

# *article IV*

## *Plan Requirements*

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### *SECTION 400 SKETCH PLAN*

The sketch plan may be submitted by the applicant as a basis for informal discussion with the Planning Commission as to the intended use and arrangement of a proposed subdivision and land development. Data furnished in a sketch plan shall be at the discretion of the applicant. It is suggested that a sketch plan should include the following information at a minimum to assist in classifying the plan and to facilitate discussions concerning its design:

A. Scale

1. Sketch plan legibly drawn to an approximate scale not smaller than one-hundred (100) feet to the inch;
2. Written and graphic scale, the plan need not be to exact scale, nor are precise dimensions required;

B. Data

1. Statement of Intent, which shall contain the major planning assumptions, objectives, and concept of the proposed development.
2. Name and address of current owner of record.
3. Name of applicant, if different from owner.
4. Name of subdivision or land development.
5. Name of the individual and/or the consultant that prepared the plan.
6. North arrow and date of drawing.
7. Approximate tract boundaries and total acreage of the tract.
8. Appropriate zoning district(s).
9. All existing and proposed land uses.
10. Location of existing structures, tree masses, utility easements, soil types with a listing of all hydric soils, floodplains, known wetlands, streams, or geologic features (sink holes, etc.), and proposed changes in these features.

11. General location of streets and street rights-of-way, both proposed and existing.
12. Topographic contours from a United States Geological Survey topographic quadrangle or other acceptable source.
13. Proposed open space and/or recreational areas, if applicable.
14. In the case of land development plans, proposed general layout, including building locations, parking lots, and open spaces.
15. Proposed phasing, if proposal is to be a phased development.

### ***SECTION 401 PRELIMINARY PLAN***

The following materials shall be submitted for consideration with the preliminary plan submission for subdivision or land development:

#### **A. Drafting Standards**

In order to ensure readable plans the following drafting standards shall be adhered to:

1. The plans shall be clearly and legibly drawn to a scale no smaller than fifty (50) feet to the inch unless the average size of the proposed lots is in excess of two (2) acres, in which case a scale of one hundred (100) feet to the inch may be used.
2. The sheet size shall be no smaller than eighteen (18) by twenty-two (22) inches and no larger than thirty-four (34) by forty-four (44) inches. If the plan is prepared in two (2) or more sections, a key map showing the location of the sections shall be placed on each sheet. If more than one (1) sheet is necessary, each sheet shall be the same size and numbered to show the relationship to the total number of sheets in the plan (e.g. Sheet 1 of 5).
3. Dimensions shall be in feet and decimals; bearings shall be in degrees, minutes, and seconds. Lot line descriptions shall read in a clockwise direction.
4. The survey shall not have an error of closure greater than one (1) foot in ten-thousand (10,000) feet.
5. The plan shall bear an adequate legend to indicate clearly which features are existing and which are proposed.
6. The boundary line of the subdivision shall be shown as a solid heavy line.

B. General Information

The following information shall be included with every submittal:

1. Proposed project name or identifying title.
2. If the proposed plan crosses municipal boundaries, the names of the municipalities shall be identified, and the location of the boundary shall be shown.
3. Name and address of the owner of record, along with the appropriate tax data from the Tax Assessment Office necessary to identify the property.
  - a. Name and address of the applicant, if different from the owner.
  - b. Name of individual and/or firm that prepared the plan.
4. The plan identification number assigned by the firm that prepared the plan, the plan date, and the date(s) and description(s) of all plan revisions.
5. Name and address of the applicant's land planner, if applicable.
6. Stamp and seal of the engineer, planner, or landscape architect that completed the plan.
7. North arrow, graphic scale, and written scale.
8. Location map drawn at a scale of not less than eight-hundred (800) feet to the inch, showing the relationship of the tract to surrounding properties, roads, and water courses within one-thousand (1,000) feet of any part of the property.
9. The entire tract boundaries with bearings and distances.
10. The total acreage of the entire existing tract.
11. The applicable district, lot area, bulk, and density requirements of the Borough Zoning Ordinance, and the adjacent municipal zoning ordinance(s) if the project is located in or adjacent to other municipalities.
12. The location of existing lot line markers along the perimeter of the entire existing tract.
13. The names of all property owners abutting the tract.

