

Chapter 4

Flood Plain Zoning

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Article A

**STATUTORY AUTHORIZATION, FINDING OF FACT,
STATEMENT OF PURPOSE AND TITLE**

Sec. 16-4-1 Statutory Authorization.

This Zoning Ordinance is adopted pursuant to the statutory authorization contained in Sections 59.69, 59.692, and 87.30 of the Wisconsin Statutes.

NOTE: This section of the Ordinance spells out the statutory authority for a municipality to adopt the Ordinance. The Floodplain Zoning Ordinance is designed to meet the requirements of Section 87.30, Wisconsin Statutes. Cities and villages are authorized by Section 62.23 and 61.35, Wisconsin Statutes, respectively, to adopt local zoning Ordinances. County Zoning is authorized under Sections 59.69 and 59.692, Wisconsin Statutes.

Sec. 16-4-2 Finding of Fact.

Uncontrolled development and use of the floodplains, rivers, or streams of the County of Columbia would adversely affect the public health, safety, convenience, general welfare, and impair its tax base.

Sec. 16-4-3 Statement of Purpose.

The purpose of these rules is to provide a uniform basis for the preparation, implementation and administration of sound floodplain regulations for all floodplains within the unincorporated areas of the county to:

- (a) Protect life, health and property;
- (b) Minimize expenditures of public monies for costly flood control projects;
- (c) Minimize rescue and relief efforts, generally undertaken at the expense of the tax paying public;
- (d) Minimize business interruptions which usually result in the loss of local incomes;
- (e) Minimize damage to public facilities on the floodplains such as water mains, sewer lines, streets and bridges;
- (f) Minimize the occurrence of future flood blight areas on floodplains; and
- (g) Discourage the victimization of unwary land and home buyers.

NOTE: Section 16-4-3 states that the purpose and intent of these regulations is to reduce flood losses and describes in a very general manner the method by which the Ordinance attempts to reduce those flood losses. The important thing to remember here is that the regulations and standards contained within the Ordinance are not geared toward prohibiting all development but are intended to guide development so that it is protected from the effects of flooding.

Sec. 16-4-4 Title.

Floodplain Zoning Ordinance for the County of Columbia, Wisconsin.

Article B

GENERAL PROVISIONS

Sec. 16-4-10 Areas to be Regulated.

- (a) Areas regulated by this Ordinance shall include all areas, within the unincorporated limits of the County of Columbia, Wisconsin, that would be covered by the "regional flood" as defined in Section 16-4, Article K, (aj).
- (b) The boundary of the floodplain district where shown, the flood way, flood fringe, and flood plain no. II district shall be those areas designated as floodplain on the Flood Insurance Maps and profiles from the Flood Insurance Study, Columbia County, Wisconsin, prepared by the Federal Emergency Management Agency.
 - (1) The Flood Plain No. II district delineation is based on information supplied by the Department on May 6, 1983.
 - (2) The maps dated September 15, 1983 are the official floodplain zoning maps for the community and have been approved by the Department of Natural Resources and the Federal Emergency Management Agency (FEMA), and are on file in the office of the County Clerk. If more than one map is referenced the most restrictive shall apply.

NOTE: Sections 16-4-10 (a) and (b) describe the areas to be regulated by the Ordinance and defines the official floodplain zoning map(s) for the municipality. Section 16-4-10 (b) should reflect the most current floodplain data available for the municipality. In municipalities where there has been no Flood Insurance Study conducted, the best available mapping information usually is the Flood Hazard Boundary Map (FHBM). The FHBM does not distinguish the floodway or flood fringe districts nor does it provide floodplain elevations. In municipalities where there has been a Flood Insurance Study or other detailed floodplain study conducted, elevations can be cross referenced on regional flood profiles contained within the study reports. The municipality will then have access to data that will assist them in determining what the flood elevations are for different areas within the floodplain.

Sec. 16-4-11 Establishment of Districts.

The regional floodplain areas within the jurisdiction of this Ordinance are hereby divided into four districts defined as follows:

- (a) The Floodway District (FW) consists of the channel of a river or stream and those portions of the floodplain adjoining the channel that are required to carry and discharge the regional flood waters.
- (b) The Flood Fringe District (FF) consists of that portion of the floodplain between the regional flood limits and the floodway.
- (c) The General Floodplain District (GFD) consists of all areas which have been or may be hereafter covered by flood water during the regional flood. It includes both the floodway and flood fringe districts.
- (d) The Flood Plain No. II District is that portion of the floodplain outside of the floodway which is covered by flood waters and required for retention and storage of flood waters associated with the regional flood.

NOTE: At this point, it is important to check the floodplain delineations on the official floodplain zoning map(s) described in Section 16-4-10 (b). In areas where no engineering data is compiled, floodway and flood fringe limits must be determined to decide if the use can be permitted and what effect the development will have on flood heights and velocities. In areas that have had such data completed, the floodway and flood fringe will be delineated.

Sec. 16-4-12 Locating Floodplain Boundaries.

Where an apparent discrepancy exists between the location of the outermost boundary of the flood fringe district or general floodplain district shown on the official floodplain zoning map and actual field conditions, the location of the district boundary line shall be initially determined by the Director of Planning and Zoning using the criteria set forth in paragraphs 16-4-12 (a) or (b). Where the Director of Planning and Zoning finds that there is a significant difference between the district boundary shown on the map and the actual field conditions, the map shall be amended using the procedures established in Section 16-4, Article I. Disputes between the Director of Planning and Zoning and an applicant on the location of the district boundary line shall be settled according to Section 16-4-83 (c).

- (a) Where flood profiles exist, the location of the district boundary line shall be

determined by the Director of Planning and Zoning using both the scale appearing on the map and the elevations shown on the water surface profile of the regional flood. Where a discrepancy exists between the boundary line location shown on the map and the location indicated by the regional flood elevations and actual field conditions, the regional flood elevations shall govern. A map amendment is required where there is a significant discrepancy between the boundary line shown on the map and the location indicated by the regional flood elevations. The Director of Planning and Zoning shall have the authority to immediately grant or deny a zoning permit on the basis of a district boundary derived from the elevations shown on the water surface profile of the regional flood, whether or not a map amendment is required. The Director of Planning and Zoning shall be responsible for initiating any map amendments required under this section within a reasonable period of time.

- (b) Where flood profiles do not exist, the location of the district boundary line shall be determined by the Director of Planning and Zoning using the scale appearing on the map, visual on-site inspection, and any available information provided by the Department. Where there is a significant difference between the district boundary line shown on the map and actual field conditions, the map shall be amended. Where a map amendment has been approved by both Columbia County and the Department, the Director of Planning and Zoning shall have the authority to grant or deny a zoning permit.

NOTE: In cases where the mapped floodplain boundary lines appear to be in error, the Director of Planning and Zoning may issue a zoning permit if flood profiles exist and the flood elevations shown on the water surface profile for the regional flood indicate clearly that the land in question is above the regional flood elevation and is contiguous to land lying outside the regional floodplain. The Director of Planning and Zoning may require a certified survey map or a statement signed by a registered land surveyor or licensed professional engineer to establish that the proposed development site is in fact above the regional flood elevation. The Director of Planning and Zoning should record the correct boundary on a map other than the official floodplain zoning map, provide a copy of the change to the appropriate Department District Office, and initiate map amendment procedures. Each such map change may be handled separately or may be combined with other proposed text or map amendments, as long as the amendment process is started within a reasonable period of time. When the applicant and the Director of Planning and Zoning disagree on the location of a floodplain boundary line, the Board of Adjustment/Appeals will be required to settle the dispute according to Section 16-4-83 (c). If the Board decides

that the map needs to be changed, no permit may be issued and no work may be commenced until the map has been amended and the amendment has been approved by the Department.

Sec. 16-4-13 Removal of Lands From Floodplain.

Compliance with the provisions of this Ordinance shall not be grounds for removing lands from the floodplain district, unless they are removed by filling to a height of at least two feet above the regional flood elevation, the fill is contiguous to land lying outside the floodplain district, and the map is amended pursuant to Section 16-4, Article I. To remove the land from flood insurance requirements, FEMA must first revise the flood insurance rate map.

NOTE: Property owners who attempt to remove their land from the State floodplain regulation standards should be informed that they are not exempted from the National Flood Insurance Program (NFIP) requirements. In order for flood insurance not to be required, the map would have to be corrected or revised by FEMA. If the map is not corrected or revised by FEMA, the first floor of the structure would have to be above the regional flood elevation to be exempt from the flood insurance purchase requirements and then only after FEMA has issued a Letter of Map Amendment (LOMA). Depending on the area involved and the extent of the proposed development, the property owner should always be advised of the possible involvement and requirements of the NFIP.

Sec. 16-4-14 Compliance.

The use or development of any land or water, a change in the use of any land or water, and the use, change of use, construction, reconstruction, remodeling or expansion of any structure within the areas to be regulated by this Ordinance shall be in compliance with the terms of this Ordinance, and other applicable local, State and Federal regulations.

Sec. 16-4-15 Greater Restrictions.

Where a city, or village zoning Ordinance is more restrictive than the provisions contained in this Ordinance, that Ordinance shall continue in full force and effect to the extent of the greater restrictions, but not otherwise.

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Sec. 16-4-16 Abrogation.

This Ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or private deed restrictions. However, where this Ordinance imposes greater restrictions, the provisions of this Ordinance shall prevail.

Sec. 16-4-17 Interpretation.

In their interpretation and application, the provisions of this Ordinance shall be held to be minimum requirements liberally construed in favor of the governing body, and shall not be deemed a limitation on or repeal of any other powers granted by the Wisconsin Statutes. Where a provision of this Ordinance is required by a standard in Chapter NR 116, Wisconsin Administrative Code, and where the meaning of the Ordinance provision is unclear, the provision shall be interpreted in light of the Chapter NR 116 standards in effect on the date of the adoption of this Ordinance or in effect on the date of the most recent text amendment to this Ordinance.

Sec. 16-4-18 Warning and Disclaimer of Liability.

The degree of flood protection provided by this Ordinance is considered reasonable for regulatory purposes and is based on engineering experience and scientific methods of study. Larger floods may occur or the flood height may be increased by man-made or natural causes such as ice jams or bridge openings restricted by debris. Therefore, this Ordinance does not imply that areas outside of the delineated floodplain or permitted land uses within the floodplain will be totally free from flooding and associated flood damages. Nor does this Ordinance create liability on the part of, or a cause of action against, the County of Columbia or any officer or employee thereof for any flood damage that may result from reliance on this Ordinance.

NOTE: The warning and disclaimer of liability is included within this Ordinance, to clarify the fact that floodplain studies are based, in part, upon engineering judgment and the best information available. Because of variations in engineering judgment and information available, two feet of freeboard above the regional flood elevation is required for all structural development within the floodplain.

Sec. 16-4-19 Severability.

If any portion of this Ordinance is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this Ordinance shall not be affected thereby.

Sec. 16-4-20 General Standards Applicable to all Floodplain Districts.

- (a) Except as provided in paragraph (b), no development shall be allowed in the floodplain which, acting in combination with existing or future similar works, will cause an increase equal to or greater than 0.1 foot (3 cm.) in the height of the regional flood or will adversely affect existing drainage courses or facilities.
- (b) Increases equal to or greater than 0.1 foot (3 cm.) may be permitted, but only if amendments are made to this Ordinance, the official floodplain zoning maps (including floodway lines) and water surface profiles in accordance with Section 16-4, Article I, and only if the total cumulative effect of the proposed development will not increase the height of the regional flood more than 1.0 foot for the affected hydraulic reach of the stream.
- (c) For the purpose of this section, increases in the regional flood elevation shall be calculated:
 - (1) Based upon an equal degree of hydraulic encroachment from the original hydraulic floodway lines for a hydraulic reach on both sides of the river or stream; and
 - (2) Based upon an equal degree of hydrologic encroachment throughout a hydrologic reach of a river or stream to determine the volume of storage area which is lost.

