

Title 16

SUBDIVISIONS AND DEVELOPMENTS

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Chapter 16.04

GENERAL PROVISIONS

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16.04.010 Short title.

The subdivision regulations set out in this title shall hereafter be known, cited and referred to as the subdivision regulations of the village of Beach Park. (Ord. 1989-O-30 1.101)

16.04.020 Declaration of policy.

A. It is declared to be the policy of the village of Beach Park (hereinafter referred to as the village) to consider the general development of land, the subdivision of land (and resubdivision of existing lots) and the subsequent development of the subdivided land as subject to the control of the village for the orderly, planned, efficient, and economical development of the village, pursuant to the official comprehensive plan, the ordinances of the village, and the statutes of the state of Illinois.

B. Land to be developed and/or subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood, or other menace; and land shall not be developed, subdivided or occupied until available public facilities and improvements exist and proper provision has been made for drainage, water, sewerage, and capital improvements such as schools, parks, recreation facilities, streets and other public improvements.

C. The existing and proposed public improvements shall conform to and be properly related to the proposals shown on the official comprehensive plan and official map of the village. It is intended that these development regulations shall supplement and facilitate the enforcement of the provisions and standards contained in building and housing codes and the zoning ordinance, official comprehensive plan and official map of the village. (Ord. 1989-O-30 1.102)

16.04.030 Purposes.

The general purposes sought to be served by this ordinance are as follows:

A. To promote the public health, safety, morals, comfort, convenience, and prosperity, and general welfare; to conserve, protect and enhance property values; to secure the most appropriate use of the land; and to facilitate the adequate and economical provision of public improvements;

B. To provide for orderly growth and development; to afford adequate facilities for the safe, convenient, and efficient means for the traffic circulation of village residents; and to safeguard the public against flood damage;

C. To prescribe reasonable rules and regulations governing the subdivision and platting of land; the preparation of plats; the location, width, and course of streets and highways; and the installation of utilities, street pavements, and other essential improvements;

D. To establish procedures for the submission, approval and recording of plats with Lake County Recorder of Deeds; and to provide the means for the enforcement and to provide penalties for violations.

16.04.040 Authority.

In order to ensure the orderly development and improvement of land within the jurisdiction of the village, to insure the provision of vehicular and pedestrian circulation ways, utilities, services and facilities necessary and desirable for the citizens of the village, to protect and enhance the value of public and private property, the plan commission may recommend and the president and board of trustees may require that as a condition of approval of any final plat or plan subject to this title, certain improvements set forth in this chapter shall be provided and that certain design standards and improvement specifications be followed. Only those improvements which are specifically attributable to the impact to be generated by the subdivision or development of a parcel may be required hereunder. (Ord. 1989-O-30, 1.104)

16.04.050 Jurisdiction.

A. All property within the geographical coverage of this title shall be subdivided, resubdivided, developed or constructed upon, dedicated for streets, easements, or public lands, or planned for a planned unit development, only in conformance with the provisions and requirements of this title. The subdivision and development regulations set out in this title shall apply to all subdivisions and development of land, as defined herein, located within the corporate limits of the village and to all subdivisions and developments, located in unincorporated areas of the county within one and one-half miles of the corporate limits of the village. The provisions of the village subdivisions and developments ordinance for access and improvements shall include uses and improvements within the village and its one and one-half mile jurisdiction in unincorporated areas for planned developments, condominium or cooperative developments or performance zoning developments under the Lake County zoning ordinance.

B. No land (except as allowed herein) shall be subdivided or developed in the above defined area until:

1. The applicant or his agent shall submit tentative and preliminary plats and plans of the parcel to the plan commission by filing same with the clerk or designee;
2. The applicant or his agent shall obtain approval of the preliminary plat and plan of subdivision or development, if any, as well as of all final plats and plans of subdivision or development by the president and board of trustees of the village;
3. The approved final plat is filed with the county recorder of deeds.

C. No building permit or certificate of occupancy shall be issued for any parcel or plat of land which was created by subdivision or developed after the effective date of the subdivision and development regulations set out in this title and which is not in conformity with these provisions, and no excavation of land or construction of any public or private improvements shall take place or be commenced except in conformity with the subdivision and development regulations set out in this title. (Ord. 1994-O-31, 4; Ord. 1989-O-30, 1.105)

D. A division, conveyance, sale, or exchange of land pursuant to any of the exceptions set forth in paragraph (b) of Section I of "An Act to revise the law in relation to plats," approved March 21, 1874, as amended, (765 ILCS 205.01 et. seq.) is excepted hereunder and may be made without compliance with the provisions hereof. Any such division, conveyance, sale, or exchange of land, however, shall conform to all other ordinances and regulations of the village.

16.04.060 Interpretation.

A. In their interpretation and application, the provisions of the subdivision regulations set out in this title shall be held to be the minimum requirements for the protection of the public health, safety, and general welfare.

B. Conflict Between Public and Private Regulations and Restrictions. The subdivision and development regulations set out in this title are not intended to abrogate any easement, covenant or any other agreement or restriction, provided that where the provisions of this title are more restrictive or impose higher standards or regulations than such easement, covenant, or other private agreement or restriction, the requirement of this title shall control. Where the provisions of the easement, covenant, or private agreement or restriction impose duty and obligations more restrictive or impose higher standards than the requirement of this title or the determination of the village in approving a subdivision, or in enforcing this title, then the private provisions shall be operative and supplemental to this title and the determination made there under. (Ord. 1989-O-30, 1.106)

16.04.065 Rules and Definitions

A. In the interpretation of this title, the rules and definitions contained in this section shall be observed and applied, except when the context clearly indicates otherwise.

B. The language set forth in the text of this title shall be interpreted in accordance with the following rules of construction:

1. Words used in the present tense shall include the future; and words used in the singular number shall include the plural number, and the plural singular.
2. The word "shall" is mandatory and not discretionary.
3. The words "may" and "should" are permissive.
4. The word "lot" shall include the words "plat", "pieces", and "parcel".

C. Definitions

1. ALLEY: A minor way that is used primarily for vehicular access to the back or side-of properties abutting upon, and having access to a street.
2. BLOCK: A tract of land bounded by streets, or by a combination of streets and public parks, cemeteries, railroad rights-of-way, shorelines of waterways, or boundaries of municipalities.
3. BUILDING SETBACK LINE: A building line establishing the minimum allowable distance between a street right-of-way and any structure.
4. CROSSWALK: A strip of land dedicated to the use of pedestrian and other non-motorized traffic.
5. CUL-DE-SAC: A short street ending in a turnaround design and intended as a permanent terminus.
6. DEVELOPMENT: A parcel of land which is to receive, or which has received, physical improvements to render it suitable for some purpose. A development may be major or minor as described under MAJOR SUBDIVISION OR DEVELOPMENT and MINOR SUBDIVISION OR DEVELOPMENT herein. It shall also mean the development or construction upon a single lot or lots.
7. EASEMENT: A grant by a property owner for the use of a strip of land by the village, the general public, a corporation or a certain person for a specific purpose of purposes.
8. ENFORCING OFFICER: The person with the duty to enforce the provisions hereof.
9. FINAL PLAN: A set of engineering drawings and specifications describing and detailing the construction required to complete the subdivision or development, and meeting all of the requirements for a final plan under the terms of this title.

10. **FINAL PLAT:** A map of subdivision with accompanying material, intended for final approval and recording, on the basis of which land can be transferred, leased, or encumbered, or a map of a property to be developed showing existing and proposed easements with accompanying material, intended for final approval and recording, showing and granting easements to specific beneficiaries, and meeting all of the requirements for a final plat under the terms of this title.

11. **BEACH PARK WATERSHED DEVELOPMENT ORDINANCE:** The Beach Park Watershed Development Ordinance shall mean the Lake County Watershed Development Ordinance as amended and adopted by the village, and as amended or updated from time to time.

12. **MAJOR SUBDIVISION OR DEVELOPMENT:** Any subdivision or development not classified as a minor subdivision or development or not specifically exempted under the terms of this title.

13. **MINOR SUBDIVISION OR DEVELOPMENT:** Any subdivision or development containing not more than 2 lots, and fronting on an existing improved street, and not involving any new street or road, and not adversely affecting the development of the remainder of the parcel of adjoining property, and meeting the requirements for a Minor Development under the provisions of the Beach Park Watershed Development Ordinance, and not in conflict with any provision or portion of the official plan, zoning ordinance, or Subdivisions and Developments ordinance of the village of Beach Park.

14. **OFFICIAL PLAN:** The comprehensive plan, or any geographical or functional part thereof, as adopted by the village of Beach Park, indicating the general locations recommended for streets, parks, public buildings, and other community development aspects, sometimes referred to as the comprehensive plan.

15. **OWNER:** Any person having legal or equitable title to the land sought to be subdivided.

16. **PERSON:** Any individual, firm, association, syndicate, corporation, trust, or any other legal entity.

17. **PLANNED UNIT DEVELOPMENT:** A subdivision approved by the village pursuant to the provisions of the planned unit development section of the village of Beach Park zoning ordinance, as may be amended.

18. **PRELIMINARY PLAN:** A preliminary set of engineering drawings of the physical improvements for a subdivision or development with accompanying material, upon which the preliminary design of the subdivision or development is presented, submitted for approval by the village but not intended for use as construction documents.

19. **PRELIMINARY PLAT:** A preliminary map of subdivision or development with accompanying material, upon which the design for the subdivision is presented, submitted for approval by the village but not for recording.

20. **RESUBDIVISION:** The relocation of property boundaries or the reallocation of property in a Final plat. The dissolution of property lines not accompanied by the relocation of new property lines shall not constitute a resubdivision

21. **ROADWAY:** The portion of the street right-of-way available for vehicular movement. Roadway width shall be measured from back of curb to back of curb.

22. **SKETCH PLAN:** A general map or drawing on which the design for the subdivision of the land is presented for discussion purposes prior to the preparation of the preliminary plat.

23. **STREET:** A way, however designated, for vehicular traffic.

24. STREET HALF: That portion of the street on either side of a tract boundary when a proposed street has its centerline, or within its right-of-way, the boundaries of one or more tracts.
25. STREET WIDTH: The shortest distance between the lines delineating the right-of-way of a street.
26. DEVELOPER: Any owner or other person proceeding under the Subdivisions and Developments ordinance to subdivide or develop land.
27. SUBDIVISION: The division of land into two or more parcels or the establishment of a planned unit development.
28. SURVEYOR: A land surveyor, registered as such by the State of Illinois.
29. UNDEVELOPED LAND: Land in and surrounding the village that has not been subdivided and/or improved under the requirements of the Subdivision and Development regulations.
30. VILLAGE: The village of Beach Park.
31. VILLAGE ATTORNEY: The attorney or legal firm retained by the village to represent its interests.
32. VILLAGE BOARD: The village board of trustees of the village of Beach Park.
33. VILLAGE ENGINEER: A professional engineer or firm, registered in the state of Illinois, who has been duly appointed as such by the board of trustees of the village.
34. VILLAGE PLANNER: A professional land planner, who has been duly appointed as such by the board of trustees of the village.
35. WALKWAY/BIKEWAY: A way, however designated, across or within a block for use by pedestrian and bicycle traffic, which shall include but not be limited to sidewalks and crosswalks.
36. ZONING OFFICER: That person appointed by the village to perform the duties described in this title.

16.04.070 Savings clause.

This title shall not be construed as abating any action now pending under, or by virtue of, prior existing subdivision or development regulations, or as discontinuing, abating, modifying, or altering any penalty accruing or about to accrue, or as affecting the liability of any person, firm, or corporation, or as waiving any right of the village under any section or provision existing at the time of adopting of the ordinance set out in this title, or as vacating, or annulling any rights obtained by any person, firm, or corporation, by lawful action of the village, except as shall be expressly provided for in this title. (Ord. 1989-O-30 1.107)

16.04.080 Vacation of plats.

A. Any plat or any part of any plat may be vacated by all of the owners of lots in such plat by a written instrument, to which a copy of such plat shall be attached, declaring the same to be vacated.

1. In order to be of force and effect, any such instrument must first be approved by the president and the board of trustees of the village, except as shall be expressly provided for in this title.

2. Such an instrument shall be executed, acknowledged or approved, and recorded in like manner as plats of subdivision; and being duly recorded and filed shall operate to destroy the force and effect of the recording of the plat so vacated, and to divest all public rights in the streets, alleys, and public grounds, and all dedications laid out or described in such plat, except as maintained by easements.

B. The president and board of trustees may reject any such instrument which destroys any public right in any of its public uses, improvements, streets, or alleys. (Ord. 1989-O-30 1.108)

C. The village board may set a sum to be paid by the owner(s) of abutting properties in consideration of any public property involved in the vacation. The village board shall consider the certified assessed value of the subject property and surrounding properties, along with other tangible and intangible forms of compensation, in setting such a sum.

D. The administrative officers of the village shall recommend disapproval of any petition for vacation that fails to meet the following standards:

1. No vacation shall be approved which creates a condition which would not be permitted under the standards of design set forth herein unless such vacation will, at the same time, correct a more serious condition which exists contrary to the standards of this title.

2. No vacation shall be approved which will result in a violation of the village's zoning ordinance or other applicable ordinances or regulations, unless such vacation will, at the same time, correct a more serious condition which exists contrary to such ordinances or regulations.

E. A certified statement of the assessed valuation of all properties surrounding any public right-of-way to be vacated shall accompany the sketch and preliminary plat of vacation. Final petitions for vacation shall include the following items:

1. Three copies of the original plat certified by the Lake County recorder of deeds to be a true copy of the same, on which is shown the portion to be vacated outlined in a heavy line and hatched.

2. The following deeds, petitions and certificates:

- a. deed of vacation.
- b. petition - 3 copies.
- c. county clerk's certificate.
- d. resolution or ordinance.
- e. assessor's certificate.

F. The petition as it is presented to the village board shall be accompanied by a recommendation from the village planner.

G. The vacation of any plat, or part thereof, or right-of-way, easement, or part thereof, shall not be deemed to be a vacation of the rights of any public utility where said public utility has installed its facilities therein. All such vacations shall be made upon the express condition that the abutting property owner(s) grant to all public utilities, their successors and assigns, the right-of-way or easement to operate, maintain, renew, and reconstruct their facilities, over, or under the public right-of-way or easement vacated and such condition shall be noted in the deed or plat of vacation and in the ordinance or resolution of vacation.

H. The village may require the petitioner to furnish a bond or other security in an amount determined by the village sufficient to protect the village and to indemnify it for any suit which may be filed for damages sustained as a result of such vacation.

I. Nothing contained herein, nor any required certificate, shall be deemed in any way to limit the right and authority of the village to vacate any plat or part thereof, or any right-of-way or easement or part thereof where it finds that such vacation will serve the public interest.

J. It shall not be necessary to vacate a plat or part thereof in order to proceed with a resubdivision of said plat or part thereof. Resubdivision according to the procedure and standards for subdivision required by this title shall automatically constitute vacation of a prior plat or part thereof, provided that monetary remuneration shall be paid to the village in consideration of any excess public property vacated over that dedicated in the subdivision.

K. Bonded contracts for the improvements of platted streets or alleys shall be automatically canceled upon vacation of such platted streets or alleys.

Chapter 16.08

ADMINISTRATION

Sections:

16.08.010	Village president- Duty and authority.
16.08.020	Village clerk.
16.08.030	Plan commission review.
16.08.040	Village engineer.

16.08.010 Village president - Duty and authority.

It shall be the duty of the village president to enforce the provisions of this title and to bring to the attention of the village attorney any violations or lack of compliance herewith. The village president may call upon any department or official of the village to furnish him with such information and assistance as he may deem necessary to properly enforce this title and it shall be the duty of such department or official to furnish such information and assistance whenever required. (Ord. 1989-O-30, 1.201 (A))

16.08.020 Village clerk.

The village clerk or designee shall:

- A. Maintain permanent and current records of this title, including amendments thereto;
- B. Receive all subdivision applications, tentative plats, preliminary plats, final plats and supporting data;
- C. Upon receipt thereof, forward copies of the tentative plat, preliminary plat and final plat to the village president, building and zoning administrator, the plan commission and the village engineer for their recommendations and report; and
- D. Record all final plats as provided for herein. (Ord. 1989-O-30 1.201 (B))

16.08.030 Plan commission review.

A. Upon receipt of all the material required for the preliminary plat or plan from the developer, the building department shall circulate the preliminary plat(s) or plan(s), as the case may be, to the village clerk or designee for distribution as required. The village clerk or designee shall place the matter on the plan commission's agenda and shall serve notice upon the applicant of the time and place of its meeting at which said matter will be discussed. The plan commission shall forward its written report to the president and board of trustees recommending approval or disapproval of the preliminary plat or plan within ninety days from the date of the filing of a complete application. If the recommendation is to disapprove, the report shall set forth the reasons for its disapproval and specify with particularity the aspects in which the proposed plat or plan fails to meet the standards of this chapter.

B. Upon receipt of the complete final plat or plan from the developer, the building department shall circulate the final plat or plan among the various village departments for their review and comment. The plan commission shall place the matter on its agenda and serve notice upon the applicant of the time and place of its meeting at which said matter will be discussed. The plan commission shall forward its written report to the president and board of trustees recommending approval or disapproval of the final plat or plan. If the recommendation is to disapprove, the report shall set forth the reasons for its disapproval, specifying with particularity the manner in which the proposed plat or plan fails to meet the standards of this chapter.

C. The plan commission may recommend variations from these requirements in specific cases where it finds that extraordinary hardships or practical difficulties unique to the site may result

from strict compliance with this title, the variances will not in any manner vary the density provisions of the zoning ordinance or be detrimental to the public safety, health or welfare. All such recommended variations shall be communicated to the president and board of trustees in writing, with the reasons therefore, so that the variations recommended may be considered prior to action by the president and board of trustees to grant final approval. (Ord. 1989-O-30 1.201 (C))

16.08.040 Village engineer.

The village engineer or consulting engineer designated by the village president shall:

A. Recommend approval or disapproval , or recommend alterations to the preliminary and final plats and plans referred to it by the plan commission;

B. Act upon variation recommendations referred to it by the plan commission;

C. Make all other determinations required by the regulations contained herein. (Ord. 1989-O-30 1.201 (D))

Chapter 16.12

VARIANCES, APPEALS AND AMENDMENTS

Sections:

16.12.010	Approval- Required findings.
16.12.020	Procedures.
16.12.030	Conditions of approval.
<u>16.12.040</u>	<u>Appeals.</u>
16.12.050	Amendments.

16.12.010 Approval required findings.

Where the president and board of trustees find that extraordinary hardships or practical difficulties may result from strict compliance with this title and/or the purposes of this title may be served to greater extent by an alternative proposal, it may approve variances to this title so that substantial justice may be done and the public interest secured, provided that such variances shall not have the effect of nullifying the intent and purpose of this title; and further provided the president and board of trustees shall not approve variances unless it shall make findings based upon the evidence presented to it in each specific case that:

A. The plight of the owner is due to unique circumstances and the proposed variation will not merely serve as a convenience to the petitioner, but will alleviate some demonstrable and unusual hardship which will result if the strict letter of the regulations of this title were carried out and which particular hardship or practical difficulty is not generally applicable to other property within the same zoning district. The loss of lots, or a reduction in the size or number of buildings that will fit on a lot, in and of themselves is not a hardship;

B. The alleged hardship has not been created by any person presently having a proprietary interest in the subject property;

C. The proposed variation will not be materially detrimental to the public welfare or injurious to other property or improvements in the neighborhood;

D. The proposed variation will not impair an adequate supply of light and air to adjacent property, substantially increase congestion in the public streets, increase the danger of fire, or endanger the public safety;

E. The proposed variation will not alter the essential character or appearance of the neighborhood;

F. The proposed variation is in harmony with the spirit and intent of this title;

G. The variances will not in any manner vary the provisions of the zoning ordinance, official comprehensive plan, or official map of the village. (Ord. 1989-O-30, 1.202 (A))

16.12.020 Procedures.

Any petition for any such variance shall be submitted in writing by the applicant on forms prescribed by the plan commission. The petition shall be filed with the preliminary plat and plan at the time of application and shall state fully the grounds for the application and all of the facts relied upon by the applicant. (Ord. 1989-O-30, 1.202 (B))

16.12.030 Conditions of approval.

In approving variances, the president and board of trustees may require such conditions as will, in its judgment, secure substantially, the objectives of the standards or requirements of this title. (Ord. 1989-O-30, 1.202 (C))

16.12.040 Appeals

A. Any person aggrieved by a decision of the enforcing officer in enforcing the terms of the Subdivisions and Developments ordinance may request a hearing before the planning and zoning committee. Requests for such hearings shall be made in writing to the planning and zoning committee. Upon notification, the planning and zoning committee shall schedule an appointment for a hearing within 30 days.

B. Upon the evidence presented by the enforcing officer and the evidence presented by the petitioner, the planning and zoning committee may:

1. Accept the decision of the enforcing officer;
2. Reject the decision of the enforcing officer and rule in favor of the petitioner, if such decision is consistent with the provisions of this title;
3. Modify the decision of the enforcing officer, consistent with the provisions of this title;
4. The decision of the planning and zoning committee shall be made known in writing to the petitioner within 30 days of the hearing.

16.12.050 Amendments

A. Action by the village board

1. The village board on its own motion shall consider any proposed changes and amendments to these subdivision regulations.
2. The village board may, on its own motion, call a public hearing on the proposed changes or amendments.
3. The village board, after reviewing proposed changes or amendments, may
 - a. Adopt the proposed changes or amendments;
 - b. Deny the proposed changes or amendments;
 - c. Submit the changes or amendments for further analysis and review.

Chapter 16.16

PROCEDURE

Sections:

16.16.010	General provisions.
16.16.010	General provisions.
16.16.020	Application for preliminary plat or plan.
16.16.030	Specifications for document submittal.
16.16.040	Surveys.
16.16.050	Classification.
16.16.060	Plan commission action on preliminary plat.
16.16.070	Preliminary approval—Effective period.
16.16.080	Zoning regulations—Conformance.
16.16.090	Preliminary plat or plan approval.
16.16.100	Final engineering plan—Generally.
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16.16.130	Final plat—Action by president and board.
16.16.140	Final plat—Signing and recording.
16.16.150	Sectionalizing subdivision plats.
16.16.160	Waiver of procedures.

16.16.010 General provisions.

A. Before undertaking the formal procedures outlined in this title, an applicant is urged to discuss his proposal with the village president (or his designees) to ascertain the problems and requirements affecting the subdivision or development of the subject property. The applicant should prepare a sketch plan for this meeting including the following information:

1. Boundaries of property to be subdivided;
2. Surrounding streets, existing structures, and available utilities;
3. Proposed layout of streets, blocks, and lots;
4. Proposed locations of business, parks, and other nonresidential areas;
5. Any other factors to be a help in approving the subdivision.

B. After informal discussions, a developer desiring village approval of a proposed subdivision or development shall submit the appropriate documents to the village clerk, who shall undertake the following procedure:

1. Submission of preliminary plat of subdivision and preliminary engineering plans to the plan commission;
2. Submission to the president and board of trustees of recommendations of the plan commission regarding the preliminary plat of subdivision and preliminary engineering plans;
3. Submission of final engineering to village engineer and plan commission;
4. Submission of final plat of subdivision to the plan commission;
5. Submission of final plat of subdivision and final engineering plans to the president and board of trustees;
6. Submission of subdivision or development agreement to the president and board of trustees; and
7. Recordation of final plat of subdivision.

C. For the purpose of this title, the date of the regular meeting of the plan commission at which discussion is held regarding the final plat of subdivision or final plan, including any adjourned date thereof shall constitute the official submittal date of the plat or plan at which date the statutory period required for formal approval or disapproval of the plat or plan shall commence.

D. In order to have plans and materials considered at a regularly scheduled plan commission meeting, the plans and material shall be submitted to the village clerk's office at least thirty days prior to the meeting date whereon the matter is scheduled to be discussed.

(Ord. 1989-O-30, 1.301)

16.16.020 Application for preliminary plat or plan.

Application Procedure and Requirements. Prior to subdividing land an owner of the land, or his representative, shall file an application for approval of a preliminary plat of subdivision and/or preliminary plan of development. At the applicant's own risk the applicant may elect to apply for preliminary and final plat and plan approval simultaneously for minor developments. The application for preliminary and final plat or plan approval shall meet the requirements for final plat or plan approval. The application for preliminary plat or plan approval only shall:

A. Be made on forms available at the office of the village clerk;

B. Include all contiguous holdings of the owner, including land in the same ownership as defined herein, with an indication of the portion which is proposed to be subdivided, accompanied by an affidavit of ownership, which shall include the dates the respective holdings of land were acquired, together with the book and page of each conveyance to the present owner as recorded in the recorder of deed's office. The affidavit shall advise as to the legal owner of the property, the contract owner of the property, the date the contract of sale was executed, and if any corporations are involved, a complete list of all directors, officers, and stockholders of each corporation owning more than five percent of any class of stock;

C. Be accompanied by twenty-five full-size copies of the preliminary plat and plan and fifteen copies of the plat and plan reduced to 11" x 17", as described in this title and complying in all respects with these regulations;

D. Be accompanied by a nonrefundable deposit to cover the costs of review according to the schedule adopted from time to time by resolution passed and approved by the village president and board of trustees;

E. If the applicant is a corporation, the application must be accompanied by a resolution of the corporation authorizing the execution and submittal of the instant application;

F. If the applicant is a general partnership, the application shall contain a list of all general partners who have a five percent, or greater individual or beneficial interest in the partnership;

G. If the applicant is a limited partnership, the application shall contain a list of all the names of general partners and the names of all limited partners having a five percent or greater individual or beneficial interest in the partnership;

H. If the applicant is a land trust or any other trust, the application shall contain the names and addresses of all beneficiaries of the trust together with their respective interests in the trust. The application shall be further verified by the applicant in his capacity of the trust, or by the beneficiary as a beneficial owner of an interest in the trust and the application shall be signed individually by as many beneficiaries as are necessary to constitute greater than fifty percent ownership of the beneficial interest of the trust;

I. Include an address and business and home telephone number of an agent who shall be authorized to receive all notices required by this title. (Ord. 1989-O-30, 1.302 (A))

16.16.030 Specifications for document submittal.

Preliminary plats and plans of subdivision or development submitted to the plan commission,

prepared in pen or pencil upon sheets 24" x 36" shall be drawn to a scale not to exceed one hundred feet to the inch (1"= 100") and shall show or be accompanied by the following information:

1. Name of proposed subdivision or development;
2. Legal description of the property, including all contiguous holdings of the owner, whether part of the development or not:
 - a. If property is within an existing subdivision or development, the name of such existing subdivision or development shall be utilized within the proposed legal description,
 - b. If property is not within a previously platted subdivision, a description by metes and bounds will suffice;
3. Ownership:
 - a. Name and address, including telephone number of legal owner or agent of property, involved in the proposed subdivision, giving grantor, grantee, date and reference to land records,
 - b. Citation of any existing legal rights-of-way or easements affecting the property,
 - c. Existing covenants on the property;
4. Name, address and telephone number of the professionals responsible for subdivision design, design of public improvements, and surveying;
5. Location of property by government lot, section, township, range and county;
6. Boundary line of proposed subdivision, section or corporate lines within or adjacent to the tract and overall property dimensions, and including all contiguous property held by the owners;
7. Property lines and lot lines of adjacent tracts of subdivided and unsubdivided land shown in relation to and within one hundred feet of the tract being proposed for subdivision, including those areas across abutting roads;
8. Location, width and names of all existing or prior platted streets (including the status of such streets: improved, unimproved or partially improved), and/or other public ways, railroad and utility rights-of-way, parks and other public open spaces, permanent buildings or structures and section and municipal corporation lines, within one hundred feet adjacent to the tract;
9. In case of a resubdivision, all descriptive lines of the original plat being vacated shall be shown by dotted lines in their proper position in relation to the new arrangement of the plat, the new plat being clearly shown in solid lines so as to avoid ambiguity or confusion;
10. Location and/or size of existing channels, natural and manmade retention/detention areas, floodplains, wetlands, storm sewers, water mains, culverts, wells, septic systems or other underground facilities within the tract and at a distance of one hundred feet (unless a greater distance is required for review) beyond the tract, which information shall include such data as grades, invert elevations and locations of catch basins, manholes, valves and hydrants;
11. The location of features such as trees, rock formations or outcroppings or scenic views, beaches, historic areas or other cultural features and other similar assets shall be shown on the preliminary plat;
12. The applicant shall also submit a soils report found acceptable to the village, which classifies soil types and which determines potential ground absorption, runoff, flooding deficiencies, seasonal groundwater levels, the presence of unstable soil or soils which may constitute problems for conventional construction, the presence of subsurface rock that would affect the installation of underground improvements or the provision for aboveground improvements. If in the opinion of the village, additional soil investigations, boring or other soil

tests are necessary, the applicant shall provide them at his own expense;

13. Locations of existing buildings, structures, paved areas, property lines, existing easements, burial grounds, railroad rights-of-way, floodplain watercourses, vegetative cover, and existing wooded areas; location, width, and names of all existing or platted rights-of-way or other public ways within or immediately adjacent to the tract;

14. Location of existing sewers, water mains, culverts, and other underground structures within the tract and immediately adjacent thereto; existing permanent building and utility poles on or immediately adjacent to the site and utility rights-of-way;

15. Existing and proposed topographic data to the same scale (minimum 1"=100') as the preliminary plat, superimposed on the plat, with contour lines of one foot or less for the proposed subdivision and for a minimum distance of 100 feet from the periphery thereof, with spot elevations at all breaks in grade, along all drainage channels and swales, and at other selected points. Additional topographic information may be required based upon existing drainage patterns. Topographic information must be based upon United States Geological Survey datum with a project benchmark noted on the plan, and proposed contours indicated throughout the site;

16. Proposed use of the site, existing land uses both on the site and adjacent to it, and existing zoning of the subject property as well as adjacent properties;

17. The approximate location and widths of proposed streets and rights-of-way, with proposed centerline radii and proposed centerline and curb line grades;

18. The approximate location, dimensions, and square footages of all existing or proposed lots;

19. Preliminary proposals for connection with existing water supply and sanitary sewerage systems, or alternative means of providing water supply and sanitary waste treatment and disposal; the location, invert elevation and size of any proposed sanitary sewers, storm sewers, stormwater management facilities and water lines; preliminary provisions for detention and retention of surface water drainage, benchmarks, and means of conveyance of existing and proposed flow through drainage and flow through drainage likely to be generated in the future off-site;

20. Graphic scale, north arrow, and date of drawing, including revision dates if applicable;

21. Layout of streets, right-of-way widths, and connections with adjoining platted streets; also the widths and locations of alleys, easements, restrictions, reservations or covenants, tree preservation areas (the layout of all improvements to be undertaken so as to minimize the destruction of existing trees) and public walkways;

22. Layout, numbers, building lines and approximate dimensions of lots. A statement shall be provided on the preliminary plat stating that minimum and typical lot sizes required by the zoning ordinance have been met;

23. A description of parcels of land and acreage intended to be dedicated, preserved, otherwise set aside for public care and enjoyment, or provided for the use of property owners in the subdivision, including any natural environmental features or significant cultural features which will be retained on the site. The applicant should also prepare a schedule indicating the sections of this title that are being complied with;

24. A description of the ownership and existence and proposed use of any parcels identified as excepted on the preliminary plat. If the applicant has an interest or owns any parcel so identified as excepted the preliminary plat shall indicate how this property could be developed in accordance with the requirements of the existing zoning district in which it is located and with an acceptable relationship to the layout of the proposed preliminary plat indicating due consideration for extension of rights-of-way, streets, public land donations, etc.;

25. A description of the protective covenants or deed restrictions which are to be placed on the property to be subdivided at the expected date of development;
26. A calculation of population equivalents shall be shown;
27. Streets shall be named in accordance with the following guidelines:
 - a. No street names shall be used which will duplicate or be confused with the names of existing or proposed streets, or that can be interpreted by the village president as being offensive in character,
 - b. A separate name shall be provided for each segment of a street that changes direction forty-five degrees or more (as measured from the centerline of the right-of-way), except by approval of the plan commission, streets which have a similar alignment with existing or proposed streets may be required to continue the use of that name. (Ord. 1989-O-30 1.302 (B))
28. Site data table, including total tract acreage, number of residential lots, average area of lots, acreage of streets, acreage of public land to be dedicated other than streets;
29. Comprehensive drainage system report, including calculations (first in preliminary form), for the conveyance and storage of the storm water runoff including, but not limited to, overland flow routes, pipe and open channel flow sizing, and basin and outlet sizing. The drainage system report shall comply with the requirements of the Beach Park Watershed Development Ordinance, and shall include a drainage map showing existing and proposed drainage areas;
30. Where unusual site conditions exist, the village may require such additional plans, specifications and drawings as it finds necessary for an adequate review of the preliminary plat.
31. All new developments of 100 or more dwelling units or non-residential developments with 100 or more employees shall be required to submit a traffic study performed by a qualified traffic engineer dated within one (1) year of submission to establish trips generated, necessary road improvements, and other traffic impact information.
32. A tax impact study, if necessary
33. A description of the method of access of construction equipment to the site, including the use of any construction easements across adjacent property.
34. Village annexation or development agreements governing the terms and conditions of annexation and development in the village.
35. Any additional information, requested by the village board for the proper consideration of the proposed subdivision.

16.16.040 Surveys.

Whenever the property shown upon any given preliminary plat or plan lies immediately adjacent and contiguous to any tract improved with buildings or other structures, the applicant shall provide current spotted surveys of all such tracts adjoining the property which is the subject of the preliminary plat. (Ord. 1989-O-30 1.302 (C))

16.16.050 Classification.

Upon receipt and review of application and materials the village clerk or designee shall place the matter on the next available regular meeting agenda of the plan commission unless requested by the applicant to do otherwise. He shall also transmit the preliminary plat and plan for review to the appropriate officials or agencies of the village and other official bodies as he deems necessary. (Ord. 1989-O-30 1.302 (D))

16.16.060 Plan commission action on preliminary plat or plan.

The plan commission shall approve or disapprove the application for preliminary approval within ninety days from the date of the application or the filing by the applicant of the last item of required supporting data, whichever date is later, unless such time is extended by mutual consent. If such plat or plan is disapproved, then within said ninety days plan commission shall furnish to applicant in writing a statement setting forth the reason for disapproval and specifying with particularity the aspects in which the proposed plat or plan fails to conform to the ordinances, including official map. If such plat or plan is approved the village shall accept or reject said plat or plan within thirty days after its next regular stated meeting following the action of the plan commission. (Ord. 1989-O-30 1.302 (E))

16.16.070 Preliminary approval- Effective period.

Following its approval of the engineering plans and specifications, the plan commission shall give the preliminary plat or plan its approval.

A. The approval of a preliminary plat or plan by the plan commission shall be effective for a period of one year.

B. If the plat or plan does not conform to the provisions of this title or other pertinent ordinances or is not consistent with the comprehensive plan or with the general design and layout of similar areas of the village, the subdivider or developer may then make such changes as are specified or required by the plan commission. If such changes are made the plan commission shall preliminarily approve the plat or plan and shall certify said action by stamping or lettering on the plat or plan the following certificate:

Preliminary approval by the Plan Commission of the Village of Beach Park, Lake County, Illinois, this day of , A.D. 19 , subject to all conditions of preliminary approval as set forth in the Plan Commission's report and recommendation to the President and Board of Trustees, shall be effective for one (1) year from the date hereof.

Signed:
Chairman

Secretary
(Ord. 1989-O-30 1.302 (F))

16.16.080 Zoning regulations - Conformance.

Every plat or plan shall conform to existing zoning regulations and subdivision and development regulations applicable at the time of proposed final approval, except that any plat or plan which has received preliminary approval shall be exempt from any subsequent amendments to the zoning ordinance rendering the plat or plan nonconforming as to bulk or use, provided that final approval is obtained within the one-year period. (Ord. 1989-O-30 1.302 (G))

16.16.090 Preliminary plat and plan approval.

Approval of the preliminary plat by the plan commission shall constitute an acknowledgement by the applicant that final engineering plans and specifications should be presented for approval. The developer shall have one (1) year from the date of approval of the submitted preliminary plat to submit a final plat and final engineering plans. If the final plat and final engineering plans are not submitted within the said one (1) year period, the village's approval shall automatically be deemed withdrawn and the preliminary plat shall be null and void, unless a request for an extension of time to file the final plat is received by the village within the said one (1) year period and good cause is shown, in which case, the

village board, in its discretion, may allow additional time to file the final plat which shall not exceed six (6) months. (Ord. 1989-O-30 1.302 (H))

16.16.100 Final engineering plan - Generally.

Following plan commission approval of the preliminary plat of subdivision, the applicant shall prepare final engineering plans for all required improvements. All plans and specifications shall show all land improvements required by this title and shall be prepared in conformance with the engineering specifications required by this title. Whenever improvements are required in the development of a subdivision, the developer shall submit to the village for approval plans, specifications, calculations and estimates bearing the seal of an Illinois Registered Professional Engineer. The final engineering plans shall comply with the Standard Details recommended by the village engineer and approved by the village board, as may be amended or revised. Approved engineering plans and specifications are required for all public improvements, including but not limited to the requirements of this title and the following

1. Streets: Plans and specifications for street construction, including center line profile of each street, right-of-way width, road width, road cross-section, curb and gutter type, drainage structures, site traffic accessibility, street lighting plan and specifications. When required, a study of traffic and traffic control requirements shall be included and incorporated into the development plans.

2. Water Supply, Storage, and Distribution: Plans, details, specifications, and studies for proposed community water supply, storage, and distribution facilities, or for private wells.

3. Wastewater Collection and Treatment: Plans, details, specifications, and studies for proposed wastewater collection and treatment facilities or individual sewage disposal systems. Sanitary sewer sizing calculations.

4. Storm water: Plans, details, and specifications for proposed storm water collection and storm water basin facilities. Storm water basin and outlet sizing calculations and storm sewer sizing calculations.

5. Grading: Existing and proposed topography, including existing and proposed contours at one foot intervals throughout the site, and including an erosion control plan. The topography data on the engineering plans shall include the surface water drainage certification as required by the Plat Act of the Illinois Compiled Statutes (765 ILCS 205.01 et. seq.)

6. Individual Lot Plat: Individual lot plat setting forth building site area, minimum building grade, lot grading plan, drainage structures, easements, nature preservation areas, individual tree preservation requirements, and any other restrictions or conditions relating to the use, development and occupancy of the lot.

7. Cost Estimates: Construction cost estimates for all on-site and off-site public improvements.

B. The improvement plan stage is for the purpose of accurately showing how the improvements will be constructed in order to conform to the layout and design objectives of the preliminary plat and plan. Where conditions so warrant, the village engineer may require that portions of improvement plans be submitted during the preliminary plat and plan review process in order to determine the land's suitability for the preliminary plat and plan design. Any required off-site improvements and engineering studies shall be provided upon request. Compliance with the standard details approved by the village board may be required at this time. Where the subdivision or development is to be developed in phases, and where soil and/or topographical conditions so warrant, the village engineer may require that improvement plans for the entire preliminary plat or plan area be submitted prior to the construction of improvements.

- C. Final engineering plans shall, as a minimum, consist of the following:
1. Title sheet;
 2. Project specifications (may be separately bound) and general construction notes;
 3. Geometric plan;
 4. Grading plan, which includes the street paving plan, all storm sewer lines and structures, storm water retention/detention facilities, flood plan and wetland protection measures, and which shows existing and proposed contours throughout the site at one foot vertical intervals;
 5. Master and detailed utility plans, which shows all storm sewers, sump pump drain lines, sanitary sewers, water main and any other public utility lines with appurtenant structures;
 6. Lighting plan, which includes the layout for lighting standards and underground conduits and cable for off-street parking and/or public street lighting facilities;
 7. Street plan and profiles;
 8. Construction details;
 9. Sanitary and storm Sewer profiles;
 10. Landscaping plan;
 11. Soil erosion and sedimentation control plan.
- D. Each plan sheet shall include the following information:
1. A title block that includes the project name, sheet title (Geometric, Grading, etc.), sheet number, date of preparation and latest revision date;
 2. North arrow and scales;
 3. Additional general plan notes and legend as may be required.
- E. The Title Sheet shall include the following information:
1. Subdivision or development name and unit number or phase number;
 2. Location map;
 3. Seal, signature, address and phone number of the registered professional engineer who prepared the plans and the person or firm who prepared the topographic surveys;
 4. Developer's name, address and phone number;
 5. Index of sheets;
 6. A minimum of two (2) benchmarks based on U.S.G.S. datum;
 7. Dates of preparation and any revisions;
 8. Standard legend.
- F. The village engineer shall review all engineering drawings in order to determine whether such drawings are consistent with the approved preliminary plat and plans and whether they comply with the requirements contained herein and with the other ordinances of the village, village policy, the village Master Plan, standard details, good engineering practice, and development and annexation agreements. The village engineer shall report its review to the village. In the event that the plans, details, or specifications do not so conform or comply, the village engineer shall notify the village of the specific manner in which they do not so conform or comply.

16.16.110 Final plat - Application.

Following the approval of the preliminary plat, the applicant may file an application for approval of a final plat, provided such application for approval is made not later than one year after approval of the preliminary plat has been granted by the president and board of trustees of the village. The application shall:

- A. Be made on forms available at the office of the village ~~president~~ clerk or designee ;
- B. Be accompanied by a minimum of twenty-five copies of the final plat and twenty-five copies of the final engineering plans and specifications as described in this title;

C. Be accompanied by a nonrefundable deposit to cover review costs as set forth in a resolution adopted from time to time by the president and board of trustees;

D. Comply in all respects with the preliminary plat, as approved, depending upon the classification of the development;

E. Be presented to the village clerk or designee at least fifteen days prior to a regular meeting of the plan commission. (Ord. 1989-O-30, 1.304 (A))

16.16.120 Final plat - Submission of documents.

The final plat shall be drawn in waterproof black (India) ink on tracing cloth, or its mylar equivalent. Along with the required number of copies, the final plat shall also be provided in digital form on Intergraph Microstation format (or DXF Format if not available on Intergraph) on 3 2" MS-DOS diskettes. The digital format of the final plat shall be submitted to the village engineer prior to recording by the Lake County recorder. The final plat shall be prepared at a minimum scale of one inch to one hundred feet (1" = 100'). Variation in scale may be allowed when determined by the village engineer to be necessary for a proper depiction of the subdivision. When more than one (1) sheet is used for any plat, they shall be numbered consecutively, and each sheet shall contain a notation showing the whole number of sheets in the plat, and its relation to other sheets (e.g., sheet one (1) of three (3) sheets). Linear dimensions shall be given in feet and decimals thereof. The final plat shall show, at a minimum, the following elements:

A. Name of subdivision or development;

B. Location and position of the subdivision or development indicated in each of the following ways: by quarter-quarter section, section, township, range, meridian, county and state; by distance and bearings from true north and angles with reference to corner or corners established in the United States Public Land Survey; and by a written metes and bounds legal description of the exterior boundaries of the land as surveyed and divided.

C. Name of the registered surveyor responsible for preparing the final plat and his seal and signature;

D. Scale, date, and north point;

E. The size of any single plat sheet shall be a minimum of eight and one-half inches by fourteen inches and a maximum of thirty inches by thirty-six inches. Other sizes will not be accepted without prior approval of the village engineer;

F. Angular, linear, and curvilinear dimensions for all lines, angles and curvatures, with functions and titles used to describe all boundaries including perimeter survey of tract, streets, alleys, easements, areas to be dedicated for public use and other important features. Error of closure of boundary line surveys shall not exceed one ten thousand (one foot for ten thousand feet of perimeter survey). Angular error shall not exceed plus or minus twenty seconds. Lot lines to show dimensions in feet and hundredths and the bearings of all lot, street, and subdivision perimeter lines shall be shown in degrees, minutes and seconds.

Subdivisions or developments within one mile of two monuments established by the Lake County Remonumentation Program shall be tied to these monuments by survey traverse and the final plat shall show the bearing(s) and distance(s) thereto. Resubdivision of subdivisions that have been previously tied to two positions monumented by the Lake County Remonumentation Program need only show on the final plat the previously plotted distances by the original subdivision plat.

In accordance with the Illinois Revised Statutes, the surveyor shall be required to file with the county recorder of deeds a monument record for each section and/or quarter section corner(s) used as reference corners in the preparation of the plat. The monument record must be filed no later than the recording date of the final plat;

G. An identification system for numbering all lots and blocks using, (1) consecutive lot numbers throughout all units of any one subdivision, or (2) consecutive lot numbers throughout each

identified block;

H. Accurate location of all required monuments and installed or to be installed in such a manner that they may be located by a licensed surveyor;

I. Exact location, width and name of all streets within and adjoining the plan and the exact location and width of all alleys and crosswalks. The length of boundary lines of all streets, blocks, lots, parcels, public grounds, easements, and right-of-way shall be provided or enough information shall be provided so that the length of this can be derived by a simple calculation. Where a boundary line is an arc of a circle, the radius, interior angle and length of the chord shall be shown. The abutting street lines of all adjoining subdivisions shall be shown in their correct locations by broken lines. Right-of-way radii at intersections shall not be less than twenty-five feet (25');

J. Accurate outlines and legal description or lot designation of any areas to be dedicated or reserved for public use, including any area to be reserved by deed covenant for common uses of all property owners. (Ord. 1989-O-30 1.304 (B))

K. Building setback lines with dimensions on all lots and other sites.

L. Statement by owner dedicating streets, rights-of-ways, and any sites for public use.

M. Proposed location of individual sewage disposal (septic) systems. The following statement regarding septic systems: In approving this plat, the village has not undertaken or reviewed any tests or data relative to the suitability of individual lots for septic systems. Prior to the issuance of a building permit, the village shall require approval from the Lake County Health Department that the lots in question permit the use of septic systems.

N. Certificates in conformance with this title and any other such affidavits, endorsements, or dedications as may be required by the village board in the enforcement of these regulations.

O. The location of all lakes, ponds, detention sites, retention sites, and dams.

P. Comply with all requirements of 765 Illinois Compiled Statutes 205, Standards of Practice for Professional Land Surveyors in the State of Illinois.

Q. Letter to the Lake County recorder of deeds from the surveyor who prepared the final plat designating the village clerk or designee as the person authorized to record the plat.

R. Tabulation of data on gross area, street area, other dedicated area, net subdivided area, number of lots, average lot size, typical lot dimensions, and lineal feet of street, as applicable.

S. Where the plat contains utility easements, the plat shall be accompanied by a written statement bearing the signature of an authorized employee of the utility company attesting to the suitability of said easements for the purpose shown. Statements granting easements to the village shall name the village of Beach Park specifically.

T. The applicant shall submit the following information with the plat:

1. Proposed covenants, agreements, bylaws, or provisions which govern the use, maintenance, insurance and continued protection of the proposed development and its common open areas and other facilities.

2. Phase One and Phase Two environmental site assessments when appropriate.

3. Evidence of review and approval of the proposed development by the following agencies shall be submitted as follows:

a. Illinois Department of Natural Resources sign-off regarding endangered species in accordance with State Law.

b. U.S. Army Corps of Engineers and/or Lake County Stormwater Management Commission wetlands report and permit.

c. Lake County Health Department sewage disposal system report and approval.

d. Lake County Stormwater Management Commission approval.

e. Illinois State Historic Preservation Agency sign-off.

- f. Illinois Department of Natural Resources Office of Water Resources sign-off regarding base flood elevations.
- g. Lake County Division of Transportation approval letter.
- h. Illinois Department of Transportation approval letter.
- i. Fire Protection District approval, depending upon location. Note: if a public water supply with hydrants is not required, provisions for dry hydrants to implement any Fire Protection District recommendations may be required.
- k. Illinois Environmental Protection Agency sanitary sewer and water permits.
- l. Illinois Environmental Protection Agency storm water discharge permit.
- m. Natural Resources Conservation Service Natural Resource Information Report.
- n. Approval and permits from other agencies, as appropriate.
- o. Compliance with all other requirements of village ordinances including, but not limited to, the payment of all fees and costs, including recapture fees, as required by this title.

16.16.130 Final plat - Action by president and board.

The village board shall not act upon the final plat until the village engineer and the plan commission have reviewed the engineering drawings and the village board has received a report of compliance or noncompliance with a recommendation for approval or disapproval from the plan commission.

When a person submitting a plat of subdivision, development or resubdivision for final approval has supplied all drawings, maps and other documents required by the village to be furnished in support thereof, and if all such material meets all village requirements, the president and board of trustees shall approve the proposed plat within sixty days from the date of filing the last required document or other paper or within sixty days from the date of filing application for final approval of the plat, whichever date is later. The applicant and president and board of trustees may mutually agree to extend the sixty-day period.

In order to insure construction of all improvements the subdivider and village shall enter into an agreement whereby and wherein a sufficient sum is guaranteed to cover the estimate of the village engineer of expenditures necessary for the construction of all public improvements including but not limited to reasonable inspection fees and costs to be borne by the applicant. (Ord. 1989-O-30 1.304 (C))

16.16.140 Final plat - Signing and recording.

A. Whenever public improvements are required to be constructed, the village president of the village shall not endorse the final plat until after the developer's agreement wherein the cost of the improvements are guaranteed has been approved by the president and board of trustees, all conditions pertaining to the execution of the plat have been satisfied, all fees have been paid, and all required certificates have been signed.

B. Certificates from the following officials and persons shall be required:

- 1. A registered Illinois Land Surveyor;
- 2. The owner, or owners of the property;
- 3. A notary public;
- 4. The county clerk;
- 5. The village treasurer and village engineer;
- 6. The village president and village clerk;
- 7. The chairman and secretary of the plan commission;
- 8. The Illinois Department of Transportation, in the event the subject property lies

adjacent to a highway controlled and maintained by the I.D.O.T.;

9. Lake County Division of Transportation, when an access permit is required. (Ord. 1989-O-30 1.305)

10. The engineer's certificate concerning drainage.

C. Upon approval by the village board, the developer shall collect the other necessary signatures and the village clerk or designee shall record the Plat and any accompanying protective covenants and/or homeowners association agreements with the Lake County Recorder of Deeds at the developer's expense. For the recording of the final plat, the village clerk or designee shall receive from the developer 1 cloth or mylar reproducible print and 3 contact prints of the approved final plat and 3 copies of the approved supporting documents. The developer shall pay the recording fee and the cost of such prints and copies of documents.

D. Distribution of the copies of the recorded final plat:

1. One contact print of the final plat, 1 copy of any accompanying protective covenants and/or homeowners' association agreements, and 1 copy of the supporting documents shall be delivered to the village board.

2. One mylar print and all specifications, drawings, and estimates shall be delivered to the village engineer.

3. The village shall retain one transparency print and 1 contact print and all other supporting documents.

16.16.150 Sectionalizing subdivision plats.

A. Prior to granting final phase approval of a subdivision plat, the plan commission may permit the plat to be divided into two or more sections and may impose such conditions upon the filing of the sections as it may deem necessary to assure the orderly development of the plat, the plan commission may require that the bond be in such amount as is commensurate with the section or sections of the plat to be filed and may defer the remaining required bond principal amount until the remaining sections of the plat are offered for filing. The applicant may also file irrevocable offers to dedicate streets and public improvements in the sections offered to be filed and defer filing offers of dedication for the remaining sections until such sections subject to any conditions imposed by the plan commission, shall be granted concurrently with final approval of the plat.

B. In the event of approval of sectionalizing, the entire approved subdivision plat including all sections shall be filed within ninety days after date of final approval with the village clerk's office and such sections as have been authorized by the plan commission shall be filed with the county recorder of deeds. Such sections must contain at least ten percent of the total number of lots contained in the approved preliminary plat. The preliminary approval of all remaining sections not filed with the county recorder of deeds shall automatically expire unless such sections have been given final approval by the president and board of trustees, all fees paid, all instruments and offers of dedication submitted and performance bonds approved and filed with the recorder of deeds within three years of the date of final subdivision approval of the initial section of the plat. (Ord. 1989-O-30 1.306)

16.16.160 Waiver of procedures.

An applicant for approval of a minor subdivision may waive the right to preliminary approval process and may instead file all of the data required herein above for such approval at the same time as such applicant files engineering plans (per Section 16.16.100) and the final plat (per Sections 16.16.110 through 16.16.130). However, before undertaking the formal procedures outlined in the subdivision and development regulations, an applicant is urged to submit a tentative plat and plan and discuss this possibility with the village president or designee to ascertain the problems and requirements affecting the subdivision or development of the subject property. (Ord. 1989-O-30 1.307)

Chapter 16.18

Minor Subdivisions and Lot Consolidations

Minor subdivisions and lot consolidations may be reviewed and approved in accordance with this section, pursuant to authorization by the Village Board.

For purposes of this section, **minor subdivisions** are those which meet all the following conditions:

- a. Create no more than two (2) lots;
- b. Involve property zoned and used for single-family residential purposes; and
- c. Involve no variations or departures from underlying zoning district standards.

For purposes of this section, **minor lot consolidations** are those which meet all the following conditions:

- a. Create no more than two (2) lots;
- b. Involve property zoned and used for single-family residential purposes; and
- c. Comply with Zoning Ordinance provisions for Contiguous Non-Conforming Lots.

A committee is hereby established by the Village Board to review and approve requests for minor subdivisions and lot consolidations in accordance with the provisions of this section and other applicable provisions of the Zoning Ordinance and the Village Subdivision requirements. Said committee shall consist of three members including: the Village Building and Zoning Administrator; one Trustee of the Village Board having responsibility for building, planning, and zoning functions as determined by the Village Board; and the Chairman or another member of the Plan Commission as determined by the Chairman. The committee shall meet as needed and at the availability of its members to review pending requests. A minimum of two members in attendance is required to conduct committee functions. The Committee may seek additional legal, engineering, planning, and other pertinent information it deems necessary to assist in the performance of its duties.

The applicant may, at the applicant's own risk, apply for preliminary and final plat approval simultaneously. Applicants for minor subdivision or lot consolidation shall provide a plat of survey for review, prepared by a State of Illinois licensed professional land surveyor, that accurately depicts the existing and proposed lot configurations, and the locations of existing structures. Committee approvals shall be provided in written form. Within thirty days of written approval by the Village committee, an approved plat of survey of a minor subdivision or lot consolidation shall be recorded with the Lake County Recorder of Deeds. Two copies of the recorded plat of survey, including thereon the recorder's stamp and document number, must be received by the Village within the same thirty day period to validate the approval.

Applicants may appeal determinations made by the committee through the submittal of an applicable zoning petition in accordance with requirements of the Zoning Ordinance, or through other applicable and available Village administrative procedures.

Chapter 16.19

DESIGN STANDARDS

Sections:

- 16.19.010 General standards.
- 16.19.020 Required improvements.
- 16.19.030 Blocks.
- 16.19.040 Lots.
- 16.19.050 Building setback lines.
- 16.19.060 Easements.
- 16.19.070 Grading and erosion, sedimentation, and dust control.
- 16.19.080 Streets.
- 16.19.090 Parking lots and driveways in non-residential developments and subdivisions.
- 16.19.100 Street lighting.
- 16.19.110 Sanitary sewerage.
- 16.19.120 Water supply, storage, and distribution.
- 16.19.130 Storm water drainage and storage facilities.
- 16.19.140 Preservation and restoration of natural features.
- 16.19.150 Wetlands.
- 16.19.160 Construction and post construction requirements.
- 16.19.170 Pedestrian circulation system.

16.19.010 General standards.

The subdivision or development of land including the arrangement, character, extent, width, grade and location of all streets, alleys, crosswalks, easements, sites for parks, playgrounds, and schools or other land to be dedicated for public use shall conform to the comprehensive plan, Master Utilities Plans and Official Map of the village of Beach Park. Approval of the design of a proposed subdivision or development shall be considered on the basis of its relation to existing and platted streets, reasonable circulation of traffic within the subdivision and adjacent land, topographic conditions, run off of storm water, public convenience and safety, and appropriate relation to the proposed land uses of the areas to be served. Before a subdivision or development shall be approved, the village engineer shall certify that the improvements described in the developer's plan and specifications, together with any other agreements, meet the minimum requirements of all ordinances of the village and that they comply with the regulations and standards as set forth in this Subdivisions and Developments ordinance. No deviation from the approved plans and specifications shall be made without prior approval of the village.

A. Size and shape

1. The size and shape of the land to be subdivided or developed shall be sufficient and proper for land planning purposes and suitable in area and dimensions for the use intended.

2. The plans for the subdivision or development of the property should incorporate into, and be compatible with, the existing and potential uses of property adjacent to the area to be subdivided or developed.

B. The layout of the streets, lots, blocks, buildings, parking lots and public lands shall create a desirable environment for the intended users thereof, without exercising a detrimental influence or effect upon surrounding land uses.

C. The subdivision or development design shall be compatible with natural features as follows:

1. The design of every subdivision or development shall be compatible with the existing topography, drainage patterns, and other natural features on the site.

2. Every subdivision or development shall conserve isolated mature trees, wooded areas, water courses, scenic views, ponds, flood plain areas, historical landmarks, and other features of the property, which, if preserved, would add to the attractiveness and value of the subdivision, neighborhood, or the village as a whole.

3. The design of every subdivision or development shall, wherever possible, create and integrate water features throughout residential land use areas.

4. The design of every subdivision or development shall make adequate provision for the use and maintenance of open space.

5. The design of every subdivision or development shall provide adequate acoustical and visual privacy for incompatible adjacent uses.

D. The proposed name of the subdivision or development shall not duplicate, or too closely approximate phonetically, the name of any other subdivision or development in the village or within its one and one-half (1 1/2) mile planning jurisdiction. The village board shall designate the name of the subdivision or development with the approval of the Preliminary Plat.

16.19.020 Required improvements-- generally.

A. The following improvements shall be provided as part of the development of a proposed subdivision or development.

1. Street pavement structure improvements.
2. Portland cement concrete sidewalks.
3. Street or site lighting.
4. Landscaping and trees.
5. Street signs and pavement markings.
6. Traffic safety installations such as guard railing etc.
7. Public utilities for telephone, electric, cable television, and natural gas.
8. Site and lot grading.
9. Storm water drainage and sump pump drainage systems.
10. Storm water storage and management.
11. Erosion control.
12. Wastewater facilities and sanitary sewers.
13. Water facilities and water mains.
14. Flood protection.

B. All construction of improvements covered by this title and materials used shall be in accordance with appropriate sections of the latest editions of the following ordinances, standards, and publications. In the event of a conflict, the more stringent standards shall apply. Where standards are not specifically set forth, improvements shall comply with standards established by the village board.

1. All applicable village ordinances, standards, and specifications as adopted, including, but not limited to, the following sections of the Beach Park Municipal Code: Title 12 Streets/ Roads; Title 13 Public Services; Title 15 Buildings and Construction.

2. Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation (IDOT).

3. Standard Specifications for Water and Sewer Main Construction in Illinois, Illinois Society of Professional Engineers, et al.

4. Illinois Design Standards for Sewage Works, Illinois Environmental Protection Agency (IEPA), Division of Water Pollution Control.

5. Illinois Design Standards for Slow Rate Land Application of Treated Wastewater, 35 Illinois Administrative Code, Subtitle C, Chapter II, Part 372.

6. Technical Policy Statements, IEPA, Division of Public Water Supply.
7. Recommended Standards for Water Works, Great Lakes Upper Mississippi River Board of State Sanitary Engineers (A10 State Standards).
8. Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois, Urban Committee of the Association of Illinois Soil and Water Conservation Districts.
9. Standard Specifications for Soil Erosion and Sediment Control, IEPA.
10. U.S. Soil Conservation Service Field Engineering Handbook.

16.19.030 Blocks.

- A. The lengths, widths, and shapes of blocks shall be determined with due regard to:
 1. Provision of adequate building sites suitable to the special needs of the type of use contemplated.
 2. Zoning requirements as to lot sizes and dimensions within the corporate limits of the village of Beach Park.
 3. Need for convenient access, circulation, control, and safety of street traffic.
 4. Limitations and opportunities of topography.
- B. Block lengths shall not exceed eighteen hundred feet (1,800') nor be less than six hundred feet (600').
- C. Pedestrian crosswalks not less than ten feet (10') wide shall be required where deemed necessary by the village board to provide for pedestrian circulation or access to schools, playgrounds, shopping centers, transportation, and other community facilities.

16.19.040 Lots.

- A. Conformance with zoning regulations: Lot dimensions and areas shall conform to the requirements of the Beach Park zoning ordinance within the village limits or the comprehensive plan as to unincorporated territory. However:
 1. Where unusual soil conditions or other physical factors exist which may impair the health and safety of the residents of the neighborhood in which a subdivision may be located, the village board may increase lot area requirements upon recommendation of the Lake County Health Department.
 2. Lots abutting a water course, drainage way, channel, or stream shall have a minimum width or depth as required to provide an adequate building site and to afford the minimum usable area required in this ordinance or the Beach Park zoning ordinance for front, rear, and side yards.
- B. Corner Lots: Corner lots for residential use shall have extra width to permit appropriate building setback from and orientation to both streets on which they abut.
- C. Frontage:
 1. All lots shall abut on a publicly dedicated street unless otherwise approved by the village board.
 2. Double frontage and reverse frontage lots should be avoided except where essential to provide separation of residential development from highways or primary thoroughfares or to overcome specific disadvantages of topography and orientation. A planting screen easement of at least ten feet (10'), and across which there shall be no right of access, shall be provided along the lines of lots abutting such highways and primary thoroughfares or other disadvantageous use. Lots abutting such highways, primary thoroughfares or other disadvantageous use shall have a width or depth ten feet (10') in excess of the typical interior lot in the same subdivision.
- D. Lot Lines: Side lot lines shall be substantially at right angles or radial to street lines.

E. Driveway Location: Lots shall be arranged to provide for a minimum of driveway openings on collector streets. Driveway locations on corner lots shall be indicated on the final plat and the location shown shall appear as a covenant running with that lot.

F. Non-Residential Lots: Width, area, and depth of lots in a commercial or industrial subdivision shall be as recommended and approved by the village board.

16.19.050 Building setback lines.

Building setback lines of new subdivisions shall conform to the provisions of the Beach Park zoning ordinance.

16.19.060 Easements

A. Location and Width: Easements across lots or centered on rear or side lot lines shall be provided for utilities where necessary and shall be at least fifteen (15') wide for water or storm sewer, twenty feet (20') wide for sanitary sewer. The village engineer may require additional easement width to accommodate deeper utilities. Easement widths for more than one utility shall be as established by the village engineer.

B. Continuity: Easements shall be designed to provide continuity from block to block.

C. Telephone and Electrical Service: All utility distribution lines for telephone and electric service shall be installed underground within easements and dedicated public ways. All transformer boxes shall be located so as not to be unsightly or hazardous to the public.

D. Approval: All utility easements shall be approved by the public utility companies, cable television franchises, and village and shall be so indicated on the Final plat.

E. Drainage Easements: Where a subdivision is traversed by an existing or proposed water course, drainage way, overland flow route, channel or stream, or other stormwater management feature, there shall be provided a drainage easement conforming substantially with the line of such water course and shall include such further width or construction, or both, as will be adequate for the purpose and as determined by the village board. Parallel streets or parkways may be required in connection therewith. Drainage easements shall also be provided along all side and rear lot lines. The village engineer shall establish the required minimum drainage easement widths.

16.19.070 Grading and erosion, sedimentation and dust control.

A. Lot Grading:

1. All developments shall provide lot grading in conformance with the village Building Code and this Subdivisions and Developments title.

2. Grading of all lots within the village shall be accomplished in such a manner as to prevent ponding in excess of eighteen inches (18") in the event of a complete failure of the storm sewer system. Parking lots shall be graded such that no ponding in excess of eight inches (8") occurs in the event of a complete failure of the storm sewer.

3. Grading shall be completed on each lot such that overland water flow is directed away from all sides of the foundation. Unless otherwise approved by the village engineer, all grades on a lot shall be a minimum of two percent (2%) and a maximum of ten percent (10%). If steeper slopes are approved, sodding, retaining walls or other special treatments may be required to protect the slopes.

4. No grading shall be allowed within 10-ft of the exterior existing property line. Maximum berm or embankment slope shall be 4 horizontal to 1 vertical (unless approved by the Village Engineer with appropriate stabilization measures), and shall not exceed a maximum height of 6-ft. Maximum height restrictions also apply to total retaining wall height, and cumulative embankment, berm and retaining wall height. If retaining walls are to be utilized, the maximum height of each retaining wall shall be three (3) feet. If retaining walls are to be utilized

in series, retaining walls shall be separated by a minimum eight (8) feet wide safety shelf. Berm and embankment heights over 6-ft shall require the submission of cross-sections drawn to scale indicating line of sight from adjoining properties, proposed structures in the vicinity of the embankment and proposed mitigating landscape features for village board approval.

5. Grading plans shall be submitted for all developments, except that a single family residence which results in a hydrologic disturbance of less than 500 square feet AND which is deemed by the village to provide no impact to overland stormwater flows, depressional storage, defined or potential wetlands or floodplains does not have to provide a grading plan. The grading plan shall indicate existing grades within a minimum of one hundred feet (100') of the development. Prior to final approval and acceptance of public improvements, an as-built grading plan shall be submitted. In cases where individual lot grading is not completed at the time of final acceptance or where public improvements are not required, grading plans for the lots shall be submitted and approved prior to building permits being issued and the as-built grading plans shall be submitted prior to occupancy permits being issued.

B. Erosion and Sedimentation Control:

1. All developments shall include a plan for soil erosion and sedimentation control. Soil erosion and sedimentation control shall be in conformance with this title, the Beach Park Watershed Development Ordinance, and the NPDES Stormwater Discharge Permit.

2. Except as provided herein, no plat of subdivision or development plan shall be approved unless the plat or plan and accompanying materials indicate measures to be taken to control erosion and sedimentation will be adequate to assure that sediment is not transported from the site by a storm event of a ten (10) year frequency or less, and that the following principles shall be applicable to all development activities in the area to be subdivided:

a. Development plans shall consider the topography and soil of the site so as to create the least potential for erosion. Areas of steep slopes where high cuts and fills may be required shall be avoided wherever possible and natural contours shall be followed as closely as possible.

b. Natural vegetation shall be retained and protected wherever possible. Areas immediately adjacent to natural watercourses shall be left undisturbed wherever possible.

c. The smallest practical area of land shall be exposed for the shortest practical time during development.

d. Erosion control and sedimentation control measures shall be installed and maintained for any land undergoing development in accordance with the Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois.

e. Provisions shall be made to accommodate the increased run off caused by changed soil and surface conditions during and after development. Drainage ways shall be designed so that their final gradients and the resultant velocities of discharges will not create additional erosion, and shall be protected against erosion and sedimentation during development.

f. Permanent vegetation and structures shall be installed as soon as practical during development.

3. The erosion and sedimentation control plan shall include the following information:

a. A vicinity map, in sufficient detail to enable easy location in the field of the site for which plat approval is sought. The vicinity map shall include the site boundary lines, site acreage, legend, and scale.

b. A plan of the site showing:

1. The existing topography of the site and adjacent land within approximately one hundred feet (100') of the boundaries, drawn at no greater than two foot (2') contour intervals and clearly portraying the conformation and drainage pattern of the area.

2. The location of existing buildings, structures, utilities, water bodies, floodplains, drainage facilities, vegetative cover, paved areas and other significant natural or manmade features on the site and adjacent land within approximately one hundred feet (100') of the boundary.

3. A general description of the predominant soil types on the site, their location, and their limitations for the proposed use.

4. The proposed use of the site, including present development and planned utilization; areas of excavation, grading and filling; proposed contours; finished grades and street profiles; provisions for storm drainage with a drainage area map and computations; and areas and acreages proposed to be paved, covered, sodded or seeded, stabilized with vegetation or left undisturbed.

c. An erosion and sedimentation control plan showing:

1. All erosion and sedimentation control measures necessary to meet the objectives of this title throughout all phases of construction and to permanently provide for erosion and sedimentation control after completion of development of the site.

2. Seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, and kind and quality of mulching for both temporary and permanent vegetative control measures.

3. Provisions for maintenance of control facilities, including easements.

4. Identification of the person or entity that will have legal responsibility for maintenance of erosion control structures and measures after development is completed.

d. The proposed schedule for development of the site, including stripping and clearing, temporary and permanent sediment and erosion control measures, rough grading and construction, installation of storm drainage, paving streets and parking areas, and establishment of permanent vegetative cover.

e. These submissions shall be prepared in accordance with the standards and requirements contained in Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois.

f. The village may waive specific requirements for the content of submissions upon finding that the information submitted is sufficient to show that the work will comply with the objectives and principles of this title.

C. Dust Control: The developer and its contractors shall use a water wagon or other acceptable means on the project site to control dust. All streets used by the developer and its contractors in or adjacent to the development shall be kept free of debris, dirt, dust and mud. Streets shall be left in a clean condition at the end of each day's work. If the village engineer determines that dust control measures are inadequate or that dust removal procedures are not maintaining the streets free of dust, the village engineer may issue a stop work order.

16.19.080 Streets.

A. General:

1. **Layout:** The layout of streets shall conform to existing regulations and policies and shall be based on thorough consideration of: topography and drainage; public convenience and safety; existing street pattern; future circulation needs of nearby lands; and proposed uses of land being subdivided. Streets extended to serve the proposed development or subdivision shall be extended to the far property lines of the property to allow for future expansion of the roadway network. In lieu of constructing the street improvements, an applicant for a single residence may, with the approval of the village, provide an escrow fund as described in Chapter 16.24 Assurances.

2. **Continuation to Surrounding Areas:** Where such is not shown in the maps that are a part of the Official comprehensive plan, the arrangement of streets in a subdivision shall either:

a. Provide for the continuation or appropriate projection of existing principal streets in surrounding areas; or

b. Conform to a plan for the area or neighborhood approved or adopted by the village board to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impracticable.

3. **Local Streets:** Local streets shall be laid out as to discourage high speed or through traffic.

4. **Cul-de-sacs:** Cul-de-sacs shall not be more than twelve hundred feet (1200') in length measured along the center line from the intersection of the street of origin to the center of the turnaround. For developments with lots under 40,000 square feet, maximum length shall be five hundred feet (500').

5. **Reserve Strips:** Reserve strips controlling access to streets shall be prohibited. Streets paralleling the subdivision boundary shall be located not less than one (1) lot depth from said boundary. All streets shall be extended to the subdivision boundary.

6. **Intersections:** All street intersections and junctions shall be laid out to encourage safe traffic flow. Street intersections shall be at right angles. Where unusual conditions exist, the village engineer may recommend intersections of less than ninety (90) degrees but not less than sixty (60) degrees. In no case shall two (2) intersections be offset less than one hundred and fifty feet (150') for local roads, and four hundred feet (400') for all other roads, measured centerline to centerline of each road.

7. **Half Streets:** Half streets shall not be permitted except by variance under special circumstances. Under no circumstances shall total pavement width be less than eighteen feet (18').

8. **Marginal Access Street:** Wherever a subdivision borders on or contains the right-of-way of a limited access highway, a railroad or a utility right-of-way, a street may be required approximately parallel to, and on either side of, such right-of-way for a distance suitable to service such properties or uses which front thereon.

9. **Boundary Streets:** Streets shall not be laid out on the boundary of a subdivision. Exceptions to this may be permitted when the village board finds that such streets are desirable for further expansion or where such streets will conform to the existing street system.

10. **Alleys:** Alleys in residential areas shall not be permitted.

11. **Culverts and Bridges:** Adequate drainage structures shall be provided.

12. **Curbs and Gutters:**

a. In all developments or subdivisions where underground storm drainage systems are required or proposed, curbs and gutters shall be provided.

b. In all subdivisions of lots less than forty thousand (40,000) square feet, concrete curbs and gutters shall be provided.

13. Sidewalks: In all subdivisions where lots are less than forty thousand (40,000) square feet, sidewalks shall be provided along both sides of all streets and cul-de-sacs. The village board may also require that sidewalks be provided elsewhere, where considered necessary for public safety.

14. Street Names: No street names shall be used which will duplicate or be confused with the names of existing streets. Street names shall be submitted by the developer in advance to the appropriate local U.S. Postal Service office and appropriate emergency services office for review and comment and shall be subject to the approval of the village board.

15. Street Signs and Pavement Markings: Signs giving names of streets shall be erected at all street intersections. Pavement markings shall be installed at locations designated by the village engineer.

16. Street Lights: Street lights shall be provided conforming to the requirements of this title.

B. Roadway Design Standards:

1 Specifications: Unless otherwise specified, all construction shall conform to the provisions of the latest edition of the Standard Specifications for Road and Bridge Construction by the Illinois Department Transportation (IDOT).

2. Roadway Grades: Roadway grades shall provide proper relation between the roadway and the first floor elevation of the houses or buildings which abut it and shall permit convenient and economical access to, and drainage of, the lots.

3. Stopping Sight Distance: Stopping sight distance shall be based on a line of sight, one end of which is three feet nine inches (3'-9") above the pavement and the other end six inches (6") above the pavement. Minimum stopping sight distance on collector streets shall be three hundred feet (300'). Local streets shall have stopping sight distance of not less than two hundred feet (200').

4. Intersection Sight Distance: The minimum intersection sight distance is 410 feet for a posted speed limit of 30 miles per hour. AASHTO's Policy of Geometric Design of Highways and Streets should be consulted for other posted speed limits. Minimum right-of-way and pavement radii shall be twenty-five feet (25').

5. Table of Minimum Standards for village Street and Roadway Design: Unless otherwise indicated on the official plan of Beach Park or required by other agencies, the table presented as Appendix B shall apply to streets and roadways.

6. The minimum thickness of allowable materials by street classification for village streets is as follows:

Street	Aggregate Base	Bituminous Base	Bituminous Binder	Bituminous Surface
Collector	8"	5"	2.5"	1.5"
Local	12"		2.5"	1.5"
Commercial/ Industrial	10"	5"	3"	2.5"

Shoulders: Where curb and gutter is not required, shoulders shall not be less than four feet (4') in width and shall consist of not less than two feet (2') of Aggregate Shoulders,

Type B, adjacent to the surface course, and not less than two feet of earth shoulder adjacent to the aggregate shoulder material.

Alternative sections with equivalent structural characteristics may be allowed with specific approval by the village engineer.

7. Roadway Construction Specifications.

a. Roadway pavements shall be designed in accordance with structural design methods described in the IDOT Design Manual. All materials shall be sampled and tested by a qualified third party testing facility to ensure conformance with quality requirements of this title. All public roadways shall be constructed using materials and construction practices in accordance with the IDOT Standard Specifications (as defined elsewhere). Bituminous mixes shall conform to specifications set forth by IDOT Bureau of Local Roads.

b. Aggregate Base Course:

1. Width: The base course shall extend a minimum of one foot (1') outside of the surface width on both sides of the road or one foot (1') beyond the back of curb.

2. Materials: Allowable base course materials shall include Aggregate Base Course, CA-6, Grade 8 or 9 (100% crushed stone), or bituminous concrete binder course min. MS. -1700 all as specified in the IDOT Standard Specifications for Road and Bridge Construction.

c. Binder Course:

1. Materials: Bituminous concrete binder course, Class I, Type 2, Mixture D, compacted to 93% modified proctor, or Superpave IL-19.0L (low ESAL).

d. Surface Course:

1. Materials: Bituminous concrete surface course, Class I, Type 2, compacted to 93% modified proctor, or Superpave IL-9.5L (low ESAL). No recycled bituminous material will be permitted in the final bituminous surface course mixture unless approved by the village engineer.

e. Prime Coat:

1. Materials: Prior to construction of the binder course, the complete aggregate base course shall be primed with a bituminous material, MC-30 or an approved equal, at a minimum application rate of 0.30 gallons per square yard.

f. Tack Coat:

1. Materials: Prior to construction of the final surface course on previously constructed binder course subjected to extended traffic use, a bituminous tack coat shall be applied to the surface of said binder course.

g. Surface Crown: The surface of all roadways shall have a uniform slope from the centerline to the edge of 0.02 feet per foot. Private streets in nonresidential developments and subdivisions without a crown shall have a cross pavement slope from side to side of 0.02 feet per foot.

h. Ditches:

1. Where curb and gutter is not required, ditches shall be constructed on both sides of the roadway outside of the shoulder line. Ditches shall be sized to convey the 100-year return frequency design storm but in no case shall have a depth of less than two feet (2') below the edge of the roadway

surface and a one-foot (1') bottom. Maximum backslopes of ditches shall be four to one (4:1) on the roadway side and three to one (3:1) on the property side.

2. Maximum ditch gradient without erosion protection shall be two percent (2%). The ditch shall be protected from erosion by means of sodding, ditch paving, ditch checks, storm sewers, or combinations thereof as deemed necessary.

3. Minimum ditch gradient shall be one percent (1.0%). If this gradient cannot be maintained, storm sewers or underdrains shall be installed.

4. Rigid perforated piping in a washed stone envelope and filter fabric shall be placed at the edge of the aggregate base course area at the side of the road at all low points and connected to an inlet, culvert, or ditch.

8. Curb and Gutter:

a. Curb and gutter shall be Type B6.12 for all streets in all non-residential developments and subdivisions. Curbs in residential subdivisions shall be Type M-3.12. A drain system shall be installed continuous with the curb with discharge to storm sewer manholes. The drain system shall consist of pipe, washed stone and filter fabric.

b. All curb and gutter shall be reinforced with two No. 4 reinforcing bars run continuously through its length, except at expansion joints.

c. The outside edge of curbs and gutters in streets shall be parallel to street lines. Radii at intersections shall not be less than twenty-five feet (25').

d. Curbs and gutters are required in all subdivisions containing lots having an area of forty thousand (40,000) square feet or less.

e. Subdivisions containing lots having an area greater than forty thousand (40,000) square feet may be required to install curb and gutter as directed by the village.

9. Storm Sewers: Whenever curbs and gutters are required, underground storm sewers shall be installed conforming to the IDOT Standard Specifications for Road and Bridge Construction and as set forth in the manual of IDOT Highway Standards.

10. Sidewalks: sidewalks shall be located one foot (1') inside the right-of-way line, not more than twelve inches (12") nor less than three inches (3") above the centerline of the street, and shall be not less than four feet (4') in width and four inches (4") in thickness. Construction shall be in accordance of the IDOT Standard Specifications for Road and Bridge Construction. Sidewalks shall be provided along all commercial developments and shall have a minimum width of five feet (5'). All sidewalks shall be provided with concrete disability ramps at all intersections and at pedestrian ways in accordance with minimum Federal guidelines and requirements for accessible design.

11. Signs and Pavement markings: Signs, sign posts, and pavement markings as required, shall meet the minimum requirements for similar signs and posts as shown and set forth in the IDOT Manual for Uniform Traffic Control Devices for Streets and Highways.

12. Minimum Standards: The specifications contained herein shall not prevent the developer from constructing a wider or better quality improvement.

C. Construction Standards:

1. The developer shall employ a licensed professional surveyor or engineer who shall be responsible for establishing proper lines and grades for construction of all required improvements.

2. Prior to the start of roadway construction, the developer shall consult with the village engineer for the purpose of inspecting drainage facilities, subgrade, base course, and such other plans involving road construction. No less than forty-eight (48) hours proper notice of such consultation shall be given by the developer to the village engineer.

3. Where the village engineer finds that unsuitable subgrade material is present, that material shall be removed and replaced with granular material deemed acceptable by the village engineer.
4. Placement of the bituminous surface course shall be done only when the following criteria are satisfied:
 - a. The base and binder course installation has been approved and has been in place over at least one winter season.
5. Subgrade Preparation:
 - a. Subgrade material shall have a minimum Illinois Bearing Ratio (IBR) of 3.0 in all areas to be paved.
 - i. The IBR of the subgrade shall be shown in the plans. If the subgrade is undercut and replaced with angular stone three inches (3") in diameter or larger, the depth of undercut shall be at least twelve inches (12"). In addition, a well-graded aggregate shall be included with the larger aggregate to fill the voids.
 - ii. Undercutting shall be done carefully to avoid damage to shallow improvements. The village engineer shall carefully inspect shallow improvements for damage. The developer is responsible for any damage and shall affect the proper and timely repair of damaged improvements. The bond, letter of credit or cash may be drawn upon as provided in this title.
 - b. During preparation of the subgrade, moisture and density tests shall be performed by an independent soil testing service at maximum two hundred-foot (200') intervals to confirm proper compaction. The density tests must be submitted for review, and a report of acceptable subgrade preparation must be submitted to the village engineer before proof rolling of the subgrade may take place.
 - c. Compacted subgrade (roadway and curb). Compact materials to achieve not less than 95% standard laboratory density. Proof rolled using loaded (45,000 pounds) "six wheel" rubber tire vehicle supplied by developer. The tires shall be designed for highway use and shall be properly inflated. The load shall be uniformly placed in the dump body. Deflections of more than one-half inch (2") will be considered unsatisfactory. The developer shall rework the clay material in these areas, or replace it with a 3-inch diameter crushed rock to a depth to be determined at the time of construction (at his option). Proof rolling tests shall be conducted in the presence of the village engineer. Any areas, which in the opinion of the village engineer show a failure to subgrade, shall be removed, replaced, and retested (proof roll test) until approved by the village engineer.
 - d. For compacted aggregate base course. The granular material shall be compacted to not less than 95% of the standard laboratory density. Proof rolling tests shall be conducted in the presence of the village engineer after the aggregate base course has been prepared. Any areas, which in the opinion of the village engineer show a failure to subgrade, shall be removed, replaced, and retested (proof roll test) until approved by the village engineer.
 - e. If in the opinion of the village engineer, paved areas are observed which pose a significant threat of premature failure, extraction tests, as specified by the Illinois Department of Transportation, may be required.
 - f. At the direction of the village engineer, coring of selected areas may be required to confirm the specified thickness of the aggregate base, binder, and surface course. This coring shall be done in the presence of the village engineer.
 - g. Concrete Curb and Gutter:

- i. Concrete Test Cylinders - One set of three cylinders every 50 cubic yards.
- ii. Slump Test 1-inch to 3-inch.
- iii. Air Entrainment 5% to 8%.
- iv. Concrete temperature 60 deg-75 deg F.
- v. Air temperature greater than 32 deg.
- vi. Ready-mix concrete will only be accepted for use up to one hour after recorded dispatch time.
- h. String line aggregate base course and binder course between curbs in the presence of the village engineer to verify proper centerline elevations.
 - i. For Binder Course and Surface Course, Nuclear Density Testing (93% modified proctor) shall be performed to establish rolling pattern.
 - j. There shall be a winter stabilization period for bituminous binder course. The binder course shall be subject to one winter period of traffic after placement before the construction of the final surface course. Prior to November, bituminous ramps shall be installed at raised manholes, vaults, and inlet casting to facilitate snow removal from the streets. Ramps shall be removed prior to construction of the surface course.

16.19.090 Parking lots and driveways.

A. General: The improvements required by this Section shall be constructed in accordance with the provisions of the IDOT Standard Specifications for Road and Bridge Construction, unless otherwise modified in this Section. The standards set forth herein are the minimum acceptable standards and are not intended to prevent the developer from constructing a higher type street structure.

1. All access drives and driveways connected to village streets must be paved with bituminous concrete, Portland cement or paver bricks prior to issuance of final occupancy permit.

B. Parking lot and driveway grades:

1. The maximum pavement slope shall not exceed eight percent (8%) for residential applications and five percent (5%) for non-residential applications.

2. The minimum pavement slope shall be two percent (2%), except where the pavement is adjacent to and sloping toward a curb.

3. The minimum curb slope shall be five tenths of one percent (0.5%) when used to provide drainage.

C. Base course material:

1. Parking lots shall have a base course material conforming to gradation CA-6, Grade 8 or 9 (100% crushed stone) which shall be placed with a minimum compacted thickness of ten inches (10") between curb faces.

2. Driveways shall have a base course material conforming to gradation CA-6, Grade 9 (100% crushed stone or crushed gravel), which shall be placed with a minimum compacted thickness of ten inches (10") between curb faces.

3. In no instance shall sub-base course material be placed on a soft sub-grade. If a soft sub-grade is encountered, it shall be removed to stable material. Backfill material shall consist of earthen material with an adequate supporting value or of granular material acceptable to the village engineer.

D. Surface material:

1. Parking lots shall be improved with a minimum one and one half inch (1.5") thick bituminous binder course (Class I), followed at a later date with one and one-half inch (1.5") thick bituminous concrete surface course (Class I, Type 2, Mixture D).

2. Driveways shall be improved with a minimum five inch (5") thick bituminous concrete binder course (Class I), followed at a later date with one and one-half inch (1.5") thick bituminous concrete surface course (Class I, Type 2, Mixture D).

E. Curbs:

1. All parking lots and driveways shall have curbs.

2. All curbs shall be Type B-6.12.

F. Parking stall dimensions:

1. All parking stalls shall be in accordance with the zoning ordinance.

2. Disabled parking shall be provided as required by State and Federal laws and regulations.

G. Parking lot aisle dimensions:

1. All parking lot aisles shall be in conformance with the zoning ordinance.

H. Driveway widths:

1. Residential driveway widths shall not exceed sixteen feet (20') with flares and non-residential driveway widths shall not exceed twenty-four feet (24') with flares unless otherwise approved by the village engineer.

I. For parking lots with anticipated heavy through traffic or truck traffic, the village may require a more substantial pavement cross section than that indicated.

16.19.100 Street lighting.

A. It is the intent of this section to provide for the installation of an efficient, uniform street lighting system creating an increase in safety margins for both vehicular and pedestrian traffic.

B. Street lights are required in all developments in which new roads are to be constructed, existing roads are to be improved, or in other locations as determined by the village. The developer is responsible for all costs associated with construction of the street lighting system. Street lighting systems in the village shall be as follows:

1. General street lighting, i.e. street lighting along existing platted street rights-of-way and in other locations as determined by the village, shall consist of light luminaires attached to truss arms mounted on existing or new wood electrical utility poles.

a. General street lighting system and components shall be installed, owned, operated and maintained by the Commonwealth Edison Electric Company, for which the village of Beach Park shall pay a monthly charge as defined by a contractual agreement between the village and the Commonwealth Edison Electric Company (ComEd).

2. Special street lighting, i.e., street lighting in planned unit developments, subdivisions or other locations as determined by the village, shall consist of decorative luminaires attached to the top of decorative poles mounted on cast-in-place concrete foundations.

a. Special street lighting system and components shall be installed, owned, operated and maintained by the village with funding via a special service area, by a subdivision homeowners association, or by an equivalent organization. This association shall be responsible for the arrangement for the provision of electrical power to the lighting system controls, and for the payment of metered monthly energy charges levied by the Commonwealth Edison Electric Company, and for maintenance of the lighting system components.

C. All street lighting system design shall conform to the following:

1. Illumination levels shall be in accordance with the average maintained horizontal illumination and uniformity values presented in Table 3 of the AASHTO "Informational Guide

for Roadway Lighting".

2. Illumination calculations, the termination of pole locations, spacing and setback, and luminaire mounting height shall be performed in accordance with the USDOT/FHWA "Roadway Lighting Handbook" and ANSI/IESNA RP-8 "Recommended Practice for Roadway Lighting".

3. Each combination of luminaire, pole foundations shall be designed in accordance with the AASHTO "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals".

4. All street lighting systems shall conform to the following specific design requirements;

a. Luminaires

1) General lighting system luminaires shall be General Electric cobra head style roadway luminaires complete with integral photocell, or approved equal.

2) Special lighting system luminaires shall be pole top mounted general electric "Town and Country" decorative luminaire, or approved equal.

b. Lamps

1) Lamps for all lighting systems shall be high intensity discharge high pressure sodium lamps.

2) Special applications requiring a high degree of color rendition shall allow for the use of metal halide or super metal halide lamps.

c. Ballasts

1) Ballasts for all lighting systems shall be high power factor type, CBM certified ballasts, rated for the lighting system operating voltage.

d. Poles

1) All lighting system poles shall be equipped with 120 VAC, 15 amp, GFI, weatherproof duplex receptacle located at the top of the pole, adjacent to the luminaire, for decorative lighting use.

2) Special lighting systems poles shall be alloy 6063 -T6 aluminum poles by General Electric, Hapco or approved equal with finish to match luminaire, flange base, handhole with cover, ground lug, stainless steel anchor bolts with covers, and internal vibration dampeners attuned to the natural frequency of the pole. Breakaway bases shall be provided where required and in areas of speed limits in excess of 30 mph. Poles shall be setback a minimum of 24-inches from the back of curb or as directed by the village engineer.

3) Poles shall be set and adjusted to within 1 degree of vertical.

e. Conductors

1) Minimum lighting circuit conductor size shall be No. 6 AWG.

2) Minimum lighting circuit conductor size in light pole shall be No. 10 AWG.

3) Conductor insulation shall be type XHHW rated 600 VAC.

f. Conduit

1) Conduit in lighting circuit runs and pole foundations shall be galvanized rigid steel.

2) Conduits shall be sized for the circuit conductors, or shall be a minimum of 2-inches in diameter.

3) Conduits shall be buried a minimum of 27-inches below finished grade, and be located a minimum of 24-inches from the back of curb.

- g. Cable Duct
 - 1) When cable duct is used in lighting circuit runs, the conduit in the pole foundations may be PVC conduit, sized to allow the ready passage of the cable duct into the pole base.
 - 2) Cable duct beneath driveways and roadways shall be installed in steel pipe sleeves spanning the traveled way and exceeding the width of the traveled way by a minimum of 12-inches on each side.
 - 3) Conductors in cable duct shall be type XHHW rated for 600 VAC, and a minimum size of No. 6 AWG.
 - 4) Cable duct shall be buried a minimum of 27-inches below finished grade and be located a minimum of 24-inches from the back of curb.
- h. Ground Rod
 - 1) Ground rods shall be copper plated steel and shall be a minimum of 3/4-inches in diameter by 10 feet in length
 - 2) Ground rods shall be installed at each electric service/lighting system controller location, and at each light pole location.
 - 3) Resistance to ground at any point in the system shall not exceed 5 OHMS.
 - 4) Ground conductor to ground rod connection shall be made by exothermic weld.
- i. Voltage drop in any lighting circuit run shall not exceed 6 percent at the most distant fixture in the run.
- j. Operating Voltage
 - 1) Typical lighting circuit operating voltage shall be 240 VAC, single phase.
 - 2) Individual lighting circuit conductors shall not exceed 150 VAC to ground
- k. Pull boxes shall be located at points where conduit runs change directions and nominally 150 feet apart in straight continuous conduit runs.
- l. Fused wire connectors or in-line fuse holder shall be installed in each lighting circuit power conductor in each pole base, accessible through the pole handhole.
- m. Splices
 - 1) Conductor splices between pull boxes and between pole handholes not allowed.
 - 2) Splices to be waterproof and made only in pull boxes and in pole handholes.
- n. Lighting System Controller
 - 1) The lighting system controller shall be a photocell operated controller housed in an aluminum NEMA 3R ventilated, deadfront enclosure, pad or pedestal mounted as required.
 - 2) The lighting controller enclosure shall be equipped with a minimum compliment of devices as follows: electric service meter, main fused disconnect or circuit breaker, neutral bus and ground bus, surge suppressor rated at 80 kA minimum, photocell, hand-off-auto selector switch for manual or automatic operation, circuit breaker overcurrent protection for each lighting circuit, multi-pole lighting contractor, thermostatically controlled strip heaters for moisture and freeze protection, interior weatherproof incandescent service light, 120 VAC, 15 amp, GFI, duplex, weatherproof convenience receptacle, door lock with 4 keys, keyed to village master key if applicable.

D. The developer shall submit the following to the village engineer for review and approval prior to final engineering plan approval:

1. For all street lighting systems, detailed lighting calculations, manually or computer generated.
2. For special street lighting systems, detailed voltage drop calculations for each lighting circuit, manually or computer generated.
3. For special street lighting systems, electrical distribution and lighting controller design prepared in accordance with the USDOT/FHWA "Roadway Lighting Handbook", and the latest edition of the National Electrical Code.
4. For special street lighting systems, lighting plans to include the following:
 - a. Equipment specifications for the following: luminaire, luminaire support arm, pole with base, breakaway base when required, cast-in-place concrete pole foundation, pad or pedestal mounted lighting controller, conduit, wire, cable duct with insulated conductors, ground rods, ground mounted polymer concrete pull boxes, street mounted pull boxes, AASHTO H-20 rated.
 - b. Lighting plan showing location of all lighting system components as follows: electric service meter, lighting controller, luminaire pole/foundation, conduit runs, pull boxes.
 - c. Details of lighting system components as follows: luminaire/support arm/pole elevation, cast-in-Place concrete pole foundation plan and elevation in accordance with the standard details, lighting controller with pedestal or pad plan and elevation with conduits, trench and backfill detail.
 - d. Electrical one-line and control diagram to include electrical service metering and all lighting controller components.
 - e. Schedules to identify the following: lighting controllers, luminaires/poles, conduit runs with conductors, pull boxes.

E. The developer shall submit a minimum of six copies of shop drawings pertaining to all lighting system equipment to the village engineer for approval prior to construction of all lighting systems.

F. The developer shall submit a minimum of three copies of record, as-built drawings to the village engineer for approval prior to acceptance or approval of the street lighting system by the village. Record drawings shall include, as a minimum, locations of the following: poles, pull boxes, conduit/wire, controllers, service meters. Locations shall be indicated by a minimum of two physical ties to existing permanent improvements.

G. After the installation is complete and at a time convenient to the village, the developer shall demonstrate that all equipment operates in accordance with the drawings and specifications. The developer shall notify the village engineer at least 48 hours prior to testing, and all testing shall be done in the presence of the village engineer.

1. All circuits shall pass a first time 5 MEBOHM insulation resistance test.
2. All defective components or materials shall be replaced.

16.19.110 Sanitary sewerage.

- A. General:
1. All subdivisions containing lots of less than forty thousand (40,000) square feet in area shall have a system of sanitary sewers serving each lot, connecting to an approved wastewater treatment system. In addition, any building located within the village, the property line of which is located within two hundred feet (200') of a sanitary sewer, shall be connected to the sanitary sewer. For all other lots, the village may permit individual sewage disposal facilities, provided that in the opinion of the village and the Lake County Health Department,

standard seepage tests or other investigations indicate that the ground is suitable for individual sewage disposal facilities.

2. Unless otherwise approved by the village, any parcel and/or building located outside the village shall be required to annex into the village prior to connecting the village's sewer system, and any and all expenses to extend said sewer system are totally the developer's expense.

3. Unless otherwise modified in this Chapter, sewer systems and sewage treatment facilities shall meet the requirements set forth by the Illinois Environmental Protection Agency, the village, and the appropriate Sanitary District (where applicable). Sanitary and storm sewer systems shall not be combined.

4. Sump pump connections to the sanitary sewer system are prohibited.

B. Individual Sewage Disposal Facilities:

1. Individual sewage disposal facilities shall be designed and constructed in accordance with the minimum standards specified in the Rules and Regulations of the Lake County Health Department.

2. Individual sewage disposal facilities shall be disapproved whenever the village or the Lake County Health Department finds that the drainage, soil conditions, or other conditions are unsuitable for such facilities or when public health and safety or the environment may be impaired.

C. Sanitary Sewer Systems:

1. Unless otherwise modified in this Section, sanitary sewer systems shall be designed in accordance with the Illinois Recommended Standards for Sewage Works, the Standard Specifications for Watermain and Sewer Main Construction in Illinois.

2. Sanitary sewer system designs (including gravity sewers, lift stations, forcemains and appurtenances) shall be submitted for review and approval to the village engineer, Lake County Public Works Department, other local agencies or municipalities responsible for transporting or treating sewage from the proposed development, and the Illinois Environmental Protection Agency.

3. Sanitary sewers extended to serve the proposed development or subdivision shall be extended to the far property lines of the development or subdivision as determined by the village engineer to allow for future expansion of the system. In addition, sanitary sewer service stubs shall be provided to the property line for existing, proposed and future sanitary sewer service connections.

4. Sewer connections shall only be allowed if it can be demonstrated that the downstream sewerage facilities have sufficient reserve capacity to adequately and efficiently handle the additional anticipated waste load.

5. All sanitary sewers shall be designed to accommodate an ultimate service area as identified by the village. If extensions of sewers beyond the limits of the proposed development result in additional construction costs, the village may provide an agreement for the recapture by the developer of the additional costs when future system extensions are made. Recapture payments will be made to the developer only after those benefiting from the extended service area have made payment to the village.

6. The village engineer shall approve the location of proposed sanitary sewers. All sanitary sewers shall be constructed within public rights-of-way or within easements dedicated for public utilities.

7. Design Flows:

a. Residential Developments:

i. Design flows for residential developments shall be based upon full development of the service area. Design flow assumptions shall be subject

to the approval of the Illinois Environmental Protection Agency, the village engineer, and the North Shore Sanitary District (if applicable).

ii. Average daily design flows for residential developments shall be a minimum of 100 gallons per capita per day.

iii. The peak design flow shall be calculated using the Illinois Recommended Standards for Sewage Works.

b. Nonresidential Developments:

i. Design flows for nonresidential developments shall be based upon full development of the service area. The daily average design flow shall be calculated in accordance with the North Shore Sanitary District calculation procedures. The estimated process water requirements shall be added to the calculated figure to determine the final average daily design flow.

ii. The peak design flow shall be calculated based upon projected flow conditions and shall be subject to the approval of the village engineer.

c. Sewerage System Capacity:

i. The flows presented in this chapter are considered minimum allowable flows. The village engineer may require Greater flows if deemed necessary due to the type of use proposed. The developer shall be ultimately responsible for the provision of sufficient sanitary sewerage system capacity to serve any and all future requirements within the development.

8. Sewer Design Hydraulics:

a. Sanitary gravity sewers shall be designed to provide design flow capacity, without surcharging, using Manning's formula.

b. Design mean velocity, flowing full, shall not be less than two feet per second (2 fps) or greater than fifteen feet per second (15 fps).

c. Sewers which will flow less than one-half (2) full at design maximum flow shall have a slope to provide a velocity not less than two feet per second (2 fps) at the design maximum flow.

d. For sanitary sewer diameters less than 12 inches, the maximum ultimate design flow shall not exceed 50% of the sewer capacity. For sanitary sewers less than 12 inches in diameter, the maximum ultimate design flow shall not exceed 80% of the sewer capacity.

9. Minimum Sewer Size and Slope:

a. Minimum sanitary sewer size shall be eight inches (8") diameter.

b. Minimum sanitary sewer service connection size shall be six inches (6") diameter. Sanitary sewer service connections shall be laid at a slope of at least one percent.

10. Alignment: Sewer shall be laid straight in both horizontal and vertical planes between manholes, unless otherwise approved by the village engineer.

11. Sewer Size Changes: Sanitary sewers of different diameter or material shall join only at manholes. The invert elevations shall be adjusted to maintain a uniform energy gradient by matching the 0.8 depth points of the differing diameter pipes.

12. Manholes:

a. Manholes shall be located at the end of all sewers; at all changes in pipe size, material, shape, direction, or gradient; and at all junctions with other sanitary sewers. An inspection/sampling manhole shall be required within ten feet (10') of any commercial, industrial, or multi-family building. Manholes shall be located so that the following maximum intervals are not exceeded:

Pipe Size (inches)	Maximum Interval (feet)
8 to 16	400
18 to 54	500

b. An outside drop manhole shall be provided for manholes with any pipe entering the manhole twenty-four inches (24") or more above the invert of the outlet pipe.

c. Special manholes or junction chambers shall be designed and constructed to the satisfaction of the village engineer where flows and other conditions dictate.

13. Depth of Cover: Sanitary sewers shall be constructed with a minimum cover of five feet (5') unless otherwise approved by the village engineer.

14. Sanitary sewerage system pipe class shall be determined by using ASTM rigid or flexible pipe design strength formulas as applicable.

15. Lift Stations:

a. Whenever possible, sanitary sewerage facilities shall be designed to avoid the necessity of lift stations.

b. Lift stations shall be of the wet well type and shall be subject to the approval of the village engineer.

c. A generator or a dual connection to the power supply system shall be required.

d. Air and vacuum release valves shall be installed in vaults at appropriate places in the forcemain. Cleanouts shall be installed at convenient points in the forcemain.

e. An auto-dialer approved by the village engineer shall be installed.

16 Allowable Materials: Unless otherwise required or approved by the village engineer, the following materials may be used.

a. Sewer Pipe:

i. PVC pipe conforming to the requirements of ASTM D-3034, Minimum Class SDR 26, with push on joints conforming to ASTM D-3212 and ASTM F-477.

ii. Within 50 feet of a water supply well, sewer pipe shall be PVC pipe conforming to the requirements of ASTM D-2241, DR21, with elastomeric joints conforming to ASTM D-3139.

iii. Ductile iron pipe conforming to the requirements of ANSI 21.51, minimum Class 52, with push on joints conforming to ANSI 21.11, ANSI A21.4 cement mortar lining and bituminous seal coat, and ANSI A21.8 bituminous exterior coating. Polyethylene encasement shall be provided.

b. Forcemain:

i. Ductile iron pipe conforming to the requirements of ANSI 21.51, minimum Class 52, with push on joints conforming to ANSI 21.11, ANSI 21.4 cement mortar lining with bituminous seal coat, and ANSI A21.8 bituminous exterior coating. Polyethylene encasement shall be provided.

ii. PVC pipe conforming to the requirements of AWWA C900, minimum Class SDR 18 with push on joints conforming to ASTM D-3139. Magnetic utility line marking tape shall be provided.

c. Pipe Sleeves for Auguring or Tunneling:

i. Steel sleeves conforming to the requirements of ASTM A-139 with welded joints.

d. Manholes

i. Manholes shall be precast, reinforced concrete conforming to ASTM C-478 with O-ring or preformed bituminous joints and integral precast bottoms with invert flow lines.

ii. Manholes shall have offset cones with steps. No more than two adjusting rings shall be allowed for a total possible adjustment of eight inches (8").

iii. All pipe connection openings shall be precast with resilient rubber water tight pipe-to-manhole sleeves. Flexible watertight sleeves (chimney seals) shall be installed from the manhole cone to the manhole casting.

iv. Manholes for sewers twenty-four inches (24") or less in diameter shall be forty-eight inches (48") in diameter. Manholes for sewers twenty-seven inches (27") in diameter or larger shall be sixty inches (60") in diameter. The required manhole diameter shall be increased if warranted by the number and size of pipes entering the structure.

v. Frames and watertight solid lids for manholes shall be Neenah R-1712 or approved equal. Lids shall be embossed with SANITARY SEWER and VILLAGE OF BEACH PARK. Lids shall have recessed pickholes. Frames and covers for manholes located within floodplain areas and having a rim elevation below the flood protection elevations shall be water tight, lock type covers equivalent to Neenah R-1916-F or equal.

e. Air and Vacuum Release Valves: Air and vacuum release valves shall be as approved by the village engineer.

17. Construction:

a. All sewers, forcemains, and appurtenances shall be installed in conformance with the Standard Specifications for Water and Sewer Main Construction in Illinois and this title.

b. No construction shall begin until copies of the required permits from the pertinent public agencies and required insurance certificates have been filed with the village engineer.

c. No construction shall begin until at least 48 hours after the village engineer has been notified of the intention to begin construction.

d. The proposed outlet pipe to the existing sanitary sewerage system shall be plugged at the lowest new manhole with a masonry or mechanical plumber's plug to prevent any flow from the new sanitary sewerage system from reaching the existing sanitary sewerage system. The plug shall not be removed without the permission of the village engineer. If required by the village engineer, the open end of any installed pipe shall be sealed with a watertight plug until the next pipe is added.

e. Pipe bedding shall support the pipe at all points. For ductile iron and concrete pipe, pipe bedding shall consist of over excavation of the trench bottom and refilling to proper grade with a minimum of four inches (4") of compacted (95% Standard Proctor) CA-6 grade 8 or 9 granular material. For PVC pipe, pipe bedding shall consist of compacted (95% Standard Proctor) Class 1A, CA-5 crushed limestone with a maximum size of one and one-half inch (1.5") in accordance with ASTM D-2321-89. Pipe bedding shall be continued to at least one foot (1') above the top of the pipe in maximum six inch (6") lifts. Where deemed necessary by the village engineer based on site and load conditions, concrete cradle or encasement shall be required.

f. If a significant amount of water enters the trench during pipe laying, it shall be removed before operations may continue.

g. All joints in forcemains requiring the use of fittings shall be thrust blocked where undisturbed earth is available to spread the reaction forces. Where undisturbed earth is not available, the plans shall include a detail of a Mega lug joint restraint system to absorb reaction forces and to transmit them to undisturbed earth. The Mega lug joint restraint system shall be subject to the approval of the village engineer. Blocking of fittings shall be done so that the blocking does not interfere with access to the adjacent joints.

h. The trench shall be carefully backfilled. Backfilling shall not be done until installation of the sewer has been inspected and approved by the village engineer. In unpaved areas, previously excavated materials shall be deposited in maximum twelve inch (12") lifts and shall be mechanically compacted to 85% Standard Proctor. Under utilities, structures, or paved surfaces (including, but not limited to, streets, sidewalks, and driveways) or structure or in the influence area below paved surfaces, structures or utilities, backfill shall be either CA-6 trench backfill placed in 6 inch (6") layers and compacted to 95% Standard Proctor. The influence area shall be considered the area within lines sloped downward at 45 degrees from the outer edges of paving, foundations, and utility lines.

i. Sanitary sewer service connections to manholes shall empty at or near the bottom of the manhole, but in no case more than twenty-four inches (24") above the bottom manhole invert.

j. The developer shall deliver to the village engineer a record of all sanitary service connections, each one located by a measurement to the nearest downstream manhole. The end of each sanitary service connection stub shall be marked with a green color four-by-four-inch timber extending vertically from two feet (2') above the end of a stub to three feet (3') above the finished grade. The timber marker locations shall be recorded with measurements to nearby lot corners and to the back of curb or other permanent structure. Final village acceptance of the sanitary sewerage system shall not be given until this report is received and approved by the village engineer.

18. Inspection and Testing: All sanitary sewers and appurtenances shall be thoroughly cleaned prior to final inspection and testing.

a. Inspection:

i. The developer shall have an employee in charge on-site at all times that the construction of the sanitary sewerage system is underway. The developer shall be fully responsible for the quality of the materials and methods of the construction work and shall bear full responsibility for insuring the sanitary sewerage system meets the requirements of the village.

ii. Upon completion of construction and prior to the beginning of the maintenance warranty period, a videotaped television inspection shall be performed on all sections of the sewer. Videotapes and written reports for all television inspections shall be provided to the village prior to the acceptance of the sanitary sewerage system. The report shall include the footage traveled by the camera recorded as each stub is passed. The village engineer shall approve the form of the report and the videotape. All fees and costs involved in this television inspection shall be borne by the developer.

iii. The village engineer will inspect the sanitary sewerage system during construction as deemed necessary. The village engineer shall not be responsible to direct the work of the developer but shall be responsible only to

assess the acceptability of the improvements as constructed. In no case shall the village engineer be responsible for day-to-day quality control.

b. Testing:

i. The maximum allowable infiltration shall be one hundred (100) gallons per inch diameter per mile per day for any section of the sanitary sewerage system. The joints shall be tight and any joint with visible leakage or any section of the sanitary sewerage system with infiltration in excess of that specified above shall be sufficient cause for village rejection of the system.

ii. The developer shall pay for the sanitary sewerage system testing program. Testing shall include the following methods:

1. Infiltration Test - Immediately after backfilling, the entire length of the sewer trench including stubs shall be inundated to normal groundwater level or to eighteen inches (18") above the top of the pipe, whichever is higher. To measure the amount of infiltration, the Contractor shall furnish, install, and maintain a V-notch sharp crested weir in a metal frame tightly secured at the lower end of each sewer test section as directed by the village engineer. The weir shall be installed twenty-four (24) hours before the test is to be made. Infiltration will be measured by measuring the flow rate over the weir. When infiltration is demonstrated to be within the allowable limits, the Contractor shall remove such weirs.

2. Air Test - An air test in accordance with Standard Specifications for Water and Sewer Main Construction in Illinois.

3. Deflection Test - For flexible thermoplastic pipe the test shall be in accordance with Standard Specifications for Water and Sewer Main Construction in Illinois and shall not be performed prior to thirty (30) days following installation.

iii. Repairs made to the sanitary sewerage system in order to fulfill the requirements of this section shall be permanent and shall be equal in quality to new work constructed in accordance with this section. All such repairs shall be at the expense of the developer. All tests to the sanitary sewer system must be repeated following any sanitary sewer repair.

iv. Should the sanitary sewer system fail any one test, or should visual inspection indicate deficiencies, the system shall be repaired to the satisfaction of the village engineer despite any positive testing results by other testing methods.

19. As-Built Drawings: For all projects, as-built drawings shall be submitted to the village engineer showing the actual locations and grades of sewers, forcemains, and manholes, and the locations of service connections to the main and terminus of the service.

D. Community Treatment Facilities:

1. Unless otherwise modified in this chapter, community wastewater treatment facilities shall be designed in accordance with the rules and regulations of the Illinois Environmental Protection Agency and additional requirements as established by the village engineer. Plans, specifications, and construction work shall be subject to the approval and inspection of the Illinois Environmental Protection Agency and the village engineer.

16.19.120 Water supply, storage and distribution.

A. General:

1. All development or subdivisions containing lots of less than one-half acre in area shall have an interconnected water distribution system supplying all lots with water from a source approved by the village and the Illinois Environmental Protection Agency. Where such water supply is not provided in developments or subdivisions with lots of one-half acre or more in area, individual private water systems may be permitted, provided such water systems meet all requirements of the village and the Lake County Health Department.

2. In addition, any building located within the village, the property line of which is located within two hundred feet (200') from an existing watermain, shall be connected to the water system. All existing buildings presently within the village that are being served by a private well are exempt from the requirements of this paragraph until such time as their private well becomes inoperable or the property is sold, at which time they will be required to connect onto the village watermain.

3. Unless otherwise approved by the village, any parcel and/or building located outside the village shall be required to annex into the village prior to connecting to the village's water system, and any and all expenses to extend said water system are totally the developer's expense.

4. Unless otherwise modified in this section, water supply, storage and distribution systems shall be constructed in accordance with requirements of the village, the Illinois Environmental Protection Agency, the Lake County Health Department, and the Insurance Service Office recommended fire flows.

5. All water supply, storage, and distribution systems shall be designed to accommodate an ultimate service area as identified by the village. If sizing of water supply and storage facilities to accommodate the ultimate service area beyond the limits of the proposed development results in additional construction costs, the village may provide an agreement for the recapture by the developer of the additional cost when future system connections are made. Additionally, the village may require oversizing of watermains within the proposed development and the extension of watermains beyond the limits of the proposed development to accommodate an ultimate service area. If such extension of watermains beyond the limits of the proposed development results in additional construction costs, the village may provide an agreement for the recapture by the developer of the additional cost when future system connections are made. Recapture payments will be made to the developer only after those benefiting from the extended service area have made payment to the village. No recapture agreements will be made for oversizing of watermains within the limits of the proposed development. No recapture agreements will be made for extending the watermain to the property limits as required by this paragraph to allow for future expansion of the system.

6. As-built drawings shall be submitted for all projects.

7. Unless otherwise approved by the village engineer, the flows listed in the following table shall be used for purposes of water supply, storage, and distribution system design, at a minimum. Process water requirements must be added to the average daily and maximum daily consumption quantities. The developer shall ultimately be responsible for providing any and all future water needs within the development.

Location or Type	Average Daily Consumption	Maximum Daily Consumption	Fire Flow
Residential:			
- Single-family Minimum [1] Detached	70 gpcd	210 gpcd	1,500 gpm
- Single-family Attached with Approved Fire Wall Minimum [1]	70 gpcd	210 gpcd	2,000 gpm
- Multi-Family	70 gpcd	210 gpcd	[1]
Commercial	1,050 gpd/acre or 0.1 gpd/sf building area (2)	3,150 gpd/acre or 0.3 gpd/sf building area (2)	[1]
Industrial	1,050 gpd/acre or 0.1 gpd/sf building area (2)	3,150 gpd/acre or 0.3 gpd/sf building area (2)	[1]

Notes:

- [1] Minimum required fire flows shall be computed in accordance with the Guide for Determination of Required Fire Flow, by the Insurance Services Office. If the above table shows a minimum fire flow, the greater of the minimum fire flow shown above and the computed fire flow shall be used.
- [2] Process water requirements must be estimated and included in the average daily and maximum daily consumption quantities.

B. Water Supply and Storage:

1. Private Water Supply Systems:
 - a. Where public water supply systems are not provided, individual private water shall meet all requirements of the village and the Lake County Health Department. Conclusive evidence shall be presented by the developer to the village to demonstrate that an adequate underground water supply is readily available for individual private water systems on the basis of suitable tests and surveys.
 - b. Wells which are currently not in use or whose use will be discontinued shall be abandoned in accordance with Lake County Health Department requirements.
2. Public Water Supply and Storage Facilities:
 - a. All public water supply and storage facilities shall meet the requirements of the village and the Illinois Environmental Protection Agency.
 - b. Unless otherwise approved or required by the village, water supplies shall be sized to deliver the development's maximum daily demand based upon supply

operation 18-hours per day. A generator or a dual connection to the power supply system shall be required. Alarms and controls, including SCADA system compatibility, as approved by the village engineer shall be installed.

C. Water Distribution:

1. General: All developments shall include provisions for the construction of a water distribution system complete with valves, fire hydrants, and other appurtenances.

2. Design:

a. Unless otherwise modified in this chapter, distribution systems shall be constructed in accordance with requirements of the village, the Illinois Environmental Protection Agency, and the Standard Specifications for Watermain and Sewer Main Construction in Illinois.

b. The location of proposed watermains shall be approved by the village engineer. All watermains shall be constructed within public rights-of-way or within easements dedicated for public utilities. Watermains shall be extended to the property lines of the development along public rights-of-way and at other locations required by the village engineer. Placement of distribution and service lines under pavement or concrete shall be avoided where practicable. The village may require oversizing of watermains within the proposed development and extension of watermains beyond the limits of the proposed development to accommodate ultimate development. The developer shall provide looping within the water distribution system where practicable and where required by hydraulic modeling and by the village engineer. Dead ends shall be avoided whenever possible, shall not exceed four hundred feet (400') in length, and shall terminate with a hydrant.

c. Design Calculations: Water distribution system mains shall be sized to deliver the required fire flows plus the consumption at the maximum daily rate of the area served. The developer shall submit calculations to demonstrate that flows in the system at any location selected by the village engineer are adequate for consumption at the maximum daily rate and fire flow demands with a required minimum twenty (20) psi residual pressure. The Insurance Services Office shall compute required fire flows in accordance with the Guide for Determination of Required Fire Flow, latest edition. Velocity, discharge, and head loss in watermains shall be computed using the Hazen Williams formula. The coefficient, C, shall be equal to 110.

d. Pipe Size: the minimum watermain pipe size shall be eight inches (8") in diameter.

e. Depth of Cover: All watermain and water service pipes shall have a minimum depth of cover of five and one-half feet (5.5') measured from the final ground surface elevation to the top of the pipe.

f. Valves: Valves and extensions to the water distribution system shall be arranged so that the service interruption caused by a break in any main will be limited to eight hundred feet (800'). In addition, valves on watermains servicing single-family residential areas shall be installed so that no more than 25 units shall be affected when shutting off a section of main. Transmission lines with no service connections shall have valves located so that less than twelve hundred feet (1,200') of main will be shut off at any time. Valves shall be located so that it will require no more than four valves to be closed to isolate a section of watermain. Valves shall be located in valve vaults.

g. Fire Hydrants: Fire hydrants shall be spaced not more than three hundred feet (300') apart. A hydrant shall be placed within one hundred feet (100') of the center of each street intersection. When a building to be occupied is set back two hundred fifty feet (250') or more from a street, or is located more than three hundred feet (300') from a

hydrant, additional hydrants shall be installed such that one hydrant shall be located at the entrance to the building and hydrants shall be provided around the perimeter of the building at a maximum two hundred fifty foot (250') spacing measured along access roads. Such hydrants shall be installed not more than fifty feet (50') or less than twenty-five feet (25') from the building. For non-residential buildings, fire hydrants shall be located on or adjacent to subject property. No service connection shall be made to fire hydrants leads or connections. In residential and nonresidential developments, fire hydrant locations shall not conflict with driveways, nor shall fire hydrants be placed directly across from driveways.

h. Fire Sprinkler Systems: All fire sprinkler systems depending on the public water supply for pressure and including 20 or more sprinkler heads shall be connected to the water distribution system through a separate fire service line.

i. Separation of Water and Sewer Mains: Separation and protection of watermains from sewers shall comply with the Illinois Environmental Protection Agency Division of Public Water Supplies Technical Policy Statements.

j. Service Connections: All water service lines shall be designed with a minimum diameter necessary to provide adequate domestic and fire flow use. Water service lines servicing single-family residences shall be a minimum of one inch (1") diameter.

k. Thrust Blocks: Thrust blocks shall be required at all hydrant tees and bends. Where undisturbed earth is not available or not likely to be available to support the thrust blocks, mega lug joint restraint system and/or retaining glands shall be used as approved by the village engineer.

3. Allowable Materials: All water distribution system materials shall conform to the following unless otherwise required or approved by the village engineer:

a. Watermain: Pipe for watermain and for service connections larger than two inches (2") in diameter shall be:

PVC watermain conforming to AWWA C900, Class 150, DR 18 [four inch (4") through twelve inch (12") diameter pipe] or AWWA C905, pressure rating 235 psi, DR 18 [fourteen inch (14") through thirty-six inch (36") diameter pipe] with push on gasketed joints meeting ASTM 3139. Magnetic utility marking tape and locator wire shall be provided.

Ductile iron pipe conforming to Class 52 AWWA C151 with joints conforming to AWWA C111 may be used.

b. Fittings: Watermain fittings shall be ductile iron and conform to ANSI A21.10 (AWWA C110) or ANSI A21.53 (AWWA C153).

c. Services: All water service pipe between one inch (1") and two inch (2") diameter shall be Type K copper, conforming to ASTM B-88 and ASTM B-251. All water services larger than two inch (2") diameter shall be ductile iron pipe or PVC as described above. Service connections two inches (2") in diameter or less shall be equipped with a Mueller H-15000 corporation stop, Mueller H-15154 curb stop, and Mueller H-10302 curb box or equal approved by village engineer. Corporation stop service saddles shall be Mueller Ductile Iron with stainless steel straps and bolts as follows: No. DN 2 S 0500 CC - 4"; No. DN 2 S 0905 CC - 8"; No. DN 2 S 1050 CC - 10". Services three inches (3") in diameter and larger shall have gate valves conforming to watermain gate valve specifications.

d. Valves:

1. Valves for pipe up to twelve inches (12") in diameter shall be iron body, bronze mounted resilient-seated gate valves with non-rising stems

conforming to AWWA C509. The valves shall have mechanical joints conforming to AWWA C111. Gate valves shall be rated for 200 psi minimum working pressure and 400 psi minimum test pressure with zero leakage. Valves larger than twelve inches (12") in diameter shall be ductile iron body, rubber seated, tight closure butterfly valves conforming to AWWA C504. Valves shall be Class 150 B. The model and manufacturer shall be compatible with other valves utilized in the village.

2. Valves in public property larger than four inches (4") in diameter except fire hydrant auxiliary valves shall be placed in valve vaults. Valves in private property larger than six inches (6") in diameter shall be placed in valve vaults.

e. Valve Vaults: Valve vaults shall be precast, reinforced concrete conforming to ASTM C478 with preformed bituminous joints and vault steps. Vaults for valves eight inches (8") or less in diameter shall be forty-eight inches (48") in diameter; vaults for valves larger than eight inches (8") in diameter shall be sixty inches (60") in diameter.

No more than two adjusting rings shall be allowed for a total possible adjustment of eight inches (8"). Frames and closed lids for vaults shall be Neenah R-1712 or approved equal, with "Water" and "Village of Beach Park" embossed thereon and chimney seals installed. Lids shall have a recessed pickhole.

f. Fire Hydrants: Fire hydrants shall be dry barrel type with break flange conforming to AWWA C502. Hydrants shall be equipped with a six inch (6") resilient wedge auxiliary gate valve with valve box with "Water" embossed on the lid. The main valve shall have a diameter of five and one-quarter inches (5.25"). Hydrants shall have two and one-half inch (2.5") and one four and one-half inch (4.5") nozzles with National Standard threads. Hydrants shall be rated for 250 psi working pressure and 500 psi test pressure. The model and manufacturer shall be compatible with other hydrants utilized in the village (Mueller Super Centurion 200 or village engineer approved equal, 200 PSIG working pressure and 400 PSIG test pressure), color safety red.

4. Construction:

a. Watermains and appurtenances shall be installed in conformance with AWWA C600, the material manufacturer's recommendations, the Standard Specifications for Water and Sewer Main Construction in Illinois, and this title.

b. No construction shall begin until copies of all of the required permits from the pertinent public agencies and all required insurance certificates have been filed with the village engineer.

c. No construction shall begin until at least 48 hours after the village engineer has been notified of the intention to begin construction.

d. Trench Bedding: For ductile iron and steel pipe, pipe bedding shall consist of over excavation of the trench bottom and refilling to proper grade with a minimum of four inches (4") of compacted (95% Standard Proctor) CA-6 granular material. For PVC pipe, pipe bedding shall consist of compacted (95% Standard Proctor) Class I, CA-5 crushed limestone with a maximum size of one and one-half inch (1 1/2") in accordance with the ASTM D-2321-74. Pipe bedding shall be continued to at least one foot (1') above the top of the pipe in maximum six inch (6") lifts. Where deemed necessary by the village engineer based on site and load conditions, concrete cradle or encasement shall be required.

e. Trench Backfill: In unpaved areas, previously excavated materials shall be deposited in maximum twelve inch (12") lifts and shall be mechanically compacted to

85% Standard Proctor. Under structures, utilities or paved surfaces (including, but not limited to, streets, sidewalks, and driveways), or in the influence area below paved surfaces, backfill shall be either CA-6 trench backfill placed in 6-inch layers and compacted to 95% Standard Proctor or acceptable excavated materials placed in eight inch (8") layers and compacted to 95% Standard Proctor. The influence area shall be considered the area within lines sloped downward at 45 degrees from the outer edges of paving foundation(s) and utility lines.

f. Water in Trench: Where water is encountered in the trench, it shall be removed during pipe laying and jointing operations. Trench water shall not be allowed to enter the pipe at any time.

g. Water System Connections: All connections to the existing water system shall be made under full water service pressure unless otherwise approved by the village engineer.

h. Fire Hydrants: Fire hydrants shall be installed plumb with the pumper nozzle oriented perpendicular to the roadway or pavement edge. Barrel extension sections shall be provided and installed as necessary to leave the nozzles eighteen inches (18") to twenty-four inches (24") above the finished grade. Fire hydrants shall have a minimum of seven (7) cubic feet of one inch (1") to one and one-half inch (1.5") washed river stone placed at the base of the hydrant to provide drainage at the barrel. The break line flange of hydrants shall be not less than one inch (1") or more than three inches (3") above finished ground elevation. Hydrants in the street right-of-way shall be placed not less than three feet (3'), nor more than five feet (5') from the back of curb.

5. Inspection and Testing:

a. Inspection: The developer shall have an employee in charge on site at all times that construction of the water distribution system is underway. The developer shall be fully responsible for the quality of the materials and methods of the construction work and shall bear full responsibility for insuring that the water distribution system meets the requirements of the village.

The village engineer will inspect the water distribution system during construction as it deems necessary. The village engineer shall not be responsible to direct the work of the developer but shall be responsible only to assess the acceptability of the improvement as constructed. In no case shall the village engineer be responsible for day-to-day quality control of the construction.

b. Testing: The completed water mains and appurtenances of the water distribution system shall be tested to the satisfaction of the village engineer.

All newly laid watermains shall be subjected to a minimum hydrostatic pressure of 150 psi maintained for not less than two hours. Each valved section of pipe shall be filled with water and the specified test pressure shall be applied by means of a pump connected to the pipe. Hydrants included in the test section shall be tested with the auxiliary valve open and the hydrant closed. Before applying the specified test pressure, all air shall be expelled from the pipe. All leaks shall be repaired until tight. Any cracked or defective pipes, fittings, valves, or hydrants discovered shall be replaced and the test repeated until satisfactory results are obtained. No visible leakage is allowed regardless of the results of the pressure and leakage tests.

The test pressure shall be maintained for the test period within 5 psi of the test pressure. If repumping is required, the amount of water added to the test section

shall be recorded. The test section will be accepted only if the leakage determined under the test pressure is less than the allowable leakage. At the conclusion of the test period, the test section shall be returned to the test pressure by repumping. If the total amount of water added to the test section exceeds the allowable leakage, the test fails and the section shall be retested. Allowable leakage shall be determined by the following formulas:

For ductile iron piping (AWWA C600):

$$L = \frac{S \times D \times P^2}{133,200}$$

Where:

L = allowable leakage, in gallons per hour
S = length of pipe tested, in feet
D = nominal diameter of pipe tested, in inches
P = test pressure, in psi

For PVC watermain (AWWA C605):

$$L = \frac{N \times D \times P^2}{7,400}$$

Where:

L = allowable leakage, in gallons per hour
N = number of joints in length of pipeline tested
D = nominal diameter of the pipe, in inches
P = test pressure, in psi

6. Preliminary Flushing: Prior to testing and chlorination, the main shall be thoroughly flushed. If there is no hydrant at the end of a main, a tap shall be provided large enough to affect a velocity in the main of at least two and one half feet per second (2-2 ft/s).

7. Disinfection:

a. All water mains shall be disinfected and tested according to the requirements of the "Standards for Disinfecting Water Mains", AWWA C601, and as required herein. All disinfection shall be performed by an independent firm with experience in the methods and techniques of this operation. The choice of the testing firm shall be subject to the approval of the village engineer.

b. The chlorinating agent shall be introduced at the beginning of the pipeline extension or any valved section of it through a corporation stop in the top of the newly laid pipe. The preferred source of chlorine is a gas-water mixture. Other methods shall be submitted for approval to the village engineer.

c. Water from the existing distribution system or other source of supply shall be controlled so it flows slowly into the newly laid pipe during the application of the chlorine gas.

d. The rate of chlorine mixture flow shall be in such proportion to the rate of water entering the pipe that the chlorine dose applied to the water entering the newly

laid pipe shall be at least 40 ppm, or enough to meet the requirements during the retention period.

e. The valves shall be adjusted so that the chlorine solution in the line being treated will not flow back into the line supplying the water.

f. Treated water shall remain in the pipe for at least 24 hours. The chlorine residual at the pipe extremities and at other representative points shall then be measured to be 20 ppm or more. If the amount of residual chlorine is too low, the pipeline extension shall be rechlorinated.

g. After chlorination, the pipeline extension shall be thoroughly flushed until the Illinois Environmental Protection Agency and village engineer approve the replacement water as safe. The water shall be tested over a period of two days. Test samples shall be drawn in the presence of the village engineer from taps located as directed by the village engineer and installed by the developer. The village engineer shall approve testing agencies. Chlorination and testing shall continue until satisfactory results are obtained.

h. Disinfection for pipe that must be placed in service immediately shall be accomplished by thoroughly flushing and swabbing with a strong (150 ppm) solution of hypochlorite immediately prior to assembly. Permission must be secured from the village engineer before this type of disinfection will be approved.

i. All water disposed of from flushing operations shall not contain chlorine concentrations exceeding 0.05 ppm. All flushing water exceeding this concentration shall be dechlorinated.

j. The cost of flushing, disinfection, sampling, and testing shall be borne by the developer.

8. Repairs made to the water system in order to fulfill the requirements of this section shall be permanent and shall be equal in quality to new work constructed in accordance with this section. All such repairs shall be at the expense of the developer. Repairs to the water system will require repetition of all tests.

16.19.130 Stormwater drainage and storage facilities.

A. General:

1. All developments or subdivisions shall include provisions for the construction of a storm water run-off conveyance system. The storm water runoff conveyance system shall consist of storm sewers, drainage ditches, swales, culvert pipes, detention and retention basins, individually or in combination.

a. When public storm sewer exists on a property to be developed, or runs adjacent to the property, the sump pump shall be connected directly to the storm sewer.

2. All streams, channels or storm sewers shall be designed to accommodate storm water run-off from all areas that naturally flow to the area of development.

3. Storm water management facilities shall be designed and constructed in accordance with provisions of this title and the Beach Park Watershed Development Ordinance.

4. Submission of Approval Documents: Plans, specifications and all calculations for stormwater run-off control as required hereunder, shall be submitted to the village as part of the review and approval of the preliminary and final plats. As-built drawings shall be submitted for all storm water and drainage facilities prior to village acceptance of the improvements.

5. Sequence of Construction: The facilities for storm water run-off control shall be constructed prior to any site grading, street or drainage construction and shall include provisions for siltation control.

B. Storm Water Drainage:

1. General: Storm sewers shall be designed and constructed in accordance with the latest edition of the Illinois Department of Transportation's Standard Specifications for Road and Bridge Construction, the Highway Standards Manual, and the Highway Design Manual.

2. Design Run-Off Rates: Storm sewers, swales, and ditches having a tributary area less than 100 acres shall be designed to convey storm run-off flows calculated using the rational method as follows:

$$Q = c \times i \times A$$

Where:

Q = Run-off flow in cubic feet per second

c = run-off coefficient characteristic of the tributary area in dimensionless units

i = Average rainfall intensity in inches per hour

A = Tributary drainage area in acres

3. Drainage Area: The drainage area used for design shall be the entire watershed tributary to the point in the storm sewer system under consideration. It shall include any tributary area that may be outside the development or subdivision.

4. Rainfall Intensity:

a. The average rainfall intensity used for design shall be selected from rainfall-intensity curves contained in Illinois State Water Survey Bulletin No. 70.

b. The rainfall intensity for design of storm sewers or minor swales and ditches shall be based on a rain storm with a 10-year recurrence interval and a duration equal to the time of concentration.

c. The rainfall intensity for design of major storm sewers in combination with streams and channels shall be based on a rainstorm with a 100 year recurrence interval and a duration equal to the time of concentration.

d. The time of concentration is defined as the time (in minutes) for the flow from the most remote point of the drainage area to reach the point under consideration.

e. For storm sewer design, the maximum time of concentration to a storm sewer inlet shall be twenty (20) minutes.

5. Run-off Coefficient:

a. The run-off coefficient is the ratio of run-off to rainfall and shall assume saturated conditions.

b. The run-off coefficient, C, for ten year storms shall be a minimum of:

Water surface area = 1.00

Impervious areas = 0.95

Pervious areas = 0.30

c. The run-off coefficients for undeveloped areas outside of the limits of the proposed development shall be a minimum of 0.35 for ten (10) year storms, or as approved by the village engineer based on the zoning and land use of the tributary area.

6. Stream, Channel, and Storm Sewer Hydraulics:

a. Design Flow: Storm sewers, streams, and channels shall be designed to provide a design flow capacity based on Manning's formula:

Where:

$$Q = A \times (1.486/n) \times (R)^{2/3} \times (S)^2$$

Q = Flow rate in cubic feet per second

A = Area of the conduit in square feet

n = Roughness coefficient of the conduit in dimensionless units

R = Hydraulic radius, defined as the area of the conduit divided by the wetted perimeter

S = Slope in feet per foot

b. Design Velocities:

1. Storm Sewers: Design velocities for storm sewers shall be greater than three feet per second (3 ft/s) and less than ten feet per second (10 ft/s).

2. Lined Channels and Streams: Design velocities for lined channels and streams shall be greater than two feet per second (2 ft/s) and less than ten feet per second (10 ft/s).

3. Unlined Channels and Streams: Design velocities for unlined channels and streams shall be greater than two feet per second (2 ft/s) and less than five feet per second (5 ft/s).

7. Storm Sewers:

a. Storm sewers shall be designed using Manning's formula for a gravity flow condition with the downstream controlling elevation at the 10-year 24-hour return frequency storm level. The lowest structure frame shall be a minimum of twelve inches (12") above the high water level in the detention or retention basin.

b. Minimum storm sewer size shall be twelve inches (12").

c. Storm sewers shall be laid straight in both horizontal and vertical planes between structures unless otherwise approved by the village engineer.

d. Storm sewers of differing diameters or materials shall join at structures only. The invert elevations shall be adjusted to maintain a uniform energy gradient by matching the 0.8 depth points of the differing diameters.

e. Inlets shall be provided so that surface water is not carried across or around street intersections. Inlets shall be spaced such that overland flow shall not build up a flow rate exceeding one (1) cubic feet per second, except that curb inlets shall be located such that no more than three hundred feet (300') of gutter is tributary to an inlet or as otherwise approved by the village engineer. Inlets shall be as provided at all low points.

f. Manholes shall be provided at all changes in horizontal or vertical direction; changes in shape, material or size of pipe; and junctions of pipes. The maximum spacing of manholes shall be four hundred feet (400') for sewers forty-two inches (42") in diameter and smaller, and five hundred feet (500') for sewers forty-eight inches (48") in diameter and larger.

g. Storm sewer service stubs for existing, proposed and future sump pump connections shall be provided as required by the village engineer.

h. When a public storm sewer exists or is proposed on or adjacent to a property to be developed, the sump pump must be connected directly to the public storm sewer. Sump pump connections shall be made with a minimum 4-inch diameter polyvinyl chloride pipe, SDR 26, installed in accordance with the village sanitary sewer installation policy. Connection to the storm sewer pipe shall be made by core drilling a

clean hole into the pipe or manhole and connecting with a mission coupling or elastomeric boot. Connection to the storm sewer structure shall be made by core drilling a clean hole into the structure and grouting the sump pump connection pipe into place with waterproof cement grout.

8. Drainage ways:

a. Existing streams and channels shall be maintained and stabilized and, if permitted, shall be realigned or channelized subject to requirements of the Illinois Department of Natural Resources Division of Water Resources, the Army Corps of engineers, the Federal Emergency Management Agency, the Lake County Stormwater Management Agency, and the village of Beach Park.

b. Where streams and channels are allowed to be realigned or channelized, the bottom shall be stabilized and the banks shall be protected from erosion by methods approved by the village engineer and in compliance with this title.

9. Floodplains:

a. No construction shall be permitted in the flood plain without village board approval.

b. Any construction in the floodplain permitted by the village board shall comply with the provisions of the Beach Park Watershed Development Ordinance.

10. Culverts:

a. The minimum culvert size shall be twelve inches (12") for driveways and roadway crossings. At locations where culverts cross roadways, the cover over the culvert shall be designed to provide H20 loading capability. In no case shall cover be less than nine inches (9") between the top of the pipe and the roadway surface.

b. All roadway culverts shall extend a sufficient distance beyond the shoulder line so as to intersect the backslope of the culvert spring line at a minimum six to one (6:1) slope. Flared end sections shall be provided on all roadway and driveway culverts. Roadway and driveway culverts eighteen inches (18") or greater in diameter shall also require grates.

c. An overall map of the development or subdivision showing the culvert size and slope for each lot shall be included in the as-built drawings submitted for the development or subdivision.

11. Allowable Materials:

a. Storm sewers shall be reinforced concrete pipe conforming to ASTM C-76 Wall B Standards for round pipe or ASTM C-507 for elliptical pipe. Class of pipe shall conform to the Class IV for round pipe and Class HE III for elliptical pipe. The village engineer may approve alternate storm sewer materials.

b. Pipe joints shall be O-ring joints conforming to ASTM C-443 or asphaltic compound joints except where the storm sewer crosses a watermain. At these locations the pipe joint shall be an O-ring joint.

c. Manholes, catch basins, and inlets shall be precast reinforced concrete conforming to ASTM C-478. Each manhole shall have a poured Class SI concrete bench shaped to drain the outlet pipe.

d. Joints between manholes, catch basins, and inlet sections shall be completely sealed with preformed bitumastic joint filler.

e. Adjusting rings shall be precast concrete rings.

f. Inlet and catch basin frames and grates shall be subject to the approval of the village engineer.

g. Manhole frames, grates, and steps shall be subject to the approval of the village engineer. Grates shall be embossed "Storm" and "Village of Beach Park".

h. Bedding and trench backfill for storm sewers shall conform to the Standard Specifications for Road and Bridge Construction and shall conform to gradation CA-5 or CA-7 washed gravel (uncrushed).

12. Construction:

a. Storm sewers shall be constructed in accordance with the Standard Specifications for Road and Bridge Construction, the Standard Specifications for Water and Sewer Main Construction in Illinois, the pipe manufacturer's recommendations, and this title.

b. Trenches for storm sewers located under or within the influence area of a paved surface, structure, or utility shall be backfilled with trench backfill (CA-6) and compacted by mechanical means in lifts not exceeding eight-inches (8") to ninety-five percent (95%) standard proctor laboratory density.

c. Adjusting rings for manholes, catch basins, and inlets shall be limited to a maximum of two (2) rings and a maximum height of eight inches (8").

d. When adjusting rings are required on structures, a cement mortar or bituminous material coating shall be applied to the outside of the rings.

e. Lifting holes in structure sections and sewer pipe shall be plugged with appropriate sized concrete lift plugs and coated with bituminous material. Storm sewer pipe shall not have lifting holes at watermain crossings.

C. Stormwater Management:

1. General: A properly designed storm water management system is required for all developments or subdivisions and shall conform to the Beach Park Watershed Development Ordinance. The provisions of the Beach Park Watershed Development Ordinance shall be deemed as additional requirements to the minimum Development Standards, the Subdivisions and Developments Ordinance and all other ordinances of the village.

2. Storm water detention facilities:

a. All storm water detention facilities other than roof tops, and/or underground storage shall be located not less than fifty feet (50') from any building or structure to be occupied and shall not be less than thirty feet (30') from any roadway unless otherwise approved by the village engineer.

b. Detention basin storage volume shall be determined in accordance with the requirements of the Beach Park Watershed Development Ordinance.

c. The design and construction of the detention basins shall meet the requirements of the village engineer.

d. No paved areas such as parking lots shall be used for storage of storm water.

e. A minimum of two feet (2') of freeboard shall be provided from the high water level to the top of the berm on all basins unless otherwise approved by the village engineer.

f. Detention basins shall be landscaped including the establishment of ground cover through sodding or hydroseeding.

g. Dry bottom stormwater storage areas:

1. Dry bottom storm water storage areas may be designed to serve a secondary purpose for recreation, open space or other use that will not be adversely affected by occasional or intermittent flooding and will not pose a safety hazard to users of the space. These areas may not count towards required active recreation area but may be included in open space requirements.

2. A method of carrying the low flow through dry bottom storm water storage areas (such as a concrete paved channel) shall be provided in

addition to a system of drains, and both shall be provided with a positive gravity outlet to a natural channel or sewer.

3. The combination of storage of the water from a 100-year storm and the design release rate shall not result in a storage duration in excess of 72 hours.

4. The maximum depth shall not exceed four feet (4') unless the existing natural ground contours and other conditions lend the area to greater storage depth as approved by the village engineer.

5. Side slopes shall not be steeper than four (4) horizontal to one (1) vertical. The basin floor shall have a slope of not less than two percent (2%) to convey storm water to the paved channel or the basin outlet.

6. Outlet control structures shall be designed as simply as possible and shall require little or no attention for proper operation. Each storm water storage area shall be provided with a method of emergency overflow in the event that a storm in excess of the 100-year frequency storm occurs. This emergency overflow shall be designed to function without attention and shall discharge to the natural surface channel system. All points of inflow and outflow to and from the storage area shall be accessible to equipment for maintenance. Hydraulic calculations shall be submitted to the village engineer for all design features.

h. Wet bottom storm water storage areas shall be designed in accordance with the requirements for dry bottom storm water storage areas except for specified slopes and the need to provide a low flow conduit and drain system. The following additional requirements apply:

1. Basin side slopes shall be subject to the approval of the village engineer.

2. The village engineer may require shoreline protection in areas deemed subject to wave erosion.

3. Minimum normal water depth shall be four feet (4'). If fish are used to keep the pond clean, a minimum of 25 percent (25%) of the pond area shall have a minimum depth of ten feet (10').

4. Facilities shall be made, if possible, to allow the pond level to be lowered by gravity flow for cleaning purposes and shoreline maintenance.

5. Control structures for storm water release shall be designed to operate at full capacity with only a minor increase in the water surface level. Hydraulic calculations shall be submitted to the village engineer to substantiate all design features.

6. Aeration facilities may be required by the village engineer to prevent pond stagnation. If aeration facilities are required, agreements for the perpetual operation and maintenance of the aeration facilities by an entity other than the village shall be prepared to the satisfaction of the village.

7. In the event that the water surface of the pond is to be raised for purposes of storing water for irrigation or in anticipation of the evapo-transpiration demands of dry weather, the volume remaining for storage of excess storm water run-off shall still be sufficient to contain the 100-year storm run-off.

i. As-built drawings for detention areas shall be delivered to the village engineer before the village will accept these improvements.

j. Construction:

1. Where development of a property presents the threat of flooding or damage by flash run-off to downstream properties, the facilities for storm water run-off shall be constructed prior to any earth moving or drainage construction on the project site.

2. During the construction phase of land development, facilities shall be provided to prevent the erosion and washing away of the earth. Silting of downstream areas shall be prevented through the strategic use of stilling basins, of run-off channels, and by limiting the period of time during which the earth is stripped of vegetation.

C. Inspection and Testing:

1. All storm sewers and appurtenances shall be thoroughly cleaned prior to final inspection and prior to testing.

2. The developer shall have an employee in charge on site at all times that the construction of the storm sewerage system and storm water management system is under way. The developer shall be fully responsible for the quality of the materials and methods of the construction work and shall bear full responsibility for insuring that the storm sewerage and storm water management systems meeting the stated requirements of the village in every way.

3. Upon completion of construction and prior to the beginning of the maintenance guarantee period, and, if deemed necessary by the village engineer, due to difficulties during construction of the storm sewers, a videotaped television inspection shall be performed on sections or portions of the storm sewer as directed by the village engineer. Videotapes and written reports for all television inspections shall be provided to the village prior to acceptance. The village engineer shall approve the form of the report and the videotape. All fees and costs involved in this television inspection shall be borne by the developer.

4. The village engineer will inspect the storm sewerage and storm water management systems during construction as it deems necessary. The village engineer shall not be responsible to direct the work of the developer but shall be responsible only to assess the acceptability of the improvement as constructed. In no case shall the village engineer be responsible for day-to-day quality control at the site of construction.

5. Repairs made to the storm water management system to meet the requirements of this section shall be permanent and shall be equal in quality to new work constructed in accordance with this section. All such repairs shall be performed at the expense of the developer and shall require repetition of all tests.

D. Submittal of engineering design data: Plans, specifications, and all calculations for storm water run-off control shall be submitted to the village engineer for review and approval prior to the village's approval of a Final plat or issuance of a building permit.

16.19.140 Preservation of natural features and restoration.

A. Purpose: The purpose of this Section is to provide a procedure by which new developments or subdivisions can preserve the natural country atmosphere that is prevalent throughout the village of Beach Park.

B. General: Restorative and landscaping measures set forth herein are intended to cover only those areas of the development or subdivision disturbed in the course of making the improvements required by this Section. The developer is encouraged to provide additional landscaping throughout the development or subdivision which will complement the existing features and the developed site. Requirements set forth herein are minimal in scope and are not to be assumed as a restriction on landscaping efforts or to replace existing landscaping ordinances. Innovative ideas to naturalize disturbed landscapes are encouraged as long as they meet the overall objective of this Section, the requirements of the zoning ordinance and the approval of the village board.

C. Natural Features Inventory and Tree Survey: The developer shall submit a natural features inventory and tree survey which inventories all trees on the property of the proposed development or subdivision and shows their location with the proposed Preliminary Plat. The tree survey shall include all trees measuring six inches (6") in diameter measured at four and one-half feet (4.5') from the ground. Based upon the survey, the village board may designate which existing features would add value to the development or subdivision or to the village as a whole, such as trees, water courses, historic spots, and similar irreplaceable assets, and which of them shall be preserved in the design of the development or subdivision. No trees shall be removed from any development or subdivision, nor any change of grade of the land effected, until approval of the Preliminary Plat has been granted. All trees required by the village board to be retained shall be guarded and preserved by use of a "No Activity Zone" with a minimum radius in feet equivalent to the drip line of the tree. The "No Activity Zone" shall be clearly marked with tree protection fencing and all trees where required shall be welled and protected against change of grade.

D. Ground Cover: The village board shall require that all disturbed areas within the development or subdivision, including unimproved areas within the dedicated right-of-way of streets and other public use areas, shall be restored by placing a minimum of four inches (4") of topsoil, graded, and seeded or sodded, in a manner approved by the village engineer. The village board may require additional topsoil depths in designated areas. Consideration shall also be given to restoring select areas with the natural growth of wildflowers, ground cover or similar material.

E. Tree Replacement: Trees required to be replaced shall be replaced with species selected from the approved listing of landscape materials on file with the village planner. If nine (9) or fewer trees are being replaced, equal numbers of at least three (3) of the listed species must be used. If ten (10) or more trees are being replaced, equal numbers of at least eight (8) of the species listed must be used.

F. Noise Abatement: Site grading and landscaping shall be provided for noise abatement along high noise generators such as regional and area highways and collector streets to preserve the natural quietness of a residential neighborhood. Noise abatement measures shall limit noise levels from noise generating sources to 70 decibels at the property line.

G. Steep Slopes: All slopes greater than four to one (4:1) must be approved by the village engineer and shall be restored by means of sod or suitable ground cover.

H. Landscape Plan: The village board may require that landscape plans and specifications be furnished as part of the overall development plan submittal. The plans shall be prepared by a practicing landscape architect and contain the following information:

1. Plant name, both Latin and English.
2. Planting location.
3. Number of plants in any one location.
4. Total number of plants to be provided.

Bushes and trees utilized in the plan shall be selected from the approved listing of landscape materials on file with the village planner. No less than three (3) species of bushes and three (3) species of trees shall be utilized in developing a plan for a proposed development or subdivision.

16.19.150 Wetlands.

A. The developer shall submit a Wetland Identification Report to the village during the preliminary stages of the development or subdivision. A wetland consultant approved by the village shall prepare the report. Wetland protection and mitigation procedures shall comply with the requirements of the U.S. Army Corps of Engineers, Lake County Stormwater Management Commission and the Beach Park Watershed Development Ordinance.

16.19.160 Construction and post construction requirements.

A. Limited completion time of public improvements: Construction of all required public improvements must be completed within two (2) years from the date of final plat approval unless good cause can be shown to the village board for granting an extension of time. A request for an extension shall not stop the running of the two-year period. No extension shall be granted unless adequate guarantee collateral has been received and approved by the village board.

B. Project representation: The developer shall be represented by a project engineer to observe the construction of the public improvements, to provide construction guidance, to certify construction in conformance with the approved improvement plans and specifications, to review and certify the quantities of work items on any reductions in the construction guarantee, to witness required tests in the presence of the village engineer and to prepare record drawings. All inspection reports of the project engineer and required test results shall be submitted to the village prior to final acceptance.

C. Village engineer: The village engineer will conduct periodic observations of the public improvements, witness the tests of the public improvements, review and recommend action relative to the construction guarantee, advise the village of potential problems and conduct semi-final and final inspections of the improvements. The developer shall reimburse the village for all services and costs of the village engineer incurred by the village.

D. Preconstruction meeting: Prior to beginning of the installation of any improvements, the developer, the project engineer, and general contractor shall attend a pre-construction meeting with village staff, the village engineer, and other appropriate authorities. The purpose of the meeting shall be to review acceptable site development and construction practices in accordance with the construction control plan and village ordinances and policies. Following the pre-construction meeting and the posting of the construction guarantee, payment of fees and insurance acceptable to the village, the developer may begin construction of land improvements.

E. Shop drawings: Where appropriate, the developer shall submit shop drawings to the village engineer for review and approval prior to the installation of materials and equipment.

F. Notice to village engineer: Whenever testing is required by this title to be performed in the presence of the village engineer, the developer shall provide a minimum of two (2) full business days notice to the village engineer of the time such tests are scheduled to take place. If such notice is not provided, re-testing may be required.

G. Record drawings: During construction, the developer shall keep an accurate record of all construction work performed. Upon completion and prior to acceptance by the village of the completed public improvements, the developer shall have prepared and shall submit to the village "Record Drawings" showing complete "as-built" information for all improvements. The record drawings shall be prepared and sealed by a registered professional engineer and shall contain a certification that all improvements have been constructed in accordance with the approved final engineering plans or with approved changes thereto. The record drawings shall consist of one (1) set of reproducible mylar drawings, ~~and~~ two (2) sets of prints or copies, and one (1) compact disc containing a copy of the record drawings in a format compatible with the version of Microstation currently in use by the village engineer.

H. Operation and maintenance manuals: Where appropriate, the developer shall submit Operation and Maintenance Manuals to the village engineer for review and approval prior to acceptance.

I. Final inspection: The village engineer in the presence of the developer, project engineer, and contractors shall make a final inspection of the completed work, and shall report the findings and recommendations to the village board.

J. Connections: No permanent connection shall be made with the sanitary sewer, storm sewer, or water distribution system until such connection has been approved by the village and all permit fees for the connection have been paid.

K. Certifications for construction guarantee reduction: Prior to the village authorizing any construction guarantee reduction, the developer shall submit to the village a request for said reduction

along with certifications from the developer and project engineer that the public improvements included under the construction guarantee have been constructed in substantial compliance with the village approved improvement plans and specifications.

16.19.170 Pedestrian circulation system.

A pedestrian circulation system shall be provided in the development or subdivision to connect individual dwelling units with parking and garbage disposal areas, to connect neighboring dwelling units, and to connect groups of dwelling units with schools, parks, commercial facilities, and other community facilities.

A. Criteria for type of pedestrian circulation system:

1. The village board shall approve the type of pedestrian circulation system appropriate for the subdivision and for the Village, which may require the physical separation of the pedestrian circulation system from the vehicular circulation system, depending upon:

- a. The size of the subdivision.
- b. The pathway system, if any, used on adjacent property.
- c. The topography of the property.
- d. The official plan of the village.
- e. The presence of any "linear" physical features on the site, such as utility rights-of-way, and other similar features.
- f. The amount of unsubdivided property adjacent to the subject site.
- g. The location of schools, parks, and community focal points.

2. If the pedestrian circulation system is physically separated from the vehicular circulation system, the village board may approve a reduction in the right-of-way width of local streets.

B. Design layout:

1. The layout of the system shall have a reasonable relationship to connections between residential areas and schools, area-wide parks, commercial facilities, work areas, existing or potential public transportation points, and other community facilities in a convenient and logical fashion.

2. The circulation system shall improve or assure public access at locations offering unusual overlooks or other particularly interesting physical features.

3. Extensions into adjoining property should be provided.

4. Conflict points with vehicular traffic shall be minimized, and shall be located only where there are adequate sight distance, grade separation and/or appropriate safety devices.

5. The circulation system shall be selected to have minimum practical change in grade throughout its length and shall follow the natural slope of the land.

6. The circulation system shall provide for rest areas.

7. The system shall to be built to applicable village Engineering Standards.

C. The circulation system shall be located within public rights-of-way, public easements, common areas maintained by a homeowner's association, parks, or schools sites.

Chapter 16.20

FLAG LOT SUBDIVISIONS

Sections:

16.20.010	Defined.
16.20.020	Minimum frontage.
16.20.030	General requirements.
16.20.040	Access.
16.20.050	Road and drainage requirements.
16.20.060	Engineering improvement plans.
16.20.070	Plat of subdivision.
16.20.080	Landscape screening.

16.20.010 Defined.

□ Flag lot, □ as used in this chapter means a tract of land not having sufficient width on a road to create more than one lot abutting such road but with sufficient area and depth to be divided into more than one buildable lot. (Ord. 1990-O-36, 1 (A))

16.20.020 Minimum frontage.

All flag lots shall have a minimum frontage on the abutting access road of not less than sixty-six feet. (Ord. 1990-O-36, 1 (B))

16.20.030 General requirements.

Flag lot subdivisions shall be permitted only when such subdivisions will conform to all of the following criteria:

- A. The parcel to be subdivided displays unusual topography or exceptional narrowness which would otherwise prohibit its division into more than one buildable lot;
- B. All lots which will be created are to be used solely for single-family residential purposes;
- C. No more than three lots-in-depths or five total lots may be served by the new road, necessitated by the subdivision;
- D. The development of such subdivisions, including the location, length and width of the access road, shall not be detrimental to nor hinder the future development of any adjoining parcels or the general area. (Ord. 1990-O-36, 1 (C))

16.20.040 Access.

- A. Access to all lots shall be provided by a right-of-way width of no less than fifty feet in width and bonded and improved to the standards specified in the road extension ordinance.
- B. In special cases, if the subdivision is contiguous to a parcel of like kind, a right-of-way of thirty-three feet may be approved on the adjoining boundary line.
- C. In subdivisions containing more than five lots, no flag lot shall be allowed, and no oversized lots shall be allowed wherein the lot thus created could only be further subdivided under this chapter.
- D. A front lot within flag lot subdivision shall gain access to the public street only through the new right-of-way created by such subdivision. (Ord. 1990-O-36, 1 (D))

16.20.050 Road and drainage requirements.

- A. An eighteen-foot-wide gravel base with an eight-inch thickness of compacted gravel shall be provided. The ditch drainage shall be compatible with the topography. A bituminous surface

shall be applied when eighty percent of the subdivision is completed. This requirement shall not limit the village's authority to draw upon any security provided by the developer for roadway or other public improvements.

B. The requirements for entrance design must be obtained from the agency maintaining the road from which access is taken. This may include a bituminous surfacing requirement.

C. In the vicinity of the far lot(s) a cul-de-sac shall be required for safety and fire purposes.

A T turnaround, if built when road is under construction, will be acceptable. (Ord. 1990-O-36 1 (E))

16.20.060 Engineering improvement plans.

The developer's engineer shall submit modified engineering improvement plans. These plans shall include plan and profile views showing a grade line with proposed elevations at each station, the location of crossroad culverts, a typical cross-section and estimate of cost. The plans may be drawn on 8 1/2" x 11" sheets and shall be properly signed and sealed by the engineer. (Ord. 1990-O-36 1 (F))

16.20.070 Plat of subdivision.

Where a tract of land qualifies under the provisions of this chapter and the owner or owners thereof are desirous of dividing such plat by the provisions of this chapter, a plat of subdivision shall be prepared by a surveyor in accordance with the Illinois Revised Statutes, as amended. The plat shall be processed as provided elsewhere in this title, and shall comply with applicable provisions of the village zoning ordinance and site capacity ordinance. A note shall appear on the plat prohibiting the creation of any additional building lots under this provision and clearly stating the driveway access to the lots is a private driveway not maintained by the village. (Ord. 1990-O-36 1 (G))

16.20.080 Landscape screening.

A. Landscape, or other suitable screening in right-of-way, so as to minimize the visual impact on the surrounding properties, and the property being subdivided, shall be shown on original plat and approved by the village board.

B. Existing natural vegetation may be used either totally or in part to fulfill the above landscape requirements.

C. Maintenance of such landscaping shall be the responsibility of the property owner adjacent to the right-of-way and shall be so noted on the original plat. (Ord. 1990-O-36 1 (H))

Chapter 16.21

OTHER CONSTRUCTION REQUIREMENTS.

Sections:

- 16.22.010 Preconstruction requirements.
- 16.22.020 Construction requirements.
- 16.22.030 Post construction requirements.

16.21.010 Preconstruction requirements.

No construction shall begin until the following requirements have been met:

- A. The developer shall provide three copies of “Approved For Construction” plans and specifications to the village engineer.
- B. The engineer’s estimate of probable cost must be approved by the village engineer.
- C. Final plat of easement and/or subdivision must be recorded.
- D. The developer must pay bonds and fees as provided by applicable ordinances.
- E. The developer and the selected contractors must provide to the village engineer certificates of insurance as to Workman’s Compensation, comprehensive general liability, automobile liability, and excess liability as follows:

Workers' Compensation as follows:

State	Statutory		
Applicable Federal	Statutory		
(e.g., Longshoreman's)			
Employer's Liability	\$1,000,000	Each Accident	
	\$1,000,000	Disease Policy Limit	
	\$1,000,000	Disease, Each Employee	

Comprehensive General Liability, including completed operations, as follows:

Bodily Injury

\$1,000,000	Each Occurrence
\$1,000,000	Annual Aggregate, Products and <u>C</u> ompleted Operations

Completed operations insurance shall be maintained for at least two years after acceptance of work by the village.

Broad Form Property Damage

\$1,000,000	Each Occurrence
\$1,000,000	Annual Aggregate

Broad Form Property Damage liability insurance shall provide Explosion Collapse and Underground coverages where applicable.

Personal Injury, with employment exclusion deleted

\$1,000,000 Annual Aggregate

Contractual Liability

\$2,000,000 Limited Form

Comprehensive Automobile Liability - combined single limit coverage as follows:

\$1,000,000 Combined Single Limit

Excess Liability as follows:

\$ 2,000,000 Each Occurrence

\$ 2,000,000 Annual Aggregate

Higher excess liability limits may be required by the village for projects with a construction cost in excess of \$ 2,000,000.

The general liability and excess liability policies shall name the village and the village's engineer as "additional insured." Under Worker's Compensation coverage, this coverage for the village and the village's engineer shall be shown as an Alternate Employer Endorsement. Insurance carriers shall be licensed in the State of Illinois and shall be A.M. Best rated A- or better.

F. Permits have been obtained from all public and private agencies having jurisdiction over the project.

G. Preconstruction Meeting: Prior to beginning of the installation of any improvements, the developer, the project engineer, and general contractor shall attend a pre-construction meeting with village staff, the village engineer, and other appropriate authorities. The purpose of the meeting shall be to review acceptable site development and construction practices in accordance with the construction control plan and village ordinances and policies.

H. Qualifications of contractors: The developer shall file with the village a list of all constructors and subcontractors who are to participate in the construction of public improvements. Such contractors and subcontractors shall be subject to disqualification by reason of faulty performance or prior construction work done.

16.21.020 Construction requirements.

A. Limited Completion Time of Public Improvements: Construction of all required public improvements must be completed within two (2) years from the date of final plat approval unless good cause can be shown to the village board for granting an extension of time. A request for an extension shall not stop the running of the two-year period. No extension shall be granted unless adequate guarantee collateral has been received and approved by the village board.

B. Project Representation: The developer shall be represented by a project engineer to observe the construction of the public improvements, to provide construction guidance, to certify construction in conformance with the approved improvement plans and specifications, to review and certify the quantities of work items on any reductions in the construction guarantee, to witness required tests in the presence of the village engineer and to prepare record drawings. All inspection reports of the project engineer and required test results shall be submitted to the village prior to final acceptance.

C. Village Engineer: The village engineer will conduct periodic observations of the public improvements, witness the tests of the public improvements, review and recommend action relative to the construction guarantee, advise the village of potential problems and conduct semi-final and final

inspections of the improvements. The presence of the village engineer shall not relieve the developer or his agents from his responsibility to perform the work in a good and workmanlike manner and in accordance with the approved plans and specifications. The Developer shall reimburse the village for all services and costs of the village engineer incurred by the village. The developer shall pay the fees incurred by the village for engineering and planning inspections and shall establish an escrow account in the amount of 50% of the estimated actual fees for such services, as determined by the village. The developer shall make payments, and the escrow shall be maintained, in accordance with the provisions of this title. The fee shall be paid upon approval of the Final plat. No construction may begin, nor any permits issued, until this fee has been paid to the village.

D. Notice to village engineer: Whenever testing or observation is required by this title to be performed in the presence of the village engineer, the developer shall provide a minimum of two (2) full business days notice to the village engineer of the time such tests are scheduled to take place. If such notice is not provided, re-testing may be required.

E. General Observation Periods: The general observation periods or visits by the village engineer shall be as follows:

CONSTRUCTION OPERATION	DEGREE	REMARKS
1. Site Preparation	As required by village	Clearing rough and fine grading, erosion control
2. Sanitary Sewers	Full time observation or as required by village	Underground
3. Storm Sewer & Culvert	Full observation or as required by village	Underground
4. Watermains	Full time observation or as required by village	Underground
5. Roadway System		
a. Subbase	Daily periodic observation	Final approval required before base course
b. Base course	Daily periodic observations	Final approval required before continuing
c. Curb forming	Periodic observation	Checking of forms prior to concrete
d. Sidewalk forming	Periodic observation	Checking of forms prior to concrete
e. Curb, Sidewalk & ROW	Part-time observation or as required by complexity	During placement
f. Binder Course	Full time observation or as required by village	During placement
g. Surface Course	Full time observation or as required by village	During placement

h. <u>Driveway aprons</u>	As required by complexity	
6. Other Improvements		
a. Lakes & detention basins	As required by village	Rough and fine grading
b. Building	As required by complexity	
c. Recreation area	As required by complexity	
7. Off-site improvements	As required by complexity	During Placement
8. Construction guidance and	As required by complexity	Bond status report, "punch lists", <u>administration</u> correspondence, permit applications, filing and typing

F. Shop Drawings: Where appropriate, the developer shall submit shop drawings to the village engineer for review and approval prior to the installation of materials and equipment.

G. Soil Investigations

1. If the subdivision or development contains questionable soil, soil investigations, borings or other soil tests may be necessary to determine the nature and extent of such questionable material. The owner or developer shall retain or cause to be retained the services of a competent testing laboratory to perform the needed investigations.

2. Copies of the completed reports prepared by the testing laboratory shall be filed with the village engineer.

3. The village shall have no liability for costs connected with the tests, borings or interpretations or results of such work.

H. Blasting: No blasting shall take place in connection with any work in a subdivision or development until appropriate village authorities have been notified and the applicable village ordinances complied with.

I. Underground utility placement: No underground utilities or storm sewers, except inlet drains, shall be installed under the pavement in streets, alleys, service roads, or highways. Service connections to such underground utilities and sewers shall be extended to the property line of each lot so as to obviate disturbing the surface improvements in such public ways when service connections are later made. Where underground utilities are located in the parkway adjacent to the paved roadway, service connections to properties across such roadway shall only be made by drilling under the pavement in such a way that surfacing is not disturbed or weakened, and excavation shall be compacted granular backfill and properly restored. The current Illinois Standard Specifications for Water and Sewer Main Construction, latest edition shall apply.

J. Debris removal: The developer shall clean and maintain all public ways, sewers, and drains free from debris, trash or other extraneous material, during construction to prevent the creation of a public nuisance. The developer shall clean all such public ways, sewers and drains of all debris, trash or other extraneous material prior to acceptance by the village.

K. Modifications of design improvements during construction: During the course of construction, the project representative shall note any circumstances which necessitate departures from the plans and specifications for the improvements, as approved, including but not limited to, an unforeseen difficulty in drainage, ground water, poor subsoil, unstable fill material, or unconventional or faulty practices of subcontractors. Whenever such departures are likely to cause a lower ultimate level of

performance than could reasonably have been anticipated, the representative shall prepare a report of his findings of the situation and promptly forward copies to the village engineer.

L. Connections: No permanent connection shall be made with the sanitary sewer, storm sewer, or water distribution system until appropriate testing for the public improvements has been successfully completed, such connection has been approved by the village and all permit fees for the connection have been paid.

16.21.030 Post construction requirements

A. Upon completion of construction, final testing and observation, and prior to final acceptance of public improvements by the village, the developer shall provide the following:

1. Certificate by the developer's engineer that the public improvements have, in all respects, been completed in accordance with the "Approved for Construction" plans and specifications.

2. Copy of all test results including video tapes.

3. Record Drawings: During construction, the developer shall keep an accurate record of all construction work performed. Upon completion and prior to acceptance by the village of the completed public improvements, the developer shall have prepared and shall submit to the village "Record Drawings" as described by this ordinance.

4. Operation and Maintenance Manuals: Where appropriate, the developer shall submit Operation and Maintenance Manuals to the village engineer for review and approval prior to acceptance.

5. Final Observation: The village engineer in the presence of the developer, project engineer, and contractors shall make a final observation of the completed work, and shall prepare a punchlist for completion by the developer. The village engineer shall repeat observation of the improvements following notification by the developer that the punchlist items have been completed. Once punchlist items have been completed to the satisfaction of the village engineer, the village engineer shall make a recommendation to the village board for acceptance.

6. Landscaping Improvements: Landscaping improvements must be approved by the village planner.

7. Any warranty deeds, affidavits of title, easements or Bills of Sale that may be required;

8. Evidence that the property upon which the improvement is made is free and clear of any liens and encumbrances;

9. A sworn statement executed by the contractor completing the improvement identifying the names and addresses of all entities providing materials, labor or equipment for the public improvement and showing that all entities providing materials, labor or equipment have been fully paid as well as final waivers of lien from each contractor or subcontractor or other entity providing any equipment, material or labor for the construction of the public improvement;

10. A commitment for title insurance from Chicago Title Insurance Company or such other company accepted by the village in an amount acceptable to the village, showing the village as the owner of any property or easement which is to be transferred to or granted to the village;

11. Evidence that the developer has satisfied all Federal, State, County and village requirements;

12. Evidence that the developer is in compliance with the other terms and conditions of this title, including payment of any fees;

13. The maintenance bond required by this title.

B. If all of the requirements for completion of a public improvement have been met, and all reimbursable fees have been paid in full to the village as set forth herein and the developer is in

compliance with this title, its final plat, engineering plans and its development agreement, if any, approval and acceptance of the public improvement shall be made by resolution of the village board. The village's acceptance of a public improvement shall not be effective until the village board has formally approved and accepted the improvement and issued written approval of the same to the developer based upon the recommendation of the village engineer and the village planner.

1. A single improvement shall not be accepted in part. An improvement shall be complete throughout the Subdivision as indicated on the final engineering plans prior to acceptance by the village. All public improvements within a development will be accepted at one time.

2. Acceptance of an improvement shall constitute a release of the applicable portion of the posted construction guarantee for satisfactory completion of said improvement.

3. All costs related to the construction and installation of the required improvements shall be borne by the developer, and said improvements shall be dedicated to the village without charge.

Chapter 16.24

ASSURANCES FOR COMPLETION, ACCEPTANCE AND MAINTENANCE OF IMPROVEMENTS

Sections:

- 16.24.010 Improvements—Completion agreement.
- 16.24.020 Improvements—Completion guarantee.
- 16.24.030 Improvements—Maintenance guarantee.
- 16.24.040 Improvements—Developer agreement—Approval.
- 16.24.050 Improvements—Developer agreement—Terms and conditions.
- 16.24.060 Improvements—Maintenance.
- 16.24.070 Improvements—Deferral or waiver.
- 16.24.080 Issuance of building permits and certificate of occupancy.
- 16.24.090 Acceptance of improvements and release of bond.
- 16.24.100 Land dedications.

16.24.010 Improvements- Completion agreement.

Before the final plat is signed by the president of the village, all applicants shall be required to agree to complete, in accordance with the decision of the president and board of trustees and to the satisfaction of the village engineer, all the street, sanitary, and other improvements, including lot improvements on the individual lots of the subdivision as required in this title, specified in the final subdivision plat and final engineering drawings, as approved by the president and board of trustees, and to dedicate the public improvements to the village free and clear of all liens and encumbrances on the property. (Ord. 1989-O-30 1.401 (A))

16.24.020 Improvements - Completion guarantee.

A. Prior to the approval of the final plat of subdivision, the applicant shall guarantee the installation of any and all required public improvements at his own expense in accordance with the plans and specifications required under the terms of this chapter and within the time required as a condition, for approval which completion guarantee may take the form of any of the following, at the option of the applicant:

1. A subdivision bond, with sufficient corporate surety in the form approved by the village attorney and payable to the village; or
2. An irrevocable straight line commercial letter of credit with any recognized financial institution in the form acceptable to the village attorney; or
3. A noninterest bearing cash escrow consisting of a cash deposit or certified or cashier's check in the total amount required, which shall be placed with the village treasurer and administered in accordance with the provisions of the escrow agreement to be negotiated by and between the village president and the applicant, and approved by the village attorney. Such agreement shall contain provisions for specific application of such funds, partial contract payouts, pro rata reduction of deposit excess, final escrow settlement and other pertinent administrative matters as may be required.

B. The amount of the completion guarantee shall be based upon the following (whichever is higher):

1. Total cost for estimated construction, engineering, surveying and fees for all required public improvements plus twenty-five percent of such total for contingencies, as

approved by the village engineer; or

2. Total contract cost for construction, engineering, surveying and fees for all required public improvements under contract plus twenty-five percent of such total contingencies, as approved by the village engineer. (Ord. 1989-O-30 1.401 (B))

C. The amount of the Letter of Credit, cash, or other securities may be reduced upon successful completion of the improvements. The village engineer must inspect the public improvements and recommend any reduction. A Letter of Credit may be reduced, and cash and other securities released in part upon completion of public improvements. At no time prior to final acceptance of the project shall the amount of the Letter of Credit, cash or other securities be reduced to an amount which is less than 125% of the estimated cost to complete the remaining public improvements, plus 25% of the actual cost of the completed public improvements, all as approved by the village engineer. In no event shall the amount of a Letter of Credit or cash and other securities be reduced to an amount below 25% of the initial principal amount of the Letter of Credit, cash or other security, unless approved by the village board.

D. No developer shall fail to pay any contractor or subcontractor for work performed such that a lien arises upon the public funds of the village. If any such lien is perfected, the village in its discretion may draw upon the developer's Letter of Credit, cash or other security posted in accordance with this title to pay any such lien.

16.24.030 Improvements- Maintenance guarantee.

The aforesaid required public improvements shall become the property of the village after construction of such improvements by the applicant or his designated representative, followed by approval of such construction and installation by the president and the board of trustees of the village.

A. Immediately upon the aforesaid approval by the president and board of trustees, the applicant shall give title to such water mains, sanitary sewer mains and other public improvements to the village by a proper bill of sale.

B. Furthermore, not later than at the time of said approval by the village and the giving of the aforesaid bill of sale by the applicant, the applicant shall have posted with the village adequate surety consisting of ten percent of the actual construction cost in the form of a letter of credit, maintenance bond, cash deposit or certified or cashier's check.

C. The final release of the original maintenance guarantee, less any costs of repairs covering a subdivision's improvement work held for the two (2) year guarantee period will be predicated upon an inspection of all improvements including a leak detection test of the subdivision's water main segments, and a videotape recording of a television inspection at all sanitary sewer mains conducted within 60 days of the expiration of the two (2) year guarantee period.

a. An approved qualified leak detection specialist will perform this test. The test results will be forwarded to the village engineer for final determination of an acceptable level of leakage. The village engineer will then, based on the test results, recommend the final release of the remaining letter of credit or other maintenance surety sum still being held for the water main and sanitary sewer main guarantees.

1. Such deposit shall be posted with the village under the terms of Section 16.24.020.

2. Such deposit shall be held by the village for a period of twenty-four months after the final acceptance of such improvements for the purpose of:

a. Guaranteeing against and securing the correction of any defect in material or workmanship furnished for such improvements, latent in character and not discernible at the time of final inspection or acceptance by the village;

b. Guaranteeing against and securing the correction of any damage

to such improvements by reason of settling of the ground, base, or foundation thereof.

D. Such maintenance guarantee shall also provide that as such defects develop, the cash deposit may be applied by the village for any amounts incurred to correct such defects and that the balance of such deposit, if any, held at the end of such twenty-four month period, shall be returned by the village to the depositor without interest. (Ord. 1989-O-30 1.401 (C))

16.24.040 Improvements -Developer agreement - Approval.

The developer's agreement shall be approved by the president and board of trustees as to amount, surety and other conditions. The plan commission may upon proof of difficulty, recommend to the president and board of trustees an extension of the completion date set forth in the developer's agreement for a maximum period of one additional year. The village president and board of trustees may at any time during the period of the developer's agreement accept a substitution of principal or sureties called for in the developer's agreement. (Ord. 1989-O-30 1.401 (D))

16.24.050 Improvements- Developer agreement - Terms and conditions.

The developer's agreement shall include the following terms and conditions:

A. Temporary Improvement. The applicant shall build and pay for all costs of temporary improvements required by the plan commission and shall maintain those improvements for the period specified. Prior to the construction of any temporary facility or improvement, the applicant shall file with the village a separate bond for the temporary facilities; the bond shall be sufficient as to amount and form to ensure that the temporary facilities will be properly constructed, maintained, and removed.

B. Costs of Improvements. All required improvements shall be made by the applicant, at his expense, without reimbursement by the village or any other public entity.

C. Failure to Complete Improvements, for Subdivisions or Developments, for Which No Bond Has Been Posted. The approval shall be deemed to have expired if the improvements are not completed within the period specified. In those cases where a bond has been posted and the required improvements have not been installed within the terms of such bond, the village may thereupon declare the bond to be in default and require that all the improvements shall be installed regardless of the intent of the building development at the time the bond is declared to be in default.

D. Acceptance of Dedication Offers. Acceptance or formal offers of dedication of streets, public areas, easements and parks shall be by motion adopted by the president and board of trustees. The approval by the plan commission of a subdivision plat shall not be deemed to constitute or imply the acceptance by the village of any street, easement, park or other public interest in land shown on the plat. The plan commission may require the plat to be endorsed with statements to this effect.

E. Inspection of Improvements - Fees. The village president shall cause inspection of the required improvements to be made during construction to ensure their satisfactory completion. The applicant shall pay to the village inspection fees in amounts specified from time to time by resolution adopted by the president and board of trustees. These fees shall be due and payable on demand of the village, and no building permits or certificates of occupancy shall be issued until all fees are paid. If the village engineer finds upon inspection that any of the required improvements have not been constructed in accordance with the village's construction standards and specifications, the applicant shall complete the improvements as required. Whenever the cost of improvements is covered by a bond, the applicant and the bonding company shall be jointly and severally liable for completing the improvements according to specifications. (Ord. 1989-O-30 1.401 (E))

16.24.060 Improvements - Maintenance.

Any action of any board, commission, group, officer, agent, or employee of the village or any approval of any plat or plan to the contrary notwithstanding, until the adoption of such motion by the president and the board of trustees formally accepting said public improvements, all such public improvements shall remain the property of the applicant, who shall have full and complete obligation for repair and maintenance and shall be responsible for keeping said improvements free from debris, trash, snow and other extraneous material to prevent the creation of a public nuisance. (Ord. 1989-O-30, 1.402)

A. The developer shall maintain and repair all required improvements including snow and ice removal on streets and sidewalks, if necessary, until acceptance of said improvements by the village board. If any necessary maintenance and repairs are not made to the required improvements in a timely fashion by the developer, the village may, on 12 hours notice to the developer, affect such repairs or maintenance, and shall charge the costs of the same to the developer.

1. The developer shall maintain the streets and roadways in a safe passable condition. The village may effect such ice or snow removal in less than the 12 hours if, in the opinion of the Superintendent of Public Works or such other appropriate official of the village, that the streets are unsafe for emergency vehicles. The cost of same shall be charged to the developer.

2. Any such repair or maintenance costs or snow and ice removal costs may be charged to the developer's Letter of Credit, cash or other security.

16.24.070 Improvements -Deferral of waiver.

A. At the time of final approval, and subject to appropriate conditions, the plan commission and the president and board of trustees may defer or waive the provision of any or all such improvements as it deems not to be necessary and in the interests of the public health, safety, and general welfare, or which are inappropriate because of inadequacy or lack of connecting facilities.

B. Whenever the president and board of trustees deems it necessary to defer the construction of any improvement required herein because of incompatible grades, future planning, inadequate connecting facilities or for other reasons, the applicant shall pay his share of the costs of the future improvement to the village prior to the signing of the final subdivision plat, or sign the village's standard restrictive covenant waiving right to protest future special assessment, or the applicant may post a bond ensuring completion of the improvement upon demand of the village. (Ord. 1989-O-30, 1.403)

1. Should the village board approve deferral of public road improvements for an individual lot development, including single family residences, the applicant will be required to supply the village with an actual cost of construction for public improvements from a licensed engineer. The application will be subject to review and acceptance by the village engineer. Once accepted, the applicant shall then escrow into a Public Improvement Fund one-half of that amount for installation of public improvements (applicant's obligation). Capital from the Public Improvement Fund will be available for public street improvements in the village as deemed necessary by the Public Works Department.

C. The street improvements and appurtenances associated with the development may be completed upon 80% of the total units being occupied in a subdivision with the approval of the village engineer, or as otherwise approved by the village engineer. Upon completion and approval by the village engineer, the developer may deposit with the village a sum determined by the village in an amount equal to 25% of the value of the street system work. This deposit will relieve the developer of any further maintenance responsibility, including the three-year guarantee that would otherwise be required.

16.24.080 Issuance of building permits and certificate of occupancy.

With respect to any final plat of subdivision wherein the final plat thereof has been approved by the village president and board of trustees and recorded with the recorder of deeds of the county:

A. No building permit shall be issued unless the extent of street improvements shall be adequate for vehicular police and fire equipment access to a proposed building site prior to the issuance of a building permit.

B. No building permit shall be issued for the final ten percent of the lots in the subdivision (as determined by the village) or, if ten percent of the total number of lots be lesser than two lots, for the final two lots of a subdivision until all public improvements required by the plan commission and approved by the president and board of trustees for the plat have been fully completed and dedicated to the village and such dedication formally accepted by the president and board of trustees.

C. Where a satisfactory bond has been required for a subdivision, no certificate of occupancy for any building in the subdivision shall be issued prior to the completion and dedication of the improvements as required by the president and board of trustees upon approval of the final plat. (Ord. 1989-O-30 1.404)

16.24.090 Acceptance of improvements and release of bond.

The completion and acceptance of public improvements shall be in accordance with the following:

A. Improvements shall be completed within two years of the recording of the final plat.

B. All bonds for all public improvements shall be in full force and effect from the date of the recording of the final plat until approval and acceptance of the public improvement by the president and board of trustees.

C. In addition to other post-construction and acceptance requirements detailed elsewhere in this title, reproducible as-built drawings of the approved final engineering plans shall be supplied to the village prior to acceptance. The drawings shall contain the following additional minimum elements:

1. Major utility relocations (i.e., structures, grades, street lights);

2. Rim and invert elevations and horizontal locations of all wetwells, manholes, catch basins, inlets and valve vaults and grade ring elevations and horizontal locations of all fire hydrants. Horizontal locations shall be designated with road stationing and offsets, or by at least two separate dimensions to property lines or permanent physical structures. Invert elevations shall be given for each pipe entering or exiting a structure;

3. Lateral location by dimension from the downstream manhole of sanitary sewer and water services including individual service boxes;

4. Sufficient information to determine that the detention and retention and conveyance facilities are substantially in accordance with the approved engineering plans and contain the required storage volume, including as-built contours, outlet restrictor and overflow sizes and elevations, and storage volume calculations;

5. Road centerline, curb and sidewalk horizontal location. Provide road centerline elevations;

6. Locations of all street lights and electrical lines associated with the street light system.

D. Reproducible as-built drawings of the approved final engineering plans shall be supplied to the village prior to acceptance. The drawings shall contain the following additional minimum elements:

1. Major utility relocations (i.e., structures, grades, street lights);

2. Rim elevations of all manholes, catch basins, inlets and valve vaults and grade ring elevations of all fire hydrants;

3. Lateral location by dimension of sanitary sewer and water services including

individual service boxes;

4. Sufficient information to determine that the detention and retention facilities are substantially in accordance with the approved engineering plans and contain the required storage volumes.

E. Upon completion of the improvements, the applicant may request release of the bond by providing a certificate from the village engineer that all improvements are constructed in accordance with the specifications of this title and by providing as-built drawings of all improvements covered by the bond. A certificate shall not be signed with respect to sewer mains until they have been properly tested and televised. The applicant shall also tender a warranty bill of sale for all improvements in a form acceptable to the village attorney indicating said improvements are complete, are ready for dedication to the village, and are free and clear of any and all liens and encumbrances.

F. Upon receipt of the certification of the village engineer that a public improvement has been installed in conformity with approved plans and specifications, the president and board of trustees of the village shall adopt a motion formally approving said public improvement.

In the event said public improvement is to be dedicated to the village pursuant to this title, the motion shall formally accept said public improvement, at which time it shall become the property of the village. (Ord. 1989-O-30, 1.405)

16.24.100 Land dedications.

A. Dedication of all land, easements and rights-of-way to the public shall be shown and indicated on the Final plat, which shall be accompanied by an irrevocable offer to dedicate said land, which offer shall be recorded with the Lake County Recorder of Deeds.

B. Acceptance of such dedicated land, easements or rights-of-way shall be by action of the village board and shall be by warranty deed from the developer. Developers shall present evidence of good title through a Title Insurance Policy issued by a reputable company, dated within one year of the dedication and shall also present waivers of all mechanics liens and an affidavit of title that all property is being conveyed free and clear of all encumbrances and liens up through the date of conveyance.

C. Lands covered by this section include, but are not limited to: streets, easements, rights-of-way, park sites, trails and greenways, storm water detention areas and wetlands and municipal sites.

D. Prior to the conveyance of land, the developer shall furnish to the village, or other appropriate governing authority in the case of land dedications, the following:

1. Certification that soils are free of all noxious or toxic chemical matter, as defined by the Illinois Environmental Protection Agency.

2. Certification that soils are free of unsuitable fill materials, including, but not limited to: Construction or demolition debris; excessive quantities of trees, roots and other vegetable matter; discarded household or machinery items and unstable soils.

3. A recognized firm, specializing in environmental investigations shall prepare the certification.

Chapter 16.26

DEDICATION OF PARK LANDS OR FOR PAYMENT OF FEES IN LIEU THEREOF AND OTHER CONTRIBUTIONS TO SCHOOL DISTRICTS.

Sections:

- 16.26.010 Requirements for dedication of park land.
- 16.26.011 Table of estimated ultimate population per dwelling unit.
- 16.26.012 Requirements for contributions to applicable school districts.
- 16.26.013 General provisions.

16.26.010 Requirements for dedication of park land.

As a condition of approval of a final plat of subdivision or of a final plat of a planned unit development for six (6) or more lots, land for park and recreational purposes, or cash contributions in lieu of land, or a combination of both, at the option of the village, shall be provided to serve those needs specifically and uniquely attributable to the residents of the subdivision or planned unit development. Planning studies indicate that the population growth in the village which accompanies new developments will accelerate in the coming years which will result in the rapid disappearance of available land and the marked increase in land values. The village has found that a healthful, productive community life depends in part on the quality of local parks. The village has found and determined that the public interest, convenience, health, welfare, and safety require the establishment of park sites and facilities serving the new residents of the village.

Demographic studies of the residential portions of a proposed subdivision or planned unit development can be readily and scientifically conducted to determine the number of children and adults to be generated therefrom and provide data by which the required dedications of land and capital costs specifically and uniquely attributable to the activity of the developer and the proposed subdivision or planned unit development may be calculated.

This land or cash or combination thereof shall be provided in accordance with the following criteria and formula:

- A. Criteria for park and recreational land requirements.
 - 1. Land Requirement and Population Ratio: The amount of land required for dedication for park and recreational purposes shall be a direct function of the ultimate population density of a proposed development. The total requirement shall be 15 acres of land per 1,000 persons of ultimate population computed in accordance with the Table of Estimated Ultimate Population Per Dwelling Unit, included in section 16.26.011.
 - 2. Location: The location and configuration of the site to be dedicated shall be determined by the village board, which shall take into account the comprehensive plan of the village, the suitability of the site for park purposes or development, its relationship to population concentrations and its proximity to other park or recreational lands. Donated land should be reasonably accessible and should be centrally located to all lots within the impacted area, where feasible.
 - 3. Minimum size, topography, soils, improvements and landscaping:
 - a. Minimum size: The minimum size of land to be dedicated for park and recreational purposes shall be no less than one acre, one dimension of which cannot be less than 100 feet. However, the village board may recommend, and the village board may approve, dedications of smaller sizes, when required by the specific plans of the

development and when the usefulness of the smaller area for park and recreational purposes is demonstrated.

b. Topography and soils:

1. The site must be graded to meet topography and to meet existing drainage patterns.

2. At least 80% of the donated land for park and recreational purposes shall be suitable in topography and soil types for recreational facilities.

3. The soil shall allow construction of recreational facilities and have a soil bearing capacity to support recreational facilities. Recreational facilities are defined as "buildings and other physical features set aside in a park site that are used by participants of the community." Examples of recreational facilities include, but are not limited to, a swimming pool complex, playground picnic shelter, picnic sites, baseball/softball field, football/soccer field, various games activity courts, tennis court, basketball court, volleyball court, restroom/storage building, community center and waterfront area.

c. Improvements and landscaping:

1. Each park site shall have sanitary and storm sewer, water, electricity, and gas available at the property lines of the dedicated site when these utilities are required in the development or subdivision.

2. A designated paved parking area with curbing not to exceed 9 spaces and 1 disabled space for a total of ten spaces, and located in close proximity to a dedicated street shall be provided in park sites over one acre.

3. Landscaping. All seeding shall be of an acceptable stand of grass suitable for recreational uses to meet village specifications. The type of seed to be planted shall be subject to village review and approval prior to final plat approval. A minimum of 6 trees per acre, at least 2.5" in caliper measured one foot from the ground, shall be planted. The number and placement of trees shall be subject to village review and approval prior to final plat approval.

4. Use of wetlands, floodplain and detention areas for dedications: Wetlands, floodplain and detention areas for storm water control shall not normally qualify as land for park and recreational purposes, but may be approved by the village board if an acceptable recreational use can be demonstrated or the area offers an exceptional amenity or the chance to protect a significant natural resource.

5. Environmental quality: If appropriate, the village may require an environmental site assessment to identify potential concerns. No site that has been part of an unlicensed landfill or a toxic waste dump shall be acceptable for park and recreational purposes.

6. Private open spaces and recreational areas: Land for park and recreational purposes shall not be privately owned and maintained unless specifically approved by the village board. The detailed plans for all improvements for such park and recreational land that is privately owned and maintained shall be subject to review and approval by the village board. Guarantees of the permanency of the use and maintenance of such privately owned and maintained park and recreational open space, satisfactory to the village, shall be entered into by the developer. The guarantees may include covenants and/or express provisions in the articles of condominium ownership or constitution and by-laws of a homeowner's association as determined by the village board.

B. Criteria for requiring a contribution in lieu of park sites: Where the development is small and the resulting land dedication is too small to be practical, or when the available land is inappropriate for park and recreational purposes, as determined by the village board, the developer shall pay a cash contribution in lieu of the land required.

1. Cash contribution in lieu of park and recreational land dedication

a. The cash contributions in lieu of park and recreational land dedications shall be held in trust by the village, or another public body designated by the village, for use in the acquisition or improvement of park and recreational land. The cash contributions shall be available to serve the immediate or future needs of the residents of that subdivision or development or for the improvement of any existing local park and recreational land which already serves such needs.

b. Fair market value. The cash contribution in lieu of land shall be based on the "fair market value" of the acres of land in the area that otherwise would have been dedicated as a park and recreational site. The fair market value, on a per acre basis, shall assume that the land is zoned residential, subdivided, stubbed with city sewer and water, has all appropriate utilities available, is improved and is otherwise property capable of being used for residential development. The fair market value shall be based upon a study of real estate transactions in Lake County for the past three (3) years and as approved by the village board based upon real estate transactions and any other indicators as to value. This figure shall be adjusted annually by the village board based on real estate transactions and any other indicators as to value. The fair market value, as defined above, shall be used in calculating any cash in lieu of land contribution herein unless timely objected to as provided in of this title. Objections to the fair market value, as defined above, shall be made to the village board in accordance with the procedure contained in this title. Failure to timely object to the fair market value, as defined above, in accordance with the provisions of this title shall constitute a waiver of any right to raise an objection at a later time.

2. Refund of cash contributions. If any portion of a cash contribution in lieu of a park and recreational land dedication is not expended for the purposes set forth herein 20 years from the date of receipt, it shall be refunded to the developer who made such contributions.

3. Criteria for requiring dedication and a fee: A combination of land dedication and a contribution in lieu of land shall be required, when:

a. The subdivision or development does not have sufficient or adequate land to meet the dedication requirements hereunder. That portion of the land within the subdivision or development which is adequate or sufficient for the park location shall be dedicated as a site as aforesaid, and a cash contribution in lieu thereof shall be required for any additional land that would have been required to be dedicated; or

b. A major part of the local park or recreational site has already been acquired and only a small portion of land is needed from the subdivision or development to complete the site. The remaining portions shall be required by dedication, and a cash contribution in lieu thereof shall be required.

4. Criteria for a fully developed park: A fully developed park, including appropriate lighting, grading, landscaping, and recreational equipment, may be required when the availability of land for park land is limited and where the recreational needs of the residents of the subdivision can be satisfied with a smaller but fully developed park with a more intensive activity level.

C. All objections relating to acreage requirements, presumptions as to fair market value, park donation requirements, or any other application of this section of the title relative to the dedication of park lands and school sites or for payment of fees in lieu thereof, to a particular lot, subdivision or

planned development, shall be referred to the village board for hearing. An objection must be made, if at all, prior to the approval by the village board of the final plat of subdivision or planned unit development. Where a plat of subdivision is not required, any objection must be made before the issuance of any building permit. A failure to object by such time shall constitute a waiver of the right to object to the provisions of this title.

1. All objections shall be in writing and at a minimum contain the following information:

a. Specific identification of the exact data, calculation or other determination to which an objection is being made;

b. A detailed written basis for each and every objection made with specific reference to all data, written documentation and/or testimony on which each and every objection is based;

c. A specific detailed statement setting forth the proper data, calculation or determination which the objector believes should be made under this title with specific and detailed reference to any data, documentary information and oral testimony supporting said position or belief;

d. Copies of all data, and/or any other documentary evidence upon which the objector intends to rely;

e. Where any data is submitted, the objection shall make a specific reference as to the source of such data;

f. Where any studies performed by or on the behalf of the objector or any other source are submitted, the objector shall further submit detailed information concerning the methods and procedures used in the study to collect and analyze data; g. Where any documentary or other evidence upon which the objector relies refers to other sources of information and/or back-up materials from which data or information was gathered, the objector shall provide copies of such back-up data and/or information;

g. The legal and common description of the properties affected by the objection.

2. All objections shall contain every and any objection being made. Any objections that are not specifically set forth shall forever be deemed waived.

3. Where any objector believes the information required to be contained in the objection creates an undue hardship, the objector shall include with its objection a sworn certification stating specific and detailed reasons why all the information required cannot be supplied and all reasons why the objector believes that requiring this information is an undue hardship.

4. Procedure for making an objection. Eight copies of every objection shall be served upon the village clerk or designee. If the objection is served on the village clerk or designee 10 or more business days before the next regularly scheduled board meeting, the objection shall be formerly presented to the village board at its next regularly scheduled meeting.

If the objection is served upon the village clerk or designee less than 10 business days before the board's next regularly scheduled meeting, the objection shall be formally presented to the village board at the first regularly scheduled village board meeting which is 10 or more days after the date the objection is received by the village clerk or designee. When the village clerk or designee receives an objection he or she shall notify the objector of the date at which the objection shall be formally presented to the village board. The objector and/or the objector's representative shall appear at the date scheduled for the presentment of the objection to the village board. On the date the objection is formally presented the village board, the objectors and the village board, shall set a date for a hearing on the objection. The village board shall have at least 30 calendar days to review and develop information to be presented at the hearing on the

objection. If the village board believes additional time is necessary, the village board shall so advise the objector at the time the objection is formally presented to the village board. The factors to be considered in determining whether additional review time may be required include but are not limited to: (1) the length of the objection and the amount of supporting data contained in it; (2) whether all back up data studies and reports have been submitted with the objection; (3) the village board's need to undertake additional study or gather additional information to consider at the hearing; and (4) the complexity of the issues involved.

5. Hearing. The hearing shall take place at a regularly scheduled village board meeting or other special meeting duly noticed and called for said purpose. The hearing shall take place on the date and time set by the village board. The village president shall preside over the hearing and render decisions on any testimonial and/or evidentiary questions that arise with the advice of the village attorney. The objector shall have the right to be represented by counsel and the right to present oral and documentary evidence to the village board. The objector and the village board all have the opportunity to cross examine each other's witnesses. Any member of the village board shall have the right to ask questions of any witness at any time. The objector and the village board shall be provided the opportunity to present rebuttal testimony and/or documentation. After the objector and the village board have submitted their testimony and documentation, the village board shall give interested members of the public the right to be heard. The village board shall have the right to continue the hearing from time-to-time on its own motion or on the request of the objector. The village board shall deliberate in public and shall issue its written decision on each objection within 30 days of the conclusion of the hearing. The village board may accept or reject the objector's position in whole or in part.

6. Notice of hearing. At least once, not more than 20 nor less than 15 calendar days before the hearing, the objector shall publish in one or more newspapers published in the village or a newspaper with a general circulation in the village, a notice setting forth the date, time and place for the scheduled hearing on the objection. The notice shall identify the nature of the objector's objection, the relief requested, identify the property or properties involved by both legal and common descriptions and invite any interested members of the public to attend. At the opening of the scheduled hearing the objector shall initially furnish to the board proof that it has complied with the requirements of this paragraph.

D. Special provisions for park and recreation donations

1. Annexation. The dedication of land, cash contribution in lieu thereof and donation of capital costs required by this title of a platted subdivision or planned unit development shall also be required as a condition of the annexation of any land to the village, and shall be incorporated in any development agreement, pre-annexation or annexation agreement governing such land. However, the village reserves the right to negotiate dedications of land or cash in lieu of land and donations for capital costs which are greater than those set forth herein.

2. Schedule of donations. The cash in lieu of land contribution and capital cost donation imposed by this title shall be made by a certified or cashier's check payable directly to the village and held by the village.

Fifty percent (50%) of any projected cash in lieu of land donation and capital cost donations imposed by this title shall be due and payable for each unit to be built prior to final plat approval of the subdivision or final approval of a planned unit development. Prior to the issuance of a building permit for each unit to be built, the balance of all cash in lieu of land donations and the balance of all capital cost donations relating to that unit shall be due and payable.

In calculating the total amount of any cash in lieu of land contribution imposed by this title, the village shall use the Fair Market Value of property in effect at the time of

building permit issuance. In calculating the total capital cost contribution imposed by this title, the village shall use the capital costs in effect at the time of building permit issuance.

For cash in lieu of land donations and capital cost donations payable prior to the issuance of any building permit, the village board shall issue a receipt for each lot or unit which shows that payment of the full cash in lieu of land donation and/or capital cost donation has been received. Each such receipt issued for donations received prior to the issuance of building permits shall identify the name of the builder/developer requesting the permit and specifically designate the subdivision and lot or unit to which the donation is referred.

At the time the first donation is made, the developer shall provide to the village board a copy of the approved plat of subdivision or other document showing all lots which are proposed to be developed. In the event any amendments or changes are made to the approved plat of subdivision or plat of planned unit development, the developer shall submit a revised plat of subdivision or planned unit development identifying all lots and showing all changes or revisions which have been made. The village board shall use the plats of subdivision or plats of planned unit development provided to mark off those lots for which the full cash donation has been paid.

3. Reservation of additional land: Where the comprehensive plan or standards of the village call for a larger amount of park and recreational land in a particular subdivision or development than the developer is required by this title to dedicate, the land needed in excess of the required dedication shall be reserved by the developer for subsequent acquisition by the village or other public body designated by the village, provided that such acquisition is started within one year from the date of approval of the final plat.

4. Combining with adjoining developments: Park or recreational land dedications may be combined with dedications from adjoining subdivisions and developments in order to produce usable recreational areas without hardship on a particular developer.

5. All sites shall have a portion of their frontage improved with water and sanitary utility lines, electrical and gas service, and fully improved streets.

6. Dedication at time of approval of final plat: Approval of any final plat of subdivision or any final planned unit development plat shall be conditioned upon the dedication of land or cash donations in lieu thereof as required by this title. Dedications of such land or cash in lieu thereof may be made at such other time as is specifically approved by the village board.

7. No storage of any equipment and/or material, including spoil materials or top soil, shall be permitted on any land designated for park and recreational use.

E. Donations required from properties outside village corporate limits: In the event that land which is subject to subdivision or planned unit development approval by the village is not within the corporate limits of the village at the time of approval of a final plat of subdivision or planned unit development for the land, the provisions of this article shall not apply to said land with respect to any instance where the land is not within the jurisdiction of the governmental entity to which the contribution or donation is to be made.

However, in the event that land which is subject to subdivision approval by the village is not within the corporate limits of the village at the time of approval of a final plat of subdivision or planned unit development for the land, the governing body of any governmental entity which would be entitled to land and/or cash donations pursuant to this article, may request that the village vary the terms of this article by allowing said governmental entity to make its own agreement and/or waiver as to any or all of the donations and amounts thereof required in this article with the developer of said land. Said request shall be made in writing by a resolution adopted by the governing board of said governmental entity. In such an event, the village may, by motion, condition subdivision approval upon compliance with the provisions of this section as the provisions of this title have been modified by said variation and/or waiver.

16.26.011 Table of estimated ultimate population per dwelling unit.

<u>Type of Unit</u>	<u>Total persons per unit</u>
Detached Single Family	
2 Bedroom	2.604
3 Bedroom	3.182
4 Bedroom	3.925
5 Bedroom	4.596
Attached Single Family (Townhouse, Row House, Quadriplex, etc.)	
1 Bedroom	1.500
2 Bedroom	2.543
3 Bedroom	3.082
4 Bedroom	4.086
Low Density Apartments (up to 15 units/acre)	
Efficiency	1.000
1 Bedroom	1.542
2 Bedroom	2.491
3 Bedroom	3.107
4 Bedroom	3.587
High Density Apartments 16 or more units/acre)	
Efficiency	1.000
1 Bedroom	1.336
2 Bedroom	1.769
3 Bedroom	2.752

16.26.012 Requirements for contributions to applicable school districts.

A. In order to defray the capital improvements costs incurred by the school districts specifically and uniquely attributable to subdivisions, planned unit developments and other developments occurring within the village, the school districts may request that the developer make land dedications or pay capital improvement fees.

1. The developer of each subdivision, planned unit development or other development within the village shall negotiate directly with each applicable school district to establish the required land dedications or capital improvement fees attributable to the subdivision, planned unit development or other development prior to final plat approval by the village.

2. The developer shall furnish to the village documentation from each school district regarding the nature and outcome of the negotiations, including payment or dedication schedules, if applicable. If the developer and the applicable school district were not successful in

arriving at an agreement concerning required fees or donations, then the documentation shall include a description of the negotiations and the outcome.

3. Any required land dedications shall be so indicated on the final plat and plan of subdivision, planned unit development or other development.

4. The developer of each subdivision, planned unit development and other developments shall make all required land dedications, payment of cash in lieu of land dedications and capital costs donations directly to the applicable school district, and provide copies of receipts or other documentation of such dedications or payments to the village.

5. The village will consider, and may require conformance to, the comments of the school district as part of the plan and plat review procedure for the subdivision, planned unit development or other development. While conformance to the requirements of the applicable school district may not be a requirement of final village approval, the village strongly encourages the developer to arrive at an agreement with the applicable school districts.

16.26.013 General provisions

A. Indemnification: As a precondition to a school district's collection of land dedications, cash in lieu of land dedications and capital cost donations, the school district shall execute an agreement indemnifying the village and holding it harmless from any damages and costs which arise out of any challenge to the validity of this chapter.

B. Severability: If any provision of this title or the application thereof to any person or circumstances is declared invalid by a court of competent jurisdiction, such partial invalidity shall not affect the other provisions or applications of this title, the invalid provision shall be deemed stricken from this title as if it were not a part hereof, ab initio, and the remainder of this title shall continue in full force and effect.

Chapter 16.28

ENFORCEMENT

Sections:

16.28.010	Transfer or sale - Plat approval required.
16.28.020	Compliance required prior to permit issuance.
16.28.030	Civil enforcement.
16.28.040	Violation - Penalty.
16.28.050	Severability.
16.28.060	Repeal and savings clause.

16.28.010 Transfer or sale - Plat approval required.

Following his execution of a plat of subdivision, no owner, or agent of the owner, of any parcel of land located on such plat of subdivision shall transfer or sell any parcel of land located on such plat of subdivision before such plat of subdivision has been approved by the president and board of trustees and recorded with the county recorder of deeds. (Ord. 1989-O-30 1.203 (A) (1))

16.28.020 Compliance required prior to permit issuance.

No building permit or occupancy permit shall be issued for the construction or use of any building or structure located on a lot or plat subdivided or sold in violation of the provisions of this title. (Ord. 1989-O-30 1.203 (A) (2))

16.28.030 Civil enforcement.

Appropriate actions and proceedings may be taken by law or in equity to prevent any violation of this title, to prevent unlawful construction to recover damages, to restrain, correct, or abate a violation, to prevent illegal occupancy of a building, structure, or premises, and these remedies shall be in addition to the penalties described in this chapter. (Ord. 1989-O-30 1.203 (C))

16.28.040 Violation - Penalty.

A. Any person, firm, corporation, or agent, employees, contractors, or owners who violate, disobey, omit, neglect, refuse to comply with, or who resist enforcement of any of the provisions of this title shall be subject to a fine of not less than twenty-five dollars nor more than five hundred dollars for each offense, plus the costs of the action.

B. For purposes of this chapter and this title, each day that a violation is permitted to exist shall constitute a separate offense. (Ord. 1989-O-30 1.203 (B))

16.28.050 Severability

A. If any section, subsection, sentence, clause, phrase, or portion of this title is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portions thereof. The remainder of this title shall remain in full force and effect as if the invalid portion was not a part hereof.

B. If any court of competent jurisdiction shall adjudge invalid the application of any provision of the subdivision regulations to a particular subdivision of land, such judgment shall not affect the application of said provision to any other subdivision of land not specifically included in said judgment.

16.28.060 Repeal and savings clause.

All prior ordinances and all parts of other ordinances in conflict herewith are hereby repealed to the extent (and only to the extent) of such conflict; providing and excepting, however, that all prior ordinances shall remain in force for those subdivisions which have received preliminary plat approval or final plat approval by the village board and are in the process of completion and for the prosecution of violations and for the enforcement of corrections of said violations there under that shall have occurred prior to the time that this title goes into effect. Suits pending or rights existing at the time this title takes effect, if any, shall not be impaired by any such repeal.

Chapter 16.32

APPENDIX A - CERTIFICATES

Sections:

- 16.32.010 Owners certificate.
- 16.32.020 Notary certificate.
- 16.32.030 Surveyor's certificate.
- 16.32.040 Village engineer's certificate.
- 16.32.050 County clerk's certificate.
- 16.32.060 Certificate as to special assessments.
- 16.32.070 Village board certificate.
- 16.32.080 Village clerk.
- 16.32.090 Certificate concerning drainage.

16.32.010 Owners certificate.

OWNERS CERTIFICATE

STATE OF ILLINOIS)
) ss
 COUNTY OF LAKE)

This certifies that the undersigned is the owner of the land described in the annexed plat, and has caused the same to be surveyed and subdivided, as indicated thereon, for the uses and purposes therein set forth, and does hereby acknowledge and adopt the same under the style and title thereon indicated.

The undersigned hereby dedicates for public use the land shown on this plat for thoroughfares, streets, alleys, and public services; and hereby reserves for the public or applicable governmental body, as the case may be, all non-utility easements, to the extent indicated on this plat; and also hereby reserves to the village of Beach Park and the utility companies operating therein, all utility easement rights specified herein.

 Title

 Address

Dated this _____ day of _____, 20____.

A corporate form of acknowledgment should accompany corporate owner's certificate.

Chapter 16.36

APPENDIX B – MINIMUM STANDARDS FOR STREET DESIGN

Sections:

16.36.010 Minimum standards for street design.

MINIMUM STANDARDS FOR STREET DESIGN

Classification Street	Minimum Right of Way Width	Minimum Pavement Width [n.1]	Minimum Radius of Horizontal Curves	Minimum Length of Vertical Curves [n.2]	Minimum Tangent Between Horizon Reverse Curves	Maximum Gradient of Roadway	Minimum Gradient of Roadway [n.3]
Collector	80 ft.	36 ft. Min.	300 ft.	200 ft.	100 ft.	6.00%	1.00% [n.7]
Local and Cul-de-sac leg	66 ft. [n.4]	27 ft.	150 ft.	100 ft.	50 ft.	6.00%	1.00% [n.7]
Cul-de-sac	120 ft. Dia. [n.5]	90 ft. Dia. [n.6]					

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- [1] Pavement widths are measured edge of pavement to edge of pavement.
 - [2] All vertical grade changes in the roadway centerline of more than one percent (1%) shall require a vertical curve.
 - [3] Minimum slope of drainage ditch bottom shall be 1.0%.
 - [4] Where ditch storm drainage is required in local street rights-of-way, such rights-of-way shall be ten feet (10') wider than noted in table above.
 - [5] If open ditches drain the cul-de-sac, the right-of-way shall be one hundred forty feet (140') in diameter with a ten foot (10') utility easement along each front lot line. If storm sewers are used for drainage, the right-of-way may be reduced to one hundred twenty feet (120') with a twenty foot (20') utility easement along the front lot line.
 - [6] Center islands are not permitted. The pavement radius at the throat of each cul-de-sac shall be fifty feet (50').

- [7] Minimum gradient may be reduced to 0.5% if curb and gutter is utilized. Additional geometrics including stopping site distance and intersection site distance shall be in accordance with requirements outlined in the latest edition of the IDOT Design Manual, or in such cases that may be deemed advisable for proper development, minimum standards as determined by the village engineer.