Town of Windham
New Hampshire

SUBDIVISION REGULATIONS

Amended December 7, 1988
Amended July 26, 1989
Amended December 1, 1993
Amended August 13, 1997
Amended May 13, 1998
Amended October 7, 1998
Amended October 17, 2001
Amended April 23, 2003
Amended October 1, 2003
Amended April 21, 2004
Amended July 18, 2007
Amended October 15, 2008
Adopted March 2, 2011
Adopted June 19, 2013
Adopted April 30, 2014
Public Hearing Draft June 17, 2015

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SECTION 100: PURPOSE

101. These rules and regulations governing the subdivision of land in the Town of Windham have been adopted and amended in accordance with the provisions of NH RSA 674:35-42 and under the authority vested in the Planning Board by the voters of the Town of Windham in March 1969 for the purpose stated in said law and more particularly:

101.1 To lessen congestion in the street;

101.2 To secure safety from fires, panic, and other dangers;

101.3 To promote health and the general welfare;

101.4 To provide adequate light and air;

101.5 To prevent the overcrowding of land;

101.6 To avoid undue concentration of population;

101.7 To facilitate the adequate provision of transportation, solid waste facilities, water, sewerage, schools, parks, and playgrounds;

101.8 To assure proper use of natural resources and other public requirements.

SECTION 200: AUTHORITY, VALIDITY, CONFLICTING PROVISIONS, ~~&~~ APPROVAL, AND WAIVERS

201. AUTHORITY: Pursuant to the authority vested in the Windham Planning Board by the voters of the Town of Windham and in accordance with the provisions of NH RSA 674:35-42, the Windham Planning Board adopts the following regulations governing the subdivision of land in the Town of Windham, New Hampshire.

Before the Planning Board exercises its powers under RSA 674:35, the Planning Board shall adopt subdivision regulations according to the procedures required by RSA 675:6.

202. VALIDITY: If any section, clause, provision, portion, or phrase of these regulations shall be held to be invalid or unconstitutional by any court or competent authority, such holding shall not affect, impair, or invalidate any other section, clause, provision, portion or phrase of these regulations.

203. CONFLICTING PROVISIONS: Whenever the regulations made under the authority hereof differ from those prescribed by any statute, ordinance, or other regulation, that provision which imposes the greater restriction or the higher standard shall govern.

204. NO SUBDIVISION WITHOUT APPROVAL: No applicant shall make a subdivision within the meaning that the Subdivision Control Regulations, of any land within the Town of Windham or proceed with the improvement or sale of lots in a subdivision or the construction of streets, and ways, or the installation of utility service therein, unless and until a Final Plan of such a subdivision has been properly submitted to and approved by the Planning Board. The exception to this are subdivisions involving commercial condominiums which may be done

administratively by staff as detailed in Section 405.1, provided no Site Plan or Change of Use is required.

205. WAIVERS: The requirements of the Subdivision Regulations may be waived or modified by the Planning Board when, in the opinion of the Board, (1) strict conformity would pose an unnecessary hardship to an applicant, and waiver would not be contrary to the spirit and intent of the regulations, or (2) specific circumstances relative to the subdivision or the conditions of the land in such subdivision, indicate that the waiver will properly carry out the spirit and intent of the regulations. The justification for such waivers shall be stated and noted in the minutes.

205.1 Requests for waivers shall be submitted in writing as a separate document, specifying the Section number and the text of the Section, with rationale justifying the request, and shall be included with the application submission.

205.2 The Planning Board may permit waiver requests to be submitted in writing during the Final Approval process, at their discretion.

205.3 The Board shall vote to grant or deny the applicant's request for a waiver from a specific section of the Subdivision Regulations which vote may occur at any point during the Final application process.

SECTION 300: DEFINITIONS

As used in these regulations, the word "person" includes corporation, incorporated association, or partnership, as well as an individual. The word "may" is permissive; the words "shall" and "will" are mandatory, subject to the provisions hereof. As used in these regulations, the following terms and/or phrases shall be defined as follows:

ABUTTER: As defined in NH RSA 672:3

APPLICANT: The owner or his agent or representative, or his assigns.

BLOCK: An area enclosed by streets.

BOARD: The Planning Board of the Town of Windham.

BOARD'S AGENT: The Town Engineer, Community Planner, or other designee of the Planning Board.

BUFFER ZONES: Land set aside to provide an adequate transitional area between abutting land uses. Whenever possible the natural vegetation shall be retained and no construction, with the exception of primary access roads shall be permitted in the buffer.

BUILDING LOT: A measured parcel of land having fixed boundaries and conforming to Town Zoning and Subdivision Regulations.

CONDITIONAL APPROVAL: Approval of a Plan subject to certain conditions. The Conditional Approval shall become final approval without further public hearing when the conditions are met; provided the conditions do not require judgment by the Planning Board.

