#### **CHAPTER 19**

# **FLOOD PLAIN ZONING**

- **19.01 STATUTORY AUTHORIZATION.** This Chapter for flood plain protection is adopted pursuant to the authorization contained in Sections 61.35, 87.30 Wisconsin Statutes (1993-1994).
- **19.02 FINDING OF FACT**. The uncontrolled use of the flood plains, rivers or streams of the Village of New Auburn, Wisconsin adversely affects the public health, safety, convenience and general welfare and impairs the tax base of that Village. In addition, extraordinary public expenditures are required for the protection of persons and property and for the relief of distress in areas subject to periodic flooding. Filling, construction, and certain other land use practices have been determined to be major causes of such effects. The effects of a single fill or other project upon flood heights, velocities, or flood plain storage areas may be relatively insignificant compared to the combined effects of a number of such projects which, over a long period of time, may drastically increase the flood hazard. Without a competent analysis of such projects, it is not possible to adequately ascertain the effects of each flood plain use upon subsequent development or the compatibility thereof with the long range needs of the community. The Legislature of the State of Wisconsin has delegated authority to the Village Board to adopt regulations which will control or eliminate the practices leading to such adverse effects, and this authority is hereby recognized.
- **19.03 STATEMENT OF PURPOSE**. To promote the public health, safety and general welfare and to minimize flood losses in areas subject to flood hazards, this Flood Plain Zoning Chapter has been established with the following purposes intended:
  - (1) To reduce the hazard of floods to life and property through:
- **(A)** Prohibiting certain uses which are dangerous to life or property in time of flood.
- **(B)** Restricting uses which would be hazardous to the public health in time of flood.
- **(C)** Restricting uses which are particularly susceptible to flood damage, so as to alleviate hardship and reduce demands for public expenditures for relief and protection.
- **(D)** Requiring permitted flood plain uses, including public facilities which serve such uses, to be protected against floods by providing flood protection at the time of initial construction.

- (2) To protect flood plain occupants from flood damage which is or may be caused by their own land use and which use is or may be undertaken without full realization of the danger, through:
- **(A)** Regulating the manner in which structures designed for human occupancy may be constructed so as to prevent danger to human life within such structures.
- **(B)** Regulating the method of construction of water supply and sanitation systems so as to prevent disease, contamination and unsanitary conditions.
- **(C)** Delineating and describing areas that could be inundated by floods so as to protect individuals from purchasing flood plain lands for purposes for which the lands are not in fact suitable.
- (3) To protect the public from the burden of extraordinary financial expenditures for flood control and relief, which is or may be caused by the types of land use listed in Sections 19.01 and 19.02 of this chapter through:
- (A) Regulating all uses within the flood plain district so as to produce a method of construction and a pattern of development which will minimize the probability of damage to property and loss of life or injury to the inhabitants of the flood hazard areas.
- (4) To protect the "storage capacity of flood plains" and to assure retention of sufficient "floodway" area to convey flood flows which can reasonably be expected to occur through:
- **(A)** Regulating filling, dumping, dredging and alteration of channels by deepening, widening, or relocating.
  - **(B)** Prohibiting unnecessary encroachments.
- **(C)** Encouraging open space uses such as agriculture, recreation and parking.

#### 19.04 GENERAL PROVISIONS

(1) JURISDICTION. The jurisdiction of this chapter includes all lands, adjacent to any river or stream within the Village of New Auburn, Wisconsin, that would be inundated by the "regional flood" for that river or stream as defined in Definitions 19.14(12). The jurisdiction of this chapter shall also extend to those lands and waters within 1-1/2 miles of the corporate limits that are approved by a majority of the members of the appropriate joint extraterritorial zoning committee pursuant to Section 62.23(7a) Wisconsin Statutes (1993-1994).

