

**SUBDIVISION
RULES AND REGULATIONS
GOVERNING THE
SUBDIVISION OF LAND**

**TOWN OF CHESTERFIELD,
MASSACHUSETTS**

July 8, 2008

*A true copy.
Attest:
Sandia L. Wickland
Town Clerk*

These Rules and Regulations Governing the Subdivision of land in
the Town of Chesterfield, Massachusetts, and the amendments
thereto, were recorded in the Hampshire Registry of Deeds and
Land Court on:
July 30, 2008

Hampshire Registry Land Court

Original Regulations	June 4, 1963
Amended	June 3, 1975
Amended	July 8, 2008

These Regulations are effective July 8, 2008

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SECTION 1.0 GENERAL

1.1 Authority

Under the authority vested in the Planning Board of Chesterfield by Section 81-Q of Chapter 41 of the General Laws as amended and all subsequent amendments thereto, said Board hereby adopts these Rules and Regulations Governing the Subdivision in the Town of Chesterfield under the Subdivision Control Law, Section 81-K through 81-GG, inclusive, Chapter 41, of the General Laws, as amended.

1.2 Purpose

These Rules and Regulations Governing the Subdivision of Land in the Town of Chesterfield have been enacted for the purpose of protecting the safety, convenience, and welfare of the inhabitants of Chesterfield by regulating the laying out and construction of ways in subdivisions providing access to the several lots therein, but which have not become public ways, and ensuring sanitary conditions in subdivisions and in proper cases, parks and open areas. The powers of the Planning Board and the Board of Appeals under the Subdivision Control Laws shall be exercised with due regard for:

- The provision of adequate access to all lots in a subdivision by ways that will be safe and convenient for travel;
- For lessening congestion in such ways and in the adjacent public ways;
- For reducing danger to life and limb in the adjacent public ways;
- For securing safety in the case of fire, flood, panic and other emergencies;
- For ensuring compliance with the Zoning By-Laws of the Town of Chesterfield;
- For securing adequate provisions for water, sewerage, drainage, underground utility services, street lighting, fire and police equipment, and other requirements where necessary in a subdivision; and,
- For coordinating the ways in a subdivision with each other and with the public ways in the Town of Chesterfield and with the ways in neighboring subdivisions.

1.3 Subdivision Compliance

No person shall make a subdivision within the Town of Chesterfield, or proceed with the improvement or sale of lots in a subdivision, or the construction of ways, or installation of municipal services therein, unless and until a plan has been endorsed "Planning Board Approval Not Required" or a Definitive Plan of such subdivision has been submitted and approved by the Planning Board as hereinafter provided, and subsequently recorded at the Hampshire County Registry of Deeds and, in the case of registered land, with the recorder of the Land Court.

Subdivision divisions shall meet the requirements pertaining to lot size, frontage, and all other requirements under existing zoning laws. No subdivision rules can dictate the size, shape, width, frontage or use of lots except that they shall be in compliance with all applicable zoning requirements.

1.4 More than one building for dwelling purposes per lot

Not more than one building designed or available for use for dwelling purpose shall be erected or placed or converted to use on such lot in the Town of Chesterfield without the consent of the Planning Board. The Planning Board may grant an exemption for an accessory apartment in a separate accessory building by special permit (See Section 6.1 of the Chesterfield Zoning Bylaw). Such consent may be conditional upon the providing of adequate ways furnishing access to each site for such building, in the same manner as otherwise required for lots within a subdivision.

1.5 Waiver of Compliance

The Planning Board may, in special and appropriate cases, waive strict compliance with such portions of these Rules and Regulations as provided for in Section 81-R, Chapter 41 of the General Laws of Massachusetts, where such action is in the public interest and not inconsistent with the purpose and intent of the Subdivision Control Law.

Limited waivers may be granted when appropriate to encourage development which is in keeping with traditional rural character of Chesterfield or takes into consideration its Open Space Plan, Community Development Plan, Creative Development, or Cluster Housing Zoning Bylaw.

A request for a waiver of a requirement, rule, or regulation shall be made by the applicant in writing at the time of the filing of the Definitive Plan. If the Planning Board approves the request for a waiver, it shall endorse conditions of such waiver (if any) on the Plan or set them forth in a separate instrument attached to and referenced on the Plan, which shall be deemed a part of the Plan .

1.6 Amendments

These Rules and Regulations or any portion thereof may be amended from time to time in accordance with Section 81-Q, Chapter 41, of the General Laws of Massachusetts.

1.7 Validity

The invalidity of any section, paragraph, clause or provision of these Rules and Regulations shall not invalidate any other section, paragraph, clause or provision thereof.

1.8 Coordination with Town Boards, Commissions, and Other Agencies

In the Town of Chesterfield, certain services provided to subdivisions are under the jurisdiction of various Town departments, boards and other public agencies. Compliance with the applicable regulations and requirements of these aforementioned agencies, departments and boards, shall be required before a plan is approved by the Board. Certification of performance relative to the proper construction and installation of the respective utilities shall be required before the performance guarantee can be reduced or released.

1.9 Effect of Prior Recording of Subdivision Plan

The recording of a plan of land within the Town of Chesterfield in the Hampshire County Registry of Deeds prior to the effective date of the Subdivision Control Law in the Town, (June 4, 1963) showing the division thereof into existing or proposed lots, sites or other divisions and ways furnishing access thereto, shall not exempt such land from the application and operation of these Rules and Regulations except as exempt by Section 81-FF, Chapter 41, of the General Law.

1.10 Summary of Subdivision Procedure

All plans and all procedures relating thereto shall in all respects comply with the provisions of these Rules and Regulations, unless the Board authorizes a variation therefrom in specified instances.

- A. Any person desiring to make a subdivision within the meaning of the Subdivision Control Law of any land within the Town shall, before proceeding with the improvement or sale of lots in a subdivision, submit to the Board a plan of such subdivision and secure approval by the Board of a Definitive Plan hereinafter provided.

- B. The Board will not approve nor modify and approve any plan of a subdivision of land unless all lots and other proposals shown on said plan comply with the zoning by-laws of the Town or a variance from the terms thereof has been granted by the Board of Appeals.
- C. The official in Town authorized to issue building permits shall not issue any permit for the erection of a building until first satisfied that the lot on which the building is to be erected is not within a subdivision, or that a way furnishing the access to a lot within a subdivision as required by the Subdivision Control Law is shown on a recorded plan and that any conditions endorsed thereon limiting the right to erect or maintain buildings on such lot have been satisfied.
- D. The Board may assign as its agents appropriate Town agencies or officials and may hire consulting services to review plans and inspect improvements at the cost of the applicant.
- E. The board on its own motion or on the petition of any interested person shall have the power to modify, amend or rescind its approval of a plan of a subdivision, or to require a change in a plan as a condition of its retaining the status of an approved plan after due notice and opportunity to the owner to be heard in accordance with Section 81W of Chapter 41 of the General Laws as amended. The time requirements shall be the same as in the case of the Definitive Plan.
- F. Plans intended for review at a regular meeting of the Planning Board shall be forwarded to the Planning Board at any of its regular meetings. The day of the regular Board meeting at which plans are submitted to the Board shall be considered to be the date of submission for all plans, except that for Definitive Plans sent by registered mail to the Planning Board in care of the Town Clerk, the date of receipt by the Town Clerk shall be considered the date of submission. For plans transmitted to the Planning Board other than at a regular Board meeting or other than through the Town Clerk, the date of submission shall be considered to be the day of the next regular Planning Board meeting after such transmittal. Plans shall not be considered "submitted" until all required documentation has been received.

1.11 Inspection and Reimbursement for Consulting Services

- A. Inspection shall be carried out at appropriate times during the development of the subdivision as described in Section 9 and in the Subdivision Inspection Checklist. The applicant shall notify the Board, or an engineer appointed by the Board, at least four (4) working days before carrying out each operation to be inspected.

- B. The Board may make arrangements with consultants to carry out such inspection on behalf of the Town.
- C. The costs of inspection shall be borne by the applicant and shall be reimbursed to the Town by certified check or money order payable to the "Town of Chesterfield, Massachusetts" (See Section 7.0 for fee schedule). Inspection costs shall include but not be limited to: on-site inspections, off-site analysis of plans, water testing, and soil testing.
- D. Failure to pay any reimbursement provided in these Rules and Regulations at the stated time, or within thirty (30) days following mailing of an invoice, whichever is earlier, shall be sufficient grounds for the Board to disapprove or rescind its approval of a Preliminary Plan or Definitive Plan of a subdivision. In addition, no performance guarantee shall be released by the Town until the Board of Selectmen determine that all reimbursements have been paid in full by certified check or money order, payable to the "Town of Chesterfield, Massachusetts".
- E. The developer has the responsibility to ensure that the approved construction plans are implemented. Use of qualified persons to furnish adequate and timely engineering supervision during construction is required. Surveillance and field revisions by Town officials or consultants appointed by the Board cannot be construed as fulfilling this responsibility.
- F. A letter of credit shall be required and shall be used by the Town to pay for any additional consultants which it finds necessary to hire in order to carry out an effective review of the proposed subdivision.

SECTION 2.0 DEFINITIONS

For the purpose of these Rules and Regulations, unless a contrary intention clearly appears, the terms and words defined in Section 81-L of Chapter 41 of the General Laws of Massachusetts shall have the meaning given therein. In addition, the following terms and words shall have the following meanings:

Abutter: All those property owners whose land abuts the proposed subdivision or land described in a plan believed not to require approval. It shall also mean those property owners directly across a street or road from, or within 300 feet of the property boundary of, the subject subdivision or land.

Applicant: May be either the owner of the land stated in the application for subdivision or all the owners where title is held jointly, in common, or in tenancy by the entirety, including corporations. An agent, representative, or his assigns may act for an owner provided written evidence of such fact is submitted. Evidence in the form of a list of their officers and designated authority to sign legal documents shall be required for a corporation.

Approval Not Required (ANR): A subdivision plan showing lots and ways that can be recorded without the approval, but not without the endorsement, of the Planning Board if:

1. The lots shown on such plan front on one of the three types of ways, as specified in MGL Chapter 41, Section 81L:
 - a. a way accepted by the Town of Chesterfield or certified by the Town Clerk as used and maintained as a public way;
 - b. A way shown on an approved and endorsed subdivision plan;
 - c. A way in existence when the Subdivision Control Law became effective in Chesterfield (June 4, 1963) and having, in the opinion of the Planning Board, sufficient width, suitable grades and adequate construction to provide for the needs of vehicular traffic in relation to the proposed use of the land abutting therein
2. The lots shown on such plan must meet the minimum frontage requirements for the Town of Chesterfield; and,
3. A Planning Board's determination that the vital access to such lots, as contemplated by MGL Chapter 41, Section 81M, otherwise exists.

Board: The Chesterfield Planning Board.

Certified by (or Endorsed by) the Planning Board: Bearing a certification or endorsement signed by a majority of the members of the Planning Board or any other person authorized by the Board to certify or endorse approval or other action, and named in a written statement to the Register of Deeds and Recorder of the Land Court, signed by a majority of the Board. This is applied to a plan or other instrument required or authorized to be recorded by the Subdivision Control Law.

Class I Subdivision: A subdivision with ten (10) or more lots.

Class II Subdivision: A subdivision with four (4) to nine (9) lots.

Class III Subdivision: A subdivision with three (3) lots or fewer.

Consultants or Consulting Services: Includes but is not limited to: architects, biologists and environmental experts, certified arborist, chemists, engineers, geologists, landscape architects, planners, lawyers, sanitarians, and surveyors.

Creative Development: See Section 5.9 of the Chesterfield Zoning Bylaws.

Date of Submission: See Section 1.10 F of these regulations.

Easement: A right in land acquired by public authority or other person to use or control property for utility or other purpose.

Engineer: Person registered by the Commonwealth of Massachusetts to perform professional civil engineering services.

Lot: An area of land in one ownership, with definite boundaries, used or available for use, as the site of one or more buildings.

Open Space: Property within a subdivision designated to be deeded by the developer to the town or other approved agency, or to be maintained by the developer or owner in an undeveloped state in a manner approved by the Planning Board. Such open space is to be used for passive or active recreation, agriculture, forestry, rare and endangered species habitat, natural or scenic vistas, unique natural or cultural features, or greenways. Such open space shall be retained in substantially a natural, wild or open condition, or in a landscaped condition in such a manner as to allow to a significant extent the preservation of wildlife or other natural resources. Open space shall be contiguous areas containing a high ratio of interior area to edge area. Open space shall contain to the greatest extent possible soils uniquely suited to agricultural use and that

further create greenway corridors to establish linkages in landscape. Such areas shall be of adequate size and configuration to accommodate the intended use, and shall not include narrow or irregular pieces of land which are remnants from the layout of lots, streets, or drainage structures. Open space does not include areas designated for sediment control, erosion control, or storm water control, nor does it include wetlands and their buffers. Such areas are considered part of the subdivision structure, and are not intended to be for recreation.

Owner: The owner of record as shown by the records in Hampshire County Registry of Deeds or Land Court.

Plan, Definitive: A proposed plan of a subdivision submitted by the applicant to be recorded in the Hampshire County Registry of Deeds or Land Court when approved by the Planning Board.

Plan, Final: A proposed final, definitive plan showing not more than one building - to be used for dwelling purposes - per building lot, to be approved by the Planning Board as a prerequisite to obtaining building permits. The Planning Board can grant an exemption for an accessory apartment in a separate accessory building by special permit (See Section 6.1 of the Chesterfield Zoning Bylaw).

Plan, Preliminary: A plan of a subdivision submitted by the applicant showing sufficient information to form a clear basis for discussion and clarification of its general contents and for the preparation of a Definitive Plan.

Streets

- a. Major Street: A street which, in the opinion of the Planning Board, is likely to carry substantial volumes of through traffic or a street serving a Class I Subdivision.
- b. Minor Street: A street which connects with Major Streets or streets serving Class II and Class III Subdivisions (fewer than ten (10) lots).
- c. Dead End Street (Cul-de-sac): a public or private vehicular right-of-way which affords the principal means of access to abutting property and which joins another thoroughfare at only one end. Any thoroughfare, which joins or intersects a dead end street/cul-de-sac, shall have adequate access at both ends from a Town, County, or State public way adjacent to the subdivision. (See Section 5.3 E of these Regulations concerning dead end streets, and Section 5.3 I concerning adequate access from a public way.)

Subdivision: Subdivision shall mean the division of a tract of land into two or more lots and shall include re-subdivision, and, when appropriate by context, shall relate to the process of subdivision or the land or territory subdivided. The division of a tract of land into two or more lots shall not be deemed to constitute a subdivision within the meaning of the Subdivision Control Law under the following conditions:

1. At the time when the subdivision is made, every lot within the tract so divided has frontage on:
 - a. a public way or a way which the Chesterfield Town Clerk certifies is maintained and used as a public way, or;
 - b. a way shown on a plan previously approved and endorsed in accordance with the Subdivision Control Law, or;
 - c. a way in existence when the Subdivision Control Law became effective in the Town of Chesterfield (June 4, 1963) having in the opinion of the Planning Board, sufficient width, suitable grades, and adequate construction to provide for the needs of vehicular traffic in relation to the proposed use of the land abutting thereon or served thereby, and for the installation of municipal services to serve such land and the buildings erected or to be erected thereon.

Such frontage shall be of at least such distance as is then required by the Zoning Bylaw of the Town of Chesterfield for erection of a building on such lot.
2. The division is made by conveyances or other instruments adding to, taking away from, or changing the size and shape of, lots in such a manner as not to leave any lot so affected without the frontage above set forth.
3. The division of land is for the purposes of establishing agricultural drainage easements, or other easements which have the effect of protecting the affected land from development in perpetuity.
4. The division of a tract of land on which two or more buildings were standing when the Subdivision Control Law went into effect in the Town of Chesterfield, creates separate lots on each of which one of such buildings remains standing.

Surveyor: Person registered by the Commonwealth of Massachusetts to perform professional land surveying services.

State Construction Standards-Massachusetts Highway Department Construction Standards: These specifications are published by the Massachusetts Department of Public Works. They are entitled, Standards and Specifications for Highways and Bridges, and include all supplements, updates, revisions, or future editions covering substantially the same subject matter. All matters left undetermined by these specifications shall be specified by the Board on a case by case basis.