NOTE: In Section 16-4-20 the intent is to require that the impact of any development on other property owners is properly analyzed and accounted for before any development or Ordinance amendments are allowed which will cause increases in the regional flood stage. Development, as defined in Section 16-4, Article K, (I), includes virtually anything that is done within the floodplain. When one property owner proposes to narrow the floodway of a river or stream on one side, an engineering calculation must be made to determine the effect of narrowing the floodway an equal amount on the opposite side of the river, stream, or tributary for a length of stream known as a hydraulic reach. This factor is referred to as equal degree of hydraulic encroachment.

Since it is assumed that most uses in the flood fringe will not obstruct flood flows or cause increases in flood heights because of obstruction, structures or filling can be permitted, providing the standards within the flood fringe district are adhered to. For example, large developments, such as shopping centers or large warehouses, could increase flood heights by removing large areas of land from flood storage. Even small developments acting in combination with

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similar works may cause a downstream increase greater than 0.1 foot (3 cm.). This is particularly true in small watersheds because the impact of storage loss is directly related to the percentage of total stream runoff which the loss of storage represents. Unlike floodway encroachments which cause an increase in upstream flood elevations, loss of storage will cause an increase in downstream elevations because less water will be stored, causing more water to rush downstream, thereby adversely affecting downstream property owners. When developments are proposed which may materially affect the storage capacity, an engineering study would have to be done applying an equal loss of storage uniformly throughout the hydrologic reach.

The reason for applying these standards is to offer equal opportunity for development to all property owners within both the hydraulic and hydrologic reach, while at the same time protecting the rights of all property owners that are adversely affected by an applicant's action. Section 16-4-91 (c) requires easements to be obtained from those property owners that are adversely affected by increases in flood elevations of 0.1 foot or more before any such increase can be allowed.

Before increases to the regional flood stage may be allowed by a municipality, the affected unit of government must amend its water surface profiles, floodplain zoning maps, and zoning Ordinances to reflect the increased flood elevations. Before the municipality can issue such an approval, appropriate legal arrangements must be made with the affected property owners and any affected local units of government for any increased flood elevations on those properties (i.e., flooding easements must be acquired by the developer from those adversely affected). Before becoming effective, all maps and text amendments require the approval of the Department.

- (d) Owners or operators of all existing mobile home parks and mobile home subdivisions located in the regional floodplain (in A-zones on flood hazard boundary maps or flood insurance study maps) shall file an evacuation plan, indicating alternate vehicular access and escape routes, including mobile home hauler routes, with the appropriate local disaster preparedness authorities, and shall provide for adequate surface drainage to minimize flood damage.
- (e) All mobile homes to be placed on a site located in the regional floodplain (in A-zones on flood hazard boundary maps or flood insurance study maps) shall be anchored so they do not float, collapse or move laterally during a flood. Such mobile homes shall be anchored according to following specifications:

- (1) Over-the-top ties shall be provided at each of the four corners of the mobile home, with two additional ties per side at intermediate locations and mobile homes more than fifty (50) feet long shall require one additional tie per side;
- (2) Frame ties shall be provided at each corner of the mobile home with five (5) additional ties per side at intermediate points and mobile homes more than fifty (50) feet long requiring four (4) additional ties per side;
- (3) All components of the anchoring system shall be capable of carrying a force of 4,800 pounds; and
- (4) Any additions to the mobile home shall be similarly anchored.
- (5) The placement of all new mobile homes in addition to the standards listed above, must also meet the residential development standards in the flood fringe as found in Section 16-4-42.

NOTE: The standards addressed in Sections 16-4-20 (d) and (e) are the minimum required NFIP development standards. Be aware that where municipalities prohibit the placement or replacement of mobile homes in flood prone areas, these standards can be modified to reflect the more restrictive development standards.

- (f) For all subdivision proposals, as "subdivision", is defined in Section 236.02 (12), Wisconsin Statutes, and other proposed developments exceeding 5 acres in area or where the estimated cost of the proposed development exceeds \$75,000, the applicant shall provide all computations which are required to show the effects of the proposal on flood heights, velocities and floodplain storage. Further, the applicant shall provide within such proposals regional flood elevation data, and the means to provide adequate surface drainage and to minimize flood damage. In those instances where the applicant is not required to provide computations and where inadequate data exists, the available information may be transmitted to the Department of Natural Resources' District office for a determination of the flood protection elevations and for an evaluation of the effects of the proposal on flood heights, velocities and floodplain storage. Additional information, such as valley cross-sections or survey data may be required by the Department to determine the effects of the proposal. This information shall be obtained from the applicant or the applicant's agent by the county. The provisions of Section 16-4-84 shall apply hereto. The applicant shall provide all data and calculations for any development which would require an amendment to the district boundaries or regional flood profiles.

NOTE: The National Flood Insurance Program (NFIP) requires that,

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"all subdivision proposals and other proposed new developments greater than 50 lots or 5 acres, whichever is the lesser, include within such proposals base flood elevation data." According to NR 116.20 (2)(a)4, Wisconsin Administrative Code, the applicant is required to provide all computations for all subdivisions proposals and all other proposals exceeding 5 acres in area or \$75,000 in value.

Section 236.02 (12), Wisconsin Statutes, defines "subdivision" as the division of a tract of land where five or more parcels or building sites of 1 ½ acres each or less in area are created by a single division or by successive divisions within a period of five years.

When subdivision proposals and other proposed new development is planned in a flood-prone area FEMA Standards require that:

- (1) all such proposals are consistent with the need to minimize flood damage within the flood-prone area,*
- (2) all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage, and*
- (3) adequate drainage is provided to reduce exposure to flood hazards.*

- (g) Prior to any alteration or relocation of a watercourse, and prior to the issuance of any zoning permit which may be required for the alteration or relocation of a watercourse, the Columbia County Director of Planning and Zoning shall notify adjacent municipalities, the appropriate district office of the Department of Natural Resources and the appropriate office of FEMA and shall require the applicant to secure all necessary State and Federal permits. The flood carrying capacity within the altered or relocated portion of any watercourse shall be maintained.
- (h) Development which requires a permit from the Department of Natural Resources, pursuant to Chapters 30 and 31, Wisconsin Statutes, such as docks, piers, wharves, bridges, culverts, dams and navigational aids may be allowed provided the necessary County permits are obtained and necessary amendments to the official floodway lines, water surface profiles, floodplain zoning maps or Floodplain Zoning Ordinance, are made according to Section 16-4, Article I.

Article C

FLOODWAY DISTRICT (FW)

Sec. 16-4-30 Applicability.

The provisions of this section apply to all areas mapped as floodway on the official floodplain zoning maps, and to those portions of the general floodplain district determined to be floodway pursuant to the procedures contained in Section 16-4-84.

NOTE: The provisions contained within Section 16-4-30 apply to areas mapped as floodway and to the floodway portion of the general floodplain. In those areas where development is proposed within the general floodplain, local zoning officials must first determine if the proposed development is within the floodway or the flood fringe. Where it is evident that the development is proposed within the flood fringe, the submission of the information listed in Section 16-4-84 (b)(2) is not necessary. Where it is necessary to do a case-by-case analysis, the provisions contained within Section 16-4-84 (b) will need to be followed.

Sec. 16-4-31 Permitted Uses.

- (a) The following open space uses are allowed within the floodway district, and in the floodway portion of the general floodplain district, provided that they are not prohibited by any other Ordinance, that the standards contained in Section 16-4-32 are met, and that all permits or certificates required under Section 16-4-81 have been issued:
- (1) Agricultural uses, such as: general farming, pasturing, outdoor plant nurseries, horticulture, viticulture, truck farming, forestry, sod farming and wild crop harvesting.
 - (2) Nonstructural industrial and commercial uses, such as: Loading areas, parking areas and airport landing strips.
 - (3) Private and public recreational uses, such as: golf courses, tennis courts, driving ranges, archery ranges, picnic grounds, boat launching ramps, swimming areas, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, and hiking and horseback riding trails.

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- (4) Uses or structures accessory to open space uses, or essential for historical areas, providing they are not in conflict with the provisions in Section 16-4-32.
- (5) Extraction of sand, gravel or other materials.
- (6) Docks, piers or wharves, including docks, piers or wharves used as part of a marina, and other water related uses, such as dams, flowage areas, culverts, navigational aids and river crossings of transmission lines, and pipelines.
- (7) Public utilities, streets and bridges.

NOTE: It is important to remember that the uses "permitted" in Section 16-4-31 may or may not require a zoning permit under Section 16-4-81 (a). These uses are "permitted" in the sense that they are not prohibited. A zoning permit is required if an activity meets the definition of development or if the use of an existing building or structure is changed. See Section 16-4-81. It is generally felt that these permitted floodway uses will not obstruct flood flows or be damaged by flood waters. In those cases where the permitted use will obstruct or cause an obstruction to flood flows, a determination will have to be made, as described in Section 16-4-20 (f) of the Ordinance, as to what effect the proposed development has on the floodway delineation and regional flood profiles. If that increase is greater than 0.1 foot (3 cm.), an amendment is required pursuant to Section 16-4, Article I.

- (b) All uses not listed as permitted uses in Section 16-4-31 are prohibited within the floodway district and in the floodway portion of the general floodplain district.

Sec. 16-4-32 Standards for Development in Floodway Areas.

- (a) **General.** Any development in floodway areas shall:
 - (1) Meet all of the provisions of Section 16-4-20;
 - (2) Not obstruct flood flows; and
 - (3) Have a low flood damage potential.
- (b) **Structures.** Only structures which are accessory to permitted open space uses, or are essential for historical areas, may be allowed by permit, providing the structures meet all of the following criteria:
 - (1) The structures are not designed for human habitation;
 - (2) The structures are constructed and placed on the building site so as to offer minimum obstruction to the flow of flood waters. Whenever possible, structures shall be constructed with the longitudinal axis parallel to the direction of flow of flood waters, and shall be placed with their longitudinal axis

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- approximately on the same line as those of adjoining structures;
- (3) The structures are firmly anchored to prevent them from floating away and restricting bridge openings or other restricted sections of the stream or river; and
 - (4) The structures have all service facilities, such as electrical and heating equipment at or above the flood protection elevation for the particular area.
- (c) Public utilities, streets and bridges may be allowed by permit, provided that:
- (1) Adequate flood proofing measures are provided to the flood protection elevation;
 - (2) Construction does not cause an increase of 0.1 foot or greater in the height of the regional flood, except that reasonable increases up to 1.0 foot may be approved if the amendment procedures and all conditions of Section 16-4-91 are met; and
 - (3) The county amends its water surface profiles, floodplain zoning maps and Floodplain Zoning Ordinance as needed, to reflect any changes resulting from such construction.
- (d) Fills or deposition of materials may be allowed by permit, provided that:
- (1) The requirements of Section 16-4-20 are met;
 - (2) The fill or deposition of materials does not encroach on the channel area between the ordinary high water mark on each bank of the stream unless a permit has been granted by the Department of Natural Resources, pursuant to Chapter 30, Wisconsin Statutes, and a permit pursuant to Section 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. 1334 has been issued, if applicable, and the other requirements of this section are met;

NOTE: The State and Federal permits referenced in paragraph (d)(2) above require the municipality's Zoning Administrator to inform the applicant that such permits may be required in addition to the local permit when development occurs in adjacent wetlands or below the ordinary high-water mark of a navigable body of water. The Department permit can be applied for at its local area office and the Federal 404 permit can be applied for at the local office of the U.S. Army Corps of Engineers. If the location of the local Corps office is not known, the applicant or the Director of Planning and Zoning should contact the local District office of the Department of Natural Resources for the necessary information.

