CITY OF PLYMOUTH, WISCONSIN TUESDAY, MAY 28, 2024 COMMITTEE OF THE WHOLE MEETING 6:30 PM, COUNCIL CHAMBERS CITY HALL, 128 SMITH STREET

AGENDA

- 1. Call to Order and Roll Call
- 2. Approve the Minutes from May 14, 2024
- 3. Discussion and Recommendation of Replacement Battery Backup System
- 4. Discussion and Recommendation for Floodplain Ordinance
- 5. Demonstration of Online Strategic Plan
- 6. Adjourn

It is likely a quorum of members of other governmental bodies of the municipality may be in attendance at the above stated meeting to gather information. No action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice.

Please note that, upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service, please contact the City of Plymouth ADA Coordinator Leah Federwisch, located in the Plymouth Utilities office at 900 County Road PP, Plymouth, WI or call 920-893-3853.

CITY OF PLYMOUTH, WISCONSIN TUESDAY, MAY 14, 2024 COMMITTEE OF THE WHOLE MEETING 6:00 PM, COUNCIL CHAMBERS CITY HALL, 128 SMITH STREET

UNOFFICIAL MINUTES

- 1. Call to Order and Roll Call: Mayor Pohlman called the meeting to order at 6:00 PM. On the call of the roll the following were present: Jeff Tauscheck, Angie Matzdorf, Diane Gilson, Mike Penkwitz, Dave Herrmann, and John Binder. Also present were: City Administrator/Utilities Manager Tim Blakeslee and City Clerk Anna Voigt.
- 2. Approve the Minutes from April 30, 2024: Motion was made by Tauscheck/Penkwitz to approve the minutes from April 30. A unanimous aye vote was cast. Motion carried.
- 3. Discussion and Recommendation for Generations Funding Agreement: City Administrator/Utilities Manager Blakeslee explained that the City of Plymouth has been providing annual funding to the Plymouth Intergenerational Coalition since 2013. This commitment has been extended multiple times, with the most recent agreement ending on April 30, 2024. Staff proposes extending the funding agreement for an additional threeyear period. This proposal includes a 2.14% increase per year, aligning with the recent City levy increase percentage. A motion was made by Binder/Penkwitz to recommend Common Council approve an Addendum to funding agreement with Generations. Upon the call of the roll, all voted aye. Motion carried.
- **4. Generations Annual Presentation:** Greg Voss, the Director of Generations, gave his annual presentation.
- 5. Sheboygan County Economic Development Corporation (SCEDC) Forward Fund Presentation: Brian Doudna, the Executive Director of the SCEDC, presented an informational update on their housing initiative Forward Fund. Doudna explained the structure of their housing projects as they consider future locations. Penkwitz asked about the history of the Forward Fund and how it got started. Doudna stated that if the County doesn't increase the number of people in the County, we will lose investment of the companies. Binder asked if there is going to be any environmental features to the new homes. Doudna stated that environmental has been discussed, but getting solar credit for the current model of homes just didn't work out. Gilson asked if Doudna just operated in Sheboygan County. He responded yes, he is just in Sheboygan County he gives presentations in other areas. Nelson asked if the project is mostly single homes and duplexes? Doudna stated that they could consider duplexes but it wouldn't be part of the Forward Fund. Nelson suggested talking about on slab construction being a possibility.
- 6. Adjourn: Motion was made by Gilson/Tauscheck to adjourn the meeting. A unanimous aye vote was cast. Motion carried.

City of Plymouth 128 Smith St. - P.O. Box 107 Plymouth, WI 53073-0107



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RE:	Discission and potential referral to Plan Commission on modifications of Section 13-2 regarding floodplain zoning
FROM:	Cathy Austin, P.E., Director of Public Works
TO:	Committee of the Whole
DATE:	May 23, 2024

Background:

The City was notified by the Department of Natural Resources (DNR) that the Federal Emergency Management Agency (FEMA) recently updated some of the Flood Insurance Rate Maps (FIRMs) and the entire Flood Insurance Study (FIS) for Sheboygan County. For the City of Plymouth, the FIRMs remain unchanged and only the Flood Insurance Study for Sheboygan County was updated. In order to continue to be eligible for floodplain insurance under National Flood Insurance Plan (NFIP), the City's floodplain ordinance must be updated.

The DNR has provided a model ordinance which meets the minimum requirements of the NFIP and Chapter NR116, Wisconsin Administrative Code. According to NR 116.05(4)(d), these changes must be adopted into the local floodplain ordinance and approved by the DNR and FEMA no later than August 28, 2024.

City Ordinance Section 13-2 of the zoning code relates to Floodplain Zoning. A draft copy of the ordinance is attached for your review. The majority of the changes are to reflect the minimum standards from the DNR model ordinance. Some of those changes include the following:

Current Code	Proposed Change
	13-2-14: Defines further standards and procedures for removing lands from the floodplain.
	13-2-15: Defines further standards for compliance with the ordinance.
	13-2-22: General standards for development in the general floodplain have been expanded upon.
13-2-23: Allowed for an allowance of 0.01 feet increase in flood heights.	13-2-23: Prohibits any flood height increase.
	13-2-26: Added standards for structures in a campground.
	13-2-29: Sets requirements for applicant supplied analyses, restrictions to encroachments, certification for flood proofing by a professional engineer.

13-2-33: Accessory structures and which are less than 600 SF and valued less than \$10,000 may be constructed with the lowest floor no more than 2-feet below the flood elevation if it is subject to flood velocities of no	13-2-33: Adds requirements for basements and crawlspaces in new construction and substantial improvements residential structures.
more than two feet per second.	Removes current code language for building below flood elevations and requires accessory structures to be constructed on fill with the
	lowest floor elevation at or above the flood elevation.
	13-2-42: Additional development standards and submittals for AO/AH zones.
	13-2-50: Discussion needed. More information later in memo. (Act 175)
13-2-60:	13-2-60: Additional record-keeping requirements for Zoning Administrator.
	Updated Hydraulic and Hydrologic (H&H) submittal requirements.
Permit expiration is 1 year after issuance.	Shorten permit expiration times to 180 days.
	13-2-64: Additions and clarifications to floodproofing standards.
	13-2-90: Additional definitions were added.

13-2-50: Discussion:

As mentioned above, there is one significant change in the draft Floodplain Ordinance related to nonconforming structures. In March 2020 Act 175 was enacted and created Wis Stats. 87.30(1d)(d). This statute creates an exemption to the "50 percent rule". The "50 percent rule" indicates no modifications or additions to any nonconforming structure or any structure with a nonconforming use, which over the life of the structure would equal or exceed 50 percent 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 requirements of the floodplain ordinance.

If the City were to incorporate Act 175 into the floodplain ordinance, if a nonconforming structure is altered to meet the federal minimum standards to new construction and substantial improvements, and the living quarters in the nonconforming building are elevated to be at or above the flood plain elevation, then the Building Inspector is prohibited from imposing cost-based regulations or restrictions to the structure (i.e. no "50 percent rule").

Unlike the other changes, this change is left up to the Municipality. They can choice whether or not to incorporate Act 175 into their floodplain ordinance.

If ACT 175 is incorporated	If ACT 175 is NOT incorporated
Nonconforming structures are not subject to a	No modifications, additions, or repairs can be
cost-based restriction, but are still subject to	made on a structure in the floodway if cost
all other non-cost based regulations.	exceeds 50% of the present equalized value.
Living space is elevated to at or above flood	If structure in the floodway is substantially
elevation.	damaged by a flood, it must be removed from
	the floodway.

applicable requirements to the floodplain	No modifications, additions, or repairs can be made on a structure in the floodfridge if cost
district they are located in. (i.e. H&H study, floodproofing standards, anchoring requirements, etc).	

Recommendation:

Motion to refer modifications of Ordinance Sec. 13-2, including incorporating Act 175, to Plan Commission.

Attachment: 1. Proposed Draft Ordinance

CHAPTER 2

FLOODPLAIN ZONING

- Article A Introduction
- 13-2-1 Statutory Authorization
- 13-2-2 Finding of Fact
- 13-2-3 Statement of Purpose
- 13-2-4 Title
- Article B General Provisions
- 13-2-10 Areas to be Regulated
- 13-2-11 Official Maps & Revisions
- 13-2-12 Establishment of Districts
- 13-2-13 Locating Floodplain Boundaries
- 13-2-14 Removal of Lands from Floodplain
- 13-2-15 Compliance
- 13-2-16 Municipalities and State Agencies Regulated
- 13-2-17 Abrogation and Greater Restrictions
- 13-2-18 Interpretation
- 13-2-19 Warning and Disclaimer of Liability
- 13-2-20 Severability
- 13-2-21 Annexed Areas for Cities and Villages
- 13-2-22 General Development Standards
- Article C General Standards Applicable to all Floodplain Districts
- 13-2-23 Hydraulic and Hydrologic Analyses
- 13-2-24 Watercourse Alterations
- 13-2-25 Wis. Stat. chs. 30 and 31 Development
- 13-2-26 Public or Private Campgrounds
- Article D Floodway District (FW)
- 13-2-27 Applicability
- 13-2-28 Permitted Uses
- 13-2-29 Standards for Development in Floodway Areas
- 13-2-30 Prohibited Uses
- Article E Floodfringe District (FF)
- 13-2-31 Applicability
- 13-2-32 Permitted Uses
- 13-2-33 Standards for Development in Floodfringe Areas_

Article F	General Floodplain District (GFP)
13-2-40 13-2-41 13-2-42 13-2-43	Applicability Permitted Uses Standards for Development in the General Floodplain District Determining Floodway and Floodfringe Limits
Article G	Nonconforming Uses
13-2-50 13-2-51 13-2-52	General Floodway Areas Floodfringe Areas
Article H	Administration
13-2-60 13-2-61 13-2-62 13-2-63 13-2-64 13-2-65	Zoning Administrator Zoning Agency Board of Appeals To Review Appeals of Permit Denials Floodproofin <u>g Standards for Nonconforming Structures or Uses</u> Public Information
Article I	Amendments
13-2-70 13-2-71	<u>General Amendments</u> Procedures
Article J	Enforcement and Penalties
13-2-80	Enforcement and Penalties
Article K	Definitions_
13-2-81	Definitions

ARTICLE A

Introduction

SEC. 13-2-1 STATUTORY AUTHORIZATION.

This ordinance is adopted pursuant to the authorization in Wis. Stat. §§ 61.35 and 62.23 for villages and cities; Wis. Stat. §§ 59.69, 59.692, and 59.694 for counties; and the requirements in Wis. Stat. § 87.30.

SEC. 13-2-2 FINDING OF FACT.

Uncontrolled development and use of the floodplains and rivers of this municipality would impair the public health, safety, convenience, general welfare, and tax base.

SEC. 13-2-3 STATEMENT OF PURPOSE.

- (a) This ordinance is intended to regulate floodplain development to:
 - (1) Protect life, health, and property;
 - (2) Minimize expenditures of public funds for flood control projects;
 - (3) Minimize rescue and relief efforts undertaken at the expense of the
 - (4) Minimize business interruptions and other economic disruptions;
 - (5) Minimize damage to public facilities in the floodplain;
 - (6) Minimize the occurrence of future flood blight areas in the floodplain;
 - (7) Discourage the victimization of unwary land and home buyers;

(8) Prevent increases in flood heights that could increase flood damage and result in conflicts between property owners; and

(9) Discourage development in a floodplain if there is any practicable alternative to locate the activity, use or structure outside of the floodplain.

SEC. 13-2-4 TITLE.

This ordinance shall be known as the Floodplain Zoning Ordinance for Plymouth, Wisconsin.

ARTICLE B

General Provisions

SEC. 13-2-10 AREAS TO BE REGULATED.

This ordinance regulates all areas of special flood hazard identified as zones A, AO, AH, A1-30, and AE on the Flood Insurance Rate Map. Additional areas identified on maps approved by the Department of Natural Resources (DNR) and local community may also be regulated under the provisions of this ordinance, where applicable.

This ordinance regulates all areas that would be covered by the regional flood or base flood.

Note: Base flood elevations are derived from the flood profiles in the Flood Insurance Study. Regional flood elevations may be derived from other studies. Areas covered by the base flood are identified as A-Zones on the Flood Insurance Rate Map.

SEC. 13-2-11 OFFICIAL MAPS & REVISIONS.

The boundaries of all floodplain districts are designated as floodplains or A-Zones on the maps listed below and the revisions in the City of Plymouth Floodplain Appendix. Any change to the Base Flood Elevations (BFE) in the Flood Insurance Study (FIS) or on the Flood Insurance Rate Map (FIRM) must be reviewed and approved by the DNR and FEMA through the Letter of Map Change process (see sec.13-2-70) before it is effective. No changes to Regional Flood Elevations (RFE's) on non-FEMA maps shall be effective until approved by the DNR. These maps and revisions are on file in the office of the Building Inspector and Zoning Administrator of the City of Plymouth. If more than one map or revision is referenced, the most restrictive information shall apply.

(a) OFFICIAL MAPS:

(1) Based on the Sheboygan County Flood Insurance Study (FIS), dated <u>April 2, 2009</u> <u>August 28, 2024</u>, volume numbers 55117CV001B and 55117CV002B

55117CV000A

(2) Sheboygan County Flood Insurance Rate Map (FIRM), panel numbers 55117C0170F, 55117C0188F, 55117C0190F, <u>55117C0285F</u>, 55117C0301F, 55117C0302F, and 55117C0306F

dated April 2, 2009, with corresponding profiles that are based on the FIS.