Subdivision Control Law: Refers to Section 81-K to 81-CC, inclusive, of the General Laws of the Commonwealth of Massachusetts, entitled, Subdivision Control Law as last amended.

SECTION 3.0 PROCEDURE FOR SUBMISSION AND ENDORSEMENT OF PLANS BELIEVED NOT TO REQUIRE APPROVAL (ANR)

3.1 General

Any person who wishes to cause to be recorded in the Registry of Deeds or to be filed with the Land Court a plan of land in the Town of Chesterfield who believes that this plan does not require approval under the Subdivision Control Law, may submit his plan as hereinafter provided, to the Planning Board for such determination.

3.2 Submission

The applicant shall submit the following to the Planning Board:

1. The original mylar drawing no larger than 24" x 36" and four (4) prints of the plan
2. Two (2) copies of application Form A (see Section 8.0), signed by the applicant and providing all required information
3. The appropriate filing fee to cover the cost of handling reviews, advertising, and public meeting expenses (See Section 7.0 for Fees)
4. All supporting evidence necessary to show that the plan does not require approval by the Board

The applicant may submit an ANR plan to the Planning Board either by delivery at a regular or special meeting of said Board, or by delivery of registered mail, postage paid, in care of the Chesterfield Planning Board. In either case, written notice (a copy of Form A) shall be filed with the Town Clerk stating the date of submission for such determination. If the notice is given by delivery, the Town Clerk shall, if requested, give a written receipt thereof.

Receipt by the Planning Board, or date of mailing of such notice, plans, and necessary documentation as may be required in these Rules and Regulations shall constitute the effective day of submission.

If in the judgement of the Planning Board, consulting services are necessary and appropriate for the review of an application, the applicant shall, prior to a determination on the Plan Believed Not to Require Approval by the Board, pay the costs incurred by

the Town for the full cost of such services. This Project Review Fee is enabled by Mass G.L. Chapter 44, Section 53G. All such consultants shall be selected by the Board. Payment shall be by certified check, personal check, or money order made payable to the "Town of Chesterfield, Massachusetts".

3.3 Contents

The plan shall be prepared by a Massachusetts Registered Civil Engineer and/or Massachusetts Registered Land Surveyor, shall be clearly and legibly drawn with waterproof ink upon mylar at a scale not smaller than one (1) inch equals forty (40) feet or a scale appropriate to project proposed, with the sheet size not exceeding thirty-six (36) inches by twenty-four (24) inches, and shall contain the following information:

1. North arrow, date, scale, legend, locus, and title, "Subdivision Approval Not Required".
2. The names and addresses of the owner/s of record at the time of submission of the application, the applicant, and Land Surveyor (including the official seal).
3. Locations, names, lines and widths of all existing streets and any common or public areas.
4. Location and setbacks of all existing structures on the proposed site.
5. Location, dimensions and purpose of all easements, both existing and proposed, within and adjacent to the land in question.
6. The plan shall show boundary lines, dimensions of all subject lots, sites of divisions, lot areas (in acres or square feet, as appropriate), with all lots designated numerically and in sequences.
7. Location of all monuments properly identified as to whether existing or proposed.
8. Frontage dimensions of all lots created and the dimensions of any frontage remaining on the original subdivided parcels, including the area of any subdivided parcels with a structure.
9. Suitable space to record the action of the Planning Board and the signatures of members.
10. Book and page number from the Hampshire Registry of Deeds.

3.4 Endorsements

1. If the Planning Board determines that the plan does not require subdivision approval, it shall, within twenty-one (21) days after the date of submission, and without public hearing, endorse on the plans the words, "Approval Under the Subdivision Control Law Not Required" (ANR), with the appropriate name(s) of the Planning Board member(s) signed thereto.
2. If the Planning Board determines that in its opinion the plan requires approval under the Subdivision Control Law, it shall, within twenty-one (21) days of submission give written notice of its determination to the Town Clerk and applicant and return the plan to the applicant.
3. If the Planning Board fails to act upon a submitted plan within twenty-one (21) days after its submission, it shall be deemed to have determined that approval under the Subdivision Control Law is not required.
4. One print of the endorsed plans shall be filed by the Planning Board with each of the following:
 1. Town Clerk
 2. Board of Assessors

SECTION 4.0 PROCEDURE FOR SUBMISSION AND APPROVAL OF SUBDIVISIONS (NON-ANR) PLANS

4.1 Pre-submission Review

Before preparation of a preliminary (or definitive) plan, it is strongly recommended that the applicant submit a sketch plan of the proposed subdivision to the Planning Board and consult with the Board informally regarding procedures, design standards and required improvements in order to save time and avoid costly mistakes.

Any person engaged in the process of submitting a subdivision plan to the Planning Board is strongly recommended, but not required, to prepare a Voluntary Sketch Plan that will include the following:

1. Existing Resources / Site Analysis Map: A map which identifies, locates, and describes noteworthy features to be designed around through sensitive subdivision layouts, such as vegetation, wetlands, steep slopes, farmland soils, historic or cultural features, threatened or endangered species, unusual geological formations, and scenic views or viewsheds.
2. Voluntary Sketch Plan: A simple and inexpensive drawing prepared by a professional landscape architect, architect, planner, site designer or engineer, which illustrates conceptual layouts of house lots, streets, conservation areas and other improvements. Ideally, this is based on the Existing Resources/Site Analysis Map and reflects comments received from Town officials.

4.2 Preliminary Plans

A. General

Before submitting an application for the subdivision of land, the applicant shall familiarize himself with the Rules and Regulations governing the subdivision of land and the Board of Health Regulations governing Minimum Requirements for Disposal of Sewage in Unsewered Areas, together with applicable local ordinances and bylaws.

A Preliminary Plan of a subdivision should be submitted by the applicant to the Planning Board, to the Conservation Commission, and to the Board of Health for approval. The submission of such a Preliminary Plan will enable the applicant, the Planning Board, and other town agencies and owners of property abutting the subdivision to discuss and clarify any problems of such a subdivision before

a Definitive Plan is prepared. Therefore it is strongly recommended that a Preliminary Plan be filed in every case. In order to maintain the rural character of Chesterfield, applicants are encouraged to take into consideration its Open Space Plan, its Community Development Plan, and its Creative Development and Cluster Housing Zoning Bylaws.

During discussion of the Preliminary Plan the complete information required for the Definitive Plan (Section 4.3) and the financial arrangements (Section 4.4) will be developed. This development shall commence at the first meeting with a presentation to the Board.

B. Submission Procedure

The applicant may submit a Preliminary Plan to the Planning Board either by delivery at a regular or special meeting of said Board, or by delivery of registered mail, postage prepaid, in care of the Chesterfield Planning Board. In either case, written notice (a copy of Form B) shall be filed with the Town Clerk stating the date of submission for such approval. The notice to the Town Clerk may be any of the types of delivery as stated for the Planning Board and the Town Clerk shall give a written receipt thereof.

Receipt by the Chesterfield Planning Board, of application, plans, and documentation as may be required in these Rules and Regulations shall constitute the effective date of submission of a Preliminary Plan.

Any person who submits a Preliminary Plan of a subdivision to the Planning Board for approval shall file with the Board the following:

1. Sixteen (16) copies of the Preliminary Plan
2. Application Form B (see Section 8.0), signed by the applicant and providing all information requested
3. A filing fee in accordance with the Fee Schedule (see Section 7.0 for Fees). The filing fee shall be in the form of a certified check or money order made payable to the Town of Chesterfield, Massachusetts
4. A copy of Form D and receipts showing that the applicant mailed, by certified mail, a notice of the proposed subdivision containing a locus map of the project to every abutter within 300 feet of the proposed subdivision.

5. If in the judgement of the Planning Board, consulting services are necessary and appropriate for the review of an application, the applicant shall, prior to a determination on the Preliminary Plan by the Board, reimburse the Town for the full cost of such services. This Project Review Fee is enabled by Mass G.L. Chapter 44, Section 53G. All such consultants shall be selected by the Board. Reimbursement shall be by certified check, or money order made payable to the "Town of Chesterfield, Massachusetts".

C. Plan Contents

The applicant is required to submit sixteen (16) copies of the preliminary plan to the Planning Board on 24" by 36" paper at a scale of 1"=100' or greater, which shall show sufficient detail to form a clear basis for discussion and preparation of the Definitive Plan, including:

1. A title block with the subdivision name, property owner, boundaries, North Arrow, date, scale, legend, locus, and title, "Preliminary Plan"
2. The names and addresses of the owners of record at the time of submission, the applicant, and the Massachusetts registered Civil Engineer and/or Land Surveyor.
3. The names of all abutters within 300 feet, (see Definitions, Section 2) as certified by the Board of Assessors.
4. Final or near final alignment of all roads, ways, and rights of way. Existing and proposed lines of street, proposed names of the latter, rights-of-way, easements, and any public or common areas within the subdivision. Purpose of easements shall be indicated.
5. Locations, names and present widths of adjacent streets
6. Location of all regulated resource areas defined by Chapter 131, the Massachusetts Wetland Protection Act.
7. Boundary lines of all proposed lots with approximate dimensions and lot areas in acres and / or square feet, as appropriate.
8. Whenever applicable, proposed storm drainage and sanitary sewerage systems including location, size, direction of flow of existing and proposed sewers, culverts, and storm drains, in a general manner

9. Proposed water system in a general manner
10. Proposed soil erosion controls in a general manner
11. Proposed fire protection systems (fire ponds, hydrants) in a general manner
12. A sketch plan of the applicant's contiguous, un-subdivided land showing possible or contemplated development and street layout
13. The existing and proposed topography of the land in a general manner at a ten (10) foot contour interval or better based on USGS data and NRCS soil maps if available, including major features such as wooded areas, ditches, wetlands, floodplains, stone walls, rock outcroppings and trees over eighteen (18) inch diameter at breast height
14. Location of existing buildings and significant structures, from an assessors plan, within 100 feet of the subdivision.
15. On land to be subdivided in un-sewered areas, such information as is required by the Chesterfield Board of Health to determine the general feasibility of subsurface sewage disposal
16. Zoning classification of all land shown in the plan including all overlay zoning districts
17. When multiple sheets are necessary, match lines shall be used and referenced. An index plan graphically indicating the arrangement of said standard (24" x 36") sheets at a suitable scale shall be provided

D. Approval of the Preliminary Plan

After submission, the Preliminary Plan will be reviewed by the Planning Board, Board of Health, the Conservation Commission, the Highway Department, Tree Warden, and other Town Boards and departments to determine whether it is in compliance with the design standards as set forth in these Rules and Regulations and with those additional requirements of other Town Boards and departments.

Within forty-five (45) days after submission of the Preliminary Plan, both the Planning Board and Board of Health shall approve, or approve with modifications suggested by the Board or agreed upon by the applicant, or disapprove said Preliminary Plan, and in the case of disapproval, the Board shall state in detail the reasons for its disapproval.

The Planning Board shall file a certificate of its action with the Town Clerk, and shall send a notice of its action by certified mail to the applicant. Failure of the Planning Board to act upon a Preliminary Plan within 45 days after submission shall be deemed to constitute approval of such a plan.

Approval of the Preliminary Plan by the Planning Board does not constitute approval of a subdivision but does facilitate the procedure in securing approval of the Definitive Plan. In addition, such approval does not in any way authorize the owner to proceed with construction of roadways and/or other work in the subdivision.

4.3 Definitive Plans

A. General

A Definitive Plan of a subdivision must be submitted to the Planning Board and the Board of Health for approval.

A Definitive Plan shall be governed by the Subdivision Regulations in effect at the time of submission of such plans or in effect at the time of submission of a Preliminary Plan provided that the Definitive Plan evolved therefrom shall have been submitted to the Planning Board within seven (7) months from the date of submission of the Preliminary Plan.

A Definitive Plan shall also be governed by the zoning in effect at the time of submission of such Plan or a Preliminary Plan from which a Definitive Plan is evolved in accordance with the provisions of Section 7A of Chapter 40A of the General Laws as amended.

B. Submission Procedure

The applicant shall submit the definitive plan to the Planning Board either by delivery at a regular or special meeting of the Board, or by delivery or registered mail, postage prepaid, addressed to the Planning Board. In each case, written notice (a copy of Form C) shall be filed by delivery or registered mail, postage prepaid, with the Town Clerk. If the notice is given by delivery, the Town Clerk shall, if requested, give a written receipt thereof.

A plan is deemed submitted when delivered to the Planning Board at a meeting of the board, or when sent by registered mail to the planning board. The date of receipt of such notice and such documentation as may be required by these rules and regulations shall constitute the effective date of submission.

Any person who submits a Definitive Plan of a subdivision to the Planning Board for approval shall file with the Board the following:

1. The applicant shall submit sixteen (16) copies of the definitive subdivision plan and Application Form C (see Section 8.0) to the Planning Board, together with all other information and documentation, such as plans, reports, maps and cross sections, as required in these rules and regulations.
2. In accordance with MGL c. 41, Section 81U, the applicant shall file one (1) copy of the plan directly with the Board of Health, along with other necessary information and documentation. The filing of the definitive subdivision plan shall also include a copy of any Order of Conditions relative to the definitive plan which may have been issued under the Massachusetts Wetlands Protection Act
3. A filing fee in accordance with the Fee Schedule (see Section 7.0). The filing fee shall be in the form of a certified check or money order made payable to the Town of Chesterfield, Massachusetts
4. A plan, at an appropriate scale, illustrating the one-hundred year floodplain, wetland areas, the Westfield River Protection District, and aquifer recharge area, as applicable, within the area to be subdivided
6. Sixteen (16) copies of street plans and profiles of proposed streets

7. A copy of Form D and a Certified List of Abutters as provided by the Board of Assessors, signed by the applicant and providing all information requested
8. If in the judgement of the Planning Board, or any other Town Board or department charged with the review of said plans, consulting services are necessary and appropriate for the review of an application, the applicant shall, prior to a determination on the Definitive Plan by the Board, reimburse the Town for the full cost of such services. This Project Review Fee is enabled by Mass G.L. Chapter 44, Section 53G. All such consultants shall be selected by the Board. Reimbursement shall be by certified check, or money order made payable to the "Town of Chesterfield, Massachusetts".

