



VILLAGE OF GRAYSLAKE  
DEVELOPER ADVANCE INFORMATION  
CHECKLIST

NON-RESIDENTIAL SITE PLANS

January 2012

**PROJECT INFORMATION**

Name of Development: \_\_\_\_\_

Location: \_\_\_\_\_

Developer/Owner: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

Engineer: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

-----

Village of Grayslake  
10 S. Seymour Avenue  
Grayslake, IL 60030

Phone Number: (847) 223-8515

Fax Number: (847) 223-4821

Mr. Kirk Smith, Zoning Officer  
Mr. Kevin McCrory, Building Commissioner  
Mr. William Heinz, Director of Public Works/Village Engineer

**ATTENTION!!** The following checklist is provided as an aid to the developer and builder to ensure an expeditious approval process, since it is the Village's policy not to initiate the review until all required information is submitted. Complete submittals also reduce applicant costs by accelerating the approval process.

Check Here

#### SECTION 1

- \_\_\_\_\_ 1. Title sheet signed and sealed by a Licensed Professional Engineer with the standard statements of compliance.

#### SECTION 2

- \_\_\_\_\_ 2. Site plan with building footprint showing lot area, yard, and all setbacks. (Section 2)
- \_\_\_\_\_ 3. Calculation of the required number of parking spaces and off-street loading areas along with a dimensioned layout. (Section 2)
- \_\_\_\_\_ 4. A site lighting plan with photometric analysis. (Section 2)
- \_\_\_\_\_ 5. A dimensioned layout of the driveway access onto the adjoining streets along with all appropriate traffic volume and trip generation calculations. (Section 2)

#### SECTION 3

- \_\_\_\_\_ 6. Stormwater management, grading, and erosion control plans along with all detention calculations, if required. (Section 3)

#### SECTION 4

- \_\_\_\_\_ 7. A utility plan indicating all off-site utilities, the water and sewer service connections, and extensions to the public utility systems, if required. (Section 4)

#### SECTION 5

- \_\_\_\_\_ 8. A landscape plan showing all buffer areas and any sidewalk/bikeway/pedestrian system connections. (Section 5)
- \_\_\_\_\_ 9. Minimum escrow amount of \$5,000 is properly credited to the Village for plan review fees (subject to change depending on complexity of project and without prior notice).
- \_\_\_\_\_ 10. Following checklists with all supporting documentation. (All Sections)
- \_\_\_\_\_ 11. Plan Review Fee & Watershed Permit Fee.

\_\_\_\_\_ 12. Plans to be submitted: 5 engineering plans including landscaping, 2 drainage calculations and exhibits and 2 photometric.

The numbers shown in parenthesis refer to the Section numbers contained in this guide that provide more detailed checklists of the information required to be submitted.

Checklist Legend:

- √ - Item submitted or standard met.
- N.A. - Item not applicable to site (written explanation required for why)

**INTRODUCTION**

In addition to the various code requirements for the construction of buildings and structures, the Village of Grayslake prescribes certain requirements governing the building site as well. The purpose of this checklist is to provide the developer with a general guide to these requirements, regulations, and standards in an effort to streamline the review process as it is the Village's policy not to issue building permits until after final approval of the site plans.

Due to the general nature of this guide and the unique characteristics of each development site, referral to the Village codes, ordinances, and standards, and communication with the Village staff for the exact requirements is greatly encouraged. Adherence to these general guidelines does not eliminate the requirement of compliance by the applicant of all federal, state, and local laws, rules, ordinances, regulations, and procedures.

**TABLE OF CONTENTS**

Check Lists for:

- A. General/Title Sheet ..... Section 1
- B. Site Plans ..... Section 2
  - Zoning, Set-backs & Yards
  - Off-Street Parking and Loading
  - Lighting
  - Driveway Access
- C. Stormwater Management Plan ..... Section 3
- D. Utility Plans ..... Section 4
- E. Pedestrian Circulation Landscape Plan ..... Section 5

## Section 1

# GENERAL/TITLE SHEET CHECKLIST

Following is a checklist of the general requirements and items to be contained on the title/cover sheet of the submitted plans:

Submittal Requirements:

- \_\_\_\_\_ 1. Signature and seal by a Licensed Professional Engineer.
- \_\_\_\_\_ 2. Signed statement of compliance that proposed project is in compliance with Village ordinances and good engineering practice.
- \_\_\_\_\_ 3. Signed statement that compliance with Village ordinances does not relieve the developer from complying with applicable state, county, federal and other regulatory agencies.
- \_\_\_\_\_ 4. Accurate title of project and location map.
- \_\_\_\_\_ 5. A note that J.U.L.I.E. is to be contacted at 811 or 1-800-892-0123 at least 48 hours prior to digging for the location of underground utilities.
- \_\_\_\_\_ 6. A note that the Village of Grayslake is to be contacted at (847) 223-8515 at least 48 hours in advance of the start of construction.
- \_\_\_\_\_ 7. A legend of symbols and index of sheets.
- \_\_\_\_\_ 8. A nearby benchmark in U.S.G.S. 29 datum.
- \_\_\_\_\_ 9. Plan sheets have north arrows and appropriate vertical and horizontal scales at not less than 1-inch equals 100 feet.
- \_\_\_\_\_ 10. Plan sheets are to be standard 24 inch x 36 inch or smaller.

## Section 2

# SITE PLAN CHECKLISTS

## A. Zoning Compliance

In order to promote and protect the public health, safety, and welfare, the Village is divided into zones prescribing and regulating the location, erection, reconstruction, alteration, and use of buildings, structures, and land for commercial, industrial and other specific non-residential uses. Following are the significant items related to zoning that will need to be addressed. Please refer to the attached Table 2-A.

### Code Requirements

### Lot Area, Yard, and Bulk Requirements in All Zones

- \_\_\_\_\_ 1. Lot Area: Any principal use together with all accessory uses shall be located on a lot having a minimum area as shown in Column 3.
- \_\_\_\_\_ 2. Lot Width: Each lot shall have a width at the building setback line as shown in Column 4.
- \_\_\_\_\_ 3. Front Yard: Each lot shall have a front yard not less than as shown in Column 5, except as otherwise provided under Nonconforming Recorded Lot.
- \_\_\_\_\_ 4. Rear Yard: Each lot shall have a rear yard not less than as shown in Column 6, except as otherwise provided under Nonconforming Recorded Lot.
- \_\_\_\_\_ 5. Side Yard: Each lot shall have two side yards the total of which is not less than that shown in Column 7. No side yard shall be less than the minimum side yard shown in Column 8, except as otherwise provided in the footnotes and under Nonconforming Recorded Lot.
- \_\_\_\_\_ 6. Yards Abutting Streets: Any side or rear yard which abutts a street shall be not less than as shown in Column 9, except as otherwise provided under Nonconforming Recorded Lot.
- \_\_\_\_\_ 7. Yards Abutting Residential Zones: Any side or rear yard abutting a residential zone shall be not less than as shown in Column 10.
- \_\_\_\_\_ 8. Structural Coverage: The total ground area occupied by a principal building together with all accessory buildings shall not exceed the percent of the total area of the lot shown in Column 11.
- \_\_\_\_\_ 9. Floor Area Ratio: The combined floor area ratio (F.A.R.) for any principal building together with all accessory buildings shall not exceed the ratio shown in Column 12.
- \_\_\_\_\_ 10. Height of Principal Building: No principal building or structure shall exceed the height restrictions in feet as shown in Column 13, except as provided otherwise in the footnotes.

