) dwelling unit per two (2) acres of land or less.

Density, Medium Residential: Land to be used for residential purposes where there is more than one (1) dwelling unit on two (2) acres of land but not less than one (1) dwelling on one (1) acre of land.

Density, High Residential: Land to be used for residential purposes where there is more than one (1) dwelling unit on one (1) acre of land.

Developer: Any individual, subdivider, firm, association, syndicate, partnership, corporation, trust or any other legal entity commencing proceedings under these Regulations who constructs or contracts to construct improvements and effects a subdivision of land hereunder for himself or for another. Evidence of consent from

ARTICLE III - DEFINITIONS

the legal owner(s) of the property shall be required in order to proceed under the provisions of these Regulations.

Easement: Recorded authorization by a property owner for the use by another, and for a specified purpose, of any designated part of his property, created by grant or prescription.

Engineer: Any person registered to practice professional engineering by the State Board of Registration, as specified in Section 4733 of the Ohio Revised Code.

Erosion and Sediment Control Plan: The written document which sets forth plans and practices to minimize soil erosion and prevent off-site disposal of soil sediment.

Escrow: A deposit of cash with the governing body, or approved land title company or bank, in lieu of an amount required and still in force on a performance or maintenance bond. Such escrow funds shall be deposited by the developer or his agents with an approved agency or with the County Engineer upon approval of the Board of County Commissioners.

Expressway: See "Thoroughfare".

Flexible Zoning: Zoning which permits uses of land and density of buildings and structures different from those which are allowed as a right within the zoning district in which the land under consideration is located. Such permits and requirements shall accompany the Preliminary Plan to Indicate by authorization from the local government the type of development so approved.

Flood Plain, 100 Year: The areas adjoining a watercourse, including both the flood fringe and the floodway, which are subject to a one percent chance of flooding in any given year.

Floodway: That portion of the flood plain, including the channel, which is reserved to discharge the base or 100-year flood.

Floodway Fringe: That portion of the 100-year flood plain outside of the floodway where development may be allowed under certain restrictions.

Governing Body: The body of the local government having the power to adopt ordinances or resolutions.

Grade: The slope of land, street or road, or any other public way, specified in percentage (%) terms.

Grantee: One who is acquiring or purchasing property.

ARTICLE III – DEFINITIONS

Grantor: One who is selling or conveying property.

Health District: The Lorain County General Health District.

Highway Director: The Director of the Ohio Department of Transportation.

Improvements: Street pavement or resurfacing, curbs, gutters, sidewalks, water lines, sewer lines, storm drains, street lights, flood control and drainage facilities, utility lines, landscaping, and other related matters normally associated with the development of raw land into building sites.

Inspection Fee: A fee to be paid by the subdivider or developer to the County, with applications and permits which covers the cost of inspection of construction of improvements.

Key (Location or Vicinity) Map: A drawing, at a reduced scale, located on the plat, which sets forth by dimension or other means, the relationship of the proposed subdivision to other nearby developments or landmarks and community facilities and services within the County or Township in order to better locate and orient said subdivision.

Last Preceding Tax Roll: (As used in Section 201.01 of these Regulations) The last tax roll of the Lorain County Auditor's records preceding the first revision of these Regulations, dated June 16, 1983.

Lot: For the purposes of these Regulations, a lot is a parcel of land of sufficient size to meet minimum zoning requirements for use, coverage and area, and to provide such yards and other open spaces as are herein required. Such lot shall have frontage on an approved public street, or on an approved private street, and may consist of:

- a. A single lot of record.
- b. A portion of a lot of record.
- c. A combination of complete lots of record, of complete lots of record and portions of lots of record, or of portions of lots of record.

Lot Frontage: The front of a lot shall be construed to be that portion of the lot nearest the street. For the purpose of determining yard requirements on corner lots and through lots, all sides of a lot adjacent to streets shall be considered frontage, and yards shall be provided as required under the Zoning Resolution.

ARTICLE III – DEFINITIONS

Lot Measurements: A lot shall be measured as follows:

- a. The **depth** of a lot shall be considered to be the distance between the midpoints of straight lines connecting the foremost points of the side lot lines in front and the rearmost points of the side lot lines in the rear.
- b. The **width** of the lot shall be considered to be the distance between straight lines connecting front and rear lines at each side of the lot, measured at the minimum building setback line.

Lot, Minimum Area of: The area of the lot which is computed exclusive of any portion of the right-of-way of any public or private street.

Lot of Record: A lot which is part of a subdivision recorded in the office of the County Recorder of Lorain County, or a lot or parcel described by metes and bounds, the description of which has been so recorded.

Lot Split: A minor subdivision.

Lot Types: Terminology used in these Regulations with reference to corner lots, interior lots, reversed frontage and through lots shall be as follows:

- a. A **corner lot** is defined as a lot located at the intersection of two or more streets. A lot abutting on a curved street or streets shall be considered a corner lot if straight lines drawn from the foremost points of the side lot lines to the foremost point of the lot meet at an interior angle of less than one hundred thirty five (135) degrees.
- b. An **interior lot** is a lot other than a corner lot with only one frontage on a street.
- c. A **through lot** is a lot other than a corner lot with frontage on more than one street. Through lots abutting two streets may be referred to as double frontage lots.
- d. A **reversed frontage lot** is a lot on which frontage is at right angles to the general pattern in the area. A reversed frontage lot may also be a corner lot.

Major Subdivision: All subdivisions not classified as minor subdivisions; including, but not limited to, subdivisions of five (5) lots or more, or any size subdivision involving the opening, widening or extension of any existing or proposed road, or easement of access, and the extension or creation of any public improvements or community facilities.

ARTICLE III – DEFINITIONS

Major Thoroughfare Plan: The system of expressway, arterial and collector streets for Lorain County as adopted by the Commission, on file in the office of the Recorder of Lorain County, Ohio, and in the offices of the Commission's Designee, together with all amendments or revisions thereto subsequently adopted.

Minor Subdivision: Any subdivision containing not more than five (5) lots fronting on an existing approved street, not involving the opening, widening or extension of any road or easement of access, after the original tract has been completely subdivided, not involving the extension or creation of any public improvements or facilities. Such subdivision shall not be in conflict with any other existing laws or covenants of record nor reduce the original tract below the requirements of existing zoning.

Monuments: Permanent concrete or iron markers used to establish definitely all lines of the plat of a subdivision, including all lot corners, boundary line corners, and points of change in street alignment or drainage courses and waterways.

Non-Residential Subdivision: A subdivision whose intended use is other than residential, such as commercial or industrial. Such subdivisions shall comply with the applicable requirements of these Regulations.

Open Space: An area open to the sky, which may be on the same lot with the building. The area may include, along with the natural environmental features, swimming pools, tennis courts, and any other recreational facilities.

Original Tract: A parcel of land shown as a unit on the last tax roll of the Lorain County Auditor's records preceding the first revision of these Regulations, dated June 18, 1983.

Owner(s): Any person, group of persons, firm or firms, corporation or corporations, or any other legal entity having title to the land sought to be subdivided under these Regulations.

Parking Space, Off-Street: For the purpose of these Regulations, an off-street parking space shall consist of an area adequate for parking an automobile with room for opening doors on both sides, together with properly related access to a public street or alley and maneuvering room, and shall be located totally outside of any street or alley right-of-way.

Performance Bond or Surety Bond: A personal or corporate suretyship agreement between a subdivider and such surety in favor of the Board of County Commissioners of Lorain County, guaranteeing the completion of physical improvements according to plans and specifications within the time prescribed by the Subdivider's Agreement.

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Plan, Preliminary: The drawing or drawings as first submitted to the Planning Commission for approval and indicating the proposed layout of the subdivision together with all data as required in Article VII of these Regulations.

Plan, Sketch: An explanatory drawing made prior to the preparation of the Preliminary Plan to enable the subdivider to save time and expense in reaching general agreement with the Planning Commission as to the form of the plan and the objectives of these Regulations.

Planned Unit Development: An area of land, in which a variety of housing types and/or related commercial and industrial facilities are accommodated in a pre-planned environment under more flexible standards, such as reduced lot sizes and set backs, than those restrictions which would normally apply under zoning or these Regulations.

Plat: A map upon which the subdivider's plan of the subdivision is presented and which he submits for approval and intends to record in the final form.

Plat, Final: The map, plan or record of a subdivision prepared in its final form for recording, with required signatures as provided for in these Regulations.

Private Street: Any non-dedicated street or road which provides access to any structure or lot.

Public Improvements: Any drainage ditch, roadway, parkway, sidewalk, pedestrian way, tree planting, grading or lawn seeding, off-street parking area, lot improvement or other facility for which the local government may ultimately assume the responsibility for maintenance and operation, or which may affect an improvement for which local government responsibility is established.

Public Way: An alley, avenue, boulevard, bridge, channel, ditch, easement, expressway, freeway, highway, land, parkway, right-of-way, road, sidewalk, street, tunnel, viaduct, walk, bicycle path, or other ways in which the general public or a public entity have a right, or which are dedicated, whether improved or not.

Re-subdivision: A change in a map of an approved or recorded Subdivision Plat if such change affects: 1) any street layout on such map or area reserved thereon for public use; or 2) lot lines.

Right-of-Way: A strip of land taken or dedicated for use as a public way. In addition to the roadway, it normally incorporates the curbs, lawn strips, sidewalks, lighting and drainage facilities, and may include special features (required by the topography or treatment) such as grade separation, landscaped areas, viaducts and bridges.

Road: See "Thoroughfare".

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Setback Line, Building: A line established by the subdivision regulations and/or the local zoning resolution, generally parallel with and measured from the lot line, which defines the limits of a yard in which no building or structure may be located above ground, except as may be provided in local zoning resolutions.

Sewers, On-Site: A septic tank or other sewage treatment system on an individual lot which utilizes an aerobic bacteriological process or equally satisfactory process for the elimination of sewage and provides for the proper and safe treatment of the effluent, subject to the approval of health and sanitation officials having jurisdiction.

Shade Tree: A tree in a public place, street right-of-way or special easement as provided for in these Regulations.

Sidewalk: That portion of the road right-of-way outside the vehicular roadway, which is improved for pedestrian traffic.

Structure: Anything constructed or erected, the use of which requires location on the ground, or attachment to something having a fixed location on the ground. Among other things, structures include buildings, mobile homes, walls, fences and billboards; but not sidewalks or parking spaces.

Subdivider: See "Developer".

Subdivision: As defined by Ohio Revised Code and as amended. (See "Article II, Section 201 of these Regulations").

Subdivision Review Subcommittee: A Subcommittee appointed by the Chairman of the Lorain County Planning Commission representing the following areas: Lorain Soil and Water Conservation District, Lorain County Health District, Lorain County Engineer, Lorain County Sanitary Engineer, Lorain County Board of Education, Lorain County Prosecutor's Office and such others as the Commission deems necessary.

Surveyor: Any person registered to practice surveying by the State Board of Registration, as specified in Section 4733 of the Ohio Revised Code.

Terrain Classification: Terrain within the entire area of the plat is classified as ordinary or level, rolling or hilly for street design purposes. The classifications are as follows:

- a. "Ordinary" is that land which has a cross slope range of eight percent (8%) or less.
- b. "Rolling" is that land which has a cross slope range of more than eight percent (8%) but not more than fifteen percent (15%).

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- c. "Hilly" is that land which has a cross slope range of more than fifteen percent (15%).

Thoroughfare, Street or Road: The full width between property lines bounding every public way or private way of whatever nature, with a part thereof to be used for vehicular traffic and designated as follows:

- a. Alley: A public or private right-of-way primarily designed to serve as secondary access to properties whose principal frontage is on some other street; and, for new subdivisions, an alley shall be no less than thirty (30) feet in width.
- b. Arterial Street:
1. Major: Streets which serve as principal connectors between communities, major land uses and larger traffic generators. Their primary function is to carry through traffic. In order to be classified as a major arterial, the street should be carrying at least 8,000 vehicles per day or be a part of the state primary system.
 2. Minor: Streets which primarily serve through traffic and augment the major arterial system. They also connect the rural area with the major arterial system. Minor arterials should carry a minimum of 2,000 vehicles per day or be part of the state secondary system.
- c. Collector Street: A thoroughfare, whether within a residential, industrial, commercial or other type of development, which primarily carries traffic from local streets to arterial streets, including the principal entrance and circulation routes within residential subdivisions.
- d. Cul-de-sac: A local street, as prescribed in these Regulations, with one (1) end open to traffic and the other terminating in a circular turn-around.
- e. Dead-end Street: A street having only one (1) outlet for vehicular traffic.

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- f. **Expressway:** An expressway is a road which is designed to facilitate rapid movement of a high volume of traffic to, around or through urban areas with a high degree of safety. Limitation of access and the separation of direction of flow with a median strip are characteristics of the expressway, which separate it from other major arterials.
- g. **Local Street:** A street primarily for providing access to residential, commercial or other abutting property.
- h. **Loop Street:** A type of local street, each end of which terminates at an intersection with the same arterial or collector street.
- i. **Marginal Access Street:** A local or collector street, parallel and adjacent to an arterial or collector street, providing access to abutting properties and protection from arterial or collector streets (Also called "Frontage Street").

Through Lot: See "Lot Types".

Township: Any unincorporated area of Lorain County governed by a Board of Township Trustees.

Variance: A variance is a modification of the strict terms of relevant regulations where such modification will not be contrary to the public interest and where owing to conditions peculiar to the property and not the result of the action of the applicant, a literal enforcement of the regulations would result in unnecessary and undue hardship.

Vicinity Map: See "Key Map".

Watershed: The drainage basin(s) in which the subdivision drains or that land whose drainage is affected by the subdivision.

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. Wetlands generally include swamps, marshes, bogs and similar areas. The three (3) criteria that must exist on site for an area to be declared a wetland are: hydric soils, hydrophytic vegetation, and wetland hydrology.

ARTICLE III – DEFINITIONS

Yard: A required open space other than a court, unoccupied and unobstructed by any structure or portion of a structure from three (3) feet above the general ground level of the graded lot upward; provided that accessories, ornaments and furniture may be permitted in any yard, subject to height limitations and requirements limiting obstruction of visibility.

- a. **Yard, Front:** An open space extending between side lot lines across the front of a lot and from the front lot line to the front of the principal building.
- b. **Yard, Rear:** An open space extending between side lot lines across the rear of a lot and from the rear lot line to the rear of the principal building.
- c. **Yard, Side:** An open space extending from the principal building to the side lot line on both sides of the principal building between the lines establishing the front and rear yards.

Zoning Inspector: The person designated by the local government to enforce the zoning resolution.

ARTICLE IV – MINOR SUBDIVISION PROCEDURES

401 DEFINITION OF A MINOR SUBDIVISION

Minor Subdivision: Any subdivision containing not more than five (5) lots fronting on an existing approved street, not involving the opening, widening or extension of any road or easement of access, after the original tract has been completely subdivided, not involving the extension or creation of any public improvements or facilities.

402 AUTHORITY

Whenever a division of a parcel of land is determined to meet the conditions of a minor subdivision, it shall be submitted to the Commission for action without a plat, as provided for in Section 711.131 of the Ohio Revised Code.

403 ITEMS FOR SUBMISSION

- 403.01 A drawing; based on a private survey, as prepared by a Registered Surveyor in the State of Ohio in conformance with the standards established by the State Board of Registration for Professional Engineers and Surveyors. The survey must include:
- Location and size of all existing and proposed parcels including remainder and combination parcels,
 - Existing parcel numbers of split parcel(s) and any parcel with which a split is to be combined,
 - The names and parcel numbers of adjoining lot owners,
 - All structures and ponds within sixty (60) feet of newly proposed lot lines with nearest distance identified,
 - FEMA 100 year flood boundary including flood fringe and floodway if available,
 - Any proposed easements, setbacks or no-build zones.
- 403.02 A separate deed shall be required for each parcel of land being subdivided and/or combination.
- 403.03 A site review of the subdivision by the Lorain County Health *District*, or evidence that the proposed subdivision is exempt from the site review requirements, as described in Section 404.01.
- 403.04 An access permit from the Lorain County Engineer's Department, or evidence that the proposed subdivision is exempt from access permit requirements.
- 403.05 An erosion & sediment control evaluation by the Lorain Soil & Water Conservation District, or evidence that the proposed subdivision is exempt from erosion & sediment control requirements.
- 403.06 A record of all variances and court decisions that have bearing on subdivision shall be submitted.

ARTICLE IV – MINOR SUBDIVISION PROCEDURES

- 403.07 A non-refundable processing fee, as established by the Board of County Commissioners by Resolution, shall accompany each application.
- 403.08 The Commission, or its designee, may require other information that deems pertinent and necessary to a review of the subdivision.

404 PROCEDURES FOR REVIEW

- 404.01 The Lorain County Health Department shall perform a site evaluation for the proposed division to determine suitability for individual wastewater disposal systems prior to submission to the Commission. A fee for this evaluation as established by the Lorain County Health District is required. Exempt from this requirement shall be minor subdivisions that have access to central sewers.
- 404.02 The Lorain Soil and Water Conservation District shall perform a site evaluation to determine if there are any potential wetlands on the lot and areas prone to erosion and sedimentation and provide information to protect these sensitive areas. A fee for this evaluation as established by the Lorain Soil and Water Conservation District is required. Exempt from this requirement shall be minor subdivisions where there is an existing house or the parcel is being combined with an adjacent parcel.
- 404.03 The Lorain County Engineer shall perform a site evaluation to determine if there are any horizontal or vertical line of sight issues which would inhibit the location of a driveway on the proposed lot. A fee for this evaluation as established by the Lorain County Engineer is required. Exempt from this requirement shall be minor subdivisions that have an existing driveway, are located on a state route, or those in which the parcel is being combined with an adjacent parcel.
- 404.04 In order to ensure compliance of all applicable local requirements, the Commission's designee shall send a copy of all minor subdivisions to the affected Township Zoning Inspector and comments must be forwarded to the Commission in a timely manner.
- 404.05 If the Commission's designee, acting through a designated member of staff, is satisfied that such proposed division is not contrary to applicable laws and regulations, it shall, within seven (7) business days after submission of a complete application, approve such proposed division and on presentation of a conveyance of said parcel, shall stamp the same, "APPROVE, LORAIN COUNTY PLANNING COMMISSION, NO PLAT REQUIRED", and have it signed by a member of the staff so designated by the Commission.
- 404.06 If the minor subdivision is disapproved, the subdivider shall be notified in writing the reason(s) for the disapproval. If the subdivider disagrees with the decision, they may then appeal to the Planning Commission.

ARTICLE IV – MINOR SUBDIVISION PROCEDURES

404.07 The Lorain County Tax Map Department shall review the description and map for accuracy and for conformance to the requirements of the Lorain County Auditor after submission to the Commission.

404.08 Once approval has been granted, this division of land must be filed with the office of the Recorder of Lorain County, Ohio within sixty (60) days. Extensions may be granted. Failure to file within the specified time will warrant the re-examination of the deed by the Commission or its designee.

405 APPROVAL OF MINOR SUBDIVISIONS

405.01 Minor subdivisions shall not be in conflict with any other existing laws or covenants of record or with applicable platting, subdividing or zoning regulations, nor shall they reduce the original tract below the requirements of existing zoning.

405.02 The division of a parcel of land and the remaining lot must meet all locally adopted zoning requirements. The Commission designee shall require the combination of adjacent parcels when either the split or the remainder does not meet zoning requirements. Relief from the mandatory combination is available when one or more of the following criteria are met: 1) The substandard parcel is twenty (20) acres or larger, 2) The adjoining parcel to which it is being sold is twenty (20) acres or larger, 3) The substandard parcel is too small to be considered a buildable lot, 4) A variance is issued by the Commission. The following wording shall be required to be placed on the deed of all parcels receiving relief from the mandatory combination.

"This conveyance represents a sale of a parcel of land between adjoining lot owners which does not create additional building sites and accordingly pursuant to Section 711.001 (B)(1) of Ohio Revised Code is exempt from platting requirements."

405.03 The Commission limits lots to a maximum ratio of 3.5 to 1 depth to width for the most efficient use of land. The Commission may grant variances for lots limited by topography or land which is determined to be unbuildable.

405.04 Approval of a division of a parcel of land by the Commission applies only to conformance with the local zoning and these Regulations. Approval does not apply to location of proposed structures thereon, nor does it guarantee the subsequent transfer and recording or approval by other County agencies having jurisdiction over said subdivision.

405.05 Appeals to decisions on minor subdivisions shall follow the provision of Section 208, "Variances".

ARTICLE IV – MINOR SUBDIVISION PROCEDURES

406 MISCELLANEOUS – DRIVEWAY PERMIT

When development occurs, the subdivider shall obtain the appropriate driveway permit for driveway pipes and grading of the road ditch and approach along the existing road frontage which shall conform to the adopted policy of the Individual Township Trustees on Township roads, the County Engineer on County roads or the Ohio Department of Transportation on State roads, whichever road is involved. This permit shall be obtained from the Township, the County Engineer or the Ohio Department of Transportation, whichever political subdivision is involved.

ARTICLE V – MAJOR SUBDIVISION PROCEDURES

501 DEFINITION OF A MAJOR SUBDIVISION

All Subdivisions not classified as minor subdivisions, including but not limited to subdivisions of five (5) lots or more, or any size subdivisions involving opening, widening or extensions of any existing or proposed road, or easements of access, and the extensions or creation of any public improvements or community facilities.

502 GENERAL PROVISIONS

502.01 No persons, firm or corporation proposing to lay out or have laid out within the territorial jurisdiction of these Regulations, a subdivision which includes more than five (5) lots, shall proceed with any construction work on the proposed subdivision, including grading, before obtaining from the Commission approval of a Preliminary Plan of the proposed subdivision. In order to provide the maximum communication procedure between developer and the Commission, the following procedure is recommended.

502.02 Approval of the Director of the Ohio Department of Transportation (ODOT)

Before any plat is approved affecting any land within three hundred (300) feet of the centerline of a proposed new highway or a highway for which changes are proposed as described in the certification to local officials by the Transportation Director, any land within a radius of five hundred (500) feet from the point of intersection of said centerline with any public road or highway, the Commission shall give notice, by registered or certified mail, to the Director. The Commission shall not approve the plat for one hundred twenty (120) days from the date the Director receives the notice. If the Director notifies the commission that he shall proceed to acquire the land needed, then the Commission shall refuse to approve the plat. If the Director notifies the Commission that acquisition at this time is not in the public interest or upon the expiration of the one hundred twenty (120) days period of any extension thereof agreed upon by the Director and the property owner, the Commission shall, if the plat is in conformance with all provisions of these Regulations, approve the plat.

603 MAJOR SUBDIVISION APPROVAL PROCEDURES

503.01 Informal Consultation

The subdivider or his/her agent may consult informally with the Commission designee's staff in order to familiarize himself with the Subdivision Regulations and with the proposals of the official Thoroughfare Plan of Lorain County affecting the territory in which the proposed subdivision will be located.

ARTICLE V – MAJOR SUBDIVISION PROCEDURES

503.02 Administrative Review

At least 14 days prior to submitting a Preliminary Plan for review, it is recommended that the developer or his/her engineer contact the Commission's designee to set up an appointment for an Administrative Review.

The Commission's designee will be responsible to schedule the meeting and notify the appropriate township and other reviewing agencies. The other County reviewing agencies include: the Lorain County Engineer, the Lorain County Sanitary Engineer, the Lorain County Rural Wastewater District, the Lorain County Health District and the Lorain Soil and Water Conservation District.

The developer shall submit six (6) copies of the sketch plan, prepared by a Registered Surveyor, to the Commission's designee at the Administrative Review. The form and requirements of the sketch plan are outlined in Article VIII, Section 801 of these Regulations.

During the Administrative Review, the reviewing agencies and the township will examine the Sketch Plan and discuss all relevant concerns and technical requirements.

503.03 Confirmation of the Planning Commission

Within five (5) working days, or within such further time as the applicant may agree to, the Commission's designee acting through its staff shall inform the developer that the plans and data, as submitted or as modified, do or do not meet the objectives of these Regulations. Preliminary Plans will not be accepted until all items identified in the Administrative Review have been addressed.

504 SUBMISSION OF A PRELIMINARY PLAN

On reaching general consensus informally regarding his general subdivision program and objectives, the developer shall submit a Preliminary Plan to the Commission's designee, the Lorain County Community Development Department. Before submission of the Preliminary Plan, the developer shall have submitted his subdivision plans to the Lorain County General Health District for their Preliminary Phase and Intermediate Phase review for the approximate number and type of wastewater disposal systems that may be approved for the particular subdivision.

The Preliminary Plan shall be prepared and signed by a Registered Surveyor or Professional Engineer. The developer shall also submit a Preliminary Title Report as required in these Regulations. The subdivider shall submit six (6) folded full-size copies of the Preliminary Plan, six (6) sets of the Preliminary Storm Water and Improvement Plans, one (1) reproducible 11x17 copy and one (1) electronic file of all plans to the Commission's designee. The designee will be responsible for distributing copies of the plans to the other County reviewing agencies and the

ARTICLE V – MAJOR SUBDIVISION PROCEDURES

affected Township. Article VIII, Section 802 describes other information required for the submission of a Preliminary Plan.

504.01 Date of Preliminary Plan Submission

The subdivider shall submit the Preliminary Plan package to the Commission designee's staff at least thirty (30) working days prior to a regular meeting of the Commission. The Commission designee's staff has five (5) working days to determine if the submission is complete. The date of submission shall be the date that the Commission designee's staff determines that the submission is complete. Incomplete submissions will not be placed on the agenda.

504.02 Compliance with Local Regulations

Every plan shall conform to existing health regulations, zoning regulations and Subdivision Regulations applicable at the time of approval.

504.03 Preliminary Plan Review Criteria

The agencies listed in Section 504 will review the preliminary plan for compliance with their various rules and regulations. These shall include, but are not limited to:

1. Wastewater Treatment System;
2. Drinking Water System;
3. Storm Water and Drainage Systems;
4. Erosion and Sediment Control Plans;
5. Flood Plain Areas and Wetland Areas;
6. Zoning; and
7. Engineering Standards.

See Article VI and the Lorain County Engineer Specifications and Regulations for Subdivision Development for detailed information on major subdivision design standards and requirements.

504.04 Approval of Preliminary Plan

The Commission, acting through its designee's staff and the Subdivision Review Subcommittee, shall within thirty (30) working days, or within such further time as the applicant may agree to, review the Preliminary Plan and other material submitted for conformity thereof to these Regulations and negotiate with the subdivider on changes deemed advisable. The staff shall inform the subdivider as to which public offices must be contacted by him to determine the nature and extent of the improvements required.

The subdivider or his/her agent must be present at both the Subdivision Review Subcommittee and County Planning Commission meetings. If no one is present,

ARTICLE V – MAJOR SUBDIVISION PROCEDURES

the subdivision will be tabled and the subdivider will be informed that they need to be present at the next meeting for their subdivision to be heard.

Major revisions to plans between the Subdivision Review Committee and the County Planning Commission will not be accepted. Anyone desiring to revise their plans can ask to be removed from the Planning Commission agenda, and placed on the next Subdivision Review Subcommittee's agenda.

The Trustees in the township where the subdivision is proposed shall respond to the Commission indicating the conformance or non-conformance of said plan with all existing zoning, future land use plans and other areas of responsibility with which the Township has jurisdiction, particularly as regards Township roads and major drainage courses.

Upon completion of the review, the action of the Commission shall be sent to the developer within five (5) working days to the developer. The County Engineer shall also provide a marked up set of the Preliminary Plan, referenced and attached to any conditions determined.

Conditional approval of the Preliminary Plan shall not constitute approval of the subdivision plat. Rather, it shall be deemed an expression of approval to the layout as returned to the subdivider on the Preliminary Plan, as a guide to the preparation of the final subdivision plat which will be submitted for approval of the Commission, and for recording upon fulfillment of the requirements of these Regulations and the conditions of approval, if any.

If the Commission does not render conditional approval of the Preliminary Plan within the thirty (30) working days stipulated in Article V, Section 504.02 of these Regulations, or such further time as they may agree to, nothing in these Regulations shall prohibit the subdivider from officially filing his/her proposed Comprehensive Storm Wwater Management and Improvement Plans with the County Engineer and Soil and Water Conservation District.

504.05 Effective Period of Preliminary Plan Approval

The approval of the Preliminary Plan shall be effective for a period of two (2) years at the end of which period; final approval or an extension on the subdivision must have been obtained from the Commission. The Planning Commission may grant one (1) extension of Preliminary Plan approval not to exceed one (1) year in length. The developer or his/her agent must apply for an extension prior to the completion of the effective period of the Preliminary Plan. Any Preliminary Plan not receiving final approval within the period of time set forth herein or granted an extension shall be null and void, and the developer shall be required to resubmit a new plan for preliminary approval subject to any and all new zoning restrictions and subdivision regulations.

ARTICLE V – MAJOR SUBDIVISION PROCEDURES

For multi-phased projects that are submitted and approved under Section 506, final plat approval for at least one phase shall be obtained within two (2) years of the preliminary plan approval. At the time of final plat approval, approval of the preliminary plan may be extended for two (2) additional years to allow for continuation of subsequent phases.

505 ENGINEERING AND DETAILED PLAN REVIEWS

Once a Preliminary Plan is approved, the subdivider shall submit:

- Conditional Letter of Map Amendment/Revision to the Lorain County Community Development Department if applicable. Any project site or portion therein located in an Approximate A zone according to the Flood Insurance Rate Maps must hire at their own expense a certified engineer to complete a hydraulic and hydrologic analysis to determine the Base Flood Elevations, floodway location and delineate the limits of the 100 year flood plain for the entire site. This analysis must be submitted to and approved by the Federal Emergency Management Agency prior to submittal of any plans to either the Lorain County Engineer or the Lorain Soil and Water Conservation District. If changes to the lot or street arrangement of the approved Preliminary Plan are necessary as a result of the flood study, the subdivider shall submit a Revised Preliminary Plan to the Lorain County Planning Commission.
- An Erosion and Sediment Control Plan to the Lorain Soil and Water Conservation District for review and approval. See the Lorain County Erosion and Sediment Control Rules for plan requirements.
- Draft Comprehensive Storm Water Management Plan and Improvement Plans to the Lorain County Engineer for review and approval. See the Lorain County Storm Water Regulations and the Lorain County Engineer Specifications for Subdivision Development for respective requirements.

Upon approval of the above mentioned plans by the Lorain Soil and Water Conservation District and Lorain County Engineers respectively, the subdivider shall enter into a Subdivider's Agreement with the Lorain County Engineers. Construction cannot begin until all necessary federal, state and local permits and approvals are secured by the subdivider.

All improvements shall be completed within the two (2) year effective period of the Preliminary Plan or extension granted in writing by the Lorain County Planning Commission. All improvements must be conditionally approved by the respective agencies before an application for Final Plat approval can be made to the Commission.

506 FINAL PLAT APPROVAL PROCEDURE

ARTICLE V – MAJOR SUBDIVISION PROCEDURES

506.01 Final Plat Submission

The subdivider, after receiving approval of the Preliminary Plan, Erosion and Sediment Control Plan and Comprehensive Storm Water Management Plan and Improvement Plans of the proposed subdivision, shall submit a final plat of the subdivision prepared and signed by a registered surveyor. The final plat shall have incorporated all changes in the Preliminary Plan required by the Commission. Otherwise it shall conform to the Preliminary Plan and it may constitute only that portion of the approved Preliminary Plan, which the subdivider proposes to record and develop at the time. Article VIII, Section 803 describes the Final Plat form, the items required for submission and other specifications of the Final Plat.

The subdivider shall submit six (6) folded copies of the Final Plat, one (1) 11x17 reproducible copy of the Final Plat, two (2) copies of the approved Comprehensive Storm Water Management Plan and Improvement Plans, one (1) electronic file of all plans and other information required in Article VIII, Section 803, to the County Planning Commission's designee. The designee will be responsible for distributing copies of the Final Plat submission to the other County reviewing agencies as described in Section 504 of this Article.