C. Contents

Said Definitive Plan submittal shall include:

1. Documentation that the applicant filed two copies of the complete application (Form C) with the Chesterfield Board of Health, the Chesterfield Conservation Commission, the Board of Selectmen, and the Road Superintendent.
2. A copy of Form D and receipts showing that the applicant mailed, by certified mail, a notice of the proposed subdivision containing a locus map of the project to every abutter within 300 feet of the proposed subdivision.
3. All master deeds, restrictive covenants, deed restrictions, deeds for shared land, detention pond, open space, and recreation areas, and homeowners association documents and all easements. A homeowners association must be established to maintain streets and infrastructure until and unless the streets are accepted by the municipality.
4. The applicant shall request, in writing to the Planning Board, any proposed waivers of subdivision requirements.
5. Sixteen (16) copies of the Definitive Plan on 24" by 36" paper at a scale of 1"= 40' or greater and every sheet shall bear the seal of a Massachusetts Registered Civil Engineer and/or Massachusetts Registered Land Surveyor, as appropriate. When multiple sheets are necessary, match lines shall be used and referenced. An index plan graphically indicating the arrangement of said standard (24" x 36") sheets at a suitable scale shall be provided. The Definitive Plan shall contain the information below. Sufficient sheets shall

be used to ensure that the plans are all easily readable. At least one of these prints shall have the significant features illustrated in color to clearly show roads, streams and water-bodies, wetlands, one hundred year floodplains, dedicated open space and recreation, pedestrian and bicycle paths, and subdivision boundaries

- a. A title block with the subdivision name, property owner, boundaries, North Arrow, date, scale, legend, locus and title, "Definitive Plan"
- b. The names and addresses of the owners of record at time of submission, the applicant, and the Massachusetts Registered Civil Engineer and/or Land Surveyor (including official seals), as appropriate.
- c. The names and plan location of all subdivision property owners, applicants, immediate abutters, abutters within 300 feet of any portion of the subdivision, and abutters separated from the subdivision only by a street.
- d. Existing and proposed lines of streets, rights-of way, sidewalks, easements (including the purpose of such easements), and any public or common areas within the subdivision. Proposed names of new streets shall be shown until they have been approved by the Planning Board. Street names may not be similar to any other streets within Chesterfield.
- e. Locations, names and present widths of adjacent streets, approaching, or within reasonable proximity of the subdivision
- f. All easements must be clearly shown on the subdivision plans and their purpose shall be clearly stated. All water and sewer utilities easements shall be a minimum of twenty (20) feet in width. Utilities shall be located as close as possible to the center line of the easement.
- g. Zoning classification of all land shown in the plan including overlay zoning such as floodplain, wireless communications facilities, or water supply protection districts

- h. Delineation of all regulated resource areas as defined by Ch. 131 of the Massachusetts Wetland Protection Act, within and adjacent to the subdivision
- i. A topographic plan of the entire subdivision at two (2) foot contour interval or better showing existing (solid line) and proposed (broken line) topography with proposed spot elevations at the intersection of all proposed lot lines and other pertinent points to show the proposed finished grading of the subdivision.
- j. Location of existing buildings and significant structures
- k. Boundary lines and dimensions of all proposed lots with dimensions and lot areas in acres, and all lots labeled numerically and in sequence
- l. Significant site features such as stone walls, fences, buildings, wetlands, floodplains as identified on the Federal Insurance Rate Maps and other flood plains identified by a professional engineer, large trees or significant tree stands, burial markers, and rock outcroppings. The plan shall identify which features shall remain undisturbed.
- m. Location of all permanent monuments and benchmarks, properly identified as to whether existing or proposed. Bounds are required at all intersections of street lines, angle points, and changes in the curvature of street lines
- n. Sufficient data to determine readily the location, direction, width, and length of every street and way line, lot line, and boundary line, and to establish these lines on the ground
- o. Suitable space to record the action of the Planning Board and the signatures of the Board members
- p. A locus plan of the subdivision showing the exterior lines of proposed streets in the subdivision and their exact location in relation to two or more existing streets, and of such accuracy to register as close as possible with the Chesterfield Assessors' Tax Map(s).

- q. Proposed storm drainage and sanitary sewerage systems including location, size, direction of flow of existing and proposed sewers, culverts, and storm drains
- r. Where a storm drainage line discharges into a drainage area, a profile will be shown of the discharge area to determine condition, adequacy of connection, and proposed method of stabilization [need to add reference to section on design of stormwater management devices]
- s. A Street Layout Plan on a separate 24" by 36" sheet for each street in the subdivision showing exterior lines, intersection angles, roadway lines, partial lot lines, curb lines, points of tangency, and radii of curves. Also included on the Street Layout Plan shall be the location, size, type of construction, elevations, and invert of all pipes and conduits of the following infrastructure:

Water Supply System: including wells, pumps, valves, stubs, gates, hydrants, and similar equipment

Storm Drainage System: including manholes, culverts, catch-basins, and appurtenant equipment

Sanitary Sewerage System: including manholes, pumps, septic tanks, and appurtenant equipment

Electrical Supply Equipment: including poles, transformers, primary and secondary cables, lighting fixtures, and other electrical equipment

Other Utility Systems: such as gas, telephone, cable TV, or data lines

- t. A Profile Plan on the same sheet located directly below or above and coordinated with the Street layout Plan indicating existing profiles on the exterior lines (using light weight lines) and proposed profile on the center line (using heavy weight lines) of each proposed street, at a maximum stationing of fifty (50) foot intervals, and at a horizontal scale of one (1) inch equals forty (40) feet and a vertical scale of one (1) inch equals four (4) feet. All elevations shall refer to Town datum and/or mean sea level

as determined by the Planning Board. Profiles shall show existing and proposed street grades, rates of gradient in percentages, ground elevations at center line of each fifty (50) foot station, and intersecting streets and ways shall be clearly indicated. The profile shall (Profile Plan) show vertical location of existing and proposed storm drainage and sanitary sewer lines, slopes of all storm and sanitary sewer lines, slopes of all storm and sanitary sewer lines, invert and rim elevations of each manhole or catchbasin and such structures to be properly identified by number.

- u. An erosion and sedimentation control plan designed to ensure, mitigate and prevent erosion/sedimentation of disturbed areas during and after construction activities. The plan shall show, in detail, what and when such measures will be implemented, on both a temporary and permanent basis, including land disturbances for house construction.
- v. Sign-off from the Massachusetts Historical Commission that there are no known archaeological sites on the property. For sites within 200 feet of a river or perennial stream and for sites without the above sign-off, a study by a qualified archaeologist to determine if any mitigation is required to avoid damaging such sites.
- w. Proposed fire protection systems including location, number, storage capacity and access to all existing or proposed fire ponds and/or hydrants
- x. Profiles of proposed streets on a horizontal scale of one (1) inch equals forty (40) feet and a vertical scale of one (1) inch equals four (4) feet, showing existing and proposed grades along the center line
- y. Construction details for catchbasins, manholes, endwalls, and other infrastructural elements as required by these regulations.

D. Additional Subdivision Requirements

1. Feasibility Report of Proposed Sanitary Sewage Systems

Where sewage disposal is to be individual on-site sewage disposal systems, the Definitive Plan shall be accompanied by a 'Feasibility Report of the Proposed Sanitary Sewage Systems' certified by a Massachusetts registered Civil Engineer or Sanitarian and carry his official seal. The purpose of the report is to evaluate the feasibility of the ground for subsurface disposal of septic tank effluents, based on the interpretation and analysis of percolation tests, soil characteristics and test borings, the water table, natural drainage patterns and other observations by the engineer.

The report should take into consideration the following factors:

- a. Results of Percolation Testing – Such tests shall be executed in accordance with all applicable state and town rules and regulations
- b. A map showing locations of tests on each proposed lot and other pertinent data.
- c. Topographic and ground level conditions, natural drainage patterns and flood elevations of nearby waterways.
- d. Determination of underlying soil characteristics, absorption qualities, maximum groundwater elevations and distance to bedrock.

2. Wetlands Protection Act

The Conservation Commission shall, to the extent practicable, file a report with the Planning Board not later than forty-five (45) days after receipt of the Definitive Plan stating that the proposed plan:

- a. is not subject to the provisions of the Wetland Protection Act, or
- b. the Wetlands Protection Act applies to certain designated areas.

In the event the Conservation Commission indicates that the plan shall be governed by said Act, the Planning Board shall include in its decision for approval, a condition that the applicant shall obtain Conservation Commission approval before the start of any construction activity in the affected areas.

3. Water Supply Protection District

Any portion of a proposed subdivision which lies within the limits of any Water Supply Protection District shall conform to the requirements of said district as stated in the appropriate section of the Chesterfield Zoning Bylaw.

4. Fire Water Availability

In any subdivision where the homes are sprinklered, said sprinkler system will be assumed to meet this standard if it meets the requirements of the Massachusetts State Building Code. In the alternative, a project may demonstrate that there will be adequate fire ponds or access to natural water bodies in a manner acceptable to the fire chief and meeting national standards.

5. Hydrology Study and Drainage Calculation

The applicant shall submit drainage calculations, including rational method and TR-55 or TR-20, showing: (a) that any proposed drainage system has been designed according to the standards set forth in these rules; and (b) any impact said drainage system would have on existing drainage systems downstream from the proposed point of discharge.

6. Lighting System, if used:

Outdoor lighting is not required. If used, any lighting system should comply with the recommendations of the International Dark-Sky Association, whose goal is "To preserve and protect the nighttime environment and our heritage of dark skies through quality outdoor lighting." All street lights must be no more than 50-watt high pressure sodium or more energy efficient models. All street lights must contain full cutoffs (hoods covering the sides of the lamps) to focus any direct lighting onto streets and sidewalks. Maximum foot candles of any light shall be 1 foot candle.

7. Restrictive Covenants

The applicant shall submit, whenever applicable, as part of his application, any and all documents, such as homeowner's association rules and regulations of any commonly owned/shared land, facility, detention pond, open space, recreation area, etc. Said documents shall be submitted by the Planning Board to the Board of Selectmen and the Town Counsel and their responses shall be given in writing within thirty (30) days of the date of submittal.

8. Easements

All easements to be granted by the developer to the Town shall be shown on the subdivision plans with bearings and distances, and their purpose shall be clearly stated. In addition, the applicant shall submit, as part of his application, easement documents, suitable for recording, deeding said easements to the Town at the applicant's expense. The easements shall be submitted by the Planning Board to the Board of Selectmen and the Town Counsel and their responses shall be given in writing within thirty (30) days of the date of submittal.

E. Environmental Impact Statement

The applicant shall also submit seven (7) copies of an environmental impact statement, the purpose of which is to enable the officials of the Town to determine what methods are used by the applicant to promote the environmental health of the community and to minimize adverse effects on the natural resources of the Town.

In preparing the statement, the applicant should refer to the Natural Communities map; Topology, Floodplain, and Water Supplies map; and the Open Space and Recreation chapter of Chesterfield's Community Development Plan, on file at the Town Offices. The applicant should also refer to the published Soil Survey for Massachusetts, Hampden and Hampshire, Western, conducted by the Natural Resources Conservation Service, US Department of Agriculture. The statement should include specific references to the appropriate plans and maps. The statement shall be a technical document with references for all statements whenever possible.

In reviewing the statement, the Town boards will consider the degree to which water is recycled back into the ground, the maintenance and improvement of the flow and quality of surface waters, historic sites, unique geological, botanical, zoological, and archaeological features, existing or potential trails and accesses to open space area, proposed land management, and the health and safety of the inhabitants of the area.

The Planning Board may waive any section, or sections, of the EIS which it deems inapplicable to the proposed project. The developer should discuss the requirements with the Board prior to the preparation of the EIS and prior to the submission of the plan.

The EIS shall include the following:

1. Physical Environment

- a. Describe the general physical conditions of the site, including amounts and varieties of vegetation, general topography, unusual geologic, scenic and historical features, trails and open space links, and indigenous wildlife.
- b. Describe how the project will affect these features.
- c. Provide a complete physical description of the project, and its relationship to the surrounding area.

2. Surface Water and Soils

- a. Describe location, extent and type of existing water and wetlands, including existing surface drainage characteristics, both within and adjacent to the subdivision.
- b. Describe the methods to be used during construction to control erosion and sedimentation; i.e., use of sediment basins and type of mulching, matting, or temporary vegetation; describe approximate size and location of land to be cleared at any given time and length of time of exposure; covering of soil stockpiles; and other control methods used. Evaluate effectiveness of proposed methods on the site and on the surrounding areas. Refer to similar methods used on existing or on-going nearby projects.
- c. Describe the permanent methods to be used to control erosion and sedimentation. Include descriptions of:
 - (1) any areas subject to flooding or ponding;
 - (2) proposed surface drainage system;
 - (3) proposed land grading and permanent vegetative cover;
 - (4) methods to be used to protect existing trees and vegetation during and as a result of construction;
 - (5) the relationship of the development to the topography;

(6) any proposed alterations of shore lines, marshes or seasonal wet areas;

(7) any existing or proposed flood control or wetland easements;

(8) estimated increase of peak run-off caused by altered surface conditions, and methods to be used to return water to the soils.

d. Completely describe sewage disposal methods. Evaluate impact of disposal methods on surface water, soils and vegetation.

3. Sub-surface Conditions

a. Describe any limitations on proposed project caused by sub-surface soil and water conditions, and methods to be used to overcome them.

b. Describe procedures and findings of percolation tests conducted on the site.

c. Evaluate impact of sewage disposal methods on quality of sub-surface water, including, but not limited to, well and other water supplies.

4. Town Services

a. Describe estimated traffic flow at peak periods and proposed circulation pattern.

b. Describe locations and number of vehicles accommodated in parking areas.

c. Describe effect of project on police and fire protection services.

d. Describe effect of project on public works department services.

e. Describe effect of project on educational services.

f. Describe effect of project on the Town water supply

5. Human Environment

- a. Provide a tabulation of proposed buildings by type, size (number of bedrooms, floor area), ground coverage, and a summary showing the percentage of the tract to be occupied by buildings, parking and other paved vehicular areas and usable open land.
- b. Describe type of construction, building materials used, location of common areas, location and type of service facilities (laundry, trash, garbage disposal).
- c. Describe lighting, screening, security provisions.
- d. State proximity to transportation, shopping and educational facilities.
- e. Describe proposed recreational facilities, including active and passive types; and age groups participating, and state the extent to facilities and open will be available to all Chesterfield residents.

6. General Impact

Summarize briefly the environmental impact on the entire Town with supporting reasons.

F. Approval of Definitive Plan

Before approval of the Definitive Plan, the applicant shall comply with all the reasonable rules and regulations of the Town departments. Copies of the Zoning Bylaw, General Bylaws, Board of Health Regulations and other appropriate information may be obtained from the respective departments. Before final approval of the plan, the applicant shall insure that lots in a Definitive Plan are in conformity with the applicable zoning regulations. Failure of the applicant to demonstrate this compliance will be adequate grounds for disapproval of the Definitive Plan.

1. Review by the Board of Health as to Suitability of the Land

At the time of filing of the Definitive Plan, the applicant shall also file with the Board of Health one (1) copy of the Definitive Plan, together with other necessary documentation and reports. The Board of Health shall report to the Planning Board, in writing, its approval or disapproval of said plan. If the Board of Health disapproves the plan, it shall make specific findings as to which, if any, of the lots shown on the plan cannot

be used for building sites without injury to public health, and include such specific findings and the reasons thereof in such report, and, where possible, shall make recommendations for the adjustment thereof. Any approval of the plan by the Planning Board shall only be given on condition that the designated lots or land shall not be built upon or served with any utilities such as septic tanks, existing cesspools, and drainage without prior consent of the Board of Health. The Planning Board shall endorse on the plan such conditions as set forth by the Board of Health and the lots and land affected by such conditions.

2. Review by the Conservation Commission

At the time of the filing of the Definitive Plan with the Planning Board, one (1) copy shall be filed by the applicant with the Conservation Commission for review. The making of a report by the Conservation Commission to the Planning Board concerning a proposed Definitive Plan shall not be treated as, nor deemed to be approved as, an Order of Conditions or any other approval provided by the Wetlands Protection Act or by any local wetlands bylaw. A request by the Planning Board for such a report shall not be treated as, nor deemed to be, a Notice of Intent or any other application provided by the Wetlands Protection Act or by any local wetlands bylaw.

3. Public Hearing

Before approval, modification and approval, or disapproval of a Definitive Plan is given, a public hearing shall be held by the Planning Board. Said public hearing shall be held after the Board of Health makes its report or after the forty-five (45) day period to report expires. Notice of the time and place of the hearing, and of the subject matter, sufficient for identification, shall be given by the Board at the expense of the applicant by advertisement in a newspaper of general circulation in the Town of Chesterfield, once in each of two successive weeks, the first publication being not less than fourteen (14) days before the day of such hearing. A copy of said notice shall be mailed to the applicant and to all owners of land abutting upon the subdivision as appearing in the most recent tax list, and to Town Boards. The applicant or his representative should be present at the hearing.

4. Approval, Modification, or Disapproval

- a. After the required public hearing and after the report of the Board of Health (or lapse of 45 days without such report), the Planning

Board shall approve, modify and approve, or disapprove the Definitive Plan. In determining whether or not the Plan conforms to these regulations, the following criteria shall be considered:

- (1) Completeness and technical adequacy of all submissions;
- (2) Determination that development at this location, as proposed in the Definitive Plan, does not entail unwarranted hazard to the health, safety, or welfare of future residents of the subdivision or to others because of possible natural disasters, traffic hazard, or environmental degradation;
- (3) Conformity with the design standards included in or cited by these regulations;
- (4) Conformity with all applicable zoning requirements;
- (5) Determination that all necessary approvals and/or determinations have been received from the Conservation Commission;
- (6) Consistent with the purposes of the Subdivision Control Law.

- b. The action of the Planning Board in respect to such a plan shall be voted, copies of which shall be certified and filed with the Town Clerk and sent by registered or certified mail to the applicant.

