ORDINANCE NO. 1583

AN ORDINANCE OF THE CITY OF DES MOINES, WASHINGTON relating to the environment; replacing Title 16 DMMC; and repealing the previously codified provisions of Title 16 DMMC and underlying Ordinances.

WHEREAS, Title 16 DMMC, entitled "Environment," contains many Ordinances that implement the State Environmental Policy Act (SEPA), the critical area requirements of chapter 36.70A RCW, the flood plain management provisions of chapter 86.16 RCW, and the State Shoreline Act as set forth in chapter 90.58 RCW; and that promote the public health, safety, and general welfare, and

WHEREAS, numerous amendments to Title 16 DMMC since enactment have adversely affected the Title's organization, and

WHEREAS, the City Council finds that it is in the best interest of the public health, safety, and general welfare to establish comprehensive, uniform, and current provisions for the City's Environmental Code; now therefore,

THE CITY COUNCIL OF THE CITY OF DES MOINES ORDAINS AS FOLLOWS:

Title 16 DMMC and all underlying Ordinances are hereby repealed and replaced with the following:

TITLE 16
ENVIRONMENT

Chapter 16.01
General Provisions

Sections:

16.01.010 Title.
16.01.020 Application.
16.01.030 Purpose.
16.01.040 Authority.
16.01.050 Definitions.
16.01.060 Rules of construction.
16.01.070 Liability.
16.01.080 Violation and penalty.

16.01.090 Severability.
16.01.100 Variance procedure.
16.01.110 Appeal.

Sec. 1. 16.01.010. Title. This Title shall be entitled "Environment." This chapter shall be entitled "General Provisions."

Sec. 2. 16.01.020. Application. This chapter and the procedures adopted under this chapter shall be applicable to all chapters within this Title.

Sec. 3. 16.01.030. Purpose. The purpose of this Title is to implement the State Environmental Policy Act, the critical area requirements of chapter 36.70A RCW, the floodplain management provisions of chapter 86.16 RCW, and the State Shoreline Act as set forth in chapter 90.58 RCW.

Sec. 4. 16.01.040. Authority. This Title is adopted pursuant to chapters 43.21C, 36.70A, 86.16 and 90.58 RCW and other applicable laws.

Sec. 5. 16.01.050. Definitions. As used in this Title, unless the context or subject matter clearly requires otherwise, the words or phrases defined in this section shall have the indicated meanings.

"Aquifer" means a consolidated or unconsolidated ground water-bearing geologic formation or formations that contain enough saturated permeable material to yield significant quantities of water to wells.

"Area of shallow flooding" means and area designated as AO, or AH Zone on the Flood Insurance Rate Map (FIRM). AO zones have base flood depths that range from one to three feet above the natural ground; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident. AO is characterized as sheet flow; AH indicates ponding, and is shown with standard base flood elevations.

"Area of special flood hazard" means the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.

"Base flood" means the flood having a 1 percent chance of being equaled or exceeded in any given year (also referred to as the "100-year flood"). Designated on Flood Insurance Rate Maps by the letters A or V.

"Basement" means any area of the building having its floor sub-grade (below ground level) on all sides.

"Bluff" means a steep slope which abuts and rises from Puget Sound. Bluffs contain slopes predominantly in excess of 40 percent, although portions may be less than 40 percent. Bluffs occur in the area north of South 222nd Street and south of South 232nd Street. The toe of the bluff is the beach of Puget Sound. The top of a bluff is typically a distinct line where the slope abruptly levels out. Where there is no distinct break in slope, the slope is either the line of vegetation separating the unvegetated slope from the vegetated uplands plateau or, when the bluff is vegetated, the point where the bluff slope diminishes to less than 15 percent.

"Breakaway walls" means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

"Buffer" means either: an area adjacent to hillsides which provides the margin of safety through protection of slope stability, attenuation of surface water flows and landslide, seismic, and erosion hazards reasonably necessary to minimize risk to the public from loss of life, well-being, or property damage resulting from natural disasters; or an area adjacent to a stream or wetland which is an integral part of the stream or wetland ecosystem, providing shade; input of organic debris and coarse sediments; room for variation in stream or wetland boundaries; habitat for wildlife; impeding the volume and rate of runoff; reducing the amount of sediment, nutrients, and toxic

materials entering the stream or wetland; and protection from harmful intrusion to protect the public from losses suffered when the functions and values of stream and wetland resources are degraded.

"Building" means any structure used or intended for supporting or sheltering any use or occupancy, as well as any structure having a roof, but excluding all forms of vehicles even though immobilized. When a use is required to be within a building, or where special authority granted pursuant to this Title requires that a use shall be within an entirely enclosed building, then the term "building" means one so designed and constructed that all exterior walls of the structure shall be solid from the ground to the roof line, and shall contain no openings except for windows and doors which are designed so that they may be closed.

"Building setback line" means a line beyond which the footprint or foundation of a building shall not extend.

"Clearing" means the destruction and removal of vegetation by burning, mechanical, or chemical methods.

"Closed record appeal" means an administrative appeal on the record to a local government body or officer, including the legislative body, following an open record hearing on a project permit application when the appeal is on the record with no or limited new evidence or information allowed to be submitted and only appeal argument allowed.

"Coastal high hazard area" means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on the FIRM as Zone V1-30, VE or V.

"Commercial and recreational shellfish areas" means areas that include all public and private tidelands or bedlands suitable for shellfish harvest, including shellfish protection districts established pursuant to chapter 90.72 RCW.

"Compensation" means the replacement, enhancement, or creation of an undevelopable environmentally critical area equivalent in functions, values, and size to those being altered or lost from development.

"Creation (establishment)" means the manipulation of the physical, chemical, or biological characteristics present to develop a wetland on an upland or deepwater site where a wetland did not previously exist. "Establishment" results in a gain in wetland acres. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create hydric soils, and support the growth of hydrophytic plant species.

"Critical aquifer recharge areas (CARAs)" mean those areas with a critical recharging effect on aquifers used for potable water, as defined by WAC 365-190-030(2). CARAs have prevailing geologic conditions associated with infiltration rates that create a high potential for contamination of ground water resources or contribute significantly to the replenishment of ground water. Aquifer recharge areas shall be rated as having high, moderate, or low susceptibility based on soil permeability, geologic matrix, infiltration, and depth to water as determined by the criteria established by the state Department of Ecology.

These areas include but are not limited to the following:

(1) Wellhead protection areas. Wellhead protection areas may be defined by the boundaries of the 10-year time of ground water travel or boundaries established using alternate criteria approved by the Washington State Department of Health in those settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135.

(2) Sole source aquifers. Sole source aquifers are areas that have been designated by the U.S. Environmental Protection Agency pursuant to the Federal Safe Water Drinking Act.

(3) Susceptible ground water management areas. Susceptible ground water management areas are areas that have been designated as moderately or highly vulnerable or susceptible in an adopted ground water management program developed pursuant to chapter 173-100 WAC.

(4) Special protection areas. Special protection areas are those areas defined by WAC 173-200-090.

(5) Moderately or highly vulnerable aquifer recharge areas. Aquifer recharge areas that are moderately or highly vulnerable to degradation or depletion because of hydrogeologic characteristics are those areas delineated by a hydrogeologic study prepared in accordance with the state Department of Ecology guidelines.

(6) Moderately or highly susceptible aquifer recharge areas. Aquifer recharge areas moderately or highly susceptible to degradation or depletion because of hydrogeologic characteristics are those areas meeting the criteria established by the state Department of Ecology.

"Critical areas" includes the following areas and ecosystems: (a) wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas. "Fish and wildlife habitat conservation areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company. RCW 36.70A.030(5).

"Development activity". means any work, condition, or activity which requires a permit or approval under Titles 11, 14, 16, or 18 DMMC.

"Developable area" means the "site area" less the following areas:

(1) Areas within a project site that are required to be dedicated for public rights-of-way;

(2) Environmentally critical areas and their buffers to the extent they are required by the City to remain undeveloped;

(3) Areas required for storm water control facilities, including but not limited to retention/detention ponds/vaults, biofiltration swales and setbacks from such ponds and swales;

(4) Areas required by the City to be dedicated or reserved as on-site recreation areas;

(5) Other areas, excluding setbacks, required by the City to remain undeveloped.

"Development" means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations or storage of equipment or materials located within the area of special flood hazard.

"Development site" means the entire lot, series of lots, or parcels on which a development is located or is proposed to be located, including all contiguous undeveloped lots or parcels which are under common ownership with the developed lots on or subsequent to June 30, 1990. This definition only applies to chapter 16.10 DMMC.

"Drainage facility" means the system of collecting, conveying, and storing surface and storm water runoff. Drainage facilities shall include but not be limited to all surface and storm water runoff conveyance and containment facilities including streams, pipelines, channels, ditches, wetlands, closed depressions, infiltration facilities, retention/detention facilities, erosion/sedimentation control facilities, and other drainage structures and appurtenances, both natural and manmade.

"Enhancement" means the manipulation of the physical, chemical, or biological characteristics of a wetland site to heighten, intensify, or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, floodwater retention, or wildlife

habitat. Enhancement results in a change in some wetland functions and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres. Activities typically consist of planting vegetation, controlling nonnative or invasive species, modifying site elevations or the proportion of open water to influence hydroperiods, or some combination of these activities.

"Environmentally critical areas." See "Critical areas" defined above.

"Erosion hazard areas" means at least those areas identified by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "moderate to severe," "severe," or "very severe" rill and inter-rill erosion hazard. Erosion hazard areas are also those areas impacted by shore land and/or stream bank erosion and those areas within a river's channel migration zone.

"Exemption" means a grant of relief from the requirements of this chapter which permits construction in a manner that would otherwise be prohibited by this chapter.

"Existing manufactured home park or subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the adopted floodplain management regulations.

"Expansion to an existing manufactured home park or subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

"Fish and wildlife habitat conservation" means land management for maintaining species in suitable habitats within their natural geographic distribution so that isolated

subpopulations are not created. Fish and wildlife habitat conservation areas include:

(1) Areas with which state or federally designated endangered, threatened, and sensitive species have a primary association;

(2) State priority habitats and areas associated with state priority species;

(3) Habitats and species of local importance;

(4) Commercial and recreational shellfish areas;

(5) Kelp and eelgrass beds identified by the Washington Department of Natural Resources;

(6) Herring and smelt spawning areas as outlined in chapter 220-110 WAC and the Puget Sound Environmental Atlas as presently constituted or as may be subsequently amended;

(7) Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat;

(8) Waters of the state as defined in Title 222 WAC;

(9) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity; and

(10) State natural area preserves and natural resource conservation areas as defined, established, and managed by the Washington State Department of Natural Resources; and

(11) Areas of rare plant species and high quality ecosystems as identified by the Washington State Department of Natural Resources through the Natural Heritage Program; and

(12) Land useful or essential for preserving connections between habitat blocks and open spaces as determined by the City Manager or the City Manager's designee.

"Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:

(1) The overflow of inland or tidal waters; and/or

(2) The unusual and rapid accumulation of runoff of surface waters from any source.

"Flood insurance rate map (FIRM)" means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

"Flood insurance study (FIS)" means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Insurance Rate Maps, and the water surface elevation of the base flood.

"Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

"Geologically hazardous areas" means areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with the public health or safety concerns.

(1) Erosion hazard;

(2) Landslide hazard;

(3) Seismic hazard; and

(4) Other geological events including tsunamis, mass wasting, debris flows, rock falls, and differential settlement.

"Hazardous substance" means any solid, liquid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any

characteristics or criteria of hazardous waste as described in WAC 173-303-090, 173-303-101, 173-303-102, or 173-303-103.

"Hazardous waste" means those solid wastes designated by 40 C.F.R. Part 261, and regulated as hazardous and/or mixed waste by the United States EPA, as described in WAC 173-303-040.

"Hillsides" means geological features of the landscape having slopes of 15 percent and greater. To differentiate between levels of hillside protection and the application of development standards, the City categorizes hillsides into four groups: hillsides of at least 15 percent but less than 25 percent; hillsides of at least 25 percent but less than 40 percent; hillsides of 40 percent slope and greater; and hillsides which are ravine sidewalls or bluffs.

"Landslide" means an episodic downslope movement of a mass of soil or rock that includes but is not limited to rockfalls, slumps, mudflows, and earthflows.

"Landslide hazard areas" are those areas of the City potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Examples of these may include, but are not limited to, the following:

(1) Areas of historic failures, such as:

(a) Those areas delineated by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "severe" limitation for building site development;

(b) Those areas mapped by the Washington State Department of Ecology (Coastal Zone Atlas) or the Washington State Department of Natural Resources (slope stability mapping) as unstable (U or class 3), unstable old slides (UOS or class 4), or unstable recent slides (URS or class 5); or

(c) Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by

the U.S. Geological Survey or Washington State Department of Natural Resources;

(2) Any area with a combination of:

(a) Slopes greater than 15 percent;

(b) Impermeable soils (usually silt and clay) frequently interbedded with granular permeable soils (usually sand and gravel); and

(c) Springs or ground water seepage;

(3) Any area which has shown movement during the Holocene epoch (from 10,000 years ago to present) or which is underlain by mass wastage debris of that age;

(4) Any area potentially unstable as a result of rapid stream incision, stream bank erosion, or undercutting by wave action;

(5) Any area designated as Class III landslide hazard area by the "Map Showing Relative Slope Stability in Part of West-Central King County, Washington, Map I-852-A, U.S., Geological Survey Miscellaneous Geologic Investigations" as presently constituted or as may be subsequently amended;

(6) Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;

(7) Slopes having gradients steeper than 80 percent subject to rock fall during seismic shaking;

(8) Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and

(9) Any area with a slope of 40 percent or steeper and with a vertical relief of 10 or more feet except areas composed of consolidated rock. A slope is delineated by establishing its

toe and top and is measured by averaging the inclination over at least 10 feet of vertical relief.

"Local administrator" means the City Manager or the City Manager's designee.

"Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this Ordinance found at Section 5.2-1(2), (i.e. provided there are adequate flood ventilation openings).

"Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle.

"Manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

"Mean sea level" means the average height of the Puget Sound for all stages of the tide.

"Mitigation" means the use of any combination or all of the following actions:

(1) Avoiding impacts to environmentally critical areas by not taking a certain action or parts of an action;

(2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;

(3) Rectifying the impact by repairing, rehabilitating, or restoring the affected environmentally critical area;

(4) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the development proposal;

(5) Compensating for the impact by replacing or enhancing environmentally critical areas, or providing substitute resources; and

(6) Monitoring the impact and taking appropriate corrective measures.

"Monitoring" means the collection and analysis of data by various methods for the purposes of understanding and documenting changes in natural ecosystems and features, and includes gathering baseline data, evaluating the impacts of development proposals on the biological, hydrologic, and geologic elements of such systems, and assessing the performance of mitigation measures.

"Native vegetation" means plant species which are indigenous to the area in question.

"New construction" means structures for which the "start of construction" commenced on or after July 1, 1992.

"New manufactured home park or subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of adopted floodplain management regulations.

"Nonconforming use" means a use which was lawfully established and maintained but which, because of the application of this Title to it, no longer conforms to the use regulations of the zone in which it is located as defined by this Title.

"Open record hearing" means a hearing, conducted by a single hearing body or officer authorized by the local

government to conduct such hearings, that creates the local government's record through testimony and submission of evidence and information, under procedures prescribed by the local government by ordinance or resolution. An open record hearing may be held prior to a local government's decision on a project permit to be known as an "open record predecision hearing." An open record hearing may be held on an appeal, to be known as an "open record appeal hearing," if no open record predecision hearing has been held on the project permit.

"Ordinary high water mark" means the mark that will be found by examining the bed and banks of a stream or shoreline and ascertaining where the presence and action of waters are so common and usual, and so long maintained in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to topography and vegetation.

"Protection/maintenance (preservation)" means removing a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This includes the purchase of land or easements, repairing water control structures or fences, or structural protection such as repairing a barrier island. This term also includes activities commonly associated with the term "preservation." Preservation does not result in a gain of wetland acres, may result in a gain in functions, and will be used only in exceptional circumstances.

"Public meeting" means an informal meeting, hearing, workshop, or other public gathering of people to obtain comments from the public or other agencies on a proposed project permit prior to the local government's decision. A public meeting may include, but is not limited to, a design review or architectural control board meeting, a special review district or community council meeting, or a scoping meeting on a draft environmental impact statement. A public meeting does not include an open record hearing. The proceedings at a public meeting may be recorded and a report or recommendation may be included in the local government's project permit application file.

"Qualified professional" means a person with experience and training in the pertinent scientific discipline, and who is a qualified scientific expert with expertise appropriate for the

relevant environmentally critical area subject in accordance with WAC 365-195-905(4). A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology, or related field, and two years of related work experience.

(1) A qualified professional for habitats must have a degree in biology and professional experience related to the subject species.

(2) A qualified professional for wetlands must have a degree in biology, must have taken a wetlands delineation course approved by the Army Corps of Engineers, and must have professional experience.

(3) A qualified professional for a geological hazard must be a professional engineer or geologist, licensed in the state of Washington.

(4) A "qualified professional for critical aquifer recharge areas" means a hydrogeologist, geologist, engineer, or other scientist with experience in preparing hydrogeologic assessments.

"Ravine sidewall" means a steep slope which abuts and rises from the valley floor of a stream and which was created by the wearing action of the stream. Ravine sidewalls contain slopes predominantly in excess of 40 percent, although portions may be less than 40 percent. The toe of a ravine sidewall is the stream valley floor. The top of a ravine sidewall is typically a distinct line where the slope abruptly levels out. Where there is no distinct break in slope, the top is where the slope diminishes to less than 15 percent. Minor natural or manmade breaks in the slope of ravine sidewalls shall not be considered as the top. Benches with slopes less than 15 percent and containing developed or developable areas pursuant to chapter 16.10 DMMC shall be considered as the top.

"Recreational vehicle" means a vehicle:

(1) Built on a single chassis;

(2) 400 square feet or less when measured at the largest horizontal projection;

(3) Designed to be self-propelled or permanently towable by a light duty truck; and

(4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

"Restoration" means the return of an environmentally critical area to a state in which its functions, values, and size approach or exceed its unaltered state as closely as possible.

"Restoration, wetlands" means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former or degraded wetland. For the purpose of tracking net gains in wetland acres, restoration is divided into:

(1) "Re-establishment" means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Re-establishment results in a gain in wetland acres (and functions). Activities could include removing fill material, plugging ditches, or breaking drain tiles.

(2) "Rehabilitation" means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. Activities could involve breaching a dike to reconnect wetlands to a floodplain or return tidal influence to a wetland.

"Retaining wall" means any wall used to resist the lateral displacement of any material.

"Seismic hazard areas" means those areas subject to severe risk of earthquake damage as a result of seismically induced ground shaking, slope failure, settlement, soil

liquefaction, lateral spreading, or surface faulting. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. Ground shaking is the primary cause of earthquake damage in Washington. The strength of ground shaking is affected primarily by:

(1) The magnitude of an earthquake;

(2) The distance from the source of an earthquake;

(3) The type of thickness of geologic materials at the surface; and

(4) The type of subsurface geologic structure.

Settlement and soil liquefaction conditions occur in areas underlain by cohesionless, loose, or soft-saturated soils of low density usually in association with a shallow ground water table. Known seismic hazard areas are mapped in the "Washington State Department of Natural Resources, Geologic Map GM-41, Liquefaction Susceptibility for the Des Moines and Renton 7.5-minute Quadrangles, Washington," and "Washington State Department of Natural Resources, Geologic Map GM-43, Liquefaction Susceptibility for the Auburn and Poverty Bay 7.5-minute Quadrangles, Washington."

"Shorelines of the state" means lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, as classified in chapter 90.58 RCW.
"Slope" means an inclined ground surface, the inclination of which is expressed as a ratio (percentage) of vertical distance to horizontal distance by the following formula:

$$\frac{\text{vertical distance}}{\text{horizontal distance}} \times 100 = \%\ \text{slope}$$

Another method of measuring the inclination of the land surface is by measuring the angle, expressed in degrees, of the surface above a horizontal plane. The following chart shows the equivalents between these two methods of measurement for several slopes:

Percent Slope	Angle of Inclination
8.7	5.0°
15.0	8.5°
25.0	14.0°
30.0	16.7°
40.0	21.8°
50.0	26.6°
100.0	45.0°

"Special environmental study" means a technical report prepared by a qualified professional. Special environmental studies are intended to evaluate past and present environmental conditions of certain properties, potential environmental impacts associated with certain development proposals, and as appropriate, recommend mitigation measures that can be expected to lessen the severity of identified adverse environmental impacts. The content and scope of required special environmental studies shall be as specified by the Planning, Building and Public Works Director.

"Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

"State designated endangered, threatened, and sensitive species" means those fish and wildlife species native to the state of Washington identified by the Washington Department of Fish and Wildlife, that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. State designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (state endangered species) and WAC 232-12-011 (state threatened and sensitive species). The state Department of Fish and Wildlife maintains the most current listing and should be consulted for current listing status. This section shall not apply to hair seals and sea lions that are threatening to damage or are damaging commercial fishing gear being utilized in a lawful manner or when said mammals are damaging or threatening to damage commercial fish being lawfully taken with commercial gear.

"State priority habitats and areas associated with state priority species" means those areas considered priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by the state Department of Fish and Wildlife.

"Stream" means an area where surface waters flow sufficiently to produce a defined channel or bed. A defined channel or bed is indicated by hydraulically sorted sediments or the removal of vegetative litter or loosely rooted vegetation by the action of moving water. Stream channels or beds show clear evidence of the passage of water and include, but are not limited to, bedrock channels, gravel beds, sand and silt beds, and defined channel swales. The channel or bed need not contain water year-round. This definition is not meant to include

irrigation ditches, canals, storm or surface water runoff devices, or other entirely artificial watercourses unless they are used by salmonids or used to convey streams naturally occurring prior to construction. Swales, which are shallow drainage conveyances with relatively gentle side slopes and generally with flow depths less than one foot, shall be considered streams when hydrologic and hydraulic analyses done pursuant to a development proposal predict formation of a defined channel after development. To differentiate between levels of stream and marine shoreline protection and the application of development standards, streams are classified according to the Washington State Department of Natural Resources Forest Practices Board water typing system specified in WAC 222-16-030 as follows:

(1) "Type S water" means all waters inventoried as "shorelines of the state," including periodically inundated areas of their associated wetlands, under chapter 90.58 RCW and the rules promulgated pursuant to chapter 90.58 RCW;

(2) "Type F water" means segments of natural waters other than Type S waters, which contain fish or fish habitat, including waters diverted for use by a federal, state or tribal fish hatchery from the point of diversion for 1,500 feet or the entire tributary if the tributary is highly significant for protection of downstream water quality;

(3) "Type Np water" means all segments of natural waters that are not Type S or F waters. These are perennial nonfish habitat streams that are physically connected to Type S or F waters by an aboveground channel system, stream or wetland. Perennial streams are waters that do not go dry any time of a year of normal rainfall. However, for the purpose of water typing, Type Np waters include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow;

(4) "Type Ns water" means all segments of natural waters that are not Type S, F, or Np waters. These are seasonal, nonfish habitat streams in which surface flow is not present for at least some portion of a year of normal rainfall and are not located downstream from any stream reach that is a Type Np

water. Ns waters must be physically connected by an aboveground channel system to Type S, F, or Np waters.

"Storage tank" means a container for the storage of a gas or liquid.

"Stream corridor" means a perennial, intermittent, or ephemeral stream including its channel bottom, lower and upper banks, area beyond the top of the upper bank which influences the stream and is influenced by the presence of water, and the vegetation inhabiting this area. This area is known as the "riparian zone" which is an area transitional between aquatic and terrestrial (upland) ecosystems having distinct vegetation and soil characteristics. Riparian zones are most commonly recognized by bottomland, flood plain, and streambank vegetation. In developed watersheds, portions of the stream corridor may currently be in a partially culverted or channelized condition by artificial conveyance systems.

"Structure" means a walled and roofed building.

"Substantial improvement" means a repair, reconstruction, or improvement of a structure made during a three-year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the structure either:

(1) Before the improvement or repair is started; or

(2) If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of a wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

(3) The term does not, however, include either:

(a) A project for improvement of a structure to comply with existing state or local health, sanitary, or safety

code specifications that are solely necessary to assure safe living conditions; or

(b) An alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

"Surface Water Design Manual for the City of Des Moines" means the King County, Washington "Surface Water Design Manual," including all subsequent revisions, adopted by reference as the "Surface Water Design Manual for the City of Des Moines," and is referred to in this Title as "Surface Water Design Manual."

"Upper bank" is that portion of the topographic cross-section of a stream which extends from the break in the general slope of the surrounding land to the normal high water line.

"Use" means the nature of the occupancy, the type of activity, or the character and form of improvements to which land is devoted or may be devoted.

"Water dependent" means a structure for commerce or industry that cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

"Wetland" or "wetlands" means areas that are inundated or saturated by surface water or groundwater 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. Wetlands to not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created for nonwetland areas created to mitigate conversion of wetlands.

To differentiate between levels of wetland protection and the application of development standards, wetlands shall be rated according to the "Washington State Wetland Rating System for Western Washington," (Ecology Publication No. 04-06-025, August 2004) or as revised by the Department of Ecology. Wetland rating categories shall be applied as the wetland exists at the time of the adoption of this chapter or as it exists at the time of an associated permit application. Wetland rating categories shall not change due to illegal modifications.

(1) Category I. Category I wetlands represent a unique or rare wetland type, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain some ecological attributes that are impossible to replace within a human lifetime, or provide a very high level of functions. Category I wetlands are:

(a) Mature forested wetlands larger than one acre; or

(b) Wetlands that perform many functions well.

(2) Category II. Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands occur more commonly than Category I wetlands, but they still need a relatively high level of protection. Category II wetlands are:

(a) Wetlands identified by the Washington State Department of Natural Resources as containing "sensitive" plant species;

(b) Wetlands with a moderately high level of functions.

(3) Category III. Generally, wetlands in this category may have been disturbed in some way and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. Category III wetlands are wetlands with a moderate level of functions.

(4) Category IV. Category IV wetlands have the lowest levels of functions and are often heavily disturbed. These are wetlands that should be replaceable, and in some cases may be improved. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.

Sec. 6. 16.01.060. Rules of construction. The following rules of construction shall apply unless inconsistent with the obvious meaning in the context of the provision.

(1) Tense. Words used in the present tense shall include the future tense.

(2) Number. Words used in the singular shall include the plural, and words used in the plural shall include the singular.

(3) Headings. In the event that there is any conflict or inconsistency between the heading of a chapter, section, or paragraph of this code, and the content thereof, the said heading shall not affect the scope, meaning, or intent of the content.

(4) Citations. Citations to state or federal laws shall mean that law as presently constituted or as it may be subsequently amended in the future.

Sec. 7. 16.01.070. Liability. It is the specific intent of this Title and procedures adopted under this Title to place the obligation of complying with the requirements of this chapter upon the permittee, and no provision is intended to impose any duty upon the City, or any of its officers, employees, or agents. Nothing contained in this Title is intended to be or shall be construed to create or form the basis for liability on the part of the City, or its officers, employees, or agents, for any injury or damage resulting from the failure of the permittee to comply with the provisions of this Title, or by reason or in consequence of any act or omission in connection with the implementation or enforcement of

this Title or any procedures adopted under this Title by the City, its officers, employees, or agents.

Sec. 8. 16.01.080. Violation and penalty.

(1) Violation. No person shall violate or fail to comply with the provisions of this Title.

(2) Civil infraction. A violation or a failure to comply with the provisions of this Title is a civil infraction and a violator may be penalized as is more specifically set forth in chapter 1.24 DMMC Civil Infractions.

(3) Civil violation and penalty. A violation or a failure to comply with the provisions of this Title is further a civil violation and may be penalized and or abated as is set forth in chapter 1.28 DMMC Civil Violations and Penalties.

(4) Criminal penalty. In addition to or as an alternative to any other penalty provided in this Title or by law, a person convicted of a violation of this Title is guilty of a gross misdemeanor. Upon conviction a person may also be ordered to abate, discontinue or correct a violation of this Title.

(5) Superior Court - Civil action. In addition to or an alternative to any other penalty provided in this Title or by law, a violation or a failure to comply with the provisions of this Title may be enforced by a civil action filed in King County Superior Court in any manner allowed by law.

Sec. 9. 16.01.090. Severability. The provisions of this Title are severable. If any section, sentence, clause or phrase of this code is adjudged by a court of competent jurisdiction to be invalid, the decision shall not affect the validity of the remaining portions of the code.

Sec. 10. 16.01.100. Variance procedure.

(1) All applications for variances from requirements set forth in this Title shall first be filed with the Hearing Examiner pursuant to chapter 18.20 DMMC and chapter 18.24 DMMC.

(2) A variance shall not be granted by the Hearing Examiner unless the Hearing Examiner finds that the applicant can demonstrate that compliance would create an undue hardship. For purposes of this Title, undue hardship is intended to mean a technological or environmental difficulty associated with the particular facility or with the particular real property involved.

(3) When granting a variance, the Hearing Examiner may attach conditions to the granting of said variance including placing a time limit on the duration of such variance.

Sec. 11. 16.01.110. Appeal. Appeals of decisions made pursuant to this Title shall be as set forth in the applicable chapter and pursuant to chapter 18.20 DMMC.

Chapter 16.02
Interpretation of Title 16 DMMC

Sections:

16.02.010 Title.
16.02.020 Application.
16.02.030 Purpose.
16.02.040 Authority.
16.02.050 Interpretation.
16.02.060 Provisions not affected by headings.
16.02.070 Appeal

Sec. 112. 16.02.010. Title. This chapter shall be entitled "Interpretation of Title 16 DMMC."

Sec. 113. 16.02.020. Application. This chapter shall apply to the interpretation of Titles 16 DMMC.

Sec. 114. 16.02.030. Purpose. The purpose of this chapter is to provide for the interpretation of development code provisions in Title 16 DMMC.

Sec. 115. 16.02.040. Authority. This chapter is adopted pursuant to the provisions of chapters 35A.13, 35A.63 and 36.70A RCW and other applicable laws.

Sec. 116. 16.02.050. Interpretation.

(1) Interpretation of Title 16 shall be responsibility of the Planning, Building and Public Works Director.

(2) Interpretations of Title 16 may be initiated by the submittal of a written request to the City Manager or the City Manager's designee.

(3) Requests for interpretations of the DMMC shall be processed as a Type I land use action.

(4) The City Manager or the City Manager's designee shall periodically submit to the City Council a summary of the interpretations requested and the corresponding interpretations made by the Planning, Building and Public Works Director. As needed, the summary shall include recommendations regarding the need for textual code amendments that would clarify DMMC provisions.

Sec. 117. 16.02.060. Provisions not affected by headings. Chapter and section headings contained in this Title shall not be deemed to govern, limit, modify, or in any manner affect the scope, meaning, or intent of any section hereof.

Sec. 118. 16.02.070. Appeal. A decision of the Planning, Building and Public Works Director made in accordance with this chapter shall be considered a final administrative decision. A person aggrieved by such decision of the Planning, Building and Public Works Director may appeal such decision to the Hearing Examiner in accordance with DMMC 18.20.150 and 18.20.160 and chapter 18.240 DMMC.

Chapter 16.05
SEPA

Sections:

16.05.010 Title.
16.05.020 Application.
16.05.030 Purpose.
16.05.040 Authority.
16.05.050 General - Requirements.
16.05.060 Definitions - Additional.
16.05.070 Designation of responsible official.
16.05.080 Lead agency - Determination and responsibilities.
16.05.090 Lead agency - Transfer to state agency.
16.05.100 Document schedule.
16.05.110 Categorical exemptions
16.05.120 Use of exemptions.
16.05.130 Environmental checklist.
16.05.140 Mitigated DNS.
16.05.150 Environmental impact statements.
16.05.160 Preparation of EIS - Additional provisions.
16.05.170 Additional elements to be covered.
16.05.180 Commenting Rules.
16.05.190 Public notice procedure - Notice of DNS, mitigated DNS, or DS.
16.05.200 Public notice procedure - Notice of DS scoping procedure.
16.05.210 Public notice procedure - Notice of DEIS and draft SEIS.
16.05.220 Public notice procedure - Content of notice.
16.05.230 Public notice procedure - Timing of notices.
16.05.240 Public notice procedure - Comment period.
16.05.250 Public notice procedure - Coordination of required notices.
16.05.260 Public notice procedure - Public notice costs.
16.05.270 Consulted agency - Official designated.
16.05.275 Public Notice (WAC 173-806-132 and DMMC 16.05.190).
16.05.280 Use of existing and supplementing environmental documents and planned actions.
16.05.290 Planned actions.
16.05.300 SEPA and Agency decisions - Appeal.
16.05.310 Substantive authority - Conditions - Denial - Policies.

16.05.320 Agency SEPA Appeal.
16.05.330 Categorical Exemptions - Adoption by reference.
16.05.340 Agency Compliance - Rules.
16.05.350 Environmentally Critical Areas and areas of special flood hazard.
16.05.360 Fees.
16.05.370 Forms - Adoption by reference.

Sec. 12. 16.05.010. Title. This chapter shall be entitled "SEPA."

Sec. 13. 16.05.020. Application. This chapter shall apply to legislative and other actions affecting the quality of the environment as set forth in chapter 43.21C RCW and chapter 197-11 WAC.

Sec. 14. 16.05.030. Purpose. The purpose of this chapter is to implement chapter 43.21C RCW and the applicable Washington Administrative Code provisions.

Sec. 15. 16.05.040. Authority. The City adopts this chapter under the State Environmental Policy Act (SEPA), RCW 43.21C.120 and the SEPA rules, WAC 197-11-904. This chapter contains this City's SEPA procedures and policies. The SEPA rules, chapter 197-11 WAC, must be used in conjunction with this chapter.

Sec. 16. 16.05.050. General - Requirements. The City adopts by reference the definitions contained in WAC 197-11-040 through 197-11-268.

Sec. 17. 16.05.060. Definitions - Additional. The City adopts by reference the definitions contained in WAC 197-11-700 through 197-11-799. In addition, the following definitions are adopted for this chapter:

"Advisory body" means a body established by ordinance of the City Council whose responsibilities include making recommendation to the City Council on actions subject to SEPA.

"Early notice" means the City's response to an applicant stating whether it considers issuance of a determination of significance

likely for the applicant's proposal (mitigated determination of nonsignificance (DNS) procedures).

"Proponent" means an agency or private applicant proposing an action subject to SEPA. For purposes of agency contact the proponent means the contact person on the environmental checklist, or agency designated for that purpose by the agency or private applicant.

"SEPA rules" means chapter 197-11 WAC adopted by the State Department of Ecology.

Sec. 18. 16.05.070. Designation of responsible official.

(1) For those proposals for which the City is the lead agency, the responsible official shall be the Planning, Building and Public Works Director.

(2) For all proposals for which the City is the lead agency, the responsible official shall make the threshold determination, supervise scoping and preparation of any required environmental impact statement (EIS), and perform any other functions assigned to the "lead agency" or "responsible official" by those sections of the SEPA rules that were adopted by reference in WAC 173-806-020.

(3) The City shall retain all documents required by the SEPA rules and make them available in accordance with chapter 42.17 RCW.

Sec. 19. 16.05.080. Lead agency - Determination and responsibilities.

(1) The department within the City receiving an application for or initiating a proposal that involves a nonexempt action shall determine the lead agency for that proposal under WAC 197-11-050, 197-11-253, and 197-11-922 through 197-11-940; unless the lead agency has been previously determined or the department is aware that another agency is in the process of determining the lead agency.

(2) When the City is not the lead agency for a proposal, all departments of the City shall use and consider, as appropriate, either the DNS or the final EIS of the lead agency in making decisions on the proposal. The responsible official shall not prepare or require preparation of a DNS or EIS in addition to that prepared by the lead agency, unless required under WAC 197-11-600. In some cases, the City may conduct supplemental environmental review under WAC 197-11-600.

(3) If the City or any of its departments receives a lead agency determination made by another agency that appears inconsistent with the criteria of WAC 197-11-253 or 197-11-922 through 197-11-940, it may object to the determination. Any objection must be made to the agency originally making the determination and resolved within 15 days of receipt of the determination, or the City must petition the Department of Ecology for a lead agency determination under WAC 197-11-946 within the 15-day time period. Any such petition on behalf of the City shall be initiated by the responsible official.

(4) The responsible official is authorized to make agreements as to lead agency status or shared lead agency duties for a proposal under WAC 197-11-942 and 197-11-944; provided, that the responsible official and any department that will incur responsibilities as the result of such agreement approve the agreement.

(5) The responsible official making a lead agency determination for a private project shall require sufficient information from the applicant to identify which other agencies have jurisdiction over the proposal.

(6) When the City is the lead agency for a MTCA remedial action, the Department of Ecology shall be provided an opportunity under WAC 197-11-253(5) to review the environmental documents prior to the public notice being provided. If the SEPA and MTCA documents are issued together with one public comment period under WAC 197-11-253(6), the City shall decide jointly with Ecology which agency receives the comment letters and how copies of the comment letters will be distributed to the other agency.

Sec. 20. 16.05.090. Lead agency - Transfer to state agency. For any proposal for a private project where the City would be the lead agency and for which one or more state agencies have jurisdiction, the City's responsible official may elect to transfer the lead agency to a state agency. The state agency with jurisdiction appearing first on the priority listing in WAC 197-11-936 shall be the lead agency and the City shall be an agency with jurisdiction. To transfer lead agency duties, the City's responsible official must transmit a notice of the transfer together with any relevant information available on the proposal to the appropriate state agency with jurisdiction. The responsible official of the City shall also give notice of the transfer to the private applicant and any other agencies with jurisdiction over the proposal.

Sec. 21. 16.05.100. Document schedule. For nonexempt proposals, the DNS or final EIS for the proposal shall accompany the City's staff recommendation.

Sec. 21. 16.05.110. Categorical exemptions - Threshold determinations. The City adopts WAC 197-11-300 through WAC 197-11-390 by reference as supplemented in this section.

Sec. 22. 16.05.120. Use of exemptions.

(1) Each department within the City that receives an application for a license or, in the case of governmental proposals, the department initiating the proposal, shall determine whether the license and/or the proposal is exempt. The department's determination that a proposal is exempt shall be final and not subject to administrative review. If a proposal is exempt, none of the procedural requirements of this chapter apply to the proposal. The City shall not require completion of an environmental checklist for an exempt proposal.

(2) In determining whether or not a proposal is exempt, the department shall make certain the proposal is properly defined and shall identify the governmental license required (WAC 197-11-060). If a proposal includes exempt and nonexempt actions, the department shall determine the lead agency, even if

the license application that triggers the department's consideration is exempt.

(3) If a proposal includes both exempt and nonexempt actions, the City may authorize exempt actions prior to compliance with the procedural requirements of this chapter, except that:

(a) The City shall not give authorization for:

(i) Any nonexempt action;

(ii) Any action that would have an adverse environmental impact; or

(iii) Any action that would limit the choice of alternatives.

(b) The responsible official may withhold approval of an exempt action that would lead to modification of the physical environment, when such modification would serve no purpose if nonexempt action(s) were not approved; and

(c) The responsible official may withhold approval of exempt actions that would lead to substantial financial expenditures by a private applicant when the expenditures would serve no purpose if nonexempt action(s) were not approved.

Sec. 23. 16.05.130. Environmental checklist.

(1) Except as provided in subsection (5) of this section, a completed environmental checklist in the form provided in WAC 197-11-960 shall be filed at the same time as an application for a permit, license, certificate, or other approval not exempted in this chapter; except, a checklist is not needed if the City and applicant agree an EIS is required, SEPA compliance has been completed, or SEPA compliance has been initiated by another agency. The City shall use the environmental checklist to determine the lead agency and for making the threshold determination.

(2) For private proposals, the City will require the applicant to complete the environmental checklist, providing assistance as necessary. For City proposals, the department initiating the proposal shall complete the environmental checklist for that proposal.

(3) The City may require that it, and not the private applicant, will complete all or part of the environmental checklist for a private proposal, if either of the following occurs:

(a) The City has technical information on a question or questions that is unavailable to the private applicant; or

(b) The applicant has provided inaccurate information on previous proposals or on proposals currently under consideration.

(4) The City may request that the applicant include supplemental studies with the environmental checklist if the responsible official determines that such studies are necessary to adequately assess the environmental impacts of a proposal. If mutually agreed to by the City and the applicant, supplemental studies may be contracted for directly by the City and funded by the applicant using the procedures set forth in DMMC 16.10.070, "Special Studies."

(5) For projects submitted as planned actions under WAC 197-11-164, the City shall use its existing environmental checklist form or may modify the environmental checklist form as provided in WAC 197-11-315. The modified environmental checklist form may be prepared and adopted along with or as part of a planned action ordinance; or developed after the ordinance is adopted. In either case, a proposed modified environmental checklist form must be sent to the department of ecology to allow at least a thirty-day review prior to use.

Sec. 24. 16.05.140. Mitigated DNS.

(1) As provided in this chapter and in WAC 197-11-350, the responsible official may issue a DNS based on conditions attached to the proposal by the responsible official or on changes to, or clarifications of, the proposal made by the applicant.

(2) An applicant may request in writing early notice of whether a DS is likely under WAC 197-11-350. The request must:

(a) Follow submission of a permit application and environmental checklist for a nonexempt proposal for which the department is lead agency; and

(b) Precede the City's actual threshold determination for the proposal.

