## **SUBDIVISION REGULATIONS**

# **TOWN OF WENDELL, MASSACHUSETTS**

These Rules and Regulations Governing the Subdivision of Land in Wendell, Massachusetts shall be known and shall be cited as the "Wendell Subdivision Regulations," herein called "Subdivision Regulations" or "Regulations."

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#### Massachusetts Subdivision Control Law, MGL C. 41, §81K to 81GG

These excerpts are provided for information and are not a part of these Regulations. These excerpts are not intended to downplay the importance of any other sections of the law including the right of interested parties to petition under MGL C. 41, §81W.

#### **Definition**

"'Subdivision' shall mean the division of a tract of land into two or more lots and shall include resubdivision...; provided, however, that the division of a tract of land into two or more lots shall <u>not</u> be deemed to constitute a subdivision within the meaning of the subdivision control law if, at the time when it is made, every lot within the tract so divided has frontage on (a) a public way or a way which the clerk of the city or Town certifies is maintained and used as a public way, or (b) a way shown on a plan theretofore 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 city or Town in which the land lies, 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..."

#### **Time Limits**

**Approval Not Required Plans**: "...If the board fails to act upon a plan submitted under this section or fails to notify the clerk of the ...Town and the person submitting the plan of its action within twenty-one days after its submission, it shall be deemed to have determined that approval under the subdivision control law is not required..."

**Preliminary Plans**: "Within forty-five days after submission of a preliminary plan, each board shall notify the Applicant and the clerk of the...Town, by certified mail, either that the plan has been approved, or that the plan has been approved with modifications suggested by the board or agreed upon by the person submitting the plan, or that the plan has been disapproved and in the case of disapproval, the board shall state in detail its reasons therefor. The Planning Board shall notify the...Town clerk of its approval or disapproval, as the case may be."

**Definitive Plans:** "After the hearing required... and after the report of said health board or officer or lapse of forty-five days without such report, the Planning Board shall approve, or, if such plan does not comply with the subdivision control law or the rules and regulations of the Planning Board or the recommendations of the health board or officer, shall modify and approve or shall disapprove such plan. In the event of disapproval, the Planning Board shall state in detail wherein the plan does not conform to the rules and regulations of the Planning Board or the recommendations of the health board or officer and shall revoke its disapproval and approve a plan which, as amended conforms to such rules and regulations or recommendations. The Planning Board shall file a certificate of its action with the... Town clerk, a copy of which shall be recorded by him in a book kept for the purpose, and shall send notice of such action by registered mail, postage prepaid, to the Applicant at his address stated on the application... The failure of a Planning Board either to take final action or to file with the... Town clerk a certificate of such action on the definitive plan within ninety days after such submission, 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 forthwith by the Planning Board with the ... Town clerk."

## **Wendell Subdivision Regulations**

# 1.00 Authority, Purpose, Applicability, and Implementation

These Regulations are adopted by the Wendell Planning Board (see adoption dates above) under authority granted by MGL Chapter 41, Section 81Q, consistent with the Massachusetts Subdivision Control Law, MGL Chapter 41, Sections 81K to 81GG ("Subdivision Control Law").

The purpose of these regulations is to preserve and protect the safety, convenience and welfare of the inhabitants of the Town of Wendell, and the Town's environment and natural resources, especially intact forest blocks, farmland, and wildlife connectivity, in the laying out and constructing of ways and subdivisions.

No person shall subdivide any land, as defined by the Subdivision Control Law, improve or sell lots in a subdivision, or construct ways or utility or municipal services within a subdivision, except consistent with the Subdivision Control Law, these Subdivision Regulations, and a definitive subdivision plan approved and endorsed by the Planning Board and recorded at the Registry of Deeds or the land registration office of the Land Court, as appropriate. Whenever requirements in these Subdivision Regulations differ from those prescribed by local bylaws or regulations, the greater restriction or stricter standard shall govern. The invalidity of any section, paragraph, clause or provision of these Subdivision Regulations shall not invalidate any other section, paragraph, clause or provision therein.

The Building Inspector shall issue no building permits for any of the lots of any subdivision unless notified in writing by the Planning Board that the approved subdivision plans and documents have been recorded at the Registry of Deeds or land registration office of the Land Court, as appropriate. The Building Inspector shall not issue an Occupancy Permit for any lot in a subdivision unless notified in writing by the Planning Board that it is in compliance with the Subdivision Regulations and the definitive plan approval.

Not more than one building designed or available for use for dwelling purposes shall be erected or placed or converted to use as such on any lot in a subdivision except as specifically authorized in the Wendell Zoning Bylaw.

### 2.00 Waivers (see MGL C. 41, §81R)

Approval of a subdivision plan, regardless of what is shown on the plan, does not relieve an Applicant from complying with the Subdivision Regulations, except as specifically provided for in any Planning Board issued waiver of these Regulations.

The Planning Board may, in special and appropriate cases, waive strict compliance with such portions of these Regulations, as provided for in M.G.L. Chapter 41, Section 81R, where such action is in the public interest and not inconsistent with the purpose and intent of the Subdivision Control Law. For the purpose of these Regulations, public interest includes, but is not limited to, providing the best infrastructure available to the Town and subdivision residents, and maintaining the traditional rural character of Wendell, which includes

preservation of large tracts of land in agricultural use, forested land and ecologically valuable land.

Waivers will only be granted for projects which provide, in the sole opinion of the Planning Board, clear and significant improvements to the project's compliance with the intent of these Regulations, as compared to the project's compliance without the waivers.

In addition, such waivers shall only be granted when appropriate to encourage development which is in keeping with traditional rural character of Wendell, which typically includes the conservation of land in agricultural use or in forest management, or the creation of significant permanently protected open space and public trails deeded to a public agency or nonprofit land preservation organization or trust or included in a conservation restriction. The burden on an Applicant for such a waiver in situations where significant amounts of protected open space will not be preserved is much greater, and a waiver will be granted only when the Planning Board finds overwhelming benefits to the community and its rural character.

Waivers for a dead-end or cul-de-sacs shall only be granted when such waiver allows the permanent protection of substantial amounts of open space or when such waiver allows the permanent preservation of views and open space adjacent to an existing road.

A request for a waiver of any requirement of these Regulations shall be made in writing by the Applicant, and submitted, whenever feasible, with the submission of the Preliminary Subdivision Plan. The Planning Board shall notify the Applicant in writing of its approval, disapproval, or approval with conditions. 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 to the plan, which shall be deemed a part of the plan. Regardless of what is shown on the plans, if a waiver is not requested in writing and not authorized by the Planning Board in writing, the Applicant must comply completely with the Subdivision Regulations.

### 3.00 Plans Believed Not To Require Approval (ANR)

Plans to be recorded in the Registry of Deeds or the land registration office of the Land Court for which Approval is Not Required (ANR) under the Subdivision Control Law may be submitted to the Planning Board for an Approval Not Required endorsement in accordance with this section. The Applicant shall submit to the Planning Board by filing at a Planning Board meeting, and shall give written notice of such filing, by delivery or certified mail, to the Town Clerk. The submittal shall include the following:

- A. A 24" by 36" Mylar and three prints of the survey plans prepared, signed, and stamped by a Massachusetts Registered Land Surveyor at 1"=100' or greater showing:
  - 1. True north arrow, date, scale, legend, and title, "subdivision approval not required."
  - 2. Name and address of property owner, Applicant, and the surveyor.
  - 3. All buildings owned by subject landowner(s) within 100' of any newly created property lines.

- 4. A notice on the plans that states that Planning Board endorsement of the plan does not indicate that the lot is buildable under wetlands, zoning, or other Town bylaws.
- 5. Any evidence to show that the plan does not require approval.
- 6. If more than one plan is used, an index of the different plan sheets.
- 7. A locus plan showing where the site is within the Town of Wendell.
- B. Two copies of a completed Approval-Not-Required Application.
- C. The appropriate fee (see Administration and Fees).
- D. An electronic copy of said plan which meet the current version of the "MassGIS Standard for Digital Plan Submission to Municipalities" meeting the requirements for Level I submission standards. An electronic copy must be submitted on a CD-ROM and must be accompanied by the completed checklist required in the MassGIS standard.

If the Planning Board determines that the plan does not require approval it shall, without a public hearing, endorse on the plan the words "Approval under the Subdivision Control Law not required". The Planning Board may add to such endorsement a statement of the reason why approval is not required and other notes pertaining to Town of Wendell bylaws or regulations. The Planning Board may also include, as a separate report or as a note on the plan, its recommendations for the most appropriate way to preserve the most sensitive ecological resources on the property.

If the Planning Board determines that the plan does require approval under the Subdivision Control Law, it will so inform the Applicant and return the plan. The Planning Board will also notify the Town Clerk of its action.

If the Planning Board fails to act upon a plan submitted under this section within the statutory time period, it shall be deemed to have determined that approval under the Subdivision Control Law is not required.

## 4.00 Subdivision Plans (Preliminary and Definitive)

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 during a regular open meeting regarding procedures, design standards and required improvements in order to save time and avoid costly mistakes.

The submission of such a sketch plan will enable the Applicant, the Planning Board, other municipal agencies, and owners of property abutting the subdivision to discuss and clarify the issues presented by the subdivision before a Preliminary Plan or Definitive Plan is prepared.

Similarly, the submission of a Preliminary Plan will assist the Applicant and the Planning Board in the processing of a Definitive Plan. Therefore, it is strongly recommended (and encouraged through Wendell's fee schedule) that a Preliminary Plan be filed in each case.

A Definitive Plan shall be governed by the Subdivision Regulations in effect at the time of submission of such plan, or in effect at the time of submission of a Preliminary Plan, provided that a 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, and be consistent with, the provisions of the

Zoning Bylaw in effect at the time of submission of such plan or at the time of submission of a Preliminary Plan from which a Definitive Plan is evolved, in accordance MGL Chapter 40A, section 6.