A Definitive Plan disapproved by the Board of Health shall not be approved by the Planning Board until the deficiencies noted by the Board of Health have been corrected. In the event of disapproval, the Planning Board shall state in detail wherein the plan does not conform to these regulations or the recommendations of the Board of Health. Favorable action shall require a majority vote of the Planning Board members. If the Board modifies or disapproves such Plan, it shall state with its vote the reasons for its action.

- c. Time limits for action by the Planning Board:

- (1) Where a Preliminary Plan has been submitted and acted upon or where at least forty-five (45) days have elapsed

since submission of the Preliminary Plan, an applicant may file a Definitive Plan. The failure of the Planning Board either to take final action or to file with the Town Clerk a certificate of such action regarding a Definitive Plan submitted by an applicant within ninety (90) days after the postmarked date if the plan is submitted by mail, or such further time as may be agreed upon at the written request of the applicant, shall be deemed to be an approval thereof. Notice of such extension of time shall be filed immediately by the Planning Board with the Town Clerk.

- (2) Where no Preliminary Plan has been submitted and acted upon or where forty-five (45) days have not elapsed since submission of such Preliminary Plan, and a Definitive Plan is submitted, the failure of the Planning Board to take final action regarding a plan submitted by an applicant within one hundred thirty-five (135) days after such submission, or one hundred thirty-five (135) days after the postmarked date if the Plan is submitted by mail, or such further time as may be agreed upon at the written request of the applicant, shall be deemed to be an approval thereof. Notice of such extension of time shall be filed immediately by the Planning Board with the Town Clerk.

d. Approval is Not Acceptance

Approval of the Definitive Plan, or subsequent release of security upon completion of construction, does not constitute the laying out or acceptance by the Town of streets and easements within a subdivision. Compliance with the existing Laws of the Commonwealth and bylaws and procedures of the Town of Chesterfield are all required before acceptance of any street or easement. Such acceptance will be by majority vote at Town Meeting.

e. Certificate of Approval

The action of the Planning Board in respect to such a plan shall be by vote, copies of which shall be certified by, and filed with, the Town Clerk and sent by registered mail or delivery to the applicant. If the Board approves with modification or disapproves said plan it shall state, in writing, with this vote the reason(s) for its action. Final approval, if granted, shall be endorsed on the

original drawing of the Definitive Plan by the signatures of a majority of the Planning Board but not until the statutory twenty (20) days of the appeal period have elapsed following the filing of the certificate of action of the Planning Board with the Town Clerk and said Clerk has notified the Planning Board that no appeal has been filed. After the Definitive Plan has been approved and endorsed, the applicant shall furnish the Planning Board with three (3) additional prints thereof.

Final approval of the Definitive Plan does not constitute the laying out or acceptance by the Town of any street or other public improvements shown on the plan.

f. Deviation from Approved Plan

After approval of any Definitive Plan, the location and width of ways shown thereon, or any street or way subject to the Subdivision Control Law, shall not be changed unless the plan is amended in accordance with the provision set forth in Section 81-W of Chapter 41 of the General Laws, and approved by the Planning Board.

In the event the applicant desires to alter or change the grade of streets, or the size, location, or layout of a storm or sanitary line or appurtenant structure, he shall:

- a. Provide the Planning Board with a written statement requesting such alteration or change, and
- b. Provide the Board with three (3) prints of the original Definitive Plan with the proposed changes indicated in red.

No changes, alteration or deviation shall be permitted unless such change, alteration or deviation has been approved by the Planning Board.

After approval of a plan modification, the applicant shall cause such approved changes to be corrected on the original Definitive Plan drawings.

Deviations from material and construction specifications shall not be allowed except as specifically authorized by the Highway

Superintendent in consultation with a designated outside consultant.

5. Endorsement

An approved plan shall not be endorsed until after the mandatory twenty (20) day appeal period has elapsed, and not until the applicant has:

- a. Posted the necessary performance guarantee
- b. Made the necessary corrections on the plan to the satisfaction of the Planning Board, if conditional approval was granted
- c. Delivered two (2) originals and two (2) prints of the Definitive Plan if no corrections to the same were necessary – if corrections were required, six (6) prints shall be delivered
- d. Paid the required street inspection fee to the Town Treasurer
- e. Caused to be executed in a form acceptable to the Town Counsel all deeds of easements as shown on the plan and submission of such deeds and documents to the Planning Board

Failure of the applicant to meet the above requirements shall be full and sufficient reason to withhold endorsement.

If the applicant fails to submit the required performance guarantees, easements, and other documentations and the endorsement of the plan by the Planning Board is delayed more than six (6) months, the Planning Board, on its own motion, shall exercise its power to modify, amend, or rescind its approval of the subdivision plan or to require a change in the plan as a condition of said plan retaining the status of an approved plan.

4.4 Performance Guarantee

- A. Before endorsement of the Planning Board's approval of the Definitive Plan, the applicant shall agree to complete the required improvements as specified in these Rules and Regulations, for all lots in the subdivision, and such construction and installation shall be secured in accordance with Section 81U of the Subdivision Control Law by one, or in part by the other, of the following methods which may from time to time be varied with the applicant:

1. Approval with Financial Performance Guarantees (Surety Bonds, Cash Escrow/Money, Three Party Lender Agreement, or Letters of Credit). The applicant shall either file a surety company performance bond or provide a deposit of money or negotiable securities, including letters of credit, in an amount determined by the Planning Board in consultation with their advisers to be sufficient to cover the cost of all or any part of the improvements specified in these regulations at State "prevailing wage rates" not covered by a covenant under "2" below, and to cover the costs of inspections, record plans, street acceptance plans, and legal work, and a 20% contingency/inflation factor. Warranty principal shall be not less than 15% of the estimated cost of those components of the entire project which shall be dedicated for public use and shall cover workmanship and materials.
 - a. If financial performance guarantees are used, at least two lots in a subdivision which can be built on must be covered by a covenant (under paragraph b below) to insure that all work, including legal work, is completed.
 - b. Letters of Credit, three-party agreement for lender retention of funds, surety bonds and other financial performance guarantees must be drafted so that the only requirement that must be met for the Planning Board to draw on the letter is to notify the financial institution (grantor) that "We have incurred liability by reason of the failure of the applicant/developer/owner, within ninety days of the expiration of this letter, to complete the construction of their project (insert name of subdivision and plans) in accordance with the definitive subdivision plans and submittal, the subdivision approval, the Zoning, and the Subdivision Rules and Regulations. The amount drawn, which may be more than required to complete the project, will be held in a segregated bank account until the work can be bid competitively and the bid awarded and paid for or until the contract for the work is otherwise let and the work paid for. Any excess over the cost of completing the work will be returned to the grantor."
 - c. Such bond, deposit of money or negotiable securities, shall be approved as to form, the surety or financial institution, and manner of execution by the Planning Board.
 - d. For any surety bond, 1) the surety must agree that any litigation stemming out of the bond will take place in Massachusetts, 2) the bond must include the name and address of the person to be

served for any legal action, 3) The bond must specifically include the terms above, and 4) No expiration date may be allowed in the bond (the bond must be valid until the work is complete) and the warranty performance period has been completed.

- e. The applicant must provide an Irrevocable Right-of-Entry to allow the Town of Chesterfield to enter the property to make any necessary improvements required in the Subdivision Regulations and the Definitive Plan approval if the Town is forced to call the financial performance guarantees. Accepting, calling, or using financial performance guarantees does not provide the Town with any responsibility to complete a project beyond that for which the Town is willing to undertake and for which there are sufficient performance guarantee funds to pay for. The property owner shall subordinate all property mortgages to the Irrevocable Right-of-Entry and record it in the Registry of Deeds or Land Court, as applicable.

- 2. Approval with Covenant – instead of filing a bond or depositing money, the applicant may fulfill the performance guarantee requirements by filing a covenant, (see Section 8.0, Form E), executed and duly recorded by the owner of record, running with the land, that no lot in the subdivision shall be sold and no building erected thereon until such ways, services and, whenever applicable, temporary turnarounds are constructed and installed, and until record plans, street acceptance plans, and other required work are accepted by the Planning Board, in accordance with these Rules and Regulations, so as to adequately serve the lots.

Such covenant shall be inscribed on the Definitive Plan or on a separate document referred to on the plan, and delivered to the Planning Board. The Planning Board shall turn over the covenant agreement to the town counsel, who shall review its contents and forward his/her comments in writing to the Planning Board. Upon approval of the covenant by the Planning Board, the applicant shall note the Planning Board's action on the Definitive Plan, record the covenant, endorsed Definitive Plan, and other appropriate documents at the Registry of Deeds or Land Court, as appropriate, and provide certified copies of the same to the Planning Board. When improvements have been completed to the satisfaction of the Planning Board, the Board will then authorize in writing, on the appropriate form, a Release of Conditions for recording in the Registry of Deeds at the owner's expense, and the conditions relating to such lots shall terminate.

B. Notification of Recording

1. The Developer, or a representative (whenever applicable), will register the Planning Board's Order of Conditions, public easements (plans and documents), restrictive covenants, master deeds, etc., at the Registry of Deeds or Land Court, as applicable. The cost of said recording shall be borne by the developer.
2. Within six (6) months from the date of the Planning Board's endorsement of the Definitive Plan, the applicant shall cause such plan to be recorded in the Hampshire Registry of Deeds, or the Land Court. If the applicant delays recording of such plan beyond the six (6) month period, such plans shall not be accepted for recording by the Registry of Deeds or Land Court unless and until it has been endorsed thereon, a certificate of the Planning Board, or Town Clerk, dated within thirty (30) days of such recording, that the approval has not been modified, amended, or rescinded, nor the plan changed. Such certificate shall, upon application, be made by the Planning Board, or Town Clerk unless the records of the Planning Board or Town Clerk receiving the application show that there has been such modification, amendment, rescission, or change.
3. Within ten (10) days after the Definitive Plan, as approved and endorsed, has been recorded in the Hampshire Registry of Deeds and in the case of registered land, with the Recorder of the Land Court, the applicant shall notify the Planning Board in writing of the date of such recording and provide written evidence of such recording.
4. Upon the receipt of notification of recording, the Board shall file one (1) print of the Definitive Plan with the Building Inspector. In accordance with the statute, where approval with covenant is noted thereon, the Building Inspector shall not issue any permit for the construction of a building on any lot within the subdivision without receipt from the Board of a copy of the Certificate of Performance (see Form I).

C. Completion Time Schedule

1. The covenant or financial performance guarantee shall be contingent upon the completion of such improvements, and the required one year warranty as required in these Rules and Regulations within a maximum period of three (3) years of the date of such bond, deposit of money, or covenant. After the completion date of all improvements and the one-

year Warranty Period, there shall be at least a three (3) month Warranty Settlement period before the expiration date of any bond, deposit of money, or letter of credit. Said three (3) month period shall give the Planning Board the opportunity to collect the financial performance guarantee so that it will be able to complete the necessary improvements in case (a) the developer is unable to do so; and/or (b) the Planning Board denies any requests for an extension of time. "Warranty" shall include all workmanship and materials.

2. Upon written request from the applicant, the Planning Board may, at its discretion, grant an extension of time, and such agreement shall be executed and affixed to the financial performance guarantee or covenant.
3. In the case of a surety company bond, such an agreement shall not be effective until the surety delivers to the board a written statement that the surety agrees to the proposed alteration of the completion schedule and that such alteration shall not relieve or affect the liability of the surety company.
4. In the case of a covenant, the Board may grant final approval of the Definitive Plan conditional upon completion of the construction of all ways and installation of utilities within a specified time period from date of said covenant. Failure to complete such improvements shall automatically rescind approval of the plan.
5. If the specified subdivision improvements in accordance with these regulations are not completed within two (2) years of the date of bond, deposit money, or covenant, the Planning Board may require an estimate of the cost of the remaining work, increase the amount of the performance guarantees proportionately, and establish a new date for completion of said required improvements. Failure of the developer to complete the improvements within the said two (2) years, or any extension thereof, shall not relieve the developer from his obligation to pay for increased costs for completing the improvements in excess of his performance guarantee.
6. Failure to complete all improvements as required by these Rules and Regulations within the time allotted shall cause the Board:
 - a. to draw upon the performance guarantee in order to complete said improvements; and/or

- b. schedule a public hearing in order to rescind approval of the subdivision in accordance with appropriate sections of Chapter 41, Section 81, of M.G.L.

D. Procedures for Partial Release

1. The applicant may, upon partial completion and installation of required improvements in a subdivision as specified in these Regulations, the security for the performance of which was given by bond, deposit of money, letter of credit, or covenant, make a formal application, in writing, to the Planning Board for partial release of the performance guarantee in accordance with the procedures set forth herein:

- a. Financial Performance Guarantee

The amount of any such bond, deposit of money, letter of credit, three-party agreement for lender fund retention, held may from time to time be reduced by the Planning Board. The applicant shall present to the Planning Board a list of all construction items performed and/or completed, said list to be based on the subdivision approval, and the subdivision regulations in their entirety. The amount to be reduced by the Planning Board, after consultation with their agents and advisers, shall be based upon State prevailing wage construction costs at the time the application for reduction is made. The Planning Board shall withhold adequate funds to complete the project, but shall withhold no less than twenty (20%) percent of the original approved cost estimate or fifty thousand dollars (\$50,000), whichever is greater. At the completion of the project (based on a written acceptance from the Planning Board that the project has been completed) and a one-year warranty period, the amount withheld shall be released.

- b. Covenant

The applicant may request a Release of Conditions (Form F) for designated lots where the required improvements have been completed for that section of roadway beginning at any intersection with an accepted street and abutting lots up through the last lot to be released. Lots may only be released if they abut the completed portion of the road. No partial release from the covenants will be approved if the total length of roadway, including a temporary turnaround, abutting said designated lots, exceeds the maximum allowable length for dead-end streets,

unless the Planning Board has already approved within the limits of the development a dead-end street exceeding said limits.

2. In the absence of financial performance guarantees, adequate covenants will be held to insure completion of the project, including record plans, street acceptance plans, site inspections, and legal work. In addition, a covenant on two lots which can be built on will be held until all work in the subdivision, including the signing of all necessary legal documents, has been completed.

E. Procedures for Full Release

1. The applicant may, upon completion and installation of required improvements in a subdivision, the completion of record plans and street acceptance plans, as specified in these Rules and Regulations, and the completion of a one-year labor and materials warranty period make formal application, in writing, to the Planning Board for full release of any outstanding performance guarantee. Before the Planning Board releases their full interest in said performance guarantee, the Planning Board shall:
 - a. Obtain from the applicant a written statement that they have completed the construction and installation of ways and utilities covered by said performance guarantee in accordance with these Rules and Regulations.
 - b. Obtain from the applicant a written statement in the form of a Certificate of Performance (Form G), prepared by a Massachusetts registered Civil Engineer and/or Land Surveyor, at the applicant's expense, stating that necessary streets, sewers, storm drains, water lines, together with their appurtenances and all other necessary requirements have been constructed and installed as specified in these Rules and Regulations and in accordance with the approved plans. Requests for final release of conditions shall be accompanied by an "As-Built Plan", as required in Section 6.
 - c. Obtain from the applicant, letters from the electric, telephone, gas and cable TV companies stating that their respective underground systems have been installed to their satisfaction
 - d. Obtain from the applicant, a set of record construction plans. Said plans shall include, but not be limited to, all the information requested in Record Plans.

- e. Obtain from the applicant, street acceptance plan or plans and necessary documents, as stated in Acceptance Plans.
 - f. The applicant shall obtain, in writing, from the Highway Superintendent in consultation with an outside consultant a certificate or statement that all work required by these Rules and Regulation under the jurisdiction of the Town has been inspected by him and completed in each street of streets in the subdivision serving the lots in question, including streets, storm drains, bridges, sewers, shoulders, sidewalks, curbs, etc., and that the method of construction and materials used in the performance of such work meets with his approval.
 - g. Obtain from the applicant, where applicable, an instrument, in a form approved by the Planning Board, transferring to the municipality or to an approved public utility company, without cost, valid unencumbered title to all sanitary sewers, water mains, and appurtenances thereto, and other utilities constructed and installed in the subdivision of approved portion thereof, and conveying to the municipality or to an approved public utility company without cost and free of all liens and encumbrances, perpetual rights and easements to construct, inspect, repair, renew, replace, operate and forever maintain such sanitary sewers, water mains and other utilities, with any manholes, conduits, and other appurtenances, and to do all acts incidental thereto, in, through, and under the whole of all streets in the subdivision or approved portion thereof, and if any such sewers or water mains have been constructed and installed in land not within such streets, then in, through, and under a strip of land extending fifteen (15) feet in width on each side of the centerline of all such sewers and water mains. The Planning Board may require greater than fifteen (15) feet in width on each side of the centerline where it deems necessary.
2. If the Planning Board determines that said that all improvements as shown on the endorsed Definitive Plan and all required plans and legal documents have been completed satisfactorily, it shall release the interest of the Town in such performance guarantee and return the bond or deposit to the person who furnished the same, or release the covenant by appropriate instrument, duly acknowledged, which may be recorded.

3. If the Planning Board determines that after inspection that said construction or installation has not been completed or said construction or installation fails to comply with these Rules and Regulations, the Planning Board shall send to the Town Clerk and, by registered mail to the applicant, the details wherein said construction or installation fails to comply with its rules. Failure of the Planning Board to act on such an application for release of conditions within forty-five (45) days after the receipt of the application by the Town Clerk, all obligations under the bond shall cease and terminate by operation of law, and any deposit shall be returned and such covenant shall become void.
4. Any such bond may be enforced and any such deposit may be applied by the Planning Board for the benefit of the Town of Chesterfield, as provided in Section 81-Y, upon failure of the performance for which any such bond or deposit was given to the extent of the reasonable cost to the Town of completing such construction and installation.

SECTION 5.0 DESIGN STANDARDS

5.1 General Standards

No plan of a subdivision shall be approved unless all of the building lots shown on the plan comply with the Zoning and the design and construction standards located herein.

Except as herein noted, the following shall be used as design standards. Where a difference between the standards as these Regulations exists, these Regulations shall be followed unless a waiver is granted by the Planning Board:

1. Streets, sidewalks, water systems, sanitary sewers, storm drain systems, public and private utilities and other infrastructure shall be constructed in accordance with these subdivision regulations and the current edition of the Massachusetts Highway Department "Standard Specifications for Highways and Bridges," (referred hereto as the "Standard Specifications").
2. Roads shall be designed in accordance with the appropriate American Association of State Highway and Transportation Officials (AASHTO) design manual for 20 mile per hour design speeds.

5.2 Relationship to Town Plans

The design and layout of a proposed subdivision should be guided by the goals and objectives of any adopted Community Development Plan or Master Plan, or statements of goals and objectives for the Town of Chesterfield.

5.3 Streets

- A. The Planning Board may require higher standards than those set forth herein after for the design and construction of streets within a subdivision, provided that such requirement are necessary and are intended to benefit a substantial area outside the subdivision.

- B. Street Classification

Streets in subdivisions shall be classified as major and minor:

1. Major Street: A street which, in the opinion of the Planning Board, is likely to carry substantial volumes of through traffic or a street serving a Class I Subdivision.
2. Minor Street: A street which connects with Major Streets or streets serving Class II and Class III Subdivisions (less than ten (10) lots).

C. Location and Alignment

1. All streets and ways shall be designed so that in the opinion of the Planning Board they will provide safe vehicular travel. Streets shall also be designed to maximize the attractiveness and design of the street layout to maximize livability and amenity of the subdivision. As far as practicable, streets should also follow natural contours.
2. The design and layout of the proposed subdivision shall conform, so far as is practicable, to the Town Master Plan, Open Space and Recreation Plan, or other Town plans, as adopted by the Planning Board or the Town.
3. Provision shall be made, to the satisfaction of the Planning Board, for the proper projection of streets, or for access to adjoining property which is not yet subdivided or developed. Generally, it is preferred that new roads loop back to the existing road instead of being dead-end streets.
4. Reserve strips prohibiting access to streets or adjoining property shall not be permitted.

D. Right of Way (ROW) and Road Design Standards

Street standards shall be provided in accordance with the table below. All roads are to be constructed to meet Mass Highway Design standards for 25 MPH roads. These standards provide a balance between what is necessary for safety (e.g., fire needs) and what is important to maintain Chesterfield's character.

	Minor Street	Major Street
Street Width	18 feet	20 feet
Shoulder Width	4 feet	4 feet
Minimum ROW	50 feet	50 feet
Horizontal Alignment: Minimum center line radius	Refer to MHD Design Standards for 25 MPH design speed	Refer to MHD Design Standards for 25 MPH design speed
Vertical Alignment: Minimum stopping sight distance at 3.5 feet above pavement	Refer to MHD Design Standards for 25 MPH design speed	Refer to MHD Design Standards for 25 MPH design speed
Maximum Grade	Refer to MHD Design Standards, based on terrain and 25 MPH design speed	Refer to MHD Design Standards, based on terrain and 25 MPH design speed
Minimum Grade	0.75%	0.75%
Intersection angle	90°	90°
Minimum sight distance (stop- controlled or obstructed-view intersection)	Refer to MHD Design Standards, based on obstruction location and 25 MPH design speed	Refer to MHD Design Standards, based on obstruction location and 25 MPH design speed
Minimum radius at edge of roadway	Refer to MHD Design Standards for 25 MPH design speed	Refer to MHD Design Standards for 25 MPH design speed

E. Dead End Streets

Dead-end streets (cul-de-sac) shall be permitted as Minor Streets only. Project shall make every effort to avoid the creation of dead-end streets and must connect their subdivision to existing dead-end streets whenever reasonably possible. Dead end streets are more expensive to maintain, limit emergency access, and reduce the sense of connection and equality that comes from interconnecting streets.

1. Dead-end streets are only appropriate when the surrounding property will never need a street connection, because of extremely sensitive and permanently protected natural resources, and the project provides a viable alternative pedestrian and bicycle connection to the surrounding property, and the street connection will not aid the transportation network that serves the subdivision, and the dead-end street will not serve more than seven (7) housing units.
2. The length of a dead-end street allowed by right is five hundred feet (500'), as measured along the centerline of construction of the street from the nearest connected existing public street which is not itself a dead-end street. A dead-end street is allowed up to 1,000 feet maximum if a corresponding amount of open space in the subdivision is dedicated (see Section 2.0 for the definition of Open Space). The formula is that for every two acres of open space dedicated, 100 feet of additional street length is allowed, up to 1,000 feet maximum.
3. All cul-de-sac streets shall use permanent teardrop-shaped cul-de-sac with a turnaround at the end of the street having a minimum island radius of forty (40) feet and a property line radius of at least eighty (80) feet (see below). The center of the cul-de-sac shall be on the centerline of construction.
4. A permanent cul-de-sac turnaround (island) shall be constructed in the center of the cul-de-sac. The roadway shall have the same width as the roadway leading into the cul-de-sac, said pavement width beginning at the exterior radius of the turnaround. If curbing is used, the inside radius of the cul-de-sac pavement shall be constructed with granite-edging type SA, SB or SC (S for sloped), as specified in the Mass Highway Standard Specifications.
5. The road going around a cul-de-sac turn around shall be a one way road twenty (20) feet wide around a tear-drop shaped cul-de-sac island graded, seeded and/or appropriately planted with acceptable trees or shrubs, or left with natural tree growth in the center.

F. Street Offsets

Streets entering opposite sides of another street shall be laid out either directly opposite each other or with a minimum offset of one hundred and fifty (150) feet between their centerlines. Streets entering the same side of another street shall also be laid out with a minimum offset of one hundred and fifty (150) feet between their centerlines. This

minimum offset shall also be observed whenever one or more streets entering are existing, whether located within or outside the boundary of the proposed development.

G. Intersections

Streets and ways shall be laid out so as to intersect in accordance with Street Offsets (Section 6.3G) and the following:

1. Street and way lines at all intersections, between proposed streets or between, whenever, applicable, a proposed and/or existing street, shall be rounded with a curve at each corner which has a property line radius of not less than fifteen and not more than twenty-five feet (25').
2. The center line of all intersecting streets or ways shall be a straight line from the point of intersection of said center line for a distance of no less than twenty (20) feet.
3. On any street where the grade exceeds two (2) percent on the approach of the intersection, a leveling area, with a maximum slope of two (2) percent shall be provided for a distance of not less than thirty (30) feet measured from the nearest gutter line of the intersecting street.

H. Surface Material

When roads are paved, the following shall apply:

1. The sub-base shall be screened bank-run gravel, a mixture of 3'' - 4'', 24'' deep, except that the top 6'' shall be processed 1.5''- gravel. A tolerance of one-half (1/2) inch above or below finished sub-grade will be permitted, provided this difference is not maintained over fifty (50) feet and the required cross section is maintained. The gravel borrow shall be laid to a depth of 18''.
2. The base or binder course (the first coat of asphalt) shall be asphalt concrete, in accordance with Standard Specifications, Class I Bituminous Concrete Pavement type I-1 (Binder Course Mix). It shall be laid to a depth of 2.5''.
3. The surface course (the second and final coat of asphalt) shall be asphalt concrete, in accordance with Standard Specifications, Class I Bituminous Concrete Pavement Type I-1 (Top Course Mix). It shall be laid to a depth of 2''.
4. Inspections shall be made by the project engineer and the municipality upon completion of each layer of sub-base and the binder and surface courses.

I. Adequate Access

The street system within a subdivision shall connect with and have, in the opinion of the Planning Board, adequate vehicular, pedestrian, and bicycle access from a public way or private way that connects to the greater network of streets.

1. The physical condition or width of a public way from which a subdivision has its access must be sufficient, in the sole opinion of the Planning Board to either provide for emergency services or carry the traffic which is expected to be generated by such subdivision. If such access is insufficient, the Planning Board shall require the applicant to dedicate a strip of land for the purpose of widening the abutting public way to a width commensurate with that required within the subdivision and to make physical improvements to and within such public way to the same standards required within the subdivision or by these Subdivision Regulations. Any such dedication of land for the purpose of the way and any such work performed within such public way shall be made only with permission of the governmental agency having jurisdiction over such way, and all costs of any such widening or construction shall be born by the applicant.
2. The Planning Board shall disapprove of a subdivision plan where, in the opinion of the Planning Board, the existing surrounding municipal infrastructure (e.g. street width and construction and necessary utilities) is insufficient and/or incapable of handling the additional volumes (e.g. traffic, storm water) anticipated, by the Planning Board, to be generated by the project. Planning Board may accept or require off-site improvements to mitigate any of these impacts.

5.4 Easements

- A. Easements for utilities shall be at the side or rear of lots wherever possible. They shall be contiguous from lot to lot. Easements shall be at least twenty (20) feet in width.
- B. Where a subdivision is bisected by or adjacent to a watercourse, either natural or man-made, the Board may require that there be a stormwater or drainage easement of at least twenty (20) feet in width to conform to the path of the watercourse and to provide for any construction related to that watercourse.
- C. The applicant will cause to be recorded in the Hampshire Registry of Deeds, by appropriate instrument (deed) any necessary easements in the name of the Town of Chesterfield or appropriate entity, for utilities, water courses or drainage channels, temporary turnarounds or other purpose, and to provide for the construction and installation of such utilities before the final bond is released. A copy of the appropriately executed instrument shall be submitted to the Planning Board after approval of the Definitive Plan, but before final endorsement.

5.5 Protection of Natural, Cultural and Historic Features

- A. All significant natural features, such as large trees, watercourses, scenic points, historic plots, and similar community assets shall be preserved. The Planning Board may waive this requirement if such features are not needed to add attractiveness and value to the subdivision.
- B. Measures shall be taken to preserve all archaeological sites or to mitigate any disturbance by fully cataloguing and preserving findings in accordance with Massachusetts Historical Commission recommendations.
- C. Before approval of a plan, the Planning Board may also require the plan to show a park or parks suitably located for playground or recreation purposes or for providing light and air. The park or parks shall not be unreasonable in area in relation to the land being subdivided and to the prospective uses of such land. The Planning Board may, by appropriate endorsement of the plan, require that no building be erected upon such park or parks for a period of not more than three (3) years without its approval. If the land is not deeded or purchased within these three (3) years, it may be included in a new subdivision proposal.

5.6 Pedestrian Ways and Sidewalks

All roads must include a parallel pedestrian walkway within the road right-of-way, or if outside of the right-of-way within an easement for the public use. The pedestrian way shall be continuous, with no breaks at streams or elsewhere, to allow pedestrians to safely walk off the roadbed. Pedestrian ways shall include a secure bed, which may be asphalt, crushed stone, gravel, or compacted earth, provided there is adequate drainage to ensure the pedestrian way is passable when snow does not block access. Sidewalks are not required, but where a developer chooses to use sidewalks they shall be designed and constructed in accordance with the Mass Highway Standard Specification and Architectural Access Board and Americans with Disabilities Act standards.

5.7 Sewage Disposal System

No lot shall be built upon without the provision of sewage disposal means specifically approved by the Board of Health.

5.8 Swales, Drainage, and Curbs

Curbs are generally not appropriate in Chesterfield, except in very limited circumstances where stormwater will be confined to feed into a formalized underground drainage system. Streets designed without curbs, however, shall use Low Impact Development (LID) drainage systems to closely mimic natural systems that meet the following standards:

1. All of the stormwater from a 1" NRCS design storm drains into the ground and does not leave the site. A 1" NRCS design storm is a storm with 1" of rain within a 24 hour period. More than 80% of Western Massachusetts storms are at or below this level.
2. Water leaving the road enters grassed swales graded flat enough to avoid erosion and hold and treat water.
3. Measures to reduce runoff, improve groundwater recharge, and improve stormwater quality, such as rain barrels (barrels at the base of roof gutter leaders that store stormwater and provide water for future lawn and garden use), or rain gardens (rain is captured and retained in depressions carefully planted with native vegetation and allowed to drain into the ground.)
4. Curbs are only appropriate in narrow defined areas without opportunity for grassed swales or in village center-type projects. In those areas curbs shall be Type 2 bituminous concrete or cement concrete curbs or granite curbs Type SB (sloped) placed on the bituminous binder, if the road is paved, or granite curbs if the road is gravel. Curbs shall utilize a 6" reveal (or 6" of curbing exposed above the street pavement). The installation of bituminous berm, granite curb, granite edging and granite curb corners shall conform to the relevant provisions of the Standard Specifications. All catch basin frames shall be consistent with those used elsewhere in town.

5.9 Water Supply

A. Water Wells

No lot shall be built upon without the provision of potable water facilities specifically approved by the Board of Health.

B. Fire Hydrants

Any subdivision where the homes are sprinklered, said sprinkler system will be assumed to meet this standard if it meets the requirements of the Massachusetts State Building Code. In the alternative, a project may demonstrate that there will be adequate fire ponds or access to natural water bodies in a manner acceptable to the fire chief and meeting national standards.

SECTION 6.0 REQUIRED IMPROVEMENTS

6.1 General Requirements

The applicant shall provide all of the improvements required herein and installed at his/her own expense. All work done under this section shall be done under the direction of the Board, including registered engineer(s) and any other consultants appointed by the Board. The applicant shall promptly reimburse the Town for the full amount of the cost of such engineer(s) and other consultants. No performance guarantee under Section 5.6 shall be released until:

1. All streets and other improvements shall have been in place over at least one winter (December 1 through April 15); See Section 4.4 C.1
2. Full approval in writing of all work done under this section is received from the Board's engineer(s) and any other consultants; and
3. A cashier's check or money order, payable to "Town of Chesterfield, Massachusetts", has been received to provide reimbursement for the full amount of the cost of such engineer(s) and other consultants.

In addition to the Mass. DPW Construction Standards, the following minimum specifications shall govern the installation of all roadways, utilities, and other improvements in all subdivisions.

