

CITY OF LYNNWOOD

ORDINANCE NO. 908

AN ORDINANCE OF THE CITY ESTABLISHING A NEW CHAPTER OF THE CITY CODE AND REQUIRING A DRAINAGE PLAN TO BE SUBMITTED IN CONJUNCTION WITH CERTAIN PERMITS, SPECIFYING THE CONTENTS THEREOF, REQUIRING SURETY AND CASH BONDS, AUTHORIZING CITY ASSUMPTION OF DRAINAGE FACILITIES.

WHEREAS, an expanding population and increased development of land, coupled with inadequate drainage controls, has led to drainage and runoff problems, and

WHEREAS, these drainage and runoff problems contribute to increased sedimentation in ponds, creeks and streams, thereby degrading water quality, and

WHEREAS, these drainage and runoff problems also contribute to water quality degradation through excessive discharge of nutrients, metals, oil and grease, toxic materials and other detrimental substances, and

WHEREAS, inadequate surface and subsurface drainage planning and practices lead to erosion and property damage, and risk to life, and

WHEREAS, excess water runoff on streets and highways poses a safety hazard to both lives and property, and

WHEREAS, the City Council finds that future problems could be avoided if developers, both private and public, provide for adequate drainage of their property, now, therefore,

THE CITY COUNCIL OF THE CITY DOES ORDAIN AS FOLLOWS:

There is hereby created a new Chapter of the City Code entitled "Drainage Plans".

SECTION I. Purposes. The City Council finds that this Chapter is necessary in order to promote sound development policies and construction procedures which respect and preserve the City's water courses; to minimize water quality degradation and control of sedimentation of creeks, streams, ponds, lakes and other water bodies; to protect property owners adjacent to developing and developed land from increased runoff rates which could cause erosion of abutting property; to protect downstream owners; to preserve and enhance the suitability of waters for contact recreation and fishing; to preserve and enhance the aesthetic quality of the waters; to maintain and protect valuable groundwater resources; to minimize adverse effects of alterations in groundwater quantities, locations, and flow patterns; to ensure the safety of City roads and rights of way; and to decrease drainage related damage to public and private property.

SECTION II. Definitions. (1) "Procedures Manual" shall mean the manual of technical and administrative procedures established by the Public Works Department which delineates methods to be used, the level of detail of analysis required, and other details for implementation of the provisions of this ordinance.

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(2) "Comprehensive Drainage Plan" refers to a detailed analysis for each drainage basin which compares the capabilities and needs for runoff accommodation due to various combinations of development, land use, structural and nonstructural management alternatives. The plan recommends the form, location and extent of quantity and quality control measures which optimally would meet the legal constraints, water quality standards, and community standards, as well as identifying the institutional and funding requirements for plan implementation.

(3) "Computations" shall mean calculations, including coefficients and other pertinent data, made to determine the drainage plan with rates of flow of water given in cubic feet per second and cubic meters per second (cms).

(4) "Design Storm" shall refer to that rainfall event which is selected by the Public Works Department for purposes of design, specifying both the return period in years and the duration in hours.

(5) "Detention facilities" shall mean facilities designed to hold runoff while gradually releasing it at a predetermined maximum rate.

(6) "Developer" shall mean the individual(s) or corporation(s) applying for the permits or approvals described in Section III(1) of this Chapter.

(7) "Developmental coverage" shall mean all developed surface areas within the subject property including, but not limited to, rooftops, driveways, carports, accessory buildings, parking areas, and any other impervious surfaces.

During construction, "developmental coverage" shall include the above in addition to the full extent of any alteration of previously occurring soils, slope or vegetation due to grading, temporary storage, access areas, or any other short-term causes.

(8) "Drainage area" shall mean the watershed contributing water runoff to and including the subject property.

(9) "Drainage plan" shall mean a plan for collection, transport, treatment, and discharge or recycle of water within the subject property.

(10) "Drainage treatment/abatement facilities" shall mean any facilities installed or constructed in conjunction with a drainage plan for the purpose of treatment or abatement of urban runoff, excluding retention or detention facilities.

(11) "Natural location" of drainage systems shall refer to the location of those channels, swales, and other non-man-made conveyance systems as defined by the first documented topographic contours existing for the subject property, either from maps or photographs, or such other means as appropriate.

(12) "Peak discharge" shall mean the maximum surface water runoff rate (cfs and cms) determined for the design storm.

(13) "Planned unit development" shall refer to residential developments which are planned and/or developed in several stages but submitted together for approvals, and which typically consist of clusters of multi-unit structures interspersed with areas of common open space.

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(14) "Receiving bodies of water" shall mean creeks, streams, lakes and other bodies of water into which waters are directed, either naturally, in manmade ditches, or in closed conduit systems.