## 5.00 Preliminary and Definitive Subdivision Plans, General Submittal Requirements

The Applicant shall submit seven copies of a Preliminary or Definitive Plan application to the Planning Board by filing at a Planning Board meeting or, by hand delivery or certified mail with the Town Clerk, and additional copies filed directly with other Town agencies, as noted herein. All Preliminary and Definitive Plan Submissions shall include the following:

- A. A locus plan at 1" = 500' or greater on a 24" by 36" sheet of the proposed subdivision and surrounding properties within 1,000 feet of the subdivision on the most recent MassGIS ½ meter resolution orthophoto, showing current and proposed property lines, roadways, physical features and drainage boundaries for watersheds and streams.
- B. Written permission from the property owner for the Planning Board and its agents to enter on the property during daylight hours, and upon reasonable notice, to conduct site visits to review the application prior to and during the public hearing process.
- C. All plans at a scale of 1" = 100' or greater (preliminary plans) and 1"=40' or greater (definitive plans) on 24" by 36" sheets showing sufficient information about the subdivision to form a clear basis for discussion and decision making. Except for three-lot subdivisions, all plans must use Mass. State Plane North American Datum (NAD) 1983 horizontal datum, in metric units, and North American Vertical Datum (NAVD) 1988 vertical datum.
- D. The subdivision name, boundaries, true north arrow, date of submission, scale, legend and title "Preliminary Plan" or "Definitive Plan" as appropriate. Existing and proposed lines of streets, streets bounding the subdivision, street vertical and horizontal curves and layouts, proposed names of new streets, rights-of-way, easements, and any public or common areas, all structures, and all wetlands, vernal pools, floodplains, areas which would be subject to inundation if any upstream dams failed, waterways areas, and areas identified as priority areas for open space preservation in the current version of the Town's Open Space and Recreation Plan. Information shall be shown for all listed resources in and within 500' of the subdivision.
- E. A plan and a report providing details of sewage disposal and treatment systems, including the results of all percolation and soil tests for individual lots and/or for any community or shared system, and any water supplies and wells within 500' of the property line. The report shall include all information required under the Department of Environmental Protection's Title 5 regulations and local health and septic regulations, if any. A registered Professional Engineer or sanitarian must stamp the plan and the test results.
- F. The definitive plan must include an erosion and sedimentation control plan designed to 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.
- G. A conservation analysis which shall include the most recent color orthographic photo of the project area and land within 300 feet of the project area, and a plan prepared and stamped by a registered professional engineer, landscape architect or professional land surveyor at the scale of 1" = 100' or of greater detail. The plan shall document the presence (if at all) of the following features:

- a. FEMA 100-year floodplains, topographic contour lines with intervals as required for site plan review, slopes of 15% to 25% and greater than 25%, water bodies, public and community water supply watersheds and aquifers, and all wetlands, as defined in the Massachusetts and Wendell wetland regulations/bylaws. Generalized wetland identification based on MassGIS data may be provided for the conservation analysis.
- b. Land in agricultural use, mapped soils especially suitable for agriculture or forestry, ridgetops, trails, adjacent protected lands, known historic and pre-Columbian features, Natural Heritage and Endangered Species (NHES) features and contiguous tracts of forests.
- c. Potential for foot, bicycle, horse, ski, snowmobile or wildlife connections to adjacent or nearby undeveloped lands, if any.
- d. Analysis of undeveloped buffers necessary to screen development from public roadways.
- e. Stone walls, cellar holes, or other significant stone features anywhere in the project area.

The current MassGIS datalayers describing these features may be used, in addition to other sources of information for the conservation analysis. The Planning Board may accept an abbreviated analysis or assessment for up to three lot subdivisions and for preliminary plans.

- H. The existing and proposed topography at five (5) foot (preliminary plans) and at two (2) foot (definitive plans) contour intervals (lines of equal elevation). Major site features, such as existing stone walls, fences, buildings, large trees, rock ridges and ledge, historic features and wooded areas shall be shown and identified.
- I. Three realistic development alternatives providing for preservation of at least 70% of the land, including the land with the most sensitive ecological resources. When a plan shows a road more than 500 feet long or within 300 feet of any vernal pool or a road crossing any wetlands, any priority areas identified in the Open Space Plan, or biocore habitat, as mapped by the Massachusetts Natural Heritage and Endangered Species Program, the Applicant shall provide an alternatives assessment, with an analysis of options for reducing the potential impacts on wetlands, open space, and habitat resources. This alternatives assessment is NOT required for:
  - i. Any project where at least 75% of the land will be permanently protected as open space (by deed to public agency or nonprofit land preservation organization or trust or by a conservation restriction); or
  - ii. A three lot subdivision.
  - iii. Projects submitted as a Conservation Development under Wendell Zoning Bylaws Article X.

## 6.0 Additional Required Submittals for Preliminary Plans

A. Documentation that one copy of the complete application was filed with or mailed to the Wendell Board of Health, the Conservation Commission, the Selectboard, the Open Space Committee, the Agricultural Commission, the Fire Chief, and the Road Superintendent. A sworn affidavit or certified mail receipts are sufficient documentation.

- B. 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.
- C. The preliminary plan on 24" by 36" paper at a scale of 1"=100' or greater, which shall show the proposed subdivision in sufficient detail to form a clear basis for discussion and preparation of the Definitive Plan, including:
  - 1. A title block identifying the plan as a Preliminary Plan, with the subdivision name, property owner, and Applicant.
  - 2. Proposed names of roads and ways. Street names may not be similar to any other streets within Wendell.
  - 3. Final or near final alignment of all roads, ways, and rights of way, and location and purpose of easements.
  - 4. The names and addresses of the owner(s) of record, the Applicant, any separate developer (known or potential) and the names, addresses and professional seals of the registered Professional Engineer and Land Surveyor.
  - 5. The names and addresses of all abutters within 300 feet, as determined from the most recent Assessors' list. The plan shall show the ownership and house number of all surrounding parcels of land.
  - 6. Location, names and present widths of streets bounding, approaching, or within reasonable proximity of the subdivision.
  - 7. Location of natural waterways and water bodies on the subdivision parcel(s) and within 200 feet of the subdivision. The plans shall note whether the streams shown are perennial or intermittent, how that determination was made, and whether the Conservation Commission has approved the determination.
  - 8. Boundary lines of all proposed lots with approximate dimensions and lot areas in square feet.
  - 9. Location of all structures on and within 100 feet of the proposed subdivision.
  - 10. Whenever applicable, and in a general manner, the proposed and existing storm drainage (curbs, gutters, and pipes or sheet flow), sanitary disposal (septic systems, decentralized systems or wastewater plants) and water (springs, individual wells or community) systems.
  - 11. A sketch of the Applicant's and owner's other parcels of contiguous un-subdivided land, showing possible or contemplated development and street layout, if abutting land can potentially be developed.
  - 12. When multiple sheets are necessary, match lines showing where two sheets come together shall be used and referenced and an index plan graphically indicating the arrangement of said multiple sheets shall be provided.
- D. The Applicant shall identify, in writing to the Planning Board, any proposed waivers of subdivision requirements.
- E. The Preliminary Plan Application Form and such other supporting information as is necessary to review the application.
- F. The appropriate fee (see Administration and Fees)

The Planning Board may give such Preliminary Plan its approval, with or without modification and conditions. Such approval does not constitute approval of a subdivision.

## 7.00 Additional Required Submittals for Definitive Plans

- A. Documentation that one copy of the complete application was filed with or mailed to the Wendell Board of Health, the Conservation Commission, the Selectboard, the Open Space Committee, the Agricultural Commission, the Fire Chief, and the Road Superintendent.
- B. 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.
- C. All master deeds, restrictive covenants, easements and deed restrictions; deeds and similar documentation for shared land, detention and retention ponds and stormwater structures, open space, and recreation areas; and homeowners' association documents. A homeowners' association or other entity acceptable to the Planning Board must be established to maintain streets and infrastructure until the streets are accepted as public ways by the Town.
- D. A written list of any proposed waivers of these Regulations. (Regardless of what is shown on the plans, no waiver shall be deemed to be granted unless it is requested in writing and specifically approved, in writing, by the Planning Board.)
- E. The Definitive Plan on 24" by 36" paper at a scale of 1"= 40' or greater. Every sheet shall bear the seal of a Massachusetts Registered Land Surveyor and a Registered Professional Engineer as appropriate. If multiple sheets are used, they shall be accompanied by an index sheet showing the entire subdivision, and all plans, layouts, profiles, cross sections and application shall be deemed to constitute the Definitive Plan. The Definitive Plan shall contain the information below. A sufficient number of 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 areas, pedestrian and bicycle paths, and subdivision boundaries.
  - 1. The plans shall include the property owner and Applicant, any separate developer (known or potential), the coordinate north arrow, date, scale, legend, the title block, "Definitive Plan, Town of Wendell,{Subdivision Name}", and certification by the Surveyor that all surveying conforms to the technical standards for property surveyors.
- 2. Names, addresses 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.
- 3. Existing and proposed lines of streets, lots, rights-of-way, easements, and any public or common areas within the subdivision.
- 4. Location, names and present widths of streets bounding, approaching, or within 500 feet of the subdivision.
- 5. Location of existing or proposed public water supply source protection areas, wetlands, perennial and intermittent streams, certified vernal pools, potential vernal pools (as identified on maps prepared by MassGIS), certified and potential vernal pool

- upland habitat areas, NHESP Estimated and Core Habitats, and waterways and water bodies within 300 feet of the subdivision. The plans shall note whether the streams shown are perennial or intermittent, how that determination was made, and whether the Conservation Commission has approved the determination.
- 6. Analysis of current vistas and views of the locus property from existing public roads, public open space areas, trails, and adjacent dwellings within 300 feet showing current representative views and showing how those views will appear once the project is completed.
- 7. Location of all storm drainage lines and drainage discharges within 200 feet of a brook, stream, or drainage area, and a profile of the brook, stream, or drainage area to determine condition, and proposed stabilization.
- 8. An erosion and sedimentation control plan designed to 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.
- 9. Major site features, such as existing stone walls, fences, buildings, large trees, rock ridges and ledge, swamps, flood plains as identified on the applicable Federal Insurance Rate Maps and other flood plains identified by a professional engineer, any area which could be inundated by the failure of an upstream dam, historic features, and wooded areas on and within 100 feet of the proposed subdivision. The plan shall identify which of the above shall remain undisturbed.
- 10. Sign-off from the Massachusetts Historical Commission and the Wendell 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.
- 11. A metes and bounds survey, including lengths, bearings, and curve data to determine the exact location, direction and length of every street and way line, easement, lot line and boundary line, and to establish these lines on the ground. All surveys must tie to the Massachusetts State Plane coordinate System (NAD 1983 Datum), using said published control points or the global positioning system. Boundary lines, areas in square feet, and dimensions of all proposed lots, with all lots designated numerically and in sequence.
- 12. All easements must be clearly shown on the subdivision plans and their purpose shall be clearly stated. All water, septic, and sewer utility easements shall be a minimum of thirty (30) feet in width. Utilities shall be located as close as possible to the center line of the easement.
- 13. Location of all permanent monuments and control points, identified as to whether existing or proposed, and identified according to the Massachusetts State Plane coordinate system (NAD 1983 Datum). At least two permanent concrete or granite monuments must be placed on site and shown on the plans prior to construction. Bounds are required at all intersections of street lines, angle points and changes of curvature of street lines. All control points shall be tied to and employ NAVD 1988 AND the Massachusetts State Plane Coordinate System (NAD 1983 Horizontal Datum), with horizontal control using said published control points or the global