(b) LETTER OF MAP REVISIONS (1) LOMR 1305-5518P effective 3/21/2014 (2) LOMR 22-05-1328P effective 4/8/2024

_Approved by: The DNR and FEMA

(c) BRICKBAUER DAM ANALYSIS

In May 2019, the Wisconsin Department of Natural Resources (DNR) approved the dam failure analysis for the Brickbauer Dam located on the Mullet River in the Southeast Quarter of the Southwest Quarter of Section 27, Township 15, Range 21 East, Sheboygan County. Based on the results of the approved study and development in the hydraulic shadow, the dam was assigned a final hazard rating of High Hazard due to homes located within the hydraulic shadow which will be inundated greater than 2 feet if a failure were to occur. The areas of potential dam failure (hydraulic shadow) are adequately reflected on a map with additional information such as stationing water surface profile, maximum velocities, and floodway widths provided on a profile plot and in a floodway data table. This information is provided for and referenced in the following titled data table, hydraulic shadow map, and flood profiles:

BRICKBAUER DAM ANALYSIS:

- (1) Hydraulic Shadow Map titled "Brickbauer Dam Hydraulic shadow Map".
- (2) Floodway data table titled "Floodway Data Table".
- (3) Flood profiles titled "Brickbauer Dam. Hydraulic shadow Profiles".

(3)

(Revised 2/09, Amended 6/19)

LOMR 1305-5518P effective 3/21/2014

SEC. 13-2-12 ESTABLISHMENT OF FLOODPLAIN ZONING DISTRICTS.

(a) The regional floodplain areas are divided into three districts as follows:

(1) The Floodway District (FW) is the channel of a river or stream and those portions of the floodplain adjoining the channel required to carry the regional floodwaters and are contained within AE Zones as shown on the FIRM, or within A Zones shown on the FIRM when determined according to sec. 13-2-43.

(2) The Floodfringe District (FF) is that portion of <u>a riverine special flood</u> hazard area outside the floodway within AE Zones on the FIRM, or, when floodway limits have been determined according to sec. 13-2-43 within A Zones shown on the FIRM. the floodplain between the regional flood limits and the floodway.

(3) The General Floodplain District (GFP) is-<u>those riverine areas that</u> may be covered by floodwater during the regional flood in which a floodway boundary has not been delineated on the FIRM and also includes shallow flooding areas identified as AH and AO zones on the FIRM. those areas that have been or may be covered by floodwater during the regional flood.

SEC. 13-2-13 LOCATING FLOODPLAIN BOUNDARIES.

(a) Discrepancies between boundaries on the official floodplain zoning map and actual field conditions shall be resolved using the criteria in paragraphs (a1) or (2b) below. If a significant difference exists, the map shall be amended according to sec. 13-2-70. The zoning administrator can rely on a boundary derived from a profile elevation to grant or deny a land use permit, whether or not a map amendment is required. The zoning administrator shall be responsible for documenting actual pre-development field conditions and the basis upon which the district boundary was determined and for initiating any

map amendments required under this section. Disputes between the zoning administrator and an applicant over the district boundary line shall be settled according to $\sec.13-2-62(\underline{e5})$ and the criteria in (<u>1a</u>) and (<u>b2</u>) below.

(1) If flood profiles exist, the map scale and the profile elevations shall determine the district boundary. The regional or base flood elevations shall govern if there are any discrepancies.

(2) Where flood profiles do not exist, including any boundary of zone A or AO, the location of the boundary shall be determined by the map scale.
 (2) Where flood profiles do not exist, the location of the boundary shall be determined by the map scale, visual on-site inspection and any information provided by the Department.

Note: Where the flood profiles are based on established base flood elevations from a FIRM, FEMA must also approve any map amendment pursuant to sec. 13-2-70-(6).

SEC. 13-2-14 REMOVAL OF LANDS FROM FLOODPLAIN.

- (a) Compliance with the provisions of this ordinance shall not be grounds for removing land from the floodplain unless it is filled at least two feet above the regional or base flood elevation, the fill is contiguous to land outside the floodplain, and the map is amended pursuant to sec. 13-2-70.
- (b) The delineation of any of the Floodplain Districts may be revised by the community where natural or man-made changes have occurred and/or where more detailed studies have been conducted. However, prior to any such change, approval must be obtained from the Wisconsin Department of Natural Resources and Federal Emergency Management Agency. A completed Letter of Map Revision is a record of this approval. The floodplain administrator shall not sign a community acknowledgement form unless all criteria set forth in the following paragraphs are met:
 - (1) The land and/or land around the structure must be filled at least two feet above the regional or base flood elevation;
 - (2) The fill must be contiguous to land outside the floodplain; Applicant shall obtain floodplain development permit before applying for a LOMR or LOMR-F;
- (c) Removal of lands from the floodplain may also occur by operation of §87.30(1)(e), Wis. Stat. if a property owner has obtained a letter of map amendment from the federal emergency management agency under 44 C.F.R. 70.

Note: This procedure does not remove the requirements for the

mandatory purchase of flood insurance. The property owner must contact FEMA to request a Letter of Map Change (LOMC).

SEC. 13-2-15 COMPLIANCE.

- (a) Any development or use within the areas regulated by this ordinance shall be in compliancewith the terms of this ordinance, and other applicable local, state, and federal regulations.<u>No</u> structure or use within areas regulated by this ordinance shall hereafter be located, erected, constructed, reconstructed, repaired, extended, converted, enlarged, or altered without full compliance with the terms of these regulations and all other applicable regulations that apply to uses within the jurisdiction of these regulations.
- (b) Failure to obtain a floodplain development permit shall be a violation of these regulations and shall be punishable in accordance with s. 9.0.
- (c) Floodplain development permits issued on the basis of plans and applications approved by the Floodplain Administrator authorize only the use, and arrangement, set forth in such approved plans and applications, or amendments thereto if approved by the Floodplain Administrator. Use, arrangement, or construction contrary to that authorized shall be deemed a violation of these regulations and punishable in accordance with s. 9.0.

SEC. 13-2-16 MUNICIPALITIES AND STATE AGENCIES REGULATED.

Unless specifically exempted by law, all cities, villages, towns, and counties are required to comply with this ordinance and obtain all necessary permits. State agencies are required to comply if Wis. Stat. § 13.48(13) applies. The construction, reconstruction, maintenance and repair of state highways and bridges by the Wisconsin Department of Transportation are exempt when Wis. Stat. § 30.2022 applies. Although exempt from a local zoning permit and permit fees, DOT must provide sufficient project documentation and analysis to ensure that the community is in compliance with Federal, State, and local floodplain standards. If a local transportation project is located within a Zone A floodplain and is not a WisDOT project under s. 30.2022, then the road project design documents (including appropriate detailed plans and profiles) may be sufficient to meet the requirements for issuance of a local floodplain permit if the following apply: The applicant provides documentation to the Floodplain Administrator that the proposed project is a culvert replacement or bridge replacement under 20' span at the same location, the project is exempt from a DNR permit under s. 30.123(6)(d), the capacity is not decreased, the top road grade is not raised, and no floodway data is available from a federal, state, or other source. If floodway data is available in the impacted area from a federal, state, or other source that existing data must be utilized by the applicant in the analysis of the project site.

SEC. 13-2-17 ABROGATION AND GREATER RESTRICTIONS.

- (a) This ordinance supersedes all the provisions of any municipal zoning ordinance enacted under Wis. Stat. §§ 59.69, 59.692 or 59.694 for counties; Wis. Stat. § 62.23 for cities; Wis. Stat. § 61.35 for villages; or Wis. Stat. § 87.30 which relate to floodplains. If another ordinance is more restrictive than this ordinance, that ordinance shall continue in full force and effect to the extent of the greater restrictions, but not otherwise.
- (b) This ordinance is not intended to repeal, abrogate or impair any existing deed restrictions, covenants or easements. If this ordinance imposes greater restrictions, the provisions of this ordinance shall prevail.

SEC. 13-2-18 INTERPRETATION.

In their interpretation and application, the provisions of this ordinance are the minimum requirements liberally construed in favor of the governing body and are not a limitation on or repeal of any other powers granted by the Wisconsin Statutes. If a provision of this ordinance, required by Wis. Admin. Code Ch. NR 116 is unclear, the provision shall be interpreted in light of the 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. 13-2-19 WARNING AND DISCLAIMER OF LIABILITY.

The flood protection standards in this ordinance are based on engineering experience and scientific research. Larger floods may occur or the flood height may be increased by man-made or natural causes. This ordinance does not imply or guarantee that non-floodplain areas or permitted floodplain uses will be free from flooding and flood damages. Nor does this ordinance create liability on the part of, or a cause of action against, the municipality or any officer or employee thereof for any flood damage that may result from reliance on this ordinance.

SEC. 13-2-20 SEVERABILITY.

Should any portion of this ordinance be declared unconstitutional or invalid by a court of competent jurisdiction, the remainder of this ordinance shall not be affected.

SEC. 13-2-21 ANNEXED AREAS FOR CITIES AND VILLAGES.

The Sheboygan County floodplain zoning provisions in effect on the date of annexation shall remain in effect and shall be enforced by the municipality for all annexed areas until the municipality adopts and enforces an ordinance which meets the requirements of Wis. Admin. Code Ch. NR 116 and <u>the 44 CFR 59-72</u>, National Flood Insurance Program (NFIP). These annexed lands are described on the municipality's official zoning map. County floodplain zoning provisions are incorporated by reference for the purpose of administering this section and are on file in the office of the municipal zoning administrator. All plats or maps of annexation shall show the regional flood elevation and the location of the

floodway.

SEC. 13-2-22 GENERAL DEVELOPMENT STANDARDS.

The community shall review all permit applications to determine whether proposed building sites will be reasonably safe from flooding and assure that all necessary permits have been received from those governmental agencies whose approval is required by federal or state law.

(a) If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall:

- (1) be designed and anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- (2) be constructed with flood-resistant materials;
- (3) be constructed by methods and practices that minimize flood damages; and
- (4) mMechanical and utility equipment must be elevated to or above the flood protection elevation.
- (5) meet other Municipal Code Requirements outlined in Sec. 13-1.
- (b) If a subdivision or other proposed new development is in a flood-prone area, the community shall assure that:
 - (1) such proposed subdivision or other proposed new development is consistent with the need to minimize flood damage within the floodprone area;
 - (2) 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.
 - (4) meet other Municipal Code Requirements outlined in Sec. 13-1.

All subdivision proposals (including manufactured home parks) shall include regional flood elevation and floodway data for any development that meets the subdivision definition of this ordinance and all other requirements in sec. 13-2-60.

If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall be designed or modified and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from

hydrodynamic and hydrostatic loads; be constructed with materials resistant to flood damage; be constructed by methods and practices that minimize flood damages; and be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. Subdivisions shall be reviewed for compliance with the above standards. All subdivision proposals (including manufactured home parks) shall include regional flood elevation and floodway data for any development that meets the subdivision definition of this ordinance.

ARTICLE C

General Standards Applicable to All Floodplain Districts

SEC. 13-2-23 HYDRAULIC AND HYDROLOGIC ANALYSES.

- (a) Except as allowed in par. (3) below, nNo floodplain development shall:
 - Obstruct flow, defined as development which blocks the conveyance of floodwaters by itself or with other development, increasing regional flood height; or
 - (2) Increase regional flood height due to floodplain storage area lost, which equals or exceeds 0.01 foot.
- (b) The zoning administrator shall deny permits if it is determined the proposed development will obstruct flow or increase regional flood heights 0.01 foot or more, based on the officially adopted FIRM or other adopted map, unless the provisions of <u>sub. (3) sec. 13-2-70</u> are met.
- (c) Obstructions or increases_ equal to or greater than 0.01 foot may only be permitted if amendments are made to this ordinance, the official floodplain zoning maps, floodway lines and water surface profiles, in accordance with sec. 13-2-70.
- **Note:** This section refers to obstructions or increases in base flood elevations as shown on the officially adopted FIRM or other adopted map. Any such alterations must be reviewed and approved by FEMA and the DNR.

SEC. 13-2-24 WATERCOURSE ALTERATIONS.

No land use permit to alter or relocate a watercourse in a mapped floodplain shall be issued until the local official has notified in writing all adjacent municipalities, the Department and FEMA regional offices and required the applicant to secure all necessary state and federal permits. The <u>standards of sec. 13-2-23 must be met</u> and flood carrying capacity of any of any altered or relocated watercourse shall be maintained.

As soon as is practicable, but not later than six months after the date of the watercourse alteration or relocation and pursuant to sec. 13-2-70, the zoning administrator or Community shall shall apply for a Letter of Map Revision (LOMR) from FEMA. Any such alterations must be reviewed and approved by FEMA and the DNR through the LOMC process. notify FEMA of the changes by submitting appropriate technical or scientific data in accordance with NFIP guidelines that shall be used to revise the FIRM, risk premium rates and floodplain management regulations as required.

SEC. 13-2-25 WIS. STAT. CHS. 30 AND 31, DEVELOPMENT.

Development which requires a permit from the Department, under Wis. Stat. chs. 30 and 31 such as docks, piers, wharves, bridges, culverts, dams and navigational aids, may be allowed if the necessary permits are obtained and amendments to the <u>floodplain ordinance are made according to sec. 13-2-70.</u> floodway lines, water surface profiles, BFE's established in the FIS, or other data from the officially adopted FIRM, or other floodplain zoning maps or the floodplain zoning ordinance are made according to sec. 13-2-70.

SEC. 13-2-26 PUBLIC OR PRIVATE CAMPGROUNDS.

Public or private campgrounds shall have a low flood damage potential and shall meet the following provisions:

(a) The campground is approved by the Department of Health and Family Services.<u>Agriculture, Trade and Consumer Protection.</u>

(b) A land use permit for the campground is issued by the zoning administrator.

(c) The character of the river system and the elevation of the campground are such that a 72-hour warning of an impending flood can be given to all campground occupants.

