

ARTICLE IV
MINIMUM STANDARDS OF IMPROVEMENT

Sec. 62-111 Applicability; Conformance Required.

- a. The subdivider shall provide and install all public improvements, as required by this Chapter. Improvements shall be provided and installed in accordance with the standards and engineering requirements established by this Chapter as well as any and all standards and requirements adopted by other local, state and federal authorities which may have jurisdiction of the area being subdivided.

Sec. 62-112 Engineering Drawings

- a. The subdivider shall prepare and file engineering drawings of the subdivision in accordance with the regulations of Section 62-35.

Sec. 62-113 Technical Specifications

- a. All construction of improvements covered by this Chapter shall be in accordance with, and materials used shall be in compliance with, the methods and materials required in the appropriate sections of the latest editions, amendments or revisions of the following:
 - i. "Standard Specifications for Road and Bridge Construction", Illinois Department of Transportation;
 - ii. "Design Manual", Illinois Department of Transportation;
 - iii. "Highway Standards", Illinois Department of Public Works and Building Division;
 - iv. "Culvert Manual", Illinois Department of Transportation;
 - v. "Manual on Uniform Traffic Control Devices", U.S. Department of Transportation and Illinois Department of Transportation Supplement;
 - vi. "Standard Specifications for Water and Sewer Main Construction in Illinois", Illinois Society of Professional Engineers, et al;
 - vii. "Illinois Design Standards for Sewage Works", I.E.P.A., Division of Water Pollution Control;
 - viii. "Technical Policy Statements", I.E.P.A., Division of Public Water Supply;

- ix. "Recommended Standards for Water Works", Great Lakes Upper Mississippi River Board of State Sanitary Engineers ("10 States Standards");
- x. "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois", The Urban Committee of the Association of Illinois Soil and Water Conservation Districts, ("Green Book");
- xi. "Standards and Specifications for Soil Erosion and Sediment Control", I.E.P.A. ("Yellow Book");
- xii. "U.S. Soil Conservation Service Field Engineering Handbook";
- xiii. Municipal standards and specifications as adopted.

Sec. 62-114 Inspections

- a. Unless otherwise excepted herein, all public improvements proposed to be made under the provisions of this Chapter shall be inspected during the course of construction by the County Engineer or his designee.

Sec. 62-115 Reference Monuments

- a. Permanent monuments shall be of stone or concrete measuring four (4) inches by four (4) inches by thirty (30) inches with a five-eighths (5/8) inch by thirty (30) inch solid iron pin cast in the center, set in such a manner so as not to be moved by frost and shall be erected at all corners or changes in bearing of the exterior boundary. All lot corners, points of intersection (P.I.) of all curves and/or points of tangency on streets and other points as shall be required by the Plat Officer to enable ready re-establishment of lines within the subdivision shall be marked by one-half (1/2) inch iron pins not less than twenty-four (24) inches in length driven flush into the ground.

Sec. 62-117 Street Improvements

- a. *Generally.* All new streets which are created and dedicated for use within a subdivision shall be graded, drained and surfaced in accordance with the minimum requirements herein set forth and in a manner which will provide complete and adequate drainage of all streets, alleys and public grounds in the entire subdivision, including any such work which may be necessary in order to provide adequate and satisfactory drainage along the side of any existing public street which is adjacent to the subdivision. In general, all such new streets within the subdivision and all work to be undertaken thereon shall be designed and

constructed according to the specifications adopted by the Division of Highways of the Illinois Department of Transportation, as the same are in effect at the time of the preliminary plat and plans for such improvement work are submitted for approval.

- b. *Roadway cross section.* The roadway shall be considered to be that part of the improvement which lies within the right-of-way and shall be constructed substantially in accordance with the typical cross-section as found in Appendix A of this Chapter.
- c. *Curbs and gutters.* All streets shall have concrete curb and gutters along the outside edge.
- d. *Construction Standards:*
 - i. Local streets shall have a minimum pavement width of thirty-two (32) feet.
 - ii. Subbase, if required, and base course thickness shall be a minimum of nine (9) inches (CA-6 or CA-10) of compacted gravel or six (6) inches of compacted bituminous mixture.
 - iii. The base course shall be two (2) feet wider than the surface and the subbase, if required, shall be two (2) feet wider than the base course.
 - iv. The minimum surface type shall be a Class B modified containing 6.5% PG 58-28 or a Class I (Hot Mix) at least two and one-half (2-1/2) inches thick and the material shall be placed in two lifts.
 - v. Ditch side slopes shall not be steeper than 3:1, nor shallower than two (2) feet.
 - vi. Arterial and collector streets shall have widths and surfaces as determined by the County Engineer.
 - vii. The aggregate base course shall remain throughout one winter season before the surface is placed thereon. The County Engineer may waive this requirement with proper compaction tests meeting ninety-five (95) percent of optimum density.
- e. *Alleys.* Alleys, where required for service access, shall be constructed in accordance with local street specifications and shall have a minimum pavement of twenty (20) feet.
- f. *Installation of utility lines.* All telephone and power transmission lines shall be installed underground in the utility easement provided.

Sec. 62-118 Storm Sewers and Other Drainage Appurtenances

- a. *Generally.* There shall be provided either storm water sewers or a surface drainage system to serve adequately the area being platted, considering, but not limited to, the following:
 - i. The results and recommendations of County Drainage Study and flood hazard maps.
 - ii. The use of existing drainage channels whenever possible.
 - iii. The provisions of Chapter 30, Article II, Division 2, pertaining to stormwater detention.
- b. *Design standards.* The design of the drainage system shall consider and show:
 - i. Storm drainage area of which the subdivision is a part.
 - ii. Calculations as to volume and frequency of water to be handled. Calculations shall prove that the proposed system will meet requirements set forth in Chapter 30, Article II, pertaining to "Drainage and Flood Control Ordinance".
 - iii. A plan of culverts sufficient in size to eliminate flooding or ponding of water.
 - iv. Elimination of grades which may result in erosion or ponding of water.
 - v. Existing water courses.
 - vi. A plan of the subdivision's grading to prevent ponding of storm water.
- c. *Storm Sewers.* Storm sewers are required and shall meet the following minimum specifications:
 - i. The storm sewers shall have an inside diameter of not less than twelve (12) inches and shall be constructed of State certified reinforced concrete pipe in conformance with IDOT standards.
 - ii. The storm sewers shall be designed to provide for a minimum velocity flow of two (2) feet per second and a maximum velocity flow of eight (8) feet per second.
 - iii. Manholes shall be provided at all changes in direction of pipe and pipe size ~~shall~~

~~be specified in State of Illinois Standard Specifications #1527-3, Type A or equivalent. Manholes shall be Type A or equivalent as specified in IDOT Standard Specifications. Inlets shall be located not more than five hundred (500) feet apart and shall be a Neenah #3154 or equivalent Inlet Special #1 or #2 as required and as shown in Appendix A.~~

- iv. Storm and sanitary sewers shall have a minimum horizontal separation of ten (10) feet from water mains.
- v. Storm sewer design shall be based on the ten-year flood frequency.

Sec. 62-119 Sanitary Sewage System

- a. There shall be provided a complete sanitary sewer system including a service connection for each lot and a sewage treatment plant or disposal facilities for the subdivision.
- b. *Construction standards; inspection by outside consultants.* All sewage systems shall be designed and constructed in accordance with applicable State, County and local regulations and in accordance with accepted engineering practices. The County shall contract for professional services for review and inspection of plans and construction of the required sanitary sewer system. All costs incurred as a result of such contract or contracts shall be borne by the developer.
- c. *Minimum capacity; required approvals.* Disposal facilities shall be designed to adequately treat the anticipated sewage load, and the facilities shall meet the approval of State, County and local agencies.
- d. *Privately owned treatment facilities.* In no case shall the County be the operator of sanitary sewer facilities, either collection or treatment. If the subdivider or developer proposes privately owned sewage treatment facilities, provisions shall be made for the maintenance and operation of such facilities and shall be stated on the final plat and incorporated in the deed. Additionally, there shall be compliance with Section 62-39.

Sec. 62-120 Water Supply and Distribution

- a. There shall be provided a complete public water supply and distribution system including all appurtenances and stubs to each lot.
- b. *Construction standards; inspection by outside-consultants.* All water supply and distribution facilities shall be designed and constructed in accordance with applicable state, County and local regulations and in accordance with accepted engineering practices. The

County shall contract for professional services for review and inspection of plans and/or construction of the required water supply and distribution system. All costs incurred as a result of such contract or contracts shall be borne by the developer.

- c. *Privately owned facilities.* In no case shall the County be the water supplier or distributor. If the subdivider or developer proposes privately owned water supply or distribution facilities, provisions shall be made for the maintenance and operation of such facilities, and shall be stated on the final plat and incorporated in the deed. Additionally, there shall be compliance with Section 62-39 of this Chapter.

Sec. 62-121 Fire Hydrants

- a. Fire hydrants shall be installed by the subdivider as part of the water distribution system if public water is available. Installation of hydrants shall be accomplished in such manner that each lot is within four hundred (400) feet of the fire hydrant when measured along the centerline of the right-of-way. No hydrants shall be placed on a main smaller than six (6) inches in diameter. Hydrants installed shall be of the type approved by the fire protection district. The location of all hydrants placed in the right-of-way shall be subject to the approval of the County Engineer.

Sec. 62-122 Street Lighting

- a. Street lighting facilities may be required at all street intersections. When required, the subdivider shall arrange for and pay any installation costs required by the public service company for the erection of the required street lights.
- b. Commercial street lighting facilities shall be of the high-level, high-intensity type, and shall be placed on alternate sides of the street at five hundred (500) foot intervals.

Sec. 62-123 Telephone and Electric Utilities and CATV

- a. All telephone and power transmission lines installed for the purpose of providing service to the subject subdivision shall be installed underground in the utility easement provided along the rear lot lines of the property developed unless otherwise specified by the appropriate utility company.
- b. All CATV transmission lines shall be installed underground.

Sec. 62-124 Sidewalks

- a. In all subdivisions, sidewalks shall be constructed with concrete or equivalent material, four

(4) inches thick and four (4) feet wide, and located one foot off the property line on both sides of all arterial, collector and local streets. The Planning and Regulations Committee may waive the requirement for the construction of sidewalks for industrial uses provided a written request is submitted by the subdivider and such request is deemed appropriate by the Committee.

Sec. 62-125 Tree Preservation

- a. *Tree Preservation:* In connection with projects involving the construction of new homes, additions, or detached accessory buildings requiring building permits, a Tree Preservation Plan shall be filed with the building permit application in order to assure that all buildings and other structures shall be located upon a lot or parcel of land in such a way as to minimize tree damage and/or removal, consistent with the various setback requirements of the Zoning Ordinance of the County. The Tree Preservation Plan shall specify the following:
 - i. Tree Preservation Area and Building Activity Area upon the lot or parcel of land for which a building permit application has been filed. The Tree Preservation Area shall be protected physically from the Building Activity Area by a barrier to prevent penetration of construction vehicles, materials, spoils, and equipment into or upon the Tree Preservation Area.
 - ii. The general contractor, who shall be responsible for the construction, erection, and maintenance of temporary fencing or other physical barrier around Tree Preservation Areas so that all trees in Tree Preservation Areas shall be preserved.
- b. A tree of diameter at breast height greater than ten inches (10") may be removed only in the event that the County finds that all reasonable efforts have been undertaken in the architectural layout and design of the proposed development to preserve existing trees. No building permit shall be issued unless the Tree Preservation Plan has been filed with the building permit application and approved by the Plat Officer or his/her designee.
- c. During construction, all reasonable steps necessary to prevent the destruction or damage of trees (other than those specified to be removed) shall be taken, including, but not limited to the following:
 - i. No construction activity, movement and/or placement of equipment or material or spoils storage shall be permitted outside the Building Activity Area or within the Tree Preservation Area. No excess soil, additional fill, liquids, or construction debris shall be placed within the Root Zone of any tree that is required to be preserved.

- ii. Appropriate protective fencing shall be temporarily installed for protection of remaining trees.
 - iii. All required protective fencing or other physical barrier must be in place and approved by the Plat Officer prior to beginning construction. The fencing must remain in place during the entire construction period. All fencing must be secured to metal posts driven into the ground spaced no further than ten feet (10') apart.
 - iv. No attachments, fences, or wires, other than those approved for bracing, guying or wrapping, shall be attached to trees during the construction period.
 - v. Other measures such as construction pruning and root pruning of trees directly impacted by construction must also be indicated on the Plan or on an accompanying sheet and approved by the Plat Officer.
 - vi. Unless otherwise authorized, no soil is to be removed from within the Root Zone of any tree that is to be preserved.
- d. *Landscaping.* Where a parcel abuts a dedicated public right-of-way, landscaping shall be provided in the unpaved portion of the public right-of-way in accordance with the following provisions:
- i. **Shade Trees**

Shade trees shall be planted on a maximum one hundred twenty-five (125') feet and a minimum fifty (50') feet spacing such that the total number of trees shall equal or exceed the ratio of one (1) tree for each fifty (50') feet of street frontage.
 - ii. **Exceptions**
 - (1) When conditions are such that the required spacing cannot be satisfied in the unpaved right-of-way or, if in the opinion of the Plat Officer the unpaved right-of-way is not appropriate to support tree growth and maintenance, trees shall be planted within the front setback area.
 - (2) If plantings are prohibited in the right-of-way of a State Route, the required shade trees shall be provided within the front setback area, unless trees are already required in the front by Subsection 6.06.4 of the Zoning Ordinance.
 - iii. **Sodding/Seeding**

The unpaved portion of a public right-of-way abutting a parcel shall be seeded or sodded with a salt tolerant grass.

Sec. 62-126 Miscellaneous Requirements

- a. *Street signs.* Street signs of the type approved by the County Engineer shall be installed on the northeast corner of each intersection and shall indicate the street names and intersection numbers as shown on the final plat. Stop signs and other traffic signs shall be provided as directed by the County Engineer.
- b. *Guard rails or warning posts.* Guard rails or warning posts, as specified by the County Engineer shall be placed along the shoulder of any street which qualifies according to the specifications adopted by the Division of Highways, Illinois Department of Transportation, as are in effect at the time.
- c. *Location of mailboxes.* The County may require that mailboxes be placed on only one side of an approved subdivision street. If so required, covenants shall be filed with the final plat stipulating such requirement.
- d. *Seeding or sodding of right-of-way.* All unpaved rights-of-way shall be either seeded or sodded as determined by the County Engineer.

Secs. 62-127 – 62-150. Reserved