- positioning system (with horizontal coordinates provided in metric). Vertical benchmarks separate from horizontal control points may be provided, provided these points are also tied to permanent concrete or granite monuments.
- 14. Proposed names of roads and ways. Street names may not be similar to any other streets within Wendell.
- 15. Construction level details of all roads and associated utilities and improvements.
- 16. Location of all structures on and within 100 feet of the proposed subdivision.
- 17. The existing and proposed topography (sufficiently differentiated) with two (2) foot contour intervals for the entire parcel, unless the Planning Board agrees that the natural surface of the ground may be adequately represented by contours with larger intervals or by figures of elevation. (The existing and proposed topographical information presented shall be sufficient to define the grading of each proposed lot and street.) Datum to be NAVD 1988 or later.
- 18. When multiple sheets are necessary, match lines showing where two sheets come together shall be used and referenced and an index plan graphically indicating the arrangement of said multiple sheets shall be provided.
- 19. A locus or location plan(s) at 1"=500' or greater showing the subdivision on an orthophoto base and its location to the surrounding roadways and physical features and drainage boundaries for watersheds and streams. The plan shall show the ownership and house number of all surrounding parcels of land.
- 20. A sketch plan showing a possible prospective street layout for any adjacent unsubdivided land owned or controlled by the owner, Applicant or separate developer (known or potential) of the subdivision and also showing topography, unless such a plan has already been submitted to the Planning Board.
- 21. Suitable space on each plan to record the action of the Planning Board and the signatures of the members of the Planning Board on each sheet of the Definitive Plan and reference to a separate certificate by the Town Clerk.
- 22. A plan and a report providing details of sewage disposal and treatment systems, including the results of all percolation and soil tests for individual lots and/or for any community or shared system, and any water supplies and wells within 200' of the property line. The report shall include all information required under the Department of Environmental Protection's Title 5 regulations and any local health and septic regulations. A registered Professional Engineer or sanitarian must stamp the plans and the results.
- F. The completed Definitive Plan Application form and such other supporting information as is necessary to review the application.
- G. The appropriate fee (see Administration and Fees)
- H. A separate plan showing street layout, horizontal scale 1" = 40', for each street in the subdivision showing exterior lines, roadway lines, partial lot lines, curb lines, intersection angles (the angles formed by the intersection of two roads, and the centerline), points of tangency, and radii of curves. Also included on the street layout plan shall be location, size, type of construction, elevations and invert (elevation of the entry to a pipe), whenever applicable, of all pipes and conduits of the following utilities:

- 1. Water Supply System, if a municipal, public, or community water system is used, including storage, distribution, and treatment components, pumps, valves, stubs (which extend water service beyond the edge of the asphalt), gates, hydrants, and similar equipment;
- 2. Storm Drainage System, including manholes, pipes, culverts, grassed swales, low impact development measure, catch basins, detention ponds (stormwater storage ponds), and appurtenant structures;
- 3. Sanitary Sewerage System, if a community system is used, including piping, manholes, pumps, community septic tanks, and appurtenant equipment;
- I. A Profile Plan on the same sheet located directly below and coordinated with the street layout plan, indicating existing profiles on the exterior and center lines (using light weight lines) and proposed profile on the center line (using heavy weight lines) of each proposed street, at a horizontal scale of 1" = 40' and a vertical scale of 1" = 4'. All elevations shall refer to NAVD 1988 datum. Profiles shall show existing and proposed street grades, rates of gradient on percentages, ground and proposed elevations at center line of each fifty (50) foot station, and grades of intersecting streets and ways shall be clearly indicated. The Profile Plan shall show location of existing and proposed water, drainage and sanitary sewer lines, slopes and types (material and class) of all storm and sanitary sewer lines, invert, manhole rim elevations and station of each manhole or catch basin.
- J. A typical cross section for the full width of the proposed right-of-way shall be shown in accordance with the standards of these Rules and Regulations showing foundation material, wearing surface, crown (or high point) and width of traveled way, curbing, grass strips, sidewalks, utility locations, etc.
- K. Construction details for catch basins, manholes, end-walls, head-walls, rip-rap, and energy dissipaters, detention ponds, gabion structures, level lip spreaders, etc.
- L. Every plan shall have at least four points on each sheet accurate within a centimeter, as certified by a surveyor, tied into the Massachusetts State Plane Coordinate System (NAD 1983 datum), using said published control points or the global positioning system. The plan must note the coordinates, in metric, of the four tie-in points, the datum, and the source and location of monuments used for data.
- M. A table listing lot numbers with the corresponding lot size and street frontage for every lot.
- N. Locations of borings shall be shown on the plan with a numbering system corresponding to boring logs which will be submitted as part of the application. The purpose of borings is to assist the Applicant and the project's engineer in designing an appropriate roadway and related utilities based on existing water table and subsurface soil conditions (e.g., a clay subsurface might necessitate extra excavation and extra depth for gravel base; a water table near ground surface might necessitate the installation of sub-drains (to drain the groundwater) along the edge of the road, etc.). The actual location at which each boring is made shall be shown on the plans. The borings shall be certified by a Massachusetts Professional Engineer. Borings or test pits used for the purpose of designing detention or retention facilities must include estimates of high groundwater based on mottles and hydromorphic features, which generally require test pits witnessed by a qualified soil scientist. Test pits may be used instead of borings except when borings are required for any geotechnical (structural) reasons.
- O. 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 Regulations; and (b) any impact said drainage system would have on existing drainage systems downstream from the proposed point of discharge.
- P. Water Study, if a community system is used. The Applicant shall submit a study certified by a professional engineer with demonstrated qualifications as a water consultant, showing that the proposed water system would provide the development with adequate potable water to meet Building Code, Department of Environmental Protection and other applicable regulatory requirements.
- Q. Fire Water Availability. The Applicant shall demonstrate that sufficient water exists to address fire needs, in accordance with the technical standards of these Regulations.
- R. An analysis of the quality of access to the proposed subdivision from the nearest existing paved Town road or state highway which is not a dead end. Such analysis must show:
  - 1. Existing traffic counts (Average Daily Traffic (ADT), morning peak, afternoon peak), projected traffic counts in 10 years under a no-build scenario, and projected traffic counts in 10 years if the subdivision is completed.
  - 2. Construction and the condition of those roads, including detailed analysis of the road's condition.
  - 3. Analysis of maintenance and rehabilitation needs for the next 10 years under a no-build scenario and if the proposed subdivision is completed.
- S. Any supplemental materials submitted by the Applicant after the original submission must provide the number of copies and the format required for the original submittal. The Planning Board may elect not to consider such revised plans or other additional materials if such plans/materials are not filed at least fourteen days prior to the date of the Public Hearing or meeting at which the Applicant wishes them to be considered. This is to ensure adequate time for review.
- T. Lighting System, if used: Outdoor lighting is not required and is discouraged. If used, any lighting system must 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 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 avoid any direct lighting off of streets and sidewalks. Maximum foot candles of any light shall be 1 foot candle.
- U. Impact Statement for any subdivision consisting of ten (10) or more lots detailing the probable effects of the proposed subdivision on the following aspects of concern to the Town:
  - 1. Public Works costs: Additional costs for future plowing, sanding, sweeping, and drainage system maintenance (based on current costs and estimated future costs).
  - 2. Municipal service costs: Estimates of costs based on existing average cost per resident for police, fire, ambulance, libraries, recreation, and schools.
  - 3. School enrollment projections: For future planning for school enrollment, assume same number of school-age-children per housing unit as currently exists in the Town, other than for age-restricted housing. (Current per unit figures may be obtained from the school committees serving the Town of Wendell.) Use these figures in calculating municipal service costs.

- 4. Analysis of traffic on all subdivision streets and surrounding streets: Assume 10 average daily trips per single family home, other than age restricted dwellings.
- 5. Analysis of property tax impacts from the project.
- 6. Detailed municipal fiscal impacts assessment summarizing above and providing full documentation of costs and citation of methods and approaches to this assessment.

## 8.00 Definitive Plan Approval and Recording

- A. Within 45 days of the application for Definitive Plan Approval, the Board of Health shall report to the Planning Board in writing approval or disapproval of said plan, and in the event of disapproval shall make specific findings as to which, if any, of the lots shown on such plan cannot be used for building sites without injury to the public health and include such specific findings and the reasons therefor in such report, and, where possible, shall make recommendations for the adjustment thereof. (Such approval is deemed to be granted if the Board of Health does not respond within 45 days.)
  - 1. Every lot shall be provided with water supply and sewage disposal installations in compliance with the requirements of the State Building Code, the Department of Environmental Protection and the Board of Health.
  - 2. The Board of Health may approve the plan on condition that prior to the issuance of a building permit for a dwelling on any lot, soil and percolation tests be made in accordance with their specifications by a qualified technician as to suitability of a specific location for subsurface sewage disposal installation.
  - 3. Based on the recommendation of the Board of Health, where due to restrictive water, soil, topographic, geologic, or other natural conditions, the proposed development is of a density which exceeds the sustaining capacity of the proposed lots in terms of individual sewage disposal systems and wells on each lot, the Planning Board may require that the Applicant revise his plan to either provide for a consolidated water supply system or a consolidated sewage disposal system.
  - 4. The Board of Health may require as a condition of the subdivision approval that a performance bond or deposit of money or negotiable securities be furnished by the Applicant to guarantee the construction of surface drainage improvements recommended by the Board and that all required improvements shall be made without undue erosion, siltation or flooding of traveled ways, and without causing any condition of public nuisance through dust or surface drainage, or any act of negligence by the Applicant or his agent during the period of construction. Such performance guarantee may be released only after completion of the work to the satisfaction of the Board of Health. In viewing possible drainage problems the Board is not limited to lots as shown on the subdivision plan, but may in appropriate cases consider areas outside the subdivision.
  - 5. Land subject to flooding, including areas which would be inundated if an upstream dam failed, and wetland areas as shown on the applicable maps of the Town, or land deemed by the Board of Health not suitable as a building site shall not be approved by the Planning Board for residential occupancy, nor for such other uses as may increase danger to health, life or property, or aggravate the flood hazard. Such land within the subdivision shall be set aside for such uses as shall not be endangered by periodic or occasional

inundation or improved in a manner satisfactory to the Planning Board and the Board of Health to remedy said hazardous condition.