CONDITIONS PRECEDENT: Must be fulfilled before approval is final.

CONDITIONS SUBSEQUENT: Deal with issues in effect after development has occurred such as hours of operation, control of traffic, noise levels, and emissions.

CONSERVATION LAND: Land deemed as conservation land may include; aquifers and aquifer recharge areas, forested watersheds, passive recreation lands, areas of special scenic

beauty, plant and wildlife habitats, prime farm lands, undeveloped shoreline, wetlands, flood storage areas, and other important natural resource lands.

CUL-DE-SAC: A ~~secondary dead end~~ street ~~intersecting~~that is designed to connect with another street at only one end ~~and terminated at the other end by a vehicular turnaround.~~ . Includes closed loop roads.

DOUBLE FRONTAGE LOT: A lot having street frontage on two opposite sides of the parcel which frontage are within 30 degrees of being parallel to each other.

ENGINEER: "Engineer" means a person who by reason of his advanced knowledge of mathematics and the physical sciences, acquired by professional education and practical experience, is technically and legally qualified to practice professional engineering, and who is licensed by the New Hampshire Joint Board of Engineers, Architects, Land Surveyors and Natural Scientists.

FINAL PLAN: A Plan that is submitted for a public hearing.

LAND SURVEYOR: "Land Surveyor" means a professional specialist in the technique of measuring land, educated in the basic principles of mathematics, the related physical and applied sciences, and the relevant requirements of law for adequate evidence all requisite to the surveying of realty property and engaged in the practice of land surveying, and is licensed by the New Hampshire Joint Board of Engineers, Architects, Land Surveyors, and Natural Scientists.

LOT: A measured parcel of land having fixed boundaries.

MAJOR SUBDIVISION: A Subdivision creating four (4) or more lots and or a subdivision which results in the construction, widening, or extension of any new roads.
MASTER PLAN: Overall guide for the development of the Town of Windham as adopted by the Windham Planning Board as required by RSA 674:1.

MINOR SUBDIVISION: A Lot Line Adjustment or a Subdivision creating three (3) or fewer lots along an existing road, or Condominium Conversion, that does not result in the construction, widening, or extension of any new roads.

MONUMENT: Granite bounds meeting Town specifications.

N.O.I. E.P.A.: Notice of Intent Environmental Protection Agency

N.O.T. E.P.A.: Notice of Termination Environmental Protection Agency

OPEN SPACE: Land that is not currently developed for residential tract development which is to be maintained in an open, non-built condition, and shall be protected by covenants recorded with the plans and deed restrictions.

PERMANENT CUL-DE-SAC: A cul-de-sac where there will be no planned continuation of the road or street.

PLAN: A plan for the subdivision of a parcel of land.

RECORDING FEES: The cost of recording plans in the Rockingham County Registry of Deeds.

RECREATIONAL LOTS: Land which has been deeded or conveyed to the Town and restricted to recreational uses such as parks, swimming pools, tennis courts, playgrounds, playing fields, nature trails, or like use.

RIGHT-OF-WAY: All present and proposed town, state, and federal highways and the land on either side of same as covered by the statutes to determine the widths of rights-of-way.

ROADWAY: That portion of a way which is designated and prepared for vehicular travel.

SPECIAL FLOOD HAZARD AREA (SFHA): A high-risk area as defined by the Federal Emergency Management Agency (FEMA) as any land that would be inundated by a flood having a 1-percent chance of occurring in any given year (also referred to as the base flood).

STREET " Pursuant to RSA 672:13, the word "Street" shall mean, relate to and include street, avenue, boulevard, road, lane, alley, viaduct, highway, freeway and other ways. For the purposes of these Regulations, all Streets shall be more specifically classified as follows:

RESIDENTIAL -1: A low volume residential street which accommodates an average daily traffic volume (ADT) of not more than 400 vehicles per day (VPD);
RESIDENTIAL – 2: A residential street which accommodates an ADT of 401 to 1,000 VPD;
NON-RESIDENTIAL: A street whose primary function is to provide frontage and local access to non-residential properties in a business or industrial park subdivision;
COLLECTOR: A street which accommodates an ADT of 1,001 to 5,000 VPD; and
ARTERIAL: A street which accommodates an ADT of more than 5,000 VPD.

SUBDIVISION: "Subdivision means the division of the lot, tract, or parcel of land into two

(2) or more lots, plats, sites, or other division of land for the purpose, whether immediate or future, of sale, rent, lease, condominium conveyance, or building development. It includes re-subdivision and, when appropriate to the context, relates to the process of subdividing or to the land or territory subdivided. The division of land held in common and subsequently divided into parts among several owners shall be deemed a subdivision under this title.