(3) The responsible official should respond to the request for early notice within 15 working days. The response shall:

(a) Be written;

(b) State whether the City currently considers issuance of a DS likely and, if so, indicate the general or specific area(s) of concern that is/are leading the City to consider a DS; and

(c) State that the applicant may change or clarify the proposal to mitigate the indicated impacts revising the environmental checklist and/or permit application as necessary to reflect the changes or clarifications.

(4) As much as possible, the City should assist the applicant with identification of impacts to the extent necessary to formulate mitigation measures.

(5) When an applicant submits a changed or clarified proposal, along with a revised or amended environmental checklist, the City shall base its threshold determination on the changed or clarified proposal and should make the

determination within 15 days of receiving the changed or clarified proposal:

(a) If the City indicated specific mitigation measures in its response to the request for early notice, and the applicant changed or clarified the proposal to include those specific mitigation measures, the City shall issue and circulate a DNS under WAC 197-11-340(2).

(b) If the City indicated areas of concern, but did not indicate specific mitigation measures that would allow it to issue a DNS, the City shall make the threshold determination, issuing a DNS or DS as appropriate.

(c) The applicant's proposed mitigation measures (clarifications, changes, or conditions) must be in writing and must be specific.

(d) Mitigation measures which justify issuance of a mitigated DNS may be incorporated in the DNS by reference to agency staff reports, studies or other documents.

(6) A mitigated DNS is issued under WAC 197-11-340(2), requiring a 14-day comment period and public notice, or WAC 197-11-355, which may require no additional comment period beyond the comment period on the notice of application.

(7) Mitigation measures incorporated in the mitigated DNS shall be deemed conditions of approval of the permit decision and may be enforced in the same manner as any term or condition of the permit, or enforced in any manner specifically prescribed by the City.

(8) If the City's tentative decision on a permit or approval does not include mitigation measures that were incorporated in a mitigated DNS for the proposal, the City should evaluate the threshold determination to assure consistency with WAC 197-11-340(3)(a) (withdrawal of DNS).

(9) The City's written response under subsection (3) of this section shall not be construed as a determination of significance. In addition, preliminary discussion of

clarifications or changes to a proposal, as opposed to a written request for early notice, shall not bind the City to consider the clarifications or changes in its threshold determination.

Sec. 25. 16.05.150. Environmental impact statements. The City adopts WAC 197-11-400 through WAC 197-11-460 by reference, as supplemented by this part.

Sec. 26. 17.05.160. Preparation of EIS - Additional provisions.

(1) Preparation and content of draft and final EISs (DEIS and FEIS), and draft and final supplemental EISs (SEIS) is the responsibility of the Planning, Building and Public Works Department under the direction of the responsible official. Before the City issues an EIS, the responsible official shall be satisfied that it complies with this chapter and chapter 197-11 WAC.

(2) The DEIS and FEIS or draft and final SEIS shall be the responsibility of City staff. The Planning, Building and Public Works Department shall contract with consultants as necessary for the preparation of an EIS. The cost of preparing an EIS shall be borne entirely by the applicant. If the responsible official requires an EIS for a proposal and determines that someone other than the City will prepare the EIS, the responsible official shall notify the applicant immediately after completion of the threshold determination. The responsible official shall notify the applicant of the City's procedure for EIS preparation, including approval of the DEIS and FEIS prior to distribution.

(3) Consultants or subconsultants selected by the City to prepare environmental documents for a private development proposal shall not:

(a) Act as agents for the applicant in preparation or acquisition of associated underlying permits; or

(b) Have a financial interest in the proposal for which the environmental document is being prepared; or

(c) Perform any work or provide any services for the applicant in connection with or related to the proposal; or

(d) Perform, contract for, or agree to perform any other work or provide any other services for the applicant while working on the environmental documents for the proposal.

(4) The Planning, Building and Public Works Department shall establish and maintain one or more lists of qualified consultants who are eligible to receive contracts for preparation of environmental documents. Separate lists may be maintained to reflect specialized qualifications or expertise. When the Planning, Building and Public Works Department requires consultant services to prepare an EIS, the applicant shall select two or three candidates from the appropriate consultant list(s) and submit the names of those candidates to the Planning, Building and Public Works Department for consideration to prepare the EIS. The Planning, Building and Public Works Department shall interview the candidate consultants, select the most qualified consultant and negotiate a contract for services. In the event that two or more of the candidate consultants are qualified to prepare the EIS, the Planning, Building and Public Works Department will negotiate with each consultant and select the consultant who can prepare the EIS at the lowest cost to the applicant. The Planning, Building and Public Works Director shall promulgate administrative rules that establish processes to:

(a) Create and maintain a qualified consultant list;

(b) Add consultants to the list; and

(c) Remove consultants from the list.

Sec. 27. 16.05.170. Additional elements to be covered. The following additional elements are part of the environment for the purpose of EIS content, but do not add to the criteria for threshold determinations or perform any other function or purpose under this chapter:

(1) Economy;

(2) Social policy analysis;

(3) Cost-benefit analysis.

Sec. 28. 16.05.180. Commenting Rules. The City adopts WAC 197-11-500 through 197-11-570 by reference, as supplemented in this part.

Sec. 29. 16.05.190 Public notice procedure - Notice of DNS, mitigated DNS, or DS. Whenever the City issues a DNS under WAC 197-11-340(2), a mitigated DNS under WAC 197-11-350(3), or a DS under WAC 197-11-360(3), the public notice of these actions shall be given as follows:

(1) Signs required for site-specific proposals. Applicants shall post one or more large signs on the subject property giving public notice of a proposed action as set forth in this subsection.

(a) Size. All signs shall be four feet by eight feet in size.

(i) Single-Family Residential Zone. All signs shall be two feet by four feet in size.

(ii) All other zones. All signs shall be four feet by eight feet in size.

(b) Number of signs. One public notice sign shall be required per street frontage. In case of large parcels or street frontages exceeding 500 feet, the SEPA Official may require the posting of additional signs.

(c) Location. Signs shall be located on the site of the proposed action, set back at least 10 feet from a public right-of-way or private road or easement as applicable, and shall be situated to maximize readability by the public from public rights-of-way. A sign may be located within the 10-foot setback, if determined necessary by the SEPA Official to provide adequate visibility.

(d) Duration of installation. Public notification signs shall be installed at the time the DNS, mitigated DNS, or DS is issued. Signage shall remain in place until the final decision on the underlying governmental action. Any required signage installed shall not be removed until the City has taken action on the application and the time for filing an appeal of that action has expired. If an application is denied, any required signage shall remain in place unless the applicant has informed the SEPA Official, in writing, of their intent not to appeal.

(e) Alternative signage.

(i) Finding of necessity. Upon a finding of necessity by the SEPA Official, the applicant may employ an alternative to the large sign requirement. Ten signs of a dimension of 11 inches by 17 inches may be posted within 300 feet of the site and at the closest street intersections, subject to the consent of any affected property owner, when one or more of the following conditions exist and the intent of this section is met:

(A) The applicant is not the property owner, and the property owner does not consent to the proposal.

(B) The site is subject to physical characteristics such as steep slopes, wetlands, submerged lands, or thick vegetation, or is located such that the large sign would not be highly visible to neighboring residents and property owners or interested citizens.

(ii) Small sign discretion. The SEPA Official is further granted discretion to permit one or more signs of a dimension of 11 inches by 17 inches as an alternative to the large sign requirement when the following conditions exist and the intent of this section is met:

(A) Where, in the opinion of the SEPA Official, the project is of a substantially minor nature; and

(B) In the opinion of the SEPA Official, adequate public notice would be rendered by employment of one or more signs of a dimension of 11 inches by 17 inches as an alternative to the large sign requirement.

(f) Additional signage may be required. The SEPA Official may require both large signs and the alternative posting measures described in subsection (1)(e) of this section, or may require that more than one large sign be posted, when necessary to assure that notice is clearly visible to the public.

(g) Affidavit of certification - Signage. The applicant shall file an affidavit of certification-signage with the SEPA Official stating that the signs as required by this subsection were installed on the subject property. The affidavit shall be in a form prescribed by the SEPA Official. The affidavit of certification-signage shall be filed not less than 14 days prior to either the date of any scheduled hearing or the date by which the public may submit comments on the application, whichever is sooner. If the affidavit is not filed as required in this subsection, any scheduled hearing, or date by which the public may comment on the application, shall be postponed or extended in order to comply with this section.

(h) Removal of signs. In any event, any required signage must be removed by the applicant within seven days following the last day that an appeal of the action could be filed. If not so removed by the applicant, any required signage shall be removed by the City at the applicant's expense. By filing an application subject to the provisions of this section, the applicant consents to City personnel going upon the applicant's property for the purpose of removing any signage required by this section.

(i) Cash deposit. The amount of $100.00 shall be deposited by the applicant upon filing of any of the applications specified in this section to assure removal of any required signage in accordance with this subsection. This deposit shall be refunded if signs are timely removed in accordance with this subsection. If signs are not so removed, such deposit shall be forfeited to the City and shall be used to cover the expenses of removal by the City.

(j) Sign Code exemption. Any required signage is exempt from the requirements of the sign code, chapter 18.200 DMMC.

(k) Design requirements. The SEPA Official shall specify detailed design requirements for any required signage, including materials, stroke width, lettering, color, format, and other design characteristics.

(2) Bulletin boards. Notice shall be posted by the City at the official City posting places and on the indoor bulletin boards at the City planning, engineering, and public works building.

(3) Interested groups. The City shall notify in writing public agencies, private groups, or individuals who have expressed interest in a certain project.

(4) Newspaper. Notice shall be published in the official City newspaper.

(5) Property owners and occupants/tenants. For site-specific proposals, the City shall notify in writing all property owners and occupants/tenants within a 300-foot radius of the exterior boundaries of the subject property of the project proposal. If any portion of an apartment or condominium complex lies within the 300-foot radius, all occupants/tenants and property owners shall be given public notice. The applicant shall provide the SEPA Official with a complete list of the names, parcel numbers, and taxpayer's mailing addresses as shown in the records of the King County assessor to within 45 days of initial application submittal of all such properties and mailing addresses for all occupants/tenants, certifying the same as a full and complete list under penalty of perjury. Occupants/tenants shall be addressed as "Occupant/Tenant" and by unit in a multiple-unit building but need not be identified by name. Property owners shall be identified by name. The form and wording of the written notice shall be prescribed by the SEPA Official. The mailing labels submitted to the City shall only be valid for 180 days from the date of notification of complete application issued by the City as required by chapter 18.20

DMMC. Once the 180 days have passed, the applicant shall be required to submit new mailing labels based on the records of the King County assessor at that time. The SEPA Official shall provide the applicant with City envelopes. Thereafter, it shall be the responsibility of the applicant to insert the written notices, and address envelopes with the correct mailing address, stamp, and seal the envelopes and return them to the SEPA Official. The applicant shall be responsible for payment of all costs connected with such notice, including but not limited to postage, envelopes, letterhead, and notice reproduction.

Sec. 30. 16.05.200 Public notice procedure - Notice of DS scoping procedure. Whenever the City issues a DS under WAC 197-11-360(3), notice of the scoping procedure for the proposal as required in WAC 197-11-408 shall be given in the manner of public notice required by DMMC 16.05.190.

Sec. 31. 16.05.210 Public notice procedure - Notice of DEIS and draft SEIS. Whenever the City issues a DEIS under WAC 197-11-455(5) or a draft SEIS under WAC 197-11-620, notice of these documents and their availability shall be given as follows:

(1) Public hearings. Any required public hearing notice shall indicate the availability of the DEIS or the SEIS.

(2) No public hearing. For applications not requiring a public hearing, the following public notice requirements shall apply:

(a) Posting notice in accordance with DMMC 16.05.190(2);

(b) Notifying interested groups and agency mailing lists in accordance with DMMC 16.05.190(3);

(c) Publishing notice in the official City newspaper in accordance with DMMC 16.05.190(4); and

(d) Notifying property owners and occupants/tenants in accordance with DMMC 16.05.190(5).

Sec. 32. 16.05.220. Public notice procedure - Content of notice. The public notice required under this section shall contain such of the following information as the SEPA Official determines is applicable:

(1) Name of the applicant and the project;

(2) Address of the project;

(3) Legal description of subject property (not required on signage);

(4) Brief description of proposed use;

(5) Date, time, and place of public hearing on the proposal if a hearing is required. The notice shall display the date by which and place at which the public may submit comments to the City on the proposal. The notice shall display whether a DNS, mitigated DNS, or DS has been issued, their availability, and when comments are due, and the scoping procedure for the DS. The notice shall state that any person may appear or be heard and that written comments will be accepted and made part of the record, and state that the hearing will be held in accordance with the rules of procedure of the hearing body;

(6) The name, address, and office telephone number of the person within the Planning, Building and Public Works Department or other City department from whom additional information may be obtained;

(7) Drawings showing the property affected by the proposed action;

(8) Other information as required by the SEPA Official.

Sec. 33. 16.05.230. Public notice procedure - Timing of notices.

(1) Signs, bulletin boards and newspaper publication for site-specific proposals. In the case of site-specific proposals the notification required under DMMC 16.05.190(2), (3), and (4) shall be made after the affidavit certifying compliance with the notification requirements of DMMC 16.05.190(1) and (5) and the list of names, addresses, and mail-ready envelopes required by DMMC 16.05.190(5) have been received by the SEPA Official.

(2) When an open record hearing is required and chapter 16.05 DMMC requires public notice of a threshold determination, the Planning, Building and Public Works Director shall issue the threshold determination at least 25 days prior to the open record hearing. The purpose of this requirement is to allow for expiration of the 15-day comment period and the 10-day appeal period related to the SEPA determination prior to the public hearing. In the event an appeal of the SEPA determination is filed, the public hearing shall also constitute an open record appeal hearing. The Planning, Building and Public Works Director may request that the combined public hearing and appeal hearing be continued in order to allow parties to the appeal to prepare appeal arguments.

(3) For applications or proposals subject to the shoreline master program, notice shall be published in the official City newspaper once each week for two consecutive weeks, with the last publication date no less than 30 days prior to the public hearing.

Sec. 34. 16.05.240. Public notice procedure - Comment period.

(1) DNS or Mitigated DNS. Once a DNS or mitigated DNS is issued, the SEPA Official shall provide a 15-day public comment period prior to taking any action on the application.

(2) DS. When a DS is issued, the SEPA Official shall invite comments on the scope of an EIS for a minimum period of 21 days.

(3) DEIS or SEIS. Once a DEIS or a draft SEIS is issued, the SEPA Official shall provide a 30-day public comment period prior to taking any action on the application or proposal.

(4) Shoreline Permits. For applications or proposals subject to the shoreline master program, the SEPA Official shall provide a 30-day public comment period prior to public hearing or taking any action on the application or proposal.

Sec. 35. 16.05.250. Public notice procedure - Coordination of required notices.

(1) Whenever possible, the City shall integrate the public notice required under this section with existing notice procedures. In the case of a conflict, the notice requirements provided in this section shall prevail.

(2) If an environmental document as defined by WAC 197-11-744 is issued concurrently with the notice of application, the public notice requirements for the notice of application in RCW 36.70B.110(4) will suffice to meet the SEPA public notice requirements in WAC 197-11-510(1).

(3) If a DNS is issued using the optional DNS process, the public notice requirements for a notice of application in RCW 36.70B.110(4) as supplemented by the requirements in WAC 197-11-355 will suffice to meet the SEPA public notice requirements in WAC 197-11-510(b).

(4) Public notice for projects that qualify as planned actions shall be tied to the underlying permit as specified in WAC 197-11-172(3).

Sec. 36. 16.05.260. Public notice procedure - Public notice costs. The applicant shall be responsible for all public notice costs incurred by the City for public notice requirements stated in this chapter.

Sec. 37. 16.05.270. Consulted agency - Official designated.

(1) The Planning, Building and Public Works Department shall be responsible for preparation of written comments for the City in response to a consultation request prior to a threshold determination, participation in scoping and reviewing a DEIS.

(2) This Department shall be responsible for the City's compliance with WAC 197-11-550 whenever the City is a consulted agency and is authorized to develop operating procedures that will ensure that response to consultation requests are prepared in a timely fashion and include data from all appropriate departments of the City.

Sec. 38. 16.05.275. Public Notice (WAC 173-806-132).

(1) Whenever possible, the City shall integrate the public notice required under this section with existing notice procedures for the City's nonexempt permit(s) or approval(s) required for the proposal.

(2) Whenever the City issues a DNS under WAC 197-11-340(2) or a DS under WAC 197-11-360(3) the City shall give public notice as follows:

(a) If public notice is required for a nonexempt license, the notice shall state whether a DS or DNS has been issued and when comments are due.

(b) If an environmental document is issued concurrently with the notice of application, the public notice requirements for the notice of application in RCW 36.70B.110(4) will suffice to meet the SEPA public notice requirements in WAC 197-11-510(1).

(c) If no public notice is otherwise required for the permit or approval, the City shall give notice of the DNS or DS by:

(i) Posting the property, for site-specific proposals;

(ii) Publishing notice in a newspaper of general circulation in the county, City, or general area where the proposal is located;

(iii) Notifying public or private groups which have expressed interest in a certain proposal or in the type of proposal being considered;

(iv) Notifying the news media;

(v) Placing notices in appropriate regional, neighborhood, ethnic, or trade journals; and/or

(vi) Publishing notice in agency newsletters and/or sending notice to agency mailing lists (either general lists or lists for specific proposals for subject areas);

(d) Whenever the City issues a DS under WAC 197-11-360(3), the City shall state the scoping procedure for the proposal in the DS as required in WAC 197-11-408 and in the public notice.

(3) If a DNS is issued using the optional DNS process, the public notice requirements for a notice of application in RCW 36.70B.110(4) as supplemented by the requirements in WAC 197-11-355 will suffice to meet the SEPA public notice requirements in WAC 197-11-510 (1)(b).

(4) Whenever the City issues a DEIS under WAC 197-11-455(5) or a SEIS under WAC 197-11-620, notice of the availability of those documents shall be given by:

(a) Indicating the availability of the DEIS in any public notice required for a nonexempt license; and (Note: In addition select at least one of the following or insert all of the list and require that at least one method be used.)

(b) Posting the property, for site-specific proposals;

(c) Publishing notice in a newspaper of general circulation in the county, City, or general area where the proposal is located;

(d) Notifying public or private groups which have expressed interest in a certain proposal or in the type of proposal being considered;

(e) Notifying the news media;

(f) Placing notices in appropriate regional, neighborhood, ethnic, or trade journals; and/or

(g) Publishing notice in agency newsletters and/or sending notice to agency mailing lists (general lists or specific lists for proposals or subject areas).

(5) Public notice for projects that qualify as planned actions shall be tied to the underlying permit as specified in WAC 197-11-172(3).

(6) The City may require an applicant to complete the public notice requirements for the applicant's proposal at his or her expense.

Sec. 39. 16.05.280. Use of existing and supplementing environmental documents and planned actions. The City adopts by reference the sections contained in WAC 197-11-164 through WAC 197-11-172 and 197-11-600 through 197-11-640.

Sec. 40. 16.05.290. Planned actions.

(1) The City endorses the procedures in the SEPA rules adopted in this article for project proposal review as a "planned action" and will apply the provisions of WAC 197-11-164 through 197-11-172 to projects which meet the criteria for planned action environmental review under RCW 43.21C.031.

(2) Where a project proposal meets the requirements and criteria for a planned action set forth in WAC 197-11-164 through 197-11-172, and any planned action ordinance adopted by the City, the responsible official shall not be required to

issue a threshold determination or EIS under the provisions of this chapter.

(3) Nothing in this section limits the City from using this chapter or other applicable law to place conditions on the project in order to mitigate nonsignificant impacts through the normal project review and permitting process.

(4) Public notice for projects that qualify as planned actions shall be tied to the underlying permit. If notice is otherwise required for the underlying permit, the notice shall state that the project has qualified as a planned action. If notice is not otherwise required for the underlying permit, no special notice is required.

Sec. 41. 16.05.300 SEPA and Agency decisions - Appeal. The City adopts by reference WAC 197-11-650 through WAC 197-11-680.

Sec. 42. 16.05.310 Substantive authority - Conditions - Denial - Policies.

(1) The policies and goals set forth in this chapter are supplementary to those in the existing authorization of the City.

(2) The City may attach conditions to a permit for approval for a proposal so long as:

(a) Such conditions are necessary to mitigate specific probable adverse environmental impacts identified in environmental documents prepared pursuant to this chapter; and

(b) Such conditions are in writing; and

(c) The mitigation measures included in such conditions are reasonable and capable of being accomplished; and

(d) The City has considered whether other local, state, or federal mitigation measures applied to the proposal are sufficient to mitigate the identified impacts; and

(e) Such conditions are based on one or more of the policies or policy sources identified in subsection (4) of this section and cited in the license or other decision document.

(3) The City may deny a permit or approval for a proposal on the basis of SEPA so long as:

(a) A finding is made that approving the proposal would result in probable significant adverse environmental impacts that are identified in a FEIS or final SEIS prepared pursuant to this chapter; and

(b) A finding is made that there are no reasonable mitigation measures capable of being accomplished that are sufficient to mitigate the identified impact; and

(c) The denial is based on one or more policies or policy sources identified in subsection (4) of this section and identified in writing in the decision document.