- **(2)** FLOOD PLAIN MAP, DISTRICT BOUNDARIES. The boundaries of the general flood plain, regional flood plain and regional floodway districts shall be as they appear on the flood plain map adopted by the Village Board which is on file in the office of the Village Clerk.
- (A) The flood plain boundary lines on the map shall be determined by the use of the scale appearing on the map. Where there is a conflict between the flood plain boundary illustrated on the map and actual field conditions the dispute shall be settled according to Section 19.09(4) Mapping Disputes.
- **(B)** Compliance with the provisions of this chapter shall not be grounds for the removal of lands from the flood plain district unless such lands are filled to a height of the flood protection elevation for the particular area and are contiguous to other lands lying outside the flood plain district.
- (3) <u>EFFECT OF FLOOD PLAIN DISTRICT REGULATIONS</u>. The regulations set forth in this chapter for flood plain district shall apply only to the flood plain mapped on the official flood plain zoning map and shall be void and of no effect in areas not mapped as being included in such district. The regulations of this chapter shall be supplementary to the regulations imposed on the same lands by any underlying zoning code. When flood plain and underlying zoning code regulations conflict with one another, the most restrictive combination of such regulations shall control.
- (4) <u>COMPLIANCE</u>. No structure, land or water, shall hereafter be used and no structure shall be located, extended, converted or structurally altered without full compliance with this chapter and other applicable regulations.

# (5) ABROGATION AND GREATER RESTRICTIONS:

- **(A)** This chapter supersedes provisions of any zoning sections relating to flood plains. However, any underlying zoning section shall remain in full force and effect to the extent that its provisions are more restrictive.
- **(B)** It is not otherwise intended by this chapter to repeal, abrogate, or impair any existing deed restrictions; however, where this chapter imposes greater restrictions, the provisions of this chapter shall prevail.
- **(6) INTERPRETATION**. In their interpretation and application, the provisions of this chapter shall be minimum requirements and shall be liberally construed in favor of the Village Board and shall not be deemed a limitation or repeal of any other powers granted by Wisconsin Statutes.
- (7) WARNING AND DISCLAIMER OF LIABILITY. The degree of flood protection intended to be provided by this chapter is considered reasonable for regulatory purposes and is based on engineering and scientific methods of study. Larger floods may occur on rare occasions or the flood height may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by

debris. This chapter does not imply that areas outside flood plain zoning district boundaries or land uses permitted within such districts will always be totally free from flooding or flood damage. Nor shall this chapter create a liability on the part of or a cause of action against the Village or any officer or employee thereof for any flood damages that may result because of reliance on this chapter.

(8) <u>SEVERABILITY</u>. If any section, clause, provision or portion of this chapter is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this chapter shall not be affected thereby.

### 19.05 NONCONFORMING USES

- (1) The existing (April 9, 1981) date of adoption, lawful use of a structure or premises which is not in conformity with the provisions of this chapter may be continued subject to the following conditions:
- **(A)** No such use shall be expanded or enlarged except in conformity with the provisions of this chapter.
- **(B)** No structural alteration, addition or repair to any nonconforming structure over the life of the structure shall exceed 50% of its fair market value at the time of its becoming a nonconforming use unless permanently changed to a conforming use.
- **(C)** If such use is discontinued for 12 consecutive months, any future use of the building and premises shall conform to this chapter. The Assessor shall notify the Zoning Administrator in writing of instance of nonconforming uses which have been discontinued for a period of 12 months.
- **(D)** Uses or adjuncts thereof which are nuisances shall not be permitted to continue as nonconforming uses.
- **(E)** Any alteration, addition or repair to any nonconforming structure permitted pursuant to Section 19.05(1)(b) shall be protected by "flood proofing" measures pursuant to Section 19.10(5)(A).
- **(F)** The Zoning Administrator shall maintain a list of nonconforming uses including: the date of becoming nonconforming, assessed value at the time of its becoming a nonconforming use, and the nature and extent of nonconformity. This list shall be brought up-to-date annually.
- **(G)** The nonconforming use may be removed from the list described in paragraph (F) by certification that the building and its electrical and mechanical equipment has been flood-proofed pursuant to Section 19.10(5)(A).