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- (3) The fill or other materials will be protected against erosion by riprap, vegetative cover, sheet piling or bulkheading sufficient to prevent erosion; and provided that
- (4) Such fills are not associated with private or public solid waste disposal.

NOTE: Section 16-4-32 lists the standards for development in floodway areas. Development is defined in Section 16-4, Article K, (i) as "any manmade change to improved or unimproved real estate, including but not limited to the construction of buildings, structures or accessory structures...." It also includes such nonstructural activities as mining, dredging, filling, grading, paving, excavation or drilling operations or the deposition or extraction of materials. Structures designed for human habitation are expressly prohibited because of the high danger to human life due to higher velocities and increased depths of moving water within this District. In addition, any development would cause increases in flood depths upstream due to the obstructing effect development has on narrowing the floodway and in not allowing as much water to run downstream as fast as it did originally. Public utilities, streets and bridges must be flood proofed and should be designed so as to not cause an increase in flood heights. If increases are caused, then the provisions of Section 16-4-91 must be applied. Fill placed within this District must be protected against erosion and must not be placed in the channel unless all necessary State and Federal permits have been obtained from both the Department and the U.S. Army Corps of Engineers.

- (e) The storage of any materials that are buoyant, flammable, explosive, or injurious to human, animal, plant, fish or other aquatic life is prohibited.
- (f) Any uses which are not in harmony with, or which may be detrimental to, the uses permitted in the adjoining districts are prohibited.
- (g) All private or public on-site sewage disposal systems are prohibited, with the exception of portable latrines that are removed during flooding, and systems associated with public recreational areas and Department approved campgrounds, that meet the applicable provisions of Chapter Comm 83, Wisconsin Administrative Code, which may be permitted in floodway areas.
- (h) All wells, whether public or private, which are used to obtain water for ultimate human consumption are prohibited.
- (i) All solid waste disposal sites, whether public or private are prohibited.

Article D**FLOOD FRINGE DISTRICT (FF)**

NOTE: The provisions contained within Section 16-4, Article D, apply to uses in the areas mapped as flood fringe and in the flood fringe portions of the general floodplain district. Since the flood fringe district does not contribute appreciably to the passage of flood water and has low depths and velocities, almost all uses are permitted if elevated to the flood protection elevation (which is a point 2 feet above the regional flood level).

Although the flood fringe district does not contribute appreciably to the passage of flood flows, the removal of large tracts of land needed for flood storage could increase flood elevations downstream. It is known that the filling in of all flood fringe areas within a watershed will cause a significant increase in flood levels and flood damages. However, for the purpose of minimum floodplain zoning standards in Chapter NR 116, Wisconsin Administrative Code, it was assumed that not enough fringe areas will be filled to cause a significant increase. Section 87.30, Wisconsin Statutes, and Chapter NR 116, Wisconsin Administrative Code, allow the local municipality to develop a more restrictive Floodplain Zoning Ordinance keeping the entire flood fringe district in open space use if it so desires, which many Wisconsin municipalities have done.

Sec. 16-4-40 Applicability.

The provisions of this section apply to all areas within the flood fringe district, as shown on the official floodplain zoning maps, and to those portions of the general floodplain district that are determined to be in the flood fringe area pursuant to Section 16-4-84.

Sec. 16-4-41 Permitted Uses.

Any structures, land use, or development, including accessory structures and uses, are allowed within the flood fringe district and flood fringe portions of the general floodplain district, provided that the standards contained in Section 16-4-42 are met, that the use is not prohibited by this or any other Ordinance or any other local, State or Federal regulation and that all permits or certificates required under Section 16-4-81 have been issued by the Director of Planning and Zoning.

Sec. 16-4-42 Standards for Development in Flood Fringe Areas.

All of the provisions of Section 16-4-20 shall apply hereto.

(a) **Residential Uses.** Any structure or building used for human habitation, which is to be erected, constructed, reconstructed, altered, or moved into the flood fringe area shall meet or exceed the following standards:

- (1) The lowest floor including the basement; except where paragraph (2) is applicable, shall be placed on fill at or above the flood protection elevation (which is a point two feet above the regional flood elevation). The fill elevation shall be one foot or more above the regional flood elevation and shall extend at such elevation at least 15 feet beyond the limits of any such structure or building erected thereon.

NOTE: Section 16-4-42 (a) requires that all residential structures and buildings shall be elevated by filling. At least 15 feet of fill must extend beyond the structure. If less than 15 feet of fill is placed, the Board of Adjustment/Appeals would have to grant a variance first. Fill is required because it provides structural safety by buffering against erosion and seepage of flood water and lessens the danger associated with rescue and relief operations by allowing a safe means of entering and exiting the structure. Fill should be of such a material that it will, when sufficiently compacted, retain its structural bearing capability under saturated conditions.

Constructing the lowest floor 2 feet above the regional flood elevation provides an additional margin of protection or safety. When flood studies are conducted, they assume a condition of free flow through bridges, culverts and other manmade or natural constrictions. No consideration is included for ice jams, debris accumulation, wave action, obstruction of bridge openings and floodways in these areas of constriction and as a result higher flood elevations can and do occur upstream.

- (2) The basement floor may be placed at the regional flood elevation providing it is flood proofed to the flood protection elevation. Where a community wide exception allowing the flood proofing of basements has been granted by FEMA, the basement floor may be placed at an elevation lower than the regional flood elevation providing it is flood proofed to the flood protection elevation in compliance with Section 16-4-85. If a community wide exception has not been granted by FEMA, requests to construct the basement floor below the regional

- flood elevation must be considered as a variance, thereby requiring action by the Board of Adjustment/Appeals as specified in Section 16-4-83 (d).
- (3) Except as provided in paragraph (4), contiguous dry-land access shall be provided from a structure or building to land which is outside of the floodplain, so that any such structure shall be accessible by rescue and relief vehicles during periods of regional flooding. Contiguous dry-land access means a road with a surface at or above the regional flood elevation and wide enough for rescue and relief vehicles.
 - (4) In existing developments where existing streets or sewer lines are at elevations which make compliance with paragraph (3) impractical, the municipality may authorize access at an elevation lower than the regional flood elevation if the municipality has written assurance (from the appropriate local units of police, fire, and emergency services) that rescue and relief will be provided to the structure(s) taking into account the anticipated depth and duration of the regional flood event.

NOTE: Section 16-4-42 (a)(2) allows the Director of Planning and Zoning to issue permits for flood proofed basements below the flood protection elevation, providing that the top of the basement floor does not go beneath the regional flood elevation for the particular area. The elevations for the area being considered in the application can be obtained by reviewing the flood profiles associated with the flood study and corresponding maps described in Section 16-4-10 (b). Where there has been no study and no flood elevations are available, a case-by-case analysis will need to be conducted to determine the regional flood elevation before the development can be permitted. FEMA has on occasion granted community wide exceptions allowing a municipality to construct flood proofed basements below the regional flood elevation. Only three Wisconsin municipalities have received this Federal exception. They are Brown County, the City of Green Bay, and the Village of Ashwaubenon within the floodplain of the East River. In all other municipalities, a variance hearing must first be held before a basement can be constructed below the regional flood elevation. The variance standards specified in Section 16-4-83 (d) must also be met before such a variance may be granted.

Section 16-4-83 (e) requires that the applicant be informed by the Chairman of the Board of Adjustment/Appeals that increased flood insurance premiums will ensue as a result of receiving a variance to build below the regional flood elevation. This notification is part of the National Flood Insurance Program

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(NFIP) requirements and is included to forewarn the applicant that flood insurance premiums will increase even though the structure may be flood proofed in compliance with the standards specified under Wisconsin law. The applicant should be informed of this fact prior to the actual variance hearing to ensure that he/she is made aware that insurance premiums are associated with what the proposed lowest floor elevation is in comparison to the regional flood elevation. The more water that covers the site, the greater the amount of insurance. The least expensive flood insurance rates are for structures that have their lowest floor constructed 2 feet above the regional flood elevation.

- (b) **Accessory Structures or Uses.** An accessory structure or use (not connected to a principle structure) shall meet all the applicable provisions of Section 16-4-32 (a), (b), and (d). A lesser degree of protection, compatible with these criteria and the criteria in Section 16-4-42 (c) may be permissible for an accessory structure or use providing that the site is not inundated to a depth greater than 2 feet or subjected to flood velocities greater than 4 feet per second upon the occurrence of the regional flood.

NOTE: Section 16-4-42 (b) applies to an accessory structure or use that is not connected to the principle structure or use. It must be necessary to the principle use of the property, structure or building as is defined in Section 16-4, Article K, (b). Section 16-4-42 (b) allows only those accessory structures which are not associated with a high degree of flood damage potential to be constructed at a lower elevation. It should be remembered that all additions to residential and commercial structures must be flood proofed to the flood protection elevation.

Although most property owners will not need to borrow money to construct accessory structures, it must be noted that where a loan is necessary the property owner will be required by the lender to purchase flood insurance and will be required to pay insurance rates based upon the elevation of the structure's first floor. If the first floor of the accessory structure is constructed below the flood protection elevation, the insured will be required to pay higher flood insurance rates as compared with constructing the same structure at the flood protection elevation. Before construction occurs, the property owner should always be advised to check with his/her insurance agent to see at what elevation the most reasonable insurance rates occur.

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- (c) **Commercial Uses.** In commercial areas, any structure or building which is to be erected, constructed, reconstructed, altered or moved into the flood fringe area shall meet the requirements of Section 16-4-42 (a). Storage yards, parking lots and other accessory land uses may be at lower elevations, subject to the requirements of Section 16-4-42 (e). However, no such area in general use by the public shall be inundated to a depth greater than two feet or subjected to flood velocities greater than four feet per second upon the occurrence of the regional flood.
- (d) **Manufacturing, Agricultural and Industrial Uses.** Any manufacturing, agricultural or industrial structure or building which is to be erected, constructed, reconstructed, altered or moved into the flood fringe area shall be protected to the flood protection elevation utilizing fill, levees, floodwalls, adequate flood proofing measures in accordance with Section 16-4-85, or any combination thereof. On streams or rivers having prolonged flood durations, greater protection may be required to minimize interference with normal plant operations. A lesser degree of protection, compatible with the criteria in Sections 16-4-42 (c) and 16-4-42 (e) may be permissible for storage yards, parking lots and other similar uses.
- (e) **Storage or Processing of Materials.** The storage or processing of materials that are buoyant, flammable, explosive, or which in times of flooding, could be injurious to human, animal, or plant life, shall be at or above the flood protection elevation for the particular area or flood proofed in compliance with Section 16-4-85. Adequate measures shall be taken to assure that said materials will not enter the river or stream during flooding.
- (f) **Public Utilities, Streets and Bridges.**
- (1) When failure or interruption of public utilities, streets and bridges would result in danger to the public health or safety or where such facilities are essential to the orderly functioning of the area, construction of and substantial improvements to such facilities may only be permitted if they are flood proofed, in compliance with Section 16-4-85, to the flood protection elevation; minor or auxiliary roads or nonessential utilities may be constructed at lower elevations providing they withstand flood forces to the regional flood elevation.
 - (2) Public utilities, streets and bridges in flood fringe areas should be designed to be compatible with the local comprehensive floodplain development plans.
- (g) **Sewage Systems.** All on-site sewage disposal systems shall be flood proofed to the flood protection elevation and shall meet the applicable provisions of all local Ordinances and Chapter Comm 83, Wisconsin Administrative Code.
- (h) **Wells.** All wells, whether public or private, shall be flood proofed to the flood protection elevation, pursuant to Section 16-4-85, and shall meet the applicable

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- provisions of Chapter NR 111 and NR 112, Wisconsin Administrative Code.
- (i) **Solid Waste Disposal Sites.** All solid waste disposal sites, whether public or private, are prohibited in flood fringe areas.