## B. Public Hearing

- 1. Public hearings, abutter notification, and public notice shall be in accordance with the Subdivision Control Law.
- 2. The Applicant's engineer and conservation analysis consultant(s) shall be present at the public hearing.
- 3. A hearing by the Conservation Commission may be required under the provisions of the Wetlands Protection Act, MGL Chapter 131, Section 40.
- 4. The comments of the Selectboard, Board of Health, Conservation Commission, Highway Superintendent, Fire Chief, Open Space Committee, Agricultural Commission, and any comments submitted by any other Town officials will be entered into the record at the public hearing and considered by the Planning Board.
- C. Definitive Plan Approval or Disapproval: After the public hearing and within the statutory time limits, the Planning Board shall approve, modify and approve, or disapprove said plan.
  - 1. An approval of the plan is conditional on designated lots or land not being built upon or served with any utilities, such as septic tanks or 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. Final approval of the Definitive Plan does not constitute the laying out or acceptance by the Town of streets within a subdivision.
  - 2. 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, and shall revoke its disapproval and approve of a plan which, as amended, conforms to these Regulations or recommendations.
  - 3. Any amended plans which are resubmitted for approval shall follow the same procedures as the original submission. Any amended plans submitted later than three (3) months following the date of the expiration of the appeal period or appeal(s) on the disapproval of the originally submitted plan must conform to the Subdivision Rules and Regulations and procedures in effect at the time of the amended plan's filing.
  - 4. The Planning Board may elect not to consider revised plans or other additional materials if such plans/materials are not filed at least fourteen days prior to the date of the Public Hearing or meeting at which the Applicant wishes them to be considered. This is to ensure that the municipal departments and the public have adequate time to review and comment on said materials.
  - 5. As part of its approval process, the Planning Board may impose reasonable conditions on any subdivision approval to ensure that these Regulations are followed, ensure that any mitigation offered by the Applicant or otherwise necessary is implemented, and ensure that mitigation required as a condition of any waivers is implemented.
  - 6. 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 provisions set forth in M.G.L. Chapter 41, Section 81W, and approved by the Planning Board.

- 7. In the event the Applicant desires to alter or change the grade of a street or the size, location or layout of a stormwater, sanitary sewer or water line or appurtenant structure, he shall provide the Planning Board with a written statement requesting such alteration or change and with six prints of the original Definitive Plan with the proposed changes drawn on said prints in red. No change or alteration shall be permitted unless such change or alteration has been approved by the Planning Board.
- 8. If the Applicant fails to submit the required Performance Guarantees, easements or other documentation and the endorsement of the Plan by the Planning Board is delayed more than six (6) months after the expiration of the twenty (20) day appeal period, 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.
- 9. Definitive Plan Endorsement: The Planning Board shall endorse reproducible drawings of the Definitive Plan in accordance with the Subdivision Control Law and these regulations ONLY after:
  - a. The final reproducible plans have been approved by the Planning Board, including any necessary corrections required in the Planning Board's approval of the plan, easements, master deeds, restrictive covenants, homeowners' association documents, and any required document which was not included with the subdivision submission.
  - b. Submission of an electronic copy of said plan which meets the current version of the "MassGIS Standard for Digital Plan Submission to Municipalities" meeting the requirements for Level I submission standards. Electronic copies must be submitted on a CD-ROM and must be accompanied by the completed checklist required in the MassGIS standard.
  - c. The statutory twenty (20) day appeal period has elapsed following the filing of the certificate of the action of the Planning Board with the Town Clerk and said Clerk has notified the Planning Board that no appeal has been filed, or if appeal has been taken, not until the entry of a final decree of the court sustaining the approval of such plan.
  - d. Any necessary performance guarantee has been posted. The monetary value of said guarantee, using any method other than a covenant, shall be based on a revised construction quantity estimate based on the final plans and with a monetary value adequate to cover all municipal costs to complete the subdivision project at the end of the expiration of said guarantee, including, but not limited to, construction costs at State "prevailing" wages, record plans, street acceptance plans, and legal costs.
  - e. Necessary inspection and other fees have been paid.
  - f. The Applicant has presented to the Planning Board for its approval, two sets of plans showing the complete subdivision network and/or systems for natural gas (if natural gas is available), electrical, telephone, cable TV, fiber optic or other broadband (if used) and, if applicable, street lighting (including pipes, pumps, valves, gates, handholes, transformer pad mounts and similar equipment). Said plans shall be accompanied by endorsements from the respective utilities that the plans have received their approval.
  - g. The Applicant has delivered to the Planning Board two (2) sets of reproducible drawings of the Definitive Plan with the necessary corrections. After endorsement by

- the Planning Board, the Applicant shall deliver to the Planning Board six sets of copies of the endorsed Definitive Plan.
- h. The Applicant has delivered an Irrevocable Offer of Dedication of all facilities to be dedicated to the public, including road rights-of-way and open space, in a form acceptable to the Town, and recorded said Offer in the chain of title at the Registry of Deeds or land registration office of the Land Court, as appropriate. Said Offer must be accompanied by a lawyer's title opinion that the Offer is free of any liens and encumbrances, and all mortgages must be subordinated to the Offer. The Offer shall be irrevocable, except the Offer can be withdrawn if the Applicant does not proceed with the project and requests that the subdivision approval be rescinded or otherwise amended such that the dedication is no longer necessary.
- i. The Applicant has submitted a detailed cost estimate for all construction within the proposed roadway layout and any utility easements, certified by the project's Registered Professional Engineer. Said estimate shall be based on current edition of the Massachusetts Department of Transportation's "Standard Specifications for Highways and Bridges," and shall include:
  - Quantity, unit price and total amount for each construction item
  - Total amount for cost of completion of project.
  - Costs adjusted to account for municipal prevailing wages rates and all municipal procurement requirements under state law and Wendell bylaws and Wendell practices for construction projects
  - Costs adjusted to add a 25% inflation/safety factor
  - Engineering inspection, materials testing, legal and other soft costs.

Final Approval: Final approval of the Definitive Plan does not constitute public way acceptance by the Town of streets within a subdivision, which requires a Town Meeting vote. Nothing in these regulations or the action of the Planning Board should be presumed to imply that Town Meeting might be willing to accept any new road.

#### 9.00 Performance Guarantees

Before endorsement of the Planning Board's approval of a Definitive Plan of a subdivision, the Applicant shall agree to complete the required improvements specified in these Regulations and in the Definitive Plan approval, such construction and installation to be secured in accordance with Section 81U of the Subdivision Control Law by one, or in part by one and in part by another, of the following methods, which may from time to time be varied by the Applicant:

A. Approval with Financial Performance Guarantees (Surety Bond, Cash Money Escrow, or Three Party Lender Agreement). The Applicant shall either file a surety company performance bond, provide a deposit of money or negotiable securities, or deliver an agreement executed by the Applicant and its lender providing for the retention of funds, all in an amount determined by the Planning Board, in consultation with its advisors, 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 "B" below, and to cover the costs of inspections, record plans, street acceptance plans, and legal work,

- and a 25% contingency/inflation factor. In addition, a warranty principal (the amount of funds that must be guaranteed to provide a warranty on the project) shall be required and shall be not less than 20% (twenty percent) of the estimated cost of the entire project and shall cover workmanship, materials, engineering, and administration.
- 1. 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. As an alternative to covenants, a financial performance guarantee with a 40% contingency/inflation factor may be used.
- 2. Financial performance guarantees must be drafted so that the only requirement that must be met for the Planning Board to make a bond claim or utilize funds is notification to the surety or financial institution that the Board has incurred or will incur liability by reason of the failure of the Applicant/owner to complete the construction of the subdivision in accordance with the definitive subdivision plan, or the Board's subdivision approval, or the Zoning Bylaw, or the Subdivision Regulations. Any excess funds advanced, over the cost of completing the work, will be returned to the surety or financial institution.
- 3. Such bond, deposit of money or negotiable securities, or lender agreement shall be approved as to form, the surety or financial institution, and manner of execution by the Planning Board.
- 4. For any surety bond, 1) the surety must agree that any litigation arising 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) the bond must remain valid and in effect until the work is complete and the Warranty Period has ended.
- 5. The Applicant and owner must provide an Irrevocable Right-of-Entry to allow the Town of Wendell to enter the property to make any necessary improvements required by the Definitive Plan approval and these Regulations if the Town is required to enforce or utilize the financial performance guarantees. Enforcing or utilizing financial performance guarantees shall not create any responsibility or liability of the Town to perform any particular work or to undertake or contract for work for which there are insufficient performance guarantee funds. The property owner shall subordinate all property mortgages to the Irrevocable Right-of-Entry and record it in the Registry of Deeds or land registration office of the Land Court, as applicable.
- B. Approval with Covenant. Instead of filing a bond, depositing money, or entering into a lender agreement, the Applicant may submit a covenant, executed and duly recorded concurrently with the recording of the subdivision approval by the owner of record, running with the land, and providing that no lot in the subdivision shall be sold and no building erected thereon until the ways, services therein and, whenever applicable, temporary turnarounds are constructed and installed so as to adequately serve the lots, and until record plans, street acceptance plans, and other required work are accepted by the Planning Board in accordance with these Regulations. 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 Town Counsel shall review the covenant and forward his/her comments in writing to the Planning Board. Upon approval of the covenant by the Planning Board, the Planning Board's action shall be noted on the Definitive Plan, and the Applicant shall record the covenant,