S.W.P.P.P.: Storm Water Pollution Prevention Plan

TEMPORARY CUL-DE-SAC: A cul-de-sac where there is a planned continuation of the road or street

TOWN ENGINEER: Person employed in such position by the Town, or a person designated by the Board to perform inspections and give approvals.

WETLAND AND WATERSHED PROTECTION DISTRICT (W.W.P.D.): Land areas designated as a W.W.P.D. shall include all areas in Section 601.4 (Zoning Ordinance) and include wetlands one (1) acre in size or larger, as well as brooks, streams and ponds. For wetlands less than one (1) acre in size, Section 601.4.3 and Section 601.4.7 of the Zoning Ordinance shall apply.

CODE ADMINISTRATOR: Official responsible for enforcement functions associated with zoning, subdivision, and site plan regulations, as well as pertinent State and Federal laws and regulations.

SECTION 400: PROCEDURE

401. PLANS NOT REQUIRING APPROVAL

Any person may record a Plan located in the Town of Windham provided no new lines or streets

are created, and which meet all of the requirements of NH RSA 676:18. Prior to recording the plan in the Registry of Deeds, the surveyor shall file, for information purposes only, a copy of the survey with the Community Development Department.

402. CONCEPTUAL APPLICATION PROCEDURE

402.1 Previous to filing an application for a Final Plan, the applicant may submit to the Planning Board conceptual plans and data as specified herein. This step does not require formal application or filing of the final plan with the Planning Board.

402.2 General subdivision information shall describe or outline the existing conditions of the site and proposed development. This information may include data on existing covenants and utilities; and information describing the subdivision proposal, such as number of lots, typical lot width and depth, business areas, playgrounds, park area, and other public areas, proposed utilities and street improvements.

402.3 Location Map shall show the relationship of the proposed subdivision to existing community facilities, which serve or influence it. Include development name and location, main roads, scale, north arrow, and date.

402.4 Sketch Plan of the topography shall show in simple sketch form the proposed layout of streets, lots, and other features in relation to existing conditions. The sketch plan may be freehand pencil sketch made directly on a print of the topographic survey.

402.5 During Conceptual Review, statements made by the Planning Board members shall not be the basis for disqualifying said members or invalidating any action taken. The time limits for acting on a plan shall not apply until a Final application is submitted and accepted by the Planning Board.

403 DESIGN REVIEW APPLICATION PROCEDURES

403.1 Prior to filing an application for a Major Final Subdivision Plan, the applicant shall submit to the Planning Board a Design Review Application and data as specified herein. Applicants filing an application for a Minor Final Subdivision may submit a Design Review Application; however they are not required to do so.

403.2 The Board may engage in non-binding discussions with the applicant, which are beyond general conceptual discussions that may involve more specific design and engineering details than is proved for in Sections 402 above.

403.3 The applicant shall submit the following material in accordance with the posted Planning Board submission schedule for the meeting at which the applicant is requesting to be heard:

- **403.3.1** Completed Design Review Subdivision Application form.
- **403.3.2** Letter of intent detailing the proposal including a brief description of the land characteristics and a summary of the major development constraints and opportunities along with a brief description of the proposed development.
- **403.3.3** Applicable fees, in accordance with the adopted fee schedule.
- **403.3.4** List of any potential waiver requests that will be submitted with the Subdivision Application.

403.3.5 Required number of copies of the Subdivision Plan as stated in the Application form and a PDF of the Subdivision Plan.

403.3.6 One list of abutters, as defined in RSA 672:3, including the abutters' addresses, as shown not more than five days before the day of filing and 2 sets of mailing labels for the certified mailings to notify abutters.

403.3.7 Existing Conditions plan that clearly illustrates the location of wetlands, and Wetland and Watershed Protection Districts; Zoning District lines including but not limited to the Aquifer Protection District, Cobbetts Pond and Canobie Lake Watershed Protection District and Flood Plain District; site topography (2 foot contours); stonewalls, historic and archeological features; major bodies of water and other ecological features; existing easements, rights-of-way, roads, and trails; and High Intensity Soil Surveys (HISS soil types). This plan shall be stamped by a licensed engineer, land surveyor, NH certified soil scientist and wetlands scientist, as applicable.

403.3.8 Proposed Conditions Plan that clearly shows the proposed development of the site, including roads, buildings, buffers/landscape areas, limits of tree clearing, easements, trails, open space/undeveloped areas, and stormwater infrastructure.

403.4 Design Review phase may proceed only after notification to abutters and the general public has been made.

403.5. During Design Review, statements made by the Planning Board members shall not be the basis for disqualifying said members or invalidating any action taken. The time limits for acting on a plan shall not apply until a Final application is submitted and accepted by the Planning Board.

403.6 Once the Planning Board is satisfied with the Design Review Phase, the Board shall vote to formally end the review process. After satisfying design review, the Applicant will have 12-months within which to submit the Final Plan application, or an applicant will need to submit a new Design Review Application if otherwise required to do so.