506.02 Date of Final Plat Submission

The subdivider shall submit a Final Plat to the Commission designee's Staff at least fourteen (14) working days prior to a regular meeting of the Commission. The regular meeting of the Commission at which the Final Plat is presented for final approval, including any adjourned date thereof, shall constitute the official submittal date of the Final Plat for the purpose of these Regulations.

506.03 Notice of the Affected Township

Within five (5) days after the submittal of the Final Plat, the Commission's designee shall send by certified mail a written notice to the Clerk of the Board of Trustees in the township where the plat is located. The notice shall inform the trustees that the plat has been submitted and the date, time and location of the meeting where the Commission will consider or act on the plat. The meeting cannot occur until at least seven (7) days after the notice is sent to the Clerk of the Township Trustees.

If the township administrative authority does not recommend acceptance of the plat, it must submit to the Commission in writing their reason or reasons for not recommending acceptance.

506.04 Commission Approval of the Final Plat

The approval of the Commission or the refusal to approve shall take place within fourteen (14) working days after the submission date or within such further time to which the applicant may agree. The grounds for refusal of any plat submitted,

ARTICLE V – MAJOR SUBDIVISION PROCEDURES

including citation of or reference to the rule or regulation violated by the plat, shall be stated upon the record of the Commission.

The subdivider or his/her agent must be present at both the Subdivision Review Subcommittee and County Planning Commission meetings. If no one is present, the subdivision will be tabled and the subdivider will be informed that they need to be present at the next meeting for their subdivision to be heard.

Major revisions to plans between the Subdivision Review Committee and the County Planning Commission will not be accepted. Anyone desiring to revise their plans can ask to be removed from the Planning Commission agenda, and placed on the next Subdivision Review Committee's agenda.

The subdivider shall be notified of the final action of the Commission within five (5) working days.

506.05 Effective Period of Final Plat Approval

The approval of a Final Plat shall be effective for a period of one (1) year. The Planning Commission may grant one (1) extension of Final Plat approval not to exceed one (1) year in length. The developer or his/her agent must apply for an extension prior to the completion of the effective period of the Final Plat.

The developer shall record the subdivision plat in the office of the Recorder of Lorain County, Ohio, within the approval period of the Final Plat. Otherwise, the Commission may recall the plat for its reconsideration.

507 ENDORSEMENT OF THE FINAL PLAT

After approval of the Final Plat has been granted by the County Planning Commission, the subdivider shall circulate the Final Plat for endorsement.

507.01 Endorsement of the Affected Township

The subdivision Final Plat shall be endorsed by the administrative authority of the Township containing the proposed development with respect to meeting all of its ordinances and/or resolutions.

507.02 Endorsement of Reviewing Agencies

The final subdivision plat shall be properly endorsed by the Lorain County General Health District with respect to meeting all the requirements of said Board for wastewater and water facilities.

The County Engineer and County Sanitary Engineer shall also have signed the Final Plat subject to meeting all the requirements of his/her office in respect to all

ARTICLE V – MAJOR SUBDIVISION PROCEDURES

drainage and construction of required improvements, maintenance guarantee and inspection fees paid.

The Soil and Water Conservation District shall also have signed the Final Plat subject to meeting all erosion and sediment control standards.

The Commission shall be the last to sign the plat, which shall be subject to meeting all the requirements of the appropriate county agencies and the requirements of these Regulations. See Article IX – Required Statements and Signatures to be Affixed on the Final Subdivision Plat for the order to obtain signatures.

508 ACCEPTANCE OF IMPROVEMENTS

Approval of the Final Plat by the Planning Commission shall not constitute the acceptance by the public of the dedication of any streets or other public way or ground.

All Improvements shall comply with the requirements of the approved Preliminary Plan, Erosion and Sediment Control Plan and Comprehensive Stormwater Management Plan and Improvement Plans as reviewed and approved by the Lorain Soil and Water Conservation District and the Lorain County Engineer's office acting on behalf of the Board of County Commissioners as its agents.

Upon completion of all improvements including utilities and approval of the Final Plat by the Lorain County Planning Commission, the subdivider shall, in writing, request acceptance of the improvements by the Board of Commissioners of Lorain County.

509 PHASING OF MAJOR SUBDIVISION PLATS

At the option of the subdivider or developer, a subdivision may be constructed in phases provided that such phasing is done according to the following provisions.

- 509.01 The applicant shall submit a phasing plan in conjunction with their preliminary plan that shows the boundaries, progressive order and general time frame for completion and platting of each phase. Phasing boundaries and sequence can be amended upon written request from the applicant and resubmission of the preliminary plan in accordance with these regulations.
- 509.02 Each phase shall be fully capable of functioning with all the required improvements in the event future phases are not completed.
- 509.03 Temporary turnarounds may be required at the end of streets that are intended to be extended into a subsequent phase.

ARTICLE V – MAJOR SUBDIVISION PROCEDURES

- 509.04 The improvement plans and corresponding final plats shall be submitted in phases and in progressive order according to the sequencing indicated on the approved phasing plan. The final plat of each phase shall be recorded with the Office of the Lorain County Recorder in accordance with the phasing plan or subsequent amended phasing plan approved by the Commission.
- 509.05 The County Commissioners may require that the maintenance guarantee be in such amount as is commensurate with the phase or phases of the plat to be filed and may defer the remaining required maintenance guarantee principal amount until the remaining phases of the plat are offered for filing.
- 509.06 The developer may also file irrevocable offers to dedicate streets and public improvements in the phases to be approved and defer filing offers of dedication for the remaining phases subject to any conditions imposed by the Commission. Approval shall be granted concurrently with final approval of the plat.

510 COMMERCIAL AND INDUSTRIAL SUBDIVISION

Subdividers or developers of shopping centers and other commercial as well as industrial uses, particularly industrial parks, shall comply with the same requirements as residential developers.

511 OTHER LAND USES

Any other land use which may either alter the existing street or road pattern or materially change or disrupt the existing flow of traffic shall be reviewed by the Commission and a plat may be required if the Commission is of the opinion that such a plat should be recorded.



ARTICLE VI – SUBDIVISION DESIGN STANDARDS AND REQUIREMENTS

601 LOCATION

601.01 Conformity with Major Thoroughfare Plan

The location and width of all streets and roads for all subdivisions shall conform to the official Major Thoroughfare Plan of Lorain County and any subsequent revision thereof, and to good design practices, which take into consideration the topography of the land, natural features and other assets, which will enhance the environment of the subdivision and surrounding development. Also, all proposed subdivisions shall conform to the Official Lorain County Park and Recreation Plan and any subsequent revision thereof.

601.02 Storm and Sanitary Drainage - General

The Commission shall not approve any subdivision having inadequate storm water provisions and/or wastewater drainage as determined by the Lorain County Engineer and the Lorain County Sanitary Engineer with input from the Lorain County Soil and Water Conservation District. Specific guidelines are outlined in the Lorain County Engineer Specifications and Regulations for Subdivision Development and the Lorain County Comprehensive Storm Water Management Regulations. The subdivider shall bear all design and construction costs for provision of adequate stormwater and wastewater drainage including but not limited to the extension of sanitary sewers to the site from another location.

601.03 Protection of Drainage Courses

No natural drainage course shall be altered and no fill, buildings or structures shall be placed in it, unless approved by the County Engineer. Said County Engineer may require that an easement be provided.

601.04 Erosion and Sedimentation Control

Provisions shall be made for minimizing erosion and sedimentation due to development. Specific guidelines are outlined in Lorain County Erosion and Sediment Control Rules. Copies of the rules are available through the Lorain Soil and Water Conservation District.

601.05 Flood Plain Areas

The Planning Commission may, when it deems necessary for the health, safety or welfare of the present and future population of the area and necessary to the conservation of water, drainage and sanitary facilities, prohibit the subdivision of any portion of the property which lies within the flood plain of any stream or drainage course. These flood plain areas shall be preserved from any and all destruction or damage resulting from clearing, grading or dumping of earth, waste material or stumps except at the discretion of the Planning Commission, it's

ARTICLE VI – SUBDIVISION DESIGN STANDARDS AND REQUIREMENTS

designee and the office of the County Engineer. A set of FEMA Flood Insurance Rate Maps is available for review at the Lorain County Community Development Department office.

601.06 Wetlands Areas

The Lorain Soil and Water Conservation District will review all subdivisions for the potential need for a detailed wetland determination. Assessment will be based on soil types, as specified in the Soil Survey of Lorain County. If the proposed subdivision is determined to potentially be classified as a wetland, it then becomes the responsibility of the developer to have a more detailed investigation done by a consultant qualified in wetlands delineation and mitigation planning. The consultant will determine if an application to the U.S. Army Corps of Engineers and/or Ohio EPA for a Section 401 and/or 404 permit is required. A letter from the consultant stating that the property does not qualify as a jurisdictional wetlands will be accepted as part of the proposed subdivision's Preliminary Plan review.

601.07 Approval of a subdivision Plan or Plat does not constitute compliance or any representation of compliance with Federal and/or State laws and regulations relating to Wetlands requirements. The owner/developer has full responsibility to comply with Federal and/or State laws and regulations, including but not limited to permits and approvals relating to wetlands areas.

602 PUBLIC SITES AND OPEN SPACES

602.01 General

Provision shall be made if requested by the Commission for the allocation of areas for playgrounds, school sites, parks and other outdoor recreational facilities as indicated on the adopted or amended Lorain County Comprehensive Plan of Parks or other plan of the area in which the subdivision is located.

602.02 Parks, Playgrounds and Recreational Areas

Any one of the following methods may be used to provide recreation space in major subdivisions provided that the method is mutually agreeable between the subdivider, Planning Commission and the affected Township.

- a. The dedication to public use on the plat of the parcel proposed for subdivision, of a parcel of land equal to at least four percent (4%) of said parcel proposed for subdivision.
- b. The conveyance by deed to an appropriate public body of a parcel of land equal to at least four percent (4%) of the parcel proposed for subdivision.

ARTICLE VI – SUBDIVISION DESIGN STANDARDS AND REQUIREMENTS

- c. A conveyance or reservation to the owners of land within the proposed subdivision of a parcel of land equal to at least four percent (4%) of the parcel proposed for subdivision for use of the property owners within said subdivision.
- d. Cash equal to four percent (4%) of the raw land acquisition cost of the parcel proposed for subdivision, if the parcel was acquired within the last ten (10) years. Such cash shall be paid to the political subdivision of which the proposed development is a part and shall be specified for limited use in acquiring park and open space land to serve the proposed development.
- e. Such other method that may be mutually agreeable to the subdivider, the Commission and the affected Township.

603 PRESERVATION OF NATURAL FEATURES AND AMENITIES

Every effort shall be made to preserve existing features which would add value to residential development, such as trees, watercourses and falls, beaches, historic sites and other similar irreplaceable assets. Easements and deed restrictions shall be placed on the subdivision plat and subsequent deed for any features to be preserved.

604 SUBDIVISION NAME

The Commission's designee shall review the proposed subdivision name to ensure that there is no duplication, nor is it similar to or in conflict with the names of any existing subdivision in Lorain County or any previously planned subdivision under consideration by the Commission.

605 LOT IDENTIFICATION

All lots shall be numbered by progressive numbers throughout the proposed subdivision. The lots in numbered additions bearing the same name shall be consecutive throughout the several additions. Where land is subdivided into more than one (1) subdivision by the same developer, the lots in each subdivision shall be so numbered so that the lots will bear consecutive numbers.

606 LOT IMPROVEMENTS

606.01 Soil Preservation and Final Site Grading

No certificate of occupancy permit, where applicable, shall be issued until final site grading has been completed in accordance with the approved erosion and sediment control plan. This includes but is not limited to temporary seeding and any other site stabilization methods in the approved plan.

ARTICLE VI – SUBDIVISION DESIGN STANDARDS AND REQUIREMENTS

606.02 Waterbodies and Watercourses

If a tract being subdivided contains a waterbody, or portion thereof, lot lines shall be so drawn as to distribute the entire ownership of the waterbody to one individual lot or a block held in common by a Homeowners' Association. The ownership of and responsibility for safe maintenance of the waterbody will not become a local government responsibility. No more than twenty-five percent (25%) of the minimum area of the lot required under the Zoning Resolution may be satisfied by land which is under water. Where a watercourse separates the buildable area of a lot from the street from which it has access, provisions shall be made for installation of a culvert or other structure, of design approved by the County Engineer.

607 OFF-STREET PARKING AND LOADING REQUIREMENTS

Whenever land is subdivided as defined in Article III, Section 1, there shall be provided at the time any building or structure is erected, off-street parking or loading spaces in accordance with the specifications of the appropriate local township zoning resolution.

608 PRIVATE AND PUBLIC UTILITY EASEMENTS

Private and public utility easements shall have a minimum width of ten (10) feet or such additional width as may be required for necessary access to the utility involved. Such easements shall be located along rear or side lot lines with five (5) feet thereof being located on each side of said lot lines except under special circumstances where the Commission may require them in other locations. For lots facing curvilinear streets, the rear easement shall consist of straight lines with a minimum of points of deflection. Easements along surface drainage courses shall be as required by the County Engineer's Office.

608.01 Easement and Public Site Dedication

Each public site, utility easement and other area to be dedicated on the plat shall be so designated as to indicate the purpose of said dedication and to whom it is to be dedicated.

609 UTILITIES

Electric service, telephone service and gas service shall be provided within each subdivision. Whenever such facilities are reasonably accessible and available, they may be required to be installed within the area prior to acceptance of improvements. When cable television service is available in the surrounding area, provision for such service should be considered.

ARTICLE VI – SUBDIVISION DESIGN STANDARDS AND REQUIREMENTS

610 NONRESIDENTIAL SUBDIVISIONS

If a proposed subdivision includes land that is zoned for commercial or industrial purposes, the layout of the subdivision with respect to such land shall make such provision as the Commission may require.

A nonresidential subdivision shall be subject to all the requirements of these Regulations, as well as such additional standards required by the Commission, and shall conform to the proposed land use and standards established in the Major Thoroughfare Plan and the local Zoning Resolution.

610.01 Standards

In addition to the principles and standards in these Regulations, which are appropriate to all subdivisions, the applicant shall demonstrate to the satisfaction of the Commission that the street, parcel and block pattern proposed is specifically adapted to the uses anticipated and takes into account other uses in the vicinity.

610.02 Protection of Residential Areas

Every effort shall be made to protect adjacent residential areas from potential nuisance from a proposed commercial or industrial subdivision, including the provision of extra depth in parcels backing up on existing or potential residential development and provision for a permanently landscaped buffer strip when necessary. In specific cases, where deemed necessary by the Commission, the 3.5 to 1 depth to width ratio for all lots may be waived. In non-residential subdivisions, collector streets shall be designed so that traffic is directed away from residential streets.

611 COUNTY ENGINEER

The Lorain County Engineer is responsible for design review, inspection and enforcement of surveying, road construction, pavement drainage, erosion and sedimentation control and other improvements as outlined in the following regulations:

611.01 Improvements

The design of improvements, together with the preparation of drawings and specifications and the construction engineering and inspection thereof, shall be in accordance with the current specifications, regulations and procedures of the Lorain County Engineer.

When it is necessary to obtain the permission and approval of a political subdivision to extend or use any existing utilities or to occupy any street or right-of-

ARTICLE VI – SUBDIVISION DESIGN STANDARDS AND REQUIREMENTS

way, the obtaining of such permission and approval shall be the responsibility of the subdivider.

611.02 Cost of Improvements

The entire cost of improvements and the cost of the preparation of drawings and specifications, including engineering supervision and overhead together with the inspection of construction, shall be borne by the developer. The estimated cost to the County for the review and approval of engineering drawings and specifications along with the cost of inspection, shall be deposited with the County Engineer prior to the commencement of construction activities.

611.03 Assurance of Completion of Improvements

1. The subdivider shall execute a Subdivider's Agreement with the Board of Commissioners in order to guarantee required construction improvements.
2. The subdivider shall furnish such liability insurance as is deemed necessary by the Board of Commissioners which shall indemnify and save harmless the County from any and all liability arising by reason of conditions which may arise and grow out of the construction or installation of such facilities.
3. The subdivider shall furnish a Title Guarantee to the Board of Commissioners to guarantee the title of lands along with certification that current taxes are paid.
4. The subdivider shall install at his own cost all improvements per the Comprehensive Stormwater Management Plan and Improvement Plans approved by the Lorain County Engineer. The subdivision plat will not be endorsed by the Lorain County Engineer until all road, drainage, water and sanitary improvements are installed, inspected and found free of deficiencies. Other utilities including gas, electric, telephone and cable can be installed prior to the acceptance of improvements.
5. The subdivider shall furnish a Maintenance Guarantee to the Board of Commissioners in the form of a certified check or cash to insure that the improvements are in satisfactory condition after completion of construction. Such Maintenance Guarantee(s) shall be effective for a minimum of one (1) full year after the execution of the Guarantee by the Board of Commissioners.

611.04 Specifications and Regulations of the Lorain County Engineer's Office

A design manual stating the current specifications, regulations and procedures of the Lorain County Engineer regarding design, drafting, construction and inspection of improvements may be obtained from the office of the Lorain County Engineer for a fee as established by the Board of Commissioners.

ARTICLE VI – SUBDIVISION DESIGN STANDARDS AND REQUIREMENTS

612 WATER/WASTEWATER TREATMENT

The Lorain County Sanitary Engineer, Board of Health and Ohio EPA are responsible for the design review, inspection and enforcement of all public wastewater, public water, group wastewater or group water developments, as outlined in the following regulations.

612.01 Public Water and Wastewater Treatment System

In the event a public water supply and a public wastewater treatment system can reasonably be made available by the extension and construction of water mains and sanitary sewers, the developer will be required to provide such utilities and if deemed advisable by the Sanitary Engineer in cooperation with the Ohio EPA, may require their construction to be complete prior to the sale of one or more lots or parcels in the subdivision.

The design of such utilities, together with the preparation of drawings and specifications and the construction thereof, shall be done by or under the supervision and direction of the Sanitary Engineer in cooperation with the Ohio EPA and in accordance with the current rules, regulations, specifications and procedures of the Lorain County Sanitary Engineer's Department.

When it is necessary to obtain the permission and approval of a political subdivision to extend or use any existing utilities or to occupy any street or right-of-way, the obtaining of such permission and approval shall be the responsibility of the developer.

612.02 Private Water and Wastewater Treatment System

In the event a public water supply and a public wastewater treatment system cannot reasonably be made available, or where the approval specified in the preceding paragraph cannot be obtained within a reasonable length of time, the developer shall submit proof satisfactory to the Sanitary Engineer in cooperation with the Ohio EPA and to the appropriate Board of Health that a safe and adequate source of water for domestic use and a safe and adequate means of wastewater treatment can and will be provided.

612.03 Group or Community Water and Wastewater Treatment Systems

In the event that a group or community type wastewater treatment plant or water supply or both are deemed necessary by the Ohio EPA or by the appropriate Board of Health, the plans and specifications therefore shall meet with the requirements of and be approved by the Sanitary Engineer and the appropriate Board of Health and Ohio EPA. If deemed advisable by the Sanitary Engineer in cooperation with the Ohio EPA, the complete construction of such utilities may be required prior to the sale of one or more parcels in the subdivision.

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612.04 Cost of Improvements

The entire cost of improvements and the cost of the preparation of drawings and specifications, including engineering supervision and overhead together with the inspection of construction, shall be borne by the subdivider. The estimated cost to the County for the review and approval of engineering drawings and specifications along with the cost of inspection shall be deposited with the County Sanitary Engineer prior to the commencement of construction activities.

612.05 Assurance of Completion of Improvements

The developer shall submit to the Sanitary Engineer, satisfactory proof that the conditions herein stipulated will be conformed to. The subdivider shall install at his own cost all improvements per the plans approved by the Sanitary Engineer. The subdivision plat will not be endorsed by the Sanitary Engineer until all improvements are installed, inspected and found free of deficiencies.

612.06 Conflict

Nothing herein shall be construed to alter or supersede the requirements stipulated in Sections 6103.01 et seq. and 6117 et seq. of the Ohio Revised Code or the rules and regulations established by the County Commissioners and the County Sanitary Engineer's Department thereunder.

612.07 Rules and Regulations of the Lorain County Sanitary Engineer's Office

A design manual stating the rules and regulations of the Lorain County Sanitary Engineer's Office regarding design, drafting and construction of water lines, sanitary sewers and wastewater treatment plants may be obtained from that office for a fee as established by the Board of Commissioners.

613 COUNTY PROSECUTOR

All legal documents, agreements, guarantees and bonds shall be reviewed and approved by the Lorain County Prosecutor.

ARTICLE VII – STANDARDS AND REQUIREMENTS FOR CONSTRUCTION OF IMPROVEMENTS

701 STREETS

701.01 General

In order to provide for streets of suitable location, width and improvement to accommodate prospective traffic and afford satisfactory access to police, fire-fighting, snow removal, sanitation and road maintenance equipment and to coordinate streets so as to compose a convenient system and avoid undue hardships to adjoining properties, the following design standards are hereby required.

As to arrangement:

1. The arrangement, character, extension, width, grade and location of all streets shall conform to the official Lorain County Major Thoroughfare Plan, or subsequent amendments thereof, and shall be considered in their relation to existing and planned streets, to topographical conditions, to public convenience and safety and in their appropriate relation to the proposed uses of land to be served by such streets:
 - a. Road classification may be indicated on the Official Lorain County Major Thoroughfare Plan or by the State Highway Director, otherwise, it shall be determined by the Commission.
 - b. Although not specifically indicated on the Lorain County Major Thoroughfare Plan, any street within a subdivision, whether by use or design, may be classified the same as or equivalent to any other street or road as indicated on said Thoroughfare Plan.
2. The subdivider shall provide within the boundaries of the subdivision plat the necessary right-of-way for widening, continuance or alignment of such streets in conformity with the Major Thoroughfare Plan by one of the following methods:
 - a. The dedication of the necessary right-of-way for the continuation, extension or connection of any existing or planned thoroughfare.
 - b. When subdividing the land abutting an existing County or Township road, not designated on the Major Thoroughfare Plan as of equivalent or greater importance than a collector street, provision shall be made for necessary right-of-way or easements for traffic, utilities and drainage. Such existing road shall have drainage improvements made to comply with the standards of the Lorain County Engineer. These improvements shall include provisions for the proper installation of driveway and entrance approaches.

ARTICLE VII – STANDARDS AND REQUIREMENTS FOR CONSTRUCTION OF IMPROVEMENTS

3. The use of curvilinear streets with tangents, short cul-de-sacs (where practicable), or loop streets shall be encouraged where such design will result in a more desirable layout as long as there are at least two means of ingress or egress to a through street. Where two means of ingress and egress are not possible stub streets shall be provided in order to facilitate future interconnection.
4. Minor or local streets shall be laid out in such a manner as to discourage use by through traffic while providing safe and convenient access to the property.
5. Proposed streets shall be extended to the boundary of the tract to the subdivided, unless prevented by topography or other physical conditions, or, unless in the opinion of the Commission, such extension is not necessary or desirable for the coordination of the layout of the subdivision with the existing layout of the surrounding area for the most advantageous future development of adjacent tracts. Reserve strips controlling access to streets shall be prohibited. Additionally, private streets must comply with the following:
 - a. Where a subdivision is proposed to contain "private streets" the layout shall be such that the continuance of the street to the boundary of the tract to be subdivided shall be prohibited; and,
 - b. The ingress and egress of subdivisions containing "private streets" shall be laid out in such a manner as to make the subdivision self-contained, either by loop type streets, cul-de-sacs, or other dead-end type streets as shall be approved by the Commission, County Engineer and Township Trustees.
6. In commercial and industrial developments, where the streets are to be dedicated to public use, they shall be planned in connection with the grouping of buildings, location of facilities and the provision for alleys, truck loading and maneuvering areas, off-street parking and walkways so as to minimize conflict of movement between the various types of traffic, including pedestrian traffic.

701.02 Major Arteries and Physical Barriers

1. Major Traffic Arteries

Where a subdivision abuts or contains an existing or proposed street of equal or greater width than a Minor Arterial, as defined by the Major Thoroughfare Plan, the Commission may require any of the following:

- a. Marginal access streets or service roads (separated from the arterial by a planting strip or grassed area and having access thereto at suitable points as may be determined by the Commission).

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- b. Deep lots with rear service alleys.
- c. The subdivision of lots so as to back onto the Arterial and front onto a parallel local street. Screening shall be provided in a strip of land along the rear property line of such "reverse frontage" lots at a minimum width of twenty (20) feet with no vehicular access across such strip.
- d. A series of cul-de-sacs, U-shaped or short looped streets entered from and designed generally at right angles to a parallel street, as described in "c" above, with the rear lines of their terminal lots backing onto the Arterial street.
- e. Such other treatment as may be necessary for adequate protection of residential properties and to afford separation of through and local traffic.

2. Physical Barriers

Where a subdivision borders on or contains a Limited Access Highway right-of-way or railroad right-of-way, so located as to affect the subdivision of adjoining lands, it shall be treated as follows:

- a. In residential districts, a buffer strip at least twenty-five (25) feet in depth in addition to the normal depth of the lot for the zoning district in which it is located, shall be provided adjacent to such railroad or Limited Access Highway right-of-way. This strip shall be part of the platted lots or dedicated openspace and shall be designated on the plat: *"This strip is reserved for screening. Parking and the placement of structures thereon is prohibited."*
- b. Streets parallel to the railroad when intersecting a street which crosses the railroad at grade shall, to the extent practicable, be at a distance of at least one hundred fifty (150) feet from the railroad right-of-way. Such distance shall be determined with due consideration of the minimum distance required for future separation of grades by means of appropriate approach gradients.

701.03 Phase Development and Proposed Future Streets

- 1. Where the plat to be submitted includes only part of the tract owned or under option by the subdivider, the Commission shall require that the entire property owned by the subdivider be submitted along with the portion to be platted and indicating thereon the future tentative streets system for the un-subdivided area in dotted lines.

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2. Where lots are more than double the minimum required area for the Zoning District, the Commission may require that such lots be arranged so as to allow further subdivision and the opening of future streets where they would be necessary to serve such potential lots.

701.04 Dead-End Streets

1. Permanent

Dead-end streets (cul-de-sacs or other approved dead-end streets) will be designed to be permanent and not longer than one thousand five hundred (1,500) feet in low density areas, one thousand (1000) feet in medium density areas and eight hundred (800) feet in high density areas. The length of the cul-de-sac will be measured from the nearest intersection of a through street or a temporary dead-end (stub street) approved by the County Planning Commission.

- a. Cul-de-sacs shall be provided at the closed end with a turn-a-round having a street property line diameter of at least one hundred twenty (120) feet. The street right-of-way lines and the one hundred twenty (120) foot diameter turn-a-round shall be joined by a tangent arc of fifty (50) foot minimum radius. Cul-de-sac turning areas shall be completely paved, unless otherwise approved by the Township and County Planning Commission.
- b. The Commission can vary the maximum cul-de-sac length, if the developer provides a minimum of two stub streets, one perpendicular to both sides of the proposed cul-de-sac street, and the plan is acceptable to the local safety service providers. The right-of-way of each stub street shall be extended to the boundary of the tract to be subdivided to provide for connection to future development. The maximum length of a dead-end street or cul-de-sac shall not exceed twice the distance permitted based on density, provided stub streets are used.
- c. Dead-end streets (cul-de-sacs or other approved dead-end streets with only one means of ingress or egress to a through street) shall be designed to service no more than 50 lots and/or housing units regardless of length or provision of a stub street.

2. Temporary

- a. Where streets dedicated to public use are extended to the boundary of a subdivision to provide for their proper continuance at such time as the adjacent land is subdivided, they shall be terminated with an approved turn-

ARTICLE VII – STANDARDS AND REQUIREMENTS FOR CONSTRUCTION OF IMPROVEMENTS

a-round. This provision shall be required even where a street extends only one (1) lot beyond a lot having frontage on an existing street.

- b. "Stub Streets" shall include a publicly dedicated street right-of-way to the property line. A paved road surface shall be installed in accordance with the width required in the County Subdivision Regulations and with a minimum length of fifty (50) feet of continuous impervious material consistent with the pavement materials of the subdivision. The length shall be measured from the intersecting street right-of-way to the rear edge of pavement on the proposed stub street. The design and construct of stub streets shall be consistent with the intersection requirements including radii of these regulations.

701.05 Half-Streets

Half-streets shall be prohibited except under one of the following conditions:

1. There exists a platted half-street which should logically be continued to a reasonable intersection.
2. There exists a dedicated or platted half-street adjacent to the tract to be subdivided; the other half shall be platted if deemed necessary by the Commission.
3. Where a subdivision boundary falls on the same line as a centerline of an existing intersection, the Commission may require a reserve strip or permanent easement in the amount of half the right-of-way of such intersecting street. The length of such strip or permanent easement shall be determined by the Commission with the approval of the Township Trustees. No part of the reserved strip or permanent easement shall form a part of any lot requirement as defined by the local zoning.

701.06 Road Dedications and Reservations

1. Widening and Realignment of Existing Roads

Where a subdivision borders on an existing road narrower than current standards or when the Major Thoroughfare Plan or zoning regulations indicate plans for realignment or widening a road that would require use of some additional land contained within the subdivision, the applicant shall be required to dedicate such areas for widening or realignment of such roads. Such frontage roads and streets shall be dedicated by the applicant to the full width as required by these Regulations. Land reserved for any road purpose may not be counted in satisfying yard or area requirements of the zoning ordinance under which such subdivision is

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governed, whether the land is to be dedicated to the Township in fee simple or an easement is granted to the County.

702 ALLEYS

702.01 Required

Alleys shall be provided in apartment or planned unit developments, commercial and industrial districts, except that the Commission may waive this requirement where other assured provision is made for service areas and access, such as off-street loading, unloading and parking, consistent with and adequate for the uses proposed.

702.02 Prohibited

Alleys shall be prohibited in one and two family districts except where it is desirable to continue an existing alley to the nearest intersection or where the lots face a street shown on the Major Thoroughfare Plan and provision has not or cannot be made for limited access on such street.

702.03 Width

The minimum width of an alley shall be thirty (30) feet.

702.04 Intersections and Alignment

Alley intersections and sharp changes in alignment shall be avoided, but, where necessary, corners shall be cut off sufficiently to permit safe vehicular movement.

703 PRIVATE STREETS

703.01 Requirements

Where a subdivision is proposed to contain private streets and if allowed within the political subdivision, the following requirements shall apply:

1. All private streets shall be designed and improved in the same manner as for publicly dedicated streets, unless Township Zoning provides for lesser right-of-way widths, pavement widths and radii. Private Streets shall be designed and laid out in accordance with these Regulations and with all specifications and standards of the office of the County Engineer.
2. The design and layout of private streets shall be such as to be self-contained and provide for the circulation of traffic solely within the proposed subdivision.

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All private streets shall also be marked as such upon entrance to the subdivision.

3. The Commission shall not approve a plat of a subdivision containing private streets unless the same shall have made provision for the incorporation of a property or land owners association and/or deed covenants or restrictions to provide for the maintenance of the street system, drainage facilities, sanitation facilities or easements, utilities and provision for the adequate protection of the property owners through contractual services for water supply, fire and police protection, ambulance and busing services where required by the Commission.
 - a. Where it is determined by the Local or County School District and the Commission that certain contractual services cannot be obtained, the subdivider shall, at his own expense, provide for such services as the Commission and the County Engineer deem necessary for the health, safety and general welfare of the property owners within said private subdivision.
4. The developer of a private subdivision in which the streets are not dedicated to public use, shall so indicate on the plat together with the statements as provided for in Article XI of these Regulations.