\_\_\_\_\_ 11. Height of Accessory Structures: No accessory building or structures shall exceed the height in feet as shown in Column 15, or the height in stories in Column 16.

Refer to the Village Code Sections 17.16.010 through 17.20.030 for additional information concerning these requirements.

I hereby certify that the lot area, yard, and bulk requirements, to the best of my knowledge, conform to the applicable codes, ordinances, and standards.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Engineer

\_\_\_\_\_  
Date

**TABLE 2-A**  
**LOT AREA, YARD, AND BULK REGULATION**

ZONE	USE	LOT SIZE		YARDS						
		Area	Width	Front	Rear	Total Side	Minimum Side	Abutting a Street	Abutting a Residential Zone	Structural Coverage
1	2	3	4	5	6	7	8	9	10	11
		Sq. Ft.	Feet	Feet	Feet	Feet	Feet	Feet	Feet	%
CB	Attached dwelling unit as accessory uses in business buildings, but not on the ground floor frontage	--	--	--	30	24 <sup>2</sup>	12 <sup>2</sup>	--	30	80
	Any other permitted use	--	--	--	30	24 <sup>2</sup>	12 <sup>2</sup>	--	30	80
CBA	Attached dwelling unit as accessory uses in business buildings, but not on the ground floor frontage	--	--	--	30 <sup>2</sup>	24 <sup>2</sup>	12 <sup>2</sup>	--	30	80
	Any other permitted use	--	--	7	30	24 <sup>2</sup>	12 <sup>2</sup>	--	30	80
CT CTL	Any permitted use	7,500	50	25	6	18	6	25	--	25
SCB	Any permitted use	40,000	130	50	30	30	15	50	75	25
GB	<b>Any permitted use:</b>									
	With community sewers	10,000	50	50	30	24	12	50	50	30
	Without community sewers	20,000	100	75	30	24	12	75	50	30
	Without community sewers serving or processing food	40,000	130	75	30	24	12	75	50	30
OR	Any permitted use	40,000	130	50	30	30	15	50	75	50
LI	Any permitted use	40,000	130	50	30	30	15	50	75	60
LIA	Any permitted use	15,000	75	50	30	30	15	50	75	60
GI	Any permitted use	80,000	190	70	30	30	15	75	100	45
AG	Any permitted special Farm use, Health medical use, Veterinary clinic, Commercial, or Private Stable	200,000	300	75	100	200	100	75	100	10
	Any other permitted use	200,000	300	30	60	60	30	30	30	10
OS	Any permitted school	200,000	300	50	20	60	20	50	75	30
	Any other permitted use	NA	NA	50	20	60	20	20	75	30

## FOOTNOTES TO TABLE 2-A

<sup>1</sup> For this use in this zone, the width listed shall be the average width of lot; the minimum width at the building setback line shall be fifty (50) feet.

<sup>2</sup> Side yards are not required in this zone if the lot line is not a zoning boundary line and the proposed construction meets fire codes. Side yards, if provided, however, shall be not less than 3 feet in width and shall be paved or finished with planned landscaping.

<sup>3</sup> The combined floor area ratio (F.A.R.) for any principal and accessory building located on a lot having an area greater than ten (10) acres may have an F.A.R. of one (1.00).

<sup>4</sup> Any structure may be as high as forty-five (45) feet. Additional height is permitted provided that no structure shall intercept the plan making an angle of forty (40) degrees from the horizontal toward the interior of the lot and originating at each property line, and provided that no structure shall exceed ninety-five (95) feet in height.

<sup>5</sup> All property lines adjoining a residential district, public or institutional facility shall be effectively screened from the adjoining property by means of a dense evergreen planting screen (or other suitable screening acceptable to the Village), not less than five (5) feet in height. All areas not paved or built upon shall be planted and landscaped. No planting, screening, or landscaping shall be so placed or of such design as to in any manner screen or obscure vision of pedestrian or vehicular traffic in such a manner as to endanger the public or present a hazard to safety.

<sup>6</sup> For single family dwellings with attached garages in subdivisions platted and recorded on or before the effective date of this Ordinance, required total side yards may be reduced to 20% of the lot width, with a minimum side yard dimension of 10% of the lot width, but in no case shall any side yard be less than six (6) feet.

<sup>7</sup> If the existing front yards of structures on lots lying wholly or partially within 300 feet on the same side of the street on the same block of any lot proposed for the construction of a structure exceed the required front yard as stated herein, then the greater distance shall be required, except that if the existing front yards are not uniform, then the average such distance shall apply.

B. Off Street Parking and Loading

The following regulations are established to increase safety and lessen congestion in the public streets, to adequately provide for parking and loading needs associated with the development of land and increased automobile and truck usage, to set standards for off-street parking and loading facilities according to the amount of traffic generated by each use, and to eliminate the on-street storage of vehicles along major traffic routes.

1. Off-Street Parking

Requirements: The following off-street parking spaces are required for all uses in all zones, except for non-residential uses in the Central Business (CB) Zone. Developer can check off the use appropriate for the proposed site and perform the calculation in the space below on the following pages.

Use	Spaces Provided
_____ accessory residential units in the Central Business District	1.0 per every efficiency unit and one bedroom unit and 2.0 per every two or more bedroom unit
_____ rooming house, fraternities, sororities, dormitories, convalescent homes	4 times maximum lawful number of occupants
_____ hotels	1.2 per room in addition to spaces required for restaurant facilities
_____ churches, theaters, facilities for spectator sports, auditoriums, concert halls	0.35 times the seating capacity
_____ golf courses	7 per hole
_____ barber shops and beauty parlors	2 plus 1.5 per chair
_____ bowling alleys	5 per lane in addition to spaces required for restaurant facilities
_____ drive-in restaurants with indoor seating	1 per 100 sq. ft. of floor area but no less than 10 spaces
_____ restaurants (except drive-ins)	1.2 per 100 square feet of floor area, or 1 space for every three seats and three employees, whichever is greater

Use	Spaces Provided
_____ furniture, appliance, household equipment, carpet, and hardware stores, repair shops, including shoe repair, contractor's showrooms, museums, and galleries	1 per 800 square feet of floor area
_____ funeral parlors	1 per 50 square feet of floor area or 1 space for every 5 seats of seating capacity, whichever is greater
_____ gas stations	2 per island (in addition to stopping places adjacent to pumps)
_____ gas stations/retail store	2 per island plus 1 per 200 sq. ft. of retail area
_____ vehicle repair	2 per bay
_____ laundromats	0.5 per machine
_____ medical offices	1 per 100 square feet of waiting room area and 1 per doctor, dentist or employee
_____ banks and other financial institutions	1 per 200 sq. ft. of floor area plus 5 stack spaces per teller window
_____ warehouse	1 per 500 square feet of floor area

For uses not specifically listed above, the requirements listed below are applicable:

Use	Spaces Provided
_____ free standing retail stores and service (including supermarkets & convenience store)	1 per 200 sq. ft. of floor area & outdoor sales area
_____ shopping center	1 per 200 sq. ft. of floor area and outdoor sales area
_____ offices	1 per 300 square feet of floor area
_____ other commercial and industrial uses	0.75 times maximum number of employees on premises at any one time

Calculation:

Calculation of Number of Required Spaces:

In any determination of the total parking requirements of any use, building, or structure, any fraction less than one-half may be dropped and any fraction of one-half or more shall be counted as one parking space.

