

## SECTION 800 – PROJECT DOCUMENTS

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### **Section 800 – Project Documents**

#### Section 800.01 – Intent

It is the intent of the following standards to provide for the thorough, relatively uniform presentation of pertinent development information by developers or others wishing to alter the present condition of real property. It is the intent of these standards to provide clear documentary evidence of what currently exists, what is proposed, what is constructed, and what all parties agree to. It is the intent of these standards to provide for the control of physical aspects of documentary material so that such material may be conveniently archived by the Village.

#### Section 800.02 – Applicability

These standards and specifications shall apply to the documentation for all subdivision and development activities within the Village and within the one and one-half (1-1/2) mile jurisdictional area surrounding the Village with the exception of architectural drawings having to do specifically with proposed buildings or like structures.

#### Section 800.03 – Document Specification and Standards

Documents shall conform to the following standards:

- a. Documents that are primarily written, forms, correspondence, etc., shall be 8-1/2 by 11 inches except certain legal documents may be 8-1/2 by 14 inches.
- b. Plats and plans shall be standard size sheets (approximately 24 by 36 inches) unless otherwise approved by the Village Engineer, Village Planner and/or Village Administrator.
- c. Documents, plats, and plans that consist of more than one sheet shall be bound at the top or left side. Bound sheets shall have a margin of one to two inches on the bound side.
- d. Certain incidental documentation such as letters of transmittal, receipts, etc., may vary from the above standards and specifications. Some of the sketches or other early drawing items required in the conceptual stage of a project may also vary from the above standards and specifications except that no conceptual stage documentation shall be smaller than 8 by 11 inches.
- e. Documents that are 11 by 17 inches shall be folded to 8-1/2 by 11 inches.
- f. Information conveyed by radio or telephone or otherwise verbally shall not be considered binding unless documentation is also provided. The intent of this provision is to encourage the conveyance of important information by documentation so each transaction is as clear and unambiguous as possible.
- g. Documents conveyed through the use of facsimile transceivers are to be considered as less binding than conveyance of original signature documents *by* mail or by hand delivery. Legal documents involving the Village shall all be original signature documents.

## **Section 801 – Final Improvement Plans**

### Section 801.01 – Intent

The improvement plan stage is for the purpose of accurately showing how the improvements will be constructed in order to conform to the layout and design objectives of the Preliminary Plan. As such, the improvement plan process is an extension of the Preliminary Plan process. Where conditions so warrant, the Village may require that portions of improvement plans be submitted during the preliminary plan review process in order to determine the land's suitability for the preliminary plan design. Any required off-site improvements and engineering studies shall be provided and paid for by the Subdivider upon request. Where the subdivision is to be developed in phases, and where soil and/or topographical conditions so warrant, the Village may require that improvement plans for the entire preliminary plan area be submitted prior to the construction of improvements.

### Section 801.02 - Filing

Prior to the submittal of the final plat, the applicant shall ensure that they have complied with the Final Plat Checklist Requirements as indicated on the Planning and Zoning Check Sheet

#### Section 801.03 – Final Engineering Plans Content

Final engineering plans shall, as a minimum, consist of the following:

1. Title Sheet;
2. Project Specifications and General Construction notes;
3. Geometric Plan;
4. Grading Plan, which includes the street paving plan, all storm sewer lines and structures, storm water retention/detention facilities, erosion control measures, flood plain and wetland protection measures;
5. Master and Detailed Utility Plan, which shows all storm sewers, sump pump drain lines, sanitary sewers, water main and any other public utility lines with appurtenant structures;
6. Lighting Plans shall include the layout for lighting standards, underground conduits for pavement crossings, unit duct, and transformers and junction boxes for electrical utility for off-street parking lighting and/or public street lighting systems;
7. Street Plan and Profiles;
8. Intersection Grading Plan;
9. Construction Details - Most Current Edition;
10. Water main, sanitary and storm sewer profiles;
11. Landscaping plan including parkway trees;
12. Striping and Signage Plan;
13. Maintenance of Traffic Plan including traffic signage; and
14. Storm Water Pollution Prevention Plan.

#### Section 801.04 – Required Information

Each Plan Sheet shall include the following information:

1. A title block that includes the project name, job number, sheet title (Geometric, Grading, etc.), sheet number, date of preparation, and latest revision date;

2. North arrow and scales;
3. Additional general plan notes and legend as may be required; and
4. A reduced (not to scale) location map on the plan and profile sheets indicating the location of the respective plan and profiles to the overall proposed subdivision.