(d) There is an adequate flood warning procedure for the campground that offers the minimum notice required under this section to all persons in the campground. This procedure shall include a written agreement between the campground owner, the municipal emergency government coordinator and the chief law enforcement official which specifies the flood elevation at which evacuation shall occur, personnel responsible for monitoring flood elevations, types of warning systems to be used and the procedures for notifying at-risk parties, and the methods and personnel responsible for conducting the evacuation.

(e) This agreement shall be for no more than one calendar year, at which time the agreement shall be reviewed and updated by the officials identified

in sub. (4) to remain in compliance with all applicable regulations, including those of the state <u>dD</u>epartment<u>of Agriculture</u>, <u>Trade and Consumer</u> <u>Protection of health and family services</u> and all other applicable regulations.

(f) All mobile recreational vehicles placed on site must meet one of the following:

- (f)(1) Only camping units that are fully licensed, if required, and ready for highway use are allowed.
 - (2) The camping units may not occupy any site in the campground for more than 180 consecutive days, at which time the camping unit must be removed from the floodplain for a minimum of 24 hours.
 - (3) Meet the requirements in either Article D, Article E, and Article F for the floodplain district in which the structure is locates

A mobile recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect utilities and security devices and has no permanently attached additions.

(g)

(h)(g) All camping units that remain on site for more than 30 days shall be issued a limited authorization by the campground operator, a written copy of which is kept on file at the campground. Such authorization shall allow placement of a camping unit <u>consistent with 13-2-26(f)</u> for a period not to exceed 180 days and shall ensure compliance with all the provisions of this section.

(i)(h) The municipality shall monitor the limited authorizations issued by the campground operator to assure compliance with the terms of this section.

(j) All camping units that remain in place for more than 180 consecutive days must meet the applicable requirements in either Article D or Article E for the floodplain district in which the structure is located.

(k)(i) The campground shall have signs clearly posted at all entrances warning of the flood hazard and the procedures for evacuation when a flood warning is issued.

(j) All service facilities, including but not limited to refuse collection, electrical service, natural gas lines, propane tanks, sewage systems and wells shall be properly anchored and placed at or floodproofed to the flood protection elevation.

(k) Standards for structures in a campground:

(1) All structures must comply with sec. 13-2-26 or meet the applicable requirements in Article D, Article E, and Article F for the floodplain

district in which the structure is located;

- (2) Deck/landing-a portable landing may be allowed for a camping unit for each entry provided that the landing is not permanently attached to the ground or camping unit, is no more than 200 square feet in size, shall be portable, contain no walls or roof, and can be removed from the campground by a truck and/or trailer. Sections of such portable landings may be placed together to form a single deck not greater than 200 square feet at one entry point. Provisions for the removal of these temporary landings during flood events must be addressed within the written agreement with the municipality compliant with sec. 13-2-26(d). Any such deck/landing structure may be constructed at elevations lower than the flood protection elevation but must not obstruct flow of flood waters or cause any increase in flood levels during the occurrence of the regional flood.
- (3) Decks/patios that are constructed completely at grade may be allowed but must also comply with applicable shoreland zoning standards.
- (4) Camping equipment and appurtenant equipment in the campground may be allowed provided that the equipment is not permanently attached to the ground or camping unit, is not used as a habitable structure, and must not obstruct flow of flood waters or cause any increase in flood levels during the occurrence of the regional flood. Provisions for the removal of this equipment during flooding events shall be addressed within the written agreement with the municipality compliant with sec. 13-2-26(d).
- (5) Once a flood warning in the written agreement has been issued for the campground, the campground owner or the designated operator shall ensure that all persons, camping units, decks, camping equipment and appurtenant equipment in the campground shall be evacuated within the timelines specified within the written agreement with the municipality compliant with sec. 13-2-26(d).
- (I) <u>A land use permit shall be obtained as provided under sec. 13-2-61</u> <u>before any development; repair, modification, or addition to an</u> <u>existing structure; or change in the use of a building or structure,</u> <u>including sewer and water facilities, may be initiated.</u>

ARTICLE D

Floodway District (FW)

SEC. 13-2-27 APPLICABILITY.

This section applies to all floodway areas on the floodplain zoning maps and those identified pursuant to sec. 13-2-43.

SEC. 13-2-28 PERMITTED USES.

(a) The following open space uses are allowed in the floodway district and the floodway areas of the general floodplain district, if

- They are not prohibited by any other ordinance;
- They meet the standards in sec. 13-2-29 and sec. 13-2-30; and
- All permits or certificates have been issued according to 13-2-60
- (a) Agricultural uses, such as: farming, outdoor plant nurseries, horticulture, viticulture and wild crop harvesting.
- (b) Nonstructural industrial and commercial uses, such as loading areas, parking areas and airport landing strips.
- (c) Nonstructural recreational uses, such as golf courses, tennis courts, archery ranges, picnic grounds, boat ramps, swimming areas, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting, trap and skeet activities, hunting and fishing areas and hiking and horseback riding trails, subject to the fill limitations of sec. 13-2-29(d)(4).
- (d) Uses or structures accessory to open space uses, or classified as historic structures that comply with sec. 13-2-29 and sec. 13-2-30.
- (e) Extraction of sand, gravel or other materials that comply with sec. 13-2-29(d)(4).
- (f) Functionally water-dependent uses, such as docks, piers or wharves, dams, flowage areas, culverts, navigational aids and river crossings of transmission lines, and pipelines that comply with Wis. Stat. chs. 30 and 31.
- (g) Public utilities, streets, and bridges that comply with sec. 13-2-29 ($\underline{c3}$).
- (h) Portable latrines that are removed prior to flooding and systems associated with recreational areas and Department-approved campgrounds that meet the applicable provisions of local ordinances and Ch. SPS 383, Wis. Adm. Code.
- (i) Public or private wells used to obtain potable water for recreational areas that meet the requirements of local ordinances and chs. NR 811 and NR 812, Wis. Adm. Code.

- (j) Wastewater treatment ponds or facilities permitted under s. NR <u>110.15(3)(b), Wis. Adm. Code.</u>
- (g)(k) Sanitary sewer or water supply lines to service existing or proposed development located outside the floodway that complies with the regulations for the floodplain area occupied.

SEC. 13-2-29 STANDARDS FOR DEVELOPMENT IN FLOODWAY AREAS.

- (a) GENERAL.
 - (1) Any development in floodway areas shall comply with Article C and have a low flood damage potential.
 - (2) Applicants shall provide an analysis calculating the effects of this proposal on the regional flood height to determine the effects of the proposal according to sec. 13-2-26 and sec. 13-2-60(b)(3). The analysis must be completed by a registered professional engineer in the state of Wisconsin.
 - (3) Any encroachment in the regulatory floodway is prohibited unless the data submitted for sec. 13-2-29(a)(2) above demonstrates that the encroachment will cause no increase in flood elevations in flood events up to the base flood at any location or removes the encroached area from the regulatory floodway as provided in sec. 13-2-14.

(2) the following data to determine the effects of the proposal according to sec. 13-2-23:

1. A cross-section elevation view of the proposal, perpendicular to the watercourse, showing if the proposed development will obstruct flow; or

2. An analysis calculating the effects of this proposal on regional flood height.

(3) The zoning administrator shall deny the permit application if the project will increase flood elevations upstream or downstream 0.01 foot or more, based on the data submitted for par. (b) above.

(a)(b) STRUCTURES.

Structures accessory to permanent open space uses, <u>including utility and</u> <u>sanitary facilities</u>, or functionally dependent on a waterfront location may be

allowed by permit if the structures comply with the following criteria:

- (1) Not designed for human habitation, does not have a high flood damage potential and is constructed to minimize flood damage;
- (2) Shall either have the lowest floor elevated to or above the flood protection elevation or shall meet all the following standards:
 - (a) Have the lowest floor elevated to or above the regional flood elevation and be dry floodproofed so that the structure is watertight with walls substantially impermeable to the passage of water and completely dry to the flood protection elevation without human intervention during flooding;
 - (b) Have structural components capable of meeting all provisions of sec. 13-2-29(b)(7) and;
 - (c) Be certified by a registered professional engineer or architect, through the use of a Federal Emergency Management Agency Floodproofing Certificate, that the design and methods of construction are in accordance with sec. 13-2-29(b)(7).
- (3) Must be anchored to resist flotation, collapse, and lateral movement;
- (4) Mechanical and utility equipment must be elevated to or above the flood protection elevation; and
- (5) Must not obstruct flow of flood waters or cause any increase in flood levels during the occurrence of the regional flood.
- (6) For a structure designed to allow the automatic entry of floodwaters below the Regional Flood Elevation, the applicant shall submit a plan that meets sec. 13-2-29(b)(1) through 13-2-29(b)(6) and meets or exceeds the following standards:
 - (a) The lowest floor must be elevated to or above the regional flood elevation;
 - (b) A minimum of two openings having a total net area of not less than one square inch for every 13 - 16

square foot of enclosed area subject to flooding;

- (c) The bottom of all openings shall be no higher than one foot above the lowest adjacent grade; openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters, otherwise must remain open.
- (d) The use must be limited to parking, building access or limited storage.
- (7) Certification: Whenever floodproofing measures are required, a registered professional engineer or architect shall certify that the following floodproofing measures will be utilized, where appropriate, and are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the regional flood:
 - (a) Reinforcement of floors and walls to resist rupture, collapse, or lateral movement caused by water pressures or debris buildup;
 - (b) Construction of wells, water supply systems and waste treatment systems so as to prevent the entrance of flood waters in such systems and must be in accordance with provisions in sec. 13-2-30(d) and 13-2-30(e);
 - (c) Subsurface drainage systems to relieve external pressures on foundation walls and basement floors;
 - (d) Cutoff valves on sewer lines or the elimination of gravity flow basement drains; and
 - (e) Placement of utilities to or above the flood protection elevation.
- (1) The structure is not designed for human habitation and does not have a high flood damage potential;

(2) It must be anchored to resist flotation, collapse, and lateral movement;

(3) Mechanical and utility equipment must be elevated or flood proofed to or above the flood protection elevation; and

(4) It must not obstruct flow of flood waters or cause any increase in flood levels during the occurrence of the regional flood.

(b)(c) PUBLIC UTILITIES, STREETS AND BRIDGES.

Public utilities, streets and bridges may be allowed by permit, if:

- (1) Adequate floodproofing measures are provided to the flood protection elevation; and
- (2) Construction meets the development standards of sec. 13-2-23.

(c)(d) FILLS OR DEPOSITION OF MATERIALS.

Fills or deposition of materials may be allowed by permit, if:

- (1) The requirements of sec. 13-2-23 are met;
- (2) No material is deposited in the navigable channel unless a permit is issued by the Department pursuant to Wis. Stat. ch. 30 and a permit pursuant to s. 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. 1344 has been issued, if applicable, and the other requirements of this section are met;
- (3) The fill or other materials will be protected against erosion by riprap, vegetative cover, sheet piling or bulkheading; and
- (4) The fill is not classified as a solid or hazardous material.

SEC. 13-2-30 PROHIBITED USES.

All uses not listed as permitted uses in sec.13-2-28 are prohibited, including the following uses:

(a) Habitable structures, structures with high flood damage potential, or those not associated with permanent open-space uses;

(b) Storing materials that are buoyant, flammable, explosive, injurious to property, water quality, or human, animal, plant, fish or other aquatic life;

(c) Uses not in harmony with or detrimental to uses permitted in the adjoining districts;

(d) Any private or public sewage systems, except portable latrines that are removed prior to flooding and systems associated with recreational

areas and Department-approved campgrounds that meet the applicable provisions of local ordinances and Wis. Admin. Code Ch. <u>SPS 383</u>-COMM 83;

(e) Any public or private wells which are used to obtain potable water, except those for recreational areas that meet the requirements of local ordinances and Wis. Admin. Code Chs. NR 811 and 812;

(f) Any solid or hazardous waste disposal sites;

(g) Any wastewater treatment ponds or facilities, except those permitted under Wis. Admin. Code § NR 110.15(3)(b);

(h) Any sanitary sewer or water supply lines, except those to service existing or proposed development located outside the floodway which complies with the regulations for the floodplain area occupied.

ARTICLE E

Floodfringe District (FF)

SEC. 13-2-31 APPLICABILITY.

This section applies to all floodfringe areas shown on the floodplain zoning maps and those identified pursuant to sec. 13-2-43.

SEC. 13-2-32 PERMITTED USES.

Any structure, land use, or development is allowed in the floodfringe district if the standards in sec. 13-2-32 are met, the use is not prohibited by this or any other ordinance or regulation and all permits or certificates specified in sec. 13-2-60 have been issued.

SEC. 13-2-33 STANDARDS FOR DEVELOPMENT IN FLOODFRINGE AREAS.

Standards. Sec. 13-2-23 <u>Article C</u> shall apply in addition to the following requirements according to the use requested. <u>Any existing structure in the floodfringe must meet the requirements of Article G.</u>

(a) RESIDENTIAL USES.

Any structure, including a manufactured home, which is to be newly constructed or moved into the floodfringe, shall meet or exceed the following standards. Any existing structure in the floodfringe must meet the requirements of Article G - Nonconforming Uses. Any habitable structure, including a manufactured home, which is to be erected, constructed, reconstructed, altered, or moved into the floodfringe area, shall meet or

exceed the following standards;

(1) <u>All new construction, including placement of manufactured</u> <u>homes, and substantial improvement of residential structures, shallThe</u> <u>have the</u> elevation of the lowest floor, <u>excluding the basement or</u> <u>crawlway</u>, shall be at or above the flood protection elevation on fill. The fill shall be one foot or more above the regional flood elevation extending at least 15 feet beyond the limits of the structure. <u>No area may be</u> <u>removed from the floodfridge district unless it can be shown to meet sec.</u> <u>13-2-14</u>. The Department may authorize other floodproofing measures if the elevations of existing streets or sewer lines makes compliance with the fill standards impractical;

(2) Notwithstanding sec.13-2-33(a)(1), a basement or crawlspace floor may be placed at the regional flood elevation if the basement or crawlspace is designed to make all portions of the structure below the flood protection elevation watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. No floor of any kind is allowed below the regional flood elevation;

(2) The basement or crawlway floor may be placed at the regional flood elevation if it is <u>dry</u> floodproofed to the flood protection elevation. No basement or crawlway floor is allowed below the regional flood elevation;

(3) Contiguous dryland access shall be provided from a structure to land outside of the floodplain, except as provided in par. (4d).