If a building or structure or groups of buildings or structures contain uses which vary in their parking requirements, the number of parking spaces shall be the sum of the individual requirements of each use. However, where peak parking requirements occur at distinctly different times of the week, as determined by the Zoning Officer, joint parking facilities may be shared by two or more users.

The Americans with Disability Act requires that a certain number of parking stalls be reserved for persons with disabilities. The specific requirements are as listed in the table below and shall count towards the required number of spaces.

<u>TOTAL OFF-STREET PARKING SPACES PROVIDED</u>	<u>REQUIRED MINIMUM NUMBER OF ACCESSIBLE PARKING SPACES</u>
1 to 20	1
21 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2% of total number
Over 1000	20 plus 1 for each 100 over 1000

Off-street loading spaces shall not be counted towards the parking space requirement. Refer to the Village Code 17.28 for additional information concerning these requirements.

Design Standards:

- \_\_\_\_\_ a. Parking spaces are located on the same lot as the use served<sup>1</sup>.
- \_\_\_\_\_ b. Parking areas are located a minimum of five (5) feet from any property line.
- \_\_\_\_\_ c. Parking area is properly graded for drainage (Refer to Section 3 for overall site grading and drainage requirements).
- \_\_\_\_\_ d. Parking areas are hard surfaced with asphalt or concrete with a pavement cross-section provided.
- \_\_\_\_\_ e. Parking areas with four (4) or more spaces that adjoin or are across the street from residential zoned property are properly screened with plantings, fences, berms, or walls<sup>2</sup> (Refer to Section 5 for specific landscaping and buffering requirements).
- \_\_\_\_\_ f. Parking spaces open directly upon an aisle or driveway of sufficient width and design that provides safe and efficient vehicular movement. (Refer to ITE standards for general guidance).
- \_\_\_\_\_ g. Parking area has appropriate means of access to a street or alley that minimizes interference with traffic movements (Refer to Section 2 - Driveway Access for specific requirements).
- \_\_\_\_\_ h. Parking area access driveways are not less than twelve (12) feet wide (Refer to Section 2 Driveway Access for maximum widths and other design criteria).
- \_\_\_\_\_ i. Parking spaces are of a usable shape and perpendicular spaces have a minimum width of eight and one-half (8-1/2) feet and a minimum area of one hundred sixty-two (162) square feet<sup>3</sup>.
- \_\_\_\_\_ j. Parking spaces have a vertical clearance of at least seven (7) feet.
- \_\_\_\_\_ k. Parking spaces have wheel guards, bumpers, or curbs so located that no part of the vehicle extends beyond the parking space.

Footnotes to Checklist

<sup>1</sup>Except when the Plan Commission recommends and the Village Board of Trustees authorizes, for a specific use, the location of all or a part of the required off-street parking spaces on a lot that does not contain the principal use, building or structure.

<sup>2</sup>The type, height and locations shall be as determined by the Village.

<sup>3</sup>Parking areas shall not be used for the sales, repair, dismantling, storage, or servicing of any vehicles, equipment, materials, or supplies.

## 2. Off-Street Loading

Requirements: The following off-street loading spaces are required for all uses in all zones, except for non-residential uses in the Central Business (CB) Zone. Developer can check off the use and size appropriate, and perform the calculation in the space below.

	Use	Spaces Provided
_____	Office building of 10,000 square feet or more	1
_____	Every retail and industrial use	1 plus one for every 100,000 square feet of floor area

Calculation:

### Design Standards:

- \_\_\_\_\_ a. Loading spaces are located on the same lot as the use served.
- \_\_\_\_\_ b. Loading spaces do not occupy a front or side yard adjoining a street<sup>1</sup>.
- \_\_\_\_\_ c. Loading space that adjoins or is across the street from residential zoned property is properly screened with plantings, fences, or walls<sup>2</sup> (Refer to Section 5 for specific requirements).
- \_\_\_\_\_ d. Loading area is properly graded for drainage (Refer to Section 3 for overall site grading and drainage requirements).
- \_\_\_\_\_ e. Loading space is hard surfaced with asphalt or concrete capable of bearing a live load of two hundred (200) pounds per square foot with a pavement cross-section provided.
- \_\_\_\_\_ f. Loading space access is not less than twelve (12) feet wide and located to minimize traffic congestion.
- \_\_\_\_\_ g. Loading space shall be so designed that no portion of a vehicle shall project onto a street or alley while being loaded or unloaded<sup>3</sup>.

Footnotes to Off-Street Loading Requirements

<sup>1</sup>The Village may approve a reduction in the number of required loading spaces for multiple use buildings but in no instance shall less than one loading space per building be provided.

<sup>2</sup>The type, height, and locations shall be as determined by the Village.

<sup>3</sup>Loading spaces shall not be used for the sale, repair, dismantling, storage, or serving of any vehicles, equipment, materials, or supplies.

I hereby certify that off street parking and loading, to be best of my knowledge, conform to the applicable codes, ordinances, and standards.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Engineer

\_\_\_\_\_  
Date

## C. Site Lighting

All new non-residential developments shall provide properly illuminated parking and loading areas in accordance with the requirements and design standards listed below. All present non-conforming uses shall meet these requirements upon obsolescence or replacement of the existing lighting system. The purpose of these standards and requirements is to minimize the effects of site lighting on adjacent property owners and public street users.

### 1) Luminaire

- i) with a cut-off, or shielding angle of less than  $90^\circ$  (lower than horizontal), maximum allowable vertical illumination: 2.0 foot-candles, measured at the property line.
- ii) with a cut-off of  $90^\circ$  (horizontal), maximum allowable vertical illumination is 0.2 foot-candle, measured at the property line.
- iii) All luminaries will be of the flat-glass type, with controlled cut-offs.
- iv) The luminaire spacing shall provide a uniformity ratio (average to minimum) not to exceed 4:1.
- v) light source (lamp) must be shielded from view by an observer standing at the property line of the commercial property.