6.2 Clearing and Grubbing of Right of Way

The entire area within the right-of-way lines, except for trees and other vegetation intended to be preserved, shall be cleared and grubbed of all stumps, brush, roots, and like material. All rock or masonry with a maximum dimension over three (3) inches and within six (6) inches of the top of sub-grade shall be removed. Trees intended to be preserved shall be protected by suitable boxes, fenders, or wells as appropriate. In cut area all material shall be removed to sub-grade. All unsuitable material, such as peat, highly organic silt or clay, or any other material that is considered to be detrimental to the sub-grade, shall be removed and shall be replaced by bank-run gravel, and be brought to proper compaction with a ten-ton roller.

6.3 Utility Installation

- A. All utility distribution systems, public or private, shall be placed underground.
- B. All utility lines shall be installed with the minimum soil cover specified in these regulations.
- C. Electric, telephone, cable TV, fiber optic, and all other conduits shall be installed underground beneath the grass strip with a minimum cover.
- D. Sheeting (to stop the sidewalls from collapsing) shall be used, whenever necessary, upon the direction of the Engineer working on behalf of the town as a consultant, and in conformance with the Standard Specifications.
- E. Pipe and conduits shall be surrounded by six (6) inches of compacted screened gravel if set in earth, and twelve (12) inches if set in rock. In rock, clay, or peat excavation, trenches shall be excavated to a depth of twelve (12) inches or more below the bottom of any water pipe, storm drain, or sewer and filled with bank-run or select gravel, whichever is approved by the Engineer working on behalf of the town as a consultant.
- F. Back-fill shall be compacted to ninety (90) percent of the maximum dry density of the material, consistent with the Standard Specifications.
- G. All lot connections shall be installed to the right-of-way line, and marked or surveyed so as to be easily located in the future.

6.4 Trees and Planting

A. Tree Preservation

- 1. The landscape shall be preserved in its natural state insofar as practical by minimizing tree removal, except in connection with a property used for tree farming. If established forested areas are to be cleared, special attention shall be given to the planting of replacement trees. Land should not be clear-cut for the sole purpose of offering land for sale.
- 2. Every effort shall be made through the design, layout, and construction of a subdivision to save as many existing, mature trees as possible. Accordingly, the applicant shall institute alternative site design methods to assure the best chance of tree survival whenever the following criteria

cannot be adhered to. The following is a list of recommended measures for the protection of existing trees:

- a. There should be no operation of heavy equipment or storage of any materials under said tree within its natural drip line.
 - b. Wherever possible, no grading or filling should be done within the drip line.
 - c. No black top paving or vehicle parking should be located under evergreen trees.
 - d. No more than twenty (20) percent of the area under any deciduous trees natural drop line may be paved.
 - e. All drainage from paved areas should be directed away from root zones.
3. On wooded tracts, the applicant is required to submit a Tree Preservation Plan for within the limits of the proposed construction activity. The Plan must be prepared by a registered landscape architect, arborist or forester. The Tree Preservation Plan must include a scaled Site Plan including the following information:
- a. A tree inventory indicating the size, species, location, and condition of all significant trees within the limits of the proposed activity; also location of existing and proposed structures, improvements, utilities, and existing and proposed contours.
 - b. Specific protection techniques and disease control, if applicable, that will be utilized to minimize disturbance to all trees remaining on site.
 - c. A reforestation plan indicating size, species, location, and planting specifications of all street trees, yard trees, and replacement trees. The reforestation plan shall utilize a diversity of tree species with emphasis on native species when possible.
 - d. Selection of replacement trees in regard to their number, size and species, shall be determined by the Planning Board upon recommendation of the Tree Warden in consultation with a certified arborist, on the basis of an analysis of tree canopy conditions, soil conditions, and other relevant factors.

B. Street Trees

1. The applicant is required to plant suitable broad-leaved deciduous shade trees along all streets. Said trees shall be located within the street right-of-way unless the Planning Board has approved otherwise. All trees shall be the equivalent of well rooted nursery grown stock, free of injury, harmful insects, and diseases. They shall be well branched and the branching structure should be sound and not interfere with traffic visibility. In certain cases, where the applicant's Tree Preservation Plan demonstrates, to the satisfaction of the Planning Board, that suitable trees will be retained within the right-of-way, the Board may waive a portion of all the required street trees.
2. The applicant shall install street trees as follows:
 - a. In order to provide a mature tree canopy in the future, the distance between trees shall not exceed approximately 30 feet along the way. The Planning Board may grant an amendment on this requirement based on tree species and soil conditions.
 - b. Minimum height and DBH of all trees to be planted is at the discretion of the Planning Board, in consultation with the Tree Warden and a certified arborist, based on tree species and soil conditions.
 - c. Supplemental irrigation should be provided to all trees as needed during the growing season to ensure healthy maintenance.
 - d. The species and variety of the trees to be planted shall be species listed on the Preferred Tree List (See Attachment A).
 - e. No evergreen trees such as pine, fir, spruce or hemlock shall be planted as public shade trees along the way.
 - f. No trees or shrubs shall be planted at any corner or intersection where they could become a traffic hazard by obstructing vision or preventing safe vehicular travel.
 - g. All cut bankings that tend to wash or erode shall be planted with a low growing evergreen shrub and seeded with a deep rooted perennial grass or groundcover to prevent erosion.

- h. In a subdivision, the applicant will be liable for all planted trees as to their erectness and good health for three calendar years after planting as determined by the Tree Warden in consultation with a certified arborist.

C. Tree Replacement

1. The applicant shall provide replacement trees on each lot to ensure that at least 35% of the lot outside the footprint of the house and driveway will be shaded. Plans submitted to the Planning Board shall show the estimated tree canopies after 15 years of growth, the specific names, sizes and locations of trees to be planted, and the total area of square feet of the area shaded by tree canopies. In determining the shaded area, measure the shaded area assuming that the shaded area is only that area directly under the drip line (See Attachment B).
2. The Planning Board will have the discretion to modify tree shading requirements under power lines and other obstructions which prohibit strict compliance with shading requirements, and to give shading credit for off-site trees and sidewalk tree canopies, where appropriate.
3. Selection of replacement trees in regard to their number, size and species, shall be determined by the Planning Board upon recommendation of the Tree Warden in consultation with a certified arborist, on the basis of an analysis of tree canopy conditions, soil conditions, and other relevant factors.
4. When possible, a diversity of trees shall be used, with a preference of species native to North America. Please see "List of Recommended Trees" (Attachment A) for preferred tree species.
5. Use of exotic plants, such as Norway Maple (*Acer platanoides*), Crimson King Norway Maple (*Acer platanoides* 'Crimson King'), Ailanthus (*Ailanthus altissima*), Amur Corktree (*Phellodendron amurense*), Rhamnus cathartica (Common Buckthorn) and *Fragula alnus* (Glossy Buckthorn) is prohibited.
6. The applicant will be liable for all planted street trees as to their erectness and good health for three calendar years after planting as determined by the Tree Warden in consultation with a certified arborist.

D. Remediation

1. Any tree shown to be saved on the above mentioned Tree Preservation Plan which, however, is removed or whose survival is irredeemably jeopardized in violation of these conditions shall be replaced in a manner to be determined solely by the Planning Board on advice of the Tree Warden in consultation with a certified arborist.
2. Failure by the applicant to comply with these conditions expeditiously may result in the Planning Board retaining a cash bond, held in an interest bearing account by the Planning Board jointly with the applicant for three years. Upon the completion of the above conditions, the applicant may request release of the funds, plus interest, retained by lender by sending a statement of completion and a request for release by registered mail to the Town Clerk and the Board.

E. Enforcement

1. The Tree Warden or any Planning Board member, or Board designee shall conduct periodic inspections of the site during land clearance and construction in order to ensure compliance with these conditions. Should the Conservation Administrator, Building Inspector, Town Engineer, Police Officer, or any other town official observe violations or possible violations of these conditions, such official shall immediately report same to the Tree Warden or the Planning Board.

6.5 Street Signs

Street name signs shall be purchased, constructed and installed in accordance with Chesterfield standards. The applicant shall provide the posts and erect them at each intersection near the inside curb edge.

6.6 Street Lights

Installation of street lights shall be governed by current Town practice and shall comply with the recommendations of the International Dark Sky Association.

6.7 Drainage

- A. The design and construction of the drainage system, including methods of construction and quality of materials used, shall be in conformance with the definitive plan and the Standard Specification.
- B. The design capacity of the drainage systems and pipes, if any, shall be determined by the Massachusetts Stormwater Standards set forth in 310 CMR 10.05(6)(b)(1)(a). The engineer shall design the drainage system in accordance with natural drainage boundaries of the total contributing drainage area, using a minimum of a ten (10) year Natural Resource Conservation Service (NRCS) design frequency storm (a storm that has a 10% chance of happening in any given year). A one-hundred (100) year NRCS design frequency storm (a storm that has a 1% chance of happening in any given year) shall be used for all bridge openings and major culverts.
- C. Drainage systems, including drainage swales, detention, retention, and infiltration, must be designed to prevent any increase in peak flows for the one (1) or two (2), ten (10), and one-hundred (100) year Natural Resource Conservation Service (NRCS) design storms. TR-55 or TR-20, with all inputs and outputs shown, shall be used for calculating drainage systems. In addition, drainage systems should include water quality/settling basins that detain the stormwater draining off the site in a 4/10 inch rain storm for an average of at least six hours. The system should be designed to mimic existing drainage patterns & flows, not release peak prior to normal peak flow, unless there is a documented problem and this will not cause a direct downstream impact.
- D. Stormwater should be directed to enter an artificial wetland or stormwater treatment facility before entering an open stream channel. Stormwater shall not be permitted to cross any roadway upon the surface but must be piped underground. Stormwater runoff shall not be permitted to flow upon the road surface for a longer distance than three hundred (300) feet before it enters the underground system or, in systems without curbs, enters a designed stormwater swale.
- E. All open stream channels shall be maintained except for short sections that need to be placed in a culvert to allow stream crossings. No open water body or pond or wet or swampy area shall be filled in unless it can be shown to the Planning Board that provision has been made in the lower drainage system to account for the removal of the storage area represented by the former wet or swampy area. In addition, permits and approval must be secured from the appropriate Municipal, State, and/or federal authorities.

- F. All catch basins shall have four (4) foot sumps and gas traps with removable hoods.
- G. Lot sub-drainage and foundations drains may NOT be discharged to road drainage.
- H. The maximum depth of any portion of the storm system shall be ten (10) feet.

6.8 Monuments and Markers

- A. Granite or concrete monuments shall be installed at all street intersections and at all points where, in the opinion of the Board, permanent monuments are necessary. Such monuments shall conform to the standard specifications of the Superintendent of Highways and shall be set according to such specifications.
- B. Iron rods or other markers suitable to the Board shall be installed at every corner of each lot within the subdivision. Their locations shall be noted on the definitive plan.
- C. No permanent monument or marker shall be installed until all construction, which would disturb or destroy the monument or marker is completed.
- D. All monuments and markers shall be installed before final release of the security for the performance guarantee.

6.9 As-Built Plan

- A. After construction of all improvements is completed, and before release of the Performance Guarantee, the applicant shall prepare and submit to the Board three (3) copies of the Definitive Plan, revised in an As-Built Record Plan at a scale of one inch equals forty feet (1"=40'), which shall indicate the location of the following as built:
 - 1. Street lines, showing centerline elevations at fifty (50) foot intervals;
 - 2. Edge of traveled way, locations of paths and sidewalks;
 - 3. All permanent monuments and all bounds;

4. Location and inverts of drainage system and any utilities required to be installed by the developer;
 5. Location of all other underground utilities (such as electricity and telephone); and
 6. All other improvements required by these Regulations or agreed upon as a condition to Plan approval.
- B. The accuracy of such record plan shall be certified by a registered professional land surveyor. As part of the As-Built Plan, the applicant shall submit to the Board a certification, by a registered engineer appointed or approved by the Board, in which said engineer certifies that all construction was executed strictly in accordance with these Regulations and with all requirements agreed upon as a condition to plan approval.

6.10 Final Cleanup

After completion of construction and before release of the performance guaranty, the applicant shall remove all temporary structures, debris, surplus materials and rubbish and shall otherwise leave the area in a neat and orderly appearance. Burning of the rubbish and waste material is prohibited.

SECTION 7.0 FEES

7.1 Fee Schedule

Fees shall be as follows and shall accompany each application:

Approval Not Required (ANR) Surveys	\$35 (no new lot) \$35 + \$25 per new lot
Preliminary Subdivision Plan	\$125 plus \$20 per newly created lot
Definitive Subdivision if no Preliminary Plan	\$500 plus \$400 per newly created lot
Definitive Subdivision if Preliminary Plan	\$125 plus \$200 per newly created lot
Subdivision Plan amendments	\$200 per submittal, plus \$200 for each new lot not in original plan
Review Costs	As deemed necessary by Planning Board
Inspection Costs for all supervision and inspection by the Town or its engineers or representatives	At customary rates
Request to change guarantees	\$100 per request to change or reduce
Review of final as-built plans	\$150
Final Street layout plans	\$35 (no new lot) \$35 + \$25 per new lot

7.2 Rules for Hiring Outside Consultants

1. As provided by GL Ch. 44, 53G, the Chesterfield Planning Board may impose reasonable fees for the employment of outside consultants, engaged by the Planning Board, for specific expert services deemed necessary by the Board to come to a final decision on an application submitted to the Planning Board pursuant to the requirements of the Chesterfield Bylaws, the Chesterfield Subdivision Regulations, and any other Town bylaw, regulation, or rule as they may be amended or enacted from time to time.
2. Funds received by the Planning Board pursuant to these rules shall be deposited with the Town Treasurer, who shall establish a special account for this purpose. Expenditures from this special account may be made at the direction of the Planning Board without further appropriation as provided in GL Ch. 44, 53G. Expenditures from this account shall be made only in connection with the review of a specific project or projects for which a consultant fee has been collected from the applicant.

3. Specific consultant services may include but are not limited to the engineering of roads and ways, private and public, driveways, grades, grading, and sanitary systems, to hydrogeologic and drainage analysis, to impact analyses of various kinds, and to environmental and land use law. The consultant shall be chosen by, and report only to, the Planning Board.
4. The Planning Board shall give written notice to the applicant of the selection of an outside consultant, which notice shall state the identity of the consultant, the amount of the fee to be charged to the applicant, and a request for payment of said fee in its entirety. Such notice shall be deemed to have been given on the date it is mailed or delivered. No such costs or expenses shall be incurred by the applicant if the application or request is withdrawn within five (5) days of the date notice is given.
5. The fee must be received in its entirety prior to the initiation of consulting services. The Board may request additional consultant fees if necessary review requires a larger expenditure than originally anticipated or new information requires additional consultant services. Failure by the applicant to pay the consultant fee specified by the Board within ten (10) business days of the request for payment shall be cause for the Board to determine that the application is administratively incomplete (except in the case of an appeal). The Board shall state such in a letter to the applicant, copied to Town Counsel. No additional review or action shall be taken on the application until the applicant has paid the requested fee. For applications to be considered under the local bylaw regulations only, failure by the applicant to pay the consultant fee specified by the Board within ten (10) business days of the request for payment shall be cause for the Board to deny the application.
6. The applicant may appeal the selection of the outside consultant to the Selectmen, who may disqualify the outside consultant selected only on the grounds that the consultant has a conflict of interest or does not possess the minimum required qualifications. The minimum qualifications shall consist of either an educational degree or three or more years of practice in the field at issue or a related field. Such an appeal must be in writing and received by the Selectmen and a copy received by the Board within ten (10) days of the date consultant fees were requested by the Board. The required time limits for action upon the application shall be extended by the duration of the administrative appeal.

SECTION 8.0 FORMS

Form A	Application for Endorsement of Plan Believed Not to Require Approval (ANR)
Form B	Application for Approval of a Preliminary Plan
Form C	Application for Approval of a Definitive Plan
Form D	Certified List of Abutters
Form E	Notice of Public Hearing
Form F	Performance Bond Agreement
Form G	Covenant Agreement
Form H	Release of Conditions
Form I	Certificate of Performance

TOWN OF CHESTERFIELD PLANNING BOARD
FORM A – Application for Endorsement of Plan Believed Not to Require Approval

DATE _____

NOTE: File two completed Form A (with application fee, see Section 7 of Chesterfield Subdivision Rules and Regulations), plus the original Mylar plan and four (4) copies of the plan with either the Town Clerk or the Planning Board.