(4) In developments where existing street or sewer line elevations make compliance with par. ($\underline{3}e$) impractical, the municipality may permit new development and substantial improvements where access roads are at or below the regional flood elevation, if:

(a) The municipality has written assurance from police, fire and emergency services that rescue and relief will be provided to the structure(s) by wheeled vehicles during a regional flood event; or

(b) The municipality has a <u>natural disaster planemergency</u> <u>evacuation plan that follows acceptable hazard mitigation planning</u> <u>guidelines</u> approved by Wisconsin Emergency Management and <u>the Department.Department of Natural Resources.</u>

(b) ACCESSORY STRUCTURES OR USES.

New construction and substantial improvements of aAccessory structures shall be constructed on fill with the lowest floor at or above the regional

flood elevation.

(5) Except as provided in paragraph b. an accessory structure which is not connected to a principal structure may be constructed with its lowest floor at or above the regional flood elevation.

(6) An accessory structure which is not connected to the principal structure and which is less than 600 square feet in size and valued at less than \$10,000 may be constructed with its lowest floor no more than two feet below the regional flood elevation if it is subject to flood velocities of no more than two feet per second and it meets all of the provisions of Sections 13-2-29 (2) (a),(b),(c) and

(d) and 4.3 (5) below.

(c) COMMERCIAL USES.

In addition to Article C, Aany commercial structure which is erected, altered or moved into the floodfringe area shall meet the requirements of sec. 13-2-33. Subject to the requirements of sec. 13-2-33(e5), storage yards, surface parking lots and other such uses may be placed at lower elevations if an adequate warning system exists to protect life and property.

(d) MANUFACTURING AND INDUSTRIAL USES.

In addition to Article C, Aany manufacturing or industrial structure which is erected, altered or moved into the floodfringe area-shall have the lowest floor elevated to or above the flood protection elevation or meet the floodproofing standards be protected to the flood protection elevation using fill, levees, floodwalls, or other flood proofing measures in sec. 13-2-64. Subject to the requirements of sec. 13-2-33(5e), storage yards, surface parking lots and other such uses may be placed at lower elevations if an adequate warning system exists to protect life and property.

(b)(e)_STORAGE OF MATERIALS.

Materials that are buoyant, flammable, explosive, or injurious to property, water quality or human, animal, plant, fish or aquatic life shall be stored at or above the flood protection elevation or floodproofed in compliance with sec. 13-2-64. Adequate measures shall be taken to ensure that such materials will not enter the water body during flooding.

(c)(f) PUBLIC UTILITIES, STREETS AND BRIDGES.

All utilities, streets and bridges shall be designed to be compatible with comprehensive floodplain development plans; and

(1) When failure of public utilities, streets and bridges would endanger public health or safety, or where such facilities are deemed essential, construction of and substantial improvements to such facilities may only be permitted if they are floodproofed in compliance with sec. 13-2-64 to the flood protection elevation;

(2) Minor roads or non-essential utilities may be constructed at lower elevations if they are designed to withstand flood forces to the regional flood elevation.

(d)(g) SEWAGE SYSTEMS.

All on-site sewage disposal systems shall be floodproofed, pursuant to sec. 13-2-64, to the flood protection elevation and shall meet the provisions of all local ordinances and ch. <u>COMM-SPS 3</u>83, Wis. Adm. Code.

(e)(h) WELLS.

All wells shall be floodproofed, pursuant to sec. 13-2-64, to the flood protection elevation and shall meet the provisions of Wis. Admin. Code Chs. NR 811 and NR 812.

(f)(i) SOLID WASTE DISPOSAL SITES.

Disposal of solid or hazardous waste is prohibited in floodfringe areas.

(g)(j) DEPOSITION OF MATERIALS.

Any deposited material must meet all the provisions of this ordinance.

(h)(k)_MANUFACTURED HOMES.

(1) Owners or operators of all manufactured home parks and subdivisions shall provide adequate surface drainage to minimize flood damage, and prepare, secure approval and file an evacuation plan, indicating vehicular access and escape routes, with local emergency management authorities.

(2) In existing manufactured home parks, all new homes, replacement homes on existing pads, and substantially improved homes shall:

(a) Have the lowest floor elevated to the flood protection elevation; and

(b) Be anchored so they do not float, collapse or move laterally during a flood

(3) Outside of existing manufactured home parks, including new manufactured home parks and all single units outside of existing parks,

all new, replacement and substantially improved manufactured homes shall meet the residential development standards for the floodfringe in sec. $13-2-33(\underline{a}^4)$.

(i)(I) MOBILE RECREATIONAL VEHICLES.

All mobile recreational vehicles that are on site for 180 consecutive days or more or are not fully licensed and ready for highway use shall meet the elevation and anchoring requirements in sec. $13-2-33(\underline{k}11)(\underline{b2})$ and $(\underline{c3})$. A mobile recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect utilities and security devices and has no permanently attached additions.

ARTICLE F

General Floodplain District (GFP)

SEC. 13-2-40 APPLICABILITY.

The provisions for this district shall apply to all floodplains for which flood profiles are not available or where flood profiles are available but floodways have not been delineated. Floodway and floodfringe districts shall be delineated when adequate data is available. The provisions for the General Floodplain District shall apply to development in all floodplains mapped as A, AO, AH, and in AE zones within which a floodway is not delineated on the Flood Insurance Rate Maps identified in sec. 13-2-11.

For proposed development in zone A, or in zone AE within which a floodway is not delineated on the Flood Insurance Rate Map identified in sec. 13-2-11, the boundaries of the regulatory floodway shall be determined pursuant to sec. 13-2-43 If the development is proposed to encroach upon the regulatory floodway, the development is subject to the standards of Article D. If the development is located entirely within the floodfringe, the development is subject to the standards of Article E.

SEC. 13-2-41 PERMITTED USES.

Pursuant to sec. 13-2-43, it shall be determined whether the proposed use is located within a floodway or floodfringe area.

Those uses permitted in floodway (13-2-28) and floodfringe areas (13-2-32) are allowed within the general floodplain district, according to the standards of sec.13-2-42, provided that all permits or certificates required under sec. 13-2-60 have been issued.

SEC. 13-2-42 STANDARDS FOR DEVELOPMENT IN THE GENERAL FLOODPLAIN DISTRICT.

Article D applies to floodway areas, Article E applies to floodfringe areas. The rest of this ordinance applies to either district.

(a) New construction and substantial improvement of structures in zone AO shall have the lowest floor, including basement, elevated:

- (1) To or above the depth, in feet, as shown on the FIRM above the highest adjacent natural grade; or
- (2) If the depth is not specified on the FIRM, two (2) above the highest adjacent natural grade or higher.

(b) New construction and substantial improvement of structures in zone AH shall have the lowest floor, including basement, elevated to or above the flood protection elevation.

In AO/AH Zones the structure's lowest floor must meet one of the conditions listed below whichever is higher:

- at or above the flood protection elevation; or
- two (2) feet above the highest adjacent grade around the structure; or
- the depth as shown on the FIRM.

(c) In AO/AH zones, provide plans showing adequate drainage paths to guide floodwaters around structures.

(a)(d) All development in zones AO and zone AH shall meet the requirements of Article E applicable to flood fringe areas.

SEC. 13-2-43 DETERMINING FLOODWAY AND FLOODFRINGE LIMITS.

Upon receiving an application for development within the <u>zone A</u>, <u>or within zone</u> <u>AE where a floodway has not been delineated on the Flood Insurance Rate Maps</u>, <u>general floodplain district</u>, the zoning administrator shall:

- (a) Require the applicant to submit two copies of an aerial photograph or a plan which shows the proposed development with respect to the general floodplain district limits, stream channel, and existing floodplain developments, along with a legal description of the property, fill limits and elevations, building floor elevations and flood proofing measures and the flood zone as shown on the FIRM;
- (a)(b) Require the applicant to furnish any of the following information deemed necessary by the Department to evaluate the effects of the proposal upon flood height and flood flows, regional flood elevation and to determine floodway boundaries:
 - a. A typical valley cross-section showing the stream channel, the floodplain adjoining each side of the channel, the

ba. cross-sectional area to be occupied<u>Hydrologic and Hydraulic</u> Study as specified in sec.13-2-60(b2)3e by the proposed development, and all historic high water information;

<u>eb.</u> Plan (surface view) showing elevations or contours of the ground; pertinent structure, fill or storage elevations; size, location and layout 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;

a. Profile showing the slope of the bottom of the channel or flow line of the stream;

d. Specifications for building construction and materials, floodproofing, filling, dredging, channel improvement, storage, water supply, and sanitary facilities.

(2) Transmit one copy of the information described in pars. (1) and (2) to the Department Regional office along with a written request for technical assistance to establish regional flood elevations and, where applicable, floodway data. Where the provisions of sec. 13-2-60 (2)(c) apply, the applicant shall provide all required information and computations to delineate floodway boundaries and the effects of the project on flood elevations.

ARTICLE G

NONCONFORMING USES

SEC. 13-2-50 GENERAL.

(a) APPLICABILITY.

The standards in this section shall apply to all uses and (1) buildings that do not conform to the provisions contained within a floodplain zoning ordinance or with s. 87.30, Stats. And §§ NR 116.12-14, Wis. Adm. Code and 44 CFR 59-72., these standards shall apply to all modifications or additions to any nonconforming use or structure and to the use of any structure or premises which was lawful before the passage of this ordinance or any amendment thereto. A party asserting existence of a lawfully established nonconforming use or structure has the burden of proving that the use or structure was compliant with the floodplain zoning ordinance in effect at the time the use or structure was created. If these standards conform with Wis. Stat. § 59.69(10) for counties or Wis. Stat. § 62.23(7)(h) for cities and villages, they shall apply to all modifications or additions to any nonconforming use or structure and to the use of any structure or premises which was

lawful before the passage of this ordinance or any amendment thereto.

- (a)(2) As permit applications are received for additions, modifications, or substantial improvements to nonconforming buildings in the floodplain, a list shall be developed of those nonconforming buildings, their present equalized assessed value, and a list of the costs of those activities associated with changes to those buildings.
- (b) The existing lawful use of a structure or its accessory use which is not in conformity with the provisions of this ordinance may continue subject to the following conditions:

(1) No modifications or additions to a nonconforming use or structure shall be permitted unless they comply with this ordinance. The words "modification" and "addition" include, but are not 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 an extension, modification, or addition; these include painting, decorating, paneling, and the replacement of doors, windows and other nonstructural components and the maintenance, repair or replacement of existing private sewage or water supply systems or connections to public utilities. Ordinary maintenance repairs do not include any costs associated with the repair of a damaged structure.

(1) The construction of a deck that does not exceed 200 square feet and that is adjacent to the exterior wall of a principal structure is not an extension, modification, or addition. The roof of the structure may extend over a portion of the deck in order to provide safe ingress and egress to the principal structure;

(2) If a nonconforming use or the use of a nonconforming structure 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 conform to the applicable requirements of this ordinance;

(3) The municipality shall keep a record which lists all nonconforming uses and nonconforming structures, their present equalized assessed value, the cost of all modifications or additions which have been permitted, and the percentage of the structure's total current value those modifications represent;

(4) No modification or addition to any nonconforming structure or any structure with a nonconforming use, which over the life of the structure would equal or exceed 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. Contiguous dry land access must be provided for residential and commercial uses in compliance with sec. 13-2-33(<u>1a</u>). The costs of elevating a nonconforming building or a building with a nonconforming use to the flood protection elevation are excluded from the 50% provisions of this paragraph;-(*Revised 2/09*)

(5) No maintenance on a per event basis to any nonconforming structure or any structure with a nonconforming use, the cost of which would equal or exceed 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. Contiguous dry land access must be provided for residential and commercial uses in compliance with sec. 13-2-33(a). Maintenance to any nonconforming structure, which does not exceed 50% of its present equalized assessed value on a per event basis, does not count against the cumulative calculations over the life of the structure for substantial improvement calculations.

(6) If on a per event basis the total value of the work being done under (4) and (5) equals or exceeds 50% of the present equalized assessed value, the work shall not be permitted unless the entire structure is permanently changed to a conforming structure with a conforming use in compliance with the applicable requirements of this ordinance. Contiguous dry land access must be provided for residential and commercial uses in compliance with sec. 13-2-33(a).

(7) Except as provided in subd. (8), if any nonconforming structure or any structure with a nonconforming use is destroyed or is substantially damaged, it cannot be replaced, reconstructed, or rebuilt unless the use and the structure meet the current ordinance requirements. A structure is considered substantially damaged if the total cost to restore the structure to its pre-damaged condition equals or exceeds 50% of the structure's present equalized assessed value.

(8) For nonconforming buildings that are substantially damaged or destroyed by a non-flood disaster, the repair or reconstruction of any such nonconforming building shall be permitted in order to restore it to the size and use in effect prior to the damage event, provided that the following minimum requirements are met, and all required permits have been granted prior to the start of construction:

(a) Residential Structures

(1) Shall have the lowest floor, including basement,

elevated to or above the base flood elevation using fill, pilings, columns, posts, or perimeter walls. Perimeter walls must meet the requirements of sec. 13-2-64(b).

(2) Shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, and shall be constructed with methods and materials resistant to flood damage.

(3) Shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or elevated so as to prevent water from entering or accumulating within the components during conditions of flooding.

(4) In A Zones, obtain, review, and utilize any flood data available from a federal, state or other source.

(5) In AO Zones with no elevations specified, shall have the lowest floor, including basement, meet the standards of sec. 13-2-42.

(6) In AO Zones, shall have adequate drainage paths around structures on slopes to guide floodwaters around and away from the structure.

(b) Non-Residential Structures

(1) Shall meet the requirements of sec. 13-2-50.

(2) Shall either have the lowest floor, including basement, elevated to or above the regional flood elevation; or, together with attendant utility and sanitary facilities, shall meet the standards in sec. 13-2-64 (a) or (b).

(3) In AO Zones with no elevations specified, shall have the lowest floor, including basement, meet the standards in sec. 13-2-42.

(5) 1. Except as provided in subd. 2., if any nonconformingstructure or any structure with a nonconforming use is destroyed oris substantially damaged, it cannot be replaced, reconstructed orrebuilt unless the use and the structure meet the current ordinancerequirements. A structure is considered substantially damaged if the total cost to restore the structure to its pre-damaged conditionequals or exceeds 50% of the structure's present equalized assessed value; (Revised 2/09)

(6) 2. For nonconforming buildings that are damaged ordestroyed by a nonflood disaster, the repair orreconstruction of any such nonconforming building may be permitted in order to restore it after the nonflood disaster, provided that the nonconforming building will meet all of the minimum requirements under applicable FEMA regulations-(44 CFR Part 60), or the regulations promulgatedthereunder.

(7)

(c) ____A nonconforming historic structure may be altered if the_-alteration will not preclude the structures continued designation as a historic structure, the alteration will comply with sec. 13-2-29(1a), flood resistant materials are used, and construction practices and floodproofing methods that comply with sec. 13-2-64 are used. Repair or rehabilitation of historic structures shall be exempt from the development standards of 13-2-50(b2)(h8)(1a) if it is determined that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and is the minimum necessary to preserve the historic character and design of the structure. are used.

(d) Notwithstanding anything in this chapter to the contrary, modifications, additions, maintenance, and repairs to a nonconforming building shall not be prohibited based on cost and the building's nonconforming use shall be permitted to continue if:

- (1) Any living quarters in the nonconforming building are elevated to be at or above the flood protection elevation;
- (2) The lowest floor of the nonconforming building, including the basement, is elevated to or above the regional flood elevation;
- (3) The nonconforming building is permanently changed to conform to the applicable requirements of sec. 13-2-22;
- (4) If the nonconforming building is in the floodway, the building is permanently changed to conform to the applicable requirements of 13-2-29. Any development that adds additional fill or creates an encroachment in the floodplain from beyond the original nonconforming structure's 3-D building envelope must determine the floodway in accordance with sec. 13-2-43. If the encroachment is in the floodway, it must meet the standards in sec. 13-2-30;
- (5) If the nonconforming building is in the floodfringe, the building is permanently changed to conform to the applicable requirements of sec. 13-2-33 and 13-2-52;

- (6) Repair or reconstruction of nonconforming structures and substantial improvements of residential buildings in zones A1-30, AE, and AH must have the lowest floor (including basement) elevated to or above the base flood elevation;
- (7) Repair or reconstruction of nonconforming structures and substantial improvements of non-residential buildings in zones A1-30, AE, and AH must have the lowest floor (including basement) elevated to or above the base flood elevation, or (together with attendant utility and sanitary facilities) be designed so that below the base flood elevation the building is watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy:
 - (a) Where a non-residential structure is intended to be made watertight below the base flood elevation, a registered professional engineer or architect must develop and/or review structural design, specifications, and plans for the construction, and must certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of sec. 13-2-50(d)(7) above.
 - (b) The community must maintain a record of such certification including the specific elevation to which each such structure is floodproofed;
- (8) Fully enclosed areas below the lowest floor of repair or reconstruction of nonconforming structures and substantial improvements in zones A1-30, AE, and AH that are usable solely for parking of vehicles, building access, or storage, must be designed to adequately equalize hydrostatic forces on exterior walls by allowing for the entry and exit of floodwaters. Subsequent improvements to repaired or reconstructed nonconforming structures must not increase the degree of their nonconformity. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or meet the following criteria:
 - (a) A minimum of two openings into each enclosed area must be located below the base flood elevation and provide a total net area of not less than one square inch for every square foot of enclosed area.

- (b) The bottom of all openings must be no higher than one foot above the adjacent grade.
- (c) Openings may be equipped with screens, louvers, valves, or other coverings if they permit the automatic entry and exit of floodwaters;
- (9) Manufactured homes that are placed or substantially improved within zones A1-30, AE, and AH outside of a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or in an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as a result of flood, must be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation, and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement;
- (10)Manufactured homes that are placed or substantially improved within zones A1-30, AE, and AH on existing sites in an existing manufactured home park that is not undergoing expansion and on which a manufactured home has not incurred substantial damage as a result of flood must be elevated so that either the lowest floor of the manufactured home is at or above the base flood elevation, or the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade, and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement;
- (11)Recreational vehicles placed on sites within zones A1-30, AH, and AE must either:
 - (a) Be on site for fewer than 180 consecutive days; or
 - (b) Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions); or
 - (c) Meet the elevation and anchoring requirements for manufactured homes in sec. 13-2-50(d)(9) above;

- (12) In a regulatory floodway that has been delineated on the FIRM in zone A1-30 or AE, encroachments, including repair or reconstruction of nonconforming structures, substantial improvement, or other development (including fill) must be prohibited unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Subsequent improvements to repair or reconstructed nonconforming structures must not increase the degree of their nonconformity;
- (13) In zone A, the community must obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source as criteria for requiring repair or reconstruction of nonconforming structures, substantial improvement, and other development to meet sec. 13-2-50(d)(6) through (12) (inclusive) above. Any development that adds additional fill or creates an encroachment in the floodplain from beyond the original nonconforming structure's 3-D building envelope must determine the floodway in accordance with sec. 13-2-43 If the encroachment is in the floodway, it must meet the standards in sec. 13-2-29(d). Subsequent improvements to repair or reconstructed nonconforming structures must not increase the degree of their nonconformity;
- (14) In zones A1-30 or AE where a regulatory floodway has not been delineated on the FIRM, repair or reconstruction of nonconforming structures, substantial improvement, or any development that adds additional fill or creates an encroachment in the floodplain from beyond the original nonconforming structure's 3-D building envelope must determine the floodway in accordance with sec. 13-2-43. If the encroachment is in the floodway, it must meet the standards in sec.13-2-29(d). Subsequent improvements to repair or reconstructed nonconforming structures must not increase the degree of their nonconformity;
- (15) In zone AO, repair or reconstruction of nonconforming structures and substantial improvements of residential structures must have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM (at least two feet if no depth number is specified). Subsequent

improvements to repair or reconstructed nonconforming structures must not increase the degree of their nonconformity; or

(c)(16) In zone AO, repair or reconstruction of nonconforming structures and substantial improvements of nonresidential structures must have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM (at least two feet if no depth number is specified), or (together with attendant utility and sanitary facilities) be structurally dryfloodproofed to that level according to the standard specified in sec. 13-2-50(d)(7) above. Subsequent improvements to repair or reconstructed nonconforming structures must not increase the degree of their nonconformity

SEC. 13-2-51 FLOODWAY AREAS DISTRICT.

(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:

(1) Has been granted a permit or variance which meets all ordinance requirements;

(2) Meets the requirements of sec. 13-2-50;

(3) Will not increase the obstruction to flood flows or regional flood height;

(4) Any addition to the existing structure shall be floodproofed, pursuant to sec. 13-2-64 by means other than the use of fill, to the flood protection elevation;

(5) If any part of the foundation below the flood protection elevation is enclosed, the following standards shall apply:

(a) The enclosed area shall be designed by a registered architect or engineer to allow for the efficient entry and exit of flood waters without human intervention. A minimum of two openings must be provided with a minimum net area of at least one square inch for every one square foot of the enclosed area. The lowest part of the opening can be no more than 12 inches above the adjacent grade;

(b) The parts of the foundation located below the flood protection elevation must be constructed of flood-resistant

materials;

(c) Mechanical and utility equipment must be elevated or floodproofed to or above the flood protection elevation; and

(d) The use must be limited to parking, <u>building access</u> or limited storage.

(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 municipal ordinances sec. 13-2-64(c)(3) and Wis. Admin. Code Ch. <u>COMM-SPS 383</u>.

(c) No new well or modification to an existing well used to obtain potable water 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 all municipal ordinances <u>sec. 13-2-64(c3)</u> and Wis. Admin. Code Chs. NR 811 and <u>NR</u> 812.

SEC. 13-2-52 FLOODFRINGE-AREASDISTRICT.

(a) No modification or addition shall be allowed to any nonconforming structure or any structure with a nonconforming use unless such modification or addition has been granted a permit or variance by the municipality, and the modification or addition shall be placed on fill or floodproofed to the flood protection elevation in compliance with the standards for that particular use in sec. 13-2-33, except where sec. 13-2- $52(b^2)$ is applicable.

(b) Where compliance with the provisions of par. (4a) 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 sec. 13-2-62, may grant a variance from those provisions of par. (4a) for modifications or additions, using the criteria listed below. Modifications or additions which are protected to elevations lower than the flood protection elevation may be permitted if:

(1) No floor is allowed below the regional flood elevation for residential or commercial structures;

(1)

(2) Human lives are not endangered;

(3) Public facilities, such as water or sewer, will not be installed

(4) Flood depths will not exceed two feet

(5) Flood velocities will not exceed two feet per second; and

(6) The structure will not be used for storage of materials as described in sec. $13-2-2333(\underline{e5}6)$.

(c) If neither the provisions of par. (1) or (2) above can be met, one addition to an existing room in a nonconforming building or a building with a nonconforming use may be allowed in the floodfringe, if the addition:

(1) Meets all other regulations and will be granted by permit or variance;

(2) Does not exceed 60 square feet in area; and

(3) In combination with other previous modifications or additions to the building, does not equal or exceed 50% of the present equalize assessed value of the building.

(Revised 2/09)

(d)(c) All new private sewage disposal systems, or addition to, replacement, repair, or maintenance of a private sewage disposal system shall meet all the applicable provisions of <u>all local ordinances _sec. 13-2-64(3)</u> and Wis. Admin. Code Ch. SPS <u>383</u> and Wis. Admin. Code Ch. COMM <u>83</u>, Wis. Adm. Code.

(e)(d) All new wells, or addition to, replacement, repair, or maintenance of a well shall meet the applicable provisions of this ordinance sec. 13-2-64(c3)-and Wis. Admin. Code Chs. NR 811 and NR 812.

ARTICLE H

ADMINISTRATION

Where a zoning administrator, planning agency or a <u>B</u>board of <u>adjustment/a</u> <u>Appeals</u> has already been appointed to administer a zoning ordinance adopted under Wis. Stat. §§ 59.69, 59.692, or 62.23(7) these officials shall also administer this ordinance.

SEC. 13-2-60 ZONING ADMINISTRATOR.

(a) <u>DUTIES AND POWERS</u> The zoning administrator is authorized to administer this ordinance and shall have the following duties and powers:

(1) Advise applicants of the ordinance provisions, assist in

preparing permit applications and appeals, and assure that the regional flood elevation for the proposed development is shown on all permit applications.

(2) Issue permits and inspect properties for compliance with provisions of this ordinance, and issue certificates of compliance where appropriate.

(3) Inspect all damaged floodplain structures and perform a substantial damage assessment to determine if substantial damage to the structures has occurred.

(4) Keep records of all official actions such as:

(a) All permits issued, inspections made, and work approved;

(b) Documentation of certified lowest floor and regional flood elevations for floodplain development;

(c) Floodproofing certificates.

(d) Water surface profiles, floodplain zoning maps and ordinances, nonconforming uses and structures including changes, appeals, variances and amendments.

(e) All substantial damage assessment reports for floodplain structures.

(b)(f) List of nonconforming structures and uses.

a. Records of water surface profiles, floodplain zoning maps and ordinances, nonconforming uses and structures including changes, appeals, variances and amendments.

b. All substantial damage assessment reports for floodplain structures.

(5) Submit copies of the following items to the Department Regional office:

(a) Within 10 days of the decision, a copy of any decisions on variances, appeals for map or text interpretations, and map or text amendments;

(b) Copies of any case-by-case analyses, and any other information required by the Department including an annual

summary of the number and types of floodplain zoning actions taken.

(c) Copies of substantial damage assessments performed and all related correspondence concerning the assessments.

Note: Information on conducting substantial damage assessments is available on the DNR website http://dnr.wi.gov/org/water/wm/dsfm/flood/title.htm

(6) Investigate, prepare reports, and report violations of this ordinance to the municipal zoning agency and attorney for prosecution. Copies of the reports shall also be sent to the Department Regional office.

(7) Submit copies of text and map amendments and biennial reports to the FEMA Regional office.

(b) LAND USE PERMIT. A land use permit shall be obtained before any new development or any structural repair, modification, or addition to an existing structure, or change in the use of a building or structure, including sewer and water facilities, may be initiated. Application to the zoning administrator shall include:

(1) GENERAL INFORMATION.