- endorsed Definitive Plan, and other appropriate documents at the Registry of Deeds or land registration office of the Land Court, as appropriate, and provide certified copies of the same to the Planning Board.
- C. Completion Time Schedule. The covenant or financial performance guarantee shall be contingent upon the completion both 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 be for the purpose of affording the Planning Board the opportunity to enforce or utilize the financial performance guarantee to complete the necessary improvements in case (a) the Applicant is unable to do so; and/or (b) the Planning Board denies any requests for an extension of time to complete the required improvements. "Warranty" shall include all workmanship and materials.
  - 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.
  - In the case of a surety company bond, such an agreement for an extension shall not be effective until the surety delivers to the Planning 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.
  - Failure to complete all improvements as required by these Regulations within the time allotted shall be cause for the Planning Board (a) to enforce or utilize the financial 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 the Subdivision Control Law.
- D. Recording of Plan. The Applicant shall record the definitive plan, together with the Planning Board's approval decision or certificate of action, required and approved easements (plans and documents), restrictive covenants, master deeds, etc., at the Registry of Deeds or land registration office of the Land Court, as applicable. The cost of said recording shall be borne by the Applicant.
  - Within seven (7) calendar days of said recording and prior to any Building Permit being issued, the Applicant shall file one (1) print of the Definitive Plan with the Building Inspector. Further, in accordance with the statute, where approval with covenant is noted thereon, the Building Inspector shall issue no permit for the construction of a building on any lot within the subdivision, except upon receipt from the Planning Board of a copy of the Certificate of Performance releasing the lot in question.
- E. Procedures for Partial Release. The Applicant may, upon partial completion and installation of required improvements in a subdivision, the security for the performance of which was given by bond, deposit of money, lender agreement, or covenant, make formal application, in writing, to the Planning Board for partial release of the Performance Guarantee, in accordance with the procedures set forth herein:

- 1. Financial Performance Guarantee. The amount of such bond, or deposit of money, or three-party agreement for lender fund retention 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 these Regulations in their entirety. The amount to be reduced by the Planning Board, after consultation with its agents and advisors, 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 expiration of the one-year warranty period, the amount withheld shall be released.
- 2. Covenant. The Applicant may request a release of conditions for 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 a covenant 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.

In the absence of financial performance guarantees, adequate covenants must remain in place to insure completion of the project, including record plans, street acceptance plans, site inspections, and legal work. In addition, a covenant on no fewer than 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.

- F. Procedures for Full Release. 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 Regulations, and the expiration of the one-year warranty period make formal application, in writing, to the Planning Board for full release of any outstanding performance guarantee.
  - 1. Before the Planning Board releases the performance guarantee, the Applicant shall provide the following:
    - i. A professional engineer's written certification that all work required by these Regulations has been constructed in conformance with the approved subdivision plan and any applicable conditions.
    - ii. Letters from authorized officials of any utilities, including electric, telephone, gas, cable TV, fiber optic/broadband, present within the new roads, stating that their respective underground systems have been installed to their satisfaction.
  - iii. A set of record construction plans signed and stamped by the Applicant's professional engineer. Said plans shall include, but not be limited to, all the information requested in Record Plans.

- iv. A set of street acceptance plans signed and stamped by the Applicant's surveyor and necessary documents, as stated in Acceptance Plans.
- Where applicable, an instrument from the Applicant's attorney, in a form v. approved by the Planning Board and acceptable to the Town Counsel, transferring to the Town 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 Town 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 when it deems it necessary.
- 2. If the Planning Board determines that all improvements as shown on the endorsed Definitive Plan and all required plans and legal documents have been completed satisfactorily, it shall release all the interest of the Town in such performance guarantee and return the guarantee 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, after inspection, that said construction or installation has not been completed, or that said construction or installation fails to comply with the endorsed Definitive Plan, applicable conditions or these Rules, it shall send by certified mail to the Applicant and to the Town Clerk a notice of noncompliance specifying the areas wherein said construction or installation fails to comply.
- 4. The Applicant shall have thirty (30) days after receipt of such notice to correct all items of noncompliance identified therein. Failure of the Applicant to finish all the necessary work within said thirty (30) days shall be cause for the Planning Board to enforce or utilize the performance.
- 5. Any performance guarantee may be enforced or utilized by the Planning Board for the benefit of the Town, as provided in M.G.L. Chapter 41, Section 81Y, to the extent of the reasonable cost to the Town of completing such construction and installation.
- G. Release of Lots from Covenant in Exchange for Financial Performance Guarantee. The Applicant may request a release of lots from a covenant in exchange for a financial guarantee provided that:
  - 1. The lots run consecutively and are released on both sides of the road simultaneously, beginning with the lots nearest any intersection of the subdivision road(s) and an existing Town road.
  - 2. The amount of the financial guarantee and the financial guarantee process shall be determined by the Planning Board, as described above.

## 10.00 Design Standards and Required Improvements

Before endorsement of the Planning Board's approval of a Definitive Plan of a subdivision, the Applicant shall agree to complete the required improvements specified in these Regulations and in the Definitive Plan approval. No plan of a subdivision shall be approved unless all of the building lots shown on the plan comply with the Zoning Bylaw and the design and construction standards specified herein.

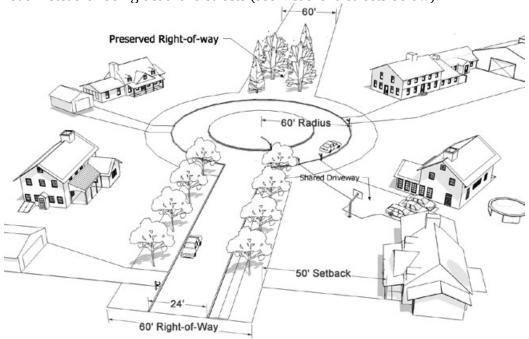
Except as herein noted, the provisions of the following documents shall be used as design standards. Where a difference between the standards and these Regulations exists, these Regulations shall be followed unless a waiver is granted by the Planning Board:

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

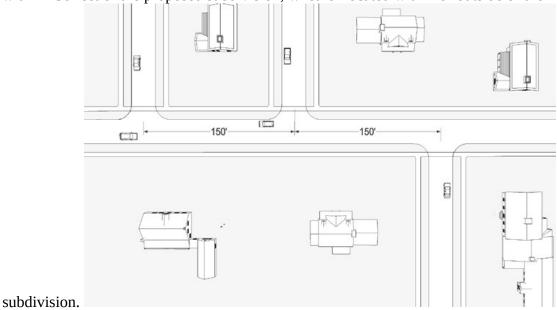
## **Street Location and Layout**

- A. Streets and Ways shall be Laid out so, in the opinion of the Planning Board, they will provide safe vehicular travel, maximize the attractiveness and livability of the subdivision, and avoid damage to wetlands, wildlife habitat, natural resources, and historic resources. As far as practicable, streets should follow natural contours and avoid disturbing existing trees and stone walls.
- B. **Future Development:** 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 (see Dead-end streets below).



C. **Street offsets:** Streets entering a roadway opposite or from the same side as 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. This minimum offset is required for all streets within 150 feet of the proposed subdivision, whether located within or outside of the



D. **Dead-end streets and cul-de-sacs:** The Applicant shall make every effort to avoid the creation of dead-end streets and shall provide for connection to existing streets in two locations whenever reasonably possible. Compared to interconnecting streets, dead-end streets are more expensive to maintain, limit emergency access, and reduce the sense of connection and equality. Dead-end streets and/or cul-de-sacs are prohibited without specific

design waivers which shall only be granted in accordance with the Waiver Section of these Subdivision Regulations.

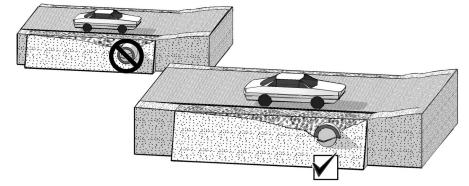
- 1. Dead-end streets shall only be considered appropriate when:
- a. The surrounding property will never need a street connection, because of extremely sensitive and/or permanently protected natural resources, and the project provides a viable alternative pedestrian and bicycle connection to the surrounding 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 5 housing units; OR
- b. A Planning Board finding or conservation finding issued under the Conservation Development provisions of the Zoning Bylaw or in response to a preliminary or definitive subdivision application identifies that a dead-end street is the most appropriate way to develop a property.
- 2. Every street in the proposed subdivision shall be laid out in such a manner that every portion of each street is less than 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, except when the Planning Board requests a longer street in its Conservation Development finding or its analysis of the site in response to a preliminary or definitive subdivision application. Cul-de-sacs or dead-ends shall be allowed only on local streets.
- 3. All dead-end streets shall include a permanent teardrop-shaped 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. The center of the cul-de-sac shall be on the centerline of construction.
- 4. A permanent island, graded, seeded and/or appropriately planted with acceptable trees or shrubs, or left with natural tree growth, shall be constructed in the center of the turnaround. The roadway surrounding the island 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 Standard Specifications.
- 5. The road surrounding the island shall be a one way road twenty (20) feet wide.
- 6. A hammerhead shall be allowed instead of a cul-de-sac. Said hammerhead shall be designed as a "T" to allow fire trucks and snow plows to turn around with only one backing-up movement. The portion of the hammerhead perpendicular to the road shall be the same width as the road it abuts and shall extend at least twenty-eight (28) feet in each direction of the "T" beyond the sideline of the main road edge. Only one edge of the hammerhead may be used as the frontage for a lot.
- E. **Access to subdivision:** The street system in 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 Applicant shall 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 borne by the Applicant.
- 2. The Planning Board shall disapprove 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) reasonably anticipated to be generated by the project. The Planning Board may accept or require off-site improvements to mitigate any of these impacts.
- F. **Intersections:** Streets and ways shall be laid out so as to intersect in accordance with the requirements of paragraph C above, Street Offsets, and:
  - 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 feet (15').
  - 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 to 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.
- G. **Drainage, swales, and low-impact development:** Curbs are generally not appropriate in Wendell, where most roads are narrow, many roads are gravel and very few curbs exist, 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. LID must be engineered to fully anticipate storms;—this is not the same as un-engineered roads with sheet runoff. The following standards must be met:
  - 1. *All* of the stormwater from a 1" Natural Resources Conservation Service (NRCS) design storm and smaller storms shall drain into the ground and not leave the site. A 1" NRCS design storm is a storm with 1" of rain within a 24 hour period (80+% of Western Massachusetts storms).
  - 2. Drainage systems, including drainage swales, detention and retention ponds, and infiltration areas, must be designed to prevent any increase in peak flows for the one (1), two (2), ten (10), and one-hundred (100) year NRCS design storms. TR-55 or TR-20, with all inputs and outputs shown, shall be used for calculating capacity of drainage systems. The system should be designed to mimic existing drainage patterns and flows.
  - 3. Water leaving a road shall enter grassed swales graded flat enough to avoid erosion and hold and treat water.