To the Planning Board:

The undersigned, believing that the accompanying plan of his/her property in the Town of Chesterfield does not constitute a subdivision within the meaning of the Subdivision Control Law, herewith submits said plan for a determination and endorsement that the Planning Board approval under the Subdivision Control Law is not required. If the applicant or owner is a corporation, trust, or other such entity, proof of signatory authority must be provided.

1. Application Information

Address of Property Location: _____

Applicant: _____

Address: _____

Mailing Address (if different): _____

Zip Code: _____ **Telephone:** _____ **Email:** _____

Status of Applicant: Owner _____ Lessee _____ Contract Purchaser _____ Other _____

Owner (if different from applicant): _____

Address: _____

Zip Code: _____ **Telephone:** _____ **Email:** _____

Owner's Agent: _____

Address: _____

Zip Code: _____ **Telephone:** _____ **Email:** _____

Signature: _____

Surveyor: _____

Address: _____

Zip Code: _____ **Telephone:** _____ **Email:** _____

2. Property Information

Address: _____

Assessor Identification: Map #, _____ Parcel # _____

Recorded in the Hampshire Registry of Deeds: Book _____ Page _____

3. Evidence of Qualification and Division of Land:

- (a) Number of existing lots _____
- (b) Area of existing lot or lots _____
- (c) Frontage of existing lot or lots _____
- (d) Number of proposed lots _____
- (e) Minimum area of proposed lot or lots _____
- (f) Minimum frontage of proposed lots _____
- (g) Minimum width of proposed lots _____
- (h) Required frontage located on (name of street) _____

Signature of Owner

Signature of Applicant (if other than owner)

FOR PLANNING BOARD USE ONLY

1. Date _____ Time _____
Application, two (2) prints, and reproducible received
2. Filing Fee - check or cash (circle one), amount _____
3. Street information is correct or incorrect (circle one)
Remarks _____

4. Endorsed or Rejected (circle one) _____ (Date)
Remarks _____

5. Town Clerk notified in writing _____ (Date)
6. Reproducible returned to applicant _____ (Date)

TOWN OF CHESTERFIELD PLANNING BOARD
FORM B: Application for Approval of a Preliminary Subdivision Plan

DATE _____

NOTE: File a complete application form and fee (with application fee, see Section 7 of Chesterfield Subdivision Rules and Regulations), plus sixteen (16) prints of the plans with the Planning Board. Include with the application all other necessary and supporting information and documentation. The Planning Board will deliver copies of the plan to other town boards and committees, such as the Board of Health, Conservation Commission, Highway Department, Board of Selectman, and Fire and Police. This procedure is according to Section 4.2 of the Code of the Town of Chesterfield (Subdivision Regulations) and according to M.G.L. Chapter 41§ 81S.

To the Planning Board:

The undersigned submits the accompanying Preliminary Plan of property located in the Town of Chesterfield for approval as allowed under the Subdivision Control Law, M.G.L. Chapter 41§ 81 and the Rules and Regulations governing the Subdivision of Land in Chesterfield, Massachusetts.

1. Application Information

Address of Property Location: _____

Applicant: _____

Address: _____

Mailing Address (if different): _____

Zip Code: _____ **Telephone:** _____ **Email:** _____

Status of Applicant: Owner _____ Lessee _____ Contract Purchaser _____ Other _____

Owner (if different from applicant): _____

Address: _____

Zip Code: _____ **Telephone:** _____ **Email:** _____

Owner's Agent: _____

Address: _____

Zip Code: _____ **Telephone:** _____ **Email:** _____

Signature: _____

Engineer, Surveyor, Landscape Architect: _____

Address: _____

Zip Code: _____ **Telephone:** _____ **Email:** _____

2. Property Information

Address: _____

Assessor Identification: Map #, _____ Parcel # _____

Recorded in the Hampshire Registry of Deeds: Book _____ Page _____

3. General Description of Plan:

- (a) Plan Title _____
- (b) Location of Property _____
- (c) Total Acreage of Tract _____
- (d) Number of lots allowed by zoning _____
- (e) Minimum area of proposed lot or lots _____

Signature of Owner

Signature of Applicant

FOR PLANNING BOARD USE ONLY

1. Application, sixteen (16) prints, filing fee, supporting documentation, received _____(Date)
2. Acknowledgment of receipt by Town Clerk _____(Date)
3. Reviews made by Town officers or consultants: (comments attached)

Board of Health _____(Date)

Highway Department _____(Date)

Fire Department _____(Date)

Conservation Commission _____(Date)

Engineering Consultant _____(Date)

Other _____(Date)

Other _____(Date)
4. Form D received _____(Date)

Approved by Town Assessor _____(Date)

Abutters notified _____(Date)
5. Planning Board action (see meeting minutes) _____(Date)

TOWN OF CHESTERFIELD PLANNING BOARD
FORM C: Application for Approval of a Definitive Subdivision Plan

DATE _____

NOTE: File a complete application form and fee (see Section 7 of Chesterfield Subdivision Rules and Regulations), plus sixteen (16) prints of the plans with the Planning Board. Include with the application to the Planning Board all other necessary and supporting information and documentation. In accordance with MGL c.41 Section 81U, the applicant shall file one (1) print of the plans, application form, and appropriate fee directly to the Board of Health. This procedure is according to Section 4.3 of the Code of the Town of Chesterfield (Subdivision Regulations).

To the Planning Board:

The undersigned submits the accompanying Definitive Plan of a subdivision of property located in the Town of Chesterfield for approval as allowed under the Subdivision Control Law, M.G.L. Chapter 41§ 81L, Subdivision Control Law, and the Rules and Regulations governing the Subdivision of Land in Chesterfield, Massachusetts.

1. Application Information

Address of Property Location: _____

Applicant: _____

Address: _____

Mailing Address (if different): _____

Zip Code: _____ Telephone: _____ Email: _____

Status of Applicant: Owner _____ Lessee _____ Contract Purchaser _____ Other _____

Owner (if different from applicant): _____

Address: _____

Zip Code: _____ Telephone: _____ Email: _____

Owner's Agent: _____

Address: _____

Zip Code: _____ Telephone: _____ Email: _____

Signature: _____

Engineer: _____

Address: _____

Zip Code: _____ Telephone: _____ Email: _____

Surveyor: _____

Address: _____

Zip Code: _____ Telephone: _____ Email: _____

2. Property Information

Address: _____

Assessor Identification: Map #, _____ Parcel # _____

Recorded in the Hamshire Registry of Deeds: Book _____ Page _____

Location and description of property _____

3. Attach a copy of Form D and a list of the names and addresses of the abutters and property owners within 300 feet of this subdivision, as received from the assessor's office.

4. The following are all the mortgages and other liens or encumbrances on the whole or any part of the above described property:

5. Title of Definitive Plan _____

a. Was a preliminary plan submitted? Yes _____ No _____

b. If Yes, the preliminary plan this definitive plan evolved from was submitted to the Planning Board on (date) _____.

c. The Preliminary Plan was:

approved _____,

approved with modifications _____, or

disapproved _____.

d. Date of Planning Board decision on the preliminary plan _____.

This application shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned owner or owners of record:

Signature of Owner

Signature of Applicant

FOR PLANNING BOARD USE ONLY

1. Application, sixteen (16) prints, filing fee, supporting documentation, received _____(Date)
2. Acknowledgment of receipt by Town Clerk _____(Date)
3. Reviews made by Town officers or consultants: (comments attached)
Board of Health _____(Date)
Highway Department _____(Date)
Fire Department _____(Date)
Conservation Commission _____(Date)
Engineering Consultant _____(Date)
Other _____(Date)
Other _____(Date)
4. Form D received _____(Date)
Approved by Town Assessor _____(Date)
Abutters notified _____(Date)
5. Form E executed by Planning Board _____(Date)
6. Public Hearing held _____(Date)
7. Performance guarantee supplied _____(Date)
8. Planning Board action (see meeting minutes) _____(Date)
Approved _____ Modified and approved _____ Disapproved _____
9. Original returned to applicant _____(Date)

TOWN OF CHESTERFIELD PLANNING BOARD
FORM D: Certified List of Abutters

DATE _____

To the Planning Board:

The undersigned, being an applicant for approval of a (circle one) preliminary / definitive plan of a proposed subdivision entitled submits the following sketch of the land in the subdivision listing the names of the adjoining owners in their relative positions and indicating the address of each abutter on the sketch or in a separate list, including owners of land separated from the subdivision only by a street or way.

Signature of Owner

To the Planning Board:

This is to certify that the names and addresses of the parties listed as adjoining owners to the parcel of land shown above are the latest owners of record.

Chesterfield Town Assessor

TOWN OF CHESTERFIELD PLANNING BOARD
FORM E: Notice of Public Hearing

DATE _____

_____, having submitted a definitive plan of a subdivision of land in
(owner)
Chesterfield located _____ as shown on a
plan by _____ dated _____, a public hearing will
(surveyor)
be held thereon at the _____ on _____
at _____ p.m., in accordance with the provisions of the Massachusetts General Laws, Chapter 41,
Section 81-T, as amended.

Chair, Chesterfield Planning Board

TOWN OF CHESTERFIELD PLANNING BOARD
FORM F: Performance Bond Agreement

DATE _____

THIS AGREEMENT made this _____ day of _____, at Chesterfield, in the county of Hampshire and Commonwealth of Massachusetts by and between _____ party of the first part, hereinafter called the SUBDIVIDER, and the TOWN OF CHESTERFIELD, a township within said County of Hampshire acting through its Planning Board, party of the second part, hereinafter called the TOWN.

WITNESS: _____

WHEREAS the Subdivider has petitioned the Town for approval of a Definitive Plan of a subdivision entitled: _____ Located _____ said Plan has been submitted to the Town Planning Board, copies of which are on file in the office of said Board.

NOW THEREFORE, in consideration of the approval of said Definitive Plan and plan profile by the Planning Board of said Town, the Subdivider agrees with the Town as follows:

1. To construct and install streets, ways, utilities and improvements as shown on the approved Definitive Plan, cross-section and plan-profile in strict compliance with the subdivision rules and regulations of the Planning Board and in accordance with the following general specifications:

a. Streets and ways shown on the Plan shall be cleared for the entire width, including the necessary side slope excavations, and the roadway shall be excavated to sub-base grade and below sub-base grade where specified by the Planning Board and/or Highway Superintendent, and then brought up to sub-base grade by compacting gravel the required number of inches.

b. Utilities shown on the Definitive Plan and plan-profile endorsed by the Planning Board shall be installed, where specified, including: water mains, hydrants, sanitary sewers, storm water drains, manholes, catch basins, electrical and telephone wires and cables, together with their appurtenances.

c. All roadways shall consist of a gravel base course of eighteen (18") inches of high quality processed gravel placed upon the sub-base in two layers with the first layer consisting of twelve (12") inches of bank-run gravel and a second layer consisting of six (6") inches of fine grade road gravel, each layer thoroughly rolled true to lines and grades.

d. The hardened surface of the roadway shall be paved the required width, and the hardened surface treatment shall be compacted bituminous concrete, Type I-1, at a depth of two and one-half (2.5") inches for the base course, and two inches (2.0") for the surface course, as specified in Section 8.02, of the Subdivision Regulations of Chesterfield.

e. Monuments, sidewalks, curbs, loaming and seeding, planting and street signs shall be installed as shown on the Definitive Plan and in accordance with the Subdivision Regulations.

2. To file with the Planning Board a Certificate of Performance attesting to the satisfactory performance of all works and installations as set forth in this agreement and the subdivision rules and regulations of the Town at which time the Planning Board or their authorized representative shall inspect the works and installations and said Board will proceed with the release of the deposit or bond if the provisions of this agreement have been completed.

3. SPECIAL CONDITIONS:

The Planning Board, its representatives, or other agents of the Town shall have right of entry at all times during the life of this agreement for the purpose of examination and inspection of works and installations included herein and that the Town at its discretion shall have the right to use whatever materials may be in or on the land for completion of said works and installations as hereinafter provided.

a. All easements to be transferred to the Town by recording said instruments in the Hampshire County Registry of Deeds or Land Court at the expense of the Subdivider before the final bond is released.

b. Sale or transfer of any lot or lots abutting any street covered in this Bond Agreement shall not release the Subdivider of any obligation contained herein to complete any roadway construction, including clearing, excavation, side slopes, utility installations, grading, gravel or paving, monuments, sidewalks, curbing, loaming, seeding, planting, and street signs in the fifty (50) foot right-of-way strip.

4. To deposit with the Town Treasurer in the form of a Certified Check or Pass Book payable to the Town of Chesterfield, or file with the Town Treasurer a bond with sufficient sureties, approved by the Town in the amount of _____ which shall insure to the said Town the faithful performance by the subdivider, of the within covenants, promises and agreements, which shall be applied in one of the following ways:

a. Full amount to be deposited before the Definitive Plan is endorsed and to be released on satisfactory completion of this agreement.

b. Full amount to be deposited before the Definitive Plan is endorsed at the request of the subdivider, partial releases to be made upon satisfactory completion an approved by the Planning Board of items 1 (a),

1 (b), 1 (c), 1 (d), and the remainder to be released upon completion of remaining conditions of this agreement.

NOW, THEREFORE, if the Subdivider shall, on or before _____, make and complete the work and installations as set forth herein and file with the Planning Board the Certificates of Performance required) any cash deposited hereunder shall be released to the Subdivider, and, the obligation under any surety bond filed with the Board shall be null and void; otherwise the amount which the Town pays to complete said work and installations shall be deducted from such cash deposit, and, the principal and surety shall pay to the Treasurer of the Town the amount which the Town pays to complete said work and installation provided, however, the amount shall not exceed the total deposit required or the penal sum of the bond.

This agreement shall terminate upon satisfactory completion of all requirements under the subdivision rules and regulations of the Planning Board and of said work and installations agreed to.

This instrument includes the Subdivider, his administrator, executor, successor or assigns.

The Subdivision herein states as one of the material allegations that induce the said Town to approve this subdivision that he/it is the owner of the tract in fee, subject to the following incumbrance: _____ and that he will not sell, convey, mortgage or pledge the tract in whole, or in part, except as individual building lots, without consent of the Town and without making such sale, conveyance, mortgage or pledge subject to the conditions set forth herein.

IN WITNESS WHEREOF, the said Subdivider and mortgagee has/have caused his/her seals to be affixed and these presents to be signed the day and year first above written.

MORTGAGEE SUBDIVIDERR

RECEIPT of the original, hereof, together with the cash deposit or Bond stipulated in paragraph (4) is hereby acknowledged.

CHESTERFIELD PLANNING BOARD

Date _____

Chair, Chesterfield Planning Board

TOWN OF CHESTERFIELD PLANNING BOARD
FORM G: Covenant Agreement

DATE _____

Date _____, _____

The undersigned _____
Name(s) (Print or Type)

of _____
(no. and street) (City), (County), (State)

hereinafter called "Covenantor", having submitted to the Chesterfield Planning Board, a Definitive Plan of a subdivision entitled _____
(Name of Subdivision)

dated _____ prepared by _____ does hereby covenant and agree with said Planning Board and the successors in office of said Board, pursuant to the General Law, Chapter 41, Section 81-U as amended, that:

1. The covenantor is the owner of record of the premises shown on said Plan;
2. This covenant shall run with the land and be binding upon the executors, administrators, heirs, assigns of the covenantor, and their successors in title to the premises shown on said Plan;
3. The construction of streets and ways and the installation of utility services and improvements shall be provided to serve any Regulations of said Planning Board before such lot may be built, upon or conveyed, other than by mortgage deed; provided that a mortgage who acquires title to the mortgaged premises by foreclosure or otherwise and any succeeding owner of the mortgaged premises or part thereof may sell any such lot, subject only to that portion of this covenant which provides that no lot so sold shall be built upon until such streets, ways, services and improvements have been provided to serve such lot;
4. The construction of all ways and the installation of all municipal services shall be completed in accordance with the applicable rules and regulations of the Planning Board within _____ months from the date said plan is approved.
5. Nothing herein shall be deemed to prohibit a conveyance subject to this covenant by a single deed of the entire parcel of land shown on the subdivision plan or of all lots not previously released by the Planning Board without first providing such streets, ways, services and improvements;

6. This covenant shall take effect upon the approval of said Plan;

7. Reference to this covenant shall be entered upon said Plan and this covenant shall be recorded when said Plan is recorded.