Article E**GENERAL FLOODPLAIN DISTRICT (GFP)****Sec. 16-4-50 Applicability.**

The provisions for this district shall apply to all floodplains in the county for which "regional flood" data, as defined in Section 16-4, Article K, (c) is not available, or where regional flood data is available but floodways have not been delineated. As adequate regional flood data becomes available and floodways are delineated for portions of this district, such portions shall be placed in the flood fringe district or floodway district, as appropriate.

Sec. 16-4-51 Permitted Uses.

Those uses permitted in Section 16-4-31 and 16-4-41 are allowed within the general floodplain district, provided that the procedures of Section 16-4-52 below are met, and all permits or certificates required under Section 16-4-81 have been issued by the Director of Planning and Zoning.

NOTE: The general floodplain district applies to those areas where a floodway line and flood fringe districts are not delineated and where there are no detailed engineering studies depicting flood elevations or flood profiles. Because of this fact, all development within the general floodplain district, unless the site is clearly in the flood fringe district, must have a detailed analysis made to determine whether or not the development lies within the floodway district. Section 16-4-20 (f) should be referred to along with its corresponding "note" which explains in part who is responsible for providing the information necessary to do the case-by-case analysis. The evaluation procedure is discussed in Section 16-4-84. If it is determined that the proposed use is located in the floodway the provisions of Article C would be applicable, and if it is in the flood fringe the provisions of Article D would be applicable.

In cases where it is determined that the delineation of the flood hazard zone is incorrect, the provisions of Section 16-4-12 may be followed. This allows the Director of Planning and Zoning some latitude in making the determination as to the actual boundary of the flood hazard district. In those cases where it is

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evident that the area is incorrectly delineated, the map should be revised utilizing the assistance of the Department of Natural Resources District Office as specified in the "note" following Section 16-4-12.

Sec. 16-4-52 Standards for Development in the General Floodplain District.

The general floodplain district encompasses both floodway and flood fringe areas. Therefore, a determination shall be made pursuant to Section 16-4-84, to determine whether the proposed use is located within a floodway or flood fringe area. If it is determined that a proposed use is located within a floodway, the provision of Section 16-4-31 and 16-4-32 shall apply. If it is determined that the proposed use is located within the flood fringe, the provisions of Section 16-4-41 and 16-4-42 shall apply.

Article F**FLOOD PLAIN NO. II DISTRICT****Sec. 16-4-60 Permitted Uses.**

The following uses shall be permitted within the Flood Plain No. II District:

- (a) Any structure, land use, or development, permitted in Section 16-4-31 of this Ordinance shall be permitted in the Flood Plain No. II District to the extent that it is not prohibited by this or any other Ordinance or any other Federal, State or local regulations and provided that it meets all of the standards contained in Article F and 16-4-73 of this Ordinance, and that a zoning permit has been issued by the Director of Planning and Zoning.
- (b) Any structure, land use or development not permitted under Section 16-4-31 of this Ordinance, shall not be allowed. However, the replacement of existing structures and the construction of structures accessory to uses permitted under Section 16-4-31 shall be permitted if the standards in Section 16-4-73 are met.

NOTE: Due to unique areas of flooding where there is a critical need to maintain a flood plain area for storage purposes, and to provide property owners, with existing structures, the ability to maintain and enhance their investments the flood plain no. II district standards have been prepared. In order to determine whether or not a particular flood hazard area is qualified to meet the standards prescribed herein a detailed hydraulic and hydrologic study must first be made to ensure an area has been properly designated. Because this floodplain Ordinance merely overlays the basic underlying Ordinance, the rights of property owners are restricted by both. Since mobile or trailer homes are not a permitted use in an agricultural, residential or recreational district unless associated with a mobile home park, such structures would have to be replaced by structures conforming to the underlying zoning as well as Section 16-4-73 of the floodplain Ordinance.

Article G

NONCONFORMING USES

NOTE: Few municipalities within Wisconsin are completely free of existing development within their designated floodplain districts. It is assumed that there will be some uses and structures existing when the Ordinance is adopted which are inconsistent with the provisions of the new Ordinance. Existing uses such as this are referred to as nonconforming uses, and by Wisconsin law are allowed to be continued subject to certain restriction. The provisions in this section of the Ordinance are applicable to both the "nonconforming uses" and "nonconforming structures". A structure may be nonconforming although the use is conforming if it does not meet dimensional standards or was not constructed above, or flood proofed to, the flood protection elevation. The reverse may also be true where a residential structure is constructed to the flood protection elevation but is located in a floodway district where the use is not permitted.

Sec. 16-4-70 General.

- (a) Insofar as the standards in this section are not inconsistent with the provisions of Section 59.69 (10) or 62.23 (7)(h), Wisconsin Statutes, they shall apply to all nonconforming uses and nonconforming structures. These regulations apply to the modification of, or addition to any structure and to the use of any structure or premises which was lawful before the passage of this Ordinance or any amendment thereto. The existing lawful use of a structure or building or its accessory use which is not in conformity with the provisions of this Ordinance may be continued subject to the following conditions:
- (b) No modifications or additions to a nonconforming use or a nonconforming structure shall be permitted unless they are made in conformity with the provisions of this Section. For the purpose of this Section, the words "modification" and "addition" shall include, but not be limited to, any alteration, addition, modification, structural repair, rebuilding or replacement of any such existing use, structure or accessory structure or use. Ordinary maintenance repairs are not considered modifications or additions; such ordinary maintenance repairs include internal and external painting, decorating, paneling and the replacement of doors, windows and other nonstructural components;

NOTE: The provisions contained within Section 16-4-70 (b) define

modification and addition in comparison to ordinary maintenance repair. The Zoning Administrator should notice that ordinary maintenance repairs are not considered to be additions or modifications, but, simply a means to maintain the structure or use in a manner necessary for continued use. It should be remembered that municipalities can adopt Ordinances that have more restrictive nonconforming use provisions and as a result may not wish to allow ordinary maintenance repairs to occur without the issuance of a zoning permit, and may wish to reflect those improvements as part of the total modification or addition referred to within this section.

- (c) If a nonconforming use is discontinued for 12 consecutive months, it is no longer permitted and any future use of the property, and any structure or building thereon, shall be made to conform to the applicable requirements of this Ordinance;

NOTE: Section 16-4-70 (c) provides for the termination of nonconforming uses after a specific period of discontinued use. The local zoning enabling authority under Section 62.23 (7)(h) for cities and villages, and Section 59.69 (10) for counties, Wisconsin Statutes, provides that if a nonconforming use is discontinued for a period of more than 12 months, any future use shall conform to the Ordinance.

- (d) As requests are received for modification or additions to nonconforming uses or nonconforming structures in the floodway, a record shall be kept which lists the nonconforming uses and nonconforming structures, their present equalized assessed value, and the cost of those additions or modifications which have been permitted; and

NOTE: The purpose of Section 16-4-70 (d) is to maintain a record of all existing nonconforming uses and nonconforming structures along with their present equalized assessed value and the costs of the improvements which have been made. It is not the intent of this Ordinance to also include the cost of ordinary maintenance repairs as defined in 16-4-70 (b). This record may be kept separately apart from the permits, or the information may be attached to the nonconforming use permit when it is issued. A continuous record is necessary to show when and at what time a nonconforming structure exceeds the dollar limitations contained in 16-4-71 (a)(3).

- (e) No modification or addition to any nonconforming structure or any structure with a nonconforming use, which over the life of the structure would exceed fifty percent

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(50%) of its present equalized assessed value, shall be allowed unless the entire structure is permanently changed to a conforming structure with a conforming use in compliance with the applicable requirements of this Ordinance and contiguous dry land access is provided in compliance with Section 16-4-42 (a)(3) or Section 16-4-42 (a)(4).

NOTE: Section 16-4-70 (e) places limitations on the modification, expansion and rebuilding of nonconforming uses and structures and where these limitations are exceeded, the modification; expansion or rebuilding is not permitted nor can it be allowed. In cities or villages, the nonconforming use provisions contained within Section 62.23 (7)(h), Wisconsin Statutes, do not give discretion to the city or village where the total cost to restore the structure would exceed 50% of its present equalized excess value. However, Section 59.69 (10), Wisconsin Statutes, provides that a county may allow the structure to be rebuilt. Chapter NR 116 requires, however, that it be flood proofed, to the flood protection elevation, by means other than fill, and dryland access must be provided in accordance with Section 16-4-42 (a) of this Ordinance. Should further explanation concerning this particular section of the Ordinance be needed, you should contact your local Department of Natural Resources District Office.

Sec. 16-4-71 Floodway Areas.

NOTE: Because of the increased hazards associated with the location of existing nonconforming uses and nonconforming structures in a floodway area, specific nonconforming use provisions are included for both the floodway and flood fringe districts. Section 16-4-71 contains the criteria for modifications or additions to nonconforming floodway uses and structures. The restrictions placed on such existing development will be more restrictive than those contained within the flood fringe nonconforming use provisions. Only in cases of extreme hardship or practical difficulty can such structures or uses be maintained beyond what is considered to be 50% of the present equalized assessed value of the structure. Modifications or additions in excess of this limit would, in a sense, be a variance to the nonconforming use provisions, and as a result, the property owner would need to be informed that increased flood insurance premiums may result for the entire structure if substantial improvement, greater than 50% of its present equalized assessed value, occurs.

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- (a) No modification or addition shall be allowed to any nonconforming structure or any structure with a nonconforming use in a floodway area, unless such modification or addition has been granted a permit or variance and meets all of the following criteria:
- (1) The modification or addition to the existing structure will not increase the amount of obstruction to flood flows as provided in Section 16-4-20;
 - (2) Any addition to the existing structure shall be flood proofed, pursuant to Section 16-4-85, by means other than the use of fill, to the flood protection elevation; and
 - (3) If any nonconforming structure or any structure with a nonconforming use is destroyed or is so badly damaged that it cannot be practically restored, it cannot be replaced, reconstructed or rebuilt unless the provisions of Article C are met. For the purpose of this subsection, restoration is deemed impractical where the total cost of such restoration would exceed 50% of the present equalized assessed value of the structure.
- (b) No new on-site sewage disposal system or addition to an existing on-site sewage disposal system, except where an addition has been ordered by a government agency to correct a hazard to public health, shall be allowed in a floodway area. Any replacement, repair or maintenance of an existing on-site sewage disposal system in a floodway area shall meet the applicable requirements of all land Ordinances and Chapter Comm 83, Wisconsin Administrative Code.
- (c) No new well or modification to an existing well, used to obtain water for ultimate human consumption, shall be allowed in a floodway area. Any replacement, repair or maintenance of an existing well in a floodway area shall meet the applicable requirements of this Ordinance and Chapters NR 111 and NR 112, Wisconsin Administrative Code.

NOTE: It can be concluded that no new on-site sewage disposal system, or private water supply system is allowed within the floodway district. Replacement of failing existing systems may be allowed providing they are replaced with flood proofed holding tanks or mound systems in compliance with Chapter Comm 83 of the Wisconsin Administrative Code.

Sec. 16-4-72 Flood Fringe Areas.

- (a) No modification or addition shall be allowed to any nonconforming structure or any structure with a nonconforming use in the flood fringe area unless such modification or addition has been granted a permit or variance and, except where Section 16-4-72 (b) is applicable, the modification or addition is placed on fill or is flood proofed to the flood protection elevation in compliance with the applicable regulations for that

particular use in a flood fringe area as contained in Section 16-4-42.