### 2) Light Poles

- i) Maximum pole height will be 16 feet, with actual height depending on fixture placements, cut-offs, etc. Pole foundation height will be a maximum of 3 inches above grade. Foundation height will not be used in determining pole height.
- ii) Pole layout is to maintain a 4:1, or less, ratio of spacing to mounting height. Pole layout may vary as the luminaire illuminance requirements are met.
- iii) Perimeter bollard lighting, if deemed needed to meet illumination levels shall be below the level of a solid perimeter fence.
- iv) Bollard lighting will be used at driveway entrances to provide the necessary illumination at the driveway.

### 3) Lighting Source

- i) The lamp to be used will be such that it meets the luminaire requirements.
- ii) Laser light source is included in all the above requirements.

- iii) Lighting source other than high pressure sodium, metal halide, fluorescent, incandescent, and LED will require a special use permit.
- iv) All parking lot lighting will be reduced by half no later than one hour after the close of business.
- v) A maximum of 10 foot - candles are allowed under building canopies.

All proposed lighting of commercial parking lots will be designed so that the maximum light meter reading, measured equidistant from adjacent light sources, is 5 foot-candles. A variance will be given consideration for special uses, when justified.

All submittals for commercial parking lot lighting will be reviewed for proper design, including neighborhood impact, and approved by the Village Engineer.

All terms are as defined in the current Illuminating Engineering Society publication of "Definition of Terms".

All present non-conforming use shall be equipped with the lighting required by this ordinance upon obsolescence or replacement of the existing lighting system.

The Sternberg antique lighting will be allowed to be installed with specific authorization from the Corporate Authorities of the Village. The Sternberg antique light allowed is Model No. D650-5R/5098BD-4PT/344DFP4. In the event the Village Engineer determined Model No. D650-5R/5098BD-4PT/344DFP4 is not appropriate for the circumstance, and alternative Sternberg antique light model shall be allowed from a list provided by the Village. All Sternberg antique light fixtures on the perimeter of a property shall include top shields and back light shields. Sternberg antique lighting can be light emitting diodes (LED).

- vi) The Village may require installation of landscaped medians or swales in parking lots with 40 or more spaces. Configuration and appearance of the medians will be approved by the Village.
- vii) No more than one vehicle per single-family lot will be allowed to be for sale at any one time. All vehicles must be registered in the name of the homeowner or immediate family member. No more than three vehicles shall be allowed to be for sale per lot per calendar year.
- viii) No more than one commercial vehicle shall be parked in a single family residentially zoned area. Said vehicles shall be no larger than nine foot in height and no more than eighteen foot long. Vehicles or their attachments not owned by the property owner cannot be stored on a property for a period exceeding 24 hours.

- ix) All recreational vehicles (i.e. campers, RV's, jet skis, boats) that are stored on a residential property shall be owned by a resident of the unit or an immediate family member.
- x) All multi-family zones or Planned Unit Development (P.U.D.) zones for multi-family complexes shall store recreational vehicles in enclosed storage areas.

Note to Lighting Checklist

Prior to issuance of the certificate of occupancy, the Village will perform an on-site inspection of the site to verify performance according to the standards indicated.

I hereby certify that the site lighting, to the best of my knowledge, conforms to the applicable codes, ordinances, and standards.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Engineer

\_\_\_\_\_  
Date

## D. Driveway Access

For safety reasons and in order to avoid or lessen traffic congestion on public streets, certain standards have been established by the various governmental bodies regulating driveway access. Non-residential developments will in most cases access onto subcollectors, collectors, and major arterials under the jurisdiction of the Village, Lake County, or State.

The developer will first need to determine if the state, county, or Village has jurisdiction over the adjacent street or streets that the site will have access. Corner properties may be under two jurisdictions. If Lake County or the State have jurisdiction, then they must be contacted directly by the developer for their requirements. The Village will not issue its access permit to Village streets until the issuance of the other agencies permits.

If the site access is onto a Village residential street, a full traffic study, prepared by a qualified traffic engineer, encompassing Items 2 through 6 will be required. For access onto other Village streets, information concerning Items 2 through 6 can be general in nature. Following are the submittal requirements and design standards.

### Submittal Requirements:

- \_\_\_\_\_ 1. Site plans with a dimensional layout of the driveways and location relative to adjacent intersections and driveways.
- \_\_\_\_\_ 2. Anticipated traffic volumes generated by the site.
- \_\_\_\_\_ 3. Traffic generation distribution to and from the site at each access point.
- \_\_\_\_\_ 4. Anticipated impact on other uses of the right-of-way, other uses of the street, pedestrian traffic, and adjacent property owners.
- \_\_\_\_\_ 5. Description of any attenuation and traffic calming methods to mitigate any negative impacts.
- \_\_\_\_\_ 6. An analysis of the existing street condition and the anticipated impact of the development on the existing street.
- \_\_\_\_\_ 7. A cross-section detail of the proposed driveway pavement.
- \_\_\_\_\_ 8. A signed statement that the driveway pavement and culverts will be maintained by the property owner.
- \_\_\_\_\_ 9. Submission of Street Access Permit.
- \_\_\_\_\_ 10. An Employee Traffic Mitigation Plan for sites that will employ 100 or more people.

Design Standards (Refer to Table 2-B) for the Driveway and Entrance Geometric Guidelines for Local Streets:

- \_\_\_\_\_ 1. Traffic volumes, trip generation, and anticipated impacts utilizing the Institute of Traffic Engineers (ITE) tables, charts, and standards.
- \_\_\_\_\_ 2. Driveway pavement type conforms to minimum standard.
- \_\_\_\_\_ 3. Width of driveway meets the minimum and maximum standards.
- \_\_\_\_\_ 4. The flare radii meets standard.
- \_\_\_\_\_ 5. The angle of the driveway as it meets the pavement conforms to standard.
- \_\_\_\_\_ 6. Any island areas meet the design criteria.
- \_\_\_\_\_ 7. The driveway gradient does not exceed 8 percent.
- \_\_\_\_\_ 8. The distance from the property line to any part of the driveway including the flares meets the minimum standard.
- \_\_\_\_\_ 9. The minimum distance from intersecting streets meets the standard.
- \_\_\_\_\_ 10. Distance between driveways on the site or from adjacent property meets the minimum standard.
- \_\_\_\_\_ 11. A culvert pipe is provided under the driveway where there is no roadway curb and gutter.
- \_\_\_\_\_ 12. The Employee Traffic Mitigation Plan contains specific actions to limit peak hour vehicular traffic such as staggered work hours, rideshare, preferential parking, full service cafeteria, etc.