14. Notarized signature of the landowner's awareness of the proposed subdivision or land development.
15. A statement or certificate by the applicant indicating that the plans are or are not in conformance with engineering, zoning, building, sanitation, and other applicable Borough Ordinances and regulations, and if they are not so conforming, the reasons for requesting an exception.
16. Where the preliminary plan covers only part of the applicant's entire holdings, a sketch plan of the prospective future street system for the remainder of the holdings. This plan shall be retained in the Borough file of the approved plan.
17. An approval block for signatures.

C. Site Analysis Plan

The Site Analysis Plan inventories the features located on the tract of the proposed subdivision or land development. The Site Analysis Plan shall indicate the location of all natural features, developed areas, and land under control or accessed by other entities as required below:

1. Existing contour lines at a minimum vertical interval of no more than two (2) feet for areas of less than eight (8) percent slope, and at five (5) foot intervals for areas with eight (8) percent or greater slope. Contours shall be accompanied by the location of the bench mark and notation indicating the datum used. Contours plotted from the United States Geologic Survey (Quadrangle Maps) will not be accepted.
2. Complete boundary survey of the property to be subdivided or developed, showing all courses, distances, area, and tie-ins to all adjacent intersections.
3. Degree of slope in the following ranges: fifteen (15) to twenty-five (25) percent, and greater than twenty-five (25) percent.
4. Areas within the Flood Hazard District, as defined in Article XI of the Spring City Borough Zoning Ordinance, distinguishing areas located within the flood fringe and the floodway.
5. Watercourses, both perennial and seasonal.
6. Wetlands, as defined by this Ordinance.
7. Wetland margins, as defined by this Ordinance.

8. Generalized soil types as mapped in the Soil Survey of Chester and Delaware Counties, including and highlighting those hydric and alluvial soils as defined by this Ordinance.
9. Lakes and ponds and lake and pond shorelines as defined by this Ordinance.
10. Existing vegetation denoted as to type, including tree masses, treelines, and hedgerows; individual trees over six (6) inch caliper; wetland vegetation; meadow, pasture, or cropland; cultivated areas; etc.
11. All existing buildings, towers, sewers, water mains, culverts, gas mains, fire hydrants, and other significant man-made features on the tract.
12. The location, and where applicable, the dimensions of existing easements, rights-of-way, public lands, and utility lines.
13. All existing streets on or immediately adjacent to the tract, including name, legislative route, municipal designation, right-of-way width, and cartway width.
14. Known hazardous sites, dumps, underground tanks, and any other artificial land condition.

D. Site Design and Layout Plan

The applicant shall indicate the layout of the proposed subdivision or land development on the Site Design and Layout Plan through provision of the following information:

1. The layout of streets, alleys, and sidewalks, including cartway and rights-of-way widths and corner sight distances.
2. The layout of lots, with approximate dimensions and building envelopes showing setback lines and yard area requirements according to the Zoning Ordinance.
3. Block and lot numbers in consecutive order (e.g., Block "A", Lots 1 through 10; Block "B", Lots 11 through 22).
4. In the case of land developments, the location and configuration of proposed buildings, parking lots, streets, access drives, driveways, and all other significant planned facilities.
5. Total number of lots, units of occupancy, density, and proposed land use; (if a multiple land use is proposed, an indication of the location of each land use).
6. The location of all easements within the tract along with a description of each easement identifying the type of easement(s) and the owner of such easement(s).

7. Location, if any, of all parks, playgrounds, and any other areas or buildings dedicated or reserved for public use, with any conditions governing such use.
8. If land to be subdivided or developed lies partly in an adjacent municipality, the applicant shall submit information concerning the location and design of streets, layout, and size of lots, and provisions of public utilities on land subject to his control within the adjacent municipality. The design of public improvements shall provide for a smooth practical transition where specifications vary between municipalities. Evidence of review of this information by the appropriate officials of the adjacent municipality shall also be submitted.

E. Improvements Construction Plan

The Improvements Construction Plan shall show the design of the proposed improvements to the site, and shall include the following information:

1. Plan view for streets showing details of the horizontal layout including:
  - a. Centerline with bearings, distances, curves data, and stations corresponding to the profile.
  - b. Right-of-way and curb lines with radii at intersections.
  - c. Tie-ins by course and distances to intersection of all public roads, with their names and widths.
  - d. Location of all monuments.
  - e. Property lines and ownership of all abutting properties.
  - f. Location and size of all drainage facilities, sidewalks, public utilities, fire hydrants, lighting standards, and street name signs.
2. Plan view for storm drainage and sanitary sewers
  - a. Location and size of line with stations corresponding to the profile.
  - b. Location of manholes or inlets with grade between and elevation of flow lines and top of each manhole or inlet.
  - c. Property lines and ownership, with details of easements where required.
  - d. Location of laterals.