NOTE: Section 16-4-72 (a) contains the general criteria for modifications or additions to nonconforming uses and structures in flood fringe areas, but the cost limitations imposed by Section 16-4-70 (e), applicable to additions or modifications in excess of 50% of present equalized assessed value, must also be applied. Where Section 16-4-70 (e) is applicable in the flood fringe, the entire structure must be flood proofed or placed on fill. The cost limitations placed on modifications and additions to nonconforming flood fringe structures is a minimum requirement of the National Flood Insurance Program (NFIP) and must be included for a municipality to meet the flood insurance eligibility standards for participation in the NFIP.

- (b) Where compliance with the provisions of Section 16-4-72 (a) would result in unnecessary hardship, and only where the structure will not be used for human habitation or be associated with a high flood damage potential, the Board of Adjustment/Appeals, using the procedures established in Section 16-4-83, may grant a variance from those provisions, using the criteria listed below. Modifications or additions which are protected to elevations lower than the flood protection elevation may be permitted if:
- (1) Human lives are not endangered;
 - (2) Public facilities, such as water or sewer, are not to be installed;
 - (3) Flood depths will not exceed four feet;
 - (4) Flood velocities will not exceed two feet per second; and
 - (5) The structure will not be used for storage of materials described in Section 16-4-42 (e).

NOTE: Section 16-4-72 (b) provides the Board of Adjustment/Appeals with the standards they must adhere to in deciding whether or not to allow variances from the provisions contained in Section 16-4-42. It must be remembered that where a variance such as this is granted, the Board must also inform the property owner in writing, signed by either the Board Chairman or its secretary, that increased flood insurance premiums may result.

- (c) All new on-site sewage disposal system, or addition to, replacement, repair or maintenance of an on-site sewage disposal system, in a flood fringe area shall meet all the applicable provisions of all local Ordinances and Chapters Comm 83, Wisconsin Administrative Code.
- (d) All new wells, or addition to, replacement, repair or maintenance of a well, in a

flood fringe area shall meet the applicable provisions of this Ordinance and Chapters NR 111 and NR 112, Wisconsin Administrative Code.

Sec. 16-4-73 Flood Plain No. II.

- (a) No new development shall be permitted in flood plain no. II areas which, acting alone or in combination with existing or future similar works, materially affect the storage capacity of the flood plain, based upon an equal degree of hydrologic encroachment (volume of the storage area which is lost). For the purpose of this subsection, "materially" is defined as any increase in discharge of a regional flood which causes a rise in the water surface profile of 0.1 foot. Such developments may be permitted only if amendments are made to this Ordinance pursuant to Article I herein; provided further that the total cumulative allowable increase in height of the regional flood for any given reach of a stream shall not exceed one foot. All of the provisions of Section 16-4-20 shall also apply herein.
- (b) The replacement of all existing structures shall meet the following standards:
 - (1) The finished surface of the first floor of the replacement structure shall be constructed on fill at or above the flood protection elevation for the particular area. The fill shall be not less than one foot below the flood protection elevation for the particular area and shall extend at such elevations at least 15 feet but no more than 20 feet beyond the limits of any structure or building erected thereon. The replacement of/or any addition to an existing structure may be flood proofed, pursuant to Section 16-4-85, of this Ordinance, by means other than the use of fill to the flood protection elevation. The provisions in Section 16-4-73 (b)(3) shall be applied in all cases.
 - (2) All on-site sewage disposal systems, utilities, and wells shall be flood proofed to the flood protection elevation pursuant to Section 16-4-85 of this Ordinance, and shall meet the applicable provisions of local zoning Ordinances and the Wisconsin Administrative Code as required.
 - (3) No structural repairs, modifications, or additions to an existing structure, the cost of which exceeds, over the life of the existing structure, 50% of its present equalized assessed value, shall be allowed unless the entire structure is permanently changed to conform with the standards prescribed in this subsection.
- (c) An accessory structure (not connected to a principle structure) shall meet the applicable provisions of Section 16-4-73 (b) above. A lesser degree of protection, compatible

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with this criteria and the criteria in Section 16-4-42 (c), may be permissible for any such accessory structure providing the provisions of Section 16-4-85 of this Ordinance, are met, and the standards contained in Section 16-4-72 (b) of this Ordinance, are adhered to.

Article H

ADMINISTRATION

This Section provides for the appointment of appropriate boards and staff, and the development of necessary policies and procedures, to administer this Ordinance, in accordance with this Section. Where a Director of Planning and Zoning, planning agency or a Board of Adjustment/Appeals has already been appointed to administer a zoning Ordinance adopted under Section(s) 59.69, 59.692, or 62.23 (7), Wisconsin Statutes, these officials shall also administer this Ordinance.

NOTE: Chapter 4 of the Floodplain-Shoreland Management Guide manual should be referred to for an explanation of the duties, functions, and responsibilities of the Director of Planning and Zoning, Board of Adjustment/Appeals and zoning agency.

Sec. 16-4-80 Director of Planning and Zoning.

The Director of Planning and Zoning is hereby authorized to administer the provisions of this Ordinance. The Director of Planning and Zoning shall have the following duties and powers:

- (a) Advise applicants of the provisions of this Ordinance; assist them in preparing permit applications and appeals, and insure that the regional flood elevation for the proposed development is shown on all permit applications.

NOTE: Section 16-4-80 (a) directs the Director of Planning and Zoning to assist applicants in preparing both their permit applications and, in cases where the application is not granted and the applicant desires to appeal, to assist them in filling out the appeal form which is submitted to the Board of Adjustment/Appeals for either a variance or an interpretation. It must be stressed that when an application for a permit is made, the Director of Planning and Zoning must inform the applicant in writing as to why a permit is denied. The administrator cannot simply tell the individual, rather, it must be stated in writing, providing, of course, that the application has also been completed in writing by the applicant.

- (b) Issue permits and inspect properties for compliance with provisions of this Ordinance and issue certificates of compliance where appropriate.
- (c) Keep the official records of all water surface profiles, floodplain zoning maps,

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Floodplain Zoning Ordinances, nonconforming uses and nonconforming structures, and changes thereto, permit applications, permits, appeals, variances and Ordinance amendments related to this Ordinance.

- (d) Submit copies of all decisions granting or denying variances and appeals, all map and text amendments, case-by-case analysis, annual reports, and other required information to the appropriate District Office of the Department of Natural Resources. An annual summary showing only the number and types of all floodplain zoning actions taken by the county shall also be submitted to the Department by the Director of Planning and Zoning.

NOTE: Section 16-4-80 (d) requires the Director of Planning and Zoning to submit copies of any action taken on variances, amendments, case-by-case analysis, annual reports and any other required information to be submitted to the appropriate District Office of the Department for their review and response. This is especially important in cases where the Ordinance text or map is being amended and in cases requiring variances from the flood protection elevation or development standards as specified within the Ordinance. In cases where assistance is needed or requested, the local Department district office should be contacted in addition to submitting the information to them for their review.

- (e) Investigate and report violations of this Ordinance to the appropriate County Planning and Zoning Committee. The Planning and Zoning Committee shall submit its recommendations on each violation to the Corporation Counsel for prosecution. Copies of the violation reports shall also be sent to the appropriate District office of the Department.

NOTE: There is no single correct procedure established for investigating or preparing reports and reporting violations of floodplain zoning provisions. But it should be remembered that in order to effectively enforce and prosecute a violation, the prosecutor will need a case record of all the information concerning the violation, including such things as photographs, written testimony, taped testimony, other records of any hearings held concerning the subject of the violation, and any other pertinent information which can be obtained. The Director of Planning and Zoning cannot be too careful or too meticulous in preparing materials which may eventually be used in an enforcement action.

- (f) Submit copies of text amendments and annual reports to FEMA.
- (g) Maintain on file a list of all documentation of certified elevations.

NOTE: The purpose of maintaining a list of certified ground surface elevations is to provide a benchmark source for future developers to use when determining if their building floor and ground surface elevations are in compliance with the elevation standards contained in this Ordinance.

Sec. 16-4-81 Administrative Procedures.

- (a) **Zoning Permit.** A zoning permit shall be obtained from the Director of Planning and Zoning before any new development, as "development" is defined in Section 16-4, Article K, (i), or any change in the use of an existing building or structure may be initiated. Application for a permit shall be made to the Director of Planning and Zoning upon furnished application forms and shall include, for the purpose of proper enforcement of these regulations, the following data:
- (1) Name and address of the applicant, property owner and contractor - builder;
 - (2) Legal description of the property, including the type of proposed use, and an indication as to whether new construction or a modification to an existing structure is involved;
 - (3) The elevation of the lowest floor using National Geodetic and Vertical Datum (NGVD);
 - (4) A site development plan which accurately locates or describes the proposal with respect to the floodway and flood fringe districts showing the dimensions of the lot and locations of all existing and proposed structures from lot lines, center lines of all abutting highways, and the ordinary high-water mark of any abutting or nearby watercourses;
 - (5) Information concerning all private water supply systems and on-site sewage disposal systems to be installed, the location of all existing wells, structures, and on-site sewage disposal systems, and the ordinary high-water mark of all streams and lakes within 100 feet of a proposed sewage disposal site; and
 - (6) Data sufficient to determine the regional flood elevation at the location of the development and to determine whether or not the requirements of Section 16-4-20 are met. This may include any of the information noted in Section 16-4-84 (b).

NOTE: Section 16-4-81 (a) addresses the permit application information that must be submitted by the applicant before the permit may be issued. Sample permit application forms are included within the floodplain-shoreland guide

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manual. An important question to be answered on the application is the floodplain zoning district classification. Is it floodway or flood fringe? In situations where the site is not classified, a case-by-case analysis will need to be made to determine whether or not the structure is in a floodway or flood fringe and precisely what the flood elevation is, so that the structure can be adequately protected from flooding.

Section 16-4-81 (a)(3) requires the elevation of the lowest floor to be given in terms of the National Geodetic and Vertical Datum (NGVD). This gives the Director of Planning and Zoning the ability to compare that elevation with the flood profile, usually given in NGVD, without having to make a conversion to a local or assumed datum.

Although there are listed permitted uses within Articles C and D, if any activity is undertaken which requires a permit under Section 16-4-81 (a), a permit must be applied for and issued in order for such a use to be allowed. If no permit is issued, the applicant would be in violation of the Ordinance in that a permit was never obtained, even though the use and the construction of the structure may be in compliance with the development standards contained in the Ordinance.

- (b) **Certificate of Compliance.** No vacant or developed land shall be occupied in the floodplain, and no building or structure hereafter erected, altered or moved into the floodplain shall be occupied or used, until the applicant obtains a certificate of compliance from the Director of Planning and Zoning. The Director of Planning and Zoning shall issue a certificate only after the applicant has submitted a certification signed by a registered professional engineer or registered land surveyor that the fill and lowest basement floor elevations were placed in compliance with the development standards contained in this Ordinance. If flood proofing is required pursuant to Section 16-4-85, the Director of Planning and Zoning shall issue a certificate only after the applicant has submitted a certification signed by a registered professional engineer or architect that the structure is adequately constructed to comply with the provisions of Section 16-4-85.

NOTE: Section 16-4-81 (b) refers to certificates of compliance. The intent of these certificates is to ensure the applicant that the use the applicant is intending is in conformance with the provisions of this Ordinance. It also requires that before such a certificate can be issued, the Director of Planning and Zoning must receive certification signed by either a registered professional

engineer or surveyor that fill and the elevation of the lowest floor are in compliance with the flood fringe development standards found in Section (4) or Section 16-4-42 was properly flood proofed in compliance with Section 16-4-85. Without certification from a registered engineer or land surveyor, the Director of Planning and Zoning might be held responsible if the structure is later found not to be constructed above the flood protection elevation or does not withstand flooding without structural failure.

