

**REQUIRED PUBLIC IMPROVEMENTS FOR ALL SUBDIVISIONS AND PLANNED DEVELOPMENTS:**

A. **STANDARDS:** Every subdivision and planned development within the territorial jurisdiction of the Village shall be improved with the following public improvements: a Village owned and operated water distribution system, a sanitary sewer system, a storm water management system, streets with curbs and gutters, sidewalks, street lights, open space, detention, park areas, and parkway landscaping (“Public Improvements”) and facilities for the distribution of electric, natural gas, telephone and cable television service (“public utilities”), except as hereinafter expressly provided. The Board of Trustees shall not approve a subdivision or planned development until the Village Engineer certifies that the engineering plans and specifications for the public improvements for such subdivision or planned development meet the minimum requirements specified in the following sections of this Subdivision Code.

1. **Additional Standards:** No private streets, water mains, sanitary sewers, or storm sewers will be permitted within any subdivision. Private sidewalks and streetlights shall not be permitted within the dedicated rights-of-way or easements for the public street system, unless prior approval from the Board of Trustees is obtained.
2. **Working Drawings and Specifications:** Before considering the approval of the final subdivision plat or final planned development plan for any subdivision or planned development, the Plan Commission shall require that complete working drawings and specifications for the public improvements and public utilities for such subdivision or planned development be submitted to the Village Engineer to determine whether they meet the Village requirements.
3. **Coordination of Review:** The Village Engineer shall coordinate the review of such plans and specifications and report staff’s findings to the Board of Trustees and Plan Commission. Should revisions be recommended by the Village Staff or retained personnel in order for the plans to conform to the requirements herein, the applicant shall revise the plans and/or specifications and resubmit them directly to the Village Engineer and Plan Commission for review and recommendations.
4. **Off-Site Public Improvements:** Each subdivider/developer shall be responsible for the construction and installation of those off-site public improvements, including but not limited to, off-site bike path and/or sidewalk, off-site bridge, off-site force main, off-site lift station, off-site sanitary sewer, off-site storm sewer, off-site stormwater storage, off-site street, off-site traffic signals and off-site water mains, that are necessary to adequately service the development of the subdivision or planned development in the reasonable opinion of the Village Engineer.

B. **SITE GRADING PLAN:** The subdivider/developer shall supply the Village with engineering plans and specifications on a final site grading plan showing the following:

1. Bench mark elevations: The benchmarks should be tied to the Village's certified benchmark system and so verified on the engineering site grading plan.
2. Centerline road elevations at front lot corners.
3. Top of building foundations.
4. Lot corner elevations with drainage arrows showing direction of drainage.
5. Break points at which the drainage changes direction.
6. Drainage structures with frame elevations.
7. Typical footprint of the pad area in which the house or building will be built.
8. Special treatment of embankments.
9. Retaining walls with top wall elevation and length.
10. Emergency/overland flood routes.
11. Stormwater detention/retention facilities, HWL, NWL.
12. Existing and proposed contours shall be shown at no more than one 1-foot intervals.

C. **WATER DISTRIBUTION SYSTEMS:** Subdivisions and planned developments with Village owned and operated public water distribution systems shall be capable of supplying the subdivision/planned development with adequate water meeting specifications for such to be approved by the Village Engineer.

D. **STREET DESIGN STANDARDS:** Every subdivision/planned development shall be provided with a system of public streets, which meets the planning standards herein and the following engineering standards:

1. **Street Improvement Standards:** All materials, workmanship, equipment and testing shall comply with the *Illinois Department of Transportation Standard Specifications for Road and Bridge Construction*, latest edition, and standards set forth herein.
2. **Minimum/Maximum Street Grades:** All street grades shall meet the following limits:

<b>Minimum/Maximum Street Grades</b>		
<b>Type of Street</b>	<b>Maximum</b>	<b>Minimum</b>
Arterial Streets	5.0 percent	0.5 percent
Collector Streets	6.0 percent	0.5 percent

<b>Minimum/Maximum Street Grades</b>		
<b>Type of Street</b>	<b>Maximum</b>	<b>Minimum</b>
Local Streets		
Minor Streets	7.0 percent	0.6 percent
Cul-des-sacs	8.0 percent	0.6 percent
Frontage road	7.0 percent	0.6 percent
Industrial service street	7.0 percent	0.6 percent
A maximum 2.0 percent grade for 100 feet into intersection		

3. Pavement Widths: All streets shall be improved with paved surfaces from edge of road to edge of road as follows:

<b>Pavement Widths, Edge to Edge</b>	
<b>Type of Street</b>	<b>Minimum Width</b>
Residential (per detail)	24 feet
Collector streets	30 feet
Industrial service streets	34 feet