- e. Location of all other drainage facilities and public utilities in the vicinity of storm and/or sanitary sewer lines.
  - f. Hydraulic design data and calculation for storm sewers, inlets, culverts, and or bridge structures.
3. A profile view indicating final grades of streets and sewers and the extent of cut and fill operations.
- a. The profile plan shall show the vertical section of the existing grade and proposed grade along the centerline of the proposed street. Where storm drainage and/or sanitary sewer lines are to be installed, they shall also be indicated on the profile plan.
  - b. The horizontal scale on the profile plan shall be not less than one (1) inch equals fifty (50) feet or one-hundred (100) feet, as appropriate, and the vertical scale shall not be less than one (1) inch equals ten (10) feet or in cases where larger scales are used, the ratio shall be one to ten (1:10) vertical to horizontal.
  - c. A typical cross-section of street construction shall be shown on the profile plan and shall indicate the following:
    - (1) Right-of-way width and the location and width of paving within the right-of-way.
    - (2) Type, thickness, and crown of paving.
    - (3) The location, width, type, and thickness of curbs and sidewalks to be installed, if any.
    - (4) Grading of sidewalk area.
    - (5) Typical location, size, and depth of any underground utilities that are to be installed in the right-of-way where such information is available.

F. Conservation Plan

The Conservation Plan shall demonstrate how erosion, sedimentation, and stormwater will be managed and controlled during the construction process and upon completion of the development. The Conservation Plan shall contain the following information:

1. The site features required in Section 401.C, above, shall be shown on the Conservation Plan in order to determine their relationship with proposed development on the site.
2. Location and elevation to which contour elevations refer; where reasonably feasible, the datum used, shall be a known established benchmark.
3. Notations indicating:
  - a. All trees or portions of tree masses proposed to be cleared as part of the proposed subdivision or land development plan, together with reasons for such clearing;
  - b. All proposed alterations of the natural grade, whether by cut or by fill, exceeding two (2) feet, together with reasons for such alteration; and
  - c. Compliance with all applicable erosion and sedimentation control standards.
4. Stormwater management and erosion control

A required element of the Conservation Plan shall be a plan for the measurement of stormwater, including the control of erosion and sedimentation during the course of site preparation or any other land disturbance. Any preliminary and final plan for subdivision or land development must be accompanied by a stormwater management plan; contents of the submitted plan shall reflect discussion by the applicant with the Borough Engineer. The plan shall, at a minimum, comply with the standards and criteria contained in Section 520 and 521 of this Ordinance. The minimum components of the plan shall include the following information:

- a. Information required in Section 401.F.1 through 401.F.3, above, of this Ordinance.
- b. A narrative summary of the project, including:
  - (1) Description of the nature of the proposed site development and improvements and how the stormwater management systems will meet the design standards and criteria outlined in Section 520 of this Ordinance, and
  - (2) Complete design calculations and conservation specifications in accordance with the terms of Section 520 of this Ordinance.
- c. All existing facilities and natural systems for controlling stormwater runoff.



- d. All proposed earthmoving and grading shall be in compliance with Section 521 of this Ordinance, including devices and measures to control erosion during land disturbance, as well as stabilization and site restoration measures.
- e. All proposed facilities and natural systems for controlling stormwater runoff, including:
  - (1) The location of drainage swales, basins, infiltration structures, non-impervious surfaces, etc.
  - (2) The size, elevation, and location of manholes, pipes, inlets, and endwalls.
  - (3) Preliminary designs of any bridge and culverts that may be required.
- G. Preliminary landscaping plan, as stipulated in Section 1304, Buffering, Screening, and Landscaping of the Zoning Ordinance.
- H. Preliminary Lighting Plan, meeting the requirements in Section 514, Street Lights, of this Ordinance.
- I. Traffic Impact Studies

A traffic impact study shall be required for subdivision and land developments that generate either fifty (50) peak hour trips per day or five-hundred (500) average daily trips (see Appendix F, Trip Generation Approximations). Trip generation rates shall be determined through the use of the current edition of the Trip Generation Report published by the Institute of Transportation Engineers. A traffic impact study shall be prepared according to the following requirements:

- 1. A traffic engineer or traffic planner with verifiable experience or proper certifications shall prepare such studies.
- 2. A description of the proposed development including the location, proposed land use and the number of total units proposed and a description of the traffic impact study area, including such area's major roads and potential trip generation rates to be determined by current land use planning references. At a minimum, the traffic study area shall include the first key intersection in each direction on any road which provides access to the site. Additional intersections shall be mutually agreed upon by the Borough and the applicant.
- 3. Existing twenty-four (24) hour and peak hour traffic volume data shall be included within the traffic impact study for all streets which provide direct access to the proposed development and for the arterial streets and collectors streets which will serve the proposed development, as well as any key intersection within the traffic impact area.

4. Twenty-four (24) hour and peak hour traffic volume data shall be included within the traffic impact study for the design year of the project for all streets which provide direct access to the proposed development and for the arterial streets and collector streets which will serve the proposed development, as well as any key intersection within the traffic impact area projected. The design year shall be considered the point in time when the development is completed and shall be determined in accordance with the accepted engineering practices. In the event of a dispute as to the design year, the determination of the Borough Engineer shall be final.
5. Estimates of the total number of vehicle trips to be generated by the proposed development for the typical morning and evening peak periods.
6. Assignments of post-development a.m. and p.m. peak hour volumes to the arterial and collector streets and other streets that will serve the proposed development based upon the projections of increased traffic volumes within the traffic impact area. In making these estimated assignments, consideration shall be given to other developments approved but not yet constructed and to development trends.
7. Projected morning and evening peak hour turning movements data for all access points proposed for the development.
8. Existing levels of service and levels of service projected for the design year without the impacts of the proposed development on all abutting streets and all key intersections within the traffic impact area. Level of service shall be computed in accordance with 1985 Highway Capacity Manual, Special Report 209, published by the Transportation Research Board, or any subsequent revision of such manual.
9. Capacity and level of service analysis on all abutting streets and all key intersections which will be impacted by the additional volumes generated by the subdivision or land development, including post-development capacity and level of service and degradation of capacity and level of service.
10. Accident levels within the past five (5) years at all intersections that will be impacted by the additional traffic volumes generated by the subdivision or land development categorized by accident type for each intersection.
11. Descriptions of street improvements and traffic control devices that will be required to provide an acceptable level of service of "C" or better on all abutting streets and all key intersections within the traffic impact study area.
12. If the level of service on an abutting street or major intersection within the traffic impact study area is presently less than "C" or is projected to be less than "C" in the design year and

the traffic impact study determines that the level of service shall be reduced, description of the street improvements and control devices that will be required to restore the level of service to that level of service existing prior to the development of the tract.

13. Description of street improvements and traffic control devices that will be required to:
  - a. mitigate traffic congestion which will be caused by the proposed development;
  - b. mitigate traffic safety hazards which will be caused by the proposed development; and
  - c. avoid problems of traffic congestion and/or safety.
15. Cost estimates of the street improvements and traffic control devices indicated in Sections 401.J.12 through 401.J.14, above.
16. Descriptions of any actions proposed or offered by the applicant to alleviate the impact of the proposed development on the Borough's transportation network.
17. The source of the standards used and the data presented.
18. Maps, tables, and schematic drawing of data and analyses collected and calculated as a result of this study.

## **SECTION 402 FINAL PLAN**

### **A. General Requirements**

The final plan for all major and minor subdivisions and land development applications shall include the following basic information:

1. Drafting Standards
  - a. The drafting standards of Section 401.A, above, shall apply.
  - b. The subdivision or land development plans submitted for review for final approval shall be clear and legible black or blue on white prints of the drawings. Upon completion of review, and for the signature of the Borough Council, clear and reproducible prints for all plans shall be submitted. Space shall be provided for signature by the Borough Council and other applicable agencies on the face of the plans.

2. General Information

The general information standards of Section 401.B, above, shall apply.

3. Approvals, Certificates, and Documents

- a. A deed or agreement of sale showing that the legal or equitable ownership is vested in the applicant.
- b. A statement duly acknowledged before an officer authorized to take acknowledgement of deeds and signed by the owner or owners of the property, to the effect that the subdivision or land development shown on the final plan is made with his or their free consent and in accordance with his or their desires.
- c. All offers of dedication and covenants governing the reservation and maintenance of undedicated open space, which shall bear the certificate of approval of the Borough Solicitor as to their legal sufficiency.
- d. A copy of such private deed restrictions, including building setback lines, as may be imposed upon the property as condition to sale, together with a statement of any restrictions previously imposed which may affect the title to the land being subdivided. Such restrictions shall be satisfactory to the Borough Council.
- e. Certification of the engineer, land surveyor, landscape architect or land planner who prepared the plan, that the plans are in conformity with zoning, building, sanitation, subdivision, and other applicable Borough ordinances and regulations. In any instance where such plans do not conform, avoidance shall be presented that an exception or modification has been authorized.