(4) The City designates and adopts by reference the following policies as the basis for the City's exercise of authority pursuant to this section:

(a) The City shall use all practicable means, consistent with other essential considerations of state policy, to improve and coordinate plans, functions, programs, and resources to the end that the state and its citizens may:

(i) Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations; and

(ii) Assure for all people of the state safe, healthful, productive, and aesthetically and culturally pleasing surroundings; and

(iii) Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences; and

(iv) Preserve important historic, cultural, and natural aspects of our national and local heritage; and

(v) Maintain, wherever possible, an environment that supports diversity and variety of individual choice; and

(vi) Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and

(vii) Enhance the quality of renewable resources and approach the maximum attainable recycling of nonrenewable resources.

(b) The City recognizes that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

(c) The City's substantive SEPA authority to condition or deny projects, proposals or connected actions shall be exercised on the basis of the regulations, plans, studies, reports or codes identified in the following subsection (4)(d), each of such items being adopted and/or reaffirmed by this reference.

(d) The City formally designates the following regulations, plans, studies, reports or codes as possible bases for the exercise of authority pursuant to the State Environmental Policy Act of 1971 as amended:

(i) City of Des Moines Comprehensive Plan;

(ii) 2010 Parks, Recreation and Senior Services Master Plan, November, 2009;

(iii) City of Des Moines Shoreline Master Program;

(iv) The Des Moines Municipal Code;

(v) Sea-Tac International Airport Impact Mitigation Study, February 1997, prepared by Hellmuth, Obata and Kassabaum, Inc., and Raytheon Infrastructure Services, Inc., under a grant from the state of Washington;

(vi) City *of Des Moines Comprehensive Transportation Plan*;

(vii) Washington State Department of Transportation Pavement Guide;

(viii) Highway Capacity Manual, Special Report 209, Transportation Research Board;

(ix) City of Des Moines Street Development Standards;

(x) Institute of Transportation Engineers, Trip Generation Manual;

(xi) City of Des Moines Comprehensive Storm Water Management Plan;

(xii) Lower Massey Creek Alternative Analysis, August 1994;

(xiii) Des Moines Creek Basin Plan, November 1997, prepared by the Des Moines Creek Basin Committee (City of Des Moines, City of SeaTac, King County and Port of Seattle);

(xiv) City of Normandy Park Stormwater Plan - 2013;

(xv) King County Surface Water Design Manual;

(xvi) Stormwater Management Manual for the Western Washington, Washington State Department of Ecology;

(xvii) King County Stormwater Pollution Control Manual, Best Management Practices for Businesses, July 1995;

(xviii) Massey Creek Comprehensive Flood Control Management Plan for the City of Des Moines, June 1990;

(xix) North Fork of Smith Creek Drainage Basin Study for the City of Des Moines, June 1987;

(xx) Executive Proposed Basin Plan Hylebos Creek and Lower Puget Sound, King County Surface Water Management, July 1991;

(xxi) Shoreline Management Guide Book;

(xxii) Code of the King County Board of Health;

(xxiii) Washington State Flood Reduction Plan (1993 DCD);

(xxiv) Guide to Conducting Wetland Inventories (DOE);

(xxv) Washington State Shoreline Management Act of 1971;

(xxvi) Standard Specification for Construction of Trails (Forest Service 1984);

(xxvii) Puget Sound Water Quality Management Plan;

(xxviii) Planning documents not specifically listed above but referenced in the environmental analysis of the City's comprehensive plan, Chapter 15.1;

(xxix) Washington State Wetlands Identification and Delineation Manual (Ecology Publication No. 96-94).

(e) It is the City's policy to protect its residents and businesses from the long-term consequences of successive incremental negative environmental impacts associated with a specific proposal or its connected action(s). Accordingly, the City may condition or deny proposals in order to mitigate or prevent such long-term impacts.

(f) Unusual circumstances related to a site, a proposal, or a connected action, as well as probable significant adverse environmental impacts not capable of adequate mitigation using the foregoing provisions, may be cause for denial of a proposal or development of site-specific or project-specific SEPA mitigation.

Sec. 43. 16.05.320 Agency SEPA Appeal.

(1) Definitions. Use of words and phrases. As used in this section, unless the context or subject matter clearly requires otherwise, the words and phrases defined in this section shall have the indicated meanings.

"Agency" means the City of Des Moines.

"Appeal" means the process by which a SEPA determination is contested.

"SEPA determination" means a SEPA procedural determination or a SEPA substantive determination.

"SEPA procedural determination" includes the adequacy of a determination of significance/nonsignificance or of a final environmental impact statement.

"SEPA substantive determination" includes a decision to require particular mitigation measures or to deny a proposal.

"Underlying governmental action" means the final decision of the agency on a proposal.

(2) The appeal described in this section is mandatory. This appeal process is supplemented by chapter 18.20 DMMC.

Failure to comply strictly with the requirements of this section is considered a failure to exhaust administrative remedies and shall foreclose any further agency or judicial appeal.

(3) The appeal is initiated by filing a written appeal with the City Clerk within 10 days of the date the SEPA determination is final. In the case of an appeal to the Hearing Examiner, the appeal will not be considered filed unless accompanied by the appropriate fee.

(4) The written appeal shall contain the following:

(a) A description of the determination being appealed, including the file number;

(b) The name and address of the appellant; and

(c) A detailed statement identifying specifically the reasons why the appellant considers the SEPA determination to be inadequate.

(5) There shall be a single agency appeal of a SEPA determination:

(a) If the underlying governmental action is taken by the City Council, the appeal is heard by the City Council and is consolidated with the consideration of the underlying governmental action.

(b) If the underlying governmental action is taken by the Hearing Examiner, the appeal is heard by the Hearing Examiner and is consolidated with the consideration of the underlying governmental action.

(c) If the underlying governmental action is administrative, the appeal is heard by the Hearing Examiner.

(d) If the appeal is from a determination of significance, the appeal is heard under all circumstances by the Superior Court of Washington for King County as specified by chapter 36.70C RCW.

(6) An appeal taken to the Hearing Examiner is considered an appeal from an administrative decision and is processed accordingly under the provisions of the Hearing Examiner Code, except the decision of the Hearing Examiner is final and is not appealable to the City Council.

(7) Procedural determinations made by the responsible SEPA Official shall be entitled to substantial weight.

(8) An adequate record shall be made of all appeals taken under this section. An adequate record consists of findings and conclusions, testimony under oath, and taped or written transcripts.

(9) The City shall give official notice under WAC 197-11-680(5) when it issues a permit or a decision for which a statute or ordinance establishes a time limit for commencing judicial appeal.

Sec. 44. 16.05.330. Categorical exemptions - Adoption by reference.

(1) The City adopts by reference the following rules for categorical exemptions, as supplemented in this chapter, including WAC 173-806-070 (Flexible thresholds), 173-806-080 (Use of exemptions), and 173-806-190 (Critical areas):

(a) WAC 197-11-800, Categorical exemptions; except that the following flexible thresholds specified in WAC 197-11-800(b) shall be adopted by the City as provided for under WAC 197-11-800(1)(c) when a development action does not occur within any environmentally critical area described and regulated in chapter 16.10 DMMC:

(i) The construction or location of multifamily development containing up to 15 dwelling units;

(ii) The construction of an office, school, commercial, recreational, service or storage building with 10,000 square feet of gross floor area or less, and with associated parking facilities designed for up to 35 automobiles;

(iii) The construction of a parking lot designed for up to 35 automobiles; and

(iv) Any landfill or excavation of up to 300 cubic yards throughout the total lifetime of the fill or excavation; and any fill or excavation classified as a Class I, II, or III forest practice under RCW 76.09.050 or regulations thereunder.

(b) WAC 197-11-880, Emergencies.

(c) WAC 197-11-890, Petitioning DOE to change exemptions.

(2) The City adopts by reference the categorical exemption for electrical vehicle charging and battery exchange stations established by RCW 43.21C.410.

Sec. 45. 16.05.340. Agency compliance - Rules. DMMC 16.05.350-370 contains rules for agency compliance with SEPA, including rules for charging fees under the SEPA process, designating categorical exemptions that do not apply within critical areas, listing agencies with environmental expertise, selecting the lead agency, and applying these rules to current agency activities. The City adopts by reference the sections contained in WAC 197-11-900 through WAC 197-11-928.

Sec. 46. 16.05.350. Environmentally critical areas and areas of special flood hazard.

(1) The City has selected certain categorical exemptions that will not apply in one or more critical areas identified in the critical areas ordinances required under RCW 36.70A.060. The City's environmentally critical areas regulations (chapter 16.10 DMMC) were prepared pursuant to RCW 36.70A.060. Within environmentally critical areas as defined in chapter 16.10 DMMC and areas of special flood hazard as defined in chapter 16.15 DMMC, the following exemptions within WAC 197-11-800 that are inapplicable are: WAC 197-11-800(1); (2)(a) through (h); (5); (6)(a); (24)(a) through (g); and (25)(h), (i).

(2) The scope of environmental review of actions within environmentally critical areas shall be limited to:

(a) Documenting whether the proposal is consistent with the requirements of chapter 16.10 DMMC, and

(b) Evaluating potentially significant impacts on the environmentally critical area not adequately addressed by Growth Management Act (GMA) planning documents and development regulations, if any, including any additional mitigation measures needed to protect the critical areas in order to achieve consistency with SEPA and with other applicable environmental review laws.

(3) All categorical exemptions not listed in subsection (1) apply whether or not the proposal will be located in an environmentally critical area.

Sec. 47. 16.05.360. Fees. The City shall require fees for its activities as established by the City Manager or the City Manager's designee.

(1) Environmental Impact Statement.

(a) When the City is the lead agency for a proposal requiring an EIS and the responsible official determines that the EIS shall be prepared by employees of the City, the City may charge and collect a reasonable fee from any applicant to cover costs incurred by the City in preparing the EIS. The responsible official shall advise the applicant(s) of the projected costs for the EIS prior to actual preparation; the applicant shall post a bond or otherwise ensure payment of such costs.

(b) The responsible official may determine that the City will contract directly with a consultant for preparation of the EIS, or portion of the EIS, for activities initiated by some persons or entity other than the City and may bill such costs and expenses directly to the applicant. The City may require the applicant to post bond or otherwise ensure payment of such costs. Such consultants shall be selected by the

City after a call for proposals and consultation with the applicant.

(c) If a proposal is modified so that an EIS is no longer required, the responsible official shall refund any fees collected under subdivision (a) or (b) of this subsection which remain after incurred costs are paid.

(2) The City may collect a reasonable fee from an applicant to cover the cost of meeting the public notice requirements of this chapter relating to the applicant's proposal.

(3) The City may charge any person for copies of any documents prepared under this chapter, and for mailing the document, in a manner provided by chapter 42.17 RCW.

Sec. 48. 16.05.370 Forms - Adoption by reference. The City adopts by reference the sections contained WAC 197-11-960 through WAC 197-11-990.

Chapter 16.10
Environmentally Critical Areas

Sections:

16.10.010 Title.
16.10.020 Application.
16.10.030 Purpose.
16.10.040 Authority.
16.10.050 Adoption by reference.
16.10.060 City Council findings.
16.10.070 Special studies required.
16.10.080 Maps and inventories.
16.10.090 Best management practices required.
16.10.100 Development restrictions.
16.10.110 Development standards - Compliance - Requirements.
16.10.120 Wetlands - Development standards.
16.10.130 Wetlands - Reasonable use exceptions.
16.10.140 Wetlands - Limited exemptions.
16.10.150 Wetlands - Mitigation requirements.
16.10.160 Streams - Development standards.

16.10.170 Streams - Reasonable use exceptions.
16.10.180 Streams - Limited exemptions.
16.10.190 Streams - Mitigation requirements.
16.10.200 Geologically hazardous areas - Development standards.
16.10.210 Ravine sidewalls and bluffs - Development standards.
16.10.220 Hillsides of 15 percent slope and greater - Development standards - Disturbance limitations.
16.10.230 Ravine sidewalls, bluffs, and hillsides of 15 percent slope and greater - Reasonable use exceptions.
16.10.240 Seismic hazard areas - Development standards.
16.10.250 Erosion and landslide hazard areas - Development standards.
16.10.260 Critical aquifer recharge areas - Development standards - Buffers and disturbance limitations.
16.10.270 Fish and wildlife habitat conservation areas - Development standards - Buffers and disturbance limitations.
16.10.280 Area of special flood hazard - Development standards - Buffers and disturbance limitations.
16.10.290 Limited density transfer.
16.10.300 Development exceptions.
16.10.310 Unauthorized critical area alterations and enforcement.
16.10.320 Tracts and easements.
16.10.330 Securities and enforcement.
16.10.340 Environmentally critical area mitigation fund.
16.10.350 Surface Water Design Manual.
16.10.360 Surface water contamination - Determination.
16.10.370 Surface water contamination - Compliance required - Penalty.
16.10.380 Surface water contamination - Penalty not exclusive remedy.
16.10.390 Interpretation.
16.10.400 Appeal.

Sec. 49. 16.10.010. Title. This chapter shall be entitled "Environmentally Critical Areas."

Sec. 50. 16.10.020. Application.

(1) All development proposals in critical areas, whether public or private, except City activities related to routine maintenance of public ways, shall comply with the requirements and purposes of this chapter. The City Manager or the City Manager's designee is authorized to adopt written procedures for the purpose of carrying out the provisions of this chapter. Responsibility for enforcement of the provisions of this chapter shall rest with the City Manager or the City Manager's designee.

(2) For the purposes of this chapter, development proposals include proposals that require any of the following: right-of-way permit; building permit; land clearing, grading, or filling permit; shoreline substantial development permit; shoreline variance; shoreline conditional use permit; shoreline environmental redesignation; conditional use permit; variance; zone reclassification; planned unit development; subdivision; short subdivision; any other land use approvals required by this code or the RCW.

(3) Prior to construction activity that would occur in, be adjacent to, or would likely affect critical areas, a review outlined by this chapter shall occur prior to the issuance of the necessary permit.

Sec. 51. 16.10.030. Purpose. Geologically hazardous areas, hillsides, wetlands, areas of special flood hazard, fish and wildlife habitat conservation areas, aquifer recharge areas and streams, and the buffers of these areas as defined in chapter 16.01 DMMC, together constitute critical areas that are of special concern to the City. The purposes of this chapter are to protect the public health, safety, and welfare by preventing the adverse environmental impacts of development listed in DMMC 16.10.060, and by:

(1) Preserving, protecting, and restoring the functions and values of critical areas by regulating development within them and their buffers;

(2) Protecting the public from damage due to flooding, landslides, subsidence, and erosion;

(3) Preventing adverse impacts to ground and surface water quality, wetlands, tidelands, streams, stream corridors, and fish and wildlife habitat;

(4) Protecting the public against loss from:

(a) Unnecessary maintenance and replacement of public facilities;

(b) Publicly funded mitigation of avoidable impacts;

(c) Cost for public emergency rescue and relief operations; and

(d) Potential litigation from improper construction practices authorized for critical areas;

(5) Upon notice to the City, alerting appraisers, assessors, owners, and potential buyers or lessees to the development limitations of critical areas;

(6) Providing City officials with information to approve, condition, or deny public or private development proposals;

(7) Providing predictability and consistency to City environmental review procedures;

(8) Protecting sensitive, unique, fragile, and valuable features of the City's environment;

(9) Adopting a goal of no overall net loss of wetland and stream functions and values; and the long-term goal to increase the quantity and quality of Washington's wetlands and streams;

(10) Implementing the policies of the State Environmental Policy Act (chapter 43.21C RCW), Puget Sound Water

Quality Management Plan, Washington State Executive Order 90-04, chapter 16.10 DMMC, the Des Moines Comprehensive Plan, Shoreline Master Program, and all other present and future City functional and community plans and programs as presently constituted or as may be subsequently amended; [and]

(11) Provide for mitigation of potential impacts to critical areas using the following descending order of preference:

(a) Avoid the impact altogether by not taking a certain action or parts of an action;

(b) Minimize impact by limiting the degree or magnitude of the action and its implementation by using appropriate technology, or by taking affirmative steps to avoid or reduce impact;

(c) Rectify the impact by repairing, rehabilitating, or restoring the affected environmentally critical areas;

(d) Reduce or eliminate the impact over time by prevention and maintenance operations during the life of the actions;

(e) Compensate for the impact by replacing, enhancing, or providing substitute environmentally critical areas and environments; and

(f) Monitor the impact and take appropriate corrective measures.

(12) Sources for attaining maps to determine where critical fish and wildlife habitats occur and the species that are present include:

(a) Washington Department of Fish and Wildlife Priority Habitat and Species maps;

(b) Washington State Department of Natural Resources official water type reference maps, as amended;

(c) Washington State Department of Natural Resources Puget Sound Intertidal Habitat Inventory maps;

(d) Washington State Department of Natural Resources Shorezone Inventory maps;

(e) Anadromous and resident salmonid distribution maps contained in the Habitat Limiting Factors reports published by the Washington Conservation Commission;

(f) Washington State Department of Health Annual Inventory of Shellfish Harvest Areas;

(g) Washington State Department of Natural Resources State Natural Area Preserves and Natural Resource Conservation Area maps;

(h) Washington State Department of Natural Resources Natural Heritage Program mapping data;

(i) Any local City of Des Moines or King County maps available.

Sec. 52. 16.10.040. Authority. This chapter is adopted pursuant to RCW 36.70A.060, .170, .172 and .480 and other applicable Washington laws.

Sec. 53. 16.10.050. Adoption by reference. The codes, standards, rules, regulations, and manuals adopted by this chapter are adopted by reference as though fully set forth in this Title. Not less than one copy of each such codes, standards, rules, and regulations, in the form in which it was adopted, and suitably marked to indicate amendments, additions, deletions and exceptions as provided in this chapter, shall be filed with the planning, building and public works department and be available for use and examination by the public.

Sec. 54. 16.10.060. City Council findings. The City Council finds that:

(1) Development in wetlands results in:

(a) Increased soil erosion and sedimentation of downstream water bodies;

(b) Degraded water quality from increased sedimentation;

(c) Degraded water quality from loss of pollutant removal process of wetlands - sediment trapping, nutrient removal, and chemical detoxification;

(d) Elimination of wildlife and fisheries habitat. Wetland ecosystems support a diverse, unique, and rich group of flora and fauna. Habitat is especially productive at the interface between water and land ecosystems. Several wildlife species specifically require wetland habitats for breeding, nesting, rearing of young, and feeding;

(e) Loss of ground water discharge and recharge areas;

(f) Loss of storm water retention and detention capacity resulting in increased flooding, degraded water quality, and changes in the streamflow regimen of watersheds;

(g) Loss of slow-release detention resulting in loss of recharge to base flow of stream systems during low flow periods and increased peak flows and flooding during storm events; and

(h) Loss of fishery resources from water quality degradation, increased peak flow rates, decreased summer low flows, and changes in the streamflow regimen.

(2) Development in stream corridors results in:

(a) Siltation of streams, which destroys spawning beds, kills fish eggs and alevins, irritates fish gills, reduces aquatic insect populations, fills stream channels, and causes flooding;

(b) Loss of stream corridor vegetation, which raises stream temperatures, destabilizes stream banks, causes erosion, removes nutrients by removing source of fallen leaves and streamside insects, increases sedimentation, and reduces recruitment of large wood debris necessary for stream structure;

(c) Elimination of wildlife and fish habitat. The stream corridor is especially sensitive and is recognized as being among the most productive terrestrial and aquatic ecosystems. It usually provides all four of the basic habitat components: water, food, cover, and space. The stream corridor is usually richer in habitat diversity and, consequently, wildlife diversity and numbers of individuals are higher than in adjoining upland plant communities. Certain fish and wildlife species are totally dependent on the stream corridor and as uplands are developed, stream corridors become a place of refuge for many wildlife species;

(d) Increased peak flow rates and decreased summer low flow rates of streams, resulting in negative impacts to the physical and chemical requirements critical for sustained fish populations;

(e) Stream channelization, which increases current velocity and bank erosion, removes critical fish rearing and spawning habitat, and reduces habitat diversity and simplifies the biotic community;

(f) Piping of streamflow and crossing of streams by culverts, which increases potential for downstream flooding, reduces migratory fishery range and, therefore, fish populations, removes habitat, and eliminates the biotic community; and

(g) Construction near or within streams, which adversely impacts fish and wildlife by destroying habitat and degrading water quality and increases potential for flooding, property damage, and risk to public health, safety, and welfare.