404. PROCEDURE FOR FILING OF FINAL PLAN APPLICATION

404.1 Applications shall be submitted in accordance with the posted Planning Board submission scheduled, including the fee schedule adopted by the Board of Selectmen, and the appropriate number of copies of material as requested by the Community Development Department staff.

404.2 The Planning Board shall begin formal consideration of the application within thirty (30) days after formal submission of the completed application.

04.3 An application shall be determined to be complete when all items listed below have been provided and staff has determined that the application meets all Zoning Ordinance requirements:

404.3.1 Letter of intent detailing the proposal

404.3.2 Two (2) large copies of the Subdivision Plans Set, sized 22" X 34" and four (4) copies, sized 11" X 17 " of the Subdivision Plans Set.

404.3.3 The Final Plan must include all of the required information detailed in Section 600 of the Subdivision Regulations. Once the plan is reviewed and edits are made more copies will be requested for the Planning Board. The exception to this is the Final Plan for Condominium Conversions which shall include the items indicated in Section 405.1.

404. 3.4 Names and addresses of all abutters, as indicated on town records, as shown not more than five (5) days before the day of filing, and two (2) sets of mailing labels for certified mailings to notify the abutters

404.3.5 Other studies may be necessary for submission when required by the Planning Board. This includes two (2) copies of traffic, drainage, and other studies.

404.3.6 A written Waiver request if a waiver from the Subdivision Regulations is necessary, per Section 205 of the Subdivision Regulations.

404.4 A completed application sufficient to invoke jurisdiction of the Board shall be accepted by the Board only at a public meeting, with notice as provided in RSA 676:4(I)(d)

404.4.1 Within sixty-five (65) days of the formal acceptance of the complete application, the Board shall vote to approve, approve with conditions, or disapprove the proposed Subdivision plan per RSA 676:4(I)(c)(1) unless waived or extended as provided by law.

404.4.2 If the Board determines that the application is not complete, it will not be accepted and no public hearing will be held. The applicant shall be notified of the determination in accordance with State law.

404.5 Reasonable fees, in addition to the fees required in Section 404.1, may be imposed by the Board to cover the costs of special investigative studies, review of documents, and other materials which may be required by particular applications.

404.6 The Applicant and Planning Board shall receive a report from the ~~Town Engineer~~Town's engineer and/or Community Development Department Staff as to the conformity of the plan to the *Subdivision Regulations* and *Zoning Ordinance and Land Use Regulations* of the Town of Windham.

404.7 The Planning Board shall receive comments and/or reports from town departments, boards, commissions, committees, and town personnel through the established Technical Review Committee (TRC) process, which is managed by Community Development Department Staff.

404.8 The applicant is encouraged to make amendments to the subdivision plans per the TRC recommendations, and any consultant reviewing party comments prior to submittal of the Final Plans for Planning Board Review.

404.9 No plan shall be acted upon by the Planning Board without affording a public hearing thereon. Notice to the applicant and abutters, and engineer, architect, land surveyor or soil scientist whose professional seal appears on any submitted plan shall be

given by certified mail, of the date, time, and place at which the Board shall conduct a public hearing on the application. Notice shall be mailed at least ten (10) days prior to the hearing. Notice to the general public shall be given at the same time by posting and publication. Additional notice shall not be required of a continued session of a hearing with proper notice, if the date, time, and place of the continued session was made known at the time of the hearing.

SECTION 405: Condominium Conversion: Conversion of existing residential duplex, residential multifamily, or multi-unit commercial structures to a condominium form of ownership is considered to be a minor subdivision for the purposes of this ordinance.

405.1 Applications for Condominium Subdivisions must include a plot plan depicting the condominium unit boundary lines and any common areas for review and approval by the Planning Board. The Plot Plan shall also include the following:

405.1.1 Title Block, as described in Section 601.3 Final Plan Requirements
405.1.2 Signatures of Property Owners
405.1.3 Abutting Features, as outlined in Section 601.5 Final Plan Requirements
405.1.4 Locus Map depicting where the proposed subdivision is within the town; include Scale and North Arrow.
405.1.5 The Zoning District of Subject parcel
405.1.6 Deed Reference
405.1.7 North Arrow
405.1.8 Scale, drawn as to appropriately display the subdivision and found to be acceptable to the Planning Board.
405.1.9 Each condominium unit will be assigned a map, block, and lot number by the Assessor.