#### 19.06 GENERAL FLOOD PLAIN DISTRICT

- (1) <u>APPLICATION</u>. The provisions for this district apply to all flood plains of rivers and streams in the Village that are delineated on the map described in Section 19.04(2). Where this district is delineated on the basis of a flood profile, such profile shall be a part of this section and the district boundaries shall be based on 2 feet of freeboard above elevation shown on the flood profile.
- (2) <u>NEW FLOOD DATA</u>. As regional flood data becomes available for portions of this district, such portions shall be placed in the Regional flood plain or regional floodway district, as appropriate.
- (3) <u>SPECIAL PROVISIONS</u>. The following regulations shall apply to all uses within the General Flood Plain District, notwithstanding that such uses may be specifically permitted under this chapter.
- (A) The flood protection elevation or height shall correspond to the elevation shown for a particular area on the map(s) described in Section 19.04(2).
- **(B)** No "structure (temporary or permanent)"; fill, including fill for roads and levees; deposit; obstruction; storage of materials or other flood plain uses which, acting alone or in combination with existing or future flood plain uses, shall be permitted that adversely affects the efficiency or the capacity of the floodway or increase flood heights based on the assumption that there will be an "equal degree of encroachment" extending for a significant "reach" on both sides of the stream.
- **(C)** No flood plain uses shall adversely affect the efficiency of or unduly restrict the capacity of the channels of floodways of any tributaries to the main stream, drainage ditches, or any other drainage facilities or systems.
- (4) <u>DESCRIPTION OF USES.</u> Permitted uses: The following open space uses shall be permitted within the General Flood Plain District to the extent that they are not prohibited in a particular area by any underlying zoning code:
- **(A)** Agricultural uses such as: general farming, pasture, grazing, outdoor plant nurseries, horticulture, viticulture, truck farming, forestry, sod farming, and wild crop harvesting.
- **(B)** Industrial-commercial uses such as loading areas, parking areas, airport landing strips, and storage yards for equipment or machinery easily moved or not subject to flood damage.
- **(C)** Public and private recreational uses not requiring "permanent or temporary structures" designed for human habitation such as: parks, swimming areas, golf courses, driving ranges, picnic grounds, target ranges, wildlife and nature preserves, game farms, fish hatcheries, shooting preserves, trap and skeet ranges, and hunting and fishing and hiking areas.

- **(D)** Utility facilities such as: dams, power plants, flowage areas, transmission lines, pipelines, and water-monitoring devices, subject to regulations pursuant to Chapter 30, Wisconsin Statutes (1993-1994).
- **(E)** Navigational and drainage aids such as: channels, channel markers, buoys, and other such devices.
- **(F)** Other water-related uses such as: docks, piers, wharves, bridges, culverts, and river crossings of transmission lines subject to any pier or dock line regulations pursuant to Chapter 30, Wisconsin Statutes.
  - (G) Structures accessory to such open-space uses.
- (5) <u>SPECIAL EXCEPTIONS</u>. Any use enumerated in this subsection may be permitted only upon application to the Zoning Administrator and the issuance of a special exception permit by the Board of Appeals as provided in Section 19.10.
- **(A)** Structures accessory to Open-space uses permitted in Description of Uses, Sub (4) whether temporary or permanent, may be permitted only upon a determination by the Board of Appeals pursuant to a finding under the procedure required by Section 19.10, that:
- (1) Structures will not be designed for human habitation (accessory structures designed for human habitation will be handled under Section 19.10(2).
  - (2) Structures will have a low flood damage potential.
- (3) The structure or structures, if permitted, will be constructed and placed on the building site so as to offer the minimum obstruction to the flow of flood waters.
- **a.** Whenever possible, structures will be constructed with the longitudinal axis parallel to the direction of flow of flood waters, and,
- **b**. So far as practicable, structures will be placed so their longitudinal axis are approximately on the same line as those adjoining structures.
- (4) Structures will be firmly anchored to prevent the structure or building from floating away and thus threatening to further restrict bridge openings and other restricted sections of the stream or rivers; and,
- (5) Service facilities such as electrical and heating equipment will be at or above the flood protection elevation for the particular area.
- **a.** Other "Structures (Temporary or Permanent)" may be permitted only upon a finding by the Board of Appeals that:

**1.** Such structures shall comply with sub. (5)(A)3,

4, and 5.

2. The first floor, or basement floor of any structure to be erected, constructed, reconstructed, or moved on the flood plain shall be constructed on fill with the finished surface of these floors at or above the flood protection elevation for the particular area (as defined in Section 19.06(3)). The fill shall be not less than one foot below the flood protection elevation for the particular area and the fill shall extend at such elevation at least 15 feet beyond the limits of any structure or building erected thereon.

**3.** All buildings and structures shall be set back at least 75 feet from the ordinary high water mark.

- **(6)** <u>FILLS OR DEPOSITS OF MATERIALS</u> may be permitted only upon a finding by the Board of Appeals that:
- (A) Any fill or deposit of materials will comply with sub. (3) Special Provisions.
- **(B)** The fill or deposit of materials will have some beneficial purpose and the amount thereof will not be greater than is necessary to achieve that purpose, as demonstrated by a plan submitted by the owner showing the final dimensions of the proposed fill or other material and the use to which the filled land will be put.
- **(C)** The fill or deposit of materials does not encroach on the channel area between the "ordinary high water marks" on each bank of the stream unless a permit has been granted by the Division of Environmental Protection pursuant to Sec. 30.12, Wis. Stats., and other requirements of this section are met; and,
- **(D)** The fill or other materials will be protected against erosion by riprap vegetative cover or other adequate measures.
- (7) THE STORAGE OR PROCESSING OF MATERIALS that are buoyant, flammable, explosive, or 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 (as defined in Sec. 19.14(8) "flood proofed") in compliance with Sec. 19.10(5). Solid wastes disposal facilities such as junkyards or areas for the dumping of refuse shall also require a permit from the Department of Natural Resources pursuant to Section 144.46, Wisconsin Statutes.
- (8) <u>USES VERY SIMILAR IN NATURE TO PERMITTED USES</u>, provided that they are consistent with the provisions of this chapter.
- **19.07 ZONING ADMINISTRATOR**. The Zoning Administrator or other officer appointed to administer the underlying zoning code shall also administer the provisions

of this chapter. The Building Inspector shall have the duties of Zoning Administrator under this ordinance.

- **19.08 ZONING PERMIT**. A zoning permit must be obtained from the Zoning Administrator before any new land use subject to the provisions of this chapter may be initiated.
- **19.09 BOARD OF APPEALS**. The Village President shall appoint a Board of Appeals according to Sec. 62.23(7)(3) Wis. Stats. Such Board may be the Board appointed under Sec. 2.01(3).
- (1) <u>POWERS OF THE BOARD</u>. The Board of Appeals shall adopt rules for the conduct of business and may exercise all of the powers conferred on such boards by Sec. 62.23(7)(e), Wis. Stats.
- **(A)** The Board shall hear and decide appeals where it is alleged there is an error in any order, requirement, decision or determination made by an administrative official in the enforcement or administration of this chapter.
- **(B)** It shall hear and decide special exceptions to the terms of this chapter upon which the Board is required to pass under this chapter.
- **(C)** It may authorize upon appeal in specific cases such variance from the terms of this chapter as will not be contrary to the public interest, where, owing to special conditions, literal enforcement of the provisions of this chapter will result in practical difficulty or unnecessary hardship so that the spirit of this chapter shall be observed, public safety and welfare secured, and substantial justice done.
- **(D)** No variance shall have the effect of allowing in any district uses prohibited in that district, permit a lower degree of flood protection than the flood protection elevation for the particular area, or permit standards lower than those required by State law.
- (2) <u>APPEALS TO THE BOARD.</u> Appeals to the Board of Appeals may be taken by a person aggrieved or by an officer, department, board or bureau of the Village affected by any decision of the Zoning Administrator. Such appeal shall be taken within a reasonable time, as provided by the rules of the Board, by filing with the Zoning Administrator and with the Board of Appeals a notice of appeal specifying the ground thereof. The Zoning Administrator shall forthwith transmit to the Board all the papers constituting the record upon which the action appealed from was taken.

#### (3) **HEARING APPEALS**

(A) The Board of Appeals shall fix a reasonable time for the hearing of the appeal; give public notice thereof by publishing in the official newspaper of the Village not less than 10 days prior to the hearing a notice specifying the date, time and place of hearing and the matters to come before the Board; as well as mailed notices to

the parties in interest including the main and appropriate regional office of the Division of Environmental Protection.

- **(B)** A decision regarding the appeal shall be made as soon as practicable.
- **(C)** The final disposition of an appeal or application to the Board of Appeals shall be in the form of a written resolution or order signed by the Chairman and Secretary of the Board. Such resolution shall state the specific facts which are the basis for the Board's determination and shall either affirm, reverse, vary or modify the order, requirement, decision or determination appealed, in whole or in part, dismiss the appeal for lack of jurisdiction or prosecution or grant the application.
- **(D)** A copy of any decision granting a variance shall be mailed to the main office of the Division of Environmental Protection.
- **(E)** Upon hearing any party may appear in person or by agent or by attorney.
- (4) <u>MAPPING DISPUTES</u>. The following procedure shall be used by the Board of Appeals in deciding contested cases in which the location of a flood plain zoning district boundary is disputed.
- (A) Flood District Boundaries. When the location of the flood plain district boundary is established by experience, flood maps or engineering studies, pursuant to Sec. 19.06, the flood elevations or "flood profiles" for the point in question shall be the governing factor in locating the district boundary on the land. If elevations or profiles are not available, the Board of Appeals may examine any other available evidence that is relevant.
- **(B)** In all cases, the person contesting the location of the district boundary shall be given a reasonable opportunity to present his case to the Board of Appeals and to submit his own technical evidence if he so desires. The Board shall not allow deviations from the boundary line as mapped unless the evidence clearly and conclusively establishes that the mapped location of the line is incorrect.

# 19.10 SPECIAL EXCEPTION PERMITS

- (1) <u>APPLICATION FOR</u>. Any use listed in this chapter as requiring a special exception permit may be allowed only upon application to the Zoning Administrator and issuance of a special exception permit by the Board of Appeals.
- **PROCEDURE.** Upon receiving an application for such a special exception permit involving the use of fill, construction of structures, or storage of materials, the Board of Appeals shall, prior to rendering a decision thereon:

- **(A)** Require the applicant to submit, at the time of application, 2 copies of an aerial photograph, or a plan certified by a competent technician, which accurately locates the flood plain proposal with respect to the flood plain district limits, channel of stream, existing flood plain 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.
- **(B)** Transmit one copy of the information described in par. (A) to the Division of Environmental Protection with a request to have that agency provide expert technical assistance in evaluating the effects of the proposed project upon flood heights, velocities, and flood plain storage areas and the determination of flood protection levels.
- **(C)** Require the applicant to furnish such of the following additional information as is deemed necessary by the Board of Appeals for the evaluation of the effects of the proposal upon flood flows and flood plain storage and to render a decision on the proposed flood plain use:
- (1) A typical valley cross-section showing the channels of the stream, the flood plain adjoining each side of the channel, cross-section area to be occupied by the proposed development and high water information.
- (2) 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, sanitary facilities, and soil types and other pertinent information.
- (3) Profile showing the slope of the bottom of the channel or flow line of the stream.
- (4) Specifications for building construction and materials, "flood proofing", filling, dredging, grading, channel improvement, storage of materials, water supply and sanitary facilities.
- (3) FACTORS UPON WHICH THE DECISION OF THE BOARD SHALL BE BASED. The determination of the Board of Appeals on each special exception permit shall be based on the effects of the proposed project with respect to the objectives and purposes of this chapter as stated in Sec. 19.03, Statement of Purpose.
- (4) PROCEDURE ON APPEAL. The Board shall act on an application in the manner above described within 60 days from receiving the application except that where additional information is required by the Board pursuant to Sec. 19.10(2)(C), the Board shall render a written decision within 60 days from the receipt of such information. A copy of any such decision shall be mailed to the main and appropriate regional office of the Department of Natural Resources.

- (5) <u>CONDITIONS ATTACHED TO SPECIAL EXCEPTION PERMITS</u>. Upon consideration of the factors listed above and the purposes of this chapter, the Board of Appeals may attach such conditions, in addition to those required by specific permits, as it deems necessary in furthering the purposes of this chapter. Such conditions may include specifications, for, without limitation because of specific enumeration; modification of sewage disposal and water supply facilities, modifications of other waste disposal methods and facilities, landscaping, periods of operation, operational controls, sureties, deed restrictions, and adequate "flood proofing".
- (A) <u>"Flood Proofing".</u> Special exceptions requiring flood proofing measures such as the following shall be designed consistent with the flood protection elevation for the particular area as described in Sec. 19.06(3), and flood velocities, forces and other factors associated with the flood protection elevation. The Board of Appeals shall require that the applicant submit a plan or document certified by a registered professional engineer that the flood proofing measures are consistent with the flood protection elevation for the particular area.
  - (1) Anchorage to resist flotation and lateral movement.
  - (2) Installation of watertight doors, bulkheads, and shutters.
  - (3) Reinforcement of walls to resist water pressures.
- (4) Use of paints, membranes or mortars to reduce seepage of water through walls.
  - (5) Addition of mass or weight to structures to resist flotation.
  - (6) Installation of pumps to lower water levels in structure.
- (7) Construction of water supply and waste treatment systems to prevent the entrance of flood waters.
- (8) Pumping facilities for subsurface drainage systems for buildings to relieve external foundation wall and basement floor pressures.
- (9) Construction to resist rupture or collapse caused by water pressure of floating debris.
- (10) Cutoff valves on sewer lines or the elimination of gravity-flow basement drains.
- **19.11** <u>CERTIFICATE OF COMPLIANCE</u>. No vacant land shall be occupied or used and no building hereafter erected, altered, or moved on the flood plains of any river or stream shall be occupied until a Certificate of Compliance shall have been issued by the Zoning Administrator.

The Zoning Administrator may request the applicant to submit a certification by a registered professional engineer or land surveyor, that the finished fill and building elevations, flood proofing measures, or other flood protection factors were accomplished in compliance with this chapter. The Zoning Administrator shall within 10 days after receipt of such certification from the applicant issue a Certificate of Compliance only if the building or premises and the proposed use thereof conform with all the requirements of this chapter.

**19.12 ENFORCEMENT AND PENALTIES.** Every structure, building, fill or development placed or maintained within any flood plain in violation of this chapter is a public nuisance and the creation thereof may be enjoined and maintenance thereof may be abated by action at suit of the Village, the State or any citizen thereof. Any person who places or maintains any structure, building, fill or development within any flood plain in violation of this chapter shall be subject to a forfeiture of not more than \$50 for each offense. Each day during which such violation exists is a separate offense.

#### 19.13 AMENDMENTS

- (1) The Village Board may from time-to-time alter, supplement or change the boundaries of use districts and the regulations contained in this chapter in the manner provided by law.
- (A) Amendments to this chapter may be made on petition of any interested party in accordance with Sec. 62.23(7)(d), Wis. Stats.
- **(B)** Copies of any amendment proposed to the Village Board which is referred to the Village Planning Commission shall be forwarded by the Secretary of the Planning Commission, together with the first notice of public hearing thereon, to the main office and appropriate regional office of the Division of Environmental Protection.
- **(C)** Any amendments to this Flood Plain Zoning Ordinance must be approved by the Department of Natural Resources before becoming effective, and wherever in this chapter the term "Division of Resource Development" is used, it shall mean the "Department of Natural Resources".
- **(D)** A copy of the action taken by the Village Board on any amendment shall be forwarded to the main office and appropriate regional office of the Division of Environmental Protection.
- **19.14 <u>DEFINITIONS</u>**. Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the same meaning as they have at common law and to give this chapter its most reasonable application.
- (1) <u>CHANNEL</u>. A natural or artificial watercourse of perceptible extent, with definite bed and banks to confine and conduct continuously or periodically flowing

water. Channel flow thus is that water which is flowing within the limits of the defined channel.