- (c) **Other Permits.** It is the responsibility of the applicant to secure all other necessary permits from all appropriate Federal, State, and local agencies, including those required by the U.S. Army Corps of Engineers under Section 404 of the Federal Water Pollution Control Act amendments of 1972, 33 U.S.C. 1334.

NOTE: Section 16-4-81 (c) states that the applicant is responsible to secure all other necessary permits from all appropriate Federal, State and local agencies, including obtaining permission from the U.S. Army Corps of Engineers for all development below or within the navigable portion of all bodies of water. The applicant should be advised by the Director of Planning and Zoning to contact the local office of the U.S. Army Corps of Engineers for the necessary Federal permit before the municipality issues a permit. Permits from the State, under Chapters 30 and 31, Wisconsin Statutes, are obtained from the local DNR district or area office.

Sec. 16-4-82 Zoning Agency.

The Planning and Zoning Committee shall have the following duties and powers to:

- (a) Oversee the functions of the office of the Director of Planning and Zoning;
- (b) Review and act upon all proposed amendments to the Floodplain Zoning Ordinance map and text; and
- (c) Maintain a complete public record of all its proceedings.

NOTE: The name of the zoning agency will vary from municipality to municipality. In counties, this particular committee is referred to most often as the Planning and Zoning Committee. Within cities and villages, the names vary from Planning Commission, Zoning Committee, to Zoning and Public Works Committee, to name a few. In many villages, the Board of Trustees also serves as the planning or zoning agency. It is permissible for both a County Board of

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Supervisors and a City Council to hold hearings and take direct action on zoning map and text amendments. Within Sections 59.69 and 62.23, Wisconsin Statutes, the required procedure is to refer the matter from the governing body to the committee responsible for the zoning functions (generally the Zoning Committee or Agency) and they in turn hold the public hearing, take testimony and record findings of fact and make a recommendation to the governing body for final action. See Section 16-4-91 and the explanations given within it, as to the procedures to follow when processing a petition for a map or text amendment.

Sec. 16-4-83 Board of Adjustment/Appeals.

The appropriate Board created under Section 59.694, Wisconsin Statutes, is hereby authorized to act as the Board of Adjustment/Appeals for the purpose of this Ordinance. The Board of Adjustment/Appeals shall exercise the powers conferred by Section 59.694 (7), Wisconsin Statutes.

- (a) **Appeals to the Board.** Appeals to the Board of Adjustment/Appeals may be taken by any person aggrieved or by any officer, department, board or bureau of the municipality affected by any decision of the Director of Planning and Zoning or other administrative officer. Such appeal shall be taken within a reasonable time, as provided by the rules of the Board, by filing with the Director of Planning and Zoning and with the Board of Adjustment/Appeals a notice of appeal specifying whether an interpretation of the Ordinance text or map or a variance is sought and the grounds thereof. The Director of Planning and Zoning or other officer from whom the appeal is taken shall transmit to the Board all the papers constituting the record upon which the action appealed from was taken.

NOTE: Under Section 59.99 (3), Wisconsin Statutes, the County Board of Supervisors is required to adopt rules for the conduct of Board of Adjustment/Appeals meetings.

Section 16-4-93 establishes the Board of Adjustment/Appeals as the Board to which persons may appeal who are upset by the interpretation by the Ordinance or feel that the regulations and requirements are too strict and feel they can demonstrate hardship and practical difficulty and thereby be allowed to deviate from the development standards contained. The Board of Adjustment/Appeals has two primary functions in this regard:

- (1) *Under its power of administrative review, it can interpret the*

- meaning of the Ordinance and provisions contained within it as well as the location of dist*
- (2) *it is the agency designated by statute to issue variances to provide relief from the strict requirements of the Ordinance. Before the Board can grant a variance from the provisions of the Ordinance, it must be clearly demonstrated, and defined within the minutes of their meeting, or in the Board's written decision, how the decision was made and in what specific way hardship or practical difficulty was shown. (Refer to the legal Summary Section within the floodplain-shoreland manual for discussion of what legally constitutes unnecessary hardships.) In some Ordinances, the Board is also authorized to issue special exception (conditional) use permits. In this particular Ordinance special exception permits have not been provided for and thus, the Board need not consider such applications.*

Both the Board of Adjustment/Appeals and the zoning agency can have additional duties and functions and may be the agency responsible for hearing appeals concerning other Ordinances. This is permissible. It must be remembered that this particular Ordinance may be more restrictive than the standards in many of the underlying land use zoning Ordinances. The most restrictive provisions contained in each Ordinance must always be applied.

(b) **Hearing Appeals.**

- (1) The Board of Adjustment/Appeals shall fix a reasonable time for the hearing of the appeal and shall publish a class 2 notice pursuant to Chapter 985, Wisconsin Statutes, specifying the date, time, place and subject of the hearing. The hearing notice shall be mailed to the parties in interest in advance of the hearing.
- (2) A decision regarding the appeal shall be made within a reasonable time.
- (3) The final decision on an appeal to the Board of Adjustment/Appeals shall be in the form of a written determination signed by the chairman or secretary of the Board. The determination shall state the specific facts, which are the basis for the Board's decision and shall either affirm, reverse, vary or modify the order, requirement, decision or determination appealed, in whole or in part, deny the appeal for lack of justification or grant or deny the application for a variance. The reasons or justifications for granting an appeal including a description of

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the hardship or practical difficulty which was demonstrated by the applicant in the case of a variance, shall be clearly stated in the recorded minutes of the Board of Adjustment/Appeals proceedings.

- (4) A copy of all decisions by the Board of Adjustment/Appeals shall be mailed to the appropriate District Office of the Department.

NOTE: Section 16-4-83 (b) establishes the procedures to be followed by the Board in considering appeals from decisions made by the Director of Planning and Zoning. It should be noted within the final decision, which is rendered by the Board, that the applicant may also appeal the Board's decision to a court of record, should the applicant feel aggrieved by the decision rendered by the Board. Failure to follow the correct zoning appeal procedure may result in the dismissal of an action taken against the municipality, the Director of Planning and Zoning, or the Board of Adjustment/Appeals.

- (c) **Boundary Disputes.** The following procedure shall be used by the Board of Adjustment/Appeals in hearing disputes concerning the district boundaries shown on the official floodplain zoning map:

- (1) Where a floodplain district boundary is established by approximate or detailed floodplain studies, pursuant to Section 16-4-10 (b), the regional flood elevations or profiles for the point in question shall be the governing factor in locating the district boundary. If no regional flood elevations or profiles are available to the Board, other available evidence may be examined.
- (2) In all cases, the person contesting the location of the district boundary shall be given a reasonable opportunity to present arguments and technical evidence to the Board of Adjustment/Appeals. Where it is determined that the district boundary is incorrectly mapped, the Board should either inform the Zoning Committee to proceed to petition the governing body or inform the person contesting the location of the boundary to petition the governing body, for a map amendment pursuant to Section 16-4-91.

NOTE: Section 16-4-83 (c) establishes the procedure to be followed in cases of boundary dispute. It should always be remembered that where there are flood elevations available, those elevations are the governing factor. It is the responsibility of the applicant or developer to submit information indicating the elevation of the property to be developed and to provide cross sections showing where that elevation appears on the flood profile. A determination can then be rendered by the Director of Planning and Zoning. In cases where it is

demonstrated that the map boundaries are in error, the Board of Adjustment/Appeals should direct the applicant or the zoning agency to petition the governing body for a zoning map amendment. When the map amendment action is commenced, both the Department and FEMA should be informed. Please refer to the amendment procedure section contained within Chapter 4 of the floodplain-shoreland management guide manual.

- (d) **Variance.** Deviation from the standards of this Ordinance, for which a permit has been denied by the Director of Planning and Zoning, may be allowed only upon written request for a variance submitted to the Director of Planning and Zoning, after a public hearing and the issuance of a variance by the Board of Adjustment/Appeals. The Board may authorize in specific cases such variance from the terms of the Ordinance as will not be contrary to the public interest where, owing to special conditions affecting a particular property, a literal enforcement of the provisions of this Ordinance would result in unnecessary hardship as defined in Section 16-4, Article K, (an). A variance:
- (1) Shall be consistent with the spirit and purpose of this Ordinance as stated in Section 16-4-3.
 - (2) Shall not permit a lower degree of flood protection in the floodway area than the flood protection elevation, as defined in Section 16-4, Article K, (4). In the flood fringe area, a lower degree of flood protection elevation may only be allowed pursuant to Section 16-4-72 (b).
 - (3) Shall not be granted because of conditions that are common to a group of adjacent lots or premises. (In such a case, the zoning Ordinance would have to be amended following proper procedures.)
 - (4) Shall not be granted unless it is shown that the variance will not be contrary to the public interest and will not be damaging to the rights of other persons or property values in the area.
 - (5) Shall not be granted for actions which require an amendment to this Ordinance or the map(s) described in Section 16-4-10.
 - (6) Shall not have the effect of granting or increasing a use of property which is prohibited in a particular zoning district.
 - (7) Shall not be granted solely on the basis of economic gain or loss.
 - (8) Shall not be granted for a self-created hardship.

NOTE: Section 16-4-83 (d) establishes the variance standards which must be met when granting a variance. Under Section 16-4-83 (d)(6), the Board of Adjustment/Appeals cannot grant a use variance (i.e., grant a permit for a residential use in the floodway district). Such an action would require an

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amendment to either the text or to the map before such a permit could be acted on. Section 16-4-83 (d)(2) specifically states that a lower degree of flood protection than the flood protection elevation is not permitted in the floodway area. In other words, no variance from the flood protection elevation is possible in the floodway area primarily due to the danger to human life, health and property. Variances to the flood protection elevation within the flood fringe area may be permissible only if the standards contained within Section 16-4-72 (b) are adhered to.

- (e) When a variance is granted the applicant shall be notified in writing, by the chairman or secretary of the Board of Adjustment/Appeals, that increased flood insurance premiums may result. A copy of this notification shall be maintained with the variance appeal record.

NOTE: Section 16-4-83 (e) requires that when a variance is granted, the applicant is to be informed in writing that increased flood insurance premiums may result. It is important that a copy of that statement be attached to the file as a permanent record should there be some question later as to whether or not the applicant was informed or when the applicant completes construction and finds out that the insurance premiums are prohibitively expensive. In most instances, the Director of Planning and Zoning should either inform the applicant of this fact before the applicant appeals to the Board of Adjustment/Appeals or should advise the applicant to contact his/her insurance agent to find the most cost effective elevation to build to. It must be remembered that the National Flood Insurance Program standards do not recognize flood proofed structures in cases where the municipality does not receive a community wide exception. Please refer to the note following Section 16-4-42 (a)(4) for further explanation as to what a community wide exception is.

Sec. 16-4-84 Procedures for Determining Floodway and Flood Fringe Limits.

- (a) **Applicability.** When any development is proposed within the general floodplain district, a determination shall be made to establish the boundaries of the floodway, to allow the Director of Planning and Zoning to determine whether floodway or flood fringe uses apply, and, where required, to determine the regional flood elevation.
- (b) Upon receiving an application for development within the general floodplain district, the Director of Planning and Zoning shall:

- (1) Require the applicant to submit, at the time of application, two copies of an aerial photograph, or a plan which accurately locates the proposed development with respect to the general floodplain district limits, channel of stream, existing floodplain developments, together with all pertinent information such as the nature of the proposal, legal description of the property, fill limits and elevations, building floor elevations and flood proofing measures.
- (2) Require the applicant to furnish any of the following additional information as is deemed necessary by the Department for evaluation of the effects of the proposal upon flood flows, to determine the boundaries of the floodway and, where applicable, the regional flood elevation:
 - a. A typical valley cross-section showing the channel of the stream, the floodplain adjoining each side of the channel, the cross-sectional area to be occupied by the proposed development, and all historic high water information.
 - b. Plan (surface view) showing: elevations or contours of the ground; pertinent structure, fill or storage elevations; size, location and spatial arrangement of all proposed and existing structures on the site; location and elevations of streets, water supply, and sanitary facilities; soil types and other pertinent information.
 - c. Profile showing the slope of the bottom of the channel or flow line of the stream.
 - d. Specifications for building construction and materials, flood proofing, filling, dredging, channel improvement, storage of materials, water supply and sanitary facilities.
- (3) Transmit one copy of the information described in paragraphs (a) and (b) to the appropriate District office of the Department along with a written request to have that agency provide technical assistance to establish regional flood elevations and, where applicable, floodway data. Where the provisions of Section 16-4-20 (f) apply, the applicant shall provide all required information and computations.