### **Section 802 – Title Sheet**

The Title Sheet shall include the following information:

1. Subdivision name and unit number or phase number;
2. Location map;
3. Seal, signature, address, and phone number of the registered professional engineer who prepared the plans and the person or firm that prepared the topographic surveys;
4. Developer's name, address, and phone number;
5. Index of sheets;
6. Permanent benchmarks need to be established at a rate of one benchmark per fifty acres. A minimum of three (3) benchmarks, both permanent and temporary need to be indicated;
7. Dates of preparation and any revisions;
8. Index of Standard Details used;
9. The standard drainage certificate as required by the Illinois Plat Act; and
10. Standard legend.
11. The following note needs to be placed on the title sheet:

The following documents will be required before receiving a Cert. of Occupancy:

1. One (1) separate as-built grading plan
2. One (1) Mylar copy of the complete construction set of plans with the as-built information incorporated and ***sealed by a registered professional engineer and the drainage certificate must be signed by the design engineer and the owner or the owner's attorney.***
3. Three (3) paper copies of the complete construction set of plans with the as-built information incorporated and ***sealed by a registered professional engineer and the drainage certificate must be signed by the design engineer and the owner or the owner's attorney.***

4. One (1) Mylar copy of the Final Recorded Plat.
5. One (1) Digital copy of the paper space as-built plan set on compact disc. All sheets of the original approved construction plan set, modified as necessary, shall be included. The digital submittal shall be compatible with AutoCAD MAP 2004 on compact disc. Also, provide one (1) digital copy in pdf format.

### **Section 803 – Project Specifications and General Construction Notes**

The Project Specifications and General Construction Notes shall include the following provisions:

1. All on-site and off site improvements shall be constructed in accordance with the requirements of the "Village of New Lenox";
2. Permits shall be obtained from all outside governmental agencies having jurisdiction;
3. All structure adjustments shall be accomplished in conformance with the most recent Village standard;
4. Existing field tiles encountered during construction shall be either integrated into the site drainage system, removed or plugged in a manner deemed appropriate by the Village Engineer;
5. The developer shall be responsible for all adjustments before and after final inspection, prior to final acceptance by the Village of New Lenox;
6. The Village must have forty-eight (48) hours notice prior to the initiation of construction activity;
7. The testing and sterilization of all new water distribution facilities shall be completed prior to making water service taps by an outside testing service;
8. Material specifications comply with Village standards and include:
  - a. Paving base materials;
  - b. Paving surface materials;
  - c. Concrete materials;
  - d. Pipe materials.
9. All restoration work in the public right-of-way subject to the specific approval of the Village Engineer;
10. Village Police Department, Fire District, School Districts and Administration shall be notified a minimum of forty-eight (48) hours prior to road or water main shutdowns. A copy of the Village Notification Sheet needs to be obtained from

Village Hall;

11. Road closures and open cutting of pavement require Village Board approval;
12. Contractor shall contact JULIE (1-800-892-0123) prior to any excavation work (including Section, Township, and Range numbers of property with note); and
13. Contractor shall maintain pavement crossing cuts until final pavement restoration is complete and accepted by the Village Engineer.

Sanitary Sewer plans and specifications shall conform to the "Standard Specifications for Water and Sewer Main Construction in Illinois, Most Recent Edition" and Village Ordinances. If a conflict arises, the Village ordinances shall govern.

Water distribution plans and specifications shall conform to "Standard Specifications for Water and Sewer Main Construction in Illinois, Most Recent Edition" and Village Ordinances. If a conflict arises, the Village Ordinances shall govern.

Pavement, curb and gutter, sidewalks, and storm sewer shall conform to "IDOT Standard Specifications for Road and Bridge Construction, Most Recent Edition"

#### **Section 804 – Geometric Plan**

The Geometric Plan shall include the following information:

1. Site boundaries and lot layout. This information shall be a copy of the final plat indicating easements and dedications, reduced if required, without the certificates;
2. All necessary geometric data required to layout the proposed improvements;
3. Show all streets adjacent to and within one hundred feet (100') of project site;
4. Show all site access roadways and driveways within one hundred feet (100') of project site;
5. All necessary geometric data required to show existing and proposed easements;
6. Street right-of-way width;
7. Street centerline and radii and curve data;
8. Street pavement width;
9. Location of curb and gutter;
10. Intersection geometric data;

11. Parking lot dimensioning and data including: lot aisle widths, space dimensions, handicap space dimensions; loading berth dimensions, curb radii, angle of parking, throat width of drives, angle of driveway at street intersection;
12. Setback lines and distances for all proposed building, parking lots, etc;
13. Proposed building footprint outlines;
14. Non-residential site area in square feet:
  - a. Office building area in square feet (if applicable);
  - b. Warehouse building area in square feet (if applicable).
15. Building envelope;
  - a. Distance to front lot line, rear lot line, interior side lot line, and exterior lot line (if applicable);
  - b. Distance to all existing off-site buildings within one hundred feet (100') of the subject site.