I hereby certify that the driveway access, to the best of my knowledge, conforms to the applicable codes, ordinances, and standards.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Engineer

\_\_\_\_\_  
Date

Table 2-B

VILLAGE OF GRAYSLAKE  
 DRIVEWAY AND ENTRANCE GEOMETRICS GUIDELINES  
 FOR LOCAL STREETS

	CLASS		
	RESIDENTIAL	COMMERCIAL URBAN	INDUSTRIAL-- COMMERCIAL-- RECREATIONAL HIGH TRUCK TRAFFIC VOLUME GENERATORS
Permit fee	\$10.00	\$200.00	\$200.00
Type	3" asphalt surface 8" aggregate base grade 9	4" asphalt surface 10" aggregate base grade 9	4" asphalt surface 10" aggregate base grade 9
	Concrete, 6" with 6" x 6" fabric, #6, 4" granular base	Concrete, 8" with 6" x 6" fabric, #6, 6" granular base	Concrete, 8" with 6" x 6" fabric #6, 6" granular base
Width of drive	12' minimum 24' maximum	12' minimum 35' maximum	2 @ 24' or 35' maximum
Radii of flare	5' minimum 15' maximum	10' minimum 25' maximum	30' - 50'
Angle of drive with pavement	90°	45° - 90 <sup>01</sup>	45° - 90 <sup>01</sup>
Island area	Not applicable	6' min. width at edge of pvmt. and ROW, 5' min. radius	4' - 18' wide median
Gradient	8% maximum	8% maximum	8% maximum
Distance from property line (to any part of driveway or flare)	0' minimum	3' minimum	10' minimum
Distance from intersecting street	25' minimum <sup>2</sup>	35' minimum <sup>2</sup>	100' minimum <sup>2</sup>
Distance between drives	0' minimum	6' minimum (at edge of pavement and at ROW)	440' minimum 660' desirable

General Notes

- 1) 45° permitted only for one-way drives;  
60° minimum for two-way drives.
- 2) Undisturbed length of curb between driveway  
flare and intersecting street flare.
- 3) Driveways shall be constructed to the right-of-way line.
- 4) Culverts shall be provided where no curb and gutter is present. The  
minimum size shall be 12" diameter or size as directed by the Village  
Engineer. Culverts shall contain end sections and shall extend  
3-feet beyond the edge of the driveway flare.

## Section 3

# STORMWATER MANAGEMENT PLANS

## A. Watershed Development Permit

Practically all new or substantially altered non-residential developments, unless specifically exempted, that disturbs the land surface and increases the volume, rate, or change the direction of stormwater runoff will require a Watershed Development Permit issued by the Village. Construction shall not be initiated until the proposed development meets the requirements of the Watershed Development Ordinance and a permit is issued. The ordinance requirements shall apply to contiguous lots or parcels of land owned by the same property owners.

A Watershed Development Permit (WDP) will be required if any of the conditions listed below apply. Some sites may have multiple levels of stormwater management that will need to be addressed before the permit is issued.

### Check All That Apply

- 1. The development hydraulically disturbs 5,000 square feet or more (refer to Checklist B for Minor Developments).
- 2. The development is three (3) acres or more in size or will result in an impervious surface area of 50% or more, unless the total impervious area is less than 0.5 acres (refer to Checklist C for Major Developments).
- 3. The development is located in a Regulatory Floodplain determined from the Flood Insurance Study and Flood Insurance Rate Maps (refer to Checklist F in the Residential Subdivision Checklist).
- 4. The development disturbs a cumulative total of one (1) or more acres of wetlands determined from the National Wetland Inventory and the Lake County ADID Maps (refer to Checklist G in the Residential Subdivision Checklist).
- 5. The development is located in a flood-prone area with 100 acres of tributary drainage area or more (refer to Checklist C).
- 6. The development contains a depressional storage area with a volume of 0.75 acre-feet or more for the base flood (refer to Checklist C).
- 7. The development will modify the flood-prone area of a channel where the tributary area is twenty (20) or more acres (refer to Checklist C).
- 8. A copy of the Notice of Intent to be submitted to IEPA

## B. Minor Development Submittals

- \_\_\_\_\_ 1. A completed and executed Watershed Development Permit Application on a form provided by the Village.
- \_\_\_\_\_ 2. A grading plan showing existing and proposed contours or elevation points referenced to NGVD 29 datum.
- \_\_\_\_\_ 3. A drainage plan of sufficient detail showing the existing and proposed drainage features such as discharge points, storm sewers, catch basins, inlets, manholes, ditches, swales, streams, and other features.
- \_\_\_\_\_ 4. A map showing the drainage area including all tributary areas to indicate where the development is located in the watershed.
- \_\_\_\_\_ 5. An erosion and sediment control plan.

### C. Major Development Submittals

- \_\_\_\_\_ 1. A completed and executed Watershed Development Permit Application on a form provided by the Village.
- \_\_\_\_\_ 2. A grading plan showing existing and proposed contours and elevation points in NGVD 29 (refer to Checklist D for specific submittal and design standard requirements).
- \_\_\_\_\_ 3. A drainage plan (refer to Checklist D for specific submittal and design standard requirements).
- \_\_\_\_\_ 4. Cross-section view of the drainage system, which includes existing and proposed ground elevations and the normal and high water elevations.
- \_\_\_\_\_ 5. A hydrologic and hydraulic report (refer to Checklist E in the Residential Subdivision Checklist for specific requirements).
- \_\_\_\_\_ 6. Detention and retention facility design and calculations (refer to Checklist E in the Residential Subdivision Checklist for specific requirements).
- \_\_\_\_\_ 7. Necessary permits from the Lake County Storm Water Management Commission and/or the State Division of Natural Resources for work in Regulatory Floodways (refer to Checklist F in the Residential Subdivision Checklist for specific requirements).
- \_\_\_\_\_ 8. Necessary permits from the Army Corps of Engineers for work that disturbs regulatory wetlands on the National Inventory List (refer to Checklist G in the Residential Subdivision Checklist for specific requirements).
- \_\_\_\_\_ 9. A soil erosion and sediment control plan (refer to Checklist H in the Residential Subdivision Checklist for specific requirements).
- \_\_\_\_\_ 10. A statement on the plans that all on-site drainage facilities will be maintained by the property owner and will not be altered in any manner that will diminish or impede designed storage or conveyance capacities.
- \_\_\_\_\_ 11. Over-sizing requirements and extensions of the public storm sewer system are in conformance with the Comprehensive Plan with a written agreement prior to the start of construction for recapture arrangements.

## D. Grading and Drainage Plans

Please note that the following items are in addition to the application requirements for major developments.

### Submittal Requirements:

- \_\_\_\_\_ 1. Topography at minimum contour intervals of 2-feet with elevations referenced to NGVD 29 standards extending at least 100 feet onto the adjoining properties.
- \_\_\_\_\_ 2. Proposed top of foundation elevation and finished grade elevation at the foundation.
- \_\_\_\_\_ 3. Existing top of foundation elevations of adjacent buildings.
- \_\_\_\_\_ 4. Pavement and top of curb elevations in parking and driveway areas including all drainage divides.
- \_\_\_\_\_ 5. Slopes between ground points with drainage direction indicated by arrows.
- \_\_\_\_\_ 6. Rim and all invert elevations at all drainage facilities.
- \_\_\_\_\_ 7. Invert elevations at all flared end sections.
- \_\_\_\_\_ 8. Location, identification, and elevations of all existing drainage facilities.
- \_\_\_\_\_ 9. Location and identification of all proposed drainage facilities.
- \_\_\_\_\_ 10. Location and contours of proposed detention and retention facilities with normal and high water elevations indicated.
- \_\_\_\_\_ 11. Location and direction of emergency overflows and overland flow paths.
- \_\_\_\_\_ 12. The limits of floodplain and floodway boundaries with appropriate base flood elevations.
- \_\_\_\_\_ 13. The limits of any wetlands, lakes, and ponds.
- \_\_\_\_\_ 14. The existing and proposed locations of any channel modifications.
- \_\_\_\_\_ 15. The locations, width, and identification of any drainage and maintenance access easements.
- \_\_\_\_\_ 16. Specifications and details of all proposed drainage facilities including a typical trench detail.

Design  
Standards:

- \_\_\_\_\_ 1. Ground slopes in parkways or other vegetated areas are not less than 1%, with 2% desirable. Maximum slope is 15%.
- \_\_\_\_\_ 2. Ground slopes in paved areas are not less than 0.5% nor more than 5%.
- \_\_\_\_\_ 3. Storm sewer trunk lines are a minimum of 4-feet below final grade directly above the pipe.
- \_\_\_\_\_ 4. Storm sewer pipe for public sewers shall be R.C.C.P. conforming to ASTM C-76.
- \_\_\_\_\_ 5. Storm sewer pipe for private sewers shall conform to the Standard Specifications for Sewer and Watermain Construction in Illinois and shall meet the approval of the Village.
- \_\_\_\_\_ 6. Culverts under driveways, where required, shall be a minimum of 12-inches in diameter, but not less in diameter than adjacent upstream and downstream culverts. (See Section 2-D.8 for maintenance sign-off).
- \_\_\_\_\_ 7. Storm sewer outfalls and culverts shall have flared end sections with riprap stone placed at the outlet.
- \_\_\_\_\_ 8. Flared end sections greater than 12-inches in diameter shall have trash grates.
- \_\_\_\_\_ 9. Inlets and catch basins in pavement areas shall be spaced no more than 400 feet apart.
- \_\_\_\_\_ 10. Inlets are required at low points when the design flow reaches 1 cfs. Double inlets are required when flow exceeds 2 cfs.
- \_\_\_\_\_ 11. Drainage structures shall be precast concrete conforming to the Standard Specifications for Road and Bridge Construction and Highway Standards.
- \_\_\_\_\_ 12. Rear yard and parkway inlets shall be a minimum 2 feet deep and the outlet pipes installed in such a manner as to preclude the entrance of floating matter into the storm sewer.

- \_\_\_\_\_ 13. Drainage structure frames, grates, and lids shall be Neenah Foundry or approved equivalents. Lids to have “Storm” cast into the lid.
- a. Manhole and catch basin frames and lids - R-1031, Type B (solid lid). Type A or D (open lid).
  - b. Type 8 (Beehive) Grate - R4340-B.
  - c. Inlet and catch basin frame for Type M-3.12 curb and gutter – R3501-P.
  - d. Inlet and catch basin frame for Type B-6.12 curb and gutter – R-3281-A.
- \_\_\_\_\_ 14. Side slopes of open channels shall be 3 to 1 or flatter.

I hereby certify that the water services, to the best of my knowledge, conform to the applicable codes, ordinances and standards.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Engineer

\_\_\_\_\_  
Date

## Section 4

# UTILITY PLANS

## A. Utility Plans – Water Mains, Sanitary Sewers, and Service Connections

All permanent non-residential buildings and structures intended for human occupancy shall be connected to central sewage treatment and water supply utility systems. The developer may be required to extend the public systems to service the site. These extensions would be installed at the developer's expense, with certain costs recapturable through appropriate agreements and ordinances.

### I. Public Water Main Installation

Following are the submittal requirements and design standards appropriate to public watermain installations:

#### Submittal Requirements:

- \_\_\_\_\_ 1. Plans are at a scale no less than 1-inch equals 50-feet showing all existing utilities, both public and private, and the proposed water main to be constructed.
- \_\_\_\_\_ 2. Specifications are included that conform to the Standard Specifications for Sewer and Water Main Construction in Illinois, latest edition, the Recommended Standards for Water and Sewage Works, latest edition, the American Water Works Association, and the Grayslake Plumbing Code.
- \_\_\_\_\_ 3. Details for all valve vaults, fire hydrants, thrust blocks, and pipe in trench.
- \_\_\_\_\_ 4. Illinois Environmental Protection Agency (IEPA) permits for public water extensions.
- \_\_\_\_\_ 5. Public water extensions are oversized in compliance with local area master plans.
- \_\_\_\_\_ 6. Extensions of public systems on private property are contained in recorded easements of not less than 20 feet wide or 30 feet wide if water and sanitary share the easement.
- \_\_\_\_\_ 7. Public water extensions shall not be located longitudinally under pavements or streets.
- \_\_\_\_\_ 8. Separation requirements of the IEPA are met and maintained.
- \_\_\_\_\_ 9. Plans for public water extensions show alignment and the location of all valve vaults, fire hydrants, pipes, and air release valves, both existing and proposed.
- \_\_\_\_\_ 10. Elevations in U.S.G.S. 29 datum are shown for all structures and the bottom ring of fire hydrants.

\_\_\_\_\_ 11. Depth, size, and material for water main pipes are indicated.

Design Standards:

- \_\_\_\_\_ 1. Water mains shall be a minimum 8-inch diameter and placed to a minimum depth of 5 foot 6-inches from the top of pipe to the grade directly above the pipe.
- \_\_\_\_\_ 2. Water main shall be cement-lined ductile iron pipe with a bituminous outer coating, Class 52 conforming to AWWA C151 with push-on or mechanical joints conforming to AWWA C110.
- \_\_\_\_\_ 3. Dead end mains are to be avoided and will only be allowed when expressly approved by the Village. Any such mains allowed shall have a flushing fire hydrant at the end, equipped with a lockout device to prevent unauthorized use.
- \_\_\_\_\_ 4. Fire hydrants shall be spaced at a maximum of 350 feet and placed in an accessible location and will be painted yellow. (Village will provide the paint specification.)
- \_\_\_\_\_ 5. Fire hydrants shall be Mueller, or approved equal with National Standard Threads and equipped with an auxiliary valve.
- \_\_\_\_\_ 6. Valves shall be located at each branch main connection and at other locations generally not exceeding 650 feet to permit adequate sectionalizing.
- \_\_\_\_\_ 7. Gate valves shall be located in valve vaults and shall be resilient wedge type conforming to AWWA C500, Mueller or approved equal.
- \_\_\_\_\_ 8. Vaults shall be pre-cast concrete provided with steps, frame and cover conforming to Neenah Foundry Type R-1030 Type 8 with "Water" cast on the cover.

I hereby certify that public water mains, to the best of my knowledge, conform to the applicable codes, ordinances, and standards.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Engineer

\_\_\_\_\_  
Date

## II. Water Service Connections

Following are the submittal requirements and design standards appropriate to water service connections:

### Submittal Requirements:

- \_\_\_\_\_ 1. Plans are at a scale no less than 1-inch equals 50-feet showing all existing water mains and service connection.
- \_\_\_\_\_ 2. Specifications are included that conform to the Standard Specifications for Sewer and Water Main Construction in Illinois, latest edition, the Recommended Standards for Water and Sewage Works, latest edition, the American Water Works Association, and the Grayslake Plumbing Code.
- \_\_\_\_\_ 3. Details for all shut-off boxes, service connections, and pipe in trench.
- \_\_\_\_\_ 4. Illinois Environmental Protection Agency (IEPA) permits for services in certain instances.
- \_\_\_\_\_ 5. Separation requirements of the IEPA are met and maintained.
- \_\_\_\_\_ 6. Plans for water services show alignment and the location of all pipes and shut-off boxes.
- \_\_\_\_\_ 7. Depth, size, and material for water service pipes are indicated and a designation that they are for domestic or fire service.
- \_\_\_\_\_ 8. Show elevation information for all utility crossings including inverts and top of each crossing pipe.

### Design Standards:

- \_\_\_\_\_ 1. Water service connections and sizing shall comply with Chapter 13.08 of the Village Code and the Grayslake Plumbing Code Chapter 15.20.
- \_\_\_\_\_ 2. Minimum sized service shall be 1-inch diameter and shall be Type K copper with minimum cover of 5.5 feet.
- \_\_\_\_\_ 3. Services in excess of 90 feet or under pavement shall be a minimum 1-1/2-inch diameter.

- \_\_\_\_\_ 4. Services larger than 2-inches in diameter shall be cement-lined ductile iron pipe with a bituminous outer coating conforming to AWWA C151-65 with calculations submitted confirming the service size.
- \_\_\_\_\_ 5. Services shall be direct tap. Saddles are not allowed.
- \_\_\_\_\_ 6. Services shall be located on the approximate centerline of the building and have a shut-off box located one (1) foot from the front edge of the sidewalk in the public right-of-way.
- \_\_\_\_\_ 7. Services shall be one continuous section of material with no splices from the Village watermain to the buffalo box service valve.
- \_\_\_\_\_ 8. Shut-off boxes shall be Mueller H-10300 with 3/4 inch bolt or approved equal.

I hereby certify that the water services, to the best of my knowledge, conform to the applicable codes, ordinances, and standards.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Engineer

\_\_\_\_\_  
Date

### III. Public Sanitary Sewer Installations

Following are the submittal requirements and design standards appropriate to public sanitary sewer installations.

#### Submittal Requirements:

- \_\_\_\_\_ 1. Plans are at a scale no less than 1-inch equals 50-feet showing all existing utilities, both public and private, and proposed utilities to be constructed.
- \_\_\_\_\_ 2. Specifications are included that conform to the Standard Specifications for Sewer and Water Main Construction in Illinois, latest edition, the Recommended Standards for Water and Sewage Works, latest edition, and the Grayslake Plumbing Code.
- \_\_\_\_\_ 3. Details for all manholes and pipe in trench.
- \_\_\_\_\_ 4. Illinois Environmental Protection Agency (IEPA) permits for sanitary sewer extensions.
- \_\_\_\_\_ 5. Public sanitary sewer extensions are oversized in compliance with local area master plans.
- \_\_\_\_\_ 6. Extensions of public sanitary sewers on private property are contained in recorded easements of not less than 20 feet wide or 30 feet wide if water and sanitary share the easement.
- \_\_\_\_\_ 7. Public sanitary sewer extensions shall not be located longitudinally under pavements or streets.
- \_\_\_\_\_ 8. Separation requirements of the IEPA are met and maintained.
- \_\_\_\_\_ 9. Plans for sanitary sewer show alignment of pipes, manholes, and cleanouts.
- \_\_\_\_\_ 10. Rim and invert elevations in U.S.G.S. 29 datum are shown for all manholes.
- \_\_\_\_\_ 11. Size, slope, and material for sewer pipes are indicated.

Design Standards:

- \_\_\_\_\_ 1. Pipe material for public sanitary sewers shall be vitrified clay pipe, polyvinyl chloride (PVC), or other materials acceptable to the Village.
- \_\_\_\_\_ 2. Sewer mains shall have a minimum earth cover of 6-feet.
- \_\_\_\_\_ 3. Sewer mains with earth cover greater than 15-feet shall be constructed of ductile iron pipe.
- \_\_\_\_\_ 4. Manholes shall be placed at all junctions and changes in alignment, but in no case spaced greater than 350-feet apart.
- \_\_\_\_\_ 5. Manholes shall be pre-cast concrete, a minimum of 4-feet in diameter and have rubber "boot" gasket connections between the pipe and manhole.
- \_\_\_\_\_ 6. Manhole castings shall be Neenah Type R-1712 B with concealed pickholes, self sealing watertight lids, and "Sanitary" cast into the cover.
- \_\_\_\_\_ 7. Bituminous mastic material shall be placed in all joints and frame seals with exterior chimney seals used for all manholes.

I hereby certify that public sanitary sewer extensions, to the best of my knowledge, conform to the applicable codes, ordinances, and standards.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Engineer

\_\_\_\_\_  
Date

#### IV. Sanitary Sewer Service Connections

Following are the submittal requirements and design standards appropriate to sanitary sewer service connections:

##### Submittal Requirements:

- \_\_\_\_\_ 1. Plans are at a scale no less than 1-inch equals 50-feet showing all existing sanitary sewer and service connections.
- \_\_\_\_\_ 2. Specifications are included that conform to the Standard Specifications for Sewer and Water Main Construction in Illinois, latest edition, the Recommended Standards for Water and Sewage Works, latest edition, and the Grayslake Plumbing Code, Chapter 15.20.
- \_\_\_\_\_ 3. Details for all manholes, service connections, and pipe in trench.
- \_\_\_\_\_ 4. Illinois Environmental Protection Agency (IEPA) permits for services in certain instances.
- \_\_\_\_\_ 5. Separation requirements of the IEPA are met and maintained.
- \_\_\_\_\_ 6. Plans for sanitary service show alignment of all pipes, manholes, and cleanouts.
- \_\_\_\_\_ 7. Rim and invert elevations in U.S.G.S. 29 datum are shown for all manholes.
- \_\_\_\_\_ 8. Size, slope and material for service pipes are indicated.
- \_\_\_\_\_ 9. The location of sampling manholes for pretreatment and grease traps are indicated, if required.

##### Design Standards:

- \_\_\_\_\_ 1. Sanitary service connections shall comply with Chapter 13.12 of the Village Code and the Grayslake Plumbing Code, Chapter 15.20.
- \_\_\_\_\_ 2. Services shall be sized in accordance with the plumbing code, but in no case shall they be less than 4-inch diameter.
- \_\_\_\_\_ 3. Service pipe shall be PVC, SDR-26.

- \_\_\_\_\_ 4. Services shall be connected to the mainline sewer with factory made Y's or T's with the first section of pipe the same material as the main line sewer.
- \_\_\_\_\_ 5. Manholes shall be placed at all junctions and changes in alignment, but in no case spaced greater than 350 feet apart.
- \_\_\_\_\_ 6. Manholes shall be pre-cast concrete, a minimum of 4-feet in diameter and have rubber "boot" gasket connections between the pipe and manhole.
- \_\_\_\_\_ 7. Manhole castings shall be Neenah Type R-1712 B with concealed pickholes, self-sealing watertight lids, and "Sanitary" cast into the cover.
- \_\_\_\_\_ 8. Bituminous mastic material shall be placed in all joints and frame seals with exterior chimney seals placed on all manholes.

I hereby certify that sanitary services, to the best of my knowledge, conform to the applicable codes, ordinances, and standards.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Engineer

\_\_\_\_\_  
Date

## Section 5

# PEDESTRIAN CIRCULATION SYSTEMS AND LANDSCAPE PLANS

## A. Pedestrian Circulation Systems

In order to provide for the safe and efficient movement of non-vehicular traffic through the separation from vehicular traffic, to connect adjacent land uses, and to connect the buildings and structures from parking and loading areas, pedestrian circulation systems must be incorporated into the site design. Following are the requirements and standards related to pedestrian circulation systems.

### Submittal Requirements:

- \_\_\_\_\_ 1. Plan for pedestrian circulation systems showing the location and alignment of internal sidewalks and paths, public sidewalks, bicycle trails, and the location of all accessibility ramps.
- \_\_\_\_\_ 2. Public sidewalks are required to connect contiguous properties. The need for public sidewalks shall be determined by the Village.
- \_\_\_\_\_ 3. Bicycle paths are required if the developed site is adjacent to or along the Village's Master Greenway Corridor Plan.
- \_\_\_\_\_ 4. Plans shall show elevations in U.S.G.S. 29 datum on the finished back of sidewalks and bicycle paths at approximate 50 foot intervals, at abrupt change in grade, at property lines, inside corners at corner lots, and at driveway edges.
- \_\_\_\_\_ 5. Details and specifications are provided for sidewalks, accessibility ramps and bicycle trails.

### Design Standards:

- \_\_\_\_\_ 1. Internal pedestrian systems shall minimize conflicts with vehicular traffic and conform to ADA accessibility requirements.
- \_\_\_\_\_ 2. Public sidewalks shall be placed within street right-of-ways located one (1) foot off the property line at an elevation no higher than 3-inches above the centerline of the street.
- \_\_\_\_\_ 3. Public sidewalks shall be a minimum of four (4) feet wide along minor and subcollector streets and five (5) feet wide along collector and arterial streets.

- \_\_\_\_\_ 4. Public sidewalks are a minimum of 4-inches in depth, thickened to 6-inches across driveways and shall have a 4-inch minimum aggregate base.
- \_\_\_\_\_ 5. Sidewalk accessibility ramps conform to the most current State of Illinois Accessibility Code and the Americans With Disabilities Act.
- \_\_\_\_\_ 6. Bicycle paths are located in conservation easements, or other areas as approved by the Village, and are a minimum of 8-foot wide with 2-foot clear zones on either side and consist of a minimum 6-inch crushed stone base and a 2-inch bituminous surface course. (See next section for conservation easement requirements.)
- \_\_\_\_\_ 7. Horizontal and vertical alignment shall generally be meandering with all design considerations conforming to the most recent AASHTO Guide for the Development of Bicycle Facilities.

I hereby certify that the pedestrian circulation systems, to the best of my knowledge, conform to the applicable codes, ordinances, and standards.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Engineer

\_\_\_\_\_  
Date

## B. Landscaping

To ensure compatibility with the existing environment, to enhance visual attractiveness, and to maintain privacy and a buffer between certain land uses; various landscape features must be incorporated into the site design. Following are the requirements and standards related to landscaping.

### Submittal Requirements:

- \_\_\_\_\_ 1. Plans for landscaping show all species and size of trees, shrubs, sodded areas, enclosures, and fencing.
- \_\_\_\_\_ 2. Plans shall include a survey of existing trees and other significant vegetation and the extent to which they shall be protected, relocated, removed, and replaced.
- \_\_\_\_\_ 3. Details and specifications are provided for all plantings, enclosures, and fencing.
- \_\_\_\_\_ 4. Plans show conservation easements dedicated to the Village along certain collectors and arterials in accordance with the Village Master Greenway Corridor Plan or sub area plan with connections on contiguous properties depicted.

### Design Standards:

- \_\_\_\_\_ 1. The site plan is compatible with existing topography and other natural features and shall preserve existing mature trees and other significant vegetated areas to the maximum extent possible.
- \_\_\_\_\_ 2. In the event that existing mature trees cannot be preserved, they shall be replaced in accordance with the criteria established in Chapter 12.16 of the Village Code (Tree Preservation Ordinance).
- \_\_\_\_\_ 3. At least ten (10) percent of the lot is landscaped.
- \_\_\_\_\_ 4. Landscape plantings are to be placed in a manner to minimize maintenance, do not interfere with vehicular and pedestrian movements, do not obstruct sight lines of same and are not located within five (5) feet on either side of public utilities.
- \_\_\_\_\_ 5. The landscape plan and plantings shall be reviewed and meet the approval of the Village.
- \_\_\_\_\_ 6. Newly planted or replacement trees shall be a minimum of 2-3 inches in diameter measured one (1) foot from the ground.

- \_\_\_\_\_ 7. Landscape buffer areas and/or screen fencing shall be provided along dis-similar zoned areas and other areas as determined by the Village in accordance with the appropriate standard detail.
- \_\_\_\_\_ 8. The height of the fencing shall not exceed 6 feet in business and commercial zones and 8 feet in industrial zones along residential properties.
- \_\_\_\_\_ 9. Screen fences shall be solid and conform to the requirements of the fencing ordinance (Chapter 15.36) of the Village Code.
- \_\_\_\_\_ 10. Trash bins are contained within enclosures and meet the approval of the Village.
- \_\_\_\_\_ 11. The enclosures shall be of the same building material as the principal building.
- \_\_\_\_\_ 12. Conservation easements as part of the Village's Comprehensive Plan are a minimum of 30 feet in width or as otherwise expressly permitted by the Village.

I hereby certify that the landscape plans, to the best of my knowledge, conform to the applicable codes, ordinances, and standards.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Engineer

\_\_\_\_\_  
Date

I hereby certify that the site plans, generally as outlined in these check sheets, conform to the applicable codes, ordinances, and standards.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Owner, Applicant or Petitioner

\_\_\_\_\_  
Date