405.2 Subdivision of Commercial Condominiums may be authorized by staff as long as all Site Plan, Subdivision, and Zoning Regulations are satisfied providing that:

a. No amendments are proposed to the existing Site Plan
b. No new parcels are created
c. No new roads or other infrastructure is proposed
d. No change of use

SECTION 500: GENERAL PROVISIONS

501. SUBDIVISION PLANS TO BE APPROVED BY THE PLANNING BOARD

No plan of a subdivision of land within the municipal boundaries which would constitute a subdivision, as herein defined, shall hereafter be filed or recorded in the Registry of Deeds until a final plan thereof shall have been approved by the Planning Board in accordance with the requirements, design standards, and construction specifications set forth elsewhere in these regulations, nor until such approval shall have been entered on such final plan by the Planning Board.

502. APPLICATION FOR SUBDIVISION APPROVAL

As to any subdivision of land within the municipal boundaries, which would constitute a

subdivision as above defined, there shall be submitted to the board by the applicant, a completed application for Final Plan approval, to be made on a form provided by the Community Development Department, accompanied by all appropriate fees.

503. NO WORK WITHIN SUBDIVISION WITHOUT FINAL APPROVAL

No utility installations, grading or construction of roads, grading of land or lots, placement of artificial fill, nor doing any other act or acts which will alter the natural state of the land or environment, and no construction of buildings shall be done on any part of the land or lots within a subdivision, until a final plan of such subdivision shall have been approved by the Planning Board as provided in these regulations, nor until such appropriate permits and approvals as may be required by these regulations, other Town ordinances, and State agencies having jurisdiction shall have been duly issued.

504. SPECIAL FLOOD HAZARD AREAS

504.1 All subdivision proposals and proposals for other developments governed by these regulations having lands identified as Special Flood Hazard Areas in the "Flood Insurance Study for the County of Rockingham, NH" together with the associated Flood Insurance Rate Maps of the Town of Windham shall meet the following requirements:

504.1.1 The subdivision, including utilities and drainage shall be designed to be consistent with the need to minimize flood damage and provide adequate drainage.

504.1.2 Subdivisions or other proposed development shall include base flood elevation data.

504.2 Elevating a structure on posts or pilings does not remove a structure from the Special Flood Hazard Area. If the ground around the supporting post or pilings is within the floodplain, the structure is still at risk. The structure is considered to be within the floodplain, and flood insurance will be required as a condition of receipt of federal or federally regulated financing for the structure.

505. CONFORMITY WITH THE WINDHAM MASTER PLAN

Subdivision plans shall conform to the substance and intent of the Master Plan and the Zoning Ordinance.

506. OFF-SITE IMPROVEMENTS.

506.1 Improvements: If it is determined by the Planning Board that the proposed subdivision is scattered or premature, the subdivision may be disapproved or special improvements, on or off site, may be required to address any items of concern. Changes to the plan may be required to mitigate those impacts that caused the subdivision to be declared scattered or premature. The Planning Board may require the applicant to make said improvements prior to, or as a condition of, approval of the subdivision.

506.2 Scattered or premature subdivision of land would involve danger or injury to health, safety, or prosperity by reason of the lack of water supply, drainage, transportation, schools,

fire protection, or other public services, or necessitate the excessive expenditure of public funds for the supply of such services.

506.3 Upon determination, by the Planning Board, of excessive impact on a town road caused by a subdivision, the applicant shall be required to perform upgrades to the road impacted by the subdivision. Upgrades will be determined by the Town Engineer and approved by the Planning Board

SECTION 600: REQUIREMENTS FOR LAYOUT OF FINAL PLAN

Final Plans, applications, and all supporting data shall be submitted in *paper,* and *CD format* as a PDF file.

601. INFORMATION REQUIRED FOR SUBMISSION OF FINAL PLAN

All of the following information must appear on the Plan and/or be submitted with it before the Planning Board can give full consideration to the plan. The exception to this is a Condominium Conversion, for which the Final Plan shall only include the items detailed in Section 405.1.

601.1 Each corresponding sheet of the plan must include the name, original signature, and seal of registered land surveyor certifying to the accuracy of the survey and the plan; and name and seal of the Soil Scientist certifying the accuracy of the Soil Map; and, if applicable, the name and seal of a registered professional engineer to certify the accuracy of road design features, structural and drainage calculations, and drainage system design;

601.2 Professional Studies/Reports Required:

601.2.1 Intensive Soils Map including soil types and requirements based on soil types subject to review by a Soil Scientist approved by the Planning Board, with costs to be paid by the applicant.

601.2.2 Location of **percolation tests** made by a competent surveyor or engineer as required by the Board of Health. Results shall be submitted in a report.

601.2.3 A **Stormwater Drainage Report**, together with corresponding Drainage Area Plans and Hydrologic Soil Group Plans, prepared in accordance with the requirements of Section 610.1 of these Regulations, shall be submitted together with any application for subdivision approval under these Regulations involving the construction of new streets.

601.2.4 Roadway Design Plan and Profile Sheets, in conformance with Section 601.40, for those subdivisions involving the constructions of new streets.