The undersigned _____ (wife, husband,) of the covenantor hereby agree that such interest as (I, we) may have in said premises shall be subject to the provisions of this covenant and insofar as is necessary release all rights of tenancy by the courtesy, dower, homestead and other interest therein.

EXECUTED as a sealed instrument this ____ day of _____, ____.

(Witness Signature)

(Witness Signature)

COMMONWEALTH OF MASSACHUSETTS

Hampshire County, Massachusetts, DATE _____, ____

Then personally appeared _____ and acknowledged the foregoing instrument to be _____ free act and deed, before me.

Notary Public

My commission expires _____

TOWN OF CHESTERFIELD PLANNING BOARD
FORM H: Release of Conditions

(Covenant Approval Release)

DATE _____

The undersigned, being a majority of the Planning Board of the Town of Chesterfield, Massachusetts, hereby certify that the requirements for the construction of ways and installation of municipal services called for by the covenant dated _____, ____ and recorded in the Hampshire County of Deeds, Book _____ Page _____, (or registered in _____ Land Registry District as Document No. _____, Page _____) completed to the satisfaction of the Planning Board as to the following enumerated lots shown on plan entitled _____ recorded with said Deeds, Plan Book _____, Plan _____, or registered in said Land Registry District, Plan Book _____, Plan _____, (or registered in said Land Registry District, Plan Book _____, Plan _____) and said lots are hereby released from the restrictions as to sale and building specified thereon.

Lots designated on said Plan as follows:

Majority of the Planning Board of the Town of Chesterfield

COMMONWEALTH OF MASSACHUSETTS

Hampshire County, Massachusetts; DATE _____, ____

Then personally appeared _____ of the above named members of the Planning Board of the Town of Chesterfield, Massachusetts, and acknowledged the foregoing instrument to be the free act and deed of said Planning Board, before me.

Notary Public

My commission expires _____

TOWN OF CHESTERFIELD PLANNING BOARD
FORM I: Certificate of Performance

(Registered Engineer's and/or Surveyor's Certificate)

DATE _____

NOTE: *File one completed form with the Planning Board and one copy with the Town Clerk, accompanied by a request from the subdivide requesting release of bonds or deposit of money on specified works and installations.*

To the Planning Board:

The undersigned hereby certifies that the following described works and/or installations have been made in accordance with the approved Definitive Plan:

Name of Subdivide _____

Name of Subdivision _____

Location of Subdivision _____

Description of works and/or installations certified to: _____

SEAL Signature of Engineer or Surveyor

SECTION 9.0 APPENDIX

APPENDIX A	List of Recommended Trees
APPENDIX B	Methodology to determine Tree Canopy Shade Coverage in Square Feet
APPENDIX C	“Planting Trees in Designed and Community Built Landscapes: Checklists for Success”, US Forest Service

9.1 Appendix A: List of Recommended Trees

An asterisk * denotes a species native to North America. These should in general be preferred to non-native species, as they contribute to the local ecology in ways that exotic species can not.

Scientific Name	Common Name	Mature Height	Mature Canopy Spread	Growth Rate	Zone	Notes
<i>Acer campestre</i>	Hedge Maple	25'-40'	Equal spread	Slow	Zone 4	Drought tolerant. Rounded growth form. Street tree / lawn tree.
<i>Acer ginnala</i>	Amur Maple	15'-20'	Equal spread	Medium	Zone 3	Yellow / orange / red fall color, drought tolerance. Street tree / lawn tree
<i>Acer griseum</i>	Paperbark Maple	25'-35'	Half or equal to height	Slow	Zone 4	Exfoliating cinnamon colored bark, red fall foliage. Lawn tree
<i>Acer rubrum*</i>	Red Maple	50'-75'	Half or equal to height	Medium to Fast	Zone 3	Tolerates wet sites to dry sites. Brilliant red fall foliage. Street tree / lawn tree
<i>Acer saccharum*</i>	Sugar Maple	60'-80'	40'-55'	Slow	Zone 3	Salt intolerant, vivid fall colors. Lawn tree
<i>Amelanchier species *</i> <i>arborea</i> <i>canadensis</i> <i>laevis</i>	Serviceberry	15'-30'	Variable	Medium to Fast	Zone 4	Dainty white spring flowers, red berries favored by birds, attractive smooth gray bark, good winter profile.
<i>Betula nigra*</i>	River Birch	40'-75'	40'-60'	Medium to Fast	Zone 4	Cultivar Heritage is a superior selection. Often multi-stemmed, exfoliating pinkish bark, prefers moist soils. Resistant to bronze birch borer.

Scientific Name	Common Name	Mature Height	Mature Canopy Spread	Growth Rate	Zone	Notes
<i>Betula alleghaniensis</i> *	Yellow birch	60'-75'	50'-60'	Medium to fast	Zone 4	Brilliant golden fall foliage, shiny bronze bark, often multi-stemmed. Prefers moist soils
<i>Celtis occidentalis</i> *	Hackberry	40'-60'	Nearly equal to height	Medium to Fast	Zone 3	Elm like form, drought and wind tolerance. Street tree
<i>Ceridiphyllum japonicum</i>	Katsura	40'-60'	Variable	Medium to Fast	Zone 4	Often multi-stemmed, needs ample room. Prefers moist soil. Street tree/lawn tree
<i>Cercis Canadensis</i> *	Eastern Redbud	20'-30'	25'-35'	Medium	Zone 5	Good understory tree / shade tolerance. Magenta pink flowers on leafless branches in spring.
<i>Cladrastis kentukea</i> *	Yellowwood	30'-50'	40'-55'	Medium	Zone 4	Spreading and low branching, good in lawns
<i>Cornus alternifolia</i> *	Pagoda Dogwood	15'-25'	1½ times the height	Medium	Zone 3	Desirable native, good for shade and understory plantings. White flowers, red bark, distinctive shape. Disease resistant.
<i>Cornus kousa</i>	Kousa Dogwood	20'-30'	Equal spread	Slow to Medium	Zone 5	Resistant to anthracnose, drought tolerant. White flowers, mottled bark, vase shape.
<i>Corylus colurna</i>	Turkish Filbert	40'-50'	1/3 to 2/3 the height	Medium	Zone 4	Tolerates drought. Street tree / lawn tree.

Scientific Name	Common Name	Mature Height	Mature Canopy Spread	Growth Rate	Zone	Notes
<i>Crataegus phaenopyrum</i> *	Washington Hawthorn	25'-30'	20'-25'	Medium	Zone 4	Clusters of showy white flowers leading to fall red berries favored by birds. Glossy green leaves turn orange/scarlet, many 1-3" thorns.
<i>Fraxinus americana</i> *	White Ash	50'-80'	Equal spread	Medium	Zone 3	Grows wide as well as tall. Street tree / lawn tree
<i>Fraxinus pennsylvanica</i> *	Green Ash	50'-60'	25'-30'	Fast	Zone 3	Fast growing, tough. Street tree / lawn tree
<i>Ginkgo biloba</i>	Ginkgo	50'-80'	30'-40' +	Slow to Medium	Zone 4	Very adaptable but will not tolerate wet soils. Handsome yellow fall color. Plant only males. Street tree / lawn tree
<i>Gleditsia tricanthos</i> (thornless)	Honeylocust	30'-70'	Comparable spread	Fast	Zone 4	Gives filtered shade, fall gold color, excellent salt tolerance. Street tree / lawn tree
<i>Gymnocladus dioica</i> *	Kentucky Coffeetree	60'-75'	40'-50'	Slow	Zone 4	Male preferably, an underused tree. Tolerates a wide range of soils. Handsome bark and great winter profile.
<i>Liquidambar styraciflua</i> *	Sweet Gum	60'-75'	2/3 equal to height	Medium to Fast	Zone 5	Fall color, star-shaped leaf, needs large area for root development, excellent for moist soils and along stream beds. Pyramidal maturing to dome shape.

Scientific Name	Common Name	Mature Height	Mature Canopy Spread	Growth Rate	Zone	Notes
<i>Liriodendron tulipifera</i> *	Tuliptree	70'-90'	35'-50'	Very fast	Zone 4	Plant in large areas -- one of our tallest native trees. Interesting yellowish green flowers appear in May after the leaves. Poor drought tolerance. Very large lawn tree.
<i>Maackia amurensis</i>	Amur Maackia	20'-30'	Wider than tall	Slow	Zone 4	Interesting amber colored bark exfoliates with age. Tidy rounded shape. Disease resistant. Street tree / lawn tree
<i>Magnolia stellata</i> , esp. 'Centennial'	Star Magnolia	15'-25'	10'-15'	Slow	Zone 4	Needs moisture, flexible usage even on street
<i>Malus</i> spp.	Flowering Crabapples	6'-30'	15'-20'	Depends on variety	Zone 4	Many cultivars, good lawn tree providing four season interest.
<i>Nyssa sylvatica</i> *	Tupelo, Gum Tree	30'-50'	20'-30'	Slow to Medium	Zone 4	Good in groves, moist soils, nice fall color and winter bark, difficult to transplant.
<i>Ostrya virginiana</i>	American Hophornbeam	25'-40'	2/3 equal to height	Slow	Zone 4	Unique capsules, handsome bark. Street tree / lawn tree
<i>Oxydendrum arboretum</i> *	Sourwood	25'-30'	20'	Slow	Zone 5	4-season interest. Easier to transplant smaller specimens, lawn tree.
<i>Platanus x acerifolia</i>	London Planetree	70'-100'	65'-80'	Medium	Zone 4	Interesting bark Good street tree /lawn tree Anthracnose susceptible

Scientific Name	Common Name	Mature Height	Mature Canopy Spread	Growth Rate	Zone	Notes
<i>Platanus occidentalis</i> *	American Sycamore	70'-100'	Equal or greater spread	Medium to Fast	Zone 4	Interesting bark One of our tallest native trees, anthracnose susceptible Lawn tree.
<i>Quercus, spp. *</i>	Red oak Pin oak	60'-80'	Equal or greater spread	Depends on variety	Zone 3	Long lived, adaptable. Street tree / lawn tree
<i>Sorbus alnifolia</i>	Korean mountain ash	40'-50'	20'-30'	Medium	Zone 3	Clusters of white flowers, small red berries, orange-red fall foliage.
<i>Sophora japonica</i>	Japanese Scholartree	50'-70'	Comparable spread	Medium to Fast	Zone 5	Mid-summer flowers. Wide growing tree, needs good drainage. Street tree / lawn tree.
<i>Tilia americana</i> *	Basswood	60'-80'	1/2 to 2/3 the height 30'	Medium	Zone 3	Fragrant blossoms, lawn tree.
<i>Tilia cordata</i> 'Greenspire'	Littleleaf Linden	40'-60'		Medium	Zone 3	Pyramidal as a young tree becoming dome shaped with maturity. Street tree / lawn tree.
<i>Ulmus americana</i> 'Princeton'	American Elm	60'-80'	1/2 to 2/3 the height	Medium to Fast	Zone 3	Disease resistant, street tree / lawn tree
<i>Ulmus parvifolia</i> Valley forge	Lacebark Elm	40'-50'	Equal or greater spread	Medium to Fast	Zone 5	Disease resistant, beautiful bark. Street tree / lawn tree.
<i>Zelcova serrata</i>	Zelcova	50'-80'	2/3 the height	Medium	zone 5	Hardy, disease resistant. Street tree / lawn tree.

9.2 Appendix B: Methodology to Determine Tree Canopy Shade Coverage in Square Feet

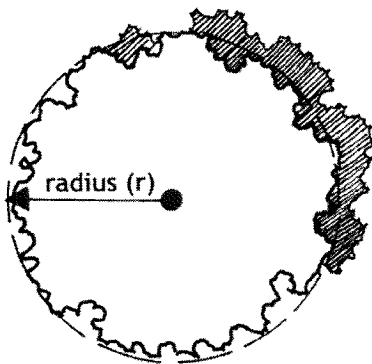
Use the mathematical formula $3.14r^2$ (r = radius)

1. Measure distance from tree trunk to mature canopy edge (radius)
2. Multiply the radius by itself (to get the radius squared)
3. Multiply that number by 3.14
4. The result is the canopy coverage in square feet
5. Calculate the canopy area for each tree and add them together
6. Divide by the total surface area (in square feet) to find shade coverage percentage

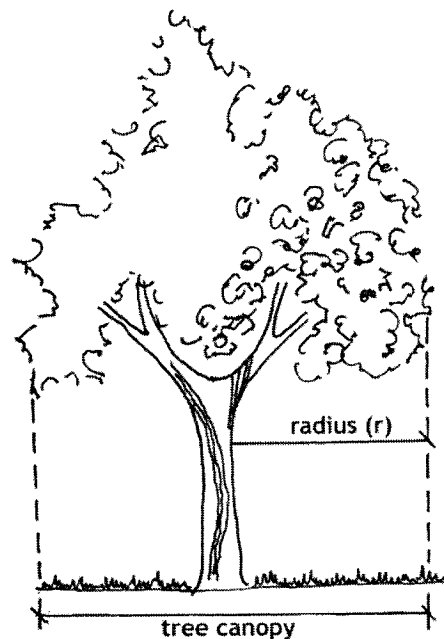
For Example:

- If the outer edge of the canopy is 18 feet from the tree trunk, then the radius is 18 feet
- That radius multiplied by itself (18×18) is 324
- That number multiplied by 3.14 is 1,017.36 square feet. This is the shade coverage for one tree

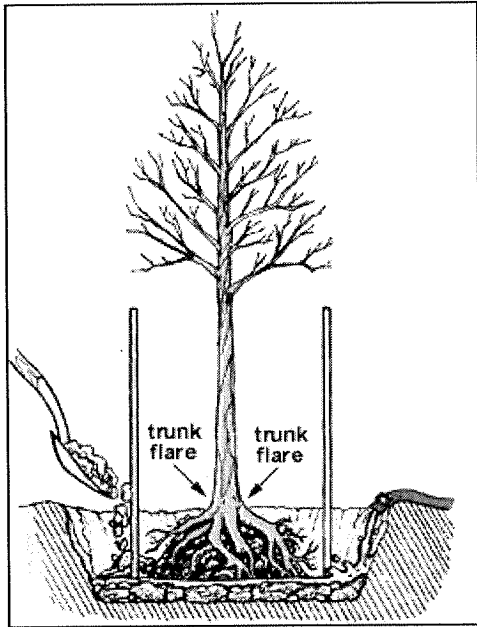
PLAN VIEW



ELEVATION



9.3 Appendix C: "Planting Trees In Designed and Community Built Landscapes: Checklists for Success", US Forest Service



- ❖ Lift tree into planting space by root ball, not the trunk.
 - ❖ Balance tree upright in center of planting space.
 - ❖ For trees in wire baskets, cut and remove wire.
 - ❖ Cut away strings and burlap or plastic, exposing root ball. Do not remove soil from root ball.
 - ❖ If tree is container grown, cut and remove container.
 - ❖ Prune dead or crushed roots and straighten or cut circling roots. Make clean cuts.
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- ❖ Begin refilling with soil, watering as you fill to firmly set tree. Gently tamp.
 - ❖ Never plant too deep. Trunk flare and top of root ball should be at grade. (Trunk flare may be hidden within the root ball.) Fill soil up to the tree base just to where roots begin to branch from trunk
 - ❖ Prune only dead or injured branches. Do not paint wounds.
 - ❖ Remove tree wrap, tape or string on trunk. Trunks should be wrapped only to protect them in transit to planting site.
 - ❖ Stake and brace most trees at planting time. Support tree but allow it to move or sway.
 - ❖ Use wide, belt-like strapping to attach to two sturdy stakes. Do not use rope or wire through a hose.
 - ❖ Mulch lightly and evenly with 2" of composted material at least to the diameter of crown of tree. Leave 3" circle of bare soil around the trunk. Deep layers of mulch can be harmful.
 - ❖ Do not plant flowers under tree.
 - ❖ Do not fertilize at planting time.