B. Minor Subdivisions

In addition to the general information requirements of Subsection A, the final plan submission for a minor subdivision shall consist of and be prepared in accordance with the following requirements:

1. Site Analysis Plan

The Site Analysis Plan shall meet the requirements of Section 401.C of this Ordinance and be submitted with all minor subdivision proposals.

2. Site Design and Layout Plan

The Site Design and Layout Plan shall meet the requirements of Section 401.D of this Ordinance and shall be submitted with all minor subdivision proposals.

3. Conservation Plan

A Conservation Plan shall be required as part of a minor subdivision proposal at the discretion of the Planning Commission or the Borough Engineer. The Conservation Plan shall meet the requirements of Section 401.F of this Ordinance.

4. Landscaping Plan

A Landscaping Plan shall be required as part of a minor subdivision proposal at the discretion of the Planning Commission, and it shall meet the requirements of Section 401.H of this Ordinance.

C. Major Subdivisions and Land Developments

In addition to the general information requirements of Subsection A, the following requirements shall apply to major subdivision and land development proposals:

1. Final plans for subdivision and land development shall conform in all important details to preliminary plans as reviewed by the Borough Council, including any conditions specified as a result of preliminary plan review.

2. Final plan submission shall consist of and be prepared in accordance with the following requirements:

a. Site Analysis Plan

(1) The Site Analysis Plan shall meet the requirements of Section 401.C of the Ordinance.

(2) The site analysis plan information shall be consistent with the terms of preliminary plan approval and modified as necessary to reflect the proposal for final approval.

b. Site Design and Layout Plan.

(1) The Site Design and Layout Plan shall meet the requirements of Section 401.D of this Ordinance.

- (2) The information required for the site design and layout plan shall be consistent with the terms of preliminary plan approval and modified as necessary to reflect the proposal for final plan approval.
- (3) The plan for lots within a subdivision shall show the proposed house locations, the proposed driveway locations, and names of all streets.
- (4) The final design shall show all sewage facilities, including, but not limited to, sewer mains, manholes, pumping stations, and sewage treatment facilities.
- (5) The plan shall contain a statement that placement of fire hydrants and the components of the system have been reviewed by the Fire Chief and that both are compatible with the firefighting methods and equipment utilized by the local fire company.
- (6) Location of permanent reference monuments, in accordance with Section of this Ordinance.
- (7) The final plan for land developments shall show:
  - (a) Proposed building locations;
  - (b) Location and size of parking lot;
  - (c) Provisions for access and traffic control;
  - (d) Locations of loading docks; and
  - (e) Provisions for landscaping in accordance with Section 1304, Buffering, Screening, and Landscaping of the Zoning Ordinance.
- (8) The plan shall be in conformance with the requirements of the Spring City Zoning Ordinance. Final plans shall show sufficient information so that conformity to zoning and subdivision standards is demonstrated.
- (9) Where subdivision of land is proposed as a part of land development, the final plan shall be submitted showing the proposed division of property including easements for access to all parcels not fronting on public roads.

c. Improvements Construction Plan

- (1) The Improvements Construction Plan shall meet the requirements of Section 401.E of this Ordinance.
- (2) The Improvements Construction Plan shall be consistent with the terms of preliminary plan approval and modified as necessary to reflect the proposal for final approval.

d. Final Conservation Plan

- (1) The Final Conservation Plan shall meet the requirements of Section 401.F of this Ordinance.
- (2) The final Conservation Plan shall be consistent with the terms of preliminary plan approval and modified as necessary to reflect the proposal for final approval.

e. Final Landscape Plan

- (1) The Final Landscaping Plan shall meet the requirements of Section 1304, Buffering, Screening, and Landscaping, of the Zoning Ordinance.
- (2) The Final Landscaping Plan shall be consistent with the terms of preliminary plan approval.

f. Final Lighting Plan

- (1) The Final Lighting Plan shall meet the requirements of Section 514 of this Ordinance.
- (2) The Final Lighting Plan shall be consistent with the terms of preliminary plan approval.

g. Final Traffic Impact Study

- (1) The Final Traffic Impact Study shall meet the requirements of Section 401.J of this Ordinance.
- (2) The Final Traffic Impact Study shall address any comments or terms of the preliminary submission.