#### **Section 805 – Maintenance of Traffic Plan**

Maintenance of traffic plans shall be provided that provides the proposed construction traffic route and all necessary detour plans for applicable off site work adjacent to proposed developments.

#### **Section 806 – Erosion and Sediment Control Plan**

The Storm Water Pollution Prevention Plan shall include the following information:

1. Initial sediment and erosion control measures to be installed prior to stripping existing vegetation or mass grading.
2. Construction Phasing, including the sequence of grading activities and the sequence for the implementation of temporary soil erosion and sediment control measures for each construction phase.
3. A maintenance schedule
4. Modification procedures
5. Hazardous material spill procedures
6. Method of conveying overland flow as well as the 100 year over land flow route. The 2 year and 10 year run-off rates from all off-site areas draining into the site shall be listed.
7. The final stabilization and vegetation measures as well as a description of the parties responsible for post-construction maintenance.

8. A location for the following information:
  - i. sediment basin locations
  - ii. sediment trap locations
  - iii. diversion swale cross section and locations
  - iv. silt fence location
  - v. temporary seeding requirements and location
  - vi. mulching
  - vii. erosion control blanket
  - viii. Chemical Storage Location
  - ix. Port-o-Pottie Location
  - x. Concrete Washout Location
  - xi. Stockpile Location
  - xii. Site Parking Plan
  - xiii. Motor Pool Area for heavy equipment
  - xiv. Rip Rap Details

### **Section 807 – Grading Plan**

The Grading Plan shall include the following information:

1. Existing and proposed finished ground topography of site at one-foot (1') contour intervals extending for one hundred feet (100') onto adjacent properties. All site and any affected adjoining properties draining to or from the proposed site need to be indicated and all existing and proposed channels, swales, lakes, ponds, and structures with control elevations, slopes and cross-sections need to be provided.
2. The Grading plan shall be no smaller than one (1) inch to fifty (50) feet in scale.
3. All existing structures located and described.
4. All streets, driveways, parking lots, and other paved areas.
5. Longitudinal slope of parkways, sidewalks and driveways where required.
6. Locations of all trees exceeding six inches (6") in diameter.
7. Flood hazard and wetlands delineation.
  - a. Floodway delineation.
  - b. One hundred year floodplain delineation.
  - c. Drainage watershed delineation.
  - d. Wetlands and other flora areas delineation.
  - e. Delineation of all major watercourses.
8. Curb and gutter, sidewalks.
9. Proposed retaining walls.

10. Storm and sump pump drainage appurtenances
  - a. Number all storm sewer structures.
  - b. Rim and invert grades and pipe sizes noted for all drainage structures.
11. All elevations including contours shall be referenced to USGS datum NAVD 88 and established from approved bench circuits. Benchmark coordinates need to be obtained from the Village G.I.S. Technician:
  - a. Existing contours to be shown as light dashed lines.
  - b. Proposed contours to be shown as heavy solid lines.
12. Spot elevations at break points, at all lot corners, foundation corners, top curb elevation at all property lines extended to curb line, drainage inlet structures, and at other ground control points.
13. A list of Special Foundation Opening Restrictions needs to be provided in a tabular format.
14. Proposed building pad location and existing building footprints with top of foundation elevations, foundation opening elevations, and, where applicable, garage floor elevations. Basement floor elevations for proposed building with walkout basement or lowest unprotected opening adjacent to flood hazard area.
15. Drainage arrows around all proposed building foundations, along lot lines, swales, ditches, and wherever else required to delineate surface drainage direction and pattern.
16. All overflow routes for the 100-year storm and for accumulated storm water runoff from several lots or from off-site catchment areas must be clearly designated
17. Outline of the storage basin with finished contours at one-foot (1') intervals.
18. Typical cross-sections of storage basin showing the degree of side slopes, top of bank elevations, bottom elevations and proposed storage elevations.
19. A release structure with necessary details.
20. High and, where applicable, normal water storage elevation.
21. Calculated water storage volume in acre-feet.
22. Downstream erosion control measures, corresponding to the release velocity through the proposed restrictor.
23. The locations of all downstream detention facilities that will be affected by the

proposed utility improvements shall be provided.