4. Determining Traffic Volumes:
- (a) When the subdivider/developer is improving existing streets, current traffic data shall be secured from responsible agencies or field counts shall be taken.
  - (b) When the ultimate size of the subdivision/planned development will be less than 100 acres, traffic projections for the structural integrity of the arterial and collector streets for residential land uses, and all streets in other land uses, shall be determined on the basis of the following standards:
    - (1) For subdivision/planned developments of detached and attached single-family residences, 10 trips per day per unit.
    - (2) For commercial, industrial, office research and institutional uses, traffic projections shall be made by a traffic engineer and submitted to the Village Engineer for approval

The breakdown of traffic by categories of passenger car (PC), single units (SU) or multiple unit (MU) trucks shall be 80 percent PC, 19 percent SU and 1 percent MU for all residential type land uses. The division of traffic for all other land uses shall be in accordance with the recommendations of a traffic engineer, which have been submitted for review and approval by the Village Engineer.

- (c) When the ultimate size of the subdivision/planned development will be more than 100 acres, traffic projections made by a traffic engineer shall be submitted for review and approval by the Village Engineer for all street classifications and land uses.

- (d) Identify proposed traffic mitigation measures, including, but not limited to, street and highway widening, intersection traffic control, change in land use intensity (floor area ratio or use), change in site plan, alternative work schedules, ride sharing, etc.

The developer shall be required to install appropriate traffic signage within the development.

- 5. **Structural Design of Streets:** All sub-base, base and surface designs for streets for all land uses shall be done in accordance with the manuals for the structural design of bituminous and portland cement concrete pavements currently being used by IDOT's Bureau of Local Roads and Streets. All residential streets shall meet the pavement cross section and design thickness pursuant to Table 22.06-A at the end of this Section.
- 6. Street curve radii shall be pursuant to Table 22.06-B at the end of this Section.
- 7. **Concrete Curbs and Gutters:** Curbs and gutters shall be required on all streets constructed within the Village. The curb shall be depressed at all intersections to accommodate handicapped accessible sidewalks. Flag thickness and the widths shall be in conformity with Table 22.06-C at the end of this Section.
- 8. **Excavating and Preparation of Subgrade:** All roadways shall be excavated and the street subgrade prepared in accordance with Sections 202, 301 and 311 of IDOT's *Standard Specifications for Road and Bridge Construction*, current edition.
- 9. **Proof Roll Test:** Under the supervision of the Village Engineer and in accordance with Village standards, a proof roll test shall be conducted prior to the placement of base material. Soft and yielding materials encountered in the subgrade shall be removed and replaced with granular material or other fill material compacted to 95 percent of optimum laboratory density.
- 10. **Materials Inspections:** A competent testing laboratory to be provided at the subdivider/developer's expense shall test subgrade compaction and all materials incorporated into the roadway section. Tests shall be made in compliance with current state recommendations, except that plant inspections will not be required in concrete or blacktop plants continuously during production. However, one random test shall be made daily on all material used. Results of all tests conducted shall be forwarded to the Village Engineer for his review and approval. No acceptance of work will be recommended without such test results being submitted to the Village Engineer.

The subdivider/developer may be required to provide cores on the roadway system prior to the placement of the final surface course in order to

verify binder course and/or base thickness. Cores shall be taken at 500-foot intervals or as directed by the Village Engineer. In the event that cores do not meet at least 95 percent of the total required thickness of the binder and/or base course, additional thickness of surface course will have to be placed to compensate for the inadequate thickness. The adjustment in thickness will be based on the IDOT local roads structural numbers assigned to each respective material type for which the adjustment needs to be made.

11. **No Building Permits:** Unless this provision is waived by the Village, no permit will be issued for the construction of any building in any subdivision or planned development until curbs and gutters are in place and street pavements have been partially completed to meet the following standards:
  - (a) Bituminous concrete streets: the base course and first lift of bituminous pavement must be in place.
  - (b) Concrete streets: the concrete pavement must be in place.
12. **No Certificate of Occupancy:** No Certificate of Occupancy will be issued until 85 percent of the public improvements have been installed. Sidewalks and all parkways shall be completed prior to release of Certificate of Occupancy. The developer/contractor shall provide documentation or certification that all lots have been surveyed for elevation and grades verified to meet approved engineering drawings prior to issuing final occupancy permit. Prior to the issuance of the occupancy permit, an inspection shall be done on each lot to check for broken sidewalk/driveway, drainage problems, lot grading, b-box location and key ability.
13. **Cut-off Date for Placing Bituminous Materials:** No bituminous concrete base or surface course work shall be placed later than November 15<sup>th</sup> of any calendar year without special written permission from the Village, which may be given on a week by week basis after November 15<sup>th</sup>.
14. **Street Ditch Sections:** In the event that the Board of Trustees permits the use of a roadway ditch section as part of the roadway cross section, the ditch section shall conform to the following minimum requirements:
  - (a) Minimum Shoulder Width: 6 feet.
  - (b) Minimum and Maximum Side Slopes: 6:1 minimum and 4:1 maximum.
  - (c) Minimum and Maximum Ditch Depth: Minimum depth is 2.0 feet below roadway centerline elevation and maximum depth is 3.0 feet below roadway centerline elevation.
  - (d) Ditch Bottom Width: Can vary from 0 to 2.0 feet wide at bottom of slope.