- 4. 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) and rain gardens (where rain is captured and retained in depressions carefully planted with native vegetation and allowed to drain into the ground) shall be utilized.
- 5. Curbs are only appropriate in areas that do not allow for grassed swales and in an area around a common, shared park. 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. Curbs shall utilize a 6" reveal (i.e., 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 have granite curb inlets (Type VB) shall be built against and shall be installed true to the horizontal and vertical alignment. All catch basins shall have four (4) foot sumps and gas traps with removable hoods. All catch basins shall connect directly to drain manholes (no catch basin to catch basin connections). Vertical curbs are not appropriate in proximity to amphibian habitat.
- 6. The design, construction, methods, and materials of drainage systems shall be in conformance with the definitive plan and the Standard Specifications.
- 7. The design capacity of any drainage system and pipes, including all culverts under any road, shall be determined by the Rational Method. 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 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.
- 8. 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 a designed stormwater swale (or underground systems when curbs are needed).

9. All perennial streams shall be piped by means of open bottom culverts. Traditional

culverts with
bottoms may be
used for
intermittent
streams. No
water body or
wetland shall be
filled without
required
wetlands
permits and



replacement of stormwater storage functions of the area to be filled.

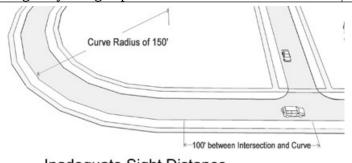
10. Lot sub-drainage and foundations drains may NOT be discharged to road drainage.

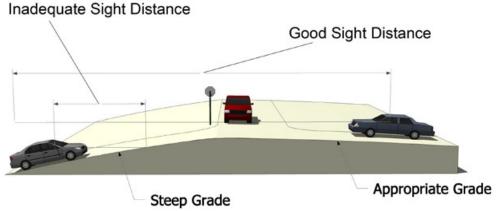
- 11. The maximum depth of any portion of the storm system shall be ten (10) feet.
- H. **Bridges, retaining walls, gabion walls, guard rails, fences, pavement structures**: These structures shall be designed in accordance with the Massachusetts Department of Transportation's Bridge Manual and the MassDOT Highway Design Manual and Standard Specifications. Roads shall meet the following standards:
  - 1. Guard rails shall not be galvanized metal.
  - 2. The sub-base shall be gravel borrow in accordance with Ml.03.0 Type a specifications, except that the top four (4) inches shall be gravel borrow meeting Ml.03.1 specifications. A tolerance of one-half (1/2) inch above or below finished sub-grade will be permitted, provided this difference is not maintained for a distance of over fifty (50) feet and the required cross section is maintained. The gravel borrow shall be laid to a depth of 24" (18" for a Conservation Development or any project where at least 75% of the land will be permanently protected as open space (by deed to public agency or nonprofit land preservation organization or trust or by a conservation restriction) in consideration of these projects' smaller overall environmental footprint.)
  - 3. For local streets and any project where at least 65% of the land will be permanently protected as open space (by deed to public agency or nonprofit land preservation organization or trust or by a conservation restriction), the road shall be 6" of crushed gravel or traprock gravel over the gravel subbase, in accordance with standard specifications. Asphalt roads are not allowed.
  - 4. For major roads, the base or binder course (the first coat) shall be a 2" depth of asphalt concrete in accordance with the Standard Specifications, Class I Bituminous Concrete Pavement type I-l (Binder Course Mix). The surface course (the second and final coat) shall be a 2" depth of asphalt concrete for local and major roads, in accordance with Standard Specifications, Class I Bituminous Concrete Pavement Type I-l (Top Course Mix).
  - 5. Inspections shall be made by the project engineer and the Town upon completion of each layer of sub-base and the binder and surface courses.
- I. Pedestrian Ways and Sidewalks; Sidewalks are not required but all subdivision roads must include a parallel pedestrian walkway or sidewalk within the road right- of-way, or if outside of the right-of-way within an easement for the public use, except when the road is designed as a shared space travel way with speed controls to enforce a maximum speed of 10 miles per hour. 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 of compacted gravel and be finished with asphalt, crushed stone, or gravel, provided drainage is provided to ensure the pedestrian way is passable when snow does not block access. All ways shall be designed and constructed in accordance with the Standard Specifications, and Massachusetts Architectural Access Board and Americans with Disabilities Act standards.
- J. **Roadway and Right-of-Way Width:** Street roadway and right of way widths shall be provided in accordance with the table below. These standards are intended to provide a balance between public works and safety/fire needs and what is important to maintain Wendell's character.

Street Category	Proposed Street Type	Street Width	Right-of- Way Width
Local	Up to 49 dwelling units (≤490 ADT or Average Daily Trips)	20'	50'
Major	50 or more dwelling units (500+ ADT)	24'	60'

- K. **Traffic Calming:** Roads shall be designed with every effort to reasonably calm the traffic within the subdivision and on surrounding streets to ensure pedestrian and bicycle friendly design and to prevent a decrease in traffic safety as a result of the additional traffic the project will generate. Traffic calming may utilize methods detailed in the Institute of Traffic Engineer's current versions of the "Traditional Neighborhood Development" or "Traffic Calming: State of the Practice" manuals, but must utilize methods that will not make snow plowing or road maintenance burdensome.
- **L. Construction Methods:** Trees and stone walls must be preserved to the extent feasible. 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 inches and within six inches of the top of sub-grade shall be removed. Trees and stone walls intended to be preserved shall be protected by suitable boxes, fenders, or wells as appropriate. In cut areas all material shall be removed to sub-grade. All unsuitable material, such as peat, highly organic silt or clay, and 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 tenton roller.
- M. **Side Slopes:** The area in back of the required grass and tree belt or behind the sidewalk when one is required, shall be graded to a point where it coincides with the finished grade of abutting lots in such a manner that no portion thereof within the right-of-way lines of the street will project above a plane sloped four (4) horizontal to one (1) vertical. The top six (6) inches of side slopes shall consist of good quality loam extending to the right-of-way, screened, raked, and rolled with at least a 100-pound roller to grade when the loam is moist. The loam shall be seeded with lawn grass seed applied in sufficient quantity to assure adequate coverage. Loam and seed shall be spread in accordance with the Standard Specifications.
- N. **Street Name Signs:** Street name signs shall be purchased, constructed and installed in accordance with Town of Wendell standards. The Applicant shall provide the posts and erect them at each intersection near the inside curb edge.
- O. **Center Line:** The center line of the roadway shall coincide with the center line of the right-of-way, unless otherwise approved by the Planning Board.
- P. Road standards: Roads shall be designed as follows:

Design Detail	Standards
Horizontal Alignment: Minimum center line radius	160 feet
Vertical Alignment: Minimum stopping sight	200 feet
distance at 3.5 feet above pavement	
Maximum Grade	8%
	6% if ≥50 dwelling units (500 ADT)
Minimum Grade	0.75%
Intersection angle	90°
Entering and Stopping Minimum Sight Distance	AASHTO (American Association of
	State Highway and Transportation
	Officials design manual)
Minimum radius at edge of roadway	25 feet
Highway design speed	Maximum 25 Miles per Hour





# Q. Community Sanitary System (only if such a system is used):

This section applies to so-called package sewage treatment plants and large community systems, not to simple shared septic tank-soil absorption systems used by a few homes.

- 1. All systems shall be designed, and the plans stamped, by a professional engineer in accordance with standard design practices.
- 2. The construction of the sanitary system, including methods of construction and quality of materials used, shall be in conformity with the Definitive Plan and the Standard Specifications. No pipes shall be more than 10' below grade. Only gravity sewerage systems and individual homes with their own Septic-Tank Effluent Pump (STEP) may be used unless the Planning Board gives specific approval to a pressurized or sewage lift station

- system that includes sufficient management and financial arrangements to ensure permanent adequate monitoring and operations.
- 3. The minimum slope for gravity sanitary sewer pipes shall be such that a minimum design flow velocity of two and one-half (2 1/2) feet per second is achieved.
- 4. The maximum slope for gravity sanitary sewer pipes shall be seven (7) percent. Drop sanitary sewer manholes (where the pipe entering the manhole drops down significantly in elevation within the manhole) must be used be used for drops of 2' or greater.
- 5. Manholes shall be 26 inches in diameter.
- 6. A minimum of ten feet (10') horizontal separation between sewer and water mains, if any, shall be maintained and the top of the sewer shall be at least eighteen (18) inches below the bottom (invert) of the water main. If required, laterals to the water main shall be relocated to provide this separation or reconstructed with mechanical-joint pipe for a distance of ten (10) feet on each side of the sewer. One full length of water main should be centered over the sewer so that both joints will be as far from the sewer as possible. When it is impossible to obtain proper horizontal and vertical separation, the water main and sewer shall be constructed of mechanical-joint cast-iron pipe (a pressure-tight joint) and shall be pressure tested to assure water-tightness.
- 7. A leakage test for gravity and pressurized systems shall be required in accordance with standard practices and methodology. A Mandrel (Go-No-Go) Test must be performed on all sewer pipes. (A mandrel, a cylindrical metal object, is pulled through the pipe to ensure that there are no obstructions within the pipe.)

# R. Municipal, District, or Community Water (only if such a system is used):

This section applies to Town or district water systems and any water system serving 13 or more bedrooms, regardless of the number of water sources used.

- 1. Water mains shall have a minimum soil cover of five (5) feet and a maximum soil cover of five and one-half (5 1/2) feet.
- 2. All systems shall be designed, and the plans stamped, by a professional engineer in accordance with standard design practices.
- 3. All water mains shall be looped.
- 4. At water main intersections, all lines will be valved and the maximum spacing between valves on any one main shall be seven hundred fifty (750) feet.
- 5. All valves shall open right.
- 6. All pipe lines shall be pressure tested at pressure of 150 pounds per square inch (p.s.i.) for a minimum of three (3) hours under the supervision of a professional engineer and flow tests shall be conducted on the completed water system to insure pressure and flow requirements have been met.
- 7. All potable water lines shall be disinfected according to American Water Works Association standard C601-68.
- **S. Fire Water Requirements** for any project with three or more homes shall be met by demonstrating that there will be adequate fire ponds or access to natural water bodies, with

standpipes sufficient to provide access to said water in any season, in accordance with the standards of the Wendell Fire Chief.