(3) Development on hillsides results in:

(a) The loss of slope and soil stability as well as increased erosion. The removal of vegetation from hillsides deprives the soil of the stabilizing function of roots, and the moderating effects on wind and water erosion of leaves and branches. Loss of soil stability increases erosion and thus lowers downstream water quality as a result of siltation. Downstream wetlands can be injured in this way. Strong rains on unstable slopes can produce mass movements, such as landslides, slumps, and flaws, particularly in steeply sloping areas;

(b) Increased runoff. Development may alter the natural drainage pattern of a hillside, producing increased runoff and erosion. Removal of vegetative cover decreases percolation of precipitation into the soil, thereby reducing the amount of ground water recharge and adding water to runoff that would ordinarily be transpired by trees, shrubs, and ground covers. Construction of impervious surfaces, such as roads, parking lots, and buildings, decreases the amount of ground water percolation and thus increases the amount of runoff. Increased runoff, in addition to producing intensified erosion, also creates downstream flood hazards;

(c) Destruction of the community's aesthetic resources. The hillsides of Des Moines mark the boundaries of several neighborhoods, lend natural character and distinctive features to the City, and provide open space and viewing points of remarkable vistas. They are also often associated with stream corridors and wetlands of the City. Degradation of hillsides resulting from erosion, mass movement, loss of vegetation, and damage to downstream areas deprives Des Moines of its attractive and distinctive setting, and decreases real estate values; and

(d) Major public expenditures to repair facility damages and protect against future damages due to instability created or exacerbated by development.

Sec. 55. 16.10.070. Special studies required. When an applicant submits an application for any development proposal the application shall indicate whether any critical area is located on the site. The City Manager or the City Manager's designee shall visit the subject property and review the information submitted by the applicant along with any other

available information. If the City Manager or the City Manager's designee determines that sufficient environmental information to evaluate a proposal is not available, the City Manager or the City Manager's designee shall notify the applicant that special environmental studies are required. Special environmental studies shall include a comprehensive site inventory and analysis, a discussion of potential impacts from the proposed development, and specific measures designed to mitigate any potential adverse environmental impacts of the applicant's proposal, on- and off-site. All special studies shall be funded by the applicant and conducted under the direct supervision of the Planning, Building and Public Works Department.

Sec. 56. 16.10.080. Maps and inventories.

(1) The general distribution of critical areas in the City and its planning area is displayed by a series of maps within the conservation element of the Des Moines Comprehensive Plan. These maps shall be used to alert the public and City officials of the potential presence of critical areas on-site or off-site of a development proposal.

(2) Information provided by the maps of critical areas shall be used for general informational and illustrative purposes only. In cases of mapping error and recognizing that critical areas are dynamic environmental processes, the actual presence and location of critical areas, as determined by qualified professional and technical scientists, shall govern the treatment of a proposed development site.

Sec. 57. 16.10.090. Best management practices required. All allowed activities under this chapter shall be conducted using the best management practices, adopted pursuant to the King County Surface Water Design Manual which is adopted by this provision and implemented herein as set forth in DMMC 16.10.050, that result in the least amount of impact to the critical areas. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. The City shall observe the use of best management practices to ensure that the activity does not result in degradation to the critical area. Any incidental damage to,

or alteration of, a critical area shall be restored, rehabilitated, or replaced at the responsible party's expense.

Sec. 58. 16.10.100. Development restrictions.

(1) Undevelopable environmentally critical areas. The following environmentally critical areas shall remain undeveloped except as otherwise provided in DMMC 16.10.120-.140, DMMC 16.10.170- .190, and DMMC 16.10.230 and .300.

(a) Wetlands and their buffers. The edge of the wetland and the outside edge of its buffer shall be determined and field marked by a professional wetland biologist or similarly qualified professional;

(b) Streams and their buffers. The top of the upper bank of the streams and the outside edge of its buffer shall be determined and field marked by a professional biologist, ecologist, or similarly qualified professional; and

(c) Ravine sidewalls and bluffs and their buffers. The top, toe, and edges of ravine sidewalls and bluffs, and the outside edge of their buffers, shall be determined and field marked by a qualified geotechnical engineer or similarly qualified professional.

(2) Developable critical areas. Critical aquifer recharge areas, areas of special flood hazard, fish and wildlife habitat conservation areas, and hillsides other than ravine sidewalls and bluffs are developable pursuant to the provisions of this chapter. The applicant shall clearly and convincingly demonstrate to the satisfaction of the City Manager or the City Manager's designee that the proposal incorporates measures protecting the public health, safety, and welfare.

Sec. 59. 16.10.110. Development standards - Compliance - Requirements. If a proposed project is within, adjacent to, or is likely to impact a critical area, all activities on the site shall be in compliance with the requirements and restrictions set forth in DMMC 16.10.120 through 16.10.280.

Sec. 60. 16.10.120. Wetlands - Development standards. If a wetland is located on or contiguous to the site of a development proposal, all activities on the site shall be in compliance with the following requirements and restrictions:

(1) General performance requirements.

(a) Activities may only be permitted in a wetland or wetland buffer if the applicant can show that the proposed activity will not degrade the functions and functional performance of the wetland.

(b) Activities and uses shall be prohibited in wetlands and wetland buffers, except as provided for in this chapter.

(c) Category I wetlands. Activities and uses shall be prohibited from Category I, except as provided for in the public agency and utility exception, reasonable use exception, and variance sections of this chapter.

(d) Category II and III wetlands. With respect to activities proposed in Category II and III wetlands, the following standards shall apply:

(i) Where wetland fill is proposed, activities and uses shall be prohibited unless the applicant can demonstrate that:

(A) The basic project purpose cannot reasonably be accomplished on another site or sites in the general region while still successfully avoiding or resulting in less adverse impact on a wetland; and

(B) All on-site alternative designs that would avoid or result in less adverse impact on a wetland or its buffer, such as a reduction in the size, scope, configuration or density of the project, are not feasible. Compensation for the loss of acreage and functions of wetland and buffers shall be provided under the terms established under DMMC 16.10.150.

(e) Category IV wetlands. Activities and uses that result in unavoidable and necessary impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved special environmental study and mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Compensation for the acreage and loss functions will be provided under the terms established under DMMC 16.10.150.

(2) Wetland buffers. The following standard buffers shall be established from the wetland edge as delineated and marked in the field:

	Width of Buffer (feet)
Category I Wetlands	
High habitat function (habitat score 29-36)	300
Moderate habitat function (habitat score 20-28)	150
High water quality function and low habitat function or none of the above characteristics (habitat score less than 20)	100
Category II Wetlands	
High habitat function (habitat score 29-36 points)	300
Moderate habitat function (habitat score 20-28)	150
High water quality function and low habitat function or none of the above characteristics (habitat score less than 20)	100
Category III Wetlands	
Moderate habitat function (habitat score 20-28)	150
Low habitat or not meeting above criteria (habitat score less than 20)	80
Category IV Wetlands	
Low functions	50

(a) Where a legally established and constructed street transects a wetland buffer, the City Manager or the City Manager's designee may approve a modification of the standard buffer width to the edge of the right-of-way if the isolated part of the buffer does not provide additional protection of the wetland and provides insignificant biological, geological or hydrological buffer functions relating to the wetland. If the resulting buffer distance is less than 50 percent of the standard buffer for the applicable wetland category, no further reduction shall be allowed through wetland buffer reduction or averaging.

(b) Where a buffer has been previously established through City or county development review, and is permanently recorded on Title or placed within a separate tract, the buffer shall be as previously established.

(3) Building setback lines. A building setback line of 10 feet is required from the edge of any wetland buffer. Minor structural intrusions into the area of the building setback line may be allowed if the City Manager or the City Manager's designee determines that such intrusions will not negatively impact the critical area.

(4) Increased wetland buffers. The City Manager or the City Manager's designee may require either additional native vegetation to achieve purposes of this chapter or increased buffer sizes when environmental information indicates the necessity for greater buffers to protect critical area functions, values, or hazards based on site-specific conditions. This determination shall be supported by appropriate documentation showing that additional buffer width is reasonably related to protection of critical area functions and values, or protection of public health, safety and welfare. Such determination shall be attached as permit conditions. The determination shall demonstrate that at least one of the following criteria are met:

(a) There is habitat for species listed as threatened or endangered by state or federal agencies present within the environmentally critical area and/or its buffer, and

additional buffer is necessary to maintain a viable functional habitat; or

(b) There are conditions or features adjacent to the buffer, such as steep slopes or erosion hazard areas, which over time may pose an additional threat to the viability of the buffer or buffers, if any, associated with the conditions or feature posing the threat in addition to, or to a maximum, beyond the buffer required for the subject critical area.

(c) In cases where additional buffers are not feasible, the City Manager or the City Manager's designee may require the applicant to undertake alternative on-site or off-site mitigation measures, including but not limited to a financial contribution to projects or programs which seek to improve environmental quality within the same watershed.

(5) Wetland buffer averaging. The City Manager or the City Manager's designee may allow modification of the standard wetland buffer width in accordance with an approved special environmental study and the best available science on a case-by-case basis by averaging buffer widths. Averaging of buffer widths may only be allowed where a qualified professional wetland scientist demonstrates that:

(a) It will not reduce wetland functions or functional performance;

(b) The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;

(c) The total area contained within the buffer after averaging is no less than that which would be contained within the standard buffer; and

(d) The buffer width is not reduced to less than 75 percent of the standard width.

(6) Wetland buffer reduction. The City Manager or the City Manager's designee may allow reduction of the required wetland buffer widths when accompanied by a special study that identifies appropriate mitigation strategies. Reduction of wetland buffer widths may be allowed where a qualified professional wetland scientist demonstrates that:

(a) The reduction in buffer width based on reducing the intensity of impacts from proposed land uses. Buffer widths required for proposed land uses with high-intensity impacts to wetlands may be reduced to those recommended for moderate-intensity impacts under the following conditions:

(i) For wetlands that score moderate or high for habitat (20 points or more for the habitat functions), the width of the buffer can be reduced if both of the following criteria are met:

(A) A relatively undisturbed, vegetated corridor at least 100 feet wide is protected between the wetland and any other priority habitats as defined by the Washington State Department of Fish and Wildlife. The corridor must be protected for the entire distance between the wetland and the priority habitat by some type of legal protection such as a conservation easement.

(B) Measures to minimize the impacts of different land uses on wetlands, such as the examples summarized in Table 8C-8 from "Wetlands in Washington State: Volume 2 - Protecting and Managing Wetlands" (Ecology, 2005), are applied.

(ii) For wetlands that score less than 20 points for habitat, the buffer width can be reduced to that required for moderate land-use impacts by applying measures to minimize the impacts of the proposed land uses. Measures include but are not limited to the following: direct light and noise away from wetlands, route untreated runoff away from wetlands, apply an integrated pest management program, use privacy fencing or vegetative buffer to delineate the wetland buffer edge and

discourage disturbance, and use best management practices to control dust (see examples in Table 8C-8).

(b) Reductions in buffer widths where existing roads or structures lie within the buffer. Where a legally established, nonconforming use of the buffer exists (e.g., a road or structure that lies within the width of buffer recommended for that wetland), proposed actions in the buffer may be permitted as long as they do not increase the degree of nonconformity, or if no reasonable alternative exists. This means no increase in the impacts to the wetland from activities in the buffer.

Sec. 61. 16.10.130. Wetlands - Reasonable use exceptions.

(1) Adjustments to dimensional requirements - Yard reductions for building one single-family dwelling. The City Manager or the City Manager's designee may allow modification to the required front, rear, or side yard on the opposite of the wetland. The reductions must meet the following standards:

(a) The wetland, wetland buffer and required yard area opposite the wetland equals more than 50 percent of the property dimension of the development site.

(b) A required side yard is reduced to five feet.

(c) A required front or rear yard is reduced to 10 feet.

(2) Single-family dwelling. Development of one single-family dwelling within the buffer of a wetland on a development site shall be approved by the City Manager or the City Manager's designee if the applicant demonstrates that:

(a) The extent of development within the buffer is limited to that which is necessary to create a developable area which is no larger than 4,000 square feet;

(b) The proposal utilizes to the maximum extent possible the best available construction, design, and

development techniques which result in the least adverse impact on the critical area;

(c) The proposal incorporates the development standards of DMMC 16.10.130 through 16.10.150 and the Surface Water Design Manual adopted pursuant to DMMC 16.10.350 to the maximum extent possible; and

(d) The proposal is consistent with the purpose and intent of this chapter.

Sec. 62. 16.10.140. Wetlands - Limited exemptions. The City Manager or the City Manager's designee may allow exemptions from the provisions of this chapter based on the following criteria:

(1) Wetlands larger than 4,000 square feet will be evaluated using standard procedures for wetland review.

(2) Wetlands between 1,000 and 4,000 square feet shall be evaluated using the Washington State Wetland Rating System for Western Washington (Hruby, 2004, or as revised) to establish category and evaluate functions. The following criteria and local knowledge of natural resources shall be used to determine whether to exempt wetlands between 1,000 and 4,000 square feet from the requirement to avoid impacts.

(a) The requirement to avoid impacts may be dropped for Category III and IV wetlands between 1,000 and 4,000 square feet that meet all of the following criteria:

(i) Wetland is not associated with a riparian corridor; and

(ii) Wetland is not part of a wetland mosaic; and

(iii) Wetland does not score 20 points or more for habitat in the wetland rating system; and

(iv) Wetland does not contain habitat identified as essential for local populations of priority

species identified by [the] Washington Department of Fish and Wildlife.

(b) Impacts allowed under this provision to these wetlands will be fully mitigated as set forth in DMMC 16.10.150.

(c) All Category I and II wetlands between 1,000 and 4,000 square feet should be evaluated with full mitigation sequencing and buffer establishment. Any approved impacts should be adequately compensated by mitigation as set forth in DMMC 16.10.150.

(3) Wetlands less than 1,000 square feet shall be exempt from regulation where the applicant has shown that they:

(a) Are not associated with a riparian corridor;

(b) Are not part of a wetland mosaic; and

(c) Do not contain habitat identified as essential for local populations of priority species identified by the Washington Department of Fish and Wildlife.

Sec. 63. 16.10.150. Wetlands - Mitigation requirements.

(1) Compensatory mitigation for alterations to wetlands shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with the Guidance on Wetland Mitigation in Washington State - Part 2: Guidelines for Developing Wetland Mitigation Plans and Proposals, April 2004 (Washington State Department of Ecology, U.S. Army Corps of Engineers Seattle District, and U.S. Environmental Protection Agency Region 10; Ecology Publication No. 04-06-013b), or as revised.

(2) Mitigation shall be required in the following order of preference:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action.

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps such as project redesign, relocation, or timing, to avoid or reduce impacts.

(c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations.

(e) Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.

(f) Monitoring the required compensation and taking remedial or corrective measures when necessary.

(3) Compensating for lost or affected functions. Compensatory mitigation shall address the functions affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions. The goal shall be for the compensatory mitigation to provide similar wetland functions as those lost, except when either:

(a) The lost wetland provides minimal functions as determined by a site-specific function assessment, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol; or

(b) Out-of-kind replacement of wetland type or functions will best meet watershed goals formally identified by the City, such as replacement of historically diminished wetland types.

(4) Preference of mitigation actions. Methods to achieve compensation for wetland functions shall be approached in the following order of preference:

(a) Restoration (re-establishment and rehabilitation) of wetlands.

(b) Creation (establishment) of wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative introduced species. This should only be attempted when there is an adequate source of water and it can be shown that the surface and subsurface hydrologic regime is conducive for the wetland community that is anticipated in the design.

(c) Enhancement of significantly degraded wetlands in combination with restoration or creation. Such enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.

(5) Type and location of compensatory mitigation. Unless it is demonstrated that a higher level of ecological functioning would result from an alternate approach, compensatory mitigation for ecological functions shall be either in-kind and on-site, or in-kind and within the same stream reach, sub-basin, or drift cell (if estuarine wetlands are impacted). Compensatory mitigation actions shall be conducted within the same sub-drainage basin and on the site of the alteration except when all of the following apply:

(a) There are no reasonable on-site or in sub-drainage basin opportunities (e.g., on-site options would require elimination of high-functioning upland habitat), or on-site and in sub-drainage basin opportunities do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include: anticipated replacement ratios for wetland mitigation, buffer conditions and proposed widths, available water to maintain anticipated hydrogeomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);

(b) Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and

(c) Off-site locations shall be in the same sub-drainage basin unless:

(i) Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City and strongly justify location of mitigation at another site; or

(ii) Credits from a state-certified wetland mitigation bank are used as compensation and the use of credits is consistent with the terms of the bank's certification.

(d) The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland. An atypical wetland refers to a compensation wetland (e.g., created or enhanced) that does not match the type of existing wetland that would be found in the geomorphic setting of the site (i.e., the water source(s) and hydroperiod proposed for the mitigation site are not typical for the geomorphic setting). Likewise, it should not provide exaggerated morphology or require a berm or other engineered structures to hold back water. For example, excavating a permanently inundated pond in an existing seasonally saturated or inundated wetland is one example of an enhancement project that could result in an atypical wetland. Another example would be excavating depressions in an existing wetland on a slope, which required the construction of berms to hold the water.

(6) Timing of compensatory mitigation. It is preferred that compensatory mitigation projects be completed prior to activities that will disturb the on-site wetlands. At the least, compensatory mitigation shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora. The City Manager or the City Manager's designee may authorize a

one-time temporary delay in completing construction or installation of the compensatory mitigation when the applicant provides a written explanation from a qualified wetland professional as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability of failure or significant construction difficulties (e.g., project delay lapses past a fisheries window; or installing plants should be delayed until the dormant season to ensure greater survival of installed materials). The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, and general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the compensatory mitigation plan. The justification must be verified and approved by the City.

(7) Mitigation ratios. The following ratios shall apply to creation or restoration that is in-kind, is on-site, is the same category, is timed prior to or concurrent with alteration, and has a high probability of success. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.

Wetland Mitigation Ratios

	Enhancement	Rehabilitation	Creation
Category I	6:1	4.5:1	3:1
Category II	3:1	2:1	1.5:1
Category III	2:1	1.5:1	1:1
Category IV	1.5:1	1:1	1:1

(a) The mitigation ratio is the acreage required for compensatory mitigation divided by the acreage of impact.

(b) The ratios are for a concurrent compensatory mitigation project. If the impacts to a wetland are to be mitigated by using an approved and established mitigation bank, the rules and ratios applicable to the bank should be used.

(c) The ratios are based on the assumption that the category, based on wetland ratings established in DMMC 16.01.050 (definition of wetland), and hydrogeomorphic (HGM) class/subclass of the wetland proposed as compensation are the same as the category and HGM class/subclass of the wetland impacts.

(d) Ratios for projects in which the category and HGM class/subclass of wetlands proposed as compensation is not the same as that of the wetland impacts will be determined on a case-by-case basis using the recommended ratios as a starting point. The ratios could be higher in such cases.

(e) Creation can be used in combination with rehabilitation or enhancement. For example, two acres of impact to a Category II wetland would require two acres of creation (i.e., replacing the lost acreage at a 1:1 ratio); the remaining one acre of creation necessary to compensate for impact could be substituted with one and one-half acres of rehabilitation or three acres of enhancement.

(f) Generally the use of enhancement alone as compensation is discouraged. Using enhancement in combination with some amount of creation is preferred.

(8) Preservation. Impacts to wetlands may be mitigated by preservation of wetland areas when used in combination with other forms of mitigation such as creation, restoration, or enhancement. Preservation may also be used by itself, but more restrictions apply as outlined below.

(a) Acceptable uses of preservation. The preservation of at-risk, high quality wetlands and habitat may be considered as part of an acceptable mitigation plan when the following criteria are met:

(i) Preservation is used as a form of compensation only after the standard sequencing of mitigation (avoid, minimize, and then compensate). See subsection (2) of this section;

(ii) Restoration (re-establishment and rehabilitation), creation, and enhancement opportunities have also been considered, and preservation is proposed by the applicant and approved by the permitting agencies as the best compensation option;

(iii) The preservation site is determined to be under imminent threat; that is, the site has the potential to experience a high rate of undesirable ecological change due to on-site or off-site activities that are not regulated (e.g., logging of forested wetlands). This potential includes permitted, planned, or likely actions;

(iv) The area proposed for preservation is of high quality or critical for the health of the watershed or basin due to its location. Some of the following features may be indicative of high quality sites:

(A) Category I or II wetland rating;

(B) Rare or irreplaceable wetland type (e.g., bogs, mature forested wetlands, estuaries) or aquatic habitat that is rare or a limited resource in the area;

(C) Habitat for threatened or endangered species;

(D) Provides biological and/or hydrological connectivity;

(E) High regional or watershed importance (e.g., listed as priority site in a watershed or basin plan);

(F) Large size with high species diversity (plants and/or animals) and/or high abundance of native species;

(G) A site that is continuous with the head of a watershed, or with a lake or pond in an upper watershed that significantly improves outflow hydrology and water quality.