24. The locations of the existing downstream conveyance for which the proposed storm sewer is tributary shall be provided.

### **Section 808 – Master Utility Plan**

The Master Utility Plan shall include the following information:

1. The location of all proposed and existing on-site and off-site water mains, sanitary sewers, storm sewers, and sump pump drain lines, gas lines, pipelines, cabled utilities, and all other private utilities and their appurtenant structures (hydrants, valves, manholes, etc), which shall be numbered for reference.
2. Show all streets, with curb and gutter line work and street names.
3. The scale of the Master Utility Plans shall not be smaller than one (1) inch equal to 100 feet.

### **Section 809 – Detailed Utility Plan**

The Detailed Utility Plan shall include the following information:

1. The location and size of all proposed and existing on-site and off-site water mains, sanitary sewers, storm sewers, and sump pump drain lines, gas lines, pipelines, cabled utilities, and all other private utilities and their appurtenant structures (hydrants, valves, manholes, etc), which shall be numbered for reference.
2. The scale of the Detailed Utility Plans shall not be smaller than one (1) inch equal to fifty (50) feet.
3. The plan shall indicate size, slope, purpose, length, and type of material of all proposed utility lines.
4. Show all locations (preferably with shading) where granular trench backfill is required.
5. All existing structures, which require adjusting, reconstruction, or filling, shall be noted on plan.
6. Depict adjacent properties for proper utility and street match.
7. All Utility crossings shall be numbered. The utility crossing information shall be provided in tabular form indicating the proposed vertical separation between and the elevation of the top of the lower pipe and the bottom of the upper pipe for all proposed and existing utilities.

8. In locations where it is required to provide sanitary services constructed of water main quality pipe, the location must be clearly designated on the plans.
9. Locations of all existing drain tiles and how they will be connected to the proposed storm sewer system
10. The finished frame elevation and invert elevations shall be given for all structures. In addition, the station and offset for all structures shall be indicated.
11. The locations of all downstream detention facilities that will be affected by the proposed utility improvements.
12. The locations of the existing downstream conveyance for which the proposed storm sewer system is tributary.
13. All utility and drainage easements shall be indicated.

#### **Section 810 – Lighting Plans**

The Lighting Plan shall include the following information:

1. Light pole locations, heights, and spacing.
2. Location of existing light poles.
3. Control system and underground site wiring diagram specifying wire size, locations, and other materials.
4. The scale of the Lighting Plans shall not be smaller than one (1) inch equal to fifty (50) feet.
5. Typical installation section showing:
  - a. Type of pole
  - b. Bracket or arm
  - c. Luminaire wattage type lamp and ballast provided
  - d. Mounting height

#### **Section 811 – Street Plan and Profile**

The Street Plan and Profile shall include the following information:

1. Plan view of all proposed street and sidewalk improvements showing, but not limited to, street name, centerlines with stationing, right-of-way lines and widths, pavement outline and widths, sidewalks, curb and gutter, return radii, all storm sewers and other drain lines with structures, sanitary sewers, water mains, and, where applicable, shoulders and drainage ditches.

2. Plan view shall show all locations where granular trench backfill is required.
3. Centerline profile of existing ground line with elevations shown at fifty foot (50') intervals minimum.
4. Centerline profile of proposed pavement surface with grades, vertical curve data, and elevations shown at fifty-foot (50') intervals minimum.
5. Profile of all proposed storm sewers, sanitary sewers, water mains and other drain lines with structures within the plan view area showing pipe size, slope, length, type of material, and finished frame and invert elevations for structures.
6. Profile of all utility crossings where a grade conflict may occur.
7. Vertical Curves and PVI locations need to be indicated in the profile view and shall be provided with the necessary lengths, algebraic difference and necessary "K" Values.
8. Plan view scale shall be one (1) inch equal to fifty (50) feet minimum and profile scales shall be horizontal, same as plan and vertical, one (1) inch equal to five (5) feet.

#### **Section 812 – Intersection Detail Plan**

The intersection Detail Plan shall provide the following information for all intersections:

1. Spot grades at the following locations and intervals
  - a. At the edge of pavement to along all curb radiuses at fifteen (15) foot intervals
  - b. At any drainage break point within the limits of the intersection
  - c. Along the center line of all intersecting roadways at fifteen (15') foot intervals
  - d. At the edge of pavement at all drainage structures
2. Flow arrows indicating the intended direction of water run off.