704 STREET NAME SIGNS AND STREET NAMING

For purposes of street naming, the following suffixes shall apply:

1. Street shall be used only for streets that run in a generally east-west direction;
2. Boulevard or Drive shall be used only for a large meandering type street
3. Circle or Court shall be used only for cul-de-sac type streets that run in a generally east-west direction;
4. Lane or Place shall be used only for cul-de-sac type streets that run in a generally north-south direction;
5. Road or Way shall be used only for streets that run in a diagonal manner, either a generally northwest-southeast direction or northeast-southwest direction;
6. Avenue shall be used only for thoroughfares that run generally in a north-south direction;
7. The words north, south, east and west should be avoided as part of a street name whenever possible.

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Whenever a new street is constructed along the approximate alignment or extension of an existing street, its name shall be the same as that of the existing street.

To avoid duplication and confusion, the proposed names of all streets shall be reviewed by the Commission's designee and the affected political subdivision prior to such names being assigned or used.

Street name signs per Lorain County Engineer standards shall be supplied and erected by the subdivider at all intersections within the new subdivision.

Street signs and traffic control devices in the subdivision shall be supplied and erected by the subdivider and shall conform to the current Ohio Manual of Uniform Traffic Control Devices published by the Ohio Department of Development.

705 LAYOUT OF LOTS

705.01 General

The lot arrangement shall be designed in such a manner that there will be no foreseeable difficulties, for reasons of topography or other conditions, in securing building permits. All lots shall be in compliance with the existing zoning requirements of the district in which it is located and the requirements of the Lorain County General Health District or wastewater treatment provider.

705.02 Dimensions

Lot dimensions shall comply with the minimum requirements of the zoning district in which it is located. Where lots are more than double the minimum required area for the zoning district, the Commission may require that such lots be arranged so as to allow further subdivision and the opening of future streets where they would be necessary to serve such potential lots, all in compliance with the local zoning and these Regulations. In general, side lot lines shall be at right angles to street lines (or radial to curving street lines) unless a variation from this rule will give a better street or lot layout or plan, as may be determined by the Commission. Dimensions of corner lots shall be large enough to allow for the erection of buildings, observing the minimum front yard setback from both streets. Depth and width of properties reserved or laid out for business, commercial or industrial purposes shall be adequate to provide for the off-street parking and loading facilities required for the type of use and development contemplated, as established in the zoning or these Regulations, whichever is more restrictive.

705.03 Double Frontage and Access

ARTICLE VII – STANDARDS AND REQUIREMENTS FOR CONSTRUCTION OF IMPROVEMENTS

1. Double frontage and reversed frontage lots shall be avoided except where necessary to provide separation of residential development from traffic arterials or to overcome specific disadvantages of topography or orientation. A planting screen easement of at least twenty-five (25) feet in width, and across which there will be no right of access, should be provided along the line of lots abutting such traffic artery.

2. Access from Major and Minor Arterials

When a local or collector street is available, lots shall not in general derive access exclusively from a major or minor arterial street, as defined in Section 700.08 of this Article. Where driveway access from a major or minor arterial street may be necessary for several adjoining lots, the Commission may require that such lots be served by a combined access drive in order to limit possible traffic hazards on such street. Such combined access drive shall not be construed as meeting any frontage requirements as defined by the local zoning, and shall be subject to the approval of the County Engineer. Where possible, driveways should be designed and arranged so as to avoid requiring vehicles to back into traffic on major or minor arterials.

3. Ingress and Egress

The subdividing of land shall be such as to provide each lot with frontage on a public street. Where a private street is involved, lots and streets shall meet the requirements of Section 702.00 of this Article and be subject to the approval of the County Engineer.

4. Depth to Width Ratio of Lots

The Commission limits lots to a maximum ratio of 3.5 to 1 depth to width for the most efficient use of land. Exceptions shall only be limited to unusual topography or land which is determined by the Commission and the Township Trustees to be unbuildable.

706 BLOCKS

706.01 Provisions

The lengths, widths and shapes of blocks shall be determined with due regard to:

1. Provision of adequate building sites suitable to the special needs of the type of use contemplated.

ARTICLE VII – STANDARDS AND REQUIREMENTS FOR CONSTRUCTION OF IMPROVEMENTS

2. Zoning requirements and the requirements contained in these Regulations as to lot size and dimension.
3. Needs for convenient access, circulation, control and safety of street traffic.
4. Limitations and opportunities of topography.

706.02 Length

Blocks shall not exceed 1,800 feet in length except where topographical conditions require longer blocks, nor shall they be less than four hundred (400) feet in length. Wherever blocks are longer than 1,000 feet, sidewalk dedication between parallel streets not less than thirty (30) feet in width shall be required near the center of the block.

706.03 Width

Blocks shall contain two (2) rows of lots except where double and reverse frontage lots are allowed.

707 SIDEWALKS

Sidewalks shall be provided in any subdivision that meets one or more of the following criteria:

1. Subdivisions with twenty (20) or more lots. A minimum four (4) foot wide paved shoulder shall be provided in subdivisions with less than twenty (20) lots and marked as no parking on at least one side of the proposed street(s);
2. A phased development or subdivision where one or more street right-of-ways are extended to adjacent property lines to provide for future connections;
3. A subdivision which abuts an existing sidewalk;
4. Where otherwise required by township zoning.

The following minimum requirements shall be met for all sidewalks:

1. Sidewalks shall be included within the non-pavement right-of-way of all roads unless it falls into the fewer than 20 lots exemption described above.
2. Sidewalks shall be designed and improved to the specifications and requirements of the County Engineer.

ARTICLE VII – STANDARDS AND REQUIREMENTS FOR CONSTRUCTION OF IMPROVEMENTS

3. All sidewalks shall be maintained and replaced when necessary by the homeowner. In the event that the abutting property owner does not repair/replace said sidewalk, then the township trustees can complete the repairs and assess the property owner for the cost.

708 NEIGHBORHOOD OR PLANNED UNIT DEVELOPMENT

708.01 General

Neighborhood or planned unit type development is encouraged by the Commission. Where large subdivisions designed on the basis of neighborhood units are being reviewed, consideration will be given to the placement of commercial areas and public areas, in relation both to the neighborhood unit being developed and to other units that might be developed. Where small subdivisions are being reviewed, the Planning Commission shall coordinate such subdivisions, to the extent practicable, into units so that the same relationship, with respect to commercial areas and public areas, may be realized.

708.02 Exceptions In Neighborhood or Planned Unit Development

Whenever a subdivision is developed as a neighborhood or planned unit development, with adequate parks or playgrounds provided, and such neighborhood is protected from through traffic, the Commission may vary, with the consent of the County Engineer, the requirements of Sections 700 through 705 of Article VII, to allow the subdivider more freedom in the design and layout of lots. However, the Commission shall ensure the convenience, health, welfare and safety of the future residents of the subdivision and the adjacent property, the general welfare of the County and the intent and purpose of these Regulations.



ARTICLE VIII – PLATS AND DATA FOR MAJOR SUBDIVISIONS

801 SKETCH PLAN FORM

A Sketch Plan, prepared and signed by a Registered Surveyor, shall be submitted prior to the preparation of the Preliminary Plan. The Sketch Plan shall include:

1. The name, address and telephone number of the owner(s) of the land to be subdivided, as well as the surveyor, engineer or other agents.
2. The name of the subdivision, date, north point and bar scale of the plan.
3. Tax parcel number and vicinity map.
4. Existing and proposed zoning district and lot specifications.
5. Proposed lot layout and building envelopes.
6. Proposed roadways, recreational paths and sidewalks.
7. Proposed open space areas.
8. Blocks for future development.
9. Existing elevation contours.
10. Existing natural features, ex. streams, ponds, wood lots, hedgerows, etc.,
11. Existing structures within one hundred (100) feet of proposed project.

802 SUBMISSION OF PRELIMINARY PLAN

On reaching conclusion informally with the Commission's designee, Township and other reviewing agencies regarding the general program and objectives, the developer shall submit a Preliminary Plan and required supplemental information in accordance to Section 802.02 of the Subdivision Regulations to the Commission's designee. The Plan shall address the summary results of the Administrative Review.

802.01 Preliminary Plan Form

The Preliminary Plan shall be prepared and signed by a Registered Surveyor or Professional Engineer with his/her signature and stamp affixed on the Plan. The Plan shall be at a scale of not more than one hundred (100) feet to the inch, and may be prepared in pen or ink on a reproducible sheet. These Plan sheets shall be numbered in sequence if more than one (1) sheet is used. The size of the sheet shall be 24 inches x 36 inches.

802.02 Items Required for Submission of a Preliminary Plan

The following items must be submitted to the Planning Commission's designee at least thirty (30) working days prior to the regularly scheduled meeting of the Commission.

1. A completed application for Preliminary Approval shall be submitted by the applicant together with a fee as established by the Board of County Commissioners by Resolution,

ARTICLE VIII – PLATS AND DATA FOR MAJOR SUBDIVISIONS

2. A Preliminary Title Report shall be submitted by the applicant,
3. A minimum of six (6) folded copies of the Preliminary Plan, one (1) 11X17 reproducible copy of the Preliminary Plan and one (1) digital copy of the Preliminary Plan for distribution as outlined in Article V, Section 504. The Preliminary Plan shall comply in all respects with the Sketch Plan as approved or modified in response to comments made at the Administrative Review.
4. The Plan shall include all lands which the applicant proposes to subdivide and all land immediately adjacent extending one hundred (100) feet therefrom and of that directly opposite thereto, extending one hundred (100) feet from the street frontage of such opposite land, with the owner's name and parcel number as shown on the Lorain County tax records or the Auditor's files.
5. A list of all current adjoining property owners' names and mailing addresses, including those directly across the street, to be used for notification of subdivision meetings.
6. A copy of the Lorain County General Health District's letter of findings and recommendations after their intermediate (second) Stage review shall be submitted. The Health District's review letter shall indicate the approximate number and type of sanitary disposal systems that may be approved for the particular subdivision. The Health District's review shall have been completed no more than one (1) year before the Preliminary Plans are submitted to the Planning Commission for review.
7. If sanitary sewers are to be extended, a letter of intent and ability to provide wastewater treatment service within two calendar years from a regional or community wastewater treatment facility must be provided.
8. A minimum of six (6) copies of the Preliminary Storm Water and Improvement Plans and one (1) copy of the drainage and storm water calculations as described in the Lorain County Engineer's specifications shall be submitted to the Commission for distribution. This plan shall be on separate sheets from the Preliminary Plan for clarity.
9. If a zoning change is involved, an affidavit from the Township Trustees and the Zoning Inspector indicating approval and date of such zoning change must accompany the Preliminary Plan.

802.03 Contents of Preliminary Plan

The Preliminary Plan shall include, at a minimum, the following features:

1. The location of the land to be subdivided with respect to surrounding property and streets, the names of all adjoining property owners of record, or the names

ARTICLE VIII – PLATS AND DATA FOR MAJOR SUBDIVISIONS

of the adjoining developments, and the location of all existing and proposed streets.

2. The location and width of all existing and proposed easements, waterbodies, drainage courses, streams and crosswalks. If any portion of the subdivision is located in a 100 year floodplain, the flood fringe, floodway and base flood elevations (if available) must be identified on the Preliminary Plan. Where base flood elevations are not available, the approximate floodplain shall be located on the Preliminary Plan.
3. The location and size of all existing buildings and the dimensions of the minimum building setback lines as defined by the local Zoning Resolution. For the purpose of determining depth to width, the width at the minimum building setback line as established by the township shall be used.
4. The location and dimensions of all property to be set aside for park and playground uses, or other public or private reservations, with designation of the purpose thereof, and conditions, if any, of the dedication or reservation.
5. The subdivision shall be referenced to the nearest road intersection, original lot line or Township boundary line.
6. The name, address and telephone number of the owner(s) of the land to be subdivided, as well as the surveyor, engineer or other agents.
7. The name of the subdivision, date, north point and bar scale of the plan.
8. The date of any revisions to the plan.
9. The indication and size of all uses other than residential.
10. Zoning classification of the area in which the subdivision is located as well as the area adjacent to the site.
11. The general location and size of all utilities (existing and proposed) including but not limited to the nearest water main, sanitary or storm sewer, electric, telephone, gas and cable lines.
12. All lots shall be numbered consecutively in unit increments as prescribed by the County Engineer.
13. Topographical information shall accompany the Preliminary Plan on a separate sheet or on the drawing itself. The elevations must be based on the current datum as determined by the United States Coast and Geodetic Survey. Contours at an interval of not more than two (2) feet shall be required.

ARTICLE VIII – PLATS AND DATA FOR MAJOR SUBDIVISIONS

803 SUBMISSION OF FINAL PLAT

The subdivider, having received approval of the Preliminary Plan, Erosion and Sediment Control Plan, Comprehensive Storm Water Management Plan and Improvement Plans of the proposed subdivision, shall submit a Final Plat of said subdivision to the Commission's designee. The Final Plat shall be prepared and signed by a Registered Surveyor and drawings and specifications of the improvements shall be prepared by a Registered Engineer. The Final Plat shall have incorporated all changes in the Preliminary Plan required by the Commission. Otherwise, it shall conform to the Preliminary Plan and it may constitute only that portion of the approved Preliminary Plan which the subdivider proposes to record and develop at the time.

803.01 Final Plat Form

The Final Plat must be drawn to a scale not less than one hundred (100) feet to the inch and preferably fifty (50) feet to the inch, where possible. If more than two (2) sheets are required, an index sheet of the same dimension must be filed showing the entire subdivision on one (1) sheet, with all areas shown on other sheets indicated thereon. Drawing shall be 24 x 36 inches and must be drawn in permanent ink on reproducible paper. In plats of unusual size, the Commission may permit a variation in scale, but sheets shall not exceed 24 x 36 inches. The minimum lettering height shall be 1/8 of an inch and spacing and line width must ensure legibility for copying and scanning. If the Final Plat contains more than one (1) page, the pages shall be numbered sequentially.

803.02 Items Required for Submission of a Final Plat

The following items shall be submitted with the Final Plat:

1. An application shall be submitted on forms available at the office of the Commission's designee.
2. A minimum of six (6) folded copies of the Final Plat, one (1) 11X17 reproducible copy of the Final Plat and one (1) digital copy of the Final Plat shall be submitted to the Commission for distribution as outlined in Article V, Section 505. The Final Plat shall include the entire subdivision, or section thereof, which derives access from an existing State, County or Township highway.
3. A minimum of two (2) copies of the Comprehensive Storm Water Management Plan and Improvement Plans as approved by the Lorain County Engineer. This plan shall be on separate sheets from the Final Plat for clarity.
4. A letter from the County Engineer indicating that all improvements have been installed and at least conditionally approved.

ARTICLE VIII – PLATS AND DATA FOR MAJOR SUBDIVISIONS

5. A letter from the Soil and Water Conservation District indicating that the developer is in compliance with their approved Erosion and Sediment Control Plan.
6. A copy of the Letter of Map Revision/Amendment and all supporting documentation when Base Flood Elevations have been determined.
7. A signed Open Space Agreement with the Township per Section 802.
8. A copy of any covenants and restrictions governing the subdivision.
9. The Final Plat shall also include, if applicable, all formal irrevocable offers of dedication to the public of all streets, local government uses, utilities, parks, and easements in the form as provided for in Article IX of these Regulations.
10. Any contracts for service through a private utility company which will serve said subdivision shall be submitted with the Final Plat Application. Also included shall be any other private contract as may be required by the Commission in the case of a "private" subdivision based on reasonable standards for the health, safety and general welfare of the future tenants of such subdivision.

803.03 Contents of Final Plat

The Final Plat must show:

1. The boundary lines of the area being subdivided in heavy lines with accurate distances and bearings, including original lot, township, corporation and county lines, and road centerlines.
2. The property lines of all proposed streets and alleys with their widths, names, bearings and centerline measurements. Also complete curve information which includes delta, radius, chord, tangent, arc, and bearing must be included and all monuments used to locate street must be shown.
3. All common boundary corners of adjoining lands and adjacent streets and alleys with their widths and names. The name of adjoining subdivisions, with sub-lots shown, and the name of record owners of adjoining parcels of unplatted land with parcel numbers shown.
4. Easements for public use, services or utilities and their dimensions.
5. Minimum building setback lines as established by the township with dimensions.
6. If any portion of the subdivision is located in a 100 year floodplain, the flood fringe, floodway and base flood elevations must be identified on the Final Plat.

ARTICLE VIII – PLATS AND DATA FOR MAJOR SUBDIVISIONS

7. All dimensions, linear and angular with as many bearings as necessary to describe boundary lines of all lots, streets, alleys, easements and areas for public or private use expressed in decimals of a foot, the number of acres of each reserve, park, playground and other public area.
8. All blocks must be identified by acreage and designated uses.
9. All sub-lots shall be numbered consecutively in numerical unit.
10. Radii and chords, points of tangency; control angles for all curvilinear street centerlines and radii for all rounded corners.
11. Arcs, chord lengths, bearings of chords and points of tangency of the property lines of curvilinear lines.
12. The name of the Subdivision and a general description of property subdivided showing its location and extent, date, points of compass, bar scale of plat, dedication of streets and other public open spaces, name of owner(s) and subdivider, together with appropriate evidence of ownership of subdivision.
13. The date of any revisions to the Plat.
14. Acreages in sub-lots, streets, blocks and parks and in other open spaces in legend form.
15. A key map.
16. Certification by a Surveyor, registered in the State of Ohio, to the effect that the plan represents a survey made by him in which the traverse of the exterior boundaries of the tract and of each block when computed from field measurements of the ground closed within a limit of error of one (1) foot to ten thousand (10,000) feet of the perimeter before balancing the survey, and that all the required survey monuments are correctly shown thereon and that those which are necessary for construction of improvements are in place on the site with any remaining survey monuments to be properly placed upon completion of construction.
17. Proper acknowledgement of consent on the Plat by all parties having any record, legal right, title or interest in the property.
18. All required statements, certificates and signatures as required in Article IX of these Regulations.
19. Upon recording of a Subdivision Final Plat, two (2) reproducible copies shall become the property of the County and shall remain on file in the office of the

ARTICLE VIII – PLATS AND DATA FOR MAJOR SUBDIVISIONS

County Engineer (Tax Map Office) except when out for reproduction. A print of the recorded Final Plat shall be deposited by the subdivider in the office of the Commission, the office of the County Engineer and the office of the affected political subdivision. Additionally, two (2) paper copies must be supplied for the auditor's use.

ARTICLE IX
REQUIRED STATEMENTS AND SIGNATURES TO BE AFFIXED ON THE
SUBDIVISION PLAT

901 OWNER'S CERTIFICATE

Situated in the Township of _____, County of Lorain, State of Ohio, and being a part of original lot _____ of said Township containing _____ acres, and being the same tract as conveyed to _____ and described in the deed recorded in Deed Volume _____, Page _____, in the Office of the Recorder, Lorain County, Ohio.

The undersigned _____ (set forth all parties having legal title or interest of record in the parcel) hereby certify that the attached plat represents _____ (Name of Subdivision) a subdivision of lots _____ to _____, inclusive, do hereby acknowledge this plat of same and dedicate to public (private) use as such, all or parts of the roads, boulevards, cul-de-sacs, easements, parks or recreation areas, planting or reserved strips, etc., shown herein and not heretofore dedicated.

The undersigned further agrees that any use of improvements made on this land shall be in conformity with all existing platting, zoning, health or other lawful rules or regulations including the applicable off-street loading and parking requirements of Lorain County, Ohio, for the benefit of himself (themselves) and all other subsequent parties taking title from, under or through the undersigned.

The dimensions of the lots and streets are shown on the plat in feet and decimal parts thereof. Easements are reserved where indicated on the plat for public utility purposes above and beneath the surface of the ground.

In witness thereof the undersigned have hereunto set their hands this _____ day of _____, 20_____.

Witness _____

Signed _____

NOTARIAL SEAL

STATE OF OHIO
COUNTY OF LORAIN

Before me a Notary Public in and for said County and State did personally appear _____, who acknowledged the signing of this plat to be their own free act and deed for the uses and purposes therein expressed.

In witness thereof I have hereunto set my hand and affixed my official seal this _____ day of _____, 20_____.

(Seal)

By: _____, Notary Public

ARTICLE IX
REQUIRED STATEMENTS AND SIGNATURES TO BE AFFIXED ON THE
SUBDIVISION PLAT

902 MORTGAGEE'S CERTIFICATE (IF APPLICABLE)

This is to certify that _____ as _____

and _____ as _____

Mortgagee of lands shown hereon, do hereby accept this plat of " _____ "

to be correct and dedicate to public use for road purposes, the roads as shown hereon.

Witness _____

Signed _____

NOTARIAL SEAL

STATE OF OHIO
COUNTY OF LORAIN S.S.

Before me, a notary public in and for said county and state did personally appear the above signed Mortgagee who acknowledged the signing of this plat to be their own free act and deed.

In testimony whereof I have hereunto set my hand and official seal this _____ day of _____, 20 _____.

By: _____, Notary Public

(Seal)

903 SURVEYOR'S CERTIFICATE

This is to certify that at the request of the owners I have surveyed and platted " _____ " as shown hereon and containing _____ acres of land in Original Lot _____ of _____ Township, Lorain County, Ohio. At all points thusly indicated _____ (insert symbol), iron pin monuments were found and at all points thusly indicated _____ (insert symbol), iron pin monuments were set. Distances are shown in feet and decimal parts thereof. Bearings shown are assumed and used to describe angles only. The plan represents a survey in which the traverse of the exterior boundaries of the tract and of each block when computed from field measurements of the ground closed within a limit of error of one (1) foot to ten thousand (10,000) feet of the perimeter before balancing the survey. All of which I certify to be correct.

By _____

Registered Surveyor No. _____

ARTICLE IX
REQUIRED STATEMENTS AND SIGNATURES TO BE AFFIXED ON THE
SUBDIVISION PLAT

904. **APPROVAL OF SUBDIVISION ENDORSEMENTS**

Signatures of Approval of a Subdivision Plat should be obtained in the following order and format.

Approved this ____ day of _____, 20____

 Lorain County Engineer

Approved this ____ day of _____, 20____

 Lorain County Sanitary Engineer

Approved this ____ day of _____, 20____

 Lorain County General Health District

Approved this ____ day of _____, 20____

 Lorain County Soil and Water
 Conservation District

Approved this ____ day of _____, 20____

 Chairman, Board of Township Trustees

Approved as to form this ____ day of _____, 20____

 Lorain County Prosecutor's Office

Approved this ____ day of _____, 20____

 Director, Lorain County Community
 Development Department

Filed for Record this ____ day of _____, 20____,
 at _____, ____m. Recorded this ____ day of
 _____, 20____ in Plat Book _____,
 Page No. _____

 Lorain County Recorder

- All Subdivisions shall be approved by the affected Township's Board of Trustees prior to the final approval of any subdivision plat.
- When central wastewater treatment is to be provided, the provider's name shall be substituted for the Health District.
- The Commission's designee will be the last signature on the plat prior to submittal to the County Tax Map Office.



LORAIN COUNTY SUBDIVISION REGULATIONS

Fee Schedule

Minor Subdivision	\$40.00 per lot
Major Subdivision	
Preliminary Plan	\$200.00 for 1 – 5 lot Subdivision \$100.00 plus \$20 per lot in Subdivisions over 5 lots
Final Plat	\$200.00 for 1 – 5 lot Subdivision \$100.00 plus \$20 per lot in Subdivisions over 5 lots
Plan Re-submittal*	\$200.00 if there are no changes to lot layout \$200.00 plus \$20 per lot changed
Replat	\$40.00 per lot
Extension Request	\$100.00 per request
Variance Request	\$100.00 per request

*Any subdivision disapproved or tabled for additional information/Planning Commission reconsideration is considered a resubmission and charged accordingly.

Revised September 4, 2019



NPDES – PHASE II

**LORAIN COUNTY
EROSION & SEDIMENT CONTROL REGULATIONS**

**Effective – June 29, 2008
Addendum – November 19, 2009
Updated – November, 2016**

Administrator:

**Lorain Soil & Water Conservation District Agricultural Center
42110 Russia Road
Elyria, Ohio 44035**

**Phone – 440-326-5800
Fax – 440-326-5807**

www.lorainswcd.com

REFERENCES

The standards and specifications for Best Management Practices are contained within the

**Rainwater and Land Development Manual, Ohio's Standards For
Storm Water Management, Land Development and Urban Stream Protection, current
edition**

published in cooperation with:

Ohio Department of Natural Resources Division of Soil and Water Conservation
U.S.D.A. Natural Resource Conservation Service Ohio Environmental Protection Agency

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LORAIN COUNTY EROSION & SEDIMENT CONTROL RULES

1. Purpose and Scope

1.1 The Lorain County Board of Commissioners adopts these Erosion and Sediment Control Rules, pursuant to Ohio Revised Code, Section 307.79, to establish technically feasible and economically reasonable standards to achieve a level of management and conservation practices in order to abate soil erosion and degradation of the waters of the State by soil sediment on land used or being developed for non-farm commercial, industrial, residential or other non-farm purposes, to establish criteria for determination of the acceptability of such management and conservation practices, and to implement Phase II of the storm water program of the National Pollutant Discharge Elimination System (NPDES) established in 40 CFR Part 122, and to promote the health, safety and well-being of the residents of Lorain County. Specifically, the Rules are intended to protect:

- a) Adjacent landowners from property loss due to sedimentation, erosion and flooding.
- b) County and township ditches, culverts and storm sewers from loss of capacity due to siltation.
- c) Water and habitat quality in streams and wetlands.

1.2 These Rules apply to soil-disturbing activities on land within the unincorporated area of Lorain County used or being developed for non-farm commercial, industrial, residential, or other non-farm purposes, including, but not limited to, individual or multiple lots, subdivisions, multi-family developments, commercial and industrial developments, recreational projects, general clearing and grading projects, underground utilities, highways, building activities on farms, redevelopment of urban areas and all other uses unless expressly excluded as follows:

- a) Activities related to producing agricultural crops or silviculture operations or areas regulated by the Ohio Agricultural Sediment Pollution Abatement Rules.
- b) Strip mine and surface mine operations.

1.3 An Erosion and Sediment Control Plan is not required before clearing, grading, excavating, filling or otherwise wholly or partially disturbing less than one contiguous acre of land owned by one person or operated as one development unit for the construction of non-farm buildings, structures, utilities, recreational areas or other similar non-farm uses; however, areas of

less than one contiguous acre are not exempt from compliance with all other provisions of these Rules.

1.4 An Erosion and Sediment Control Plan is not required for a public highway, transportation, or drainage improvement or maintenance thereof undertaken by a government agency or political subdivision in accordance with a statement of its Standard Sediment Control Policies that is approved by the Lorain County Board of Commissioners or the Chief of the ODNR Division of Soil and Water Conservation.

1.5 No soil disturbing activities shall commence without compliance with these rules.

1.6 Disclaimer of Liability

Compliance with the provisions of this regulation shall not relieve any person from responsibility for damage to any person otherwise imposed by law. The provisions of this regulation are promulgated to promote the health, safety, and welfare of the public and are not designed for the benefit of any individual or for the benefit of any particular parcel of property.

1.7 Conflicts, Severability, Nuisances and Responsibility

- (a) Where this regulation is in conflict with other provisions of law or ordinance, the most restrictive provisions shall prevail.
- (b) If any clause, section, or provision of this regulation is declared invalid or unconstitutional by a court of competent jurisdiction, the validity of the remainder shall not be affected thereby.
- (c) This regulation shall not be construed as authorizing any person to maintain a private or public nuisance on their property, and compliance with the provisions of this regulation shall not be a defense in any action to abate such a nuisance.
- (d) Failure of the County to observe or recognize hazardous or unsightly conditions or to recommend corrective measures shall not relieve the site owner from their responsibility for the condition or damage resulting therefrom, and shall not result in the County, its officers, employees, or agents being responsible for any condition or damage resulting therefrom.

2 Terms Defined

2.1 Interpretation of Terms and Words

- (a) Words used in the present tense include the future tense and the singular include the plural, unless the context clearly indicates the contrary.
- (b) The term "shall" is always mandatory and not discretionary. The word "may" is permissive. The term "should" is permissive but indicates strong suggestion.
- (c) The word or term not interpreted or defined by this section shall be construed according to the rules of grammar and common usage so as to give these Rules their most reasonable application.

2.2 Definitions

Abbreviated Erosion and Sediment Control Plan (Abbreviated ESC Plan): The written document that sets forth the plans and practices to be used to meet the requirements of this regulation.

Accelerated Soil Erosion: The increased loss of the land surface that occurs as a result of human activities.

Acre: A unit of measure equaling 43,560 square feet.

Administrator: The person or entity having the responsibility and duty of administering and ensuring compliance with these Rules. The Administrator shall be appointed by the Board of Lorain County Commissioners.

Best Management Practices: Structural or nonstructural facilities or activities that control soil erosion and/or storm water runoff at a development site. Includes treatment requirements, operating and maintenance procedures, or other practices to control site runoff, leaks, or waste disposal.

Buffer Area: A designated transitional area around a stream or wetland left in a natural, usually vegetated, state so as to protect a stream or wetland from runoff pollution. Construction activities in this area shall be restricted or prohibited based on the sensitivity of the stream or wetland and the recommendation of the Administrator.

Channel: A natural or manmade bed or ditch, existing or excavated for the conveyance of water.

Common Plan of Development: A term used to define the entire scope of a development project, both on-site and off-site, regardless of ownership, including phases (future and existing), sublots, and parcels of development, associated easements, road and utility right of ways, and other land development or soil disturbances in support of the development project.

Clean Water Act: The Federal Water Pollution Control Act enacted in 1972 by Public Law 92-500 and amended by the Water Quality Act prohibits the discharge of pollutants to Waters of the United States unless said discharge is in accordance with an NPDES permit. The 1987 amendments include guidelines for regulating municipals, industrial, and construction storm water discharges under the NPDES permit.

Conservation: The development of land using alternative layout and building arrangements in order to better conserve open space and retain natural resources.

Critical Area: Any portion of an area subject to this Rule the disturbance of which would cause soil erosion and sediment run-off and damage to private properties, water courses, storm sewers or public lands due to topography, soil type, hydrology or proximity to a water course. These areas include, but are not limited to, riparian areas, wetlands and highly erodible soils.

Cut: An excavation that reduces an existing elevation, as in road or foundation construction.

Development Area: A contiguous area owned by one person or persons, or operated as one development unit, and used or being developed for non-farm commercial, industrial, residential or other institutional construction or alteration which changes the runoff characteristics of a parcel of land.

Development Project: An area of land, parcel or parcels, portions of parcels, and associated land disturbance that is being developed, redeveloped, or disturbed in support of development, for non-farm commercial, industrial, residential or other institutional construction or alteration which changes, either permanently or temporarily, the runoff characteristics or grade of the lands therein.

Disturbed Area: An area of land subject to erosion due to the removal of vegetative cover and/or soil moving activities, including filling.

Ditch: An open channel, either dug or natural, for the purpose of drainage or irrigation with intermittent flow.

Drainage: The removal of excess surface water or groundwater from land by surface or subsurface drains.

Drainage Surface Area: An area, measured in a horizontal plane, enclosed by a topographic divide from which surface runoff from precipitation normally drains by gravity into a stream above the specified point of measurement.

Drainage Improvement: An improvement as defined in O.R.C. 6131.01(C), and/or conservation works of improvement as defined in O.R.C. 1511 and 1515.

Drainage Way: A natural or manmade channel, ditch, or waterway that conveys surface water in a concentrated manner by gravity. See also watercourse, channel, stream.

Dumping: A grading, pushing, piling, throwing, unloading or placing.

Earth Material: The soil, sediment, rock, sand, gravel and organic material or residue associated with or attached to the soil.

Engineer: A Professional Engineer registered in the State of Ohio.

Erosion: The process by which the land surface is worn away by the action of wind, water, ice, gravity or any combination of those forces.

Erosion and Sediment Control: The control of soil material, both mineral and organic, during soil-disturbing activity to prevent its transport out of the disturbed area by means of wind, water, ice or gravity.

Erosion Sediment Control Plan: The written document meeting the requirements of Sections 3, 4 and 5 of these Rules which sets forth the plans and practices to be used to minimize soil erosion and prevent off-site disposal of soil sediment by containing sediment on-site or bypassing sediment-laden runoff through a sediment control measure during and after land development.

Farm: Land or water devoted to agricultural uses as defined in O.R.C. 519.01 including farming; ranching; aquaculture; horticulture; viticulture; animals; poultry husbandry and the production poultry products; dairy production; the productions of field crops, tobacco, fruits, vegetables, nursery stock, ornamental shrubs, ornamental trees, flowers, sod, or mushrooms; timber; pasturage, any combination

of the foregoing; the processing, drying, storage, and marketing of agricultural products when those activities are conducted in conjunction with, but are secondary to, such husbandry or production.

Final Stabilization: All soil-disturbing activities at the site have been completed and a uniform perennial vegetative cover with a density of at least 70% cover for all disturbed areas has been established or equivalent stabilization measures, such as the use of mulches or geo-textiles, have been employed.

Grading: The excavating, filling, or stockpiling of earth material, or any combination thereof, including the land in its excavated or filled condition.

Grassed Waterway: A broad or shallow natural watercourse or constructed channel, covered with erosion-resistant grasses or similar vegetative cover, used to convey surface water.

Impervious: That which does not allow infiltration.

Landscape Architect: A Professional Landscape Architect registered in the State of Ohio.

Landslide: A rapid mass movement of soil and rock moving downhill under the influence of gravity.

Multi-family Development: Apartments, condominiums, duplexes or other similar buildings housing more than one family.

Natural Waterway: A waterway that is part of the natural topography, which usually maintains continuous or seasonal flow during the year and is characterized as being irregular in cross-section with a meandering course.

NPDES: National Pollutant Discharge Elimination System, a regulatory program in the Federal Clean Water Act that prohibits the discharge of pollutants into surface waters of the United States without a permit.

Parcel: Means a tract of land occupied or intended to be occupied by a use, building or group of buildings and their accessory uses and buildings as a unit, together with such open spaces and driveways as are provided and required. A parcel may contain more than one contiguous lot individually identified by a 'Permanent Parcel Number' assigned by the Lorain County Auditor's Office.

Person: An individual, corporation, firm, trust, commission, board, public or private partnership, joint venture, agency, unincorporated association, municipal corporation, county or state agency, federal government or any combination thereof.

Phasing: Clearing a parcel of land in distinct sections, with the stabilization of each section before the clearing of the next.

Pre-Construction Meeting: A meeting between the Administrator and all principal parties, prior to the start of any construction, at a site that requires an Erosion Sediment Control Plan.

Pre-Winter Stabilization Meeting: A meeting between the Administrator and all principal parties, prior to October 1, in order to plan winter erosion and sediment controls for a site that requires an Erosion Sediment Control Plan.

Rainwater and Land Development Manual: Ohio's standards for storm water management, land development, and urban stream protection. Developed by the Ohio Department of Natural Resources, the U.S. Department of Agriculture Natural Resource Conservation Service, and the Ohio Environmental Protection Agency. The most current edition of these standards shall be used with this regulation.

Sediment: The soils or other surface materials that can be transported or deposited from its site of origin by the action of wind, water, ice or gravity as a product of erosion.

Sedimentation: The deposit of sediment in water bodies.

Sediment Basin: A temporary barrier or other suitable retention structure built across an area of water flow to intercept runoff and allow transported sediment to settle and be retained prior to discharge into waters of the State.

Sediment Pollution: The degradation of waters of the State by sediment as a result of failure to apply management or conservation practices to abate wind or water soil erosion, specifically in conjunction with soil-disturbing activities on land used or being developed for commercial, industrial, residential or other non-farm purposes.

Silviculture: The activity for which the primary purpose is the growing, managing and harvesting of a merchantable forest product of commercial species under accepted silvicultural systems through natural or artificial reforestation methods and for which there is an approved forest management plan.

Sloughing/Slumping: A slip or downward movement of an extended layer of soil resulting from the undermining action of water or the soil-disturbing activity of man.

Soil Conservation: The use of the soil within the limits of its physical characteristics and protecting it from unalterable limitations of climate and topography.

Soil-Disturbing Activity: A clearing, grading, excavating, filling or other alteration of the earth's surface where natural or man-made ground cover is destroyed, which may result in, or contribute to, erosion and sediment pollution. Grubbing and stump removal that occurs during clearing or timber activities constitutes a soil disturbing activity.

Soil and Water Conservation District: An entity organized under Chapter 1515 of the Ohio Revised Code referring either to the Soil and Water Conservation District Board or its designated employee(s), hereinafter referred to as the Lorain SWCD.

Soil Loss: The soil moved from a given site by the forces of erosion, measured using "T."

Stabilization: The installation of vegetative and/or structural measures to establish a soil cover in order to reduce soil erosion by storm water runoff, wind, ice, and gravity.

Stream or Watercourse: Shall have the same meaning as "water of the state" contained in O.R.C. 6111.01 and shall include all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs irrigation systems, drainage systems, and other bodies or accumulations of water, surface and underground,

natural or artificial, regardless of the depth of the strata in which underground water is located, that are situated wholly or partly within, or border upon, this state, or are within its jurisdiction, except those private waters that do not combine or effect a junction with natural surface or underground waters.

Storm Drain: A conduit, pipe or human-made structure, which serves to transport storm water runoff. Storm Water Pollution Prevention Plan: (SWP3): The written document that sets forth the plans and practices to be used to meet the requirements of the NPDES permit.

Storm Water Runoff: The direct response of a watershed to precipitation, which includes the surface and subsurface runoff that enters a stream, ditch, storm sewer or other concentrated flow during and following the precipitation.

Subsoil: That portion of the soil below the topsoil or plow layer, beginning 6-12" below surface down to bedrock parent material.

T: The soil loss tolerance expressed in tons per acre per year as determined by the USDA Revised Universal Soil Loss Equation (RUSLE).

Temporary Soil Erosion and Sediment Control Measures: Interim control measures, which are installed or constructed to control soil erosion or sedimentation until permanent soil erosion control measures are established.

Topsoil: The upper layer of soil that is usually darker in color and richer in organic matter and nutrients than the subsoil.

Unstable Soils: A portion of land surface or area which is prone to slipping, sloughing, landslides or is identified by Natural Resource Conservation Service, USDA methodology as having low soil strength.

Water Resource: Any public or private body of water including lakes or ponds, and streams, gullies, swales, or ravines having banks, a defined bed, a permanent watermark and a definite direction of course, either continuously or intermittently flowing.

Watershed: The total drainage area contributing runoff to a single point.

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 CFR 232, as amended).

3. Regulated Activities.

No person shall cause or allow soil-disturbing activities, land clearing, grading, excavating or filling within the scope of these Rules without full compliance with the requirements set forth in these Rules and all applicable fees are paid.

- 3.1 When a proposed soil-disturbing activity on land used or being developed, either wholly or partially, for non-farm residential, commercial, industrial, or other non-farm purposes consisting

of one or more contiguous acres of land owned by one person or operated as one development unit for the construction of non-farm buildings, structures, utilities, recreational areas or other limited non-farm uses, the owner of said land shall prepare and file with the Administrator an Erosion and Sediment Control (ESC) plan. Areas of less than one contiguous acre shall not be exempt from compliance with all other provisions of these Rules.

- 3.2 When a residential dwelling unit is proposed on an individual lot of one or more acres or a lot which is part of a large common plan of development, the owner of said land shall prepare and file with the Administrator an Abbreviated Erosion and Sediment Control (ESC) plan, which shall consist of items listed in Section 4.11 of this document. A copy of the Ohio EPA Notice of Intent or General Permit authorization shall be provided.
- 3.3 When a residential dwelling unit on an individual lot is proposed, which is not part of a larger common plan of development and less than one-acre, the owner of said land shall not be required to prepare and file an Erosion and Sediment Control Plan; however, said owner shall comply with all other provisions of these Rules.
- 3.4 The submitted ESC plan must be approved by the Administrator of these Rules prior to the start of any soil-disturbing activity. The owner of said land shall notify the Administrator no less than two (2) working days before the start of soil-disturbing activity. The Administrator shall also be notified by the owner no later than two (2) working days after project completion. Failure to comply may result in the issuance of a stop work order, additional fees, and/or other adverse actions such as fines.
- 3.5 The ESC plan shall be submitted to the Administrator for review no less than thirty (30) working days prior to any soil-disturbing activity at the proposed site.
- 3.6 The ESC plan shall contain narrative and drawings that explain practices to be used to prevent soil erosion and off-site discharge of soil sediment during and after land development. (See Section 5 for plan requirements and review schedules.)
- 3.7 Erosion and sediment control practices used to satisfy the performance criteria of these Rules shall meet the specifications provided in the current edition of Rainwater & Land Development Manual, Ohio's Standards for Storm Water Management and Land Development, and Urban Stream Protection, published by the Ohio Department of Natural Resources and Provisions of the Lorain County Floodplain Regulations. (See Section 4 for performance standards and requirements.)
- 3.8 Approvals issued in accordance with this regulation do not relieve the applicant of responsibility for obtaining all other necessary permits and/or approvals from the Ohio EPA, the US Army Corps of Engineers, and other federal, state, and/or county agencies. If requirements vary, the most restrictive requirement shall prevail. These permits may include, but are not limited to, those listed below. All submittals required showing proof of compliance with these state and federal regulations shall be submitted with Erosion and Sediment Control Plans or Abbreviated Erosion and Sediment Control Plans to the Administrator.
 - (a) Ohio EPA NPDES Permits authorizing storm water discharges associated with construction activity or the most current version thereof. Proof of compliance with these requirements shall be the applicant's Notice of Intent (NOI) number from Ohio EPA, a copy of the Ohio EPA Director's Authorization Letter for the NPDES Permit, or a letter from the site owner certifying and explaining why the NPDES Permit is not applicable.

- (b) Section 401 of the Clean Water Act: Proof of compliance shall be a copy of the Ohio EPA Water Quality Certification application tracking number, public notice, project approval, or a letter from the site owner certifying that a qualified professional has surveyed the site and determined that Section 401 of the Clean Water Act is not applicable. Wetlands, and other waters of the United States, shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.
- (c) Ohio EPA Isolated Wetland Permit: Proof of compliance shall be a copy of Ohio EPA's Isolated Wetland Permit application tracking number, public notice, project approval, or a letter from the site owner certifying that a qualified professional has surveyed the site and determined that Ohio EPA's Isolated Wetlands Permit is not applicable. Isolated wetlands shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.
- (d) Section 404 of the Clean Water Act: Proof of compliance shall be a copy of the U.S. Army Corps of Engineers Individual Permit application, public notice, or project approval, if an Individual Permit is required for the development project. If an Individual Permit is not required, the site owner shall submit proof of compliance with the U.S. Army Corps of Engineer's Nationwide Permit Program. This shall include one of the following:
- (1) A letter from the site owner certifying that a qualified professional has surveyed the site and determined that Section 404 of the Clean Water Act is not applicable.
 - (2) A site plan showing that any proposed fill of waters of the United States conforms to the general and special conditions specified in the applicable Nationwide Permit. Wetlands, and other waters of the United States, shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.
- (e) Ohio Dam Safety Law: Proof of compliance shall be a copy of the ODNR Division of Water permit application tracking number, a copy of the project approval letter from the ODNR Division of Water, or a letter from the site owner certifying and explaining why the Ohio Dam Safety Law is not applicable.
- 3.9 The ESC plan shall be certified by a professional engineer, professional surveyor or certified professional erosion and sediment control specialist or landscape architect registered in the State of Ohio.
- 3.10 The owner of said land and the developer, engineer and contractor of the project, and other principal parties, shall meet with the Administrator for a Pre-Construction Meeting no less than seven (7) days prior to soil-disturbing activity at the site in order to ensure that erosion and sediment control devices are properly installed, limits of disturbance and buffer areas are properly delineated and construction personnel are aware of such devices and areas. Pre-Construction Meetings for Abbreviated ESC Plans may be waived at the discretion of the Administrator.
- 3.11 The approved erosion and sediment control plan shall be kept at the development site and made available to contractors, site managers, inspectors, and the administrators of these regulations.

- 3.12 The project engineer shall perform first inspection of erosion and sediment control devices to certify that the 'as built' condition complies with the approved plan no less than two (2) working days prior of the start of the project. An inspection report shall be produced and kept at the development site and be made available to the Administrator within seven (7) working days from the date of inspection.
- 3.13 All project activity shall be subject to monitoring. A record of site inspections and compliance and non-compliance shall be maintained by the Administrator.
- 3.14 If the site is, or planned, to remain active through the winter months, a Pre-Winter Stabilization Meeting shall be held by the owner of said land and the developer, engineer and contractor of the project and the Administrator prior to October 1, in order to plan and approve winter erosion and sediment controls as defined in the most current edition of Rainwater and Land Development Manual Ohio's Standards for Storm Water Management and Land Development and Urban Stream Protection published by the Ohio Department of Natural Resources.
- 3.15 Upon completion of all construction and final stabilization of the entire construction site, the owner of said land shall contact the Administrator through written notification that construction is complete and final stabilization has been achieved.

4. Performance Standards

All properties adjacent to the site of soil-disturbing activity shall be protected from soil erosion and sediment run-off and damage, including, but not limited to, private properties, natural and artificial waterways, wetlands, storm sewers and public lands.

Construction site erosion and sediment control practices used to satisfy this requirement shall conform, as a minimum, to State of Ohio standards as set forth in the most-current edition of the *Rainwater and Land Development Manual* and as defined by the Ohio Department of Natural Resources Division of Soil and Water Conservation and Natural Resource Conservation Service and shall conform to the most current Ohio Environmental Protection Agency, Ohio Revised Code Chapter 6111, requirements. The ESC Plan is intended to be the same as the erosion control portion of the SWP3 required in the Ohio EPA's General Storm Water permit. All SWP3 requirements listed in the General permit must also be met.

Erosion and sediment control plan approvals issued in accordance with these Rules do not relieve the owner of responsibility for obtaining all other necessary permits and/or approvals from federal, state and/or county agencies. If requirements vary, the most stringent requirement shall be followed.

Erosion and sediment control practices at the site, and as identified in the ESC plan, shall comply with the following:

The ESC Plan must contain a description of the controls appropriate for each construction operation and the applicant must implement such controls. The ESC Plan must clearly describe for each major construction activity the appropriate control measures; the general sequence during the construction process under which the measures will be implemented; and the contractor responsible for implementation (e.g., contractor A will clear land and install perimeter controls and contractor B will maintain perimeter controls until final stabilization). The controls shall include the following minimum components:

- 4.1 NON-STRUCTURAL PRESERVATION MEASURES: The ESC Plan must make use of practices that preserve the existing natural condition to the

maximum extent practicable. Such practices may include preserving riparian areas, reserving existing vegetation and vegetative buffer strips, phasing of construction operations in order to minimize the amount of disturbed land at any one time, and designation of tree preservation areas or other protective clearing or grubbing practices. Soil compaction shall be minimized and, unless infeasible, topsoil shall be preserved. Provide and maintain a 50-foot buffer of undisturbed natural vegetation around surface waters of the state, or riparian or wetland setbacks, if applicable, whichever is greater, unless maintaining this buffer is infeasible (e.g., stream crossings for roads or utilities, or for channel and floodplain rehabilitation and restoration). Direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration.

4.2 EROSION CONTROL PRACTICES: The ESC Plan must make use of erosion controls that are capable of providing cover over disturbed soils. A description of control practices designed to restabilize disturbed areas after grading or construction shall be included in the ESC Plan. The ESC Plan must provide specifications for stabilization of all disturbed areas of the site and provide guidance as to which method of stabilization will be employed for any time of the year. Such practices may include: temporary seeding, permanent seeding, mulching, matting, sod stabilization, vegetative buffer strips, phasing of construction operations, the use of construction entrances, and the use of alternative ground cover.

Erosion control practices must meet the following requirements:

- (a) Stabilization. Disturbed areas must be stabilized as specified in Tables 1 and 2 below.

Table 1: Permanent Stabilization

Area requiring permanent stabilization	Time frame to apply erosion controls
Any area that will lie dormant for one year or more.	Within 7 days of the most recent disturbance.
Any area within 50 feet of a watercourse or wetland and at final grade.	Within 2 days of reaching final grade.
Any area at final grade.	Within 7 days of reaching final grade within that area.

Table 2: Temporary Stabilization

Area requiring temporary stabilization	Time frame to apply erosion controls
Any disturbed area within 50 feet of a watercourse or wetland and not at final grade.	Within 2 days of the most recent disturbance if that area will remain idle for more than 14 days.
For all construction activities, any disturbed area, including soil stockpiles that will be dormant for more than 14 days but less than one year, and not within 50 feet of a surface water of the state.	Within 7 days of the most recent disturbance within the area. For residential subdivisions, disturbed areas must be stabilized at least 7 days prior to transfer of ownership or operational responsibility.
Disturbed areas that will be idle over winter.	Prior to November 1 or the onset of winter weather, whichever occurs first.

Note: Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed. These techniques may include mulching or erosion matting.

- (b) Permanent stabilization of conveyance channels. Applicants shall undertake special measures to stabilize channels and outfalls and prevent erosive flows. Measures may include seeding,

dormant seeding, mulching, erosion control matting, sodding, riprap, natural channel design with bioengineering techniques, or rock check dams, all as defined in the most recent edition of Rainwater and Land Development Manual or the Field Office Technical Guide available at www.nrcs.usda.gov/technical/efotg/.

- 4.3 **RUNOFF CONTROL PRACTICES.** The ESC Plan shall incorporate measures that control the flow of runoff from disturbed areas so as to prevent erosion. Peak flow rates and total stormwater volume shall be controlled to minimize erosion and outlets, downstream channel and streambank erosion. Such practices may include rock check dams, pipe slope drains, diversions to direct flow away from exposed soils and protective grading practices. These practices shall divert runoff away from disturbed areas and steep slopes where practicable. Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected.
- 4.4 **SEDIMENT CONTROL PRACTICES.** The ESC Plan shall include a description of, and detailed drawings for, all structural practices that shall store runoff, allowing sediments to settle and/or divert flows away from exposed soils or otherwise limit runoff from exposed areas. Structural practices shall be used to control erosion and trap sediment from a site remaining disturbed for more than 14 days. Such practices may include, among others: sediment settling ponds, silt fences, storm drain inlet protection, and earth diversion dikes or channels which direct runoff to a sediment settling pond. All sediment control practices must be capable of ponding runoff in order to be considered functional. Earth diversion dikes or channels alone are not considered a sediment control practice unless used in conjunction with a sediment settling pond.

Sediment control practices must meet the following requirements:

- (a) **Timing.** Sediment control structures shall be functional throughout the course of earth disturbing activity. Sediment basins and perimeter sediment barriers 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 restabilized. As construction progresses and the topography is altered, appropriate controls must be constructed or existing controls altered to address the changing drainage patterns.

Sediment settling ponds. Sediment settling ponds shall be provided in the form of a sediment trap or sediment basin as defined in the latest edition of *Rainwater and Land Development*. The maximum allowable contributing drainage area to a sediment trap shall be limited to less than 5 acres. Contributing drainage areas of 5 acres or more shall be treated with a sediment basin. An equivalent best management practice may be utilized upon approval from the City of Ontario.

The sediment-settling pond shall provide both a sediment storage zone and a dewatering zone. The volume of the dewatering zone shall be at least 1,800 cubic feet of storage per acre of total contributing drainage area. The dewatering structure of sediment basins shall be designed to have a minimum 48-hour drain time, and, unless infeasible, be designed to always withdraw runoff from the surface of the pond throughout the storm cycle. As such, a skimmer discharge device consistent with *Rainwater and Land Development* shall be provided to dewater sediment basins. Sediment traps shall also provide both a sediment storage zone and dewatering zone, but the outlet structure shall be constructed consistent with the specifications contained in the latest edition of *Rainwater and Land Development*.

When post-construction detention/water quality ponds are to be used as temporary sediment trapping BMPs, a skimmer discharge device consistent with *Rainwater and Land Development*

shall be utilized during construction phase and until the site is deemed permanently stabilized by the Administrator.

The skimmer shall be designed per the equivalent requirements of sediment basins and the operator must ensure that the outlet structure of the pond provides an equivalent or better sediment storage zone and dewatering zone. As such, temporarily while the site is under construction, there shall be no discharge of runoff below the elevation required for the sediment storage zone and the discharge of stormwater within the dewatering zone shall only occur through the skimmer.

The volume of the sediment storage zone shall be calculated by one of the following methods:

Method 1: The volume of the sediment storage zone shall be 1000ft³ per disturbed acre within the watershed of the basin.

Method 2: The volume of the sediment storage zone shall be the volume necessary to store the sediment as calculated with RUSLE or other generally accepted erosion prediction model.

When determining the total contributing drainage area, off-site areas and areas which remain undisturbed by construction activity must be included unless runoff from these areas is diverted away from the sediment settling pond and is not co-mingled with sediment-laden runoff. The depth of the dewatering zone must be less than or equal to five (5) feet. The configuration between the inlets and the outlet of the sediment-settling pond must provide at least two units of length for each one unit of width $\geq 2:1$ length-to-width ratio; however, a length to width ratio of $\geq 4:1$ is recommended. Sediment must be removed from the sediment-settling pond when the design capacity of the sediment storage zone has been completely filled by sediment accumulations. This limit is typically reached when sediment occupies one-half of the basin depth. When designing sediment settling ponds, the applicant must consider public safety, especially as it relates to children, as a design factor for the sediment basin and alternative sediment controls must be used where site limitations would preclude a safe design. The use of a combination of sediment and erosion control measures in order to achieve maximum pollutant removal is encouraged.

- (b) Silt fence and diversions. Sheet flow runoff from denuded areas shall be intercepted by silt fence or diversions to protect adjacent properties, waterresources, and wetlands from sediment transported via sheet flow. Where intended to provide sediment control, silt fence shall be placed on a level contour and shall be capable of temporarily ponding runoff. The relationship between the maximum drainage area to silt fence for a particular slope range is shown in Table 3 below. Placing silt fence in a parallel series does not extend the size of the permissible drainage area. Stormwater diversion practices shall be used to keep runoff away from disturbed areas and steep slopes. Such devices, which include swales, dikes or berms, may receive storm water runoff from areas up to 10 acres.

Table 3: Maximum Drainage Area to Silt Fence

Maximum Drainage Area (acres) to 100 linear feet of silt fence	Range of Slope for a drainage area (%)
0.5	< 2%
0.25	$\geq 2\%$ but < 20%
0.125	$\geq 20\%$ but < 50%

Silt fence or similar perimeter controls shall not be implemented where the slope is greater than 50%; instead water should be collected and conveyed to a sediment settling pond. Where slopes are greater than 50% adjacent to water resources, the use of erosion controls shall be emphasized.

- (c) Inlet protection. Erosion and sediment control practices, such as boxed inlet protection, shall be installed to minimize sediment-laden water entering active storm drain systems. All inlets receiving runoff from drainage areas of one or more acres will require a sediment settling pond. Straw or hay bales and filter socks around catch basins are not acceptable forms of inlet protection.
- (d) Off-site tracking of sediment and dust control. Best management practices must be implemented to ensure sediment is not tracked off-site and that dust is controlled. These best management practices must include, but are not limited to, the following:
1. Construction entrances shall be built and shall serve as the only permitted points of ingress and egress to the development area. These entrances shall be built of a stabilized pad of aggregate stone or recycled concrete or cement sized greater than 2" in diameter, placed over a geotextile fabric, and constructed in conformance with specifications in the most recent edition of the Rainwater and Land Development Manual. Construction entrances shall be installed prior to the commencement of any soil disturbing activity.
 2. Streets directly adjacent to construction entrances and receiving traffic from the development area, shall be cleaned daily to remove sediment tracked off-site. If applicable, the catch basins on these streets nearest to the construction entrances shall also be cleaned weekly and protected from sediment-laden runoff, if feasible without posing a public safety hazard.

Based on site conditions the Administrator may require additional best management practices to control off site tracking and dust. These additional BMPs may include:

1. Silt fence or construction fence installed around the perimeter of the development area to ensure that all vehicle traffic adheres to designated construction entrances.
 2. Designated wheel-washing areas. Wash water from these areas must be directed to a designated sediment trap, the sediment-settling pond, or to a sump pump for dewatering in conformance with Section 4.7 of this regulation.
 3. Applicants shall take all necessary measures to comply with applicable regulations regarding fugitive dust emissions, including obtaining necessary permits for such emissions. The Administrator may require dust controls including the use of water trucks to wet disturbed areas, tarping stockpiles, temporary stabilization of disturbed areas, and regulation of the speed of vehicles on the site.
- (e) Stream protection. Construction vehicles shall avoid water resources and wetlands. If the applicant is permitted to disturb areas within 50 feet of a water resource or wetland, the following conditions shall be addressed in the ESC Plan:
1. All BMPs and stream crossings shall be designed as specified in the most recent edition of the Rainwater and Land Development Manual.
 2. Structural practices shall be designated and implemented on site to protect water

resources or wetlands from the impacts of sediment runoff. Riparian and wetland setbacks required by the community will be implemented. A 25-foot minimum setback measured from the ordinary high water mark on all sides must be maintained as a permanent buffer and protected with construction fence until final site stabilization occurs except as otherwise provided in Subsection F.

3. No structural sediment controls (e.g., the installation of silt fence or a sediment settling pond in-stream) shall be used in a water resource, wetland or floodplain.
 4. Where stream crossings for roads or utilities are necessary and permitted, the project shall be designed such that the number of stream crossings and the width of the disturbance are minimized.
 5. Temporary stream crossings shall be constructed if water resources or wetlands will be crossed by construction vehicles during construction.
 6. Construction of bridges, culverts, or sediment control structures shall not place soil, debris, or other particulate material into or close to the water resources or wetlands in such a manner that it may slough, slip, or erode.
 7. Concentrated stormwater runoff from BMPs to natural wetlands shall be converted to diffuse flow through the use of level spreaders or other such appropriate measure before the runoff enters the wetlands. The flow should be released such that no erosion occurs downslope. Level spreaders may need to be placed in series to ensure non-erosive velocities.
- (f) Modifying controls. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the applicant shall replace or modify the control for site conditions.

4.5 NON-SEDIMENT POLLUTANT CONTROLS: No solid or liquid waste, including building materials, shall be discharged in storm water runoff. The applicant must implement site best management practices to prevent toxic materials, hazardous materials, or other debris from entering water resources or wetlands. These practices shall include but are not limited to the following:

- (a) Waste Materials: A covered dumpster shall be made available for the proper disposal of garbage, plaster, drywall, grout, gypsum, and other waste materials.
- (b) Concrete Truck Wash Out: The washing of concrete material into a street, catch basin, or other public facility or natural resource is prohibited. A designated area for concrete washout shall be provided and clearly marked for usage.
- (c) Disposal of Other Wastewaters: The discharge of washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials to a street, catch basin, other public facility, natural resource or waters of the state is prohibited. The discharge of soaps or solvents used in vehicle and equipment washing is also prohibited. If generated, these wastewaters must be collected and disposed of properly.
- (d) Fuel/Liquid Tank Storage: All fuel/liquid 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 all containers in the storage area.

- (e) Toxic or Hazardous Waste Disposal: Any toxic or hazardous waste shall be disposed of properly.
- (f) Contaminated Soils Disposal and Runoff: Discovery of previously unknown contaminated soils onsite shall be self-reported to Ohio EPA and local authorities. Contaminated soils from redevelopment sites shall be disposed of properly. Runoff from contaminated soils shall not be discharged from the site. Proper permits shall be obtained for development projects on solid waste landfill sites or redevelopment sites. Where construction activities are to occur on sites with contamination from previous activities, operators shall be aware that concentrations of materials that meet other criteria (i.e. not considered a Hazardous Waste, meeting Voluntary Action Program (VAP standards)) may still result in stormwater discharges in excess of Ohio Water Quality Standards. Such discharges are not authorized by this code. Control measures which may be utilized to meet this requirement include, but are not limited to:
 - (1) Use berms, trenches, pits or tanks to collect contaminated runoff and prevent discharge.
 - (2) Pump runoff from contaminated soils to the sanitary sewer with the prior approval of the sanitary sewer system operator, or pump into a container for transport to an appropriate treatment or disposal facility; and
 - (3) Cover areas of contamination with tarps, daily cover or other such methods to prevent storm water from coming into contact with contaminated materials.

The SWP3 must include methods to minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, and sanitary waste to precipitation, stormwater runoff, and snow melt. The SWP3 shall include measures to prevent and respond to chemical spills and leaks. Applicants may also reference the existence of other plans (i.e., Spill Prevention Control and Countermeasure (SPCC) plans, spill control programs, Safety Response Plans, etc.) provided that such plan addresses this requirement and a copy of such plan is maintained on site.

- (g) Restroom facilities must be provided for site workers during all phases of construction.

4.6 COMPLIANCE WITH OTHER REQUIREMENTS. The ESC Plan shall be consistent with applicable State and/or local waste disposal, sanitary sewer, or septic system regulations, including provisions prohibiting waste disposal by open burning, and shall provide for the proper disposal of contaminated soils located within the development area.

4.7 TRENCH AND GROUND WATER CONTROL. There shall be no sediment-laden or turbid discharges to water resources or wetlands 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. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag or comparable practice. Ground water dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. However, care must be taken when discharging ground water to ensure that it does not become pollutant-laden by traversing over disturbed soils or other pollutant sources.

4.8 INTERNAL INSPECTIONS. At a minimum, procedures in an ESC Plan shall provide that all controls

on the site are inspected at least once every seven calendar days and within 24-hours after any storm event greater than one-half inch of rain per 24 hour period. The inspection frequency may be reduced to at least one every month if the entire site is temporarily stabilized or runoff is unlikely due to weather conditions (e.g., site is covered with snow, ice, or the ground is frozen). A waiver of inspection requirements is available until one month before following 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 in the ESC Plan.

Once a definable area has been finally stabilized, you may mark this on your SWP3 and no further inspection requirements apply to that portion of the site. The applicant shall assign "qualified inspection personnel" to conduct these inspections to ensure that the control practices are functional and to evaluate whether the ESC Plan is adequate and properly implemented in accordance with the schedule proposed herein or whether additional control measures are required.

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

- 1) the inspection date;
- 2) names, titles, and qualifications of personnel making the inspections;
- 3) weather information for the period since the last inspection (or since commencement of construction activities if the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall or each storm event (in inches), and whether any discharges occurred;
- 4) weather information and a description of any discharges occurring at the time of the inspection;
- 5) location(s) of discharges of sediment or other pollutants from the site;
- 6) location(s) of BMP's that need to be maintained;
- 7) location(s) of BMP's that failed to operate as designed or proved inadequate for a particular location;
- 8) location(s) where additional BMP's are needed that did not exist at the time of inspection; and
- 9) corrective action required including any changes to the ESC Plan necessary with implementation dates.

These inspections shall meet the following requirements:

- 1) 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.
- 2) Erosion and sediment control measures identified in the ESC Plan shall be observed to ensure that they are operating correctly. The applicant shall utilize an inspection form to be provided by the Administrator or an alternate form acceptable to the Administrator.

- 3) Discharge locations shall be inspected to determine whether erosion and sediment control measures are effective in preventing significant impacts to the receiving water resource or wetlands.
- 4) Locations where vehicles enter or exit the site shall be inspected for evidence of off-site vehicle tracking.
- 5) The applicant shall maintain for three (3) years following final stabilization the results of these inspections, the names and qualifications of personnel making the inspections, the dates of inspections, major observations relating to the implementation of the ESC Plan, a certification as to whether the facility is in compliance with the ESC Plan, and information on any incidents of non-compliance determined by these inspections.

4.9 MAINTENANCE. The ESC Plan shall be designed to minimize maintenance requirements. All control practices shall be maintained and repaired as needed to ensure continued performance of their intended function until final stabilization. All sediment control practices must be maintained in a functional condition until all up slope areas they control reach final stabilization. The applicant shall provide a description of maintenance procedures needed to ensure the continued performance of control practices and shall ensure a responsible party and adequate funding to conduct this maintenance.

When inspections reveal the need for repair, replacement, or installation of erosion and sediment control BMPs, the following procedures shall be followed:

- (a) When practices require repair or maintenance. If an internal inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment-settling pond, 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.
- (b) When practices fail to provide their intended function. If an internal inspection reveals that a control practice fails to perform its intended function as detailed in the ESC plan and that another, more appropriate control practice is required, the ESC plan must be amended and the new control practice must be installed within ten (10) days of the inspection.
- (c) When practices depicted on the ESC Plan are not installed. If an internal inspection reveals that a control practice has not been implemented in accordance with the schedule, the control practice must be implemented within ten (10) days from the date of the inspection. If the internal inspection reveals that the planned control practice is not needed, the record must contain a statement of explanation as to why the control practice is not needed.

4.10 FINAL STABILIZATION. Final stabilization shall be determined by the Administrator. "Final stabilization" means that either:

- 1) All soil disturbing activities at the site are completed and a uniform perennial vegetative cover (e.g., evenly distributed, without large bare areas) with a density of at least 70 percent cover for the areas has been established on all unpaved areas and areas not covered by permanent structures or equivalent stabilization measures (such as the use of landscape mulches, rip-rap, gabions or geotextile) have been employed. In addition, all temporary erosion and sediment control practices are removed and disposed of and all trapped sediment is permanently stabilized to prevent further erosion; or

- 2) For individual lots in residential construction by either:
 - a) The homeowner completing final stabilization as specified above; or
 - b) The homeowner establishing temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner on the need for and benefits of, final stabilization; or
- 3) For construction projects on land used for agricultural purposes (e.g., pipelines across crop or rangeland), final stabilization may be accomplished by returning the disturbed land to its pre-construction agricultural use. Areas disturbed that were previously used for agricultural activities, such as buffer strips immediately adjacent to surface waters of the state and which are not being returned to their pre-construction agricultural use, must meet the final stabilization criteria in (1) or (2) above.

4.11 ABBREVIATED EROSION AND SEDIMENT CONTROL PLAN.

- (a) Any Abbreviated ESC Plan which does not follow the model provided by the Lorain Soil & Water Conservation District must be designed by a certified engineer, landscape architect, surveyor or erosion and sediment control specialist. In order to control sediment pollution of water resources and wetlands, the applicant shall submit an Abbreviated ESC Plan in accordance with the requirements of this regulation. Said plan shall contain the minimum requirements set forth in (c) hereafter and substantially conform with the model developed by the Administrator.
- (b) The Administrator may require re-submission of any plan which does not comply with this section.
- (c) The Abbreviated ESC Plan shall include a minimum of the following BMPs. The Administrator may require other BMPs as site conditions warrant.
 1. Construction Entrances: Construction entrances shall be built and shall serve as the only permitted points of ingress and egress to the development area. These entrances shall be built of a stabilized pad of aggregate stone or recycled concrete sized greater than 2" in diameter, placed over a geotextile fabric, and constructed in conformance with specifications in the most recent edition of the Rainwater and Land Development Manual.
 2. Concrete Truck Wash Out: The washing of concrete material into a street, catch basin, or other public facility or natural resource is prohibited. A designated area for concrete washout shall be made provided and clearly marked for usage.
 3. Street Sweeping: Streets directly adjacent to construction entrances and receiving traffic from the development area shall be cleaned daily to remove sediment tracked off-site. If applicable, the catch basins on these streets nearest to the construction entrances shall be cleaned weekly.
 4. Stabilization: The development area shall be stabilized as detailed in Table 4.

Table 4: Stabilization

Area	Stabilization Schedule
Any disturbed area within 50 feet of a watercourse or	Within 2 days of the most recent disturbance if that area will remain idle for more than 14 days
For all construction activities, any disturbed area, including soil	Within 7 days of the most recent disturbance within the area
Disturbed areas that will be	Prior to November 1.
<p>Note: Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed. These techniques may include mulching or erosion matting.</p>	

5. Silt Fence or Other Approved Perimeter Barriers: Shall be placed along the down slope of any disturbed areas and along any water resources.
6. Inlet Protection, Erosion and sediment control practices, such as boxed inlet protection, shall be installed to minimize sediment-laden water entering active storm drain systems. Straw or hay bales are not acceptable forms of inlet protection.
7. Internal Inspection and Maintenance. All controls on the development area shall be inspected at least once every seven-calendar days and within 24 hours after any storm event greater than one-half inch of rain per 24-hour period. Maintenance shall occur as detailed below:
 - A. When practices require repair or maintenance. If the internal inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment-settling pond, 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.
 - B. When practices fail to provide their intended function. If the internal inspection reveals that a control practice fails to perform its intended function and that another, more appropriate control practice is required, the Abbreviated ESC Plan must be amended and the new control practice must be installed within ten (10) days of the inspection.
 - C. When practices depicted on the Abbreviated ESC Plan are not installed. If the internal inspection reveals that a control practice has not been implemented in accordance with the schedule, the control practice must be implemented within ten (10) days from the date of the inspection. If the inspection reveals that the planned control practice is not needed, the record must contain a statement of explanation as to why the control practice is not needed.
8. Final Stabilization: Final stabilization shall be determined by the Administrator in accordance with Section 4.10.

5. Application Procedures for ESC Plan

The ESC Plan for development projects shall be submitted to the Administrator after the approval of the preliminary plans and prior to the approval of improvement plans or drawings by the Lorain County Planning Commission in the case of subdivisions; concurrently with the submittal of construction drawings to the Lorain County Engineer or Township Zoning Inspector in the case of other construction projects; and thirty (30) working days prior to any soil-disturbing activity for general clearing projects.

The Administrator shall review the BSC plan and approve, or return for revision with comments and recommendations for revision, within twenty-one (21) working days after receipt of said plan. A plan rejected because of deficiencies shall receive a narrative report stating specific problems and the procedure for filing a revised plan. At the time of receipt of a revised plan, another 21-day review period shall be commenced.

Approved plans shall remain valid for two years from the date of approval. A copy of the approved plan and its review report shall be forwarded by the Administrator to the Lorain Soil & Water Conservation District, County Planning Commission, and County Engineer.

A plan is considered complete when it contains two sets of the following:

5.1 **Site construction plans** intended for contractor's bid.

5.2 **Contact information** for the owner of the land, the developer and project engineer; project engineer's certification; project name; and, project vicinity map.

5.3 **Permit Verification**

(a) **Jurisdictional Wetlands:** In areas where jurisdictional wetlands as defined by an on-site delineation verified by the United States Army Corps of Engineers will be affected, a copy of the wetland delineation report shall be submitted with the BSC Plan. If an Individual Permit is required, a copy of that Permit, showing project approval and any restrictions that apply to site activities, shall also be submitted. If an Individual Permit is not required for the proposed project, the site owner shall submit proof of compliance with the Nationwide Permit Program as detailed under Section 3.8. If an Ohio EPA Section 401 Water Quality Certification and/or an Ohio EPA Isolated Wetland Permit is required the site owner shall submit proof of compliance with the Ohio EPA Water Quality Certification and/or Isolated Wetland Permit program as detailed in Section 3.8.

(b) An Ohio Environmental Protection Agency (OEPA) National Pollutant Discharge Elimination System permit with permit verification number or Notice of Intent shall be submitted with the ESC Plan.

5.4 **Project Description:** A brief description of the project and types of soil-disturbing activities. Note specifically items not self-evident from the plan drawings. The project description shall list total project acreage, north arrow and adjacent property boundaries.

(1) Site description: The ESC Plan shall provide:

A. A description of the nature and type of the construction activity (e.g. residential, shopping mall, highway, etc.).

B. Total area of the site and the area of the site that is expected to be disturbed (i.e.,

- grubbing, clearing, excavation, filling or grading, including off-site borrowareas).
- C. Existing data describing the soil and, if available, the quality of any known pollutant discharge from the site such as that which may result from previous contamination caused by prior land uses.
 - D. A description of prior land uses at the site.
 - E. An implementation schedule which describes the sequence of major soil- disturbing operations (i.e., grubbing, excavating, grading, utilities and infrastructure installation) and the implementation of erosion and sediment controls to be employed during each operation of the sequence.
 - F. The location and name of the immediate receiving stream or surface water(s) and the first subsequent receiving water(s).
 - G. The aerial (plan view) extent and description of wetlands or other special aquatic sites at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project.
 - H. For subdivided developments where the ESC Plan does not call for a centralized sediment control capable of controlling multiple individual lots, a detail drawing of a typical individual lot showing standard individual lot erosion and sediment control practices.
 - I. Site map showing:
 - i. Limits of soil-disturbing activity of the site, including off site spoil and borrow areas.
 - ii. Soils types should be depicted for all areas of the site, including locations of unstable or highly erodible soils.
 - iii. Existing and proposed one-foot (1') contours. This must include a delineation of drainage watersheds expected during and after major grading activities as well as the size of each drainage watershed in acres.
 - iv. Surface water locations including springs, wetlands, streams, lakes, water wells, etc., on or within 200 feet of the site, including the boundaries of wetlands or stream channels and first subsequent named receiving water(s) the applicant intends to fill or relocate for which the applicant is seeking approval from the Army Corps of Engineers and/or Ohio EPA.
 - v. Existing and planned locations of buildings, roads, parking facilities, utilities and easements.
 - vi. The location of all erosion and sediment control practices, including the location of areas likely to require temporary stabilization during the course of site development.
 - vii. Sediment ponds, including their sediment settling volume and contributing drainags area.
 - viii. Areas designated for the storage or disposal of solid, sanitary and toxic wastes,

including dumpster areas, areas designated for concrete truck washout, and vehicle fueling.

- ix. The location of designated stoned construction entrances where the vehicles will ingress and egress the construction site.
- x. The location of any in-stream activities including stream crossings.
- xi. Location and identification of all permanent post-construction BMP's.

- 5.5 **Existing site conditions** shown with maximum scale of 1"=200' and 2' contour intervals; locations and names of soil type boundaries, vegetation, ditches, springs, streams, lakes, wetlands, woods, agricultural fields; location of downstream lakes and wetlands within 1000' of project; and, existing drainage patterns including direction of flow and watershed acreage.
- 5.6 **Grading plan** showing types of soils and boundaries; limits of disturbance; areas of excavation and fill; final contours; and, proposed drainage pattern including storm sewer inlets and permanent storm water basins. Basin detail shall be drawn to scale and show volumes and size of contributing drainage area.
- 5.7 **Erosion and Sediment Control plan** showing location, type and construction detail for perimeter controls; sediment settling devices; limits of disturbance; buffers for streams, wetlands, ponds and drainages; seeding mixtures and rates; and, type and quantity of mulching; application of water or fertilizer. Erosion and Sediment Control plans shall also provide a detailed construction sequence. Updates and/or corrections to schedules and/or sequencing shall be clearly marked or listed on approved plans, which shall be located at the site.
- 5.8 **Storm Water Control Methods** adequate to prevent pollution of public waters by soil sediment from accelerated storm water runoff from development areas.
- 5.9 **Contractor's Construction Sequence** that estimates the time frame required for the following:
- (a) Pre-Construction meeting.
 - (b) Initial clearing and grubbing to gain access and installation of perimeter controls within seven (7) days of clearing and grubbing.
 - (c) Clearing and grubbing followed by excavation of sediment traps and basins and temporary soil stabilization for these sediment settling devices within seven (7) days of excavation.
 - (d) Project engineer's initial inspection of erosion and sediment controls for "as-built" certification.
 - (e) Maintenance inspection schedule and party responsible for inspection and repair of erosion and sediment control devices.
 - (f) Pre-Winter Stabilization meeting if project is to be through the winter.
 - (g) Final grading and permanent soil stabilization within seven (7) days of finishing final grade.

- (h) Removal of temporary sediment control devices. The construction maintenance guarantee shall not be released until all temporary devices are removed; properly disposed of and trapped sediment has been stabilized or removed.

5.10 Review and Inspection Fee shall be submitted with the Erosion and Sediment Control Plan. ESC Plans shall not be reviewed until the fee has been paid. The fee is based on project size and paid by the owner or developer directly to the Administrator. The review and inspection fee shall be established by the Board of Lorain County Commissioners by Resolution. Payment is made payable to Lorain County Commissioners.

6. Monitoring for Compliance: Enforcement

6.1 Following the initial inspection of erosion and sediment control devices by the project engineer, regular inspections will be performed by the Administrator for compliance with these Rules. If it appears that a violation of any of these Rules has occurred, the owner and developer will be notified of deficiencies or noncompliance in writing by certified mail, return receipt requested.

6.2 The rules shall be enforced in accordance with O.R.C. 309.79 and at a minimum shall permit: The Board of County Commissioners or any duly authorized representative of the Board may, upon identification to the owner or person in charge, enter any land upon obtaining agreement with the owner, tenant, or manager of the land in order to determine whether there is compliance with the rules adopted under this section. If the Board or its duly authorized representative is unable to obtain such an agreement, the Board or representative may apply for, and a judge of the Lorain County Common Pleas Court inspection warrant as necessary to achieve the purposes of this chapter.

1. If the Board of County Commissioners or its duly authorized representative determines that a violation of the rules adopted under this section exists, the Board or representative may issue an immediate stop work order if the violator failed to obtain any federal, state or local permit necessary for sediment and erosion control, earth movement, clearing, or cut and fill activity. In addition, if the Board or representative determines such a rule violation exists, regardless of whether or not the violator has obtained the proper permits, the Board or representative may authorize the issuance of a notice of violation. If, after a period of not less than thirty (30) days has elapsed following the issuance of the notice of violation, the violation continues, the Board or its duly authorized representative shall issue a second notice of violation. Except as provided in division Subsection (3) of this section, if after a period of not less than fifteen (15) days has elapsed following the issuance of the second notice of violation, the violation continues, the Board or its duly authorized representative may issue a stop work order after first obtaining the written approval of the prosecuting attorney of the county if, in the opinion of the prosecuting attorney, the violation is egregious.

Once a stop work order is issued, the Board or duly authorized representative shall request, in writing, the prosecuting attorney of the county to seek an injunction or other appropriate relief in the court of common pleas to abate excessive sedimentation and secure compliance with the rules adopted under this section. If the prosecuting attorney seeks an injunction or other appropriate relief, then, in granting relief, the Court of Common Pleas may order the construction of sediment control improvements or implementation of other control measure and may assess a civil fine of not less than one hundred or more than five hundred dollars. Each day of violation of a rule or stop work order issued under this section shall be considered a separate violation subject to a civil fine.

2. The person to who a stop work order is issued under this section may appeal the order to

Lorain County Common Pleas Court issued, seeking any equitable or other appropriate relief from that order.

3. No stop work order shall be issued under this section against any public highway transportation, or drainage improvement or maintenance project undertaken by a government agency or political subdivision in accordance with a statement of its standard sediment control policies that is approved by the Board or the Chief of the Division of Soil and Water Conservation, Ohio Department of Natural Resources.

The Administrator shall have the authority to require immediate on-site adjustments to the ESC Plan in order to achieve compliance with these Rules.

A final inspection will be made to determine if the criteria of these Rules have been satisfied and a report will be presented to the Board of Lorain County Commissioners on the site's compliance status.

The Administrator will monitor soil-disturbing activities for non-farm residential, commercial, industrial, or other non-farm purposes on land of less than one contiguous acre to ensure compliance required by these Rules.

The Administrator shall notify the U.S. Army Corps of Engineers when there is a violation on a development project covered by an Individual or Nationwide Permit. The Administrator shall notify the Ohio Environmental Protection Agency when there is a violation on a development project covered by a Section 401 Water Quality Certification and/or Isolated Wetland Permit.

The Administrator shall not review or approve erosion and sediment control plans, of any type, for applicants that have an existing development project or site(s) that is not in compliance with its approved erosion and sediment control plan, or a project site(s) that is otherwise not in compliance with the Lorain County Erosion and Sediment Control Rules.

The Administrator shall not review or approve Erosion and Sediment Control Plans for sublots or other areas within existing development projects that are not in compliance with its approved Erosion and Sediment Control Plan or otherwise not in compliance with the Lorain County Erosion and Sediment Control Rules. Such development projects include but not limited to, subdivisions or other common plans of development

The County of Lorain reserves the right to withhold relevant inspections and/or other approvals from its departments and/or agencies for development projects or activities in support of development projects that are not in compliance with these Rules.

The County shall not issue building permits for projects regulated under the Lorain County Erosion and Sediment Control Rules that have not received approval for an Erosion and Sediment Control Plan for said project(s).

7. Variances to Rules

The Lorain County Board of Commissioners, or its designated agent, may grant a variance to these Rules if all of the following are found to exist:

- (a) There are exceptional or extraordinary circumstances or conditions applying to the land.
- (b) Literal enforcement of the Rules would cause undue hardship or practical difficulties. The standards shall have the same general meaning as applied in zoning variances.

- (c) The exceptional or extraordinary circumstances or conditions and the undue hardship or practical difficulties were not the result of any prior actions of the owner of the land.
- (d) The variance is necessary for the preservation and enjoyment of substantial property rights of the owner of the land.
- (e) The variance will not be a substantial detriment to adjacent land and will not materially impair the purposes of these Rules.

Adverse economic conditions shall not be a valid reason to grant a variance.

A request for a variance shall be in writing and shall state specifically the reasons for the request and shall include all data and information in support of the request. The request shall be reviewed and approved, disapproved or approved with modifications within thirty - (30) working days. Failure to act within said time will result in the variance request being approved.

8. Appeals

Any person receiving a denial of permit may appeal the determination to the Board of Commissioners or its designee. The Notice of Appeal must be mailed to the Clerk of the Board of Commissioners within 14 days of the Notice of Denial. A hearing shall take place within 30 days of receipt of the Notice. Written notice of the hearing will be sent to the appellant.

9. Penalties

No person shall violate any rule adopted or order issued under this section. Notwithstanding Section 6.2 of this section, if the Board of County Commissioners determines that a violation of any rule adopted or administrative order issued under this section exists, the Board may request, in writing, the prosecuting attorney of the county to seek an injunction or other appropriate relief in the Court of Common Pleas to abate excessive erosion or sedimentation and secure compliance with the rules or order. In granting relief, the Court of Common Pleas may order the construction of sediment control improvements or implementation of other control measures and may assess a civil fine or not less than one hundred or more than five hundred dollars. Each day of violation of a rule adopted or administrative order issued under this section shall be considered a separate violation subject to a civil fine.

Review and Inspection Fee Schedule

Please make all checks payable to: Lorain County Commissioners

Full Erosion & Sediment Control Plan		
Subdivisions, Commercial, Industrial, Residential Subdivisions *	10 acres or less	\$ 390.00
	More than 10 to and including 20 acres	\$ 650.00
	More than 20 to and including 50 acres	\$ 910.00
	More than 50 acres	\$1,300.00
Non-Residential Individual Development Site	Individual Development one acre to and including 5 acres	\$ 325.00
	More than 5 acres	\$ 600.00
Multi Family Development Site (Apartments, Condominiums, Townhouses)	10 acres or less	\$ 390.00
	More than 10 to and including 20 acres	\$ 650.00
	More than 20 to and including 50 acres	\$ 910.00
	More than 50 acres	\$ 1,300.00
A Non-Residential lot within a Common Plan of Development	Any lot one acre or greater within a Common Plan of Development	\$190.00
Multi-Family Development within a Common Plan of Development	Any lot one acre or greater within a Common Plan of Development	\$190.00
General Non-Residential/ Grading for Recreational	Any project one acre or greater	\$ 190.00
Stop Work Order Inspections – Inspection to determine contractor is in compliance following a stop work order	10 acres or less	\$ 50.00
	More than 10 Acres	\$100.00

* Fees will be assessed with each phase of development.

Abbreviated ESC Plan – see page 32

Review and Inspection Fees

Please make all checks payable to: Lorain County Commissioners

Abbreviated ESC Plan		
Single Lot ESC Evaluation	Lots 10 acres or less	\$ 20.00
All New, Single-Family Residential Projects	Any project one acre or greater or part of a common Plan of development	\$ 50.00
Any Residential Clearing	Any project one acre or greater	\$ 50.00
Variance Fee		\$ 100.00
Stop Work Order Inspections – Inspection to determine contractor is in compliance following a stop work order	10 acres or less	\$ 50.00
	More than 10 Acres	\$ 100.00

NPDES – PHASE II

**LORAIN COUNTY
COMPREHENSIVE STORM WATER MANAGEMENT REGULATIONS**

**Effective – December 19, 2009
Updated – December, 2016**

Administrator:

**Lorain Soil & Water Conservation District
Agricultural Center
42110 Russla Road
Elyria, Ohio 44035
Phone – 440-326-5800
Fax – 440-326-5807**

www.lorainswcd.com

&

**Lorain County Engineer
247 Hadaway Street
Elyria, Ohio 44035
Phone – 440-328-5585
Fax – 440-328-5587**

www.loraincounty.com/engineer/

REFERENCES

The standards and specifications for Best Management Practices are contained within the

**Rainwater and Land Development Manual, Ohio's
Standards, Current Edition
For
Storm Water Management, Land Development and Urban Stream Protection**

Published in cooperation with:

Ohio Department of Natural Resources Division of Soil and Water Conservation
U.S.D.A. Natural Resource Conservation Service
Ohio Environmental Protection Agency

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CHAPTER 1
COMPREHENSIVE STORM WATER MANAGEMENT

1.0 PURPOSE AND SCOPE

- A. The purpose of this regulation is to establish technically feasible and economically reasonable storm water management standards to achieve a level of storm water quality and quantity control that will minimize damage to property and degradation of water resources and will promote and maintain the health, safety, and welfare of the citizens of the Lorain County.
- B. This regulation requires that a Comprehensive Storm Water Management Plan be developed and implemented before any non-agricultural soil disturbing activities for all development for which soil disturbing activities disturbing one (1) acre or more of total land, or less than one acre if part of a larger common plan of development or sale disturbing one (1) or more acres of total land. The administrator may require a comprehensive stormwater management plan on any site with soil disturbing activities disturbing less than one (1) acre.
- C. This regulation requires owners who develop or re-develop their property within Lorain County to:
 - 1. Control storm water runoff from their property and ensure that all storm water management practices are properly designed, constructed, and maintained.
 - 2. Reduce water quality impacts to receiving water resources that may be caused by new development or redevelopment activities.
 - 3. Control the volume, rate, and quality of storm water runoff originating from their property so that surface water and ground water are protected and flooding and erosion potential are not increased.
 - 4. Minimize the need to construct, repair, and replace subsurface storm drain systems.
 - 5. Preserve natural infiltration and ground water recharge, and maintain subsurface flow that replenishes water resources, except in slippage prone soils.
 - 6. Incorporate storm water quality and quantity controls into site planning and design at the earliest possible stage in the development process.
 - 7. Reduce the expense of remedial projects needed to address problems caused by inadequate storm water management.
 - 8. Maximize use of storm water management practices that serve multiple purposes including, but not limited to, flood control, erosion control, fire protection, water quality protection, recreation, and habitat preservation.

9. Design sites to minimize the number of stream crossings and the width of associated disturbance in order to minimize Lorain County's future expenses related to the maintenance and repair of stream crossings.
 10. Maintain, promote, and re-establish conditions necessary for naturally occurring stream processes that assimilate pollutants, attenuate flood flows, and provide a healthy water resource.
- D. This regulation shall apply to all parcels used or being developed, either wholly or partially, for new or relocated projects involving highways and roads; subdivisions or larger common plans of development; industrial, commercial, institutional, or residential projects; building activities on farms; redevelopment activities; grading; and all other uses that are not specifically exempted.
 - E. Public entities, including the State of Ohio, Lorain County, and the County shall comply with this regulation for roadway projects initiated after March 10, 2006 and, to the maximum extent practicable, for projects initiated before that time.
 - F. This regulation does not apply to activities regulated by, and in compliance with, the Ohio Agricultural Sediment Pollution Abatement Rules.
 - G. This regulation does not require a Comprehensive Storm Water Management Plan for linear construction projects, such as culverts, maintenance projects, ditch cleaning projects, pipeline or utility line installation, that do not result in the installation of impervious surface as determined by the Lorain County Engineer. Such projects shall be designed to minimize the number of stream crossings and the width of disturbance. Linear construction projects shall comply with the requirements of Erosion and Sediment Control Rules.
 - H. It is not the role of Lorain County to point out each and every part of these rules and how to implement them on the individual job sites. It is the project owner's responsibility to be proactive in meeting the intent, purpose and requirements of these rules.

2.0 DEFINITIONS

For the purpose of this regulation, the following terms shall have the meaning herein indicated:

- A. **ACRE**: A measurement of land area equal to 43,560 square feet.
- B. **ADMINISTRATOR**: Lorain County Engineer is named the administrator for these Regulations and is the entity having the responsibility and duty of administrating and ensuring compliance with these Rules.
- C. **AS-BUILT SURVEY**: A survey shown on a plan or drawing prepared by a Registered Surveyor indicating the actual dimensions, elevations, and locations of any structures,

underground utilities, swales, detention facilities, and sewage treatment facilities after construction has been completed.

- D. BEST MANAGEMENT PRACTICES (BMPs): Structural or nonstructural facilities or activities that control soil erosion and/or storm water runoff at a development site. Schedule of activities, prohibitions of practices, operation and maintenance procedures, treatment requirements, and other practices to reduce the pollution of water resources and to control storm water volume and rate.
- E. BUFFER AREA: A designated transitional area around a stream or wetland left in a natural, usually vegetated, state to protect a stream or wetland from runoff pollution. Construction activities in this area shall be restricted or prohibited based on the sensitivity of the stream or wetland and the recommendation of the Administrator.
- F. CHANNEL: A natural or manmade bed or ditch, existing or excavated for the conveyance of water.
- G. CLEAN WATER ACT: The Federal Water Pollution Control Act enacted in 1972 by Public Law 92-500 and amended by the Water Quality Act of 1987. The Clean Water Act prohibits the discharge of pollutants to Waters of the United States unless said discharge is in accordance with an NPDES permit. The 1987 amendments include guidelines for regulating municipal, industrial, and construction storm water discharges under the NPDES permit.
- H. COMMON PLAN OF DEVELOPMENT: A term used to define the entire scope of a development project, both on-site and off-site, regardless of ownership, including phases (future and existing), sublots and parcels of development, associated easements, road and utility right of ways, and other land development or soil disturbances in support of the development project.
- I. COMPREHENSIVE STORM WATER MANAGEMENT PLAN: The written document including plans and drawings that meet the requirements of this regulation and set forth the techniques, programs, strategies and practices to minimize storm water runoff from a development area, to safely convey or temporarily store and release post-development runoff at an allowable rate to minimize flooding and stream bank erosion, and to protect or improve storm water quality and stream channels.
- J. CONSERVATION: The development of land using alternative layout and building arrangements in order to better conserve open space and retain natural resources.
- K. COUNTY: Throughout these rules Lorain County shall mean the Lorain County Board of Commissioners, State of Ohio, and its designated agents and representatives. County shall mean unincorporated areas in Lorain County.
- L. CRITICAL STORM: A storm that is calculated by means of the percentage increase in volume of runoff by a proposed development area. The critical storm is used to calculate the maximum allowable storm water discharge rate from a developed site.

- M. CUT: An excavation that reduces an existing elevation, as in road or foundation constructions.
- N. DETENTION FACILITY: A basin, pond, oversized pipe, or other structure that reduces the peak flow rate of storm water leaving the facility by temporarily storing a portion of the storm water entering the facility.
- O. DEVELOPMENT AREA: A parcel or contiguous parcels owned by one person or persons, or operated as one development unit, and used or being developed for non-farm commercial, industrial, residential, institutional, or other construction or alteration that changes runoff characteristics of a parcel of land.
- P. DEVELOPMENT DRAINAGE AREA: A combination of each hydraulically unique watershed with individual outlet points on the development area.
- Q. DITCH: An open channel, either dug or natural, for the purpose of drainage or irrigation with intermittent flow.
- R. DISTURBED AREA: An area of land subject to erosion due to the removal of vegetative cover and/or soil disturbing activities.
- S. DRAINAGE: The removal of excess surface water or groundwater from land by surface or subsurface drains.
- T. EARTH DISTURBING ACTIVITY: Any grading, excavations, filling, or other alteration of the earth's surface where natural or man-made ground cover is destroyed.
- U. EROSION: The process by which the land surface is worn away by the action of wind, water, ice, gravity, or any combination of those forces.
- V. EXISTING: In existence at the time of the passage of this ordinance and these regulations.
- W. EXTENDED CONVEYANCE: A storm water management practice that replaces and/or enhances traditional open or closed storm drainage conduits by retarding flow, promoting percolation of runoff into the soil, and filtering pollutants during the storm water quality event.
- X. EXTENDED DETENTION: A storm water management practice that replaces and/or enhances traditional detention facilities by releasing the runoff collected during the storm water quality event over at least 24 to 48 hours, retarding flow and allowing pollutants to settle within the facility.
- Y. FARM: Land or water devoted to agricultural uses as defined in O.R.C. §19.01 including farming, ranching, aquaculture; horticulture; viticulture; animals; poultry husbandry and the production poultry products; dairy production; the productions of field crops, tobacco, fruits, vegetables, nursery stock, ornamental shrubs, ornamental trees, flowers, sod, or mushrooms; timber; pasturage, any combination of the foregoing; the processing, drying, storage, and marketing of agricultural products when those activities are conducted in conjunction with, but

are secondary to, such husbandry or production.

- Z. FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA): The agency with overall responsibility for administering the National Flood Insurance Program.
- AA. FINAL STABILIZATION: All soil-disturbing activities at the site have been completed and a uniform perennial vegetative cover with a density of at least 70% coverage for the area has been established or equivalent stabilization practices, such as the use of mulches or geotextiles, have been employed.
- BB. FLOOD PLAIN: Any Special Flood Hazard Area (SFHA) identified by the Federal Emergency Management Agency (FEMA), including other areas that are susceptible to flooding as determined by the Lorain County Engineer.
- CC. GRADING: The process in which the topography of the land is altered to a new slope or any combined thereof, includes the land in its excavated or filled condition.
- DD. GRUBBING: Removing, clearing or scalping material such as roots, stumps or sod.
- EE. HYDROLOGIC UNIT CODE: a cataloging system developed by the United States Geological Survey and the Natural Resource Conservation Service to identify watersheds in the United States.
- FF. IMPERVIOUS COVER: Any surface that cannot effectively absorb or infiltrate water. This may include roads, streets, parking lots, rooftops, sidewalks, and other areas not covered by vegetation.
- GG. INFILTRATION: A storm water management practice that does not discharge to a water resource during the storm water quality event, requiring collected runoff to either infiltrate into the groundwater and/or be consumed by evapotranspiration, thereby retaining storm water pollutants in the facility.
- HH. 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.
- II. LANDSLIDE: A rapid mass movement of soil or rock moving downhill under the influence of gravity.
- JJ. MS4: municipal separate storm water system which means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) that is:
 - 1. Owned or operated by the federal government, state municipality, township, county, district or other public body (created by or pursuant to state or federal law) including special district under state law such as a sewer district, floodcontrol district or drainage districts, or similar entity, or a designated and approved management

agency under sections 208 of the Act (33 U.S.C., section 1288, effective February 4, 1987) that discharges into surface waters of the state;

2. Designated or used for collecting or conveying solely storm water;
3. Not combined sewer, and;
4. Not a part of a publicly owned treatment works.

KK. MS4 – SMALL: all municipal separate storm water systems that are neither a large MS4 nor a medium MS4.

LL. MS4 – MEDIUM: all municipal separate storm water systems that is located in an incorporated place with a population of one hundred thousand (100,000) or more, but less than two hundred fifty thousand (250,000) or more as determined by the 1990 censuses by the United States Bureau of Censuses. The 1990 census is available at public libraries and on the United States Bureau of the Censuses web site: www.census.gov

MM. MS4 – LARGE: all municipal separate storm water systems that are located in an incorporated place with a population of two hundred fifty thousand (250,000) or more as determined by the 1990 censuses by the United States Bureau of Censuses. The 1990 census is available at public libraries and on the United States Bureau of the Censuses web site: www.census.gov

NN. MAXIMUM EXTENT PRACTICABLE: The level of pollutant reduction that operators of small municipal separate storm sewer systems regulated under Section 40 C.F.R. Parts 9, 122, 123, and 124, referred to as NPDES Storm Water Phase II, shall meet.

OO. NPDES PERMIT: National Pollutant Discharge Elimination System. A regulatory program in the Federal Clean Water Act that prohibits the discharge of pollutants into surface waters of the United States without a permit.

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

QQ. NONSTRUCTURAL STORM WATER MANAGEMENT PRACTICE: Storm water runoff control and treatment techniques that use natural practices, as defined by the Rainwater and Land Development Manual, to control runoff and/or reduce pollution levels.

RR. OHIO EPA: The Ohio Environmental Protection Agency.

SS. 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.

TT. PARCEL: Means a tract of land occupied or intended to be occupied by a use, building or group of buildings and their accessory uses and buildings as a unit, together with such open

spaces and driveways as are provided and required. A parcel may contain more than one contiguous lot individually identified by a 'Permanent Parcel Number' assigned by the Lorain County Auditor's Office.

- UU. PERSON: An individual, corporation, firm, trust, commission, board, public or private partnership, joint venture, agency, unincorporated association, municipal corporation, county or state agency, federal government or any combination thereof.
- UU. POST-DEVELOPMENT: The conditions that exist following the completion of soil disturbing activity in terms of topography, vegetation, land use, and the rate, volume, quality, or direction of storm water runoff.
- VV. PRE-CONSTRUCTION MEETING: Meeting prior to construction between all parties associated with the construction of the project including government agencies, contractors and owners to review agency requirements and plans as approved and submitted.
- WW. PRE-DEVELOPMENT: The conditions that exist prior to the initiation of soil disturbing activity in terms of topography, vegetation, land use, and the rate, volume, quality, or direction of storm water runoff.
- XX. PROFESSIONAL ENGINEER: A Professional Engineer registered in the State of Ohio with specific education and experience in water resources engineering, acting in conformance with the Code of Ethics of the Ohio State Board of Registration for Engineers and Surveyors.
- YY. RAINWATER AND LAND DEVELOPMENT MANUAL: Ohio's standards for storm water management, land development, and urban stream protection. Developed by the Ohio Department of Natural Resources, the U.S. Department of Agriculture Natural Resource Conservation Service, and the Ohio Environmental Protection Agency. The most current edition of these standards shall be used with these regulations.
- ZZ. REDEVELOPMENT: A construction project on land where impervious cover has previously been developed and where the new land use will not increase the runoff coefficient. If the new land use will increase the runoff coefficient, then the project is considered a new development project rather than redevelopment project.
- AAA. RIPARIAN AREA: Land adjacent to any watercourse such as a brook, creek, river, or stream having a defined bed and bank that, if appropriately sized, helps to stabilize streambanks, limit erosion, reduces flood size flows, and/or filters and settles out runoff pollutants, or performs other functions consistent with the purposes of this regulation.
- BBB. RIPARIAN AND WETLAND SETBACK: The real property adjacent to a water resource on which soil disturbing activities are limited, all as defined by reference to Lorain County Erosion and Sediment Rules or locally adopted Riparian and Wetland Setbacks.
- CCC. RUNOFF: The portion of rainfall, melted snow, or irrigation water that flows across the ground surface and is eventually returned to water resources.

- DDD. SEDIMENT: The soils or other surface materials that can be transported or deposited by the action of wind, water, ice, or gravity as a product of erosion.
- EEE. SEDIMENTATION: The deposition of sediment in water resources.
- FFF. SEDIMENT BASIN: A temporary barrier or other suitable retention structure built across an area of water flow to intercept runoff and allow transported sediment to settle and be retained prior to discharge into waters of the State.
- GGG. SEDIMENT CONTROL: The limiting of sediment being transported by controlling erosion or detaining sediment-laden water, allowing the sediment to settle out.
- HHH. SEDIMENT POLLUTION: The degradation of water of the State by sediment as a result of failure to apply management or conservation practices to abate wind or water soil erosion, specifically in conjunction with soil-disturbing activities on land used or being developed for commercial, industrial, residential or other non-farm purposes.
- III. 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 (5) acres of surface area;
 2. Small streams with gradients less than ten (10) feet per mile with average annual flows of less than 3.5 feet per second containing sand or gravel bottoms;
 3. Drainage areas of locally designated or an Ohio designated Scenic River;
 4. Riparian and wetland areas.
- JJJ. SETTLING POND: A runoff detention structure, such as a Sediment Basin or Sediment Trap, which detains sediment-laden runoff, allowing sediment to settle out.
- KKK. SHEET FLOW: Water runoff in a thin uniform layer or rills and which is of small enough quantity to be treated by sediment barriers.
- LLL. SITE OWNER/OPERATOR: Any individual, corporation, firm, trust, commission, board, public or private partnership, joint venture, agency, unincorporated association, municipal corporation, county or state agency, the federal government, other legal entity, or an agent thereof that is responsible for the overall construction site.
- MMM. SLIP: A landslide as defined under "Landslides."
- NNN. SOIL CONSERVATION: The use of the soil within the limits of its physical characteristics and protecting it from unalterable limitations of climate and topography.

- OOO. SOIL DISTURBING ACTIVITY: Clearing, grading, excavating, filling, or other alteration of the earth's surface where natural or human made ground cover is destroyed and that may result in, or contribute to, increased storm water quantity and/or decreased storm water quality.
- PPP. SOIL: Unconsolidated erodible earth material consisting of minerals and/or graphics.
- QQQ. SOIL AND WATER CONSERVATION DISTRICT: An entity organized under Chapter 1515 of the Ohio Revised Code referring either to the Lorain Soil and Water Conservation District Board or its designated employee(s), hereinafter referred to as the Lorain County Soil & Water Conservation District.
- RRR. SOIL LOSS: the soil moved from a given site by the forces of erosion, measured using "T".
- SSS. 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; www.websoilsurvey.nrcs.usda.gov/app/
- TTT. STRUCTURAL STORM WATER MANAGEMENT PRACTICE OR STORMWATER CONTROL MEASURE (SCM): Any constructed facility, structure, or device that prevents or reduces the discharge of pollutants to water resources and/or controls stormwater volume and flow rate.
- UUU. STORM DRAIN: A conduit, pipe or human-made structure, which serves to transport storm water runoff.
- VVV. STORM WATER POLLUTION PREVENTING PLAN (SWP3): The written document that sets forth the plans and practices to be used to meet the requirements of the NPDES permit.
- WWW. STORM WATER RUNOFF: The direct response of a watershed to precipitation, which includes the surface and subsurface runoff that enters a stream, ditch, storm sewer or other concentrated flow during and following precipitation.
- XXX. STABILIZATION: The use of Best Management Practices that reduce or prevent soil erosion by storm water runoff, trench dewatering, wind, ice, gravity, or a combination thereof.
- YYY. STREAM: Shall have the same meaning as "water of the state" contained in O.R.C. 6111.01 and shall include all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs irrigation systems, drainage systems, and other bodies or accumulations of water, surface and underground, natural or artificial, regardless of the depth of the strata in which underground water is located, that are situated wholly or partly within, or border upon, this state, or are within its jurisdiction, except those private waters that do not combine or effect a junction with natural surface or underground waters.
- ZZZ. STRUCTURAL STORM WATER MANAGEMENT PRACTICE: Any constructed facility, structure, or device that provides storage, conveyance, and/or treatment of storm water runoff.

AAAA. SUBSOIL: That portion of the soil below the topsoil or plow layer, beginning 6 – 12” below surface down to bedrock parent material.

BBBB. SURFACE WATERS OF THE STATE: All streams, lakes, reservoirs, marshes, wetlands, or other waterways situated wholly or partly within the boundaries of the state, except those private waters which do not combine or affect a junction with surface water. Waters defined as sewerage systems, treatment works or disposal systems in Section 6111.01 of the Ohio Revised Code are not included.

CCCC. TOTAL MAXIMUM DAILY LOAD: The sum of the existing and/or projected point source, nonpoint source, and background loads for a pollutant to a specified watershed, water body, or water body segment. A TMDL sets and allocates the maximum amount of a pollutant that may be introduced into the water and still ensures attainment and maintenance of water quality standards.

DDDD. UNSTABLE SOILS: A portion of land surface or area which is prone to slipping, sloughing, landslides or is identified by Natural Resource Conservation Service, USDA methodology as having low soil strength.

EEEE. WATER QUALITY VOLUME: The volume of runoff from a contributing watershed that shall be captured and treated, equivalent to the maximized capture volume as defined in the American Society of Civil Engineers (ASCE) Manual and Report on Engineering Practice No. 87 and Water Environment Federation Manual of Practice No. 23 titled *Urban Runoff Quality Management*.

FFFF. WATER RESOURCE: Any public or private body of water; including wetlands; the area within the ordinary high water level of lakes and ponds; as well as the area within the ordinary high water level of any brook, creek, river, or stream having a defined bed and bank (either natural or artificial) which confines and conducts continuous or intermittent flow.

GGGG. WATER RESOURCE CROSSING: Any bridge, box, arch, culvert, truss, or other type of structure intended to convey people, animals, vehicles, or materials from one side of a watercourse to another. This does not include private, non-commercial footbridges or pole mounted aerial electric or telecommunication lines, nor does it include below grade utility lines.

HHHH. WATERCOURSE: Any natural, perennial, or intermittent channel, stream, river or brook.

III. WATERSHED: The total drainage area contributing storm water runoff to a single point.

JJJ. 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 CFR 232, as amended).

KKKK. WETLAND SETBACK: Those lands within the County that fall within the area defined by the criteria set forth in these regulations.

3.0 DISCLAIMER OF LIABILITY

- A. Compliance with the provisions of this regulation shall not relieve any person from responsibility for damage to any person otherwise imposed by law. The provisions of this regulation are promulgated to promote the health, safety, and welfare of the public and are not designed for the benefit of any individual or any particular parcel of property.
- B. By approving a Post Construction Comprehensive Storm Water Management Plan under this regulation, the County does not accept responsibility for the design, installation, and operation and maintenance of storm water management practices.

4.0 CONFLICTS, SEVERABILITY, NUISANCES & RESPONSIBILITY

- A. Where this regulation is in conflict with other provisions of law or ordinance, the most restrictive provisions, as determined by the Administrator shall prevail.
- B. If any clause, section, or provision of this regulation is declared invalid or unconstitutional by a court of competent jurisdiction, the validity of the remainder shall not be affected thereby.
- C. These Rules shall not be construed as authorizing any person to maintain a nuisance on their property, and compliance with the provisions of this regulation shall not be a defense in any action to abate such a nuisance.
- D. Failure of the County to observe or recognize hazardous or unsightly conditions or to recommend corrective measures shall not relieve the site owner from the responsibility for the condition or damage resulting therefrom, and shall not result in the County, its officers, employees, or agents being responsible for any condition or damage resulting therefrom.

5.0 DEVELOPMENT OF COMPREHENSIVE STORMWATER MANAGEMENT PLANS

- A. This regulation requires that a "Post-Construction" Storm Water Management Plan be developed and implemented to meet these Rules and be coordinated and combined with any Riparian and Wetland Setback Plan and the Lorain County Erosion and Sediment Control Rules. Combination of these documents may constitute the Comprehensive Storm Water Management Plan. **The Plan shall be implemented for any soil disturbing activities disturbing one (1) acre or more of total land, or less than one (1) acre if part of a larger common plan of development or sale disturbing one (1) or more acres of total land, and on which any regulated activity of Lorain County Erosion and Sediment Control Rules – Section 1.3 and 3.1 is proposed.** The Comprehensive Storm Water Management Plan so developed may serve as the Stormwater Pollution Prevention Plan required by Ohio EPA as part of the NPDES Storm Water Permit for General Construction.
- B. The County shall administer this regulation, shall be responsible for determination of compliance with this regulation, and shall issue notices and orders as may be necessary. The landowners / developers may consult with the Lorain County Soil & Water Conservation

District, Lorain County Engineer's Office, private engineers, storm water districts, or other technical experts in reviewing the Comprehensive Storm Water Management Plan.

6.0 APPLICATION PROCEDURES

<http://www.loarainswcd.com/forms/post-Constr-Plan-Application.pdf>

- A. **Pre-Application Meeting:** The applicant shall attend a Pre-Application Meeting with the Administrator and County Engineer to discuss the proposed project, review the requirements of this regulation, identify unique aspects of the project that shall be addressed during the review process, and establish a preliminary review and approval schedule.
- B. **Preliminary Comprehensive Storm Water Management Plan:** The applicant shall submit two (2) sets of a Preliminary Comprehensive Storm Water Management Plan (Preliminary Plan) and the applicable fees to the Administrator. The Preliminary Plan shall show the proposed property boundaries, setbacks, topography extending at least 25 feet beyond site extents, dedicated open space, public roads, water resources, storm water control facilities, and easements in sufficient detail and engineering analysis to allow the Administrator to determine whether the site will meet the intent of this regulation and if the proposed storm water management practices will be capable of controlling runoff from the site in compliance with this regulation. The applicant shall submit two (2) sets of the Preliminary Plan and applicable fees as follows:
1. **For subdivisions:** In conjunction with the submission of the preliminary subdivision plan.
 2. **For other construction projects:** In conjunction with the application for a zoning permit.
 3. **For general clearing projects:** In conjunction with the application for a zoning permit.
1. **Final Comprehensive Storm Water Management Plan:** The applicant shall submit two (2) sets of a Final Comprehensive Storm Water Management Plan (Final Plan) and the applicable fees to the Administrator prior to any of the following: (1) Submittal of the final plat (for subdivisions) with applicable fees paid to Lorain County Commissioners; (2) Submittal of improvement plans with applicable fees to Lorain County Engineer's Office; (3) Submittal of an application for a building with applicable fees to a certified Building Department; (4) Submittal of a zoning permit for the site with applicable fees to that township. The Final Plan shall meet the requirements of Section 8 of these rules and shall be approved prior to approval of the final plat and/or before issuance by the township's zoning inspector or building permit by the Building Inspector.
- C. **Review and Comment:** Lorain County Soil & Water Conservation District and Lorain County Engineer shall review the Preliminary and Final Plans submitted, and shall approve or return for revisions with comments and recommendations for revisions. A Preliminary or Final Plan rejected because of deficiencies shall be returned with a narrative report stating specific inadequacies and the procedures for filing a revised Preliminary or Final Plan. The Administrator shall review the plan and approve, or return for revision with comments and

recommendations for revisions, within thirty (30) days working days after receipt of said plan. At the time of receipt of a revised plan, another thirty (30) working days review period shall be commenced.

- D. Approval Necessary: Land clearing and soil-disturbing activities shall not begin and zoning and/or building permits shall not be issued without an approved Comprehensive Storm Water Management Plan.
- E. Valid for Two Years: Approvals issued in accordance with this regulation shall remain valid for two (2) years from the date of approval.
- F. One (1) Year Maintenance Bond: Shall be required for all improvements including "post-construction" measures. Lorain County Engineer may waive the requirement of the maintenance bond for small residential water quality SCMs within a larger common plan of sale that disturbs less than five (5) acres of land.

7.0 COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

Approvals issued in accordance with this regulation do not relieve the applicant of responsibility for obtaining all other necessary permits and/or approvals from other federal, state, and/or county agencies. If requirements vary, the most restrictive shall prevail. These permits may include, but are not limited to, those listed below. Applicants are required to show proof of compliance with these regulations before the County will issue a storm water approval.

- A. Ohio EPA NPDES Permits authorizing storm water discharges associated with construction activity. Proof of compliance with these requirements shall be the applicant's Notice of Intent (NOI) number from Ohio EPA, a copy of the Ohio EPA Director's Authorization Letter for the NPDES Permit, or a letter from the site owner certifying and explaining why the NPDES Permit is not applicable.
- B. Section 401 of the Clean Water Act: Proof of compliance shall be a copy of the Ohio EPA Water Quality Certification application tracking number, public notice, project approval, or a letter from the site owner certifying that a qualified professional has surveyed the site and determined that Section 401 of the Clean Water Act is not applicable. Wetlands, and other waters of the United States, shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.
- C. Ohio EPA Isolated Wetland Permit: Proof of compliance shall be a copy of Ohio EPA's Isolated Wetland Permit application tracking number, public notice, project approval, or a letter from the site owner certifying that a qualified professional has surveyed the site and determined that Ohio EPA's Isolated Wetlands Permit is not applicable. Isolated wetlands shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.
- D. Section 404 of the Clean Water Act: Proof of compliance shall be a copy of the U.S. Army Corps of Engineers Individual Permit application, public notice, or project approval, if an Individual Permit is required for the development project. If an Individual Permit is not

required, the site owner shall submit proof of compliance with the U.S. Army Corps of Engineer's Nationwide Permit Program. This shall include one of the following:

1. A letter from the site owner certifying that a qualified professional has surveyed the site and determined that Section 404 of the Clean Water Act is not applicable.
 2. A site plan showing that any proposed fill of waters of the United States conforms to the general and special conditions specified in the applicable Nationwide Permit. Wetlands, and other waters of the United States, shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.
- E. Ohio Dam Safety Law: Proof of compliance shall be a copy of the ODNR Division of Water permit application tracking number, a copy of the project approval letter from the ODNR Division of Water, or a letter from the site owner certifying and explaining why the Ohio Dam Safety Law is not applicable.
- F. Flood Plain Permit(s): Proof of compliance shall be a copy of the U.S. Army Corps of Engineer's Conditional Letter of Map Revisions and/or a local flood plain permit. If no work is proposed in the flood plain, the applicant shall submit proof in the form of a letter from the site owner certifying that a qualified professional has surveyed the site and determined that no fill will be placed in the flood plain.

8.0 COMPREHENSIVE STORM WATER MANAGEMENT PLAN

- A. Comprehensive Storm Water Management Plan Required: The applicant shall develop a Post Construction Storm Water Management Plan describing how the quantity and quality of storm water will be managed after construction is complete for every discharge from the site. The Plan will illustrate the type, location, and dimensions of every structural and non-structural storm water management practice incorporated into the site design, and the rationale for their selection. The rationale shall address how these storm water management practices will address flooding within the site as well as flooding that may be caused by the development upstream and downstream of the site. The rationale will also describe how the storm water management practices minimize impacts to the physical, chemical, and biological characteristics of on-site and downstream water resources and, if necessary, correct current degradation of water resources that is occurring or take measures to prevent predictable degradation of water resources.
- B. Preparation by Professional Engineer: The Comprehensive Storm Water Management Plan shall be prepared by a registered professional engineer and include supporting calculations, plan sheets, and design details. To the extent necessary, as determined by the Lorain County Engineer's office, a site survey shall be performed by a Registered Professional Surveyor to establish boundary lines, measurements, or land surfaces.
- C. Community Procedures: The Lorain County Engineer's office shall prepare and maintain procedures providing specific criteria and guidance to be followed when developing the Comprehensive Storm Water Management Plan. These procedures may be updated from time to

time, at the discretion of the Lorain County Engineer's office based on improvements in engineering, science, monitoring, and local maintenance experience. The Lorain County Engineer's office will make the final determination of whether the practices proposed in the Comprehensive Storm Water Management Plan meet the requirements of this regulation. The Lorain County Engineer's office may also maintain a list of acceptable Best Management Practices to be used in Lorain County, that meet the criteria of this regulation.

D. Contents of the Comprehensive Storm Water Management Plan: The Comprehensive Storm Water Management Plan shall contain an application, narrative report, construction site plan sheets, a long-term Inspection and Maintenance Agreement, and a site description with the following information provided:

1. Site description:

- a. A description of the nature and type of the construction activity (e.g. residential, shopping mall, highway, etc.).
- b. Total area of the site and the area of the site that is expected to be disturbed (i.e. grubbing, clearing, excavation, filling or grading, including off-site borrow areas).
- c. A description of prior land uses at the site.
- d. An estimate of the impervious area and percent of imperviousness created by the soil-disturbing activity at the beginning and at the conclusion of the project.
- e. Existing data describing the soils throughout the site, including the soil series and association, hydrologic soil group, porosity, infiltration characteristics, depth to groundwater, depth to bedrock, and any impermeable layers.
- f. If available, the quality of any known pollutant discharge from the site such as that which may result from previous contamination caused by prior land uses.
- g. The location and name of the immediate water resource(s) and the first subsequent water resource(s).
- h. The plan (aerial view) extent and description of water resources at or near the site that will be disturbed or will receive discharges from the project.
- i. Describe the current condition of water resources including the vertical stability of stream channels and indications of channel incision that may be responsible for current or future sources of high sediment loading or loss of channel stability.

2. Site map showing:

- a. Limits of soil-disturbing activity on the site.

- b. Soils types for the entire site, including locations of unstable or highly erodible soils.
 - c. Existing and proposed one-foot elevation (1') contours. This shall include a delineation of drainage watersheds expected before, during, and after major grading activities as well as the size of each drainage watershed in acres.
 - d. Water resource locations including springs, wetlands, streams, lakes, water wells, and associated setbacks on or within two-hundred (200) feet of the site, including the boundaries of wetlands or streams and first subsequent named receiving water(s) the applicant intends to fill or relocate for which the applicant is seeking approval from the Army Corps of Engineers and/or Ohio EPA.
 - e. Existing and planned locations of buildings, roads, parking facilities, and utilities.
 - f. The location of any in-stream activities including stream crossings.
3. Contact information: Company name and contact information as well as contact name, addresses, email address(es), and phone numbers for the following:
- a. The Professional Engineer who prepared the Comprehensive Storm Water Management Plan.
 - b. The Owner(s) of the Development Area.
 - c. The Applicant.
 - d. The Developer.
4. Phase, if applicable, of the overall development plan.
5. List of sub-lot numbers if project is a subdivision.
6. Ohio EPA NPDES Permit Number and other applicable state and federal permit numbers, if available or status of various permitting requirements if final approvals have not been received.
7. Location, including complete site address and sub-lot number if applicable.
8. Location of any easements or other restrictions placed on the use of the property.
9. A site plan sheet showing:

- a. The location of each proposed post construction storm water management practice and its point of discharge from the site. The size of the total drainage area contributing to the practice shall be indicated with either:
 - a. the percent imperviousness; or b. post-Construction land use breakdown in acres shown.
- b. The geographic coordinates of the site AND each proposed practice in North American Datum Ohio State Plan North longitude and latitude.

It is preferred that the entire site be shown on one plan sheet to allow a complete view of the site during plan review. If a smaller scale is used to accomplish this, separate sheets providing an enlarged view of areas on individual sheets should also be provided.

10. An Inspection and Maintenance Agreement. The Inspection and Maintenance Agreement required for storm water management practices under this regulation shall be a separate agreement between Lorain County and the owner, and shall contain the following information and provisions (The standard Inspection and Maintenance Agreement is provided in Appendix A):

- a. The location of each storm water control measure (SCM), including those practices permitted to be located in, or within fifty (50) feet of, water resources, and identification of the drainage area served by each storm water management practice.
- b. A schedule for regular maintenance for each aspect of the storm water management system and description of routine and non-routine maintenance tasks to ensure continued performance of the system as is detailed in the approved Post-Construction Storm Water Management Plan. This schedule may include additional standards, as required by the Lorain County Engineer, to ensure continued performance of storm water management practices permitted to be located in, or within fifty (50) feet of, water resources.
- c. The location and documentation of all access and maintenance easements to serve the property.
- d. Identification of the current and proposed landowner(s), organization, or municipality responsible for long-term maintenance, including repairs, of the storm water management practices.
- e. The landowner(s), organization, or municipality who shall maintain storm water management practices in accordance with this regulation.
- f. Lorain County has the authority to enter upon the property to conduct inspections as necessary to verify that the storm water management practices are being maintained and operated in accordance with this regulation.
- g. Lorain County shall maintain public records of the results of its site inspections, shall inform the landowner(s), organization, or municipality responsible for

maintenance of the inspection results, and shall specifically indicate any corrective actions required to bring the storm water practices into proper working condition.

- h. If Lorain County notifies the landowner(s), organization, or municipality responsible for maintenance of the maintenance problems that require correction, the specific corrective actions shall be taken within a reasonable time frame as determined by Lorain County.
- i. Lorain County is authorized to enter upon the property and to perform the corrective actions identified in the inspection report if the landowner(s), organization, or municipality responsible for maintenance does not make the required corrections in the specified time period. Lorain County shall be reimbursed by the landowner(s), organization, or municipality responsible for maintenance for all expenses incurred within 10 days of receipt of invoice from Lorain County.
- j. The proposed method of funding long-term maintenance and inspections of all storm water management practices.
- k. A release of Lorain County from all damages, accidents, casualties, occurrences, or claims that might arise or be asserted against Lorain County from the construction, presence, existence, or maintenance of the storm water management practices.

Alteration or termination of these stipulations is prohibited. The applicant shall provide a draft of this Inspection and Maintenance Agreement as part of the Comprehensive Storm Water Management Plan submittal. A recorded copy of the final Agreement shall be submitted to Lorain County to receive final inspection approval of the site.

- 11. Calculations required: The applicant shall submit calculations for projected storm water runoff flows, volumes, and timing into and through all SCMs for flood control, channel protection, water quality, and the condition of the habitat, stability, and condition of each water resource and its flood plain, as required in Section 9 of this regulation. These submittals shall be completed for both pre- and post-development land use conditions and shall include the underlying assumptions and hydrologic and hydraulic methods and parameters used for these calculations. The applicant shall also include critical storm determination, and demonstrate that the runoff from offsite and upper watershed areas have been considered in the calculations.
- 12. List of all contractors and subcontractors before construction: Prior to construction and before the pre-construction meeting, provide the list of all contractors and subcontractors names, addresses, and phones involved with the implementation of the Post Construction Storm Water Management Plan including a written document containing signatures of all parties as proof of acknowledgment that they have reviewed and understand the requirements and responsibilities of the Post Construction StormWater Management Plan.
- 13. Existing and proposed drainage patterns: The location and description of existing and proposed drainage patterns and storm water management practices, including any related storm water management practices beyond the development area including the larger common development area.

14. For each storm water management practice to be employed, include the following:
 - a. Location and size, including detail drawings, maintenance requirements during and after construction, and design calculations, all where applicable.
 - b. Final site conditions including storm water inlets and permanent nonstructural and structural storm water management practices. Details of storm water management practices shall be drawn to scale and shall show volumes and sizes of contributing drainage areas.
 - c. Any other structural and/or non-structural storm water management practices necessary to meet the design criteria in this regulation and any supplemental information requested by the Lorain County Engineer.
 - d. 25' wide clear access to SCMs with minimum 12 feet wide gravel, asphalt or concrete driveway as determined by the Lorain County Engineer.

9.0 PERFORMANCE STANDARDS

- A. General: The storm water system, including storm water management practices for storage, treatment and control, and conveyance facilities, shall be designed to prevent structure flooding during the NRCS one-hundred (100)-year, twenty-four (24)-hour storm event; to maintain predevelopment runoff patterns and flows, and to meet the following criteria:
 1. Integrated practices that address degradation of water resources. The storm water management practices shall function as an integrated system that controls flooding and minimizes the degradation of the physical, biological, and chemical integrity of the water resources receiving storm water discharges from the site. Acceptable practices shall:
 - a. Not disturb riparian areas, unless the disturbance is intended to support a watercourse restoration project and complies with Lorain County Erosion and Sediment Control Rules – Section 4.4-F-2 and or the locally adopted Riparian and Wetland Setbacks.
 - b. Minimize impacts to predevelopment hydrology and groundwater recharge on as much of the site as practicable.
 - c. Only install new impervious surfaces and compact soils where necessary to support the future land use.
 - d. Compensate for increased runoff volumes caused by new impervious surfaces and soil compaction by reducing storm water peak flows to be equal or less than predevelopment levels and flows.

- e. Storm water management practices that meet these criteria in this regulation, and additional criteria required by the Lorain County Engineer, shall comply with this regulation.
2. Practices designed for final use: Storm water management practices shall be designed to achieve the storm water management objectives of this regulation, to be compatible with the proposed development and post-construction use of the development area, to protect the public health, safety, welfare, and to function safely with minimal maintenance.
3. Adequate Outfall: Convey runoff from the development area to an adequate outfall, as recommended by the applicant's Professional Engineer, and approved by the Lorain County Engineer. Submit an engineering report at the preliminary plan stage that addresses the adequate outfall issue. Convey runoff to any adequate outfall that lies beyond the development area in accordance with these Comprehensive Storm Water Management Regulations. In this case, the applicant shall obtain easements for construction and maintenance and shall provide off-site improvements as recommended by his or her Professional Engineer, and approved by the Lorain County Engineer.
4. Storm water management for all lots: Areas developed for a subdivision, as defined in Section 501 of the Subdivision Regulations of Lorain County, shall provide storm water management and water quality controls for the development of all subdivided lots. This shall include provisions for lot grading and drainage that prevent structure flooding during the 100-year, 24-hour storm; and maintain, to the extent practicable, the pre-development runoff patterns, and peak flows from the development area.
5. Storm water facilities in water resources: Storm water management practices and related activities shall not be constructed in water resources unless the applicant shows proof of compliance with all appropriate permits from the Ohio EPA, the U.S. Army Corps, and other applicable federal, state, and local agencies as required in Section 7 of this regulation, and the activity is in compliance with Chapter 3 – Regulated Activities of the Lorain County Erosion and Sediment Control Rules and /or the locally adopted Riparian and Wetland Setbacks all as determined by the Lorain County Engineer.
6. Storm water ponds and surface conveyance channels: All storm water pond and surface conveyance designs shall provide a minimum of one (1) foot freeboard above the peak stage within the facility during the one-hundred (100)-year, 24-hour storm. At the peak stage, safely convey the 100-year design flow rate to an adequate outlet with emergency overflow structures. Design overflow structures for the condition when all other outlets are obstructed and the facility has reached 100-year design storage capacity. When designing storm water ponds and conveyance channels, the applicant shall consider public safety as a design factor and alternative designs shall be implemented where site limitations would preclude a safe design.
7. Exemption: The site where soil-disturbing activities are conducted shall be exempt from the requirements of Section 9 of this regulation if it can be shown to the satisfaction of the Lorain County Engineer that the site is part of a larger common plan of development where the storm water management requirements for the site are

provided by an existing storm water management practice, or if the storm water management requirements for the site are provided by practices defined in a regional or local storm water management plan approved by the Lorain County Engineer.