NOTE: Section 16-4-84 sets forth the procedures and information needed to determine whether a proposed development to be located in the general floodplain district is in the floodway or flood fringe. Section 16-4-20 (f) may also be applicable. It states that the applicant must provide all the engineering data and analysis, if the development exceeds 5 acres in area, \$75,000 in cost or is a subdivision. Where these standards are not met or exceeded, the applicant need only provide the field data to the municipality. The municipality may then refer the matter to the Department for a case-by-case analysis in

which the engineering data is analyzed to determine if the development is in the floodway or flood fringe districts and to determine the regional flood elevations.

Sec. 16-4-85 Flood Proofing.

- (a) Where flood proofing measures, as defined in Section 16-4, Article K, (u) are required, they shall be designed to withstand the flood pressures, depths, velocities, uplift and impact forces, and other factors associated with the regional flood, to assure protection to the flood protection elevation. In addition, all flood proofing measures shall provide anchorage of structures to foundations to resist flotation and lateral movement, and shall insure that the structural walls and floors are watertight (i.e., completely dry without human intervention during flooding) to the flood protection elevation, as defined in Section 16-4, Article K, (v).
- (b) The applicant shall submit a plan or document certified by a registered professional engineer or architect that the flood proofing measures are adequately designed to protect the structure or development to the flood protection elevation for the particular area. Flood proofing measures could include:

NOTE: For additional information, addressing design standards for flood proofing buildings and structures, engineers and architects should refer to the publication entitled, "Flood Proofing Regulations," dated June, 1972, prepared by the U.S. Army Corps of Engineers. Copies of this document can be obtained by contacting the local Department District Water Management Coordinator.

- (1) Reinforcement of walls and floors to resist rupture or collapse caused by water pressure or floating debris;
- (2) Addition of mass or weight to structures to prevent flotation;
- (3) Placement of essential utilities above the flood protection elevation;
- (4) Surface drainage systems, including pumping facilities, to relieve external foundation wall and basement floor pressures;
- (5) Construction of water supply wells, and waste treatment systems so as to prevent the entrance of flood waters into such system;
- (6) Cutoff valves on sewer lines and the elimination of gravity flow basement drains.

NOTE: Section 16-4-85 describes the various flood proofing measures which can be used to flood proof structures by means other than fill. This section sets the standards which flood proofing must meet, namely that all new structures, or additions to existing structures, developed within the regional floodplain must be watertight or dry flood proofed to the flood protection elevation. The first floor, meaning the lowest floor or basement floor, must either be elevated or flood proofed to the flood protection elevation in order to maintain these standards. Before the Director of Planning and Zoning can accept an application for a permit involving flood proofing requirements, the applicant must obtain a certification signed by a registered professional engineer or architect, that the design for flood proofing measures is adequate to protect the structure or development to the flood protection elevation.

It should be remembered that the only permits which can be issued by the Director of Planning and Zoning for flood proofed structures would be for manufacturing, agricultural or industrial related uses as described in Section 16-4-42 (d). All other flood proofed structures would require a variance hearing before the Board of Adjustment/Appeals due to the fact the standards for development in the flood fringe district requires the first floor of all residential and commercial structures to be elevated on fill.

See the example of a flood proofed structure in Chapter 6 of the Floodplain-Shoreland Management Guide Manual.

For more information addressing the importance of protecting structures to mitigate flood damages refer to the publication entitled, "Design Guidelines for Flood Damage Reduction," dated October, 1981, prepared for FEMA by the American Institute of Architects (AIA) Research Corporation. Copies of the document can be obtained by contacting: AIA Research Corporation; 1735 New York Avenue N.W., Washington, D.C. 20006.

Article I

AMENDMENTS

Sec. 16-4-90 General.

The governing body of the County of Columbia, Wisconsin, may change or supplement the boundaries of the floodplain zoning districts and the regulations contained in this Ordinance in the manner provided by law. Official amendments are required for any changes in the official floodway lines, water surface profiles, floodplain zoning maps or text of the Floodplain Zoning Ordinance. Actions which require an amendment include, but are not limited to, the following:

- (a) Any change in the official floodway line or boundary of the general floodplain area;
- (b) Correction of significant discrepancies between the water surface profiles and zoning maps;
- (c) Any fill in the floodplain which raises the elevation of the filled area to a height at or above the flood protection elevation and is contiguous to land lying outside the floodplain;
- (d) Any fill or encroachment into the floodplain that will cause a change, equal to or greater than 0.1 foot (3 cm.), in the height of the regional flood; and
- (e) Any upgrading of Floodplain Zoning Ordinances required by Section NR 116.05 (4), Wisconsin Administrative Code, or otherwise required by law.

Sec. 16-4-91 Amendment Procedures.

Amendments to this Ordinance may be made upon petition of any interested party in accordance with the provisions of Section 59.69, of the Wisconsin Statutes. Such petitions shall include any necessary data required by Section 16-4-84 (b) and 16-4-20 (f).

- (a) Copies of any amendment proposed to the governing body shall be referred to the zoning agency, described in Section 16-4-82, for a public hearing and recommendation to the governing body. Copies of the proposed amendment and notice of the public hearing shall be submitted to the appropriate District office of the Department of Natural Resources. The amendment procedure shall comply with the provisions of Section 59.69, Wisconsin Statutes.
- (b) No amendment to the maps or text of this Ordinance shall become effective until

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- reviewed and approved by the Department of Natural Resources.
- (c) All persons petitioning for a map amendment which involves an increase in the height of the regional flood of 0.1 foot (3 cm.) or more shall obtain flooding easements, or other appropriate legal arrangements, from all affected local units of government and property owners before the municipality may approve an amendment which would result in such an increase to the regional flood elevation.
 - (d) When considering amendments to the official floodplain zoning map, in areas where no water surface profiles exist, the zoning agency shall consider data submitted by the Department, the Director of Planning and Zoning's visual on-site inspections and other available information. (See Section 16-4-12 (b) of this Ordinance.)

NOTE: Section 16-4, Article I, refers to amendments and the procedures to follow when an amendment is instituted. Any change made to the Ordinance text or the official map and its corresponding profiles requires that an amendment be obtained.

Article J

ENFORCEMENT AND PENALTIES

Any violation of the provisions of this Ordinance by any person shall be unlawful and shall be referred to the Corporation Counsel, who shall expeditiously prosecute all such violators. A violator shall, upon conviction, forfeit to the County, a penalty as listed in the Penalty Section at Title 1, Chapter 2. Each day of continued violation shall constitute a separate offense. Every violation of this Ordinance is a public nuisance and the creation thereof may be enjoined and the maintenance thereof may be abated by action at suit of the County, the State, or any citizen thereof pursuant to Section 87.30, Wisconsin Statutes.

NOTE: Wisconsin zoning law provides for the disposition of violations through forfeitures, through injunctive relief (correction of the violation) or both. Forfeiture may be an effective weapon to use against relatively small violations, but the route of injunctions and abatement may be the necessary steps where large or expensive violations are involved, particularly if those violations will cause an increase in flood elevations affecting other property owners. In most instances, the monetary fine will be far less than what it would cost to abate a nuisance or a violation.

Article K

DEFINITIONS

Unless specifically defined below, words and phrases used in this Ordinance shall be interpreted so as to give them the same meaning as they have at common law and to give this Ordinance its most reasonable application. Words used in the present tense include the future. Words used in the singular number include the plural and words in the plural number include the singular. The word "may" is permissive. The word "shall" is mandatory and not discretionary.

NOTE: The purpose of Section 16-4, Article K, is to clarify terms commonly used within the Ordinance which reflect the policy of the Ordinance. In some cases, terms are not defined and it is for that reason that they are to be given the same meaning as they have at common law. By "common law" we mean court decisions, in which the meaning of a particular term is decided in the context of a particular fact situation.

- (a) **A Zones.** Those areas shown on a municipality's "Official Floodplain Zoning Map" (See definition [ag]) which would be inundated by the "base flood" or "regional flood" as defined herein. These areas may be numbered as A0, A1 to A30, A99, or be unnumbered A Zones. The A Zones may or may not be reflective of flood profiles, depending on the availability of data for a given area.
- (b) **Accessory Structure or Use.** A detached subordinate structure or a use which is clearly incidental to and customarily found in connection with the principal structure or use to which it is related, and which is located on the same lot as that of the principal structure or use.
- (c) **Base Flood.** A term used by the FEMA to mean that flood having a one percent chance of being equaled or exceeded in any given year. (Also see REGIONAL FLOOD.)

NOTE: The term "base flood" is synonymous with the terms "regional flood," "intermediate regional flood," and "100 year flood." It should be noted that the term "base flood" is referred to in much of the information received from FEMA. It is defined in this Ordinance to reduce confusion when the term is used in the informational material put out by FEMA.

The U.S. Army Corps of Engineers references the "intermediate regional flood" as having the same duration and frequency as occurring one in every 100 years. This flood is the same as a regional flood. The Corps also references the "standard project flood" which is something larger than the regional flood and is based on the most severe combination of hydrological and meteorological conditions that is considered to be capable of occurring in any given watershed. The terms mentioned in this explanation may be contained in your flood insurance studies or other floodplain information documents which you use in conjunction with defining the floodplain districts in your municipality.

- (d) **Building.** See STRUCTURE.
- (e) **Bulkhead Line.** A geographic line along a reach of navigable water that has been adopted by a municipal Ordinance and approved by the Department of Natural Resources, pursuant to Section 30.11, Wisconsin Statutes, and which allows complete filling to the landward side of the line, except where such filling is prohibited by the floodway provisions of this Ordinance.
- (f) **Certificate of Compliance.** A certification issued by the Director of Planning and Zoning stating that the use of land or a building, the elevation of fill or the first floor of a structure is in compliance with all of the provisions of this Ordinance.
- (g) **Channel.** A natural or artificial watercourse with definite bed and banks to confine and conduct normal flow of water.
- (h) **Department.** The Wisconsin Department of Natural Resources.
- (i) **Development.** Any man-made change to improved or unimproved real estate, including but not limited to the construction of buildings, structures or accessory structures; the construction of additions or substantial improvements to buildings, structures or accessory structures; the placement of mobile homes; mining, dredging, filling, grading, paving, excavation or drilling operations; and the deposition or extraction of materials.
- (j) **Encroachment.** Any fill, structure, building, use or development in the floodway.
- (k) **Equal Degree of Hydraulic Encroachment.** The effect of any encroachment into the floodway is computed by assuming an equal degree of hydraulic encroachment on the opposite side of a river or stream for a significant hydraulic reach, in order to compute the effect of the encroachment upon hydraulic conveyance. This computation assures that property owners up, down or across the river or stream will have the same rights of hydraulic encroachment. (Also see: HYDRAULIC REACH and FLOODWAY LINES.)
- (l) **Equal Degree of Hydrologic Encroachment.** The effect of any development on the storage capacity of a floodplain area, particularly upstream from urban areas, is

analyzed assuming an equal loss of flood storage for all property owners and subdivided lots in the storage area of a floodplain on both sides of a river or stream for a significant hydrologic reach.