(15) "Retention facilities" shall mean facilities designed to hold water for a considerable length of time and then consume it by evaporation, plant transpiration, or infiltration into the soil.

(16) "Subject property" shall mean the tract of land which is the subject of the permit and/or approval action, as defined by the full legal description of all parcels involved in the proposed development.

SECTION III. Submission of a Drainage Plan.

(1) All developers applying for any of the following permits and/or approvals shall submit for approval a drainage plan with their application and/or request:

- (a) Grading permit
- (b) Substantial development permit required under RCW 90.58 (Shoreline Management Act)
- (c) Subdivision approval
- (d) Short subdivision approval
- (e) Rezones
- (f) Conditional use permits
- (g) Building permits where the permit relates to 5,000 or more square feet of development coverage within the property, or where development is in a critical area.
- (h) Planned unit development

(2) Commencement of construction work under any of the above permits or applications shall not begin until such time as final approval of the drainage plan is obtained in accordance with Section VII of this Chapter.

(3) The same plan submitted during one permit/approval process may be subsequently submitted with further required applications. The plan shall be supplemented with such additional information that is requested by the Public Works Department or required by the provisions of the Procedures Manual.

(4) The plan requirement established in this section will apply except when the Developer demonstrates to the satisfaction of the Public Works Department that the proposed activity or development:

- (a) Will neither seriously nor adversely impact the water quality conditions of any affected receiving bodies or water, and
- (b) Will not alter the surface discharge location, alter the drainage pattern on adjoining properties, alter drainage patterns, increase the discharge, nor cause any other adverse effects in the drainage area, and

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- (c) Will not alter the subsurface drainage patterns, flowrates, and discharge points, nor result in any significant adverse effects to property or residents.

SECTION IV. Contents of a Drainage Plan.

All persons applying for any of the permits and/or approvals contained in Section III of this ordinance shall provide a drainage plan for surface and pertinent subsurface water flows entering, flowing within, and leaving the subject property both during and after construction. The detailed form and contents of the drainage plan shall be described in procedures established by the Public Works Department, or in the Procedures Manual. The Procedures Manual will set forth the manner of presenting the following required information:

- (a) Background computations for sizing drainage facilities:
 - (1) Depiction of the drainage area on a topographical map of approved scale and contour interval, with acreage of the site, development, and developmental coverage indicated.
 - (2) Indication of the peak discharge and volume of surface water currently entering and leaving the subject property due to the design storm.
 - (3) Indication of the peak discharge and volume of runoff which will be generated due to the design storm within the subject property if the development or proposed activity is allowed to proceed.
 - (4) Determination of the peak discharge and volume of water that will be generated by the design storm at various points on the subject property.
- (b) Proposed measures for handling the computed runoff at the detail level specified in the Procedures Manual.
- (c) Proposed measures for controlling runoff during construction.

The requirements of this section may be modified at the discretion of the City Public Works Department in special cases requiring more information.

SECTION V. Mandatory Requirements for Drainage Improvements.

- (1)(a) Surface water entering the subject property shall be received at the naturally occurring locations and surface water exiting the subject property shall be discharged at the natural locations with adequate energy dissipators within the subject property to minimize downstream damage and with no diversion at any of these points; and
- (b) The design storm peak discharge from the subject property may not be increased by the proposed development; and
- (c) Retention/detention facilities must be provided in order to maintain surface water discharge rates at or below the existing design storm peak discharge; and

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(d) Where open channel construction is used to handle drainage within the subject property, a minimum of fifteen (15) feet will be provided between any structures and the top of the bank of the defined channel.

(1) In open channel work the water surface elevation will be indicated on the plan and profile drawings. The configuration of the finished grades constituting the banks of the open channel will also be shown on the drawings.

(2) Proposed cross section of the channel will be shown with stable side slopes as approved by the Public Works Department.

(3) The water surface elevation of the flow for the design storm will be indicated on the cross section.

(e) When a closed system is used to handle drainage within the subject property, the system will be a minimum of ten (10) feet from all structures.

(2) To the extent possible, approved measures for controlling runoff during construction should comply with the above provisions.

(3) Variances from the requirements of Section V(1) may be permitted only after a determination by the Public Works Department, using the Comprehensive Drainage Plan and/or employing the following criteria:

(a) Sufficient capacity of downstream facilities under design conditions.

(b) Maintenance of the integrity of the receiving waters;

(c) Possibility of adverse effects of retention/detention;

(d) Utility of regional retention/detention facilities;

(e) Capability of maintenance of the system; and

(f) Structural integrity of abutting foundations and structures.

Requests for variances shall be filed in writing with the Public Works Department and shall adequately detail the basis for granting an exemption.