(a) Name and address of the applicant, property owner and contractor;

(b) Legal description, proposed use, and whether it is new construction or a modification;

<u>SITE DEVELOPMENT PLAN.</u> A site plan drawn to scale shall be submitted with the permit application form and shall contain:
 (2)

(a) Location, dimensions, area and elevation of the lot;

(b) Location of the ordinary highwater mark of any abutting navigable waterways;

(c) Location of any structures with distances measured from the lot lines and street centerlines;

(d) Location of any existing or proposed on-site sewage systems or private water supply systems;

(e) Location and elevation of existing or future access

roads;

(f) Location of floodplain and floodway limits as determined from the official floodplain zoning maps;

(g) The elevation of the lowest floor of proposed buildings and any fill using the vertical datum from the adopted study either National Geodetic Vertical Datum (NGVD) or North American Vertical Datum (NAVD);

(h) Data sufficient to determine the regional flood elevation in NGVD or NAVD at the location of the development and to determine whether or not the requirements of Article D or Article E are met; and

(i) Data to determine if the proposed development will cause an obstruction to flow or an increase in regional flood height or discharge according to sec. 13-2-23 This may include any of the information noted in sec. 13-2-29(4a).

DATA REQUIREMENTS TO ANALYZE DEVELOPMENTS (3) HYDRAULIC AND HYDROLOGIC STUDIES TO ANALYZE DEVELOPMENT. All hydraulic and hydrologic studies shall be completed under the direct supervision of a professional engineer registered in the State. The study contractor shall be responsible for the technical adequacy of the study. All studies shall be reviewed and approved by the Department

(a) Zone A floodplains and AE Zones within which a floodway is not delineated:

<u>(1) Hydrology</u>

4

(3)

The appropriate method shall be based on the standards in ch. NR 116.07(3), Wis. Admin. Code, Hydrologic Analysis: Determination of Regional Flood Discharge.

(2) Hydraulic modeling

The regional flood elevation shall be based on the standards in ch. NR 116.07(4), Wis. Admin. Code, *Hydraulic Analysis: Determination of Regional Flood Elevation* and the following:

(a) Determination of the required limits of the hydraulic model shall be based on detailed study information for downstream structures (dam, bridge, culvert) to determine adequate starting WSEL for the study.

- (b) Cehannel sections must be surveyed.
- (c) <u>—Mminimum four foot contour data in the</u> overbanks shall be used for the development of cross section overbank and floodplain mapping.
- (d) A a-maximum distance of 500 feet between cross sections is allowed in developed areas with additional intermediate cross sections required at transitions in channel bottom slope including a survey of the channel at each location.
- (e) Tthe most current version of HEC_RAS shall be used.
- (f) Aa survey of bridge and culvert openings and the top of road is required at each structure.
- (g) Aadditional cross sections are required at the downstream and upstream limits of the proposed development and any necessary intermediate locations based on the length of the reach if greater than 500 feet.
- (h) Sstandard accepted engineering practices shall be used when assigning parameters for the base model such as flow, Manning's N values, expansion and contraction coefficients or effective flow limits. The base model shall be calibrated to past flooding data such as high water marks to determine the reasonableness of the model results. If no historical data is available, adequate justification shall be provided for any parameters outside standard accepted engineering practices.
- (i) Tthe model must extend past the upstream limit of the difference in the existing and proposed flood profiles in order to provide a tie-in to existing studies. The height difference between the proposed flood profile and the existing study profiles shall be no more than 0.00 feet.
- (3) Mapping

A work map of the reach studied shall be provided,

showing all cross section locations, floodway/floodplain limits based on best available topographic data, geographic limits of the proposed development and whether the proposed development is located in the floodway. If the proposed development is located outside of the floodway, then it is determined to have no impact on the regional flood elevation.

(a) If any part of the proposed development is in the floodway, it must be added to the base model to show the difference between existing and proposed conditions. The study must ensure that all coefficients remain the same as in the existing model, unless adequate justification based on standard accepted engineering practices is provided.

- (b) Zone AE Floodplains
 - (1) Hydrology

If the proposed hydrology will change the existing study, the appropriate method to be used shall be based on ch. NR 116.07(3), Wis. Admin. Code, Hydrologic Analysis: Determination of Regional Flood Discharge.

(2) Hydraulic model

The regional flood elevation shall be based on the standards in ch. NR 116.07(4), Wis. Admin. Code, *Hydraulic Analysis: Determination of Regional Flood Elevation* and the following:

(a) Duplicate Effective Model

The effective model shall be reproduced to ensure correct transference of the model data and to allow integration of the revised data to provide a continuous FIS model upstream and downstream of the revised reach. If data from the effective model is available, models shall be generated that duplicate the FIS profiles and the elevations shown in the Floodway Data Table in the FIS report to within 0.1 foot.

(b) Corrected Effective Model. The Corrected Effective Model shall not include any man-made physical changes since the effective model date, but shall import the model into the most current version of HEC-RAS for Department review.

- (c) Existing (Pre-Project Conditions) Model. The Existing Model shall be required to support conclusions about the actual impacts of the project associated with the Revised (Post-Project) Model or to establish more up-to-date models on which to base the Revised (Post-Project) Model.
- (d)Revised (Post-Project Conditions) Model.The Revised (Post-Project Conditions) Modelshall incorporate the Existing Model and anyproposed changes to the topography caused bythe proposed development. This model shallreflect proposed conditions.
- (e) <u>All changes to the Duplicate Effective</u> <u>Model and subsequent models must be</u> <u>supported by certified topographic</u> <u>information, bridge plans, construction plans</u> <u>and survey notes.</u>
- (f)Changes to the hydraulic models shall be
limited to the stream reach for which the
revision is being requested. Cross sections
upstream and downstream of the revised reach
shall be identical to those in the effective model
and result in water surface elevations and top
widths computed by the revised models
matching those in the effective models
upstream and downstream of the revised reach
as required. The Effective Model shall not be
truncated.
- (3) Mapping
 - Maps and associated engineering data shall be submitted to the Department for review which meet the following conditions:
 - (a) Consistency between the revised hydraulic models, the revised floodplain and floodway delineations, the revised flood profiles, topographic work map, annotated FIRMs and/or Flood Boundary Floodway Maps (FBFMs), construction plans, bridge plans.
 - (b) Certified topographic map of suitable scale, contour interval, and a planimetric map showing the applicable items. If a digital version of the map is

available, it may be submitted in order that the FIRM may be more easily revised.

- (c) Annotated FIRM panel showing the revised <u>1% and 0.2% annual chance floodplains and</u> <u>floodway boundaries.</u>
- (d) If an annotated FIRM and/or FBFM and digital mapping data (GIS or CADD) are used then all supporting documentation or metadata must be included with the data submission along with the Universal Transverse Mercator (UTM) projection and State Plane Coordinate System in accordance with FEMA mapping specifications.
- (e) The revised floodplain boundaries shall tie into the effective floodplain boundaries.
- (f) All cross sections from the effective model shall be labeled in accordance with the effective map and a cross section lookup table shall be included to relate to the model input numbering scheme.
- (g) Both the current and proposed floodways shall be shown on the map.
- (h) The stream centerline, or profile baseline used to measure stream distances in the model shall be visible on the map.

(a) The applicant shall provide all survey data and computations required to show the effects of the project on flood heights, velocities and floodplain storage, for all subdivision proposals, as "subdivision" is defined in Wis. Stat. ch. 236 and other proposed developments exceeding 5 acres in area or where the estimated cost exceeds \$125,000. The applicant shall provide:

a. An analysis of the effect of the development on the regional flood profile, velocity of flow and floodplain storage capacity;

b. A map showing location and details of vehicular access to lands outside the floodplain; and

c. A surface drainage plan showing how flood damage will be minimized.

d. The estimated cost of the proposal shall include all structural development, landscaping, access and road development, utilities, and other pertinent items, but need not include land costs.

(1)(4) EXPIRATION._All permits issued under the authority of this ordinance shall expire <u>no more than 180 days after</u> issuance. The permit may be extended for a maximum of 180 days for good and sufficient cause. If the permitted work has not started within 180 days of the permit date, the development must comply with any regulation, including any revision to the FIRM or FIS, that took effect after the permit <u>dateone (1) year after issuance.</u>

(c) CERTIFICATE OF COMPLIANCE. No land shall be occupied or used, and no building which is hereafter constructed, altered, added to, modified, repaired, rebuilt, or replaced shall be occupied until a certificate of compliance is issued by the zoning administrator, except where no permit is required, subject to the following provisions:

- (1) The certificate of compliance shall show that the building or premises or part thereof, and the proposed use, conform to the provisions of this ordinance;
- (2) Application for such certificate shall be concurrent with the application for a permit;
- (3) If all ordinance provisions are met, the certificate of compliance shall be issued within 10 days after written notification that the permitted work is completed;
- (4) The applicant shall submit a certification signed by a registered professional engineer, architect or land surveyor that the fill, lowest floor and floodproofing elevations are in compliance with the permit issued. Floodproofing measures also require certification by a registered professional engineer or architect that floodproofing measures meet the requirements of sec. 13-2-64.
- (5) Where applicable pursuant to sec. 13-2-42, the applicant must submit a certification by a registered professional engineer or surveyor of the elevation of the bottom of the lowest horizontal structural member supporting the lowest floor (excluding pilings or columns), and an indication of whether the structure contains a basement.
- (6) Where applicable pursuant to sec. 13-2-42, the applicant must submit certifications by a registered professional engineer or architect that the structural design and methods of construction meet accepted standards of practice as required by sec. 13-2-42. (4)

(d) OTHER PERMITS. The applicant must secure all necessary permits from federal, state, and local agencies, including those required by the U.S. Army Corps of Engineers under s. 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. 1344.

SEC. 13-2-61 ZONING AGENCY.

(a) The Plan Commission shall:

(1) ΘO versee the functions of the office of the zoning administrator; and

(2) <u>FR</u>eview and advise the Governing body on all proposed amendments to this ordinance, maps and text.

(2)(3) Publish adequate notice pursuant to Ch. 985, Stats., specifying the date, time, place, and subject of the public hearing.

- (b) This zoning agency shall not
 - (1) <u>G</u>grant variances to the terms of the ordinance in place of action by the Board of Appeals; or
 - (2) <u>Aamend the text or zoning maps in place of official action by the Governing body.</u>

SEC. 13-2-62 BOARD OF APPEALS.

(a) STATUTORY AUTHORITY. The Board of Appeals, created under Wis. Stat. § 62.23(7)(e) is hereby authorized or shall be appointed to act for the purposes of this ordinance. The Board shall exercise the powers

conferred by Wisconsin Statutes and adopt rules for the conduct of business. The zoning administrator may not be the secretary of the Board.

- (b) POWERS AND DUTIES.
 - (1) The Board of Appeals shall:

(a) Appeals – 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 ordinance.

(b) Boundary Disputes – Hear and decide disputes concerning the district boundaries shown on the official floodplain zoning map.

(c) Variances – Hear and decide, upon appeal, variances from the ordinance standards.

(c) APPEALS TO THE BOARD. Appeals to the board may be taken by any person aggrieved, or by any officer or department of the municipality affected by any decision of the zoning administrator or other administrative officer. Such appeal shall be taken within 30 days unless otherwise provided by the rules of the board, by filing with the official whose decision is in question, and with the board, a notice of appeal specifying the reasons for the appeal. The official whose decision is in question shall transmit to the board all records regarding the matter appealed.

(d) NOTICE AND HEARING FOR APPEALS INCLUDING VARIANCES.

- (1) <u>Notice</u> The board shall:
 - (a) Fix a reasonable time for the hearing;
 - (b) Publish adequate notice pursuant to Wisconsin Statutes, specifying the date, time, place and subject of the hearing;
 - (c) Assure that notice shall be mailed to the parties in interest and the Department Regional office at least 10 days in advance of the hearing.
- (2) <u>Hearing</u> Any party may appear in person or by agent. The board shall:

(a) Resolve boundary disputes according to sec. 13-2-62(3e).

(b) Decide variance applications according to sec. 13-2-62(4f).

(c) Decide appeals of permit denials according to sec. 13-2-63.

(3) <u>Decision</u>: The final decision regarding the appeal or variance application shall:

(a) Be made within a reasonable time;

(b) Be sent to the Department Regional office within 10 days of the decision;

(c) Be a written determination signed by the chairman or secretary of the Board;

(d) State the specific facts which are the basis for the Board's decision;

(e) 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 grant or deny the variance application;

(f) Include the reasons for granting an appeal, describing the hardship demonstrated by the applicant in the case of a variance, clearly stated in the recorded minutes of the Board proceedings.

(e) BOUNDARY DISPUTES. The following procedure shall be used by the Board in hearing disputes concerning floodplain district boundaries:

(1) If a floodplain district boundary is established by approximate or detailed floodplain studies, the flood elevations or profiles shall prevail in locating the boundary. If none exist, other evidence may be examined.

(2) In all cases, the person contesting the boundary location shall be given a reasonable opportunity to present arguments and technical evidence to the Board.

(3) If the boundary is incorrectly mapped, the Board should inform the zoning committee or the person contesting the boundary location to petition the governing body for a map amendment according to Article I.

(f) VARIANCE.

(1) The Board may, upon appeal, grant a variance from the standards of this ordinance if an applicant convincingly demonstrates that:

(a) 1—Literal enforcement of the ordinance provisions will cause unnecessary hardship;

2(b) The hardship is due to adoption of the floodplain ordinance and unique property conditions, not common to adjacent lots or premises. In such case the ordinance or map must be amended;

3.(c) The variance is not contrary to the public interest; and

4.(d) The variance is consistent with the purpose of this ordinance in sec. 13-2-3.

(2) In addition to the criteria in par. $(\underline{1}a)$, to qualify for a variance under FEMA regulations, the following criteria must be met:

(a) The variance may not cause any increase in the regional flood elevation;

(b) The applicant has shown good and sufficient cause for issuance of the variance;

(c) Failure to grant the variance would result in exceptional hardship;

(d) Granting the variance will not result in additional threats to public safety, extraordinary expense, create a nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances;

(e) The variance granted is the minimum necessary, considering the flood hazard, to afford relief. (a)

(b) Variances can only be granted for lots that are less than one-half acre and are contiguous to existing structures constructed below the RFE;

(c) Variances shall only be granted upon a showing of good and sufficient cause, shall be the minimum relief necessary, shall not cause increased risks to public safety or nuisances, shall not increase costs for rescue and relief efforts and shall not be contrary to the purpose of the ordinance.