601.2.5 Other Studies as the Planning Board may require if the Board finds them necessary for the appropriate review of the Subdivision. These include but are not limited to traffic studies, geohydrologic studies, soil and erosion control studies, etc.

601.2.6 All Studies and Reports shall include the relevant name, original signature, and seal of licensed professional certified to create or oversee the creation of the related study or report.

601.3 Title and Approval Block on each plan page**,** Identifying:

601.3.1 Name of proposed subdivision;

601.3.2 Street address(es) of existing lots within proposed subdivision;

601.3.3 Map block and lot number(s) of existing parcels within proposed subdivision

601.3.4 Roadway stationing for the segment of street depicted on each sheet;

601.3.5 Name and address of owner of record, with signature block, original signature, and Date

601.3.6 Name, address, and phone number of consultant, developer, and/or designer as applies;

601.3.7 Signature block for Planning Board Chairman, with date
601.3.8 Date of plan preparation & each subsequent revision;

601.3.9 The title block of each plan sheet must include the names, original signatures, and seals of the registered land surveyor certifying to the accuracy of the survey and the plan; the licensed Soil Scientist certifying the accuracy of the Soil Map; certified wetland scientist certifying the boundary of any wetlands and WWPD; and if applicable, the name, original signature, and seal of a registered professional engineer to certify the accuracy of road design features, structural and drainage calculations, and drainage system design;

601.4 Locus Map depicting where the proposed subdivision is within the town; include North Arrow

601.5 Abutting Features:

601.5.2 Names and mailing addresses of owners of record of abutting properties as shown in the Town records not more than five (5) days before the day of filing of the application must be shown on the Title Page of the proposed subdivision;

601.5.3 Abutting subdivision names and zoning districts;

601.5.4 Streets, includes public & private streets, dedicated right-of-ways, paper streets and discontinued roads

601.5.5 Easements

601.5.6 Building footprint(s);

601.5.7 Parks, conservation lands, open spaces and similar facts regarding abutting property.

601.5.8 Well locations on abutting parcels within 50’ of the subject parcel line.

601.6 Tract Boundary Line(s), of subject property and abutting properties, including accurate dimensions to the nearest .01 foot together with a bearing to the nearest minute for each line and radii, arc lengths, and central angles for each curve.

601.7 The total area of each existing and proposed lot (in acres & in square feet) shall be noted.

601.8 The Zoning District(s) of subject parcel(s)

601.9 Deed reference.

601.10 A recitation of all reference plans relied upon in preparation of the plat;
601.11 North Arrow, depicted on all sheets with a map.

601.12 Bar Scale (all plans shall be drawn at a scale of 1” = 40’ Horiz/1” = 4’ Vert., or 1” = 50’ Horiz./1”= 5’ Vert.); or other scale that more appropriately displays the subdivision if found to be acceptable by the Planning Board.

601.13 The 100-year Flood Plain Line must be shown on the plan or if subject parcel is not within 100-year Flood Plain, note this.

601.14 The edge of the Wetlands must be shown on the plan.

601.15 Purpose for which sites other than building lots are to be used.

601.16 Location and description of existing and proposed monuments.

601.17 A lot number to identify each lot to be assigned by the Town. The house numbers shall also be shown.

601.18 At least one benchmark shall be shown on all plans except for plans for filing at the Rockingham Registry of Deeds.

601.19 Existing tree lines & stonewalls

601.20 Any features listed on either the Historic Resource List or Cultural Resource List.

601.21 Ledge outcroppings & other significant natural site features.

601.22 Statement on the plan of how wood and stump waste from the site will be managed

601.23 Topographic plan showing contours at two-foot intervals.

601.24 Location of existing and proposed easements, buildings, water courses, ponds, marshes, vernal pools, or standing water.

601.25 A drainage plan showing location of all existing and proposed drainage structures, including water mains, sewers, pipes, culverts, and drains, and proposed connections or alternative means of providing water supply and disposal of sewage or surface drainage.

601.26 The Plan must depict a minimum of a 30,000 sq. ft. contiguous area for each residential building lot and 10,000 sq. ft. building area, as required by Appendix A-1 of the *Zoning Ordinance and Land Use Regulations*, not to include wetlands, Wetland and Watershed Protection District, vernal pools, and drainage easements.

601.27 The plan must depict the potential location of a septic system, well and associated protective well radii.

601.28 All right-of-way lines of proposed streets, easements (drainage, slopes, telephone, electric and television cables), and rights-of-way showing widths, purpose for which reserved, or name if it is a street. If the width of a right-of-way varies, depict the widths at the narrowest and widest points.

601.29 Location, name and widths of existing and proposed streets and highways, drainage courses showing their grades, profiles, section and elevations at 50 foot intervals overlaid on a topographic plan showing contours at two-foot intervals.

601.30 Where the topography is such as to make difficult the inclusion of any facilities mentioned above, within the public area so laid out, the plan shall show permanent easements over private property, not less than thirty (30) feet in width, and shall have access to existing public ways.

601.31 Location of all parcels of land proposed to be dedicated to public use and to the conditions of such dedication, and a copy of such deed restrictions as are intended to cover part or the entire tract.

601.32 Designs of any bridges, culverts or walls which may be required with elevations, grades, and size.

601.33 Designs for sanitary sewers, if required.

601.34 Where the plan covers only a part of the tract, a sketch of the future street layout of the unsubmitted part shall be furnished, and the street system of the submitted part will be considered in light of connections with the proposed roads in the unsubmitted part.

601.35 Location of highway bounds, as approved by the Town, State, or Federal Agency.

601.36 Add the following Note to the Plan: Building permits for new construction will not be issued until the requirements for emergency water supply have been met per NFPA 1, as amended, and NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting. These requirements will be implemented by the Town of Windham Fire Chief or his designee.

601.37 Wetland Watershed Protection District Requirements

If any part of the proposed subdivision falls within the WWPD, the provisions of Section 601 of the *Zoning Ordinance and Land Use Regulations* shall apply.

601.37.1 Statement, AS FOLLOWS, must be entered on the plan: "NOTE: No structure may be erected nor shall any alteration of the surface configuration of the land be permitted in the Wetland and Watershed Protection District"

601.37.2 The Wetland and Watershed Protection District line must be shown on the Plan, and include a notation of when the WWPD was delineated, sealed and signed by a Certified Wetland Scientist.

601.37.3 Where a subdivision is proposed within the WWPD, the WWPD shall be marked as detailed in Section 601.39 in order to prevent encroachment.

601.37.4 Where any activity requiring Planning Board approval is proposed within the WWPD, the plan shall also indicate: the location and limits of the proposed activity; the construction techniques and sequence to be used in constructing the proposed improvements; and the protective measures to be employed to minimize disturbance and/or degradation of the WWPD.

601.37.5 Where any activity requiring Planning Board approval is proposed within the WWPD, the applicant shall also submit evidence that: the WWPD disturbance is the minimum necessary to affect the proposed improvements; the proposed activity will not contribute to the degradation of surface or groundwater quality; the proposed activity is appropriate and safe to locate in the WWPD; and, the proposal is consistent with the intent and purpose of Section 601 of the Windham Zoning Ordinance. At a minimum, the Applicant shall submit:

601.37.5 (a) Plans showing profiles, cross-sections, and elevations, at 50-foot maximum intervals for any proposed streets, drives, access ways, or other disturbance of the WWPD:

601.37.5 (b) Two (2) sets of color photographs (of minimum 4" x 6" size) taken in both directions along the center line of any proposed street or access way at 50-foot maximum intervals corresponding with the intervals delineated on the plans

submitted in accordance with 601.37.5.(a).

601.38 Vernal Pool Requirements

If any part of the proposed subdivision falls within a vernal pool or within the designated vernal pool buffer area, the provisions of Section 716.3 of the *Zoning Ordinance and Land Use Regulations* shall apply.

601.38.1 Statement, AS FOLLOWS, must be entered on the plan: "NOTE: No structure may be erected, no vegetation may be cut, nor shall any alteration of the surface configuration of the land be permitted in the vernal pool or designated vernal pool buffer area."

601.38.2 If there are vernal pools on site, they must be marked on the plan as well as a protective buffer of a minimum of 25 feet from the edge of the pool. These areas shall be determined by a certified wetland scientist, who shall sign and stamp the plan.

601.38.3 Where a subdivision is proposed containing a vernal pool on site, the vernal pool buffer shall be marked as detailed in Section 601.39 in order to prevent encroachment.

601.39 WWPD and Vernal Pool Buffer Area Marking Requirements

Where ~~a subdivision is proposed~~any application receiving Planning Board Approval contains property within the Wetland and Watershed Protection District (WWPD~~ or vernal pool/vernal pool buffer area,~~), the WWPD ~~or vernal pool/vernal pool buffer~~ boundaries on such ~~parcel (or such lesser area~~portions of the property as the Planning Board ~~may specify)~~ shall ~~be marked in order~~determine as reasonably necessary to prevent encroachment~~.~~ shall be marked. In determining whether such marking is reasonably necessary, the Planning Board shall consider the following factors:

i. Whether the application requires actual work within the WWPD area.
ii. Whether the application results in new development in close proximity to the WWPD area.
iii. Whether the application results in new lot lines in close proximity to the WWPD.
iv. Any other circumstance where the Planning Board sees just cause for such marking.

601.39.1 WWPD or vernal pool buffer boundary markers should be placed at fifty-foot +/- (50 foot +/-) intervals along the total WWPD or vernal pool buffer boundary following its general contour~~.~~ provided further that at least one such marker must be within the line of sight from the location of the primary structure or proposed primary structure, if an unobstructed line of sight exists or will exist.