SECTION VI. Development in Critical Areas.

Development which would increase the volume or rate of discharge due to any storm from the subject property shall not be permitted in areas designated as critical areas by the Public Works Department. Critical areas are those in which existing flooding, drainage, erosion, and/or instability conditions present an imminent likelihood of harm to the welfare and safety of the surrounding community, or to the integrity of the surface or groundwater system. Development shall not be permitted in these critical areas until such time as the existing community hazard is alleviated and it is adequately demonstrated that the proposed development will not cause a recurrence of the problem nor the occurrence of any new drainage-related problem. The Public Works Department may also designate as critical any area in which comparable problems would occur in the future due to any increase in volume or peak discharge. The requirements of this section shall apply regardless of any variance under Section III, Item (4). Where applications of the provisions of this section will deny all reasonable uses of the property, the

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restrictions on development contained in this section may be waived for the subject property, provided that the resulting development shall be subject to all the remaining terms and conditions of the Chapter. All decisions based on the provision of this section shall be compatible with the Comprehensive Drainage Plan for the basin in which the subject property is located. For development in areas designated as critical, the developer shall provide information regarding volume and rate of discharge for a range of storms as specified in the Procedures Manual.

SECTION VII. Review and Approval of the Plan.

All storm drainage plans prepared in connection with any of the permits and/or approvals listed in Section III shall be submitted for review by and approval of the Public Works Department in accordance with the procedures established in the Procedures Manual.

At the time of approval of the drainage plan for the subject property, a schedule for inspection of construction and facilities will be established by the Public Works Department.

SECTION VIII. Establishment of Regional Facilities.

In the event that public benefits would accrue due to modification of the drainage plan for the subject property to better implement the recommendations of the Comprehensive Drainage Plan, the Public Works Department may recommend that the City should assume responsibility for the further design, construction, operation, and maintenance of drainage facilities on the subject property. Such decision shall be made concurrently with review and approval of the plan as specified in Section VII. In the event that the City decides to assume responsibility for design, construction, operation, and maintenance of the facilities, the developer will be required to contribute a prorata share to the construction cost of the facilities. The developer may be required to supply additional information at the request of the Public Works Department to aid in the determination by the City. Guidelines for implementing this section will be defined in the Procedures Manual or by the Public Works Department.

SECTION IX. Bonds and Liability Insurance Required.

The Public Works Department is authorized to require all persons constructing retention/detention or other drainage treatment/abatement facilities to post surety and cash bonds.

Where such persons have previously posted, or are required to post, other such bonds on the facility itself or on other construction related to the facility, such person may, with the permission of the Public Works Department and to the extent allowable by law, combine all such bonds into a single bond, provided that at no time shall the amount thus bonded be less than the total amount which would have been required in the form of separate bonds, and provided further that such a bond shall on its face clearly delineate those separate bonds which it is intended to replace.

(a) Construction Bond. Prior to commencing construction, the person constructing the facility shall post a construction bond in an amount sufficient to cover the cost of conforming said construction with the approved drainage plans. The amount of the bond shall be increased at one (1) year intervals in a proportion equivalent to the prevailing rate of inflation in construction costs as specified in the Procedures Manual. After determination by the Public Works Department that all facilities are constructed in compliance with the approved plans, the construction bond shall be released. Alternatively, an equivalent cash deposit to an escrow account administered by a local bank designated by the City could be required at the City option.

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(b) Maintenance Bond. After satisfactory completion of the facilities and concurrent with release of the construction bond by the City, the person constructing the facility shall commence a two (2) year period of satisfactory maintenance of the facility. A cash bond to be used at the discretion of the Engineer to correct deficiencies in said maintenance affecting public health, safety and welfare must be posted and maintained throughout the two year maintenance period. The amount of the cash bond shall be determined by the City Engineer but shall not be in excess of ten percent nor less than five percent of the estimated construction cost of the drainage facilities. In addition, a surety bond or cash bond to cover the cost of design defects or failures in workmanship of the facilities shall also be posted and maintained throughout the two year maintenance period. The amount of the bonds shall be increased at one (1) year intervals in a proportion equivalent to the prevailing rate of inflation. Alternatively, an equivalent cash deposit to an escrow account administered by a local bank designated by the City could be required at City option.

(c) The person constructing the facility shall maintain a liability policy in the amount of one hundred thousand dollars per individual, three hundred thousand dollars per occurrence, and fifty thousand dollars property damage, which shall name the City as an additional insured and which shall protect the City from any liability up to those amounts for any accident, negligence, failure of the facility, or any other liability whatsoever, relating to the construction or maintenance of the facility. Said liability policy shall be maintained for the duration of the facility by the owner of the facility, provided that in the case of facilities assumed by the City for maintenance pursuant to Section X of this ordinance, said liability policy shall be terminated when said City maintenance responsibility commences.

SECTION X. City Assumption of Operation and Maintenance.

The City may assume the operation and maintenance responsibility of retention/detention or other drainage treatment/abatement facilities after the expiration of the two (2) year operation and maintenance period in connection with the subdivision of land if:

(a) All of the requirements of Section IX of this ordinance have been fully complied with; and

(b) The facilities have been inspected and approved by the Public Works Department after two (2) years of operation in accordance with the Procedures Manual; and

(c) All necessary easements entitling the City to properly operate and maintain the facility have been conveyed to the City and recorded with the Snohomish County Auditor; and

(d) The surety bond required in Section IX(b) has been extended for one year, covering the City's first year of operation and maintenance; and

(e) The developer has supplied to the City an accounting of capital, construction, and operation and maintenance expenses or other items, for the drainage facilities up to the end of the two year period, for the purpose of establishing the basis for future bonding requirements for other developments.

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In the event that the City elects not to assume the operation and maintenance responsibility for the facilities it will be the responsibility of the developer to make arrangements with the occupants or owners of the subject property for assumption of operation and maintenance in a manner subject to the approval of the Public Works Department or in accordance with the Procedures Manual. Such arrangements shall be completed and approved prior to the end of the two year period of developer responsibility.

If the City elects not to assume operation and maintenance responsibility, the drainage facilities shall be operated and maintained in accordance with the arrangements as approved by the Public Works Department. The City may inspect the facilities in order to ensure continued use of the facilities for the purposes for which they were built and in accordance with these arrangements.

SECTION XI. Retroactivity Relating to City Maintenance of Drainage Facilities. If any person constructing retention/detention or other drainage treatment/abatement facilities and/or receiving approval of drainage plans prior to the effective date of this ordinance re-evaluates according to the requirements of this ordinance the facilities and/or plans so constructed and/or approved and demonstrates, to the Engineer's satisfaction, acceptable compliance with its requirements, the City may, after inspection, approval, and acknowledgement of the proper posting of the required bonds as specified in Section X, assume operation and maintenance responsibility of the facilities.

In cases in which all or part of the drainage facilities are not accessible for operation or maintenance purposes due to overlying structures or other causes the City shall be held harmless for damages which might occur due to failure of design or workmanship of those segments, and further will not be responsible for their maintenance, replacement or rehabilitation. In such cases, responsibility shall revert to the existing owner of such facilities.

SECTION XII. Applicability to Governmental Entities. All municipal corporations and governmental entities shall be required to submit a drainage plan and comply with the terms of this Chapter when developing and/or improving land including, but not limited to, road building and widening, within the areas of the City.

It is recognized that many other city, county, state, and federal permit conditions may apply to the proposed action and that compliance with the provisions of this Chapter does not constitute compliance with such other requirements.

SECTION XIII. Penalties for violation Any person wilfully violating any provision of this title is guilty of a misdemeanor, and on conviction thereof shall be punished by a fine in any sum not exceeding five hundred dollars, or by imprisonment in the City jail for a period not exceeding ninety days, or by both such fine and imprisonment. Each day's violation of the provisions of this Chapter may be deemed a separate offense.

SECTION XIV. Protection of Public/Private Rights. Implementation of any provision of this Chapter shall not cause nor be construed as an infringement of the rights of individuals, municipalities, or corporations other than the developer seeking a permit or approval as described in Section III.

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SECTION XV. Effective Date. The requirements of this chapter shall apply to all plats receiving preliminary approval subsequent to the effective date of this ordinance. In the case of all additional actions enumerated in Section III of this ordinance, the terms of this chapter shall apply where final action by the City has not been taken prior to the effective date of this Ordinance.

SECTION XVI. Severability. If any provision of this Chapter or its application to any person or property is held invalid, the remainder of the Chapter or the application of the provision to other persons or circumstances shall not be affected.

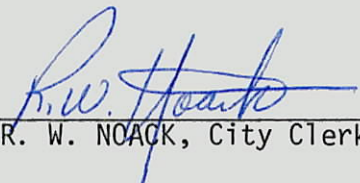
SECTION XVII. Permit Fee. After review and approval of the plan, a Storm Drainage Permit will be issued at a cost of twenty-five (25) dollars.

SECTION XVIII. This ordinance shall be in full force and effect five days after its passage, approval and publication.


PASSED by the City Council of the City of Lynnwood this 25th day of April, 1977, and signed in authentication of its passage this 25th day of April, 1977.


M. J. HRDLICKA, Mayor

ATTEST:


R. W. NOACK, City Clerk

APPROVED AS TO FORM:


J. GAYLORD RIACH, City Attorney

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