- (e) Ditch Bottom Slope: Minimum slope is 1 percent and maximum slope is 7 percent.
- 15. Temporary Street Name Signs: During the construction of the public improvements in a subdivision or planned development the subdivider/developer shall erect temporary street name signs with lettering at least 3 inches high and water-proofed to facilitate easy delivery of materials and provide ample direction for emergency equipment.
- 16. Permanent Street Signs: Subdivider/developer shall install permanent street name signs and other signage required for the public improvements upon completion of underground improvements.
- 17. Construction Traffic: Prior to the recording of any final plat of subdivision or planned development, the subdivider/developer shall file a road repair letter of credit with the Village to insure the subdivider/developer's repair of damage to streets within the Village caused by construction trucks. The duration of the letter of credit shall be for one-year intervals, but shall be renewed annually until such time as the infrastructure associated with the development is completed and dedicated to the Village. The form and amount of the letter of credit shall be determined by the Village Attorney and Village Engineer.
- 18. Sidewalks shall be required in all public rights-of-way and in other locations as determined by the Board of Trustees. Sidewalks shall extend through all driveways.
  - (a) Standards for Sidewalks: The standards are as follows:
    - (1). All sidewalks in public rights-of-way or easements dedicated to the Village shall be constructed of Portland cement concrete conforming to Section 424 of the Standard Specifications for Road and Bridge Construction.
    - (2). For additional standards refer to the Building Department.
  - (b) Waiver of Sidewalk Requirements: The Board of Trustees may waive the requirements for public sidewalks for subdivisions or planned developments with residential lots one acre or more in area, or wooded areas, or where a bicycle path is provided in lieu of a sidewalk along certain public rights-of way.
  - (c) Handicapped Accessible Sidewalks: All sidewalks shall be provided with ramps from streets to sidewalks at all intersections to accommodate the handicapped. Slopes for such ramps shall not exceed 1:12. The surface of the sidewalk ramp shall have a diamond pattern texture finish.

- (d) **Sidewalk Transverse Slope:** All sidewalk sections shall be sloped from the property line side of the walk to the street side of the walk at one-quarter inch per foot.

E. **BICYCLE PATHS:** Bicycle paths shall be required within or adjacent to a subdivision or planned development where a bicycle path shown on the Village's Comprehensive Land Use Plan runs through all or part of, or adjacent to, such Subdivision or planned development. Bicycle paths may be installed in lieu of sidewalks with the approval of the Board of Trustees.

1. Standards:

- (a) All bicycle paths shall be constructed of a crushed gravel base course (C.A. - 6) and a bituminous surface course (Class I-11) conforming to the requirements of IDOT's *Standard Specifications for Road and Bridge Construction*. The excavation shall be lined with geotechnical fabric prior to the installation of the aggregate base course.
- (b) For additional standards refer to the Village of Prairie Grove Standard Specifications for Construction and Estimating.

F. **DRIVEWAY APPROACHES:** A P.C.C. concrete driveway approach up to the right-of-way will be required between the curb and sidewalk (a P.C.C. concrete or asphalt concrete driveway approach will be required between the curb [or edge of pavement where there is no curb] and property line where sidewalks are waived) for each lot before a certificate of occupancy is issued.

- 1. **Materials:** Placement of all materials shall be done in accordance with the current IDOT edition of *Standard Specifications for Road and Bridge Construction*.
- 2. **Slope of Drive Approaches:** All drive approaches shall have a minimum slope of 1 percent and a maximum slope of 8 percent with drainage from the property line to the street. Slope from the street to the property line will be permitted only if it can be demonstrated that storm water runoff can be intercepted within the rights-of-way and carried by the street or storm sewer system.

G. **LANDSCAPING:** All parkway areas, including landscaped islands and cul-de-sacs, and all landscape materials, including lawns, shrubs, and trees, shall be maintained by the homeowner's association of the property owners that abut said parkway or island.

H. **PUBLIC UTILITIES, UNDERGROUND:** All subdivisions and planned developments shall be provided with a complete system of public utilities including telephone, electric, gas service and cable television. All such utility lines shall be placed underground in rear lot line easements with minimal utility installation in public rights-of-way and side yard areas. When cables or conduits are placed within easements or public rights-of-way, they shall be so placed that they will not conflict with the Village's public improvements.