(b) Preservation in combination with other forms of compensation. Using preservation as compensation is acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation and the criteria below are met:

(i) All criteria listed in subsection (8)(a) of this section are met;

(ii) The impact area is small and/or impacts are occurring to a low functioning system (Category III or IV wetland);

(iii) Preservation of a high-quality system occurs in the same watershed or basin as the wetland impact;

(iv) Preservation sites include buffer areas adequate to protect the habitat and its functions from encroachment and degradation; and

(v) Mitigation ratios for preservation in combination with other forms of mitigation shall range from 10:1 to 20:1, as determined on a case-by-case basis, depending on the quality of the wetlands being impacted and the quality of the wetlands being preserved.

(c) Preservation as the sole means of compensation for wetland impacts. Preservation alone shall only be used as compensatory mitigation in exceptional circumstances. Preservation alone shall not apply if impacts are occurring to functions that must be replaced on-site, such as flood storage or water quality treatment that need to be replicated by water quality measures implemented within the project limits. Preservation of at-risk, high-quality wetlands and habitat (as defined above) may be considered as the sole means of compensation for wetland impacts when the following criteria are met:

(i) All criteria listed in subsections (8)(a) and (8)(b) of this section are met;

(ii) There are no adverse impacts to habitat for fish and species listed as endangered and threatened;

(iii) There is no net loss of habitat functions within the watershed or basin;

(iv) Higher mitigation ratios are applied. Mitigation ratios for preservation as the sole means of mitigation shall generally start at 20:1. Specific ratios should depend upon the significance of the preservation project and the quality of the wetland resources lost.

(9) Wetland mitigation banks.

(a) Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:

(i) The bank is certified under Chapter 173-700 WAC;

(ii) The City Manager or the City Manager's designee determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and

(iii) The proposed use of credits is consistent with the terms and conditions of the bank's certification.

(b) Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification.

(c) Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the bank's certification. In some cases, the service area of the bank may include portions of more than one adjacent drainage basin for specific wetland functions.

(10) Substitute fees. In cases where the applicant demonstrates to the satisfaction of the City Manager or the City

Manager's designee that a suitable compensation site does not exist, the City Manager or the City Manager's designee may allow the applicant to make a financial contribution to a water quality project or program performing critical areas enhancement, restoration, or mitigation. The project or program must improve environmental quality within the same watershed as the altered wetland. The amount of the fee shall be determined by the City Manager or the City Manager's designee and shall be equal to the cost of mitigating the impact of the wetland alteration.

(11) Mitigation plan requirements. When mitigation is required, the applicant shall submit for approval a mitigation plan prepared by a qualified scientist(s) following procedures set forth in the state Department of Ecology Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposals, 2004, or as revised.

(12) Final approval. The City Manager or the City Manager's designee shall grant final approval of a completed compensation project if the final report of the project mitigation plan satisfactorily documents that the area has achieved all requirements of this section and DMMC 16.10.310.

Sec. 64. 16.10.160. Streams - Development standards. If a stream is located on or contiguous to the site of a development proposal, all activities on the site shall be in compliance with the following requirements and restrictions:

(1) Stream buffers. The following standard buffers shall be measured from the ordinary high water mark or from the top of the bank if the ordinary high water mark cannot be identified:

Water Type	Buffer Width (feet)
Types S or F	115
Types Np or Ns	65

Type S: streams inventoried as "shorelines of the state" under the City's shoreline master program.

Type F: streams that are salmonid-bearing or have the potential to support salmonids.

Type Np: streams that are perennial during a year of normal rainfall and do not have the potential to support salmonids use.

Type Ns: streams that are seasonal or ephemeral during a year of normal rainfall and do not have the potential to support salmonids use.

(a) Where a legally established and constructed street transects a stream buffer, the City Manager or the City Manager's designee may approve a modification of the standard buffer width to the edge of the street if the isolated part of the buffer does not provide additional protection of the stream and provides insignificant biological, geological or hydrological buffer functions relating to the stream. If the resulting buffer distance is less than 50 percent of the standard buffer, no further reduction shall be allowed.

(b) Where a buffer has been previously established through City or county development review, and is permanently recorded on Title or placed within a separate tract, the buffer shall be as previously established, provided it is at least 50 percent of the required standard buffer distance.

(c) Any stream relocated or altered as part of approved mitigation measures shall have at least the minimum buffer required for the type of stream involved.

(d) If the stream buffer includes a steep slope hazard area or landslide hazard area, the stream buffer width is the greater of either the stream buffer in this section or 25 feet beyond the top of the hazard area.

(e) Any stream adjoined by a riparian wetland or other contiguous critical area shall have the buffer required for the stream type involved or the buffer that applies to the wetland or other critical area, whichever is greater.

(2) Increased stream buffer. The City Manager or the City Manager's designee shall require increased buffer widths in accordance with the recommendations of a qualified biologist and the best available science on a case-by-case basis when a larger buffer is necessary to protect stream functions and values based on site-specific characteristics.

This determination shall be based on one or more of the following criteria:

(a) A larger buffer is needed to protect other critical areas;

(b) The buffer or adjacent upland has a slope greater than 30 percent or is susceptible to erosion and standard erosion-control measures will not prevent adverse impacts to the wetland.

(c) In cases where additional buffers are not feasible, the City Manager or the City Manager's designee may require the applicant to undertake alternative on-site or off-site mitigation measures, including but not limited to a financial contribution to projects or programs which seek to improve environmental quality within the same watershed.

(3) Pursuant to RCW 35.21.180, the King County, Washington "Surface Water Design Manual," including all subsequent revisions, is adopted by reference as the "Surface Water Design Manual for the City of Des Moines" in DMMC 16.10.350.

(4) Building setback lines. A building setback line of 10 feet is required from the edge of any stream buffer. Minor structural intrusions into the area of the building setback line may be allowed if the City Manager or the City Manager's designee determines that such intrusions will not negatively impact the critical area.

Sec. 65. 16.10.170. Streams - Reasonable use exceptions.

(1) Adjustments to dimensional requirements.

(a) Yard reductions for building one single-family dwelling. The City Manager or the City Manager's designee may allow modification to the required front, rear, or side yard on the opposite of the stream. The reductions must meet the following standards:

(i) The stream, stream buffer and required yard area opposite the stream equals more than 50 percent of the property dimension of the development site.

(ii) A required side yard is reduced to five feet.

(iii) A required front or rear yard is reduced to 10 feet.

(2) Single-family dwelling. Development of one single-family dwelling within the buffer of a stream on a development site shall be approved by the City Manager or the City Manager's designee if the applicant demonstrates that:

(a) The extent of development within the buffer is limited to that which is necessary to create a developable area which is no larger than 4,000 square feet;

(b) The proposal utilizes to the maximum extent possible the best available construction, design, and development techniques which result in the least adverse impact on the environmentally critical area;

(c) The proposal incorporates the development standards of DMMC 16.10.160 and the Surface Water Design Manual to the maximum extent possible; and

(d) The proposal is consistent with the purpose and intent of this chapter.

Sec. 66. 16.10.180. Streams - Limited exemptions. The City Manager or the City Manager's designee may allow exemptions from the provisions of this chapter based on the following provisions:

(1) Stream crossings. Stream crossings, whether for access or utility purposes, shall be avoided to the extent possible. The City Manager or the City Manager's designee may approve stream crossings only when he/she determines that there are no practicable or reasonable alternatives, and when the proposal complies with all of the following criteria:

(a) Bridges are required for streams which support salmonids; and

(b) All crossings using culverts shall use superspan or oversize culverts; and

(c) All construction and installation crossings shall comply with timing restrictions set by federal and state permit processes, generally during summer low flow; and

(d) Crossings shall not occur in salmonid spawning areas unless no other feasible crossing site exists; and

(e) Bridge piers or abutments shall not be placed in either the floodway or between the ordinary high water marks unless no other feasible alternative placement exists; and

(f) Crossings shall not diminish flood-carrying capacity; and

(g) Crossings shall provide for maintenance of culverts, bridges, and utilities; and

(h) Crossings shall serve multiple properties whenever possible; and

(i) Crossings shall comply with all applicable local, state, and federal laws.

(2) Stream relocation and dredging. Stream relocation and dredging are strongly discouraged and shall only occur to improve hydrologic, hydraulic, and fish and wildlife habitat functions. The City Manager or the City Manager's designee may approve stream relocation and dredging only when he/she determines that there are no practicable or reasonable alternatives, and when the proposal complies with all of the following criteria:

(a) Relocation and dredging shall follow all applicable local, state, and federal laws and receive approvals from the agencies administering such laws;

(b) Dredging of any stream shall follow the standards for dredging set forth in the shoreline master program;

(c) A mitigation plan with a contingency plan shall be prepared by a licensed professional pursuant to DMMC 16.10.190 and shall include the following provisions:

(i) Identification of long-term goals (25 years) and objectives for restoration of the stream channel and riparian areas;

(ii) A three-year to five-year monitoring program to measure success of the restoration;

(iii) Mitigation shall be designed to accommodate a 100-year storm event.

(3) Stream channel, stream bank, bluff, or shore stabilization. The City Manager or the City Manager's designee may approve stabilization of stream channels, stream banks, bluffs, or shorelines when he/she determines that the proposed stabilization complies with the Washington Department of Fish and Wildlife Integrated Streambank Protection Guidelines (2003) and the following criteria as applicable:

(a) Naturally occurring movement threatens existing structures, public improvements, unique natural resources, or the only feasible access to property.

(b) In the case of streams, stabilization results in improved fish and wildlife habitat, flood control, and improved water quality.

(c) The preferred methodology for stream channel and bank stabilization is bioengineering or some combination of bioengineering and more traditional structural solutions. Bioengineering involves use of plant materials to stabilize eroding stream channels and banks.

(d) The preferred methodology for bluff and shore stabilization is naturalistic shoreline protection measures such as creation of beaches that absorb and dissipate wave energy. Bluff and shore stabilization shall follow the standards of the shoreline master program for the construction of any stabilization device.

(e) Relocation and dredging shall follow all applicable local, state, and federal laws and receive approvals from the agencies administering such laws.

Sec. 67. 16.10.190. Streams - Mitigation requirements.

(1) Compensatory mitigation for alterations to streams shall achieve equivalent or greater biologic functions.

(a) On-site and in-kind for streams. For streams, the applicant shall maintain or improve stream channel dimensions, including depth, length, and gradient; restore or improve native vegetation and fish and wildlife habitat; and create an equivalent or improved channel bed, biofiltration, and meandering. Unless otherwise specified by the City Manager or the City Manager's designee, such mitigation to replace and enhance stream elements such as pools, riffles, and spawning gravel shall be provided on a relative 2:1 basis.

(b) Off-site and in-kind for streams. When environmental information demonstrates that greater functions and values will be achieved, off-site compensation of greater size, functions, and values may be approved if the compensation

project is within the same subwatershed as the wetland or stream to be altered. Unless otherwise specified by the City Manager or the City Manager's designee, such mitigation shall be provided pursuant to the ratios specified in this section.

(c) Conditions preceding stream alteration. In the case of the exceptions of DMMC 16.10.160, the following conditions shall precede any stream alteration approved pursuant to this section:

(i) A mitigation plan for the compensation project shall be submitted by the applicant and approved by the City Manager or the City Manager's designee;

(ii) The compensation project shall be fully implemented following the requirements of the approved mitigation plan; and

(iii) A final report shall be submitted following the specified growing seasons documenting that all requirements of a mitigation plan have been fully achieved. The City may postpone or limit development, require bonds pursuant to DMMC 16.10.330, or use other appropriate techniques to ensure the success of the mitigation plan.

(d) The City Manager or the City Manager's designee may postpone the issuance of development permits for one or more growing seasons until the success or viability of the approved mitigation measures can be demonstrated by the applicant.

(e) Substitute fees. In cases where the applicant demonstrates to the satisfaction of the City Manager or the City Manager's designee that a suitable compensation site does not exist, the City Manager or the City Manager's designee may allow the applicant to make a financial contribution to a water quality project or program performing critical areas enhancement, restoration, or mitigation. The project or program must improve environmental quality within the same watershed as the altered stream. The amount of the fee shall be determined by the City Manager or the City Manager's designee and shall be

equal to the cost of mitigating the impact of the stream alteration.

(2) Mitigation plans. All restoration and compensation projects shall follow a mitigation plan prepared by qualified scientists containing the following components:

(a) Baseline information. Quantitative data shall be collected and synthesized for both the impacted critical area and the proposed mitigation site, if different from the impacted critical area, following procedures set forth by the City Manager or the City Manager's designee.

(b) Environmental goals and objectives. Goals and objectives describing the purposes of the mitigation measures shall be provided, including a description of site selection criteria, identification of target evaluation species and resource functions.

(c) Performance standards. Specific criteria for fulfilling environmental goals and objectives, and for beginning remedial action or contingency measures shall be provided, including water quality standards, species richness and diversity targets, habitat diversity indices, or other ecological, geological, or hydrological criteria.

(d) Detailed construction plan. Written specifications and descriptions of mitigation techniques shall be provided, including the proposed construction sequence, accompanied by detailed site diagrams and blueprints that are an integral requirement of any development proposal.

(e) Monitoring program. A program outlining the approach for assessing a completed project shall be provided, including descriptions of proposed experimental and control site survey or sampling techniques. A protocol shall be included outlining how the monitoring data will be evaluated by agencies that are tracking the progress of the mitigation project. A report shall be submitted at least twice yearly documenting milestones, successes, problems, and contingency actions of the restoration or compensation project. The City Manager or the City Manager's designee shall require that the applicant monitor

the compensation or restoration project for a minimum of five years.

(f) Contingency plan. A plan shall be provided fully identifying potential courses of action, and any corrective measures to be taken when monitoring or evaluation indicates project performance standards are not being met.

(g) Performance and maintenance securities. Securities ensuring fulfillment of the mitigation project, monitoring program, and any contingency measures shall be posted pursuant to DMMC 16.10.330.

(3) Final approval. The City Manager or the City Manager's designee shall grant final approval of a completed restoration or compensation project if the final report of the project mitigation plan satisfactorily documents that the area has achieved all requirements of DMMC 16.10.300.

Sec. 68. 16.10.200. Geologically hazardous areas - Development standards. Development within all geologically hazardous areas shall comply with the following general performance requirements:

(1) Alterations of geologically hazardous areas or associated buffers may only occur for activities that:

(a) Will not increase the threat of the geological hazard to adjacent properties beyond pre-development conditions;

(b) Will not adversely impact other critical areas;

(c) Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than pre-development conditions;

(d) Are designed and constructed in accordance with the Surface Water Design Manual; and

(e) Are certified as safe as designed and under anticipated conditions by a qualified engineer or geologist, licensed in the state of Washington.

(2) Critical facilities prohibited. Critical facilities shall not be sited within geologically hazardous areas unless there is no other practical alternative.

Sec. 69. 16.10.210. Ravine sidewalls and bluffs - Development standards. Activities on ravine sidewalls and bluffs shall meet the general performance requirements of DMMC 16.10.200 and the specific following requirements:

(1) Buffers. A 50-foot undisturbed buffer of native vegetation shall be established from the top, toe, and sides of all ravine sidewalls and bluffs.

(2) Buffer reduction. The City Manager or the City Manager's designee may approve a reduction in the width of the required buffer, to a minimum width of 10 feet, when special environmental studies are provided that demonstrate all of the following:

(a) A licensed engineer specializing in geotechnical analysis or a licensed engineering geologist, after review of the geologic conditions of the site, the proposed development plans, and all mitigation measures proposed or required, concludes in a written statement that the development proposal will result in minimal risk of soil instability; and

(b) Special mitigation measures regarding design, construction, and maintenance can reasonably be employed to minimize adverse environmental impacts associated with the proposal; and

(c) The proposal represents minimal disruption of existing native vegetation.

(3) Additional buffers. The City Manager or the City Manager's designee may require increased buffers if environmental studies indicate such increases are necessary to

mitigate landslide, seismic and erosion hazards, or as otherwise necessary to protect the public health, safety, and welfare.

(4) Building setback lines. A building setback line of 10 feet is required from the edge of any buffer of a ravine sidewall or bluff. Minor structural intrusions into the area of the building setback line may be allowed if the City Manager or the City Manager's designee determines that such intrusions will not negatively impact the critical area.

(5) All buffers shall be measured from the top, toe, and sides of all ravine sidewalls or bluffs.

Sec. 70. 16.10.220. Hillsides of 15 percent slope and greater - Development standards - Disturbance limitations. Development on hillsides shall comply with the general performance requirements of DMMC 16.10.200 and the following requirements regarding disturbance limitations, development location, development design, construction techniques, and landscaping.

(1) Amount of disturbance allowed. The following chart sets forth the maximum slope disturbance allowed on a development site:

Slope	Amount of Slope Which Can Be Disturbed	Factor
0 - 15%	100%	1.00
15 - 25%	60%	.60
25 - 40%	45%	.45
40%+	30%	.30

The overall amount of disturbance allowed on development sites which have any combination of the above slope categories shall be determined by the following formula:

(Square Footage of Site having 0 - 15% slopes) X 1.00 + (Square Footage of Site having 15 - 25% slopes) X 0.60 + (Square Footage of Site having 25 - 40% slopes) X 0.45 + (Square Footage of Site

having 40%+ slopes) X 0.30 = Total Amount of Allowable Site Disturbance.

(2) Development location.

(a) Structures and improvements shall be clustered to retain as much open space as possible and the natural topographic character of the slope; and

(b) Structures and improvements shall conform to the natural contour of the slope, foundations must be tiered to generally conform to the existing topography of the site; and

(c) Structures and improvements shall be located to preserve the most sensitive portion of the site and its natural landforms and vegetation.

(3) Development design.

(a) The footprint of buildings and other disturbed areas shall be minimized. The least number of buildings is desirable in order to consolidate the development; and

(b) Standard prepared building pads (slab on grade) resulting in grading more than 10 feet outside the building footprint area are prohibited; and

(c) Use of common access drives and utility corridors is required where feasible; and

(d) Impervious lot coverage shall be minimized. With the exception of detached single-family structures, understructure parking and multilevel structures shall be incorporated where feasible; and

(e) Roads, walkways, and parking areas shall be designed to parallel the natural contours of the steep slope hazard areas while maintaining consolidated areas of natural topography and vegetation. Access shall be located in the least environmentally critical area feasible; and

(f) Use of retaining walls which allow the maintenance of existing natural slope areas is preferred over graded artificial slopes.

(4) Construction techniques.

(a) Use of foundation walls as retaining walls is preferable to rock or concrete walls built separately and away from the building. Freestanding retaining devices are only permitted when they cannot be designed as structural elements of the building foundation; and

(b) Use of pole-type construction which conforms to the existing topography is desirable where feasible; and

(c) Structures shall be tiered to conform to existing topography and to minimize topographic modification. Piled deck support structures are preferred for parking or garages over fill-based construction types.

(5) Landscaping. The disturbed area of a development site not used for buildings and other improvements shall be landscaped according to a landscape design which will achieve a minimum 40 percent coverage by the canopy of trees and shrubs within 10 years to provide habitat desirable to native western Washington birds. The trees and shrubs shall be a mix of shade, flowering, and coniferous and broad-leaf evergreens that are either native to the Puget Sound region or are valuable to western Washington birds. The Department of Wildlife "Plants for Wildlife in Western Washington" shall be used as a general guide.

(a) Trees shall be the following size at time of planting and shall conform to the "American Standard for Nursery Stock":

(i) Single-stem shade and flowering trees shall be a minimum one-inch caliper trunk as measured six inches above the ground.

(ii) Multistem shade and flowering trees shall be a minimum height of eight feet as measured from the

ground level to the average uppermost point of growth of the plant.

(iii) Coniferous evergreen trees (Types 4, 5, and 6) shall be a minimum height of six feet as measured from the ground to the midpoint between the uppermost whorl and the tip of the leader. For species of trees without whorls, minimum height shall be measured to the uppermost side growth. The ratio of height to spread shall not be less than 5:3.

(iv) Broad-leaf evergreen trees (Types 4 and 5) shall be a minimum height of four feet as measured from the ground level to where the main part of the plant ends, not to the tip of a thin shoot.

(b) Shrubs shall be of the following size at time of planting and shall conform to the "American Standard for Nursery Stock":

(i) Dwarf and semi-dwarf deciduous shrubs shall be a minimum height of two to two and one-half feet above grade, and either a No. 3 container size for container-grown plants, 10-inch diameter root ball for balled and burlapped plants, or 11-inch root spread for bare-root plants.

(ii) Strong-growing deciduous shrubs shall be a minimum height of two to three feet above grade, and either a No. 3 container size for container-grown plants, 10-inch diameter root ball for balled and burlapped plants, or 11-inch root spread for bare-root plants.

(iii) Coniferous and broad-leaf evergreen shrubs (Types 1, 2, and 3) shall be a minimum height of two to two and one-half feet spread or height, and either a minimum No. 3 container size for container-grown plants or 12-inch diameter root ball for balled and burlapped plants.

Sec. 71. 16.10.230. Ravine sidewalls, bluffs, and hillsides of 15 percent slope and greater - Reasonable use exceptions.