NOTE: The terms hydraulic and hydrologic can simply be defined as follows: "hydraulic" means the movement of water through a channel and its adjacent floodplain, and "hydrologic" means the storage of water within the floodplain based on volume. When hydraulic encroachment is involved, water tends to back up causing higher flood levels upstream and when hydrologic encroachment occurs, the storage capacity is reduced causing water to move more quickly through the watershed causing higher flood elevations downstream.

- (m) **Existing Mobile Home Park or Mobile Home Subdivision.** A parcel (or contiguous parcels) of land divided into two or more mobile home lots for rent or sale on which the construction of facilities for servicing the lots (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the constructing of streets) is completed before the effective date of this Ordinance.
- (n) **Federal Emergency Management Agency (FEMA).** The Federal agency that administers the National Flood Insurance Program. This agency was previously known as the Federal Insurance Administration (FIA). The Division of Insurance and Mitigation is contained within FEMA. (Should it be necessary to contact FEMA for information or assistance, the Region V Office of the Federal Emergency Management Agency's Division of Insurance and Mitigation should be contacted.)
- (o) **Flood or Flooding.** A general and temporary condition of partial or complete inundation of normally dry land areas caused by the overflow on inland waters, or the unusual and rapid accumulation or runoff of surface water from any source.
- (p) **Flood Fringe.** That portion of the floodplain outside of the floodway which is covered by flood waters during the regional flood; it is generally associated with standing water rather than rapidly flowing water.
- (q) **Flood Hazard Boundary Map.** A map prepared for the county by FEMA designating approximate flood hazard areas. Flood hazard areas are designated as unnumbered A-Zones and do not contain floodway lines or regional flood elevations. Said map forms the basis for both the regulatory and insurance aspects of the National Flood Insurance Program.
- (r) **Flood Insurance Study.** A technical engineering examination, evaluation, and determination of the county flood hazard areas. It provides maps designating those areas affected by the regional flood and provides both flood insurance rate zones and

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regional flood elevations as well as floodway lines. The flood hazard areas are designated as numbered A-Zones. Flood insurance study maps form the basis for both the regulatory and the insurance aspects of the National Flood Insurance Program.

NOTE: A "Flood Insurance Study," commonly referred to as an "FIS", is a written document providing both the historic flood information and data that was used to compile the flood elevations along rivers and streams studied within a municipality. The FIS provides the applicant or developer with a regional flood elevation which can be used to construct the first floor of a building at the flood protection elevation. Any questions concerning how to use the information contained in the study should be directed to the water management coordinator located in the district or area office of the Department of Natural Resources.

When a community has only a flood hazard boundary map to rely on, it is not possible to determine the regional flood elevation without first doing a case-by-case analysis. In such cases, the Director of Planning and Zoning should contact the Department for assistance in determining how to obtain or acquire the flood elevation information. It must also be remembered that a community can provide this service for the developer or, as is provided for in this Ordinance, require the applicant to provide the necessary cross sectional data to make these determinations. Where the provisions contained in Section 16-4-20 (f) are exceeded, the applicant is required to provide the calibrations and determinations at their expense. This is not true where the community has a FIS with detailed regional flood elevations and floodways delineated; in cases such as this the developer must submit their detailed analysis without regard to dollar or size limitations.

- (s) **Floodplain.** That land which has been or may be hereafter covered by flood water during the regional flood. The floodplain is comprised of the floodway and the flood fringe.
- (t) **Flood Profile.** A graph or a longitudinal profile line showing the relationship of the water surface elevation of a flood event to locations of land surface elevations along a stream or river.
- (u) **Flood Proofing.** Any combination of structural and nonstructural additions, changes or adjustments which reduce or eliminate flood damage to unimproved or improved real estate, water and sanitary facilities, structures and their contents.
- (v) **Flood Protection Elevation.** An elevation that corresponds to a point two feet of

- freeboard above the water surface profile associated with the regional flood. (Also see: FREEBOARD.)
- (w) **Floodway.** The channel of a river or stream and those portions of the floodplain adjoining the channel required to carry and discharge the flood water or flood flows associated with the regional flood without cumulatively increasing the water surface elevation more than 0.1 foot (3 cm.).
 - (x) **Floodway Encroachment Lines.** Represent the limits of obstruction to flood flows. These lines are designated on both sides of, and generally parallel to, the channel of a river or stream. They are established by assuming that the area landward (outside of the encroachment lines) will ultimately be developed in such a way that it will not convey flood flows, but the development will not cause an increase to regional flood elevations upstream. It is assumed that any development riverward of these lines will cause an obstruction and will require a detailed analysis (equal degree of hydraulic encroachment) to determine its effect on the regional flood elevations upstream.
 - (y) **Freeboard.** Represents a factor of safety usually expressed in terms of a certain amount of feet above a calculated flood level. Freeboard compensates for the many unknown factors that contribute to flood heights greater than the height calculated. These unknown factors include, but are not limited to, ice jams, debris accumulation, wave action, obstruction of bridge openings and floodways, the effects of urbanization on the hydrology of the watershed, loss of flood storage areas due to development and the sedimentation of a river or stream bed.
 - (z) **High Flood Damage Potential.** Any danger to human life or public health or the potential for any significant economic loss to a structure or its contents.

NOTE: The term "high flood damage potential" is referred to from time to time in the Ordinance as a means of determining whether or not a use or structure can be developed below the required development standards as contained in Section 16-4-42. This determination is not something that can be given a clear limit based on either cost or danger to life, health or property. Rather, it is an indicator that can be applied by the local Board of Adjustment/Appeals in determining if a development can or cannot occur below the required standards for development. An example of high flood damage potential could be where a grocery store is constructed below the flood protection elevation and is not flood proofed to the flood protection elevation, thereby exposing all of the produce within the store to flood damages. This type of situation could result in a significant economic loss to the contents, although not severely effecting the structure. In such a case, the Board of Adjustment/Appeals would be justified in requiring the entire structure to be either elevated or flood proofed to the

flood protection elevation.

- (aa) **Hydraulic Reach.** That portion of the river or stream extending from one significant change in the hydraulic character of the river or stream to the next significant change. These changes are usually associated with breaks in the slope of the water surface profile, and may be caused by bridges, dams, expansion and contraction of the water flow, and changes in stream bed slope or vegetation.
- (ab) **Hydrologic Reach.** A designated length of river, stream or lake where the storage of flood waters therein has been taken into account to reduce the regulatory flood discharge. Major man-made or natural changes in the river character, limits of political jurisdiction, or a change in the flood-routing technique used to determine the storage and translation of a flood wave through the area of interest may be used to define the end of a hydrologic reach (e.g., a dam may be considered a major man-made change in the river character or a change from channel routing to reservoir routing may be considered a major change in the flood-routing technique).
- (ac) **Land Use.** Any nonstructural use made of unimproved or improved real estate. (Also see DEVELOPMENT.)
- (ad) **Mobile Home.** A structure transportable in one or more sections, which is built on a permanent chassis and is designed to be used with or without a permanent foundation when connected to required utilities. For the purpose of this Ordinance, it does not include recreational vehicles or travel trailers.
- (ae) **Nonconforming Structure.** An existing lawful structure or building which is not in conformity with the dimensional or structural requirements of this Ordinance for the area of the floodplain which it occupies. (For example, an existing residential structure in the flood fringe district is a conforming use. However, if the first floor is lower than the flood protection elevation, the structure is nonconforming.)
- (af) **Nonconforming Use.** An existing lawful use or accessory use of a structure or building which is not in conformity with the provisions of this Ordinance for the area of the floodplain which it occupies.
- (ag) **Official Floodplain Zoning Map.** That map, adopted and made part of this Ordinance, as described in Section 16-4-10 (b), which has been approved by the Department of Natural Resources and FEMA.
- (ah) **Open Space Use.** Those uses having a relatively low flood damage potential and not involving structures.
- (ai) **Person.** An individual, or group of individuals, corporation, partnership, association, municipality or State agency.
- (aj) **Regional Flood.** A flood determined to be representative of large floods known to have generally occurred in Wisconsin and which may be expected to occur on a

particular stream because of like physical characteristics. The flood frequency of the regional flood is once in every 100 years. This means that in any given year, there is a 1% chance that the regional flood may occur or be exceeded. During a typical 30-year mortgage period, the regional flood has a 26% chance of occurrence. (The regional flood is based upon a statistical analysis of stream flow records available for the watershed or an analysis of rainfall and runoff characteristics in the general watershed region.)

- (ak) **Storage Capacity of a Floodplain.** The volume of space above an area of floodplain land that can be occupied by flood water of a given stage at a given time, regardless of whether the water is moving.
- (al) **Structure.** Any manmade object with form, shape and utility, either permanently or temporarily attached to, placed upon or set into the ground, stream bed or lake bed, which includes, but is not limited to, such objects as roofed and walled buildings, gas or liquid storage tanks, bridges, dams and culverts.

NOTE: The term "structure" lists some examples of the types of things that could be interpreted to be structures. Be aware that this list represents only an example of the types of objects that can be construed as structures. A common misconception is that a structure is only a building that has a roof and four walls. Be aware it is any manmade object that is placed on, in, over or under the ground, and is not limited to only the examples listed.

- (am) **Substantial Improvement.** Any structural repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the present equalized assessed value of the structure either before the improvement or repair is started, or if the structure has been damaged, and is being restored, before the damage occurred. The term does not, however, include either:
- (1) any project for improvement of a structure to comply with existing State or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or
 - (2) any alteration of a structure or site documented as deserving preservation by the Wisconsin State Historical Society as listed or the National Register of Historic Places. Ordinary maintenance repairs are not considered structural repairs, modifications or additions. Such ordinary maintenance repairs include internal and external painting, decorating, paneling, and the replacement of doors, windows, and other nonstructural components. (For purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether

or not that alteration affects the external dimensions of the structure.)

- (an) **Unnecessary Hardship.** Any unique and extreme inability to conform to the provisions of this Ordinance due to special conditions affecting a particular property which were not self-created and are not solely related to economic gain or loss. Unnecessary hardship is present only where, in the absence of a variance, no feasible use can be made of the property.

NOTE: In order for any variance to be granted, the Board of Adjustment/Appeals, must determine if unnecessary hardship has been demonstrated sufficiently to warrant a permit to be issued which is inconsistent with the dimensional standards as contained within the Ordinance. An example would be in a case where a structure is to be constructed on a substandard lot, where it is impossible to satisfy requirements for the placing of fill and extending that fill 15 feet from the outside dimensions of the structure, either due to the narrow dimensions or the physical character of the lot, which would prevent the owner of the lot from being able to use the property if a variance is not granted. The considerations involved in determining unnecessary hardship are as varied as there are properties in a municipality. However, the Board must clearly state in what way unnecessary hardship is demonstrated before such variation is granted.

- (ao) **Utilities.** Any public or private water supply, waste collection or disposal system, including, but not limited to, private and public wells and their attendant facilities, septic systems and public sewage collection systems.
- (ap) **Variance.** An authorization granted by the Board of Adjustment/Appeals to construct, alter or use a structure in a manner which is inconsistent with the dimensional standards contained in this Ordinance.

NOTE: A variance may not be used to permit a use of property otherwise prohibited by this Ordinance. Unnecessary hardship must be demonstrated by the applicant/property owner before a variance can be granted.

Historical Reference:

The Columbia County Floodplain Zoning Ordinance, #Z55-83, became effective on September 3, 1983.

An Amendment was made to the original Ordinance, #Z67-84, which became effective in December, 1984.