The scale of this plan shall be twenty (20) feet equal to one (1) inch.

#### **Section 813 – Striping and Signage Plan**

The design engineer shall submit the respective Utility Plan sheets for the entire development prior to completion of the Striping and Signage Plan. The Public Works Department will assign the location of the street signage within the development and return the marked-up plan to the design engineer for incorporation within the improvement plans. The striping and signage shall be designed in accordance with the MUTCD manual as well as the IDOT standard details.

#### **Section 814 – Sanitary Sewer Profile**

Sanitary Sewer Profiles with existing and proposed ground elevations shown at fifty (50)

foot intervals minimum shall be provided at the request of the Village Engineer. The profile scales shall be horizontal, same as the detailed utility plan and vertical, one (1) inch equal to five (5) feet.

**Section 815 – Landscaping Plan/Parkway Tree, Berm & Buffer Plan**

A Landscaping Plan, prepared by a qualified landscape architect shall be submitted and shall include trees to be preserved, screening where required, the restoration of site flora and other areas to be stabilized and enriched according to Village Ordinances and all other Village requirements. The Landscaping plan shall include a proposed parkway tree plan, which shall provide the general location of all trees adhering to the Village Ordinances for spacing requirements. A table that indicates the specific tree types and spacing shall be provided. Trees should be located to avoid conflicts with driveways, manholes, fire hydrants, street lights and all above ground appurtenances. A copy of the approved Landscaping Plan / Parkway Tree Plan shall be incorporated into the final plan set for the proposed subdivision.

**Section 816 – Street Cross Section**

Street Cross Section shall be provided at the request of the Village Engineer. The Street cross sections shall have a scale of one (1) inch equals twenty (20) feet horizontal and one (1) inch equals five (5) feet vertical. The cross sections shall be at intervals of fifty feet. Additional cross sections should be provided at driveway locations and intersections. Each cross section should show the following applicable information:

3. Full pavement section
4. The location of all proposed and existing utilities
5. Station, existing, proposed elevation
6. Transverse pavement slope and side slopes

**Section 817 – Construction Details**

All details shall be of type standard with the Village of New Lenox including but not limited to:

1. Manholes, inlets, catch basins, vaults
2. Standard utility structure covers
3. Standard valve and hydrant installation
4. Drainage structures
5. Concrete curb and gutter
6. Thrust block installation

7. Service connections
8. Typical Sections

**Section 818 – Supporting Documents**

The following supporting documents will be required at the time of submittal:

1. A detailed statement by the subdivider setting forth the nature, kind, character, and extent of all improvements that will be constructed within the subdivision, together with complete plans, profiles, and specifications clearly describing the same, with agreement to construct same in accordance therewith.
2. A statement by a professional engineer registered in the State of Illinois giving a detailed estimate of the total cost of construction for all proposed improvements. The estimate shall include a ten-percent (10%) Warranty Contingency and a fifteen-percent (15%) Construction Contingency of the total of the Engineer's Opinion of Probable Cost plus the Warranty Contingency.
3. Any and all documents as may be required by the Village of New Lenox to ensure that the dedication of all required rights of way and the granting of all required easements has or will be established.
4. Any covenants or other documents, which place certain restrictions on the use and development of the property and is, intended to be recorded with the Final Plat.
5. Five (5) completed copies of all permit application forms (IEPA, IDOT, IDOWR, etc.) required for construction of the proposed improvements.
6. Proof of compliance with all applicable impact fee ordinances.
7. Proof of compliance with all applicable ordinances.
8. Final studies, reports, drawings, and calculations for all proposed storm water sewers, drain lines, culverts, retention or detention storage basins, flood routing, and any other site storm water management facilities.

**Section 819 – Letter of Credit**

Improvements to proposed Park Sites require separate line items within the Engineer's Opinion of Probable Cost. All requests for reduction of letters of credits shall be presented in Microsoft Excel format and shall comply with the following:

1. A table indicating the estimated quantities and costs, the actual completed quantities, and the value of the remaining work to be completed shall be provided. The summary shall provide the following information and shall be sent to the Village Engineer, the Public Works Department and the applicable Consulting

Engineer:

- a. Original construction cost (Including approved landscaping costs)
- b. Balance to complete
- c. Completed quantities to date
- d. Warranty Contingency (10%)
- e. Project Cost
- f. Construction Contingency (15%)
- g. The new Letter of Credit amount
- h. The current Letter of Credit amount
- i. The total amount of reduction requested