I. EASEMENTS: Easements for drainage and public utilities shall be provided on all side and rear lot lines. Such easements shall be not less than 5 feet wide on each side of common side and rear lot lines, or 10 feet wide in cases when a 5-foot easement cannot be acquired from the adjoining property or properties. If it is determined by the Board of Trustees on the basis of the Village Engineer's recommendation that additional easements or wider easements are required, the developer shall provide such wider easements.

1. In cases where rear or side lot lines abut an existing subdivision/planned development an easement of sufficient width shall be provided to create an easement 10 feet wide.
2. Easements on newly subdivided lots shall, whenever possible, be aligned and continuous with easements on adjoining lots.
3. No obstruction shall be placed in an easement that would prohibit or alter the natural flow of stormwater through the drainage easement.
4. No structures except fences shall be permitted within a drainage or public utility easement. All fences shall require application for and issuance of a building permit, and shall comply with the Village's building codes.
5. On days of extensive rain events stormwater may be present in drainage easements up to 48 hours.
6. Impermeable surfaces shall not be placed on drainage easements.
7. When cables or conduits are placed within easements or public right-of-way they shall be so placed that they will not interfere with the Village sanitary, storm sewer and water lines and their appurtenant structures.
8. All transformer boxes, junction boxes, and risers shall be so located as not to be unsightly or hazardous to the public, or disrupt drainage easements.
9. Utility easements for primary sewer or water facilities shall be located on open or common space areas and not on private property.
10. Provisions for cross-access between adjacent properties may be required for certain developments. These cross-access easements shall be depicted on the final plat of subdivision or planned development.
11. In the event, a subdivider/developer is unable to obtain utility easements over, under, across or through other property which may be necessary or appropriate for the development of the property, on conditions mutually acceptable to the subdivider/developer and the Board of Trustees, the Village may, in its sole discretion, use its powers of condemnation to acquire such easements. All costs and expenses incurred by the Village in the securing of such easements on behalf of the subdivider/developer.

J. RECAPTURE FOR OVERSIZED PUBLIC IMPROVEMENTS: In the event the Village requires the developer to oversize any of the required public improvements for the subdivision, the developer shall provide the public improvements. If any third party outside of the subdivision desires to “tap on” or make use of any of the oversized public improvements required by the Village, the Village agrees that the developer may request a recapture agreement to collect the proportionate share of the cost from others who connect to or utilize such improvements.

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**TABLE 22.07-A  
MINIMUM BASE AND SURFACE THICKNESS FOR BITUMINOUS  
SURFACED STREETS**

Base Course Type	ARTERIAL STREET		INDUSTRIAL COLLECTOR		RESIDENTIAL COLLECTOR & INDUSTRIAL SERVICE		RESIDENTIAL LOCAL	
	Base Course	Surface Course	Base Course	Surface Course	Base Course	Surface Course	Base Course	Surface Course
Portland Cement Concrete Base Course	8"	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Aggregate Base Course Type B (100% crushed gravel or stone)	N/A	N/A	14"	2½" Surface 3" Binder	14"	1½" Surface 2½" Binder	12"	1½" Surface 2½" Binder
			Structural #4.02		Structural #3.42		Pavement #3.16	
Bituminous Aggregate Base Course (BAM)*	9"	1½" Surface 1½" Binder	7½"	1½" Surface 1½" Binder	6"	1½" Surface 1½" Binder	6"	2" Surface
	Structural #4.61		Structural #4.12		Structural #3.62		Structural #3.22	
*A minimum of 4" C.A. -6 crushed gravel or stone sub-base will be required under all bituminous aggregate (BAM) base course sections. The maximum thickness of BAM placement shall be four inches.								

**TABLE 22.07-B  
STREET CURVE RADII**

TYPE OF INTERSECTION	MINIMUM RADII
Cul-de-sac to minor street Minor street to minor street	25 feet
Cul-de-sac to collector street Minor street to collector street Collector street to collector street Minor street to arterial street Cul-de-sac to arterial street	30 feet
Collector street to arterial street Arterial street to arterial street	40 feet

**TABLE 22.07-C  
MINIMUM WIDTHS AND THICKNESS FOR COMBINATION  
CONCRETE CURBS AND GUTTERS**

	Arterial Streets*		Collector Streets**		Local Streets**	
	Flag Width	Flag Thickness	Flag Width	Flag Thickness	Flag Width	Flag Thickness
Flexible Bases	24"	10"	12"	10"	12"	10"
P.C.C. Pavements***	24"	20"	12"	12"	12"	10"
* The curb height for all subdivision streets shall be six inches with a barrier face (B-6.12).						
** For subdivisions that were approved prior to September 1, 1999, the Public Works Director may all the curb height to be three inches with a mountable face (M-3.12).						
*** When integral curbs are constructed with P.C.C. pavements, the thickness of the curbs shall be equal to the pavement thickness.						