- (2) <u>EQUAL DEGREE OF ENCROACHMENT</u>. Is established by considering the effect of encroachments of the hydraulic efficiency of the "flood plain" along a significant "reach" of the stream. Hydraulic efficiency depends on such factors as the relative orientation of the channel with respect to the "floodway", the natural and manmade characteristics of the flood plain, relative ground level on both sides of the stream, the type of vegetation of both sides of the stream and the resistance of such vegetation to flood flows. In most cases, these factors will not result in equal distances of areas between encroachment lines on both sides of the stream.
- (3) ENCROACHMENT LINES. Limits of obstruction to flood flow--these lines are generally parallel to the stream. The lines are established by assuming that the area landward (outside) of the encroachment lines will be ultimately developed in such a way that it will not be available to convey flood flows. The stream channel and adjoining flood plains between these lines will be maintained as open space and will be adequate to convey the regional flood without adversely increasing flood heights.
- (4) <u>FLOOD</u>. A temporary rise in stream flow or stage that results in water overtopping its banks and inundating areas adjacent to the channel.
- (5) <u>FLOOD PLAIN</u>. The land adjacent to a body of water which had been or may be hereafter covered by flood water including, but not limited to, the regional flood.
- **(6) FLOODWAY**. The channel of a stream and those portions of the flood plain adjoining the channel that are required to carry and discharge the flood water or flood flows of any river or stream including, but not limited to, flood flows associated with the regional flood.
- (7) <u>FLOOD PROFILE</u>. A graph or longitudinal profile showing the relationship of the water surface elevation of a flood event to location along a stream or river.
- **(8) FLOOD PROOFING.** A combination of structural provisions, changes, or adjustments to properties and structures subject to flooding primarily for the reduction or elimination of flood damages to properties, water and sanitary facilities, structures, and contents of buildings in a flood hazard area.
- **(9) FLOOD STAGE.** The height or elevation of a flood as referred to some datum. For other purposes, it is commonly used to refer to the elevation at which the stream will overtop its normal stage banks.
- (10) <u>ORDINARY HIGH WATER MARK</u>. The highest point on the bank of a normal stage channel at which the water level has been for a sufficient period of time to leave a definite mark.

- (11) <u>REACH</u>. A hydraulic engineering term to describe longitudinal segments of a stream or river. A reach will generally include the segment of the flood plain where flood heights are primarily controlled by man-made or natural flood plain obstructions or restrictions. In an urban area, the segment of a stream or river between 2 consecutive bridge crossings would most likely be a reach.
- (12) <u>REGIONAL FLOOD</u>. The regional flood is a flood determined by the Division of Environmental Protection which is representative of large floods known to have occurred generally in Wisconsin and reasonably characteristic of what can be expected to occur on a particular stream. The regional flood generally has an average frequency in the order of the 100 year recurrence interval flood determined from an analysis of floods on a particular stream and other streams in the same general region.
- (13) <u>STANDARD PROJECT FLOOD</u>. A hypothetical flood, estimated by the Corps of Engineers, representing the critical runoff volume and peak discharge that may be expected from the most severe combination of meteorological and hydrologic conditions that are considered reasonably characteristic of the geographical region involved, excluding extremely rare combinations.
- (14) <u>STORAGE CAPACITY OF A FLOOD PLAIN.</u> The volume of space above an area of flood plain land that can be occupied by flood water of a given stage at a given time, regardless of whether the water is moving.
- (15) <u>STRUCTURE.</u> Anything constructed or erected, the use of which requires a more or less permanent location on or in the ground. Includes, but is not limited to, objects such as buildings, factories, sheds, and cabins.
- (16) <u>PERMANENT STRUCTURE.</u> A structure which is built of such materials and in such a way that it would commonly be expected to last and remain for a substantial period of time.
- (17) <u>TEMPORARY STRUCTURE.</u> A structure which is built of such materials and in such a way that it would commonly be expected to have a relatively short useful life, or is built for a purpose that would commonly be expected to be relatively short-term.