## T. Landscaping, Street Trees, Tree Belts, and Natural Features

- 1. Tree belts a minimum of eight (8) feet wide shall be provided on each side of the roadway. When sidewalks are required, the tree belt shall be between the curb and the sidewalk with the trees planted along the center line of the tree belt. The finished grade of such tree belts adjacent to sidewalks shall have a slope of one-half (1/2) inch per foot toward the roadway, or a plane sloped four (4) horizontal to one (1) vertical if there are no sidewalks.
- 2. The top six (6) inches of tree belt shall consist of good quality loam extending to the right-of-way, screened, raked, and rolled, when the loam is moist, and planted with lawn grass or wildlife seed applied in sufficient quantity to assure adequate coverage.
- 3. Street shade trees shall be on both sides of subdivision streets in the tree belt or within five (5) feet of the right-of-way. There shall be one tree planted an average of every thirty (30) feet of street frontage along each lot and not less than two trees per lot. Any mature deciduous shade trees preserved during construction may be applied toward this average. Trees will not be required when the Planning Board finds that vistas, stonewalls and natural landscape features are better served by waiving this requirement.
- 4. Street shade trees shall not be permitted within twenty-five (25) feet of the curb line of the intersection of two streets.
- 5. Trees shall be mature deciduous trees or newly planted trees including, but not limited to, those listed in the table below, no less than three inch (3") caliper (at a point 6" above the ground) at time of installation Clumping is permitted in order to frame or enhance a view. The center of the tree should be four feet from pavement or curbs.
- 6. No more than 35% of any one species shall be used throughout the subdivision.
- 7. Street shade trees shall have a minimum caliper of three inches (3") six inches (6") above soil root ball. They shall be single-stemmed with a single, straight leader. All tree species must meet American Nursery and Landscape Association (ANLA) standards for the types and sizes specified.
- 8. The Applicant shall install the street shade trees specified on the approved plans prior to the issuance of the final Certificate of Occupancy. Trees must survive one year after planting prior to the release of warranty performance guarantees.
- 9. Planting operations and requirements for street shade trees shall be shown on the subdivision plans and be in accordance with the ANLA standards for planting and shall have a two (2) year growth warranty.

Approved Street Shade Tree Specie	proved Street Shade Tree Species		
Botanical Name	Common Name	Notes	
Acer rubrum	Red Maple	Low salt areas	
Acer saccharum	Sugar Maple	Low salt, wide root zone areas	

Betula papyrifera	Paper Birch	
Betula populifolia	Gray Birch	
Carya cordiformis	Bitternut Hickory	
Carya ovata	Northern Shagbark Hickory	
Fagus grandifolia	American Beech	
Fraxinus pennsylvanica	Green Ash	
Nyssa sylvatica	Black Gum, Tupelo	Moist soils
Quercus coccinea	Scarlet Oak	
Quercus robur	English Oak	
Quercus rubra	Red Oak	Tolerates poor, sandy soils
Robinia pseudoacacia	Black Locust	
Tilia cordata	Littleleaf Linden	
Ulmus americana 'Valley Forge'	Valley Forge Elm	
Ulmus americana 'Princeton'	Princeton Elm	
Ulmus parvifolia 'Allee'	'Allee' Lacebark Elm	

NOTE: The Planning Board may accept other species as approved street shade tree species.

- 10. All natural features, such as large trees, watercourses, scenic points, historic plots, and similar assets shall be preserved. The Planning Board may waive this requirement if such features are not needed to add attractiveness or otherwise promote the purpose and intent of these Regulations.
- 11. Measures shall be taken to preserve all archaeological sites or to mitigate any disturbance by fully cataloging and preserving findings in accordance with Massachusetts Historical Commission and Wendell Historical Commission recommendations.
- A. 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 years without its approval.

## **U. Utility Installation:**

- 1. All utility distribution systems, public or private, shall be placed underground.
- 2. All utility lines shall be installed with the minimum soil cover specified in these regulations.

- 3. Electric, telephone, cable TV, fiber optic, and all other conduits shall be installed underground beneath the grass strip with a minimum cover.
- 4. Width of trench for the pipe or conduit shall be equal to four thirds (4/3) diameter of the pipe or conduit, plus eighteen (18) inches.
- 5. Sheeting (to stop the sidewalls from collapsing) shall be used, whenever necessary, upon the direction of the Applicant's engineer and in conformance with the Standard Specifications.
- 6. 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 Planning Board or its engineer.
- 7. Back-fill shall be compacted to ninety (90) percent of the maximum dry density of the material, consistent with the Standard Specifications.
- 8. 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.

#### V. Monuments and Markers

- 1. Granite or reinforced concrete monuments six (6) feet in length, dressed to six (6) inches at the top with a three-eights (3/8) inch drill hole in the center, and not less than six (6) inches square at the bottom shall be set to finish grade as shown on the plans.
- 2. No permanent monuments shall be installed until all construction which could destroy or disturb the monuments is completed.
- 3. Monuments shall be installed at all street intersections and at all points of change in direction or curvature of streets. Documentation of the horizontal metric coordinates of the center point of the monument shall be provided on as built-plans (using Massachusetts State Plane Coordinates, NAD 1983). All monuments shall be installed under the direction of a Massachusetts registered land surveyor.
- 4. All monuments shall be installed prior to any release of the performance guarantee.

## 11.00 Project Management

**A. Pre-Construction Conference:** Prior to ANY construction, the Applicant, its project engineer, and the contractor must meet with the Planning Board, Highway Superintendent, Board of Health, Conservation Commission, Fire Chief, and other appropriate Town parties to review the subdivision plan, approval and conditions. The Applicant must provide evidence that all required documents have been recorded and adequate copies of all documents have been provided to the Planning Board. After the pre-construction conference, the Applicant shall notify in writing the Planning Board and Planning Board agents at least five (5) business days in advance of the date of commencement of construction and subsequent phases of construction.

- **B. 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, and related utilities, improvements, materials, and construction specifications shall not be changed unless the plan is amended in accordance with the provisions set forth in M.G.L. Chapter 41, Section 81W, and approved in writing by the Planning Board. If the Applicant proposes to amend or revise the plan, it shall:
- 1. Provide the Planning Board with a written request for such alteration and provide the appropriate fee (see Administration and Fees).
- 2. Provide the Planning Board with three (3) prints of the original Definitive Plan with the proposed changes drawn on said prints in red.
- 3. Cause such approved changes to be shown on the record plans if the Planning Board approves the change.
- At the Planning Board's discretion, minor "field changes" may be approved with a simple vote and letter from the Board.
- **C. Privatized Project Inspection:** Inspection shall be made by a registered professional engineer chosen by the Applicant, who shall certify in writing to the Planning Board that all work was done in accordance with the approved subdivision plans, except as noted, and shall provide a detailed list and plan of changes/differences between the approved plan and what was built. An Applicant's engineer or engineer's agent shall be on site during the entire construction process to ensure compliance with the design.
- **D. Town Inspections:** The Applicant shall notify the Planning Board prior to commencement of each of the major phases of construction and, as each phase is completed, it shall be approved in writing by the Planning Board prior to the start of work for the next succeeding phase. The Planning Board may designate the Town Highway Superintendent as the inspector for the construction of streets and the installation of municipal services and utilities in the subdivision.

### E. Warranty Period (see also Performance Guarantee section of these Regulations):

The Planning Board shall hold all lot covenants, or at least twenty (20%) percent of the original approved performance guarantee amount or fifty thousand dollars (\$50,000), whichever is greater, until one-year after the completion of all pavement, drainage facilities, and landscaping to ensure the maintenance and repair of those features. Only at the successful completion of this one-year warranty shall these covenants or funds be released. The required subdivision improvements are not considered complete, in accordance with the Subdivision Control Law, until this warranty period is complete.

### 12:00 Administration and Fees

**Fees:** Fees shall be as follows and shall accompany each application:

Fees are based on covering Town costs, including the updating of Assessors' maps and records, as a result of a project.

Approval Not Required (ANR) Plans

\$100 plus \$45 per newly created lot

Preliminary Subdivision Plan
Definitive Subdivision if no Preliminary
Definitive Subdivision if Preliminary Plan
Subdivision amendments requested by board
Other subdivision amendments

lots

No charge

**Inspection Costs (actual cost to Town)** 

Staff rate and Town consultants

\$125 plus \$200 per newly created lot

\$200, plus \$200 for any additional

cost

Request to changes guarantees Review of final as-built plans Final Street layout plans \$100 per request to change or reduce \$200 Same as ANR fee

\$125 plus \$20 per newly created lot

\$500 plus \$400 per newly created lot

- **A. Rules for Hiring Outside Consultants:** As provided by MGL Chapter 44, Section 53G, the 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.
- 1. Funds received by the Planning Board pursuant to these Regulations 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 MGL Chapter 44, Section 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.
- 2. Specific consultant services may include, but are not limited to, the engineering of roads and ways private and public, driveways, grades, grading, and sanitary sewage systems, hydrogeologic and drainage analysis, impact analyses of various kinds, and environmental and land use law. The consultant shall be chosen by, and report only to, the Planning Board.
- 3. 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 if the application is withdrawn within five days of the date notice is given.
- 4. 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 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.
- 5. The Applicant may appeal the selection of the outside consultant to the Selectboard, 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 Selectboard and a copy received by the Planning 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.