(1) Limited waiver of hillside disturbance limitations. Any one or all of the disturbance limitation requirements of DMMC 16.10.220 may be waived if the City Manager or the City Manager's designee determines that the application of such requirements is not feasible for developing one single-family dwelling on a development site and the proposal is consistent with the purpose and intent of this chapter.

Sec. 72. 16.10.240. Seismic hazard areas - Development standards. Development in seismic hazard areas shall be in accordance with the standards for earthquake design and seismic motion as established in the Des Moines Building and Construction Code (Title 14 DMMC). Seismic hazard areas shall be altered only when the City Manager or the City Manager's designee concludes, based on environmental information, the following:

(1) There is no actual hazard based on a lack of seismic activity in the past in the area of the development proposal, and a quantitative analysis of potential for seismic activity indicates no significant risk to the development proposal; or

(2) The development proposal can be designed so that it will be as safe from any earthquake damage as a similar development not located in a seismic hazard area.

Sec. 73. 16.10.250. Erosion and landslide hazard areas - Development standards. Development on hillsides containing or adjacent to erosion or landslide hazard areas shall meet the general performance requirements of DMMC 16.10.200 and the following:

(1) Buffer requirement. A buffer shall be established from all edges of landslide hazard areas. The size of the buffer shall be determined by the City Manager or the City Manager's designee to eliminate or minimize the risk of property damage, death, or injury resulting from landslides caused in whole or

part by the development, based upon review of and concurrence with a special environmental study prepared by a qualified professional.

(a) Minimum buffer. The minimum buffer shall be equal to the height of the slope or 50 feet, whichever is greater;

(b) Increased buffer. The buffer may be increased where the City Manager or the City Manager's designee determines a larger buffer is necessary to prevent risk of damage to proposed and existing development;

(c) Buffer reduction. The buffer may be reduced to a minimum of 10 feet when a qualified professional demonstrates to the City Manager or the City Manager's designee's satisfaction that the reduction will adequately protect the proposed development, adjacent developments, and uses and the subject critical area;

(2) Alterations. Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a hazards analysis is submitted and certifies that:

(a) The development will not increase surface water discharge or sedimentation to adjacent properties beyond pre-development conditions;

(b) The development will not decrease slope stability on adjacent properties; and

(c) Such alterations will not adversely impact other critical areas;

(3) Design standards. Development within an erosion or landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides greater long-term slope stability while meeting all other provisions of this chapter. The requirement for long-term slope stability shall exclude designs that require

regular and periodic maintenance to maintain their level of function. The basic development design standards are:

(a) The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Analysis of dynamic conditions shall be based on a minimum horizontal acceleration as established by the current version of the Uniform Building Code;

(b) Structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas;

(c) Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;

(d) Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;

(e) The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;

(f) The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes; and

(g) Development shall be designed to minimize impervious lot coverage;

(4) Vegetation retention. Unless otherwise provided or as part of an approved alteration, removal of vegetation from an erosion or landslide hazard area or related buffer shall be prohibited;

(5) Seasonal restriction. Land clearing, grading, or filling shall be limited to the period between April 1st and October 1st; provided, that the City may extend or shorten the

dry season on a case-by-case basis depending on actual weather conditions;

(6) Utility lines and pipes. Utility lines and pipes shall be permitted in erosion and landslide hazard areas only when the applicant demonstrates that no other practical alternative is available. The line or pipe shall be located aboveground and properly anchored and/or designed so that it will continue to function in the event of an underlying slide. Storm water conveyance shall be allowed only through a high-density polyethylene pipe with fuse-welded joints, or similar product that is technically equal or superior;

(7) Point discharges. Point discharges from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area shall be prohibited except as follows:

(a) Conveyed via continuous storm pipe downslope to a point where there are no erosion hazard areas downstream from the discharge;

(b) Discharged at flow durations matching predeveloped conditions, with adequate energy dissipation, into existing channels that previously conveyed storm water runoff in the predeveloped state; or

(c) Dispersed discharge upslope of the steep slope onto a low-gradient undisturbed buffer demonstrated to be adequate to infiltrate all surface and storm water runoff, and where it can be demonstrated that such discharge will not increase the saturation of the slope;

(8) Subdivisions. The division of land in landslide hazard areas and associated buffers is subject to the following:

(a) Land that is located wholly within a landslide hazard area or its buffer may not be subdivided. Land that is located partially within a landslide hazard area or its buffer may be divided; provided, that each resulting lot has sufficient buildable area outside of, and will not affect, the landslide hazard [area] or its buffer.

(b) Access roads and utilities may be permitted within the landslide hazard area and associated buffers if the City determines that no other feasible alternative exists; and

(9) Prohibited development. On-site sewage disposal systems, including drain fields, shall be prohibited within erosion and landslide hazard areas and related buffers.

Sec. 74. 16.10.260. Critical aquifer recharge areas - Development standards - Buffers and disturbance limitations. If an aquifer recharge area is located on or adjacent to a development site, all activities on the site shall be in compliance with the following requirements:

(1) Development standards - General performance requirements.

(a) Activities may only be permitted in a critical aquifer recharge area if the applicant can show that the proposed activity will not cause contaminants to enter the aquifer and that the proposed activity will not adversely affect the recharging of the aquifer.

(b) The proposed activity must comply with the water source protection requirements and recommendations of the U.S. Environmental Protection Agency, Washington State Department of Health, and the Seattle-King County Health Department.

(c) The proposed activity must be designed and constructed in accordance with the Surface Water Design Manual.

(2) Development standards - Specific uses.

(a) Storage tanks. All storage tanks proposed to be located in a critical aquifer recharge area must comply with local building code requirements and must conform to the following requirements:

(i) Underground tanks. All new underground storage facilities proposed for use in the storage of hazardous

substances or hazardous wastes shall be designed and constructed so as to:

(A) Prevent releases due to corrosion or structural failure for the operational life of the tank;

(B) Be protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and

(C) Use material in the construction or lining of the tank that is compatible with the substance to be stored.

(ii) Aboveground tanks. All new aboveground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:

(A) Not allow the release of a hazardous substance to the ground, ground waters, or surface waters;

(B) Have a primary containment area enclosing or underlying the tank or part thereof; and

(C) Provide either a secondary containment system built into the tank structure or a secondary containment dike system built outside the tank for all tanks.

(b) Vehicle repair and servicing.

(i) Vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.

(ii) No dry wells shall be allowed in critical aquifer recharge areas on sites used for vehicle repair

and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the state Department of Ecology prior to commencement of the proposed activity.

(c) Residential use of pesticides and nutrients. Application of household pesticides, herbicides, and fertilizers shall not exceed times and rates specified on the packaging.

(d) Use of reclaimed water for surface percolation or direct recharge. Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the state Departments of Ecology and Health.

(i) Use of reclaimed water for surface percolation must meet the ground water recharge criteria given in RCW 90.46.010(10) and 90.46.080(1). The state Department of Ecology may establish additional discharge limits in accordance with RCW 90.46.080(2).

(ii) Direct injection must be in accordance with the standards developed by authority of RCW 90.46.042.

(e) State and Federal Regulations. The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable state and federal regulations.

Activity	**Statute - Regulation - Guidance**
Aboveground Storage Tanks	WAC 173-303-640
Automobile Washers	Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (Washington Department of Ecology WQ-R-95-56)
Below Ground Storage Tanks	Chapter 173-360 WAC
Chemical Treatment Storage and	WAC 173-303-182

Disposal Facilities	
Hazardous Waste Generator (Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, Etc.)	Chapter 173-303 WAC
Injection Wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
On-Site Sewage Systems (Large Scale)	Chapter 173-240 WAC
On-Site Sewage Systems (Less Than 14,500 Gal./Day)	Chapter 246-272 WAC, Local Health Ordinances
Pesticide Storage and Use	Chapter 15.54 RCW, Chapter 17.21 RCW
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Wastewater Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, Washington State Department of Ecology Land Application Guidelines, Best Management Practices for Irrigated Agriculture

(3) Prohibited uses and activities - Critical aquifer recharge areas. The following activities and uses are prohibited in critical aquifer recharge areas:

(a) Landfills. Landfills, including hazardous waste, municipal solid waste, special waste, wood waste, and inert and demolition waste landfills;

(b) Underground injection wells. Class I, III, and IV wells and subclasses 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 of Class V wells;

(c) Mining.

(i) Metals and hard rock mining; and

(ii) Sand and gravel mining, prohibited from critical aquifer recharge areas determined to be highly susceptible or vulnerable;

(d) Wood treatment facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);

(e) Storage, processing, or disposal of radioactive substances. Facilities that store, process, or dispose of radioactive substances; and

(f) Other prohibited uses or activities.

(i) Activities that would significantly reduce the recharge to aquifers currently or potentially used as a potable water source;

(ii) Activities that would significantly reduce the recharge to aquifers that are a source of significant base flow to a regulated stream; and

(iii) Activities that are not connected to an available sanitary sewer system, are prohibited from critical aquifer recharge areas associated with sole source aquifers.

Sec. 75. 16.10.270. Fish and wildlife habitat conservation areas - Development standards - Buffers and disturbance limitations.

(1) Buffers and disturbance limitations. If a fish and/or wildlife habitat conservation area is located on or adjacent to a development site, the following provisions shall apply:

(a) A habitat conservation area may be altered only if the proposed alteration of the habitat or the mitigation

proposed does not degrade the quantitative and qualitative functions and values of the habitat.

(b) The City Manager or the City Manager's designee may require native vegetation buffer areas when special environmental studies indicate the necessity for such buffers in order to achieve the purposes identified in DMMC 16.10.030.

(c) In cases where the City Manager or the City Manager's designee determines that adequate buffers are not feasible, and that the impact upon the habitat conservation area may be severe, the City Manager or the City Manager's designee may prohibit development of the subject habitat conservation and buffer area.

(d) In cases where the City Manager or the City Manager's designee determines that adequate buffers are not feasible, but that the environmental impacts associated with the proposal would not be so severe as to warrant a prohibition of all development, the applicant shall undertake alternative on-site or off-site mitigation measures specified by the City Manager or the City Manager's designee. Alternative mitigation measures include, but are not limited to, a financial contribution to projects or programs which seek to improve environmental quality within the same fish and wildlife habitat conservation area. Such financial contribution shall be of an amount sufficient to fund mitigation measures commensurate with the adverse impact being mitigated.

(e) Any approval of alterations or impacts to a habitat conservation area shall be supported by the best available science such as the Washington Department of Fish and Wildlife management recommendations for priority habitats and species.

(f) When appropriate due to the type of habitat or species present or the project area conditions, the City Manager or the City Manager's designee may require a critical areas study. If the habitat conservation area is also classified as a stream, lake, pond or a wetland, then the stream, lake, pond or wetland protection standards shall apply and habitat management shall be addressed as part of the stream, lake, pond

or wetland review; provided, that the City may impose additional requirements when necessary to provide for protection of the habitat conservation areas consistent with this chapter. The City Manager or the City Manager's designee may require the following site and proposal related information with the critical areas study:

(i) Identification of any federal or state listed endangered, threatened, sensitive or candidate species that have a primary association with habitat on or adjacent to the project area, and an assessment of potential project impacts to the species;

(ii) A discussion of any federal or state management recommendations, including Washington Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;

(iii) A discussion of any ongoing management practices that will protect habitat after the project site has been developed, including any proposed monitoring, maintenance, and adaptive management programs; and

(iv) When appropriate due to the type of habitat or species present or the project area conditions, the City Manager or the City Manager's designee may also require the habitat management plan to include an evaluation by the state Department of Fish and Wildlife, local Native American Indian tribe, or other qualified professional regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate.

(2) Specific habitats. If a use, activity or development is within, adjacent to, or likely to affect one or more specific fish and/or wildlife habitat conservation areas, the following provisions shall apply:

(a) Endangered, threatened, and sensitive species.

(i) No development shall be allowed within a habitat conservation area or buffer with which state or federally endangered, threatened, or sensitive species have a primary association, except that which is provided for by a management plan established by the Washington Department of Fish and Wildlife or applicable state or federal agency.

(ii) Whenever activities are proposed adjacent to a habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a special environmental study prepared by a qualified professional and approved by the City. Approval for alteration of land adjacent to the habitat conservation area or its buffer shall not occur prior to consultation with the Washington Department of Fish and Wildlife for animal species, the Washington State Department of Natural Resources for plant species, and other appropriate federal or state agencies.

(iii) Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292).

(b) Anadromous fish.

(i) All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:

(A) Activities shall be timed to occur only during the allowable work window as designated by the Washington Department of Fish and Wildlife for the applicable species;

(B) An alternative alignment or location for the activity is not feasible;

(C) The activity is designed so that it will not degrade the functions or values of the fish habitat or other critical areas;

(D) Shoreline erosion control measures shall be designed to use bioengineering methods or soft armoring techniques, according to an approved special environmental study; and

(E) Any impacts to the functions or values of the habitat conservation area are mitigated in accordance with an approved special environmental study.

(ii) Structures that prevent the migration of salmonids shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided to prevent fish migrating downstream from being trapped or harmed.

(iii) Filling of aquatic habitats, when authorized by the City of Des Moines Shoreline Master Program shall not adversely impact anadromous fish or habitat or shall mitigate any unavoidable impacts and shall only be allowed for a water-dependent use.

Sec. 76. 16.10.280. Area of special flood hazard - Development standards - Buffers and disturbance limitations. If an area of special flood hazard is located on or adjacent to a development site, all activities on the site shall be in compliance with the following requirements and restrictions:

(1) The provisions of chapters 11.08 and 16.15 DMMC.

(2) Prior to approval of any development proposal within an area of special flood hazard, special environmental studies must demonstrate that the proposed development and related construction activities will not result in an increase in the frequency, severity, or magnitude of flooding on the development site or on properties within the same hydrologic system.

Sec. 77. 16.10.290. Limited density transfer.

(1) Density and floor area calculation. The calculation of potential dwelling units in residential development proposals and allowable floor area in commercial development proposals shall be determined by the ratio of developable area to undevelopable critical area of the development site. The following formula for density and floor area calculations is designed to provide compensation for the preservation of critical areas, flexibility in design, and consistent treatment of different types of development proposals. The formula shall apply to all residential zones (including PUD) and all commercial zones.

(2) Formulas. The maximum number of dwelling units (DU) for a site which contains undevelopable critical areas is equal to:

> [(Developable Area) divided by (Minimum Lot Area/DU)] + [(Undevelopable Area) divided by (Minimum Lot Area/DU) (Development Factor)] = Maximum Number of Dwelling Units.

The maximum amount of commercial floor area for a site which contains undevelopable critical areas is equal to:

> [(Maximum Permitted Floor Area/Lot Area) (Developable Area)] + [(Maximum Permitted Floor Area/Lot Area) (Undevelopable Area) (Development Factor)] = Maximum Amount of Floor Area.

Developable critical areas shall receive full credit towards calculating the number of dwelling units or floor area.

(3) Development factor. The development factor is a number to be used in calculating the number of dwelling units or the maximum allowable floor area for a site which contains undevelopable critical areas. The development factor is derived from the following table:

Undevelopable Environmentally Critical Area as Percentage of Site (Percent)	Development Factor
1 - 10	.30
11 - 20	.27
21 - 30	.24
31 - 40	.21
41 - 50	.18
51 - 60	.15
61 - 70	.12
71 - 80	.09
81 - 90	.06
91 - 99	.03

Sec. 78. 16.10.300. Development exceptions. Exceptions to the development restrictions and standards set forth in DMMC 16.10.100 through 16.10.280 shall be permitted pursuant to the following provisions:

(1) Emergencies. The City Manager or the City Manager's designee may approve improvements that are necessary to respond to emergencies that threaten the public health and safety, or public development proposals when he/she determines that no reasonable alternative exists and the benefit outweighs the loss. Emergencies shall be verified by a licensed engineer.

(2) Drainage facilities.

(a) Wetlands, streams and their buffers shall not be altered for use as any private drainage facility. Drainage facilities near these areas shall satisfy all requirements of the Surface Water Design Manual.

(b) Wetlands, streams and their buffers may be altered for use as a public drainage facility; provided, that all requirements of the Surface Water Design Manual and all other local, state, and federal laws are satisfied, and so long as increased and multiple natural resource functions are achievable and the benefits outweigh the lost resource. The City Manager or the City Manager's designee may approve drainage

facilities in a wetland or stream only where he/she determines that long-term impacts are minimal or where there are no practicable or reasonable alternatives and mitigation is provided.

(c) Ravine sidewalls and bluffs and their buffers shall not be altered for use as any private facility, but may be altered for a public facility if all requirements of the Surface Water Design Manual are satisfied. Drainage facilities on hillsides shall satisfy all requirements of the Surface Water Design Manual.

(3) Trails and trail-related facilities. Public and private trails and trail-related facilities, such as picnic tables, benches, interpretive centers and signs, viewing platforms, and campsites, shall be allowed, but use of impervious surface shall be minimized. Trails and trail-related facilities shall be avoided within wetlands and streams. The City Manager or the City Manager's designee may approve such trails and facilities only when he/she determines that there are no practicable or reasonable upland alternatives. Trail planning, construction, and maintenance shall adhere to the following additional criteria:

(a) Trails and related facilities shall, to the extent feasible, be placed on existing levees, road grades, utility corridors, or any other previously disturbed areas; and

(b) Trails and related facilities shall be planned to minimize removal of trees, shrubs, snags, and important wildlife habitat; and

(c) Trail construction and maintenance shall follow the U.S. Forest Service "Trails Management Handbook" (FSH 2309.18, June 1987) and "Standard Specifications for Construction of Trails" (EM-7720-102, June 1984) or as amended; and

(d) Viewing platforms, interpretive centers, campsites, picnic areas, benches, and access to them shall be designed and located to minimize disturbance; and

(e) Trails and related facilities shall provide water quality protection measures to assure that runoff from them does not directly discharge to wetlands or streams; and

(f) Within the buffer, trails and trail-related facilities shall be aligned and constructed to minimize disturbance to wetland and stream functions and values.

(4) Utility and roadway construction. Construction of utilities and roadways shall be avoided within critical areas. The City Manager or the City Manager's designee may approve utilities and/or roadways in critical areas and their buffers only when he/she determines that there are not practicable or reasonable alternatives. Utility and roadway corridor alignment, construction, restoration, and maintenance shall adhere to the following additional criteria:

(a) Corridor alignment shall follow a path of least impact to the functions of critical areas;

(b) Corridor construction and maintenance shall maintain and protect the hydrologic and hydraulic functions of wetlands and streams and the stability of ravine sidewalls and bluffs;

(c) Corridors shall be fully revegetated with native vegetation upon completion of construction pursuant to the development standards set forth in DMMC 16.10.100 through 16.10.280 pursuant to the development standards set forth in DMMC 16.10.100 through 16.10.280;

(d) Any pipeline crossing of a stream channel shall employ one or more of the following measures:

(i) Jacked or bored under active stream channel starting outside the ordinary high water mark;

(ii) Suspension over the active channel; or

(iii) Restoration of functions and values of natural stream channel features where channel disturbance is unavoidable;

(e) Any required construction or maintenance roads shall be the minimum width necessary to gain access. Roads shall be maintained without use of herbicides and, when specified by the City Manager or the City Manager's designee, shall be available for use as a trail. Roads necessary for construction or maintenance purposes shall closely approximate the location of the utility and/or primary roadway to minimize disturbance; and

(f) Within a required buffer area, utilities and roadways shall be aligned and constructed to minimize disturbance to critical area functions and values.

(5) Time limitation. A development exception automatically expires and is void if the applicant fails to file for a building permit or other necessary development permit within one year of the effective date of the development exception, unless either:

(a) The applicant has received an extension for the development exception pursuant to this section; or

(b) The development exception approval provides for a greater time period.

(6) Time extension. The City Manager or the City Manager's designee may extend a development extension, not to exceed one year, if:

(a) Unforeseen circumstances or conditions necessitate the extension of the development exception; and

(b) Termination of the development exception would result in unreasonable hardship to the applicant, and the applicant is not responsible for the delay; and

(c) The extension of the development exception will not cause adverse impacts to critical areas.

Sec. 79. 16.10.310 Unauthorized critical area alterations and enforcement.

(1) When a critical area or its buffer has been altered in violation of this chapter, all ongoing development work shall stop and the critical area shall be restored. The City Manager or the City Manager's designee shall have the authority to issue a stop work order to cease all ongoing development work, and order restoration, rehabilitation, or replacement measures at the owner's or other responsible party's expense to compensate for violation of provisions of this chapter. All restoration shall follow an approved restoration plan pursuant to the provisions of this chapter and meet the following minimum performance standards:

(2) Minimum performance standards for restoration.

(a) For alterations to critical aquifer recharge areas, frequently flooded areas, wetlands, and habitat conservation areas, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:

(i) The historic structural and functional values shall be restored, including water quality and habitat functions;

(ii) The historic soil types and configuration shall be replicated;

(iii) The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities. The historic functions and values should be replicated at the location of the alteration; and

(iv) Information demonstrating compliance with the requirements of this chapter shall be submitted to the City Manager or the City Manager's designee.