601.39.2 Care shall be taken to insure that WWPD and vernal pool buffer boundary markers are placed with the appropriate spacing at points closest to any proposed or existing structure located on the property.

601.39.3 The cost of the purchase of the WWPD or vernal pool buffer boundary markers from the Community Development Department and the placement of them where designated

by a certified wetland scientist, surveyor, or other qualified professional as determined by staff, shall be borne by the applicant /developer or their successors in interest.

601.40 Copies of the completed and submitted non-municipal permit applications including but not limited to State of NH and Federal Agencies. Some permits, including the NH Subdivision Permit, NH DOT Driveway Permit, and DES Dredge and Fill Permit, shall be required prior to plans being signed and recorded and the permit number must be added to the final plan. Final copies of other permits must to be submitted prior to Town's acceptance of road.

601.41 Roadway Design Plan & Profile Sheets (for all applications involving the construction of new streets or significant improvement of existing streets), shall contain the following information and be sealed by a Licensed Professional Engineer:

601.41.1 Limits of existing or proposed right-of-way & corresponding existing and proposed right-of-way monumentation;

601.41.2 Adjoining lot lines with map & lot number of each platted or existing parcel;

601.41.3 Two-foot contour interval topography & defined limits of wetland;

601.41.4 Centerline stationing & horizontal curve geometry;

601.41.5 Existing & proposed limits of pavement and curbing, including design radii of all curves and flares;

601.41.6 The location and design elevations of all existing and proposed driveway aprons;

601.41.7 Two-foot contour interval finish grade contours and finish spot grades, where applicable;

601.41.8 Existing and proposed drainage features, including, but not limited to:

a) Location, diameter, pipe material, design slope, invert elevations & end treatments for all culverts and storm drains;

b) Location (by station & offset), rim & invert elevations of all catch basins, manholes and other proposed drainage structures;

c) Headwalls or flared end sections specified at all culvert and storm drain inlets and outlets;

d) Outlet protection accommodations;

e) Existing & proposed drainage easements;

f) Location & design of stormwater treatment provisions;

g) Location & design of stormwater detention or retention provisions;

h) Underdrain; and

i) The location and type of temporary and permanent erosion & sedimentation control measures.

j) A minimum of one benchmark with elevation per plan sheet;

601.42 Roadway profiles depicting:

a) Stationing;

b) Existing & proposed elevations at 50-foot stations, as well as at all PVI's (Point of Vertical Intersection), PVC's, (Point of Vertical Curve) & PVT's, (Point of Vertical Tangent);

c) Existing & proposed roadway centerline profiles;

d) Vertical curve design data, including station and elevation of all crest and sag points; and

e) Existing & proposed drainage and utility improvements.

601.43 Location, diameter & pipe material of existing & proposed water main and sanitary sewer, if any; Location & type of existing & proposed above and below ground utilities, as available;

601.44 Location (by station & offset) of proposed guardrail and end units;

601.45 A note specifying: "All workmanship and materials incorporated into this work shall conform to applicable requirements of Standard Specifications for Road and Bridge Construction, as published by the New Hampshire Department of Transportation, latest edition; and the Windham Subdivision Regulations";

601.46 Pavement markings and traffic signage per MUTCD (Manual on Uniform Traffic Control Devices); and

601.47 Test pits, in sufficient number and location along the centerline of proposed streets, to identify the depth of bedrock and seasonal high groundwater.

601.48 Roadway Cross-Sections (for all applications involving the design of new or improved streets) at 50-foot intervals, culvert crossings and special points of interest; drawn at a scale of 1" = 5' or 1" = 10' Horiz. & Vert. or other scale that more appropriately displays subdivision if found to be acceptable by the Planning Board.; sealed by a Licensed Professional Engineer and showing:

a) Existing & proposed centerline elevations;

b) Limits of proposed pavement, curbing, crushed gravel, gravel, sand, embankment slopes, right-of-way & easements;

c) Roadway & embankment slopes;

d) Underdrain, drainage & utility improvements; and

e) Guardrail where warranted.

601.49 Construction Detail Drawings, sealed by a Licensed Professional Engineer, for the following elements of construction, as applicable:

a) Typical roadway cross-section(s);

b) Driveway apron construction;

c) Curbing installation;

d) Guardrail & terminal end-unit installation;

e) Underdrain installation;

f) All drainage structures, as applicable (catch basins, drain manholes, outlet structures, etc.);

g) Headwalls;

h) Outlet protection;

i) Treatment swale & stormwater detention/retention basin construction;

j) Utility & drainage trench construction;

k) Erosion & sedimentation control;

l) Fire protection;

m) Utility construction;

n) Traffic control signage and pavement markings;

o) Turf establishment; and