#### 13.00 Subdivision Closeout and As-Built Plans

To close out a subdivision and obtain release final performance guarantees, the following requirements must be met:

- A. The subdivision has been fully completed in accordance with the approved plan and these Regulations, including all subdivision facilities, street bounds, and other improvements shown on the approved subdivision plan.
- B. The Applicant has provided letters from all private utility companies indicating that they have no objections to the project being considered complete or certification from the Applicant's project engineer that all utilities were installed in conformance with all utility company comments and requirements. (A statement by the project engineer certifying that the work was completed and submission of a copy of a certified letter sent to the utility notifying it that it has 60 days to object to the installation or construction in a subdivision with no response shall be considered sufficient if the utility does not respond or send in a report.)
- C. The warrantee period for the subdivision has lapsed.
- D. All final engineering certifications and inspection reports have been provided by the Applicant's professional engineer in a format acceptable to the Town.
- E. All landscaping is completed and the entire area is cleaned up so as to leave a neat and orderly appearance free from debris and other objectionable materials.
- F. All catch basins, drainage structures, drainage swales, and detention and retention ponds have been properly cleaned out and landscaped.
- G. Electronic copies of the As-Built/Record Plans and Street Layout Plans which meet the current version of the requirements for Level I submission standards of the "MassGIS Standard for Digital Plan Submission to Municipalities" have been submitted to the Town. Electronic copies must be submitted on a CD-ROM and must be accompanied by the completed checklist required in the MassGIS standard.
- H. Submission of a report signed and stamped by the Applicant's project engineer including:
  - 1. A description of how the project varied from the subdivision approval plans. Minor changes are common to reflect the exact field placement, but all changes must be noted and approved by the Planning Board.
  - 2. Certification that all utilities under the roadways were installed prior to the installation of the base coat of pavement.
- I. Submission of As-Built or Record Plans, drawn at the same size as the original plans and including the following:
  - 1. Edge of road, type of curbing, all utilities, existing driveways

- 2. Right-of-way sidelines and property lot lines extending at least 100' from the frontage.
- 3. Private Utilities-- It shall be the responsibility of the Applicant to ensure that each utility (gas, electric, telephone, cable TV, water, etc.) provides all the necessary information to the person preparing the record plan, so that all the components of each system can be plotted on the record plan. Components of said systems which can be identified on the ground such as gates, hand-holes, transformers, etc. shall be verified by the Applicant's professional engineer.
- 4. Profile showing centerline of roadway and storm and sanitary systems.
- 5. Every plan shall have at least four points accurate within a centimeter, as certified by a surveyor, on each sheet tied into the Massachusetts State Plane Coordinate System (NAD 1983 datum), using said published control points or the global positioning system. The plan must note the metric coordinates of the four tie-in points, the datum, and the source and location of monuments used for data. Elevations to be NAVD 1988 datum
- 6. Sanitary Sewer (if community system), with all components clearly identified and marked:
  - a. Stationing of manhole bases on center-to-center distances between successive ones with lowest/beginning manholes being a 0+00 station
  - b. Type, size and class of pipe between each manhole
  - c. Location of sanitary wyes, pumping stations, siphons, etc with distances from center of downstream manhole
  - d. Location of end of sanitary sewer service stubs at property lines (for each location, provide ties (distances) to fixed and easily identifiable objects and elevations of end of pipe (NAVD 1988 datum) to be placed on a 4"x 6" card and submitted to the Planning Board prior to placement of gravel on roadway).
- 7. Storm Sewer (if applicable), with all components clearly identified and marked
  - a. Stationing of manholes based on center-to-center distances between successive ones with lowest/beginning manhole having a 0+00 station
  - b. Type, size and class of pipe between each successive manhole and between manholes and catch basins
  - c. Location of individual lot subdrains and connections of said subdrains to stormwater system, ties to easily identifiable objects and elevations of end of subdrains at property line. (Each location, ties and elevation to be placed on a 4"x 6" card and submitted to the Planning Board prior to placement of gravel on roadway.)
  - d. Location, size and class of roadway curtain drains, detention and retention ponds, including elevations of inlet and outlet structures, and pond bottom projections, if any.
- 8. Water System (if public or community system), with all components clearly identifiable and marked
  - a. Location, with ties (distances) to fixed and easily identifiable objects and elevations, of all water gates, water service boxes, ends reducers, tapping sleeves and valves, etc. (each location and ties for each of the above to be placed on a 4"x 6" card and submitted to the Planning Board prior to placement of gravel on roadway).
  - b. Location, type and class of mains, branches, services, etc.
- J. Final Street Layout Plans including the following:

- 1. Final approved plans must be recorded in the Registry of Deeds or land registration office of the Land Court, as appropriate
- 2. A title certification showing that the property is free of all liens and encumbrances.
- 3. Two sets of 24" by 36" Mylar originals (one for the Town and one to be recorded) and three sets of prints at a scale of 1" equals 40' prepared by a registered land surveyor in accordance with Registry of Deeds and Land Court requirements
- 4. Only one proposed street to be shown per sheet, with match lines to be used if a street is to be shown on more than one sheet
- 5. Title block to be: Street Layout Plan {name} STREET, Wendell, said street is part of the {name} Subdivision approved by the Planning Board, filed with the Town Clerk, {date} and recorded at the Registry of Deeds (or land registration office of the Land Court) (book and page)
- 6. Planning Board's endorsement that "Approval is not Required"
- 7. Street lines to be shown in metes and bounds (standard surveying distance and bearing descriptions). Tie courses so that street can be mathematically closed. Bearings and distances for all curves to be shown.
- 8. Streets to be tied to Massachusetts State Plane coordinate system. Every plan shall have at least four points accurate within a centimeter, as certified by a surveyor, on each sheet tied into the Massachusetts State Plane Coordinate System (NAD 1983 datum), using said published control points or the global positioning system. The plan shall note the metric coordinates of the four tie-in points, the datum, and the source and location of monuments used for data.
- 9. All street line monuments to be shown and identified and their exact metric coordinates shown, in accordance with the requirements in the above paragraph.
- 10. At least 100' of lot property lines shown with metes and bounds.
- 11. Ownership of lots (including Registry Book and Page)
- 12. Land court case numbers, when appropriate, must appear on plans

The Planning Board's release of final performance guarantees is NOT a representation by the Town that the project has been successfully completed, but strictly represents that final releases will be issued.

# Town of Wendell Application for Endorsement Of Approval Not Required (ANR) Plan

1. Deed	nd registration office of the Land Court: Book -		
2. Stre	Page Street Address:		
<ul> <li>Street Address: <ul> <li>Assessors' Map: Lot(s):</li> <li>Additional property description:</li> <li>Check list of filing requirements (check the supplied items. Applications MUST har these items.)</li> <li>Original mylar, with endorsed seal of a Massachusetts Registered Professional L Surveyor showing</li> <li>All buildings owned by subject landowner(s) within 100' of any newly created property lines</li> <li>A statement that the Planning Board's endorsement is not a determination the lots shown are buildable lots.</li> <li>Three prints of the Plan (plus any prints the Applicant wants returned).</li> <li>Three copies of this completed and signed Application.</li> <li>Fee</li> <li>A CD-ROM electronic version of the plan in model space in DWG (drawing) for including</li> <li>All property lines, buildings and geographic features shown on the plans</li> <li>Closure of all property boundaries of one part in 20,000</li> <li>Conformance with the current version "MassGIS Standard for Digital Plan Submission to Municipalities" at Level I submission standards.</li> </ul> </li> </ul>			
(2) The (3) I/We my/o (4) I/We infor Applicant: Address:	plan is not a division as defined in the plans submitted are now in the public e certify that the information containe our knowledge; and e grant the Planning Board and its age rmation needed to review this applica Signature:	domain and may be copied freely in any form. d herein is true and accurate to the best of ents permission to enter the property to collect tion.  Phone:	
		Signature:	
Address:	·	Phone:	
		Signature:	

# Town of Wendell Application For Approval Of Preliminary Plan

1. Deed recorded in Registry of Deeds or land registration office of the Land Court: 1		
	Page	
,	2. Street Address:	
	3. Assessors' Map: Lot(s):	
	4. Additional property description:	
	5. Check list of filing requirements (check the supplied items. Applications MUST have these	ž
	items.)	
1	Seven copies of the preliminary Plan.	
	☐ I/we certify that we provided the required copies directly to other Town officials as required in the Subdivision Regulations.	
	☐ I/we certify that we have included all of the items required in the Subdivision	
•	Regulations for a Preliminary Plan Application.	
1 . 7	☐ Seven copies of this completed and signed Application.	
	$\Box$ Fee in accordance with the Subdivision Regulations.	
2		
	I/We represent and agree that:	
j	(1) The plan complies with the application requirements in the Subdivision Regulations; and	
	(2) The plans submitted are now in the public domain and may be copied freely in any form; an	ıd
	(3) I/We certify that the information contained herein is true and accurate to the best of my/our	
3	knowledge; and	
	(4)I/We grant the Planning Board and its agents permission to enter the property to collect	
	information needed to review this application.	
	Applicant : Signature:	
	Address:Phone:	
	OwnerSignature:	
	Address:Phone:	
	1 101101	
	Surveyor:Signature:	
	Address: Phone:	

# Town of Wendell Application For Approval Of Definitive Plan

Page	Deeds of faild registration office of the Land Court. Book
2. Street Address:	
3. Assessor's Map: Lo	ot(s):
4. Additional property description	
	ents (check the supplied items. Applications MUST have these
items.)	
· ·	efinitive Plan with endorsed seal of a Massachusetts Registered
Professional Land Sur	veyor showing
$\square$ I/we certify that we pr	rovided the required copies directly to other Town officials as
required in the Subdiv	
$\square$ I/we certify that we ha	ave included all of the items required in the Subdivision
Regulations for a Defi	initive Plan Application
-	ompleted and signed Application.
☐ Fee in accordance wit	h the Subdivision Regulations
I/We represent and agree that:	
	pplication requirements in the Subdivision Regulations; and
	Board to approve the Definitive Plan but prior to its
	provide electronic copies of the plan and the performance
guarantee called for in the Su	<u> </u>
• /	and install the ways and the services in accordance with the
	the Definitive Plan as finally approved by the Planning Board
	ules and regulations of the Board of Health, the Conservation
Commission and other applications of the commission and other applications of	
	n an Irrevocable Right-of-Entry to enter into the property to
	its, contingent upon subdivision approval, and I/we agree that if
	we shall record a notice to this effect in the Registry of Deeds of
9	e Land Court, as appropriate, and subordinate all mortgages to
	t this agreement shall be binding upon my/our heirs and
successors in interest; and	
` '	in the public domain and may be copied freely in any form; and
	erein is true and accurate to the best of my/our knowledge; and
	d and its agents permission to enter the property to collect
information needed to review	11
	Signature:
Address:	Phone:
Owner	Signature:
	Phone:
Survoyor	Signaturo
	Signature:
Auui 699'	Phone: