

**STORMWATER MANAGEMENT ORDINANCE
CITY OF KENTWOOD, MICHIGAN
ord. no. 9-84 eff. June 1, 1984**

25.170. AN ORDINANCE TO PROVIDE FOR CONTROL, MAINTENANCE, AND REGULATION OF STORMWATER IN THE CITY OF KENTWOOD.

THE CITY OF KENTWOOD ORDAINS:

25.171 Sec. 1. **FINDING OF NECESSITY.**

The City hereby finds that it is necessary for the protection of the health, safety, and welfare of the citizens of the City of Kentwood that provision be made by ordinance for control, maintenance, and regulation of stormwater so as to **prevent** flooding, loss of life, property damage, erosion, nuisance conditions and to **promote** ground water recharge, lower storm sewer costs, and water quality improvement in the City, and this ordinance is hereby adopted to that end. This ordinance is further necessary to **define responsibility** for handling stormwater related problems among the City of Kentwood Government, private developers, and private citizens.

(ord. no. 9-84 eff. June 1, 1984)

25.172 Sec. 2. **IMPACT ON OTHER CITY ORDINANCES.**

This ordinance repeals and replaces Ordinance No. 5-77, Storm Water Detention, Effective April 3, 1977.

Other resolutions, ordinances or portions thereof which are in conflict herewith are hereby rescinded or repealed as the case may be.

(ord. no 9-84 eff. June 1, 1984)

25.173 Sec. 3. **OUTLINE.**

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(ord. no. 9-84 eff. June 1, 1984; amend. by ord, no. 18-84 eff. Oct. 5, 1984)

25.174 Sec. 4. **DEFINITIONS.**

- A) **Stormwater.** Water that has its origin in precipitation.
- B) **Drain.** Any open or enclosed conduit, ditch, swale, or creek, used for purposes of transferring water from land and structures to a down stream location.
- C) **Drainage.** Method of transfer of Stormwater from impacting land or structure.
- D) **Construction.** Improvement of a drain by rechannelization, reconstruction, erosion protection, or enclosure.
- E) **Maintenance.** Process of restoration of stormwater flow in a drain by weed and brush control, by returning to a previously established design grade, by cleanout of conduits, by bank stabilization, and by drainage structure repair.
- F) **Chapter 20 Drain.** A drain established under Chapter 20 of the Drain Code of 1956.
- G) **Floodplain.** Area flooded by a 100 year storm as determined by the current Flood Insurance Study by the Federal Emergency Management Agency.
- H) **Floodway.** Cross section of Floodplain or naturally occurring drain outside the FEMA designated Floodplain necessary to carry the flood waters.
- I) **Floodway Fringe.** Cross section between floodway and edge of floodplain necessary to store flood waters temporarily,
- J) **Building Opening.** Any opening of a solid wall such as a window or door, through which flood waters could penetrate to cause property damage.
- K) **Act 346.** Inland Lakes and Streams Act of 1972
(ord. no. 9-84 eff. June 1, 1984; amend. by ord no. 18-84 eff. Oct, 5, 1984; ord. no. 7-93 eff, May 23, 1993)

25.175 Sec 5. **DRAIN CONSTRUCTION.**

- A) **CITY OF KENTWOOD.**
 - 1) A drain construction project may be undertaken by the City of Kentwood following receipt of a petition or by initiative of the City Commission.

- 2) Appropriate special assessment hearings must be conducted prior to any further action beyond receipt of a petition or projection initiative by the City Commission, unless the City Commission determines that it is in the best interest of the City to finance the construction project in another manner.
- 3) Special assessment amount for any Chapter 20 drain project shall be divided into 50% from City of Kentwood Drain-At-Large Fund and 50% from the special assessment district.
- 4) For any enclosure of a drain, except as otherwise provided for in this ordinance, the 50% special assessment district amount divides into 25% per front foot along the enclosure because of a special benefit and 25% from the district because of a legal benefit.
(ord. no. 9-84 eff., June 1, 1984; amend. by ord. no. 11-03 eff. Sept 2, 2003)

B) DEVELOPER.

- 1) Any drain improvement work required because of land improvement shall be 100% funded by the developer. Inherent in this concept is a fundamental principle that an existing drain reduces raw land costs as compared to land without such encumbrance.
- 2) For any residential development, drains must be enclosed along all front yards and side yards.
- 3) All developments must carry a **floodway** through the development such as to preclude property damage.
- 4) Storm sewer laterals must be provided to any building when soil borings or actual excavation indicates a siting in the water table. A hydraulic break must occur between the building and storm sewer so that a storm sewer backup will not affect the building.
- 5) A grading plan showing surface and subsurface drainage on the parcel and any division of that parcel must be filed and approved by the City of Kentwood for purposes of ensuring that the drainage system and building development are compatible.
- 6) A site grading and stormwater management bond payable to the City and in the amount of the estimated cost of the necessary stormwater management controls is required for any non-plat development requiring stormwater detention or floodway construction or surface or subsurface drainage construction. The bond is posted to assure that the approved plan is constructed in the field. Developments of less than one acre or remaining undeveloped parcel size of less than one acre are exempt. Upon certification by a registered professional engineer that the construction has taken place according to the approved plans and specifications and subsequent approval by the engineering staff, the bond will be released. Certification shall be according to As-Built certification requirements of the City of Kentwood, which are adopted in connection with and conjunction with this Ordinance. Filing a false certification is subject to the penalties of this Ordinance as provided in Section 12A.

C) PRIVATE PROPERTY OWNER.

- 1) Drain improvement by a private property owner can be undertaken only after approval by the City of Kentwood and any other appropriate jurisdiction.
- 2) Costs for improvement are a responsibility of the property owner.

D) STREAM PROTECTION.

- 1) Any natural, stream, as defined under Act 346, shall be protected from drain improvement work by means of a 50ft. no disturbance zone centered on the stream.
2. Exceptions to the no disturbance zone are - road culverts and drain enclosures required in front and side yards of residential development.
(ord. no. 9-84 eff. June 1, 1984; amend. by ord. no. 18-84 eff. Oct. 5, 1984; further amend. by ord. no. 5-89 eff. Aug. 25, 1989; ord. no. 7-93 eff. May 23, 1993; and ord. no. 1-94 eff. Mar. 13, 1994)

25.176 Sec. 6. **DRAIN MAINTENANCE.**

A) CITY OF KENTWOOD.

- 1) Any Chapter 20 Drain improved under a construction project shall be maintained by the City of Kentwood to the following degree:
 - a) Enclosed drains, structures, ditch checks, spillways, constructed erosion protection - 100%,
 - b) Restoration of hydraulic capacity to prevent property damage – 100%.
 - c) Stagnant water or erosion correction - depends if correction of the problem would cause greater problems than the existing condition by reason of quantity of earth to be disturbed.
- 2) Any drain improvement constructed as part of plat improvements and for which a drain easement exists, shall be maintained by the City of Kentwood to the same degree as in Section 6.A.1.

B) PRIVATE PROPERTY OWNER.

- 1) For any drain, whether improved or unimproved, the adjacent property owner shall have responsibility of natural growth management of weeds, trees, and turf.
- 2) Any unimproved drain shall be maintained 100% by the adjacent property owner. Riparian "rights" also includes riparian "responsibility", The existence of a drain or even a recorded drain easement does not confer on the City the maintenance responsibility.
- 3) No filling, blocking, fencing, or above surface vegetation planting is to be undertaken within a floodway except by written approval.
- 4) For an overland flow drainage easement:
 - a) Site screen fences are not allowed below top of bank or edge of the easement, whichever is higher.
 - b) Chain link fences will be allowed if it is determined by the Engineering Department that the chain link fence will not obstruct or divert the flow of water.
 - c) If the fences are removed by the City for drain access or maintenance, they are to be replaced by the owner of the fence at the owner's expense,
 - d) No shrubs or trees are to be placed below top of bank or edge of easement, whichever is higher, unless written approval is received.
- 5) For a storm sewer easement, shrubs, trees or above ground vegetation are not permitted to be planted. If the easement is only for storm sewer purposes a fence can be allowed under the same removal conditions as an overland flow easement.
(ord. no, 9-84 eff. June 1, 1884; amend. by ord, no. 7-93 eff. May 23, 1993)

25.177 Sec. 7 **STORMWATER DETENTION.**

A) LANDS SUBJECT TO STORMWATER DETENTION.

- 1) Any and all parcels of land are subject to stormwater detention storage requirements in Kentwood unless the parcel is one of the following.

- a) Less than one acre in total size or undeveloped remainder of parcel is less than one acre.
- b) Is within the Crippen or Esbaugh Drains and has adequate downstream channel.
- c) Over 25% is floodplain.
- d) Dry wells could be used.
- e) Development density is one dwelling unit per acre or less.
- f) Parcel already has a master pond to serve it and downstream facilities between the parcel and the master pond are adequate to transport the water. In this case, the master pond must be used.

B) PHASE AND SEQUENCE LIMITATIONS.

- 1) To avoid large numbers of detention sites, each original parcel, as of the original adoption date of this ordinance, is allowed only one detention pond for that parcel. If this original parcel is split off, phased, or in any way only partially developed at this time, the detention facility for the whole original parcel must be constructed with this initial construction, regardless of where on the original parcel the pond is best suited. The City expects property owners to work together on property splits to prevent the occurrence of many ponds..
- 2) Stormwater detention storage is to be the first item of earth moving on any site and must work along with soil erosion prevention requirements to reduce peak downstream flows from the first day of earth change.

C) MAINTENANCE RESPONSIBILITY.

- 1) For all recorded plats following final approval of the City of Kentwood, control and maintenance of the stormwater detention storage facility shall be by and under the City of Kentwood, The City shall be responsible for any and all work related to the hydraulic functioning of said facility. The property owner on whose parcel the easement for the facility rests is **responsible** for turf maintenance.
- 2) For any development under which the land or parcel remains in one ownership, control and maintenance of the detention storage facility is the responsibility of the property owner. Should the property owner neglect to maintain the storage in such manner that failure of the detention concept could occur, the City of Kentwood, following proper notification, shall have the right to make the necessary repairs or maintenance and add the cost thereof to the next tax bill covering the subject premises.

(ord. no. 9-84 eff. June 1, 1984; amend., by ord. no. 4-87 eff. Apr, 10, 1987; ord. no. 7-93 eff. May 23, 1993)

25.178 Sec. 8. **STORMWATER CONNECTIONS.**

A) PARKING LOTS.

- 1) Any parking lot paved after the effective date of this ordinance and which in its final configuration constitutes over 2,500 square feet of pavement shall not be allowed to drain directly to any adjacent surface but shall drain to an internal storm sewer system.

B) ROOF DRAINAGE.

- 1) Residential buildings of two units or less shall dump roof drainage onto the lawn adjacent to the building. This time lapse is needed to reduce peak flows in the storm sewer system.

C) **SUMP PUMP DISCHARGE.**

- 1) Whenever a building needs footing drains because of high water table which is within two (2) feet of the footing drains or impervious soils, a direct connection between the footing drains through a sump pump-check valve system to a storm sewer is required. A gravity system is not allowed.
 - a) Should a storm sewer lateral or other suitable storm sewer connection point not be available, then consideration will be given to a waiver of this requirement.
- 2) Storm sewer lateral(s) is (are) to be provided at the time of storm sewer construction so that permanent pavement will not have to be removed for the installation.
 - a) For plats, one storm lateral for every two parcels is required
(Sec. 8.C.1 and 8.C.2) amend by ord no 3-88 eff. Feb. 29, 1988)

D) **SWIMMING POOLS.**

- 1) Swimming pool discharge water is allowed into the drainage system under the same conditions as Section 8.B.1 above.

E) **UNDER BUILDINGS.**

- 1) Private storm sewers, connected to external sources such as parking lot drains or yard drains, shall not be built under a building.
(ord. no. 9-84 eff. June 1, 1984; amend. by ord. no. 4-87 eff. Apr. 10, 1987; and ord. no. 7-93 eff. May 23, 1993)

25.175 Sec 9. **PRIVATE PROPERTY DRAINAGE.**

A) **BUILDING OPENINGS.**

- 1) Any building in a flooding influence area of a swale, drainage way, floodway, ditch, culvert, detention pond, or any device which controls flooding, shall strictly control the lowest building opening elevation so as to preclude building damage.
- 2) No building opening shall be constructed below the following elevations:
 - a) One foot above the 100 year floodplain established under the National Flood Insurance Program.
 - b) Building opening established at time of plat or development approval and on file in the Inspection Department.
 - c) Three feet above the top of any downstream culvert.
 - d) Four feet above the bottom of any permanent and defined drainageway.
 - e) Five feet above the bottom of any drainageway that could be enclosed in pipe in the probable future.
- 3) A waiver from meeting elevations outlined in Section 9.A.2 can be granted by the City Engineer following receipt of a certified letter from a registered professional engineer which supports the proposed elevation as being non-hazardous.
- 4) The construction of any minimum building opening specified by this ordinance or by an approved grading plan must be certified upon its completion by a registered land surveyor. This certification, attesting that the

building opening meets the specified standards, must be submitted by the permittee to the Community Development Inspections Department prior to the issuance of an occupancy permit for the building. If the surveyor should find that the minimum building opening is below the specified elevation, that opening must be raised or protected by using a method which meets the approval of the City Building Inspector. This reconstruction must then be certified by the registered land surveyor before an occupancy permit is issued.

B) LOT DRAINAGE.

- 1) Any drainage situation not involving any public property water is the responsibility of the property owner.
- 2) In plat and site plan review, the City will only review private property drainage for the purpose of assuring that private property can be drained.
- 3) Lot grading and private property drainage is a civil matter among the property owners affected.
- 4) The City will provide technical advice to a property owner on drainage matters but help will be limited to advice only.
- 5) To aid contractors and builders in grading private property, a lot grading plan will be required on all development and such information shall be disbursed along with the building permit. This lot grading plan must show:
 - a) Any established minimum building opening.
 - b) Floodway elevations.
 - c) All storm sewers, the size, grades, invert elevations and top of casting elevations.
 - d) All storm sewer laterals.
 - e) All utility and drainage easements and their full description.
 - f) Minimum basement elevation for sanitary sewer.
 - g) Direction of drainage on each lot.
 - h) Elevations of any constructed surface drainage facilities.
 - i) Surface grading of the entire parcel.
- 6) A minimum rear yard of twenty-five feet (25') prior to any drainage encumbrance is required. This will allow opportunity for rear yard use for sheds, play equipment etc., without concern about water damage or inconvenience.
- 7) Prior to construction of any structure on a parcel or lot upon which a floodway easement exists, the permittee must obtain from the Community Development Inspections Office, a copy of the approved plans showing the location and design elevations of that floodway. Upon completion of the structure and prior to the issuance of an occupancy permit, the permittee must provide a certification from a registered land surveyor that the floodway grades and dimensions are as designed. If the floodway does not conform to the approved plans, the floodway must be reconstructed and certified prior to the issuance of an occupancy permit for that lot or parcel. Concurrent floodway reconstruction and issuance of an occupancy permit are permitted only if that action does not present a danger to the safety and welfare of any affected property. To permit concurrent action, the permittee shall provide the City of Kentwood with a performance bond, a letter of credit, or a cash deposit to cover the cost of said reconstruction at a dollar amount established by the City of Kentwood.

(ord. no. 9-84 eff. June 1, 1984; amended by ord. no. 7.93 eff. May 23, 1993)

- A) No alteration of the natural floodway shall be allowed.
- B) No alteration of the natural floodway fringe shall be allowed unless natural vegetation consisting of trees, scrub trees, and shrubs are at a density of one per 100 square feet or less.
- C) Provisions 10(A) and (B) above are intended to keep a major drain system in dynamic equilibrium such that the drain can handle major storms without major soil erosion occurring because of impact of natural root systems on soil stabilization.
- D) Only in areas of the floodway fringe can permitted development take place and then only in areas of low concentrations of natural soil holding root systems (described in Section 10 (C)).
- E) No filling of any floodway or naturally vegetated floodway fringe shall take place.
- F) For purposes of retaining the current natural flood storage in the floodway fringe, no filling of any sparsely vegetated portion of the floodway fringe shall take place unless the storage taken away by this filling action is created in another portion of the site outside the floodway fringe. This process shall be known as offset detention.
- G) In order to protect the FEMA designated floodplain fringe from erosion damage, a Do Not Disturb/Natural Erosion Control Zone is to be established and called out on a recorded plat, an approved block grading plan, a site plan or an improvement plan. This zone consists of existing natural tree and vegetation slope protection on the bank immediately adjacent to the established floodplain and shall be maintained as is, that is, no earth change or vegetation change of any sort is to take place. This includes planting of additional vegetation, shrubs or trees. Should the event of bank erosion, tree blockage, or any excessive erosion of any type threaten the property immediately adjacent to the zone, the City will take any corrective action necessary. If the cause is action taken by the property owner, then said owner will be billed for the corrective action. The limits for the zone extend from the edge of the established floodplain to the established top of bank. Top of bank is established in this sequence:

- 1) Existing top of bank where the stream channel is within ten (10) feet of the base of the bank or aims at the base of the bank.
- 2) Existing top of bank where downslope to the floodplain is one on three (1 on 3) or steeper.
- 3) A developed top of bank where:
 - a) The existing downslope is flatter than one on three (1 on 3).
 - b) A six (6) foot band of natural vegetation is left between the floodplain high water mark and the beginning of yard development.
 - c) The developed slope of the yard is one on four (1 on 4) or flatter.

Should the existing bank have no tree or shrub stabilization, the existing bank can be graded provided that the existing toe of bank is not moved, the bank slope does not exceed one on three (1 on 3), and the bank grading is blanketed with erosion protection immediately following the grading. Any home construction shall allow for a thirty-five foot (35') rear yard prior to top of bank. This allows for several uses in the rear yard which will not disturb the top of bank. This thirty-five foot (35')

dimension can be reduced but only after an approved development plan which does not disturb the top of bank,
(ord. no. 9-84 eff. June 1, 1984; amend. by ord. no. 10-92 eff. Apr. 21, 1992; and ord. no. 7-93 eff. May 23, 1993)

25.181 Sec. 11. **APPROVAL PROCESS.**

A) **DESIGN AND APPROVAL REQUIREMENTS.**

- 1) Any construction on a drain in the City of Kentwood shall be designed and the construction supervised by a registered professional engineer.
- 2) Approval for construction work shall be by the City Engineer.
- 3) Any waiver from the provisions of this ordinance must be supported by a study conducted by a registered professional engineer

B) **STANDARD SPECIFICATIONS.**

- 1) Any construction shall conform to Standard Specifications as listed below and said Specifications are hereby adopted by the City of Kentwood in connection with and in conjunction with this ordinance.
 - a) Site Drainage
 - b) Design and Construction of Storm Sewer
 - c) Design and Construction of Open Channels
 - d) Design and Construction of Stormwater Detention Storage

C) **APPEAL PROCEDURE.**

- 1) Should the application of this ordinance produce practical drainage facilities which serve to prevent compliance or serve to create offsetting difficulties the net result of which is detrimental, the City Engineer is hereby authorized to hear and consider such difficulties.
- 2) The City Engineer, upon consideration of the facts, shall file a report with the Service Committee of the City Commission.
- 3) The applicant's input, along with the above report, shall be considered by said Service Committee and the Service Committee is hereby designated as the appropriate body to grant a waiver from provisions of this ordinance.
(ord. no. 9-84 eff. June 1, 1984)

25.182 Sec. 12. **PENALTIES.**

- A) Any person, firm or corporation who violates any provision of this ordinance is responsible for a civil infraction and shall be fined not less than Twenty-Five Hundred Dollars (\$2,500.00) for each violation.
- B) Each day a violation exists or continues shall be deemed as a separate offense.
- C) Any person, firm, or corporation, who, having been determined to be responsible for a violation of this ordinance, commits and is found responsible for a subsequent violation, within a two (2) year period, shall be fined in an amount double the amount of the fine assessed for the immediately preceding violation.
- D) In addition to fines assessed pursuant to subsections A, B, and C above, a person, firm, or corporation found to be responsible for a violation shall pay the City's actual costs, direct or

indirect, for correcting and abating the violation, and the actual costs, direct and indirect, to which the City has been put in correcting or abating the violation, to the extent permitted by law, in the event the fines and costs are not fully paid within 30 days, the fines and costs may be added to and made part of the next City tax bill against the subject premises and may be collected in the same manner as provided by Michigan Law for the collection of City taxes on real estate.
(ord. no. 9-84 eff. June 1, 1994, amend. by ord. no. 3-01 eff. Feb. 6, 2001 and 2-02 eff. Jan. 7, 2002)