8. Maintenance: All storm water management practices shall be maintained in accordance with Inspection and Maintenance Agreements approved by the Lorain County Engineer.
9. Ownership: Unless otherwise required by the Lorain County, storm water management practices serving multiple lots in subdivisions shall be located on a separate lot or block of land held and maintained by an entity of common ownership or, if compensated by the property owners, by Lorain County. Storm water conveyance systems serving multiple lots in a subdivision may be located in the rear of the lots accessed and restricted within easements, and maintained by an entity of common ownership or, if compensated by the property owners, by Lorain County. Storm water management practices serving single lots shall be placed on these lots, or blocks protected within easements, and maintained by the property owner.
10. Preservation of Existing Natural Drainage. Practices that preserve and/or improve the existing natural drainage shall be used to the maximum extent practicable. Such practices may include minimizing site grading and compaction; protecting and/or restoring water resources, riparian areas, and existing vegetation; and maintaining un-concentrated storm water runoff to and through these areas.
11. Preservation of Wetland Hydrology: Concentrated storm water runoff from BMPs to wetlands shall be converted to diffuse flow before the runoff enters a wetland in order to protect the natural hydrology, hydro-period, and wetland flora. The flow shall be released such that no erosion occurs down slope. Practices such as level spreaders, vegetative buffers, infiltration basins, conservation of forest covers, and the preservation of intermittent streams, depressions, and drainage corridors may be used to maintain the wetland hydrology.

If the applicant proposes to discharge to natural wetlands, a hydrological analysis may be required to demonstrate that the proposed discharge matches the pre-development hydro-periods and hydrodynamics.

B. Storm Water Conveyance Design Criteria: All storm water management practices shall be designed to convey storm water safely, and to allow for the maximum removal of pollutants and reduction in flow velocities. This shall include but not be limited to:

1. Stream relocation or enclosure: The Lorain County Engineer may allow the enclosure or relocation of water resources only if the applicant shows proof of compliance with all appropriate permits from the Ohio EPA, the U.S. Army Corps, and other applicable federal, state, and local agencies as required in Section 7 of this regulation, and the activity is in compliance with Section 3 – Regulated Activities of the Lorain County Erosion and Sediment Control Rules and / or locally adopted Riparian and Wetland Setbacks all as determined by the Lorain County Engineer. At a minimum, stream relocation designs shall show how the project will minimize changes to the vertical

stability, flood plain form, channel form, and habitat of upstream and downstream channels on and off the property.

2. Off-site storm water discharges: Off-site storm water runoff that discharges to or across the applicant's development site shall be conveyed through the storm water conveyance system at its pre-development peak flow rates during each design storm. Off-site flows shall be diverted around storm water quality control facilities or, if this is not possible, the storm water quality control facility shall be sized to treat the off-site flow. Comprehensive Storm Water Management Plans will not be approved until it is demonstrated to the satisfaction of the Lorain County Engineer that off-site runoff will be safely conveyed through the development site to an adequate outfall in a manner that does not exacerbate upstream or downstream flooding and erosion.
3. Sheet flow. The site shall be graded in a manner that maintains sheet flow over as large an area as possible. The maximum area of sheet flow shall be determined based on the slope, the uniformity of site grading, and the use of easements or other legally-binding mechanisms that prohibit re-grading and/or the placement of structures within sheet flow areas. In no case shall the sheet flow length be longer than 100 feet, nor shall a sheet flow area exceed one acre. Flow shall be directed into an open channel, storm sewer, or other storm water management practice from areas too long and/or too large to maintain sheet flow, all as determined by the Lorain County Engineer.
4. Open channels: Unless otherwise approved by the Lorain County Engineer, drainage tributary to SCMs may be provided by an open channel with vegetated banks, designed to carry the ten (10)-year, storm water runoff.
5. Open drainage systems: Open drainage systems are preferred on all new development sites to convey storm water where feasible. Storm sewer systems shall be allowed only when the site cannot be developed at densities allowed under township's zoning or where the use of an open drainage system affects public health or safety, all as determined by the Lorain County Engineer. The following criteria shall be used to design storm sewer and open channel systems:

- a. Design storm sewers and open channels by the Rational Method ($Q=CiA$) for tributary areas less than two hundred acres. Calculate flow capacity in accordance with Manning's Formula ($V=1.486/n R^{2/3} S^{1/2}$). Use $n=0.015$ for pipes less than thirty inches in diameter.

Storm sewers and open channels that drain tributary areas in excess of two hundred acres may be designed using flows calculated by Soil Service Technical Release No. 20 (TR-20).

Design storm sewers and open channels with minimum mean velocity when flowing full of two feet per second, and with maximum mean velocity of ten feet per second in sewers, or five feet per second in open channels.

Design Culverts in accordance with ODOT 1100.

Design residential, commercial and industrial storm sewers and open channels as non-pressure conduits (to flow "just full") for the ten-year storm, with their twenty-five-year hydraulic grade line below the gutter line of the overlying roadway, or below the top of drainage structures outside the roadway. Also design open channels with a minimum of one foot freeboard to the top of their banks. The system shall be designed to meet these requirements when conveying the flows from the contributing areas within the proposed development and existing flows from offsite areas that are upstream from the development.

- b. Design public open channels with minimum slope of 0.3%, minimum bottom width of two feet, and minimum side slopes of 3:1. Specify vegetative cover and appropriate turf reinforcement.
- c. The minimum inside diameter of pipe permitted to be used in public storm sewer systems shall be twelve (12) inches (with minimum slope of 0.2%). Smaller pipe sizes may be used in private systems, subject to the approval of the Lorain County Engineer. Match crown elevations.
- d. All storm sewer and open channel systems shall be designed taking into consideration the tailwater of the receiving facility or water resource. The tailwater elevation used shall be based on the design storm frequency. The hydraulic grade line for the stormsewer system shall be computed with consideration for the energy losses associated with entrance into and exit from the system, friction through the system, and turbulence in the individual manholes, catch basins, and junctions within the system.
- e. The inverts of all curb inlets, manholes, yard inlets, and other structures shall be formed and channelized to minimize the incidence of quiescent standing water where mosquitoes may breed.
- f. Headwalls shall be required at all storm sewer inlets or outlets.

6. Water Resource Crossings. The following criteria shall be used to design structures that cross a water resource in the Lorain County:

- a. Water resource crossings other than bridges shall be designed to convey the stream's flow for the minimum twenty-five (25)-year, twenty-four (24)-hour storm.
- b. Bridges, open bottom arch or spans (3-sided culverts) are the preferred crossing technique and shall be considered in the planning phase of the development.

Bridges and open spans should be considered for all State Scenic Rivers, coldwater habitat, exceptional warm water habitat, seasonal salmonid habitat streams, and Class III headwater streams. The footers or piers for these bridges and open spans shall not be constructed within the ordinary high water mark.

- c. If a culvert or other closed bottom crossing is used, twenty-five (25) percent of the cross-sectional area or a minimum of one (1) foot of box culverts and pipe arches shall be embedded below the channel bed.
 - d. The minimum inside diameter of pipes to be used for crossings shall be twelve (12) inches.
 - e. The maximum slope allowable shall be a slope that produces a maximum ten (10)-feet per second velocity within the culvert barrel under design flow conditions. Erosion protection and/or energy dissipaters shall be required to properly control entrance and outlet velocities.
 - f. All culvert installations shall be designed with consideration for the tailwater of the receiving facility or water resource. The tailwater elevation used shall be based on the design storm frequency.
 - g. Streams with a drainage area of 5 square miles or larger shall incorporate flood plain culverts at the bank-full elevation to restrict head loss differences across the crossing so as to cause no rise in the 100-year storm event.
 - h. Bridges shall be designed such that the hydraulic profile through a bridge shall be below the bottom chord of the bridge for either the 100-year, twenty-four (24)-hour storm, or the 100-year flood elevation as determined by FEMA, whichever is more restrictive.
7. Overland flooding: Overland flood routing paths shall be used to convey storm water runoff flow rate from the 100-year, twenty-four (24)-hour storm event to an adequate receiving water resource or storm water management practice such that the runoff is contained within the drainage easement for the flood routing path and does not cause flooding of buildings or related structures. The peak 100-year water surface elevation along flood routing paths shall be at least one foot below the finished grade elevation at all structures. When designing the flood routing paths, the conveyance capacity of the site's storm sewers shall be taken into consideration.
8. Compensatory flood storage mitigation: The Lorain County Engineer recommends that no fill be proposed in any flood plain. In order to preserve flood plain storage volumes and thereby avoid increases in water surface elevations, any filling within flood plains approved by the Lorain County Engineer shall be compensated by removing an equivalent volume of material therein. First consideration for the location(s) of compensatory flood plain volumes should be given to areas where the stream channel will have immediate access to the new flood plain within the limits of the development site. Consideration will also be given to enlarging existing or proposed retention basins to compensate for flood plain fill if justified by a hydraulic analysis of the contributing watershed. Unless otherwise permitted by the Lorain County Engineer *reductions* in volume due to flood plain fills shall be mitigated within the

legal boundaries of the development. Embankment slopes used in compensatory storage areas shall reasonably conform to the natural slopes adjacent to the disturbed area. The use of vertical retaining structures is specifically prohibited.

9. Velocity dissipation: Velocity dissipation devices shall be placed at discharge locations and along the length of outfalls to provide non-erosive flow velocity from the structure to a water resource, so that the natural physical and biological characteristics and functions of the water resource are maintained and protected.

C. **Storm Water Quality Control:**

<http://www.lorainswcd.com/forms/ESC-Rules.pdf>

1. Direct runoff to a BMP: The site shall be designed to direct all runoff to one or more of the following SCMs. These practices are listed in Table 2 of this regulation and shall be designed to meet the following general performance standards:
 - a. For sites less than five (5) acres, but greater than one (1) acre and not part of a common plan of development where five (5) or more acres disturbed, the Administrator may approve other BMP's if the applicant demonstrates to the Lorain County Engineer's satisfaction that these BMP's meet the objectives of the regulation as stated in Section 9.C.6.
 - b. For sites greater than five (5) acres, or less than five (5) acres but part of a larger common plan of development or sale which will disturb five (5) or more acres, the Administrator and/or the Lorain County Engineer may approve other BMP's if the applicant demonstrates to the Administrator and/or the Lorain County Engineer's satisfaction that these BMP's meet the objectives of this regulation as stated in Section 9.C.6, and has prior written approval from the Ohio EPA.
 - c. For the construction of new roads, roadways and improvement projects by public entities (i.e. the state, counties, townships, cities, or villages), the Lorain County Engineer may approve alternative SCMs in accordance, with the current version of the Ohio Department of Transportation's "*Location and Design Manual, Volume Two Drainage Design*".
2. Criteria applying to all storm water management practices. Practices chosen shall be sized to treat the water quality volume (WQv) and to ensure compliance with Ohio Water Quality Standards (OAC Chapter 3745—1).

a. The WQv shall be equal to the volume of runoff from a 0.75 inch rainfall event and shall be determined according to one of the following methods:

(1) Using the following equation:

$$WQV = C * P * A / 12$$

where terms have the following meanings:

WQV = water quality volume in acre-feet

C = runoff coefficient appropriate for storms less than 1 in.

P = 0.75 inch precipitation depth

A = area draining into the storm water practice, in acres.

Runoff coefficients required by the Ohio Environmental Protection Agency (Ohio EPA) for use in determining the water quality volume can be determined using the list in Table 1 or using the following equation to calculate the runoff coefficient, if the applicant can demonstrate that appropriate controls are in place to limit the proposed impervious area of the development:

$$C = 0.858i^3 - 0.78i^2 + 0.774i + 0.04, \text{ where:}$$

i = fraction of the drainage area that is impervious

Table 1: 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)	0.4
Low Density Residential (<4 dwellings/acre)	0.3
Open Space and Recreational Areas	0.2
Where 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 $(0.6)(0.3) + (0.3)(0.5) + (0.1)(0.2) = (0.35)$	

b. An additional volume equal to 20% of the WQv shall be incorporated into the storm water practice for sediment storage. This volume shall be incorporated into the sections of storm water practices where pollutants will accumulate.

c. SCMs shall be designed such that the drain time is long enough to provide treatment and protect against downstream bank erosion, but short enough to provide storage available for successive rainfall events as defined in Table 2.

Stormwater Control Measure (SCM)	Drain Time of WQv
Infiltration Basin or Trench ¹	48 hours
Permeable Pavement – Infiltration ¹	48 hours
Permeable Pavement – Extended Detention	24 hours
Extended Detention Facilities	
▪ Dry Extended Detention Basin ²	48 hours
▪ Wet Extended Detention Basin ³	24 hours
▪ Constructed Wetlands (above permanent pool) ⁴	24 hours
▪ Bioretention Area/Cell ^{5,6}	24 hours
▪ Sand and other Media Filtration ⁵	24 hours
▪ Pocket Wetland ⁷	24 hours
¹ Practices designed to fully infiltrate the WQ _v shall empty within 48 hours to provide storage for subsequent storm events. ² The use of a forebay and micropool is required on all dry extended detention basins. Each is to be sized at a minimum 10% of the WQ _v . ³ Provide both a permanent pool and an extended detention volume above the permanent pool, each sized with at least 0.75*WQ _v . ⁴ Extended detention shall be provided for the WQ _v above the permanent water pool. ⁵ The surface ponding area shall completely empty within 24 hours so that there is no standing water. Shorter drawdown times are acceptable as long as design criteria in Rainwater and Land Development have been met. ⁶ This includes grassed linear bioretention, which was previously titled enhanced water quality swale. ⁷ Pocket wetlands shall have a wet pool equal to the WQ _v , with 25% of the WQ _v in a pool and 75% in marshes. The ED _v above the permanent pool shall be equal to the WQ _v .	

Table 2: Draw Down Times for Storm Water Management Practices

3. Additional criteria applying to infiltration facilities.
 - a. Infiltration facilities shall only be allowed if the soils of the facility fall within hydrologic soil groups A or B, if the seasonal high water table is at least three (3) feet below the final grade elevation, and any underlying bedrock is at least six feet below the final grade elevation.
 - b. All runoff directed into an infiltration basin shall first flow through a pretreatment practice such as a grass channel or filter strip to remove coarser sediments that could cause a loss of infiltration capacity.
 - c. During construction, all runoff from disturbed areas of the site shall be diverted away from the proposed infiltration basin site. No construction equipment shall be allowed within the infiltration basin site to avoid soil compaction.

4. Additional criteria for extended detention facilities:

- a. The outlet shall be designed to not release more than the first half of the water quality volume in less than one-third (1/3) of the drain time. A valve or sump shall be provided to drain any permanent pool volume for removal of accumulated sediments. The outlet shall be designed to minimize clogging, vandalism, maintenance, and to promote the capture of floatable pollutants.
- b. The basin design shall incorporate the following features to maximize multiple uses, aesthetics, safety, and maintainability:
 - (1) Basin side slopes above the permanent pool shall have a run to rise ratio of 4:1 or flatter.
 - (2) The perimeter of all permanent pool areas deeper than four (4) feet shall be surrounded by an aquatic bench that extends at least eight (8) feet and no more than fifteen (15) feet outward from the normal water edge. The six (6) feet wide portion of the aquatic bench closest to the shoreline shall have an average depth of six (6) inches below the permanent pool to promote the growth of aquatic vegetation. The remainder of the aquatic bench shall be no more than fifteen (15) inches below the permanent pool to minimize risk to persons who accidentally or intentionally enter the basin, and to limit growth of dense vegetation in a manner that allows waves and mosquito predators to pass through the vegetation. The maximum slope of the aquatic bench shall be ten (10) (H) to 1 (V). The aquatic bench shall be planted with hearty plants comparable to wetland vegetation that are able to withstand prolonged inundation.
 - (3) A forebay designed to allow larger sediment particles to settle shall be placed at basin inlets. The forebay and micropool volume shall each equal at least ten (10)% of the water quality volume (WQv).
- c. Water quality ponds may not be appropriate for ultra-urban areas where adequate space is not available or for heavy industrial areas that require extensive pollution treatment.
- d. Water quality ponds may cause stream warming and may need additional design consideration as determined by the Lorain County Engineer.
- e. Applicant shall assure compliance with Ohio Dam Safety Regulations. Ponds with dams are regulated under the Ohio Revised Code 1501: 21 Dam Safety Administrative Rules. A dam is exempt from the state's authority (ORC Section 1521.062) if it is 6 feet or less in height regardless of total storage; less than 10 feet in height with not more than fifty (50) acre-feet of storage, or not more than fifteen (15) acre-feet of total storage regardless of height. Check with the Ohio Dept. of Natural Resources, Division of Water, for the most current requirements.

- f. **Reducing Thermal Impacts Through Shading** – Warm water released from a permanent pool may adversely impact the thermal regime of receiving streams, particularly if the receiving water is a cold-water fishery. The pool acts as a heat sink between storm events during the summer months. Water released downstream from the pond can be as much as 10°F warmer than naturally occurring base flow. Large impervious surfaces also warm surface runoff significantly which can be critical to stream systems where fish and other aquatic life are threatened by high summertime water temperatures.

Add Shading – Shading a pond can significantly reduce thermal impacts. Trees planted around the pond, particularly on the south and west sides offer the most protection from the summer sun. Trees planted on islands or peninsulas should also be considered. Because tree roots can damage dams, trees shall not be planted on the embankment itself. Wetland vegetation also contributes to shading and reduces thermal impacts.

Leaf litter introduces nutrients to the pond and adds to the accumulations of sediment. While nutrients and sediment are pollutants, nutrients in plant material or detritus are more readily utilized by aquatic insects and incorporated into the food chain. Fallen leaves are a vital part of aquatic environments, whereas soluble nutrients and nutrients attached to fine sediments easily wash through a pond system or promote algal growth. The designer shall provide a landscape plan showing SCMs that shade the permanent pool, subject to approval by the Lorain County Engineer's Office.

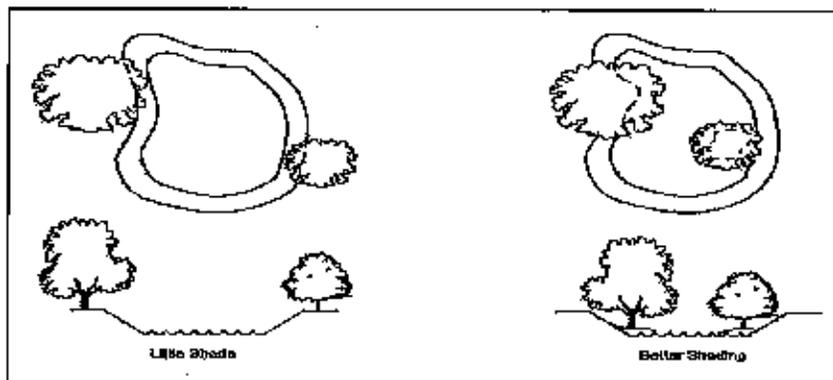


Figure: 2.6.7 Tree Placement to Shade Pond and Reduce Thermal Impacts

- g. Additional upland practices may be needed to reduce nutrient loads that cause problems common to reduce nutrient loads that cause problems common to eutrophic ponds (excess algae, low oxygen levels, and odor).

Suitable soils shall be available for constructing the embankment and insuring sufficient impermeability to prevent seepage losses. A trained professional shall

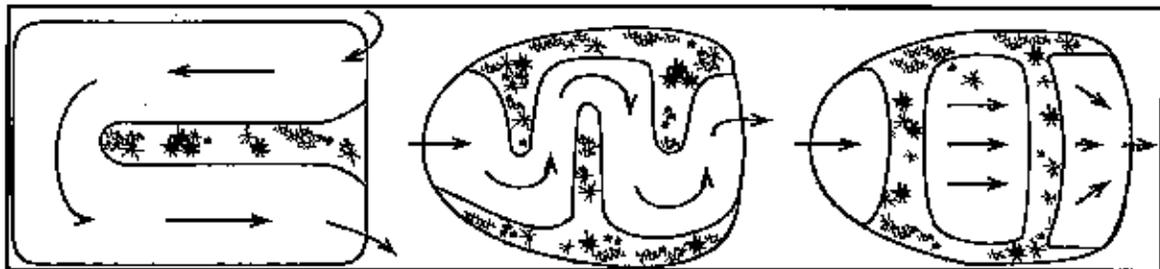
conduct an on-site evaluation of the proposed pond site and borrow areas prior to final design to characterize the adequacy of the site and the excavated soils for use as core trench or embankment fill. The evaluation should include a test pit at each abutment, along the centerline of the proposed embankment, the emergency spillway, the borrow area and the pool area. As a rule, one test pit should be placed for every 10,000 square feet of area examined. All explorations shall be logged using the Unified Soil Classification System.

- h. ***Advantages of Wetland Features*** – Wetland extended detention ponds may include wetland environments that greatly enhance water quality treatment by establishing a shallow aquatic bench around the main pool. These areas also improve safety by creating a vegetative barrier to discourage children from venturing into deeper water and reducing the hazard of steep grades at the pond edge.

When used as one water quality design feature within a wet extended detention pond, wetland vegetation should occupy at least twenty (20)% of the wet pool's water surface. It is also recommended that benches be at least six (6) feet wide and have depths of six (6) to twelve (12) inches on average and not exceed eighteen (18) inches. See the design criteria for wetland extended detention ponds for guidance on establishing wetland plants.

- i. For wet ponds, soils and site conditions shall be appropriate to maintain a permanent pool during dry weather. Permanent pools may be difficult to maintain if the contributing watershed area is less than twenty (20) acres and if the ratio of drainage area to water surface area is less than 6:1.
- j. Wetland vegetation promotes settling and stabilizes deposited sediment. Wetlands can further treat stormwater in ways most other treatment practices cannot, by plant uptake, adsorption, physical filtration, microbial decomposition and shading. Wetland plants readily absorb heavy metals, and other toxic wastes. Microorganisms that thrive in wetland plant root systems consume and decompose pollutants, these microorganisms that live among the plants are very good at breaking down poisonous organic compounds such as benzene, toluene and PCBs into harmless elements that the microorganisms and plants can digest.
- k. ***Mosquito Concerns*** – Water quality ponds have extended detention times less than the time needed for common vector mosquitoes to hatch (generally 72 hours). But it is still important to design and maintain stormwater ponds in order to prevent conditions most favorable to mosquitoes. When designing and maintaining stormwater ponds apply the following considerations:
 - 1. Avoid stagnant water by assuring there is sufficient flow to support a wet or wetland ponds.
 - 2. Maintain the outlets so that detention does not occur beyond the extended detention period.

3. Design wet ponds with wetland benches and wetlands with varying depths (mix of deeper water and wetland areas) in order to have improved habitats for natural mosquito predators like small fish, birds, dragonflies and aquatic insects.
 4. For areas that will have standing water without wave action or deeper water, consider aeration to prevent stagnation.
1. **Pond Configuration** – Configure the pond so that water quality treatment is optimized through pond shape and flow length. Improved settling of pollutants occurs as the flow length is maximized. Optimally, designs will avoid the problems of dead storage or incoming water short-circuiting through the pond and the re-suspension of deposited sediments.
1. **Length to Width Ratio** - Wedge shaped or ponds that are longer than wide will prevent flow from short-circuiting the main body of water. The ratio of flowlength to pond width should be at least 3:1. To increase a pond's flow length, the contours of the pond may be configured to form baffles or an extended flow path. Construction submerged aquatic benches to form cells will enhance flow routing.

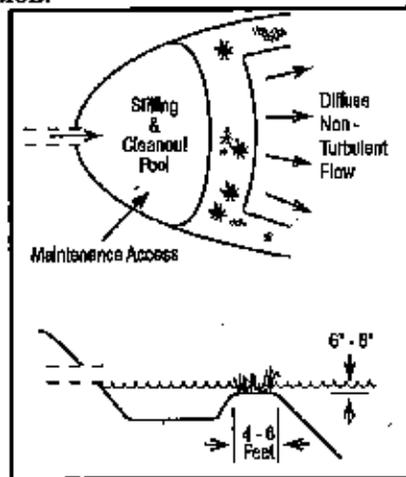


Flow Routing to Enhance Water Quality Treatment

2. **Side Slopes** – Varying the slope to create benches above and below waterlines increases safety and stability and can create water quality features such as wetland benches in permanent pools. Slopes should not be steeper than 4:1 or gentler than 12:1.
3. **Forebay (s)** – A forebay is a settling pool located at the inlet to a pond. It is separated from the rest of the pond by a level dike often planted with emergent wetland vegetation. Forebays are primarily used to improve the settling efficiency of a pond but they also reduce maintenance by promoting settling in a confined, easily accessible location.

Forebays promote settling by: segmenting or dividing the pond into cells which reduce mixing and promote plug flow; by converting the high velocity concentrated inflow from a pipe to a wide uniform slow flow to

the normal pool area, and by dissipating flows through emergent vegetation.

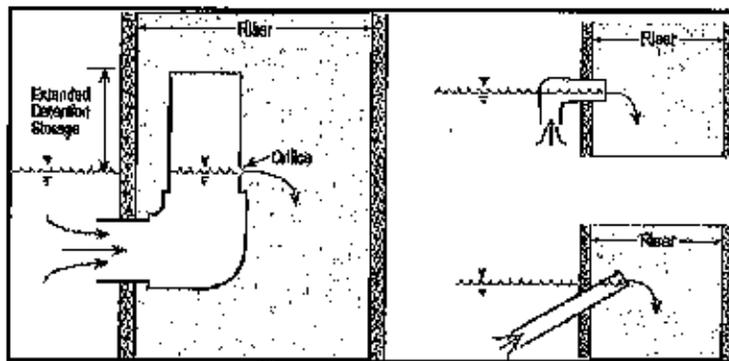


Forebay

4. **Forebay Size** – Forebay for single inlet should occupy from 8-25% of the normal pool area. Forebays should be large enough to avoid scour and re-suspension of trapped sediment and sized for ease of construction and cleanout. Forebays should have a water depth of at least three (3) feet.
 5. **Forebay Outlet** – Provide an outlet to the main pond, consisting of a level spreader or submerged level dike. A submerged dike separating the Forebay from the rest of a wet pool or wetland should be 6-12 inches below the normal water surface elevation and provide a non-erosive overflow. It should also be planted with hardy emergent wetland vegetation. See the wetland extended detention pond section below for more information on planting.
 6. **Forebay Maintenance Access** – To accommodate relatively frequent sediment cleanout, provide easy equipment access to the forebay. Include gradual slopes without obstructions and an access easement. Additionally, install a drain under the dike so that the Forebay can be drained during maintenance operations.
- m. **Micro-pool** – For wetland and predominantly dry extended detention Stormwater ponds, a micro-pool is recommended in front of the outlet. The micro-pool allows a reverse slope pipe or other non-clogging outlet to be used. The micro-pool should be 4-6 feet deep and equal to ten (10)% of the water quality volume.
 - n. **Non-clogging Outlet** – Extended detention outlets require small orifices or controls and shall be designed to be non-clogging. The orifice controlling the discharge of the WQv shall be a minimum of two (2) inches in diameter. If a design to meet these regulations cannot be achieved with the minimum orifice

size, another post construction BMP shall be utilized to meet the water quality requirements. A reverse flow pipe is one way to configure an outlet to better trap floating pollutants and to be less clogging (see figure 2.6.3). Reverse flow pipes draw water from below the water surface to trap floating debris that would otherwise clog the outlet.

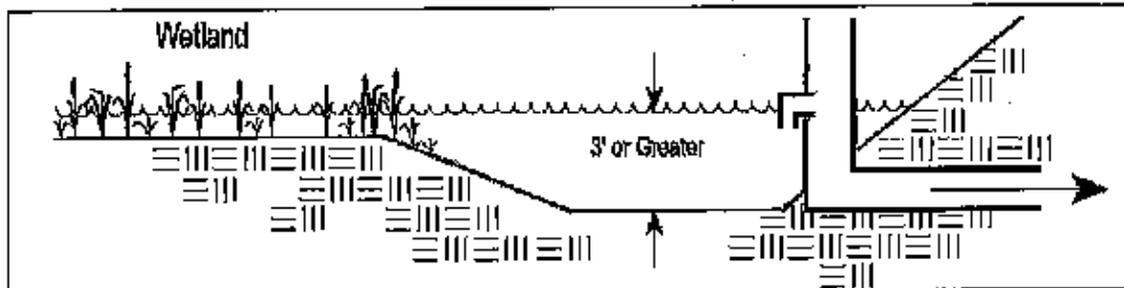
A reverse flow pipe is designed to draw water below the pond's surface and above the midpoint of the normal permanent pool elevation. They may be constructed with a pipe on a negative slope or with a turned pipe elbow. Reverse flow outlets may be constructed with a straight pipe set on a negative slope. A pipe with a ninety (90)-degree elbow also may be used either inside the riser and facing upward or outside the riser facing down.



Reverse Flow Structures Reduce Clogging and Trap Floating Pollutants

- o. **Pond Drain** – Install a drain such that the entire pond can be drained for maintenance or repair purposes.
- p. **Emergency Spillway** – Design emergency spillways based on Section 9.A.5.
- q. **Additional Specifications for Pond Construction** – Embankment ponds shall be well constructed and built according to NRCS Conservation Practice Standards 378 (Pond) addressing issues such as:
 1. Ponds shall incorporate emergency spillways designed to safely convey flows exceeding design storm flows.
 2. Outlet structures should be built to withstand flotation and incorporate anti-vortex and debris or trash rack devices.
 3. Embankments and principal spillway shall utilize adequate soils and compactions, core trenches and anti-seep collars.
- r. **Wetland Depth** – for Constructed Wetland – Wetland pool depths should generally range between six (6) to eighteen (18) inches. The average depth should be between six (6) and twelve (12) inches. This depth may vary but shall accommodate: 1) the depth appropriate for the type of wetland vegetation planted,

and 2) adequate volume of runoff stored within the wetlands. Wetland diversity and stability will be improved if a variety of depths are created with complex subsurface contours and irregular shapes to provide more edge effect.



Micropool: Open Water around Outlet Structure of Wetland

A micropool, that is a deep area, greater than three (3) feet, should be created at the outlet structure so that vegetation and sediment buildup do not interfere with outflow from the basin. Incorporating a deep pool at the inlet to the pond may be used to promote initial settling and dissipate concentrated inflow.

Establishing Wetland Vegetation – Six (6) to eight (8) species of wetland plants should be planted. Species that have worked well in constructed urban wetlands include: common three square, arrowhead, soft stem bulrush, wild rice, pickerelweed, sweetflag, smartweeds, spike rush, soft rush, and a number of other sedges.

Vegetation may be established one or a combination of the following methods: planting nursery stock (plants or rhizomes), mulching with soils from an existing wetland or allowing volunteer establishment. Using only volunteer establishment is discouraged since it often leads to monotypical stands of invasive or undesirable species.

Planting Layout – Initial planting should cover at least 30% of the wetland area, concentrated in several portions of the pond and have densities of four (4) to five (5) plants/square yard. Planting clusters of single species will improve the quality and diversity plantings. Plants should be planted for their appropriate depth within the permanent wetland pool.

Flood and Drain Prior to Planting – If nursery stock will be used, it is recommended that the wetland area be flooded for a period of time (6-9 months, USEPA) prior to draining and planting.

Treatment of Plant Material – For successful establishment of wetland vegetation the nursery stock shall be correctly handled prior to planting. For growing plants, this consists of keeping the roots moist at all times, and in keeping the plants out of direct sunlight as much as possible.

Vegetation should be planted as soon as possible to avoid damage during on-site storage. Dormant plant material should be stored under conditions similar to those under which the material was stored at the nursery. When planting container plants, dig holes about one third bigger to allow rootsystems an un-compacted area in which to develop.

Mulching with Wetland Soils – If an area is mulched with soil from an existing wetland, plants should be allowed to germinate and grow for a period prior to fully inundating the wetland pool. Care should be taken not to allow the newly germinated plants to dry out.

- u. ***Transition from Temporary Sediment Control Basin to permanent Stormwater Quality Pond*** – Often permanent Stormwater management ponds are used for sediment control during construction. In most cases, these facilities will need dewatering and sediment removal in order to insure that the pond has the appropriate volume for permanent Stormwater design. This includes removal of temporary risers used for sediment control, opening orifices and windows on the outlet structure that were temporarily plugged to comply with the sediment basin outlet detail in the Erosion and Sediment Control Plan, and reseeding bare soil or establishing wetland vegetation in designated areas within the pond.
 - v. ***Permanent Pool Depth*** – For Wet Extended Detention Basins – The mean depth of the permanent pool should be between three (3) and six (6) feet in order to optimize settling of suspended particles. This is calculated by dividing the permanent pool's storage volume by the pool's surface area. A pool that varies in depth will allow diverse conditions for wetland vegetation and portions which are deep enough for fish. If fish are to be maintained in the pool, approximately 25% of the pool should be at least six (6) to eight (8) feet deep.
 - w. For additional criteria in bio-retention, sand and other media filtration see the latest edition of the ODNR Rainwater and Land Development Manual.
5. **Criteria for the Acceptance of Alternative post-construction BMPs:** The applicant may request approval from the Lorain County Engineer for the use of alternative structural post-construction BMPs if the applicant shows to the satisfaction of the Lorain County Engineer that these BMPs are equivalent in pollutant removal and runoff flow/volume reduction effectiveness to those listed in Table 2. If the site is greater than five (5) acres, or less than five (5) acres but part of a larger common plan of development or sale which will disturb five (5) or more acres, prior approval from the Ohio EPA is necessary. To demonstrate the equivalency, the applicant shall show:
- a. The alternative BMP has a minimum total suspended solid (TSS) removal efficiency of 80 percent, using the Level II Technology Acceptance Reciprocity Partnership (TARP) testing protocol or other similar protocol acceptable to the Lorain County Engineer.

b. The water quality volume discharge rate from the selected BMP is reduced to prevent streambed erosion, unless there will be negligible hydrologic impact to the receiving surface water of the State. The discharge rate from the BMP will have negligible impacts if the applicant can demonstrate one of the following conditions:

- (1) The entire water quality volume is recharged to groundwater.
- (2) The development will create less than one (1) acre of impervious surface.
- (3) The development project is a redevelopment project in an ultra-urban setting, such as a downtown area, or on a site where 100 percent of the project area is already impervious surface and the storm water discharge is directed into an existing storm sewer system.
- (4) The storm water drainage system of the development discharges directly into a large river of fourth order or greater or to a lake, and where the development area is less than five (5) percent of the water area upstream of the development site, unless a Total Maximum Daily Load (TMDL) has identified water quality problems in the receiving surface water of the State.

6. Storm Water Management on Redevelopment Projects: Comprehensive Storm Water Management for redevelopment projects shall reduce existing site impervious areas by at least twenty (20) percent. A one-for-one credit towards the twenty (20) percent net reduction of impervious area can be obtained through the use of pervious pavement and, or green roofs.

- a. Where site conditions prevent the reduction of impervious area, then Stormwater management practices shall be implemented to provide storm water quality control facilities for at least twenty (20) percent of the WQv.
- b. When a combination of impervious area reduction and stormwater quality control facilities are used, 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.
- c. Where projects are a combination of new development and redevelopment, the total water quality volume that shall be treated shall be calculated by a weighted average based on acreage, with the new development at 100 percent water quality volume and redevelopment at twenty (20) percent.
- d. Where conditions prevent area reduction or on-site Stormwater management for redevelopment projects, practical alternatives may be approved by the Lorain County Engineer.

D. Storm Water Rate Control

The Comprehensive Storm Water Management Plan shall describe how the proposed storm water management practices are designed to satisfy the following requirements for storm water rate or quantity control for each watershed in the development. Furthermore, critical storm criteria detention volumes or quantities shall be satisfied in addition to water quality volume. That is, provide storage of one to one-hundred-year storm volumes entirely above the top elevation of the water quality volume stage (if handled within an individual SCM, pond or basin):

1. The peak discharge rate of runoff from the Critical Storm and from all more frequent storms that occur under post-development conditions shall not exceed the peak discharge rate of runoff from a 1-year, 24-hour storm occurring on the same development drainage area under pre-development conditions.
2. Pre-development runoff calculations shall reflect historic vegetative cover as meadow or woods (not agriculture). Post-development runoff calculations shall reflect adjusted Hydrologic Soil Group (HSG) classifications according to the OEPA Rainwater and Land Development Manual Appendix 9.
3. Storms of less frequent occurrence (longer return periods) than the Critical Storm, up to the 100-year, 24-hour storm shall have peak runoff discharge rates no greater than the peak runoff rates from equivalent size storms under pre-development conditions. The 1, 2, 5, 10, 25, 50, and 100-year storms shall be considered in designing a facility to meet this requirement.
4. The Critical Storm for each specific development drainage area shall be determined as follows:
 - a. Determine, using a curve number-based hydrologic method that generated hydrologic method that generates hydrographs, or other hydrologic method approved by the Lorain County Engineer, the total volume (acre-feet) of runoff from a 1-year, 24-hour storm occurring on the development drainage area before and after development. These calculations shall meet the following standards:
 1. Calculation shall include the lot coverage assumptions used for full build out as proposed.
 2. Calculations shall be based on the entire contributing watershed to the development area.
 3. To account for future post-construction improvements to the site, calculations shall assume an impervious surface such as asphalt or concrete for all parking areas and driveways, regardless of the surface proposed in the site description.
 - b. From the volume determined the percent increase in volume of runoff due to development. Using the percentage, select the 24-hour Critical Storm at Table 3 on page 41.

Table 3: 24-Hour Critical Storm

If the Percentage of Increase in Volume of Runoff is:		The Critical Storm will be:
Equal to or Greater Than:	and Less Than:	
---	10	1 year
10	20	2 year
20	50	5 year
50	100	10 year
100	250	25 year
250	500	50 year
500	---	100 year

For example, if the percent increase between the pre- and post-development runoff volume for a 1-year storm is 35%, the Critical Storm will be a 5-year storm. The peak discharge rate of runoff for all storms up to this frequency shall be controlled so as not to exceed the peak discharge rate from the 1-year frequency storm under pre-development conditions in the development drainage area. The post-development runoff from all less frequent storms need only be controlled to meet pre-development peak discharge rates for each of those same storms.

10.0 ALTERNATIVE ACTIONS

- A. When Lorain County determines that site constraints compromise the intent of this regulation, off-site alternatives may be used that result in an improvement of water quality and a reduction of storm water quantity. Such alternatives shall meet the following standards:
1. Shall achieve the same level of storm water quantity and quality control that would be achieved by the on-site controls required under this regulation.
 2. Implemented in the same Hydrologic Unit Code (HUC) 14 watershed unit as the proposed development project.
 3. The mitigation ratio of the water quality volume is 1.5 to 1 or the water quality volume at the point of retrofit, whichever is greater.
 4. An inspection and maintenance agreement as described in Chapter 8.0 – D.10 is established to ensure operations and treatment in perpetuity.
 5. Obtain prior written approval from Ohio EPA.
- B. Alternative actions may include, but are not limited to the following. All alternative actions shall be approved by the Lorain County Engineer:
1. Fees, in an amount specified by Lorain County Soil & Water Conservation District to be applied to community-wide storm water management practices.
 2. Implementation of off-site storm water management practices and/or the retrofit of an existing practice to increase quality and quantity control.
 3. Stream, flood plain, or wetland restoration.
 4. Acquisition or conservation easements on protected open space significantly contributing to storm water control such as wetland complexes.

11.0 EASEMENTS

Access to storm water management practices as required by Lorain County Engineer for inspections and maintenance shall be secured by easements in favor of the Lorain County Commissioners. The following conditions shall apply to all easements:

- A. Easements shall be included in the Inspection and Maintenance Agreement submitted with the Comprehensive Storm Water Management Plan.
- B. Easements shall be approved by Lorain County Engineer prior to approval of a final plat and shall be recorded with the Lorain Auditor and on all property deeds.

- C. Unless otherwise required by Lorain County Engineer access easements between a public right-of-way and all storm water management practices shall be no less than twenty-five (25-foot) wide. The easement shall also incorporate the entire practice plus an additional twenty-five (25-foot) wide band around the perimeter of the storm water management practice.
- D. The easement shall be graded and/or stabilized as necessary to allow maintenance equipment to access and manipulate around and within each facility, as defined in the Inspection and Maintenance Agreement for the site.
- E. Easements to structural storm water management practices shall be restricted against the construction therein of buildings, fences, walls, and other structures that may obstruct the free flow of storm water and the passage of inspectors and maintenance equipment; and against the changing of final grade from that described by the final grading plan approved by the Administrator. Any re-grading and/or obstruction placed within a maintenance easement may be removed by Lorain County at the property owners' expense.

12.0 MAINTENANCE AND FINAL INSPECTION APPROVAL

To receive final inspection and acceptance of any project, or portion thereof, the following shall be completed and submitted to Lorain County Engineer:

- A. Final stabilization shall be achieved and all permanent storm water management practices shall be installed and made functional, as determined by Lorain County Engineer and per the approved Comprehensive Storm Water Management Plan.
- B. An As-Built Certification, including a Survey and Inspection, shall be sealed, signed and dated by a Professional Engineer and a Professional Surveyor with a statement certifying that the storm water management practices, as designed and installed, meet the requirements of the Comprehensive Storm Water Management Plan approved by Lorain County Engineer. In evaluating this certification, Lorain County Engineer may require the submission of a new set of storm water practice calculations if he/she determines that the design was altered significantly from the approved Comprehensive Storm Water Management Plan. The As-Built Survey shall indicate the location, dimensions, elevations, and volumes of such practices. Include the entity responsible for long-term maintenance as detailed in the Inspection and Maintenance Agreement.
- C. Include in the certification, the as-built volumes and key invert and overflow elevations of SCMs.
- D. Provide to the Lorain County Engineer, the complete and recorded Inspection and Maintenance Agreement as specified in Section 8.0 .

13.0 ON-GOING INSPECTIONS

The Lorain County Soil & Water Conservation District and or Lorain County Engineer may inspect storm water management practices after acceptance. Upon finding a malfunction or other need for maintenance, the Lorain County Engineer shall provide written notification to the responsible party, as detailed in the Inspection and Maintenance Agreement, of the need for maintenance. Upon notification, the responsible party shall within *five (5) working days*, or other mutually agreed upon time, make repairs or submit a plan with detailed action items and established timelines. Should repairs not be made within this time, or a plan approved by the Lorain County Engineer for these repairs not be in place, the Lorain County Engineer may undertake the necessary repairs and assess the responsible entity.

14.0 FEES

The Comprehensive Storm Water Management Plan review, filing, and inspection fees are part of a complete submittal and shall be submitted to the Administrator before the review process begins. The Lorain County Engineer shall establish a fee schedule based upon the actual estimated cost for providing these services. All fees are payable to the Lorain County Commissioners. For Fee Schedule see page 48.

15.0 BOND

- A. If a Comprehensive Storm Water Management Plan is required by this regulation, soil-disturbing activities shall not be permitted until a maintenance bond *of 100% of the total project cost of the storm water facilities*, has been deposited with the Lorain County Engineer. This bond shall be posted for the Lorain County Soil & Water Conservation District to perform the obligations otherwise to be performed by the owner of the development area as stated in this regulation and to allow all work to be performed as needed in the event that the applicant fails to comply with the provisions of this regulation. The maintenance bond will be returned, less administrative fees established by Lorain County, when the following three criteria are met:
1. 100% of the total project has been permanently stabilized.
 2. An As-Built Inspection of all SCMs is conducted by the Lorain County Engineer.
 3. An Inspection and Maintenance Agreement signed by the developer, the contractor, the Lorain County Engineer, and the private owner or homeowners association who will take long-term responsibility for these SCMs, is accepted by the Lorain County Storm Water District.
- B. Once these criteria are met, the applicant shall be reimbursed all bond monies that were not used for any part of the project. If all of these criteria are not met after three years of permanent stabilization of the site, Lorain County may use the bond monies to remedy any outstanding issues with all storm water management structures on the site and the remainder of the bond shall be given to the private lot owner/ homeowners association for the purpose of long term maintenance of the project.

16.0 INSTALLATION OF STORM WATER CONTROL MEASURES (SCMs)

The operator may not direct runoff through any water quality SCMs and structures or portions thereof that could be degraded by construction site sediment until the entire area tributary to the structure has reached final stabilization as determined by Lorain County Soil & Water Conservation District. Final stabilization requires the completion of the final grading at the site, all of the utilities installed, and the site subsequently stabilized with vegetation or other appropriate methods. The operator shall provide documentation acceptable to Lorain County Soil & Water Conservation District to demonstrate that the site is completely stabilized. Upon this proof of compliance, the water quality SCMs and structure(s) may be installed and placed into service. Schedule and sequence construction operations accordingly to protect water quality SCMs from sediment clogging. Upon completion of installation of these practices, all disturbed areas and/or exposed soils caused by the installation of these practices shall be stabilized within seven (7) days.

17.0 MONITORING FOR COMPLIANCE: ENFORCEMENT

A. Following the initial inspection of control devices by the project engineer, regular inspections will be performed by the Administrator for compliance with these Rules. If it appears that a violation of any of these Rules has occurred, the owner and developer will be notified of deficiencies or noncompliance in writing by certified mail, return receipt requested.

B. The rules shall be enforced in accordance with O.R.C. 307.79 and at a minimum shall permit: The Board of County Commissioners or any duly authorized representative of the Board may, upon identification to the owner or person in charge, enter any land upon obtaining agreement with the owner, tenant, or manager of the land in order to determine whether there is compliance with the rules adopted under this section. If the Board or its duly authorized representative is unable to obtain such an agreement, the Board or representative may apply for, and a judge of the Lorain County Common Pleas Court inspection warrant as necessary to achieve the purposes of this chapter.

1. If the Board of County Commissioners or its duly authorized representative determines that a violation of the rules adopted under this section exists, the Board or representative may issue an immediate stop work order if the violator failed to obtain any federal, state or local permit necessary for sediment and erosion control, earth movement, clearing, or cut and fill activity. In addition, if the Board or representative determines such a rule violation exists, regardless of whether or not the violator has obtained the proper permits, the Board or representative may authorize the issuance of a notice of violation. If, after a period of not less than thirty - (30) days has elapsed following the issuance of the notice of violation, the violation continues, the Board or its duly authorized representative shall issue a second notice of violation. Except as provided in division Subsection (3) of this section, if after a period of not less than fifteen (15) days has elapsed following the issuance of the second notice of violation, the violation continues, the Board or its duly authorized representative may issue a stop work order after first obtaining the written approval of the prosecuting attorney of the county if, in the opinion of the prosecuting attorney, the violation is egregious.

Once a stop work order is issued, the Board or duly authorized representative shall request, in

writing, the prosecuting attorney of the county to seek an injunction or other appropriate relief in the court of common pleas to abate excessive sedimentation and secure compliance with the rules adopted under this section. If the prosecuting attorney seeks an injunction or other appropriate relief, then, in granting relief, the Court of Common Pleas may order the construction of sediment control improvements or implementation of other control measure and may assess a civil fine of not less than one hundred or more than five hundred dollars. Each day of violation of a rule or stop work order issued under this section shall be considered a separate violation subject to a civil fine.

2. The person to who a stop work order is issued under this section may appeal the order to Lorain County Common Pleas Court issued, seeking any equitable or other appropriate relief from that order.
3. No stop work order shall be issued under this section against any public highway transportation, or drainage improvement or maintenance project undertaken by a government agency or political subdivision in accordance with a statement of its standard sediment control policies that is approved by the Board or the Chief of the Division of Soil and Water Conservation, Ohio Department of Natural Resources.

The Administrator shall have the authority to require immediate on-site adjustments to the Comprehensive Storm Water Management Regulations in order to achieve compliance with these Rules.

A final inspection will be made to determine if the criteria of these Rules have been satisfied and a report will be presented to the Board of Lorain County Commissioners on the site's compliance status.

The Administrator will monitor soil-disturbing activities for non-farm residential, commercial, industrial, or other non-farm purposes on land of less than one contiguous acre to ensure compliance required by these Rules.

The Administrator shall not review or approve Comprehensive Stormwater Management Plans, of any type, for applicants that have an existing development project or site(s) that is not in compliance with its approved erosion and sediment control plan, or a project site(s) that is otherwise not in compliance with the Lorain County Comprehensive Stormwater Management Plan.

The Administrator shall not review or approve Lorain County Comprehensive Stormwater Management Plans for sublots or other areas within existing development projects that are not in compliance with its approved erosion and sediment control plan or otherwise not in compliance with the Lorain County Comprehensive Stormwater Management Plans. Such development projects include but not limited to, subdivisions or other common plans of development

The County of Lorain reserves the right to withhold relevant inspections and/or other approvals from its departments and/or agencies for development projects or activities in support of development projects that are not in compliance with these Rules.

The County shall not issue building permits for projects regulated under the Lorain County Comprehensive Stormwater Management Plan that have not received approval for a Comprehensive Stormwater Management Plan for said project(s).

18.0 VIOLATIONS

No person shall violate or cause or knowingly permit to be violated any of the provisions of this regulation, or fail to comply with any of such provisions or with any lawful requirements of any public authority made pursuant to this regulation, or knowingly use or cause or permit the use of any lands in violation of this regulation or in violation of any permit granted under this regulation.

19.0 APPEALS

Any person receiving a denial of permit may appeal the determination to the Board of Commissioners or its designee. The Notice of Appeal shall be mailed to the Clerk of the Board of Commissioners within 14 days of the Notice of Denial. A hearing shall take place within thirty (30) days of receipt of the Notice. Written notice of the hearing will be sent to the appellant.

20.0 PENALTY

No person, firm, entity or corporation; including but not limited to, the owner of the property, his agents and assigns, occupant, property manager, and any contractor or subcontractor shall violate any rule adopted or order issued under this section. Notwithstanding Section 17.B of the section, if the Board of County Commissioners determines that a violation of any rule adopted or administrative order issued this section exists, the Board may request, in writing, the prosecuting attorney of the County to seek an injunction or other appropriate relief in the Court of Common Pleas to abate excessive erosion and sedimentation and secure compliance with the rules or order. In granting relief, the Court of Common Pleas may order the construction of sediment control improvements or implementation of other control measures any may assess a civil fine or not less than one hundred (\$100.00) or more than five hundred dollars (\$500.00). Each day of violation of a rule adopted or administrative order issued under this section shall be considered a separate violation subject to a civil fine.

Lorain County Comprehensive Storm Water Management Plan Fee Schedule

Please make all checks payable to: Lorain County Commissioners

Single Lot Residential – Not Part of a Greater Plan of Development

Fee

Single Projects	\$50.00
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Residential Developments Property Under Construction

Fee

On five (5) acre or more (these fees are cumulative)	
a. for first five (5) acre	\$ 50.00
b. for additional 20 acres or any part thereof:	\$ 175.00
c. for the next 25 acres:	\$ 150.00
d. for all acreage over 50 acres	\$ 100.00

Non-Residential Property Under Construction

Fee

On five (5) acre or more (these fees are cumulative)	
a. for first five (5) acre	\$ 250.00
b. for all acreage over 5 acres	\$ 50.00 / acre

Site Inspections

Fee

Both Residential and Non-Residential

Sites 1 – 5 acres	\$ 250.00
Sites 6 – 10 acres	\$ 400.00
Sites 11 – 20 acres	\$ 700.00
Sites 21 – 50 acres	\$ 900.00
Sites larger than 50 acres	\$ 1200.00

**** Please note: Non-compliant sites will incur an additional inspection fee of \$50.00 per hour for each inspection required until site meets compliance.**

Appendix A

Inspection and Maintenance Agreement for SCMs

INSPECTION AND MAINTENANCE AGREEMENT
FOR STORM WATER CONTROL MEASURES

This Inspection and Maintenance Agreement, made this ____ day of _____ 20__ by and between Columbia Northwest Properties, LTD (hereafter referred to as the "Owner") and the *Lorain County Storm Water Management District*, provides as follows:

WHEREAS, the Owner is responsible for certain real estate described as Lorain County Auditor's Tax Map Parcel Nos. _____ located at _____ (complete street address or attach legal description of the property) that is to be developed as _____ (Development's official name), and referred to as the "Property;" and,

WHEREAS, the Owner is providing a storm water management system consisting of the following storm water control measures (SCMs):

1. (List all SCMs)

as shown and described on the attached Comprehensive Storm Water Management Plan *attached and incorporated fully herein and Marked as "Exhibit A"*; also on file with the Lorain County Storm Water Management District, and,

WHEREAS, to comply with the Comprehensive Storm Water Management Regulations of Lorain County, as they exist on the date of this agreement pertaining to this project, the Owner has agreed to inspect, operate, maintain, and repair the SCMs in accordance with the terms and conditions hereinafter set forth.

NOW, THEREFORE, for and in consideration of the mutual covenants and undertaking of the parties, the parties hereby agree as follows:

A. FINAL INSPECTION and APPROVAL

1. The Owner shall record all easements as described in Section 11.0 of the Comprehensive Storm Water Management Regulations, and shall submit copies thereof to the Lorain County Engineer.
2. The Owner shall install and make functional all SCMs, and request a final inspection by the Lorain County Engineer, as described in Section 12.0 (A) of the Comprehensive Storm Water Management Regulations.
3. The Owner shall further submit to the Lorain County Engineer the Owner's Professional Engineer's Certification and Inspection, including the Owner's professional surveyor's As-Built Survey, as described in Section 12.0 (B) of the Comprehensive Storm Water Management Regulations.

4. The Owner shall further record this complete Inspection and Maintenance Agreement, including copies of the approved Inspection and Maintenance Plan; and the Owner shall submit copies thereof to the Lorain County Engineer as described in Section 12.0 (C) of the Comprehensive Storm Water Management Regulations.
5. Within 30 days of receipt of the above documents, the Lorain County Engineer shall then make a final inspection of SCMs, and the Owner shall make any necessary repairs as described in Section 13.0 of the Comprehensive Storm Water Management Regulations.
6. The Owner shall further pay all fees in accordance with Section 14.0 of the Comprehensive Storm Water Management Regulations.
7. Within 30 days of satisfactory completion of all these requirements, the Lorain County Engineer shall approve in writing, and shall notify the *Lorain County Storm Water Management District* that the SCMs are constructed in accordance with the approved plans and specifications of the approved Comprehensive Storm Water Management Plan.

B. MAINTENANCE of STORMWATER CONTROL MEASURES

1. The Owner agrees to maintain in perpetuity the SCMs in accordance with the approved Maintenance Plans described in #2 below, and in a manner that will permit the SCMs to perform the purposes for which they were designed and constructed, and in accordance with the standards by which they were designed and constructed, all as shown and described in the approved Comprehensive Storm Water Management Plan. This includes all pipes and channels built to convey storm water to the SCMs, as well as structures, improvements, vegetation, and non-structural measures provided to control the quantity and quality of the storm water runoff.
2. The Owner shall provide a Maintenance Plan for each SCM. The Maintenance Plans shall include the following:
 - i. The location of each SCM and identification of the drainage areas served by each SCM.
 - ii. Photographs of each SCM, including all inlets and outlets upon completion of construction.
 - iii. A schedule of inspection.
 - iv. A schedule for regular maintenance for each aspect of the SCM and description of routine and non-routine maintenance tasks to ensure continued performance of the SCM as detailed in the approved Comprehensive Storm Water Management Plan. The Owner shall also provide a maintenance inspection checklist written so the average person can understand it. The maintenance plan shall include detailed drawings of each SCM and outlet and control structures (with the parts of the structures labeled). This schedule may include additional standards, as required by the *Lorain County Storm Water*

Management District, to ensure continued performance of SCMs permitted to be located in, or within 50 feet of, water resources.

- v. Location and documentation of all access routes and access and maintenance easements on the Property.

Alteration or termination of these stipulations is prohibited.

3. The Owner shall maintain, update, and store the inspection, maintenance and repair records for the SCMs.
4. The Owner shall regularly inspect, shall perform all maintenance in accordance with the Inspection and Maintenance Plan, and shall complete all repairs identified, and any additional repairs or improvements necessary to make the SCMs function properly as requested in writing by the *Lorain County Storm Water Management District*.

C. INSPECTION, MAINTENANCE and REPAIR of SCMs

1. During the first year of operation, the Owner shall inspect all SCMs listed in this Agreement, at a minimum of every three (3) months, and after major storm water runoff events.
2. The Owner's Professional Engineer shall inspect all SCMs listed in this Agreement at least once each year, and shall submit his report to the *Lorain County Storm Water Management District* including his recommendations and including his summary of the prior year's activities.
3. Upon request, The Owner shall submit Inspection Reports, Maintenance Logs, and Repair Records in writing to the *Lorain County Storm Water Management District* within seven (7) days. The reports shall be on the form attached as Exhibit C.
4. The Owner grants permission to the *Lorain County Storm Water Management District* to enter the Property with prior notification to the Owner to inspect all aspects of the SCMs and related drainage whenever the *Lorain County Storm Water Management District* deems necessary to verify that the SCMs are being maintained and operated in accordance with the terms and conditions hereinafter set forth. The *Lorain County Storm Water Management District* shall maintain public records of these reports of such site inspections, and shall deliver copies of said reports to the Owner, and shall indicate in writing any corrective actions and repairs or improvements necessary to make the SCMs function properly.
5. The Owner shall complete all corrective actions and repairs within five (5) working days of their discovery through Owner inspections, or through a request from the *Lorain County Storm Water Management District*. If repairs do not occur within this five (5) day period, the Owner shall request written approval from the *Lorain County Storm Water Management District* for his schedule of repairs.

6. In the event of any default or failure by the Owner in the performance of any of the covenants and warranties pertaining to the maintenance of the SCMs, or in the event the Owner fails to maintain the SCMs in accordance with the approved design standards and Inspection and Maintenance Plan, or, in the event of an emergency as determined by the *Lorain County Storm Water Management District*, in the sole discretion of the *Lorain County Storm Water Management District*, after providing reasonable notice to the Owner, may enter the property and take whatever steps necessary to correct deficiencies and to charge the cost of such repairs to the Owner. The Owner shall reimburse the *Lorain County Storm Water Management District* upon demand, within ten (10) days of receipt thereof for all actual cost incurred by the *Lorain County Storm Water Management District* (or later with written permission from the *Lorain County Storm Water Management District*). All costs expended by the *Lorain County Storm Water Management District* in performing such necessary maintenance or repairs shall constitute a lien against the properties of the Owner. Nothing herein shall obligate the *Lorain County Storm Water Management District* to maintain the SCMs.

D. FUNDING

The Owner shall specify the method of funding for the perpetual inspection, operation, and maintenance of the SCMs listed in this Inspection and Maintenance Agreement. A description of the funding mechanism shall be submitted with its application to the *Lorain County Storm Water Management District* and approved by the *Lorain County Storm Water Management District*.

E. INDEMNIFICATION

1. The Owner hereby agrees to save, hold harmless, and to indemnify the *Lorain County Storm Water Management District* and its employees and officers and agents from and against all liability, losses, claims, demands, costs and expenses arising from, or out of, default or failure by the Owner to maintain the SCMs, in accordance with the terms and conditions set forth herein, and from acts of the Owner arising from, or out of, the construction, operation, repair or maintenance of the SCMs.
2. The Owner hereby releases the *Lorain County Storm Water Management District* from all damages, accidents, casualties, occurrences, or claims that might arise or be asserted against the *Lorain County Storm Water Management District* from the presence, existence, or maintenance of the SCMs.
3. The parties hereto expressly do not intend by execution of this Inspection and Maintenance Agreement to create in the public, or any member thereof, any rights as a third party beneficiary, nor to authorize anyone not a party hereof to maintain a suit for any damages pursuant to the terms of this Inspection and Maintenance Agreement.
4. This Inspection and Maintenance Agreement shall be a covenant that runs with the land and shall inure to the benefit of and shall be binding upon the parties hereto, their respective successors and assigns, and all subsequent owners of the property.

5. The current Owner shall promptly notify the *Lorain County Storm Water Management District* when the Owner legally transfers any of the Owner's responsibilities for the SCMs. The Owner shall furnish to the *Lorain County Storm Water Management District* a copy of any document of transfer, executed by both parties.

6. Upon execution of this Inspection and Maintenance Agreement, The *Lorain County Storm Water Management District* shall record it in the Recorder's Office of *Lorain County*, Ohio, at the Owner's expense.

7. In the event that the *Lorain County Storm Water Management District* shall determine in its sole discretion that any or all of the SCMs are no longer necessary, then the *Lorain County Storm Water Management District* shall, at the request of the Owner, execute and record a release of this agreement, at the Owner's expense.

IN WITNESS WHEREOF, the Owner has caused this Inspection and Maintenance Agreement to be signed in its names by a duly authorized person.

By: _____

By: _____, PE, PS
Lorain County Engineer, on behalf of the Lorain County Storm Water Management District

Approved as to Form:

 By: Assistant County Prosecutor

 Print Name



Matt Lundy Lari Kokoski Sharon Sweda

226 Middle Avenue
Elyria, OH 44035-5641
Office: 440-329-5111
Fax: 440-329-3357
www.loraincounty.us

County Administrator
James R. Cordes
40-329-5760

Clerk of the Board
Theresa Upton
40-329-5103

Log Kennel
Timothy Pihlblad
40-326-5997

Budget
L.C. Saunders
40-329-5406

Charles Berry Bridge
J Zacchi
40-244-2137

Children & Family Council
40-284-4464

Community Development
Don Romancak
40-328-2323

Emergency 9-1-1
Lucy Lopez
40-329-5444

Emergency Management &
Homeland Security
Thomas Kelley
40-329-5117

Facilities Management
Aren Davis
40-329-5102

Human Resources
40-329-5150

I/Telecommunications
Alicia Smith
40-329-5786

Crime/Drug Lab
Elizabeth Doyle
40-329-5636

Lorain County Transit
Amela Novak
40-329-5525

Purchasing
Amela Wilkens
40-329-5240

Records Center
Janice Lindler
40-326-4866

Solid Waste Management
40-329-5440

Visit Lorain County
40-984-5282

Workforce Development
Lisa Longo
40-284-1834

September 5, 2019

Don Romancak, Director
LCCDD
226 Middle Avenue
Elyria, Ohio 44035
Attn: Christin Brandon

Dear Mr. Romancak:

Enclosed is corrected Resolution No. 19-547 adopted by the Lorain County Board of Commissioners on September 4, 2019 adopting updates to the Lorain County Subdivision Regulations for the Unincorporated Portions of Lorain County

This is being forwarded for your information and files.

Sincerely,

Theresa L. Upton
Clerk

Enclosure

Co: File

b.11

RESOLUTION NO. 19-547

In the matter of adopting updates)
To the Lorain County Subdivision)
Regulations for the Unincorporated)
Portions of Lorain County)

September 4, 2019

WHEREAS, the Lorain County Board of Commissioners adopted Resolution No. 19-361 on June 12, 2019 advertising notice of Public Hearings for the Update of the Lorain County Subdivision Regulations; and

WHEREAS, the public hearings were duly advertised in the Chronicle Telegram on July 2, 2019 & July 23, 2019; and

WHEREAS, the public hearings were held on July 16, 2019 and August 6, 2019 to inform the citizens of Lorain County about the proposed updates to the Lorain County Subdivision Regulations.

Said subdivision regulations are considered a part hereof to this resolution by reference thereto and can be found on file in the Commissioners/Community Development Department.

NOW, THEREFORE BE IT RESOLVED, that the Lorain County Board of hereby adopt the following Subdivision Regulations of Lorain County, Ohio to become effective immediately on the date of adoption.

Motion by Kokoski, seconded by Sweda to adopt Resolution. Upon roll call the vote taken thereon, resulted as: Ayes: Kokoski & Sweda / Nays: None / Absent: Lundy on vacation
Motion carried. _____ (discussion was held on the above)

I, Theresa L. Upton, Clerk to the Lorain County Board of Commissioners do hereby certify that the above Resolution No. 19-547 is a true copy as it appears in Journal No. 19 on date of September 4, 2019



Theresa L. Upton, Clerk