(b) For alterations to flood and geological hazards, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

(i) The hazard shall be reduced to a level equal to, or less than, the predevelopment hazard;

(ii) Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and

(iii) The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.

(3) Site investigations. The City Manager or the City Manager's designee is authorized to make site inspections and take such actions as are necessary to enforce this chapter. The City Manager or the City Manager's designee shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.

Sec. 80. 16.10.320. Tracts and easements.

(1) Environmentally Critical Area tracts or easements. Separate environmentally critical area tracts or easements shall be used to protect critical areas that are to remain undeveloped pursuant to this chapter. The tracts or easements shall impose upon all present and future owners and occupiers of land subject to the tracts or easements the obligation, enforceable on behalf of the public by the City, to leave the areas of the tracts or easements permanently undisturbed. In a single-family residential zone, any lots containing a critical area easement shall be of a dimension of not less than 5,000 square feet, exclusive of such easement.

(2) Permanent marking. Where determined by the City Manager or the City Manager's designee to reduce the likelihood of future intrusion into a critical area, the common boundary between a separate environmentally critical area tract or easement and the adjacent land shall be permanently identified

and marked with permanent wood or metal signs on wood or metal posts. Sign location and wording shall be approved by the City Manager or the City Manager's designee during review of the development proposal and are exempt from the sign code, chapter 18.200 DMMC. The size, coloring, lettering, spacing, placement, and height above the ground surface shall be as established by the City Manager or the City Manager's designee.

Sec. 81. 16.10.330. Securities and enforcement.

(1) Performance securities. The City Manager or the City Manager's designee shall require the applicant of a development proposal to post a cash performance bond or other acceptable security to guarantee that the applicant will properly construct all structures and improvements required by this chapter. The security shall guarantee that the work and materials used in construction are free from defects. All securities shall be on a form approved by the director. Until written release of the security, the principal or surety may not be terminated or canceled. The director shall release the security upon determining that all structures and improvements have been satisfactorily constructed and upon the posting by the applicant of a maintenance security if one is required.

(2) Maintenance securities. The director shall require the applicant to post a cash maintenance bond or other acceptable security guaranteeing that structures and improvements required by this chapter satisfactorily perform for a minimum of two years, or, in the case of required mitigation improvements, up to five years after they have been constructed and approved. All securities shall be on a form approved by the City Manager or the City Manager's designee. Until written release of the security, the principal or surety may not be terminated or canceled. The director shall release the security upon determining that performance standards established for evaluating the effectiveness and success of the structures and improvements have been satisfactorily met. The performance standards shall be agreed upon by the City Manager or the City Manager's designee and the applicant and contained in the mitigation plan developed and approved during the review process.

(3) Renewable bonds. Any bonds required by this section may be in the form of one-year bonds to be renewed as appropriate.

Sec. 82. 16.10.340. Environmentally critical area mitigation fund. The City Manager shall be authorized to establish an environmentally critical area mitigation fund solely for use in enforcing and implementing environmentally critical area codes. Upon establishment of the fund, all moneys obtained from enforcement of the provisions of this chapter shall be deposited in this fund.

Sec. 83. 16.10.350. Surface Water Design Manual. Pursuant to RCW 35.21.180 the King County, Washington "Surface Water Design Manual," including all subsequent revisions, is adopted by reference as the "Surface Water Design Manual for the City of Des Moines." A current copy of the King County, Washington "Surface Water Design Manual" adopted by reference in this section shall be maintained on file in the office of the City Clerk and shall be available for public inspection.

Sec. 84. 16.10.360 Surface water contamination - Determination.

(1) The City shall determine if surface water pollution has occurred or is occurring by:

(a) Utilizing the federal Environmental Protection Agency quality criteria for freshwater bodies and the state Department of Ecology water quality standards for surface waters of the state listed in chapter 173-201A WAC; or

(b) Requesting investigations by other agencies having regulatory authority regarding surface water pollution.

(2) When the City or the investigating agency determines surface water quality pollution has occurred, notice shall be provided to the alleged source of pollutants identifying the specific surface water quality problem and requesting that the problem be remedied.

(3) The City shall pursue City, state and/or federal enforcement actions when any surface water pollution is verified.

Sec. 85. 16.10.370. Surface water contamination - Compliance required - Penalty.

(1) No person shall defile, pollute, or contaminate:

(a) The surface waters of the City;

(b) A stream running through or into the corporate limits of the City; or

(c) A stream running through or into the corporate limits of the City, and for a distance of five miles beyond the corporate limits of the City.

(2) A violation of or failure to comply with this section is a class 1 civil infraction.

(3) Each day upon which a violation occurs constitutes a separate violation.

Sec. 86. 16.10.380. Surface water contamination - Penalty not exclusive remedy. The City reserves the right to pursue other appropriate civil actions under state and federal law, including a citizen suit under the federal Clean Water Act.

Sec. 87. 16.10.390. Interpretation. This chapter shall be liberally construed to give full effect to its objectives and purposes.

Sec. 88. 16.10.400. Appeal. Discretionary decisions of the City Manager made in accordance with this chapter are subject to appeal as either an appeal from administrative decisions and may be appealed to the Hearing Examiner pursuant to DMMC 18.20.150 and 18.20.160 and chapter 18.240 DMMC, or as part of the underlying application process, as set forth in chapter 18.20 DMMC.

Chapter 16.15
Flood Hazard Areas

Sections:

16.15.010 Title.
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16.15.080 Warning and disclaimer of liability.
16.15.090 Establishment of development permit.
16.15.100 Designation and Duties and responsibilities of the local administrator.
16.15.110 Use of other base flood data (In A and V Zones).
16.15.120 Information to be obtained and maintained.
16.15.130 Alteration of watercourses.
16.15.140 Interpretation of FIRM boundaries.
16.15.150 Appeal and exemptions.
16.15.160 Exemptions.
16.15.170 Provisions for flood hazard protection - General standards.
16.15.180 Specific standards.
16.15.190 AE and AI-30 zones with base flood elevations but no floodways.
16.15.200 Floodways.
16.15.210 Wetlands management.
16.15.220 Compliance with federal and state permits required.
16.15.230 Coastal high hazard area.
16.15.240 Encroachments.

Sec. 89. 16.15.010. Title. This chapter shall be entitled "Flood Hazard Areas Code."

Sec. 90. 16.15.020. Application. This chapter applies to all development on all properties within areas of flood hazard, as further defined by this chapter.

Sec. 91. 16.15.030. Purpose. The purpose of this chapter is to implement the provisions of chapter 86.16 RCW in

coordinating the flood plain management regulation aspects of the National Flood Insurance Program.

Sec. 92. 16.15.040. Authority. This chapter is adopted pursuant to chapter 18.86 RCW, chapter 173-158 WAC and WAC 173-220-030.

Sec. 93. 16.15.050. Basis for establishing the areas of special flood hazard. The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for King County, Washington and Incorporated Areas," Volumes 1 through 3, dated November 8, 1999, with accompanying flood insurance maps is adopted by reference and declared to be a part of this chapter. Not less than one copy of the flood insurance study shall be filed in the Building Official's office and be available for use and examination by the public.

Sec. 94. 16.15.060. Abrogation and greater restrictions. This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail. The best available information for Flood Hazard Area identification as outlined in Section 4.3-2 shall be the basis for regulation until a new FIRM is issued that incorporates data utilized under Section 4.3-2.

Sec. 95. 16.15.070. Interpretation. In the interpretation and application of this chapter, all provisions shall be:

(1) Considered as minimum requirements; and

(2) Liberally construed in favor of the governing body; and

(3) Deemed neither to limit nor repeal any other powers granted to the City under state statutes.

Sec. 96. 16.15.080. Warning and disclaimer of liability. The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create any legal liability on the part of the City, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any lawfully-made administrative decision.

Sec. 97. 16.15.090. Establishment of development permit. A development permit shall be obtained before construction or development begins within any area of flood hazard established in DMMC 16.15.060. The permit shall be for all structures including manufactured homes and for all other development including fill and other activities. Application for a development permit shall be made on forms furnished by the local administrator and shall include, but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, on-site storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information shall be furnished by the applicant:

(1) Elevation, in relation to mean sea level of the lowest floor (including basement) of all structures; and

(2) Elevation in relation to mean sea level to which any structure has been floodproofed; and

(3) Certification by a registered professional engineer or architect that the flood-proofing methods for any nonresidential structure meet the floodproofing criteria in DMMC 16.15.180(2); and

(4) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development; and

(5) A report reviewed and approved by an appropriate state or federal agency(ies) which identifies and assesses habitat impacts, if any, and proposes conservation methods consistent with federal permitting requirements. Preparation of the report shall be the responsibility of the applicant and shall utilize the expertise of a biologist specializing in wetland, riverine, or coastal zone ecology.

Sec. 98. 16.15.100. Designation and duties and responsibilities of the local administrator. The Local Administrator is hereby appointed to administer and implement this Ordinance by granting or denying development permit applications in accordance with its provisions.

Duties of the local administrator shall include, but not be limited to:

(1) Reviewing all development permits to determine that the permit requirements of this chapter have been satisfied; and

(2) Reviewing all development permits to determine that all necessary permits have been obtained from those federal, state, or local governmental agencies from which prior approval is required; and

(3) Reviewing all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of DMMC 16.15.200(1) are met.

Sec. 99. 16.15.110. Use of other base flood data (in A and V Zones). When base flood elevation data has not been provided (in A or V Zones) in accordance with DMMC 16.15.050, the local administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to administer DMMC 16.15. 180(1), (2), (3), and (4) and 16.15.200.

Sec. 100. 16.15.120. Information to be obtained and maintained.

(1) Where base flood elevation data is provided through flood insurance studies or as in DMMC 16.15.110, obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.

(2) For all new or substantially improved floodproofed structures where base flood elevation data is provided through the FIS, FIRM, or as required in 16.15.130:

(a) Obtain and record the actual elevation (in relation to mean sea level) to which the structure was floodproofed; and

(b) Maintain the floodproofing certifications required in DMMC 16.15.090(3).

(3) Maintain for public inspection all records pertaining to the provisions of this chapter.

(4) In coastal high hazard areas, certification shall be obtained from a registered professional engineer or architect that the structure is securely anchored to adequately anchored pilings or columns in order to withstand high velocity waters, storm surges, and tsunamis.

Sec. 101. 16.15.130. Alteration of watercourses.

(1) Notify adjacent communities and the state Department of Ecology (DOE) prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.

(2) Require that maintenance is provided within the altered or relocated portion of the watercourse so that the flood-carrying capacity is not diminished.

Sec. 102. 16.15.140. Interpretation of FIRM boundaries. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in DMMC 16.15.170. Such appeals shall be granted consistent with the standards of Section 60.6 of Appeals and Regulations of the National Flood Insurance Program (44 C.F.R. 59-76).

Sec. 103. 16.15.150. Appeal and exemptions. Appeals of administrative orders, decisions or determinations under this chapter shall be processed pursuant to chapter18.20 DMMC.

Sec. 104. 16.15.160. Exemptions.

(1) When considering an application for an exemption to any provisions of this chapter, the Hearing Examiner shall consider all technical evaluations, all relevant factors and standards specified in other sections of this chapter, and:

(a) The danger that materials may be swept onto other lands to the injury of others; and

(b) The danger to life and property due to flooding or erosion damage; and

(c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner; and

(d) The importance of the services provided by the proposed facility to the community; and

(e) The necessity to the facility of a waterfront location, where applicable; and

(f) The availability of alternate locations for the proposed use which are not subject to flooding or erosion damage; and

(g) The compatibility of the proposed use with existing and anticipated development; and

(h) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area; and

(i) The safety of access to the property in times of flood for ordinary and emergency vehicles; and

(j) The expected height, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
(k) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

(2) Conditions/criteria for exemptions.

(a) Generally, the only condition under which an exemption from the elevation standard may be granted shall be for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below base flood level; provided, that the exemption criteria listed above have been fully considered.

(b) Exemptions may be granted for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedure set forth in this section.

(c) Exemptions shall not be granted within a designated floodway if any increase in flood levels during the base flood discharge would result.

(d) Exemptions shall only be granted upon a determination that the exemption is the minimum necessary, considering the flood hazard, to afford relief.

(e) Exemptions shall only be granted upon:

(i) A showing of good and sufficient cause; and

(ii) A determination that failure to grant the exemption would result in exceptional hardship to the applicant; and

(iii) A determination that the granting of an exemption will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.

(f) Exemptions as interpreted in the National Flood Insurance Program are based on the general zoning law principle that such exemptions pertain to a physical piece of property; such exemptions are not personal in nature and do not pertain to a structure, inhabitants thereof, or economic or financial circumstances.

(g) Exemptions may be granted for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing where it can be determined that such action has a low damage potential, complies with all other exemption criteria except DMMC 16.15.180(1)(b), and otherwise complies with the general standards of this chapter.

(h) Any applicant to whom an exemption is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

Sec. 105. 16.15.170. Provisions for flood hazard protection - General standards. In all areas of special flood hazards, the following standards are required:

(1) Anchoring.

(a) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

(b) All manufactured homes must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques FEMA 85).

(2) Construction materials and methods.

(a) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(b) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

(c) Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(3) Utilities.

(a) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

(b) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

(c) On-site waste disposal systems shall be located to avoid impairment to such systems or contamination

from such systems during flooding. Locating such equipment below the base flood elevation may cause annual flood insurance premiums to be increased.

(4) Subdivision proposals.

(a) All subdivision proposals shall be consistent with the need to minimize flood damage.

(b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flooding.

(c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.

(d) Base flood elevation data shall be provided for subdivision proposals and other proposed developments which contain at least 10 lots or one acre, whichever is less. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

(5) Review of building permits. Where elevation data is not available either through the flood insurance study or from another authoritative source, applications for building permits shall be reviewed by the Building Official to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

Sec. 106. 16.15.180. Specific standards. In all areas of special flood hazards where base flood elevation data has been provided as set forth in DMMC 16.15.060 or 16.15.130, the following provisions are required:

(1) Residential construction.

(a) New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation.

(b) Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

(i) A minimum of two openings having a total net area of not less than one square inch for every one square foot of enclosed area subject to flooding shall be provided.

(ii) The bottom of all openings shall be no higher than one foot above grade.

(iii) Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of flood waters.

(2) Nonresidential construction. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to or above the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

(a) Be floodproofed so that below one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water; and

(b) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

(c) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of

practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the local administrator as required by Section 106.3.4.1 IBC and Section 106.1 IRC.

(d) Nonresidential structures that are elevated, but not floodproofed, must meet the same standards for space below the lowest floor as described in subsection (1)(b) of this section.

(e) Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g., a building floodproofed to one foot above the base flood level will be rated as at the base flood level).

(3) Manufactured homes. All manufactured homes in the floodplain to be placed or substantially improved on sites shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated one foot or more above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement. This subsection applies to new manufactured homes placed on any site, manufactured homes in a new or expanded manufactured home park or subdivision, and new manufactured homes in an existing manufactured home park and subdivision.

(4) Recreational vehicles. *(44 CFR 60.3(c)(14))* Recreational vehicles placed on sites are required to either:

(a) Be on the site for fewer than 180 consecutive days, *(or)*

(b) Be fully licensed and ready for highway use, on wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or

(c) Meet the requirements of DMMC 16.15.170 and 16.15.180 above and the elevation and anchoring requirements for manufactured homes.

Sec. 107. 16.15.190. AE and AI-30 zones with base flood elevations but no floodways. In areas with base flood elevations (but a regulatory floodway has not been designated), no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

Sec. 108. 16.15.200. Floodways. Located within areas of special flood hazard established in DMMC 16.15.050 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

(1) Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels during the occurrence of the base flood discharge.

(2) Construction or reconstruction of residential structures is prohibited within designated floodways, except for:

(a) repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and

(b) repairs, reconstruction or improvements to a structure, the cost of which does not exceed 50 percent of the market value of the structure either,

(i) before the repair, or reconstruction is started, or

(ii) if the structure has been damaged, and is being restored, before the damage occurred. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or to structures identified as historic places, may be excluded in the 50 percent.

(3) If subsection (1) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of DMMC 16.15.190 and 16.15.200.

Sec. 109. 16.15.220. Wetlands management. To the maximum extent possible, each development subject to this chapter shall avoid the short-term and long-term adverse impacts associated with the destruction or modification of wetlands, especially those activities which limit or disrupt the ability of the wetland to alleviate flooding impacts. The following process shall be implemented for such development:

(1) Review proposals for development within base floodplains for their possible impacts on wetlands located within the floodplain.

(2) Ensure that development activities in or around wetlands do not negatively affect public safety, health, and welfare by disrupting the ability of the wetland to reduce flood and storm drainage.

(3) Request technical assistance from the Department of Ecology in identifying wetland areas. Existing wetland map information from the National Wetlands Inventory (NWI) may be used in conjunction with the area's FIRM to prepare an overlay zone indicating critical wetland areas deserving special attention.

Sec. 110. 16.15.230. Compliance with federal and state permits required. No approval of an application for a development permit within an area of special flood hazard shall be issued without first demonstrating compliance with all necessary federal and state environmental permit requirements, including, but not limited to, Clean Water Act, 33 U.S.C. 1344, Section 404 permits and Endangered Species Act, 16 U.S.C. 1531, Section 10 permits.

Sec. 111. 16.15.240. Coastal high hazard area. Located within areas of special flood hazard established in DMMC 16.15.050 are coastal high hazard areas, which are designated as zones V1-V30, VE, and/or V. These areas have special flood hazards associated with high velocity waters from surges and, therefore, in addition to meeting all provisions in this chapter, the following provisions shall also apply:

(1) All new allowable construction and substantial improvement in zones V1-V30 and VE (V if base flood elevation data is available) shall be elevated on pilings and columns so that:

(a) The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood level; and

(b) The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).

(c) A registered professional engineer or architect shall develop or review the structural design, specifications, and plans for the construction and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of subsections (1)(a) and (b) of this section.

(2) Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the

lowest floor (excluding pilings and columns) of all new and substantially improved structures in zones V1-V30 and VE, and whether or not such structures contain a basement. The local administrator shall maintain a record of all such information.

(3) All new construction shall be located landward of the reach of mean high tide.

(4) Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with nonsupporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

(a) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and

(b) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum wind and water loading values to be used in this determination shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).

(5) If breakaway walls are utilized, such enclosed space shall be usable solely for parking of vehicles, building access, or storage. Such space shall not be used for human habitation.

(6) Prohibit the use of fill for structural support of buildings.

(7) Prohibit manmade alteration of sand dunes which would increase potential flood damage.

(8) Manufactured homes proposed in coastal high hazard areas must meet all V zone standards.

Sec. 112. 16.15.250. Encroachments. The cumulative effect of any proposed development, when combined with all other existing and anticipated development, shall not increase the water surface elevation of the base flood more than one foot at any point.

Chapter 16.20
Shoreline Master Program

Sec. 113. 16.20.010. Shoreline Master Program - Adopted. The "City of Des Moines Shoreline Master Program" attached as Exhibit "A" to the Ordinance codified in this chapter, dated January 27, 2011, and consisting of 133 pages, and Appendix "A" entitled "Shoreline Inventory and Characterization Report," dated March 2005, are adopted as the official Shoreline Master Program for the City and are available at the City Clerk's office and on the City's website, www.desmoineswa.gov.

Sec. 114. Savings clause. Title 16 DMMC, which is repealed and replaced by this Ordinance, shall remain in force and effect until the effective date of this Ordinance.

Sec. 115. Repealer. Title 16 DMMC as presently constituted and codified is hereby repealed in its entirety along with all underlying ordinances.

Sec. 116. Severability - Construction.

(1) If a section, subsection, paragraph, sentence, clause, or phrase of this Ordinance is declared unconstitutional or invalid for any reason by any court of competent

jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance.

(2) If the provisions of this Ordinance are found to be inconsistent with other provisions of the Des Moines Municipal Code, this Ordinance is deemed to control.

Sec. 117. Effective date. This Ordinance shall take effect and be in full force on January 1, 2014.

PASSED BY the City Council of the City of Des Moines this 24th day of October, 2013 and signed in authentication thereof this 24th day of October, 2013.

MAYOR

APPROVED AS TO FORM:

City Attorney

ATTEST:

City Clerk

Published: October 29, 2013

Effective Date: January 1, 2014

LEGAL NOTICE

SUMMARY OF ADOPTED ORDINANCE

CITY OF DES MOINES

ORDINANCE NO. 1583, Adopted October 24, 2013.

DESCRIPTION OF MAIN POINTS OF THE ORDINANCE:

This Ordinance relates to the environment; replaces Title 16 DMMC; and repeals the previously codified provisions of Title 16 DMMC and underlying Ordinances.

The full text of the Ordinance will be mailed without cost upon request.

Bonnie Wilkins
City Clerk

Published: October 24, 2013