(3) A variance shall not:

(a) Grant, extend, or increase any use prohibited in the zoning district.

(b) Be granted for a hardship based solely on an economic gain or loss.

(c) Be granted for a hardship which is self-created.

(d) Damage the rights or property values of other persons in the area.

(e) Allow actions without the amendments to this ordinance or map(s) required in sec. 13-2-70.

(f) Allow any alteration of an historic structure, including

its use, which would preclude its continued designation as an historic structure.

(4) When a floodplain variance is granted the Board shall notify the applicant in writing that it may increase flood insurance premiums could increase up to \$25.00 per \$100.00 of coverage and increase risks to life and property. A copy shall be maintained with the variance record.

SEC. 13-2-63 TO REVIEW APPEALS OF PERMIT DENIALS.

(a) The Zoning Agency (sec. 13-2-61) or Board shall review all data related to the appeal. This may include:

- (1) Permit application data listed in sec. 13-2-60(<u>2b</u>).
- (2) Floodway/flood_fringe determination data in sec. 13-2-43.

(3) Data listed in sec. $13-2-29(\underline{a})+(\underline{b})$ where the applicant has not submitted this information to the zoning administrator.

(4) Other data submitted with the application, or submitted to the Board with the appeal.

- (b) For appeals of all denied permits the Board shall:
 - (1) Follow the procedures of sec. 13-2-62;

(1)

- (2) Consider zoning agency recommendations; and
- (2)
- (3) Either uphold the denial or grant the appeal.

(c) For appeals concerning increases in regional flood elevation the Board shall:

(1) (1) Uphold the denial where the Board agrees with the data showing an increase in flood elevation. Increases may only be allowed after amending the flood profile and map and all appropriate legal arrangements are made with all adversely affected property owners as per the requirements of Article I; and Increases equal to or

(2) greater than 0.01 foot may only be allowed after amending the flood profile and map and all appropriate legal arrangements are made with all adversely affected property owners.

(3)(1) Grant the appeal where the Board agrees that the data properly demonstrates that the project does not cause an increase equal to or greater than 0.01 foot provided no other reasons for denial exist.

SEC. 13-2-64 FLOODPROOFING STANDARDS.

(a) No permit or variance shall be issued for a non-residential structure designed to be watertight below the regional flood elevation until the applicant submits a plan certified by a registered professional engineer or architect that the floodproofing measures will protect the structure or development to the flood protection elevation and submits a FEMA Floodproofing Certificate. Flood proofing is not an alternative to the development standards in sec. 13-2-22, Article D, Article E, or Article F.

(b) For a structure designed to allow the entry of floodwaters, no permit or variance shall be issued until the applicant submits a plan either:

(1) certified by a registered professional engineer or architect; or

- (2) meets or exceeds the following standards:
 - (a) a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding; the bottom of all openings shall be no higher than one foot above grade; and
 - (b) openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- (c) Floodproofing measures shall be designed, as appropriate, to:
 - (1) Withstand flood pressures, depths, velocities, uplift and impact forces and other regional flood factors;
 - (2) Protect structures to the flood protection elevation;
 - (3) Anchor structures to foundations to resist flotation and lateral movement;
 - (4) Minimize or eliminate infiltration of flood waters; and
 - (5) Minimize or eliminate discharges into flood waters.

- (6) Placement of essential utilities to or above the flood protection elevations; and
- (7) If any part of the foundation below the flood protection elevation is enclosed, the following standards shall apply:
 - (a) The enclosed area shall be designed by a registered architect or engineer to allow for the efficient entry and exit of flood waters without human intervention. A minimum of two openings must be provided with a minimum net area of at least one square inch for every one square foot of the enclosed area. The lowest part of the opening can be no more than 12 inches above the adjacent grade;
 - (b) The parts of the foundation located below the flood protection elevation must be constructed of flood-resistant materials;
 - (c) Mechanical and utility equipment must be elevated or floodproofed to or above the flood protection elevation; and
 - (d) The use must be limited to parking, building access or limited storage.

(1) No permit or variance shall be issued until the applicant submits a plan certified by a registered professional engineer or architect that the floodproofing measures will protect the structure or development to the flood protection elevation.

(2) Floodproofing measures shall be designed to:

a. Withstand flood pressures, depths, velocities, uplift and impact forces and other regional flood factors;

b. Protect structures to the flood protection elevation;

c. Anchor structures to foundations to resist flotation and lateral movement; and;

d. Insure that structural walls and floors are watertight to the flood protection elevation, and the interior remains completely dry during flooding without human intervention.

(3) Flood-proofing measures could include:

a. Reinforcing walls and floors to resist rupture or collapse caused by water pressure or,

b. Adding mass or weight to prevent flotation.

c. Placing essential utilities above the flood protection elevation. 13 - 51 d. Installing surface or subsurface drainage systems to relieve foundation wall and basement floor pressures.

e. Constructing water supply wells and waste treatment systems to prevent the entry of flood waters.

f. Putting cutoff valves on sewer lines or eliminating gravity flow basement drains.

SEC. 13-2-65 PUBLIC INFORMATION.

(1) Place marks on structures to show the depth of inundation during the regional flood.

(2) All maps, engineering data and regulations shall be available and widely distributed.

(3) All real estate transfers should show what floodplain zoning district any real property is in.

ARTICLE I

AMENDMENTS

SEC. 13-2-70 AMENDMENTS. <u>Obstructions or increases may only be</u> permitted if amendments are made to this ordinance, the official floodplain zoning maps, floodway lines and water surface profiles, in accordance with sec. 13-2-70.

- (a) In AE Zones with a mapped floodway, no obstructions or increases shall be permitted unless the applicant receives a Conditional Letter of Map Revision from FEMA and amendments are made to this ordinance, the official floodplain zoning maps, floodway lines and water surface profiles, in accordance with s. 13-2-70. Any such alterations must be reviewed and approved by FEMA and the DNR.
- (b) In A Zones increases equal to or greater than 1.0 foot may only be permitted if the applicant receives a Conditional Letter of Map Revision from FEMA and amendments are made to this ordinance, the official floodplain maps, floodway lines, and water surface profiles, in accordance with s. 13-2-70.

The governing body may change or supplement the floodplain zoning district boundaries and this ordinance in the manner provided by law. Actions which require an amendment to the ordinance and/or submittal of a Letter of Map Change (LOMC) include, but are not limited to, the following:

(a) Any change to the official floodplain zoning map, including the floodway line or boundary of any floodplain area.

(b) Correction of discrepancies between the water surface profiles and floodplain 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 floodplain encroachment that obstructs flow, increasing regional flood height 0.01 foot or more.

(e) Any upgrade to a floodplain zoning ordinance text required by Wis. Admin. Code § NR 116.05 or otherwise required by law, or for changes by the municipality.

(f) All channel relocations and changes to the maps to alter floodway lines or to remove an area from the floodway or the floodfringe that is based on a base flood elevation from a FIRM requires prior approval by FEMA.

(g) Any change to the floodplain boundaries and/or watercourse alterations on the FIRM.

Note: Consult the FEMA web site - www.fema.gov - for the map change fee schedule._

SEC. 13-2-71 PROCEDURES.

Ordinance amendments may be made upon petition of any interested party according to the provisions of Wis. Stat. § 62.23.<u>for cities and villages, or Wis.</u> Stat. § 59.69 for counties. Such petitions shall include all necessary data required by sec. 13-2-43 and sec. 13-2-60 (<u>b</u>2).

(a) The proposed amendment shall be referred to the zoning agency for a public hearing and recommendation to the governing body. The amendment and notice of public hearing shall be submitted to the Department Regional office for review prior to the hearing. The amendment procedure shall comply with the provisions of Wis. Stat. § 62.23 for cities and villages or Wis. Stat. § 59.69 for counties.

(b) No amendments shall become effective until reviewed and approved by the Department.

(c) All persons petitioning for a map amendment that obstructs flow, increasing regional flood height 0.01 foot or more, shall obtain flooding easements or other appropriate legal arrangements from all adversely

affected property owners and notify local units of government before the amendment can be approved by the governing body.

(d) For amendments in areas with no water surface profiles, the zoning agency or board shall consider data submitted by the Department, the zoning administrator's visual on-site inspections and other available information. (See sec. 13-2-13)

ARTICLE J

ENFORCEMENT AND PENALTIES

SEC. 13-2-80 ENFORCEMENT AND PENALTIES.

Any violation of the provisions of this ordinance by any person shall be unlawful and shall be referred to the municipal attorney who shall expeditiously prosecute all such violators. A violator shall, upon conviction, forfeit to the municipality a penalty of not less than \$\$100 and not more than \$50050, together with a taxable cost of such action. Each day of continued violation shall constitute a separate offense. Every violation of this ordinance is a public nuisance and the creation may be enjoined and the maintenance may be abated by action at suit of the municipality, the state, or any citizen thereof pursuant to Wis. Stat. § 87.30.

ARTICLE K

DEFINITIONS

SEC. 13-2-90 DEFINITIONS.

Unless specifically defined, words and phrases in this ordinance shall have their common law meaning and shall be applied in accordance with their common usage. Words used in the present tense include the future, the singular number includes the plural and the plural number includes the singular. The word "may" is permissive, "shall" is mandatory and is not discretionary.

(1) "A ZONES" – Those areas shown on the Official Floodplain Zoning Map which would be inundated by the regional flood. These areas may be numbered or 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.

(2) AH ZONE – See "AREA OF SHALLOW FLOODING".

(3) AO ZONE – See "AREA OF SHALLOW FLOODING".

(1)(4) "ACCESSORY STRUCTURE OR USE" - A facility, structure,

building or use which is accessory or incidental to the principal use of a property, structure, or building.

(2)(5) "BASE FLOOD" – Means the flood having a one percent chance of being equaled or exceeded in any given year, as published by FEMA as part of a FIS and depicted on a FIRM.

(3)(6) "BASEMENT" – Any enclosed area of a building having its floor subgrade, i.e., below ground level, on all sides.

(4)(7) "BUILDING" – See STRUCTURE.

(5)(8) "BULKHEAD LINE" – A geographic line along a reach of navigable water that has been adopted by a municipal ordinance and approved by the Department pursuant to Wis. Stat. § 30.11 and which allows limited filling between this bulkhead line and the original ordinary high water mark, except where such filling is prohibited by the floodway provisions of this ordinance.

(6)(9) "CAMPGROUND" – Any parcel of land which is designed, maintained, intended or used for the purpose of providing sites for nonpermanent overnight use by 4 or more camping units, or which is advertised or represented as a camping area.

(7)(10) "CAMPING UNIT" – Any portable device, no more than 400 square feet in area, used as a temporary shelter, including but not limited to a camping trailer, motor home, bus, van, pick-up truck, tent or other mobile recreational vehicle.

(8)(11) "CERTIFICATE OF COMPLIANCE" – A certification that the construction and the use of land or a building, the elevation of fill or the lowest floor of a structure is in compliance with all of the provisions of this ordinance.

(9)(12) "CHANNEL" – A natural or artificial watercourse with definite bed and banks to confine and conduct normal flow of water.

(10)(13) "CRAWLWAYS" OR "CRAWL SPACE" – An enclosed area below the first usable floor of a building, generally less than five feet in height, used for access to plumbing and electrical utilities.

(11)(14) "DECK" – An unenclosed exterior structure that has no roof or sides, but has a permeable floor which allows the infiltration of precipitation.

(12)(15) "DEPARTMENT" – The Wisconsin Department of Natural Resources.

(13)(16) "DEVELOPMENT" – Any artificial 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

alterations to buildings, structures or accessory structures; the repair of any damaged structure or the improvement or renovation of any structure, regardless of percentage of damage or improvement; the placement of buildings or structures; subdivision layout and site preparation; mining, dredging, filling, grading, paving, excavation or drilling operations; the storage, deposition or extraction of materials or equipment; and the installation, repair or removal of public or private sewage disposal systems or water supply facilities.

(14)(17) "DRYLAND ACCESS" – A vehicular access route which is above the regional flood elevation and which connects land located in the floodplain to land outside the floodplain, such as a road with its surface above regional flood elevation and wide enough for wheeled rescue and relief vehicles.

(15)(18) "ENCROACHMENT" – Any fill, structure, equipment, building, use or development in the floodway.

(16)(19) "EXISTING MANUFACTURED HOME PARK OR SUBDIVISION" – A parcel of land, divided into two or more manufactured home lots for rent or sale, on which the construction of facilities for servicing the lots is completed before the effective date of this ordinance. At a minimum, this would include the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads.

(17)(20) "EXPANSION TO EXISTING MOBILE/MANUFACTURED HOME PARK" – The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed. This includes installation of utilities, construction of streets and either final site grading, or the pouring if concrete pads.

(18)(21) "FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)" – The federal agency that administers the National Flood Insurance Program.

(19)(22) "FLOOD INSURANCE RATE MAP" (FIRM) – A map of a community on which the Federal Insurance Administration has delineated both special flood hazard areas (the floodplain) and the risk premium zones applicable to the community. This map can only be amended by the Federal Emergency Management Agency.

(20)(23) "FLOOD" or "FLOODING" – A general and temporary condition of partial or complete inundation of normally dry land areas caused by one of the following conditions:

a. The overflow or rise of inland waters,

b. The rapid accumulation or runoff of surface waters from any source,

c. The inundation caused by waves or currents of water exceeding anticipated cyclical levels along the shore of Lake Michigan or Lake Superior, or

d. The sudden increase caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a seiche or by some similarly unusual event.

(21)(24) "FLOOD FREQUENCY" – The probability of a flood occurrence which is determined from statistical analyses. The frequency of a particular flood event is usually expressed as occurring, on the average once in a specified number of years or as a percent chance of occurring in any given year.

(22)(25) "FLOODFRINGE" – That portion of the floodplain outside of the floodway which is covered by flood waters during the regional flood and associated with standing water rather than flowing water.

(23)(26) "FLOOD HAZARD BOUNDARY MAP" – A map designating approximate flood hazard areas. Flood hazard areas are designated as unnumbered A-Zones and do not contain floodway lines or regional flood elevations. This map forms the basis for both the regulatory and insurance aspects of the National Flood Insurance Program (NFIP) until superseded by a Flood Insurance Study and a Flood Insurance Rate Map.

(24)(27) "FLOOD INSURANCE STUDY" – A technical engineering examination, evaluation, and determination of the local flood hazard areas. It provides maps designating those areas affected by the regional flood and provides both flood insurance rate zones and base flood elevations and may provide floodway lines. The flood hazard areas are designated as numbered and unnumbered A-Zones. Flood Insurance Rate Maps, that accompany the Flood Insurance Study, form the basis for both the regulatory and the insurance aspects of the National Flood Insurance Program.

(25)(28) "FLOODPLAIN" – Land which has been or may be covered by flood water during the regional flood. It includes the floodway and the floodfringe, and may include other designated floodplain areas for regulatory purposes.

(26)(29) "FLOODPLAIN ISLAND" – A natural geologic land formation within the floodplain that is surrounded, but not covered, by floodwater during the regional flood.

(27)(30) "FLOODPLAIN MANAGEMENT" – Policy and procedures to insure wise use of floodplains, including mapping and engineering, mitigation, education, and administration and enforcement of floodplain regulations.

(28)(31) "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.

(29)(32) "FLOODPROOFING" – Any combination of structural provisions, changes or adjustments to properties and structures, water and sanitary facilities and contents of buildings subject to flooding, for the purpose of reducing or eliminating flood damage.

(30)(33) "FLOOD PROTECTION ELEVATION" – An elevation of two feet of freeboard above the water surface profile elevation designated for the regional flood. (Also see: FREEBOARD.)

(31)(34) "FLOOD STORAGE" – Those floodplain areas where storage of floodwaters has been taken into account during analysis in reducing the regional flood discharge.

(32)(35) "FLOODWAY" – The channel of a river or stream and those portions of the floodplain adjoining the channel required to carry the regional flood discharge.

(33)(36) "FREEBOARD" – A safety factor expressed in terms of a specified number of feet above a calculated flood level. Freeboard compensates for any factors that cause flood heights greater than those calculated, including ice jams, debris accumulation, wave action, obstruction of bridge openings and floodways, the effects of watershed urbanization, loss of flood storage areas due to development and aggregation of the river or stream bed.

(34)(37) "HABITABLE STRUCTURE" – Any structure or portion thereof used or designed for human habitation.

(35)(38) "HEARING NOTICE" – Publication or posting meeting the requirements of Wis. Stat. ch. 985. For appeals, a Class 1 notice, published once at least one week (7 days) before the hearing, is required. For all zoning ordinances and amendments, a Class 2 notice, published twice, once each week consecutively, the last at least a week (7 days) before the hearing. Local ordinances or bylaws may require additional notice, exceeding these minimums.

(36)(39) "HIGH FLOOD DAMAGE POTENTIAL" – Damage that could result from flooding that includes any danger to life or health or any significant economic loss to a structure or building and its contents.

(37)(40) "HISTORIC STRUCTURE" – Any structure that is either:

a. Listed individually in the National Register of Historic Places or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register,

b. Certified or preliminarily determined by the Secretary of the

Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district,

c. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior, or

d. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been

certified either by an approved state program, as determined by the Secretary of the Interior; or by the Secretary of the Interior in states without approved programs.

(38)(41) "INCREASE IN REGIONAL FLOOD HEIGHT" – A calculated upward rise in the regional flood elevation, equal to or greater than 0.004 foot, based on a comparison of existing conditions and proposed conditions which are directly attributable to development in the floodplain but not attributable to manipulation of mathematical variables such as roughness factors, expansion and contraction coefficients and discharge.

(42) "LAND USE" – Any nonstructural use made of unimproved or improved real estate. (Also see DEVELOPMENT.)

(43) "LOWEST ADJACENT GRADE" – Elevation of the lowest ground surface that touches any of the exterior walls of a building.

(44) "LOWEST FLOOR" – The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of 44 CFR 60.3.

(39)(45) "MAINTENANCE" – The act or process of restoring to original soundness, including redecorating, refinishing, non structural repairs, or the replacement of existing fixtures, systems or equipment with equivalent fixtures, systems or structures.

(46) "MANUFACTURED 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. The term "manufactured home" includes a mobile home but does not include a "mobile recreational vehicle."

(47) "MOBILE/MANUFACTURED HOME PARK OR SUBDIVISION" - A parcel (or contiguous parcels) of land, divided into two or more manufactured home lots for rent or sale.

(48) "MOBILE/MANUFACTURED HOME PARK OR SUBDIVISION, EXISTING" – A parcel of land, divided into two or more manufactured home lots for rent or sale, on which the construction of facilities for servicing the lots is completed before the effective date of this ordinance. At a minimum, this would include the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads.

(49) "MOBILE/MANUFACTURED HOME PARK, EXPANSION TO EXISTING" – The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed. This includes installation of utilities, construction of streets and either final site grading, or the pouring if concrete pads.

(50) "MOBILE RECREATIONAL VEHICLE" – A vehicle which is built on a single chassis, 400 square feet or less when measured at the largest horizontal projection, designed to be self-propelled, carried or permanently towable by a licensed, light-duty vehicle, is licensed for highway use if registration is required and is designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel or seasonal use. Manufactured homes that are towed or carried onto a parcel of land, but do not remain capable of being towed or carried, including park model homes, do not fall within the definition of "mobile recreational vehicles."

(51) "MODEL, CORRECTED EFFECTIVE" – A hydraulic engineering model that corrects any errors that occur in the Duplicate Effective Model, adds any additional cross sections to the Duplicate Effective Model, or incorporates more detailed topographic information than that used in the current effective model.

(52) "MODEL, DUPLICATE EFFECTIVE" – A copy of the hydraulic analysis used in the effective FIS and referred to as the effective model.

(53) "MODEL, EFFECTIVE" – The hydraulic engineering model that was used to produce the current effective Flood Insurance Study.

(54) "MODEL, EXISTING (PRE-PROJECT)" – A modification of the Duplicate Effective Model or Corrected Effective Model to reflect any man made modifications that have occurred within the floodplain since the date of the effective model but prior to the construction of the project for which the revision is being requested. If no modification has occurred since the date of the effective model, then this model would be identical to the Corrected Effective Model or Duplicate Effective Model. (40)(55) "MODEL, REVISED (POST-PROJECT)" – A modification of the Existing or Pre-Project Conditions Model, Duplicate Effective Model or Corrected Effective Model to reflect revised or post-project conditions.

(41)(56) "MUNICIPALITY" or "MUNICIPAL" – The county, city or village governmental units enacting, administering and enforcing this zoning ordinance.

(42)(57) "NAVD" or "NORTH AMERICAN VERTICAL DATUM" – Elevations referenced to mean sea level datum, 1988 adjustment.

(43)(58) "NGVD" or "NATIONAL GEODETIC VERTICAL DATUM" – Elevations referenced to mean sea level datum, 1929 adjustment.

(44)(59) "NEW CONSTRUCTION" – For floodplain management purposes, "new construction" means structures for which the start of construction commenced on or after the effective date of floodplain zoning regulations adopted by this community and includes any subsequent improvements to such structures. For the purpose of determining flood insurance rates, it includes any structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures.

(45)(60) "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 floodfringe district is a conforming use. However, if the lowest floor is lower than the flood protection elevation, the structure is nonconforming.)

(46)(61) "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. (Such as a residence in the floodway.)

(47)(62) "OBSTRUCTION TO FLOW" – Any development which blocks the conveyance of floodwaters such that this development alone or together with any future development will cause an increase in regional flood height.

(48)(63) "OFFICIAL FLOODPLAIN ZONING MAP" – That map, adopted and made part of this ordinance, as described in Article B, which has been approved by the Department and FEMA.

(49)(64) "OPEN SPACE USE" – Those uses having a relatively low flood damage potential and not involving structures.

(50)(65) "ORDINARY HIGH WATER MARK" – The point on the bank or shore up to which the presence and action of surface water is so continuous as to leave a distinctive mark such as by erosion, destruction or prevention of terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristic.

(<u>66</u>) "PERSON" – An individual, or group of individuals, corporation, partnership, association, municipality, or state agency.

(51)(67) "PRIVATE SEWAGE SYSTEM" – A sewage treatment and disposal system serving one structure with a septic tank and soil absorption field located on the same parcel as the structure. It also means an alternative sewage system approved by the Department of Commerce, including a substitute for the septic tank or soil absorption field, a holding tank, a system serving more than one structure or a system located on a different parcel than the structure.

(52)(68) "PUBLIC UTILITIES" – Those utilities using underground or overhead transmission lines such as electric, telephone and telegraph, and distribution and collection systems such as water, sanitary sewer, and storm sewer.

(53)(69) "REASONABLY SAFE FROM FLOODING" – Means base flood waters will not inundate the land or damage structures to be removed from the special flood hazard area and that any subsurface waters related to the base flood will not damage existing or proposed buildings.

(54)(70) "REGIONAL FLOOD" – A flood determined to be representative of large floods known to have occurred in Wisconsin. A regional flood is a flood with a one percent chance of being equaled or exceeded in any given year, and if depicted on the FIRM, the RFE is equivalent to the BFE.

(55)(71) "START OF CONSTRUCTION" – The date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond initial excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling, nor does it include the installation of streets and/or walkways, nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms, nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For an alteration, the actual start of construction means the first alteration of any

wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

(56)(72) "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 including, but not limited to, roofed and walled buildings, gas or liquid storage tanks, bridges, dams, and culverts.

(57)(73) "SUBDIVISION" – Has the meaning given in Wis. Stat. § 236.02(12).

(58)(74) "SUBSTANTIAL DAMAGE" – Damage of any origin sustained by a structure, whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed 50 percent of the equalized assessed value of the structure before the damage occurred.

(59)(75) "UNNECESSARY HARDSHIP" – Where special conditions affecting a particular property, which were not self-created, have made strict conformity with restrictions governing areas, setbacks, frontage, height, or density unnecessarily burdensome or unreasonable in light of the purposes of the ordinance.

(60)(76) "VARIANCE" – An authorization by the board of adjustment or appeals for the construction or maintenance of a building or structure in a manner which is inconsistent with dimensional standards (not uses) contained in the floodplain zoning ordinance.

(61)(77) "VIOLATION" – The failure of a structure or other development to be fully compliant with the floodplain zoning ordinance. A structure or other development without required permits, lowest floor elevation documentation, floodproofing certificates, or required floodway encroachment calculations is presumed to be in violation until such time as that documentation is provided.

(62)(78) "WATERSHED" – The entire region contributing runoff or surface water to a watercourse or body of water.

(63)(79) "WATER SURFACE PROFILE" – A graphical representation showing the elevation of the water surface of a watercourse for each position along a reach of river or stream at a certain flood flow. A water surface profile of the regional flood is used in regulating floodplain areas.

(64)(80) "WELL" – means an excavation opening in the ground made by digging, boring, drilling, driving or other methods, to obtain groundwater regardless of its intended use.

CHAPTER 3

Shoreland-Wetland Zoning

Article A Statutory Authorization, Findings of Fact, Statement of Purpose and <u>Title</u>

> 13-3-1 Statutory Authorization 13-3-2 Findings of Fact Title of Chapter through Reserved for Future Use <u>Article B</u> <u>General Provisions</u>

> > Compliance

City of Plymouth 128 Smith St. - P.O. Box 107 Plymouth, WI 53073-0107



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 Web Site:
 plymouthgov.com

DATE:	May 23, 2024	
TO:	Committee of the Whole	
FROM:	Tim Blakeslee, City Administrator/Utilities Manager	
RE:	Utility Building Battery Backup Replacement	

Background: The Plymouth Utilities Building, now approximately 12 years old, is beginning to show signs of aging, with components needing repair or replacement. Specifically, the battery backup system and charger unit have deteriorated over time and is in need of replacement. This system is crucial as it provides emergency backup power to the Utilities Building and supports the City/Utility network and servers.

ltem	4-Hour Backup	8-Hour Backup (Current)
Batteries	\$64,842.48	\$88,517.52
Charger	\$13,976.09	\$13,976.09
Install	\$9,503.00	\$9,503.00
Shipping	\$2,676.67	\$2,676.67
Total	\$90,998.24	\$114,673.28

There are two options for replacing the battery backup system:

The battery backup system replacement is not currently budgeted for 2024. However, delaying the replacement to the 2025 budget cycle poses a risk of potential outages, which could disrupt staff operations and emergency personnel logistics, as well as impact the general city/utility network and servers.

Fortunately, the electric utility has available funding to cover these costs within the 2024 budget. The 8-hour backup option matches the current system, while the 4-hour backup option, though less extensive, provides sufficient emergency power for shorter outages.

Staff seeks the Committee's feedback on:

- Proceeding with the project in 2024 versus delaying to 2025.
- Choosing between the 4-hour and 8-hour backup systems.

Typically, power can be restored within 1 to 2 hours at the Utilities Building during an outage, but longer restoration times are possible in significant events.

Recommendation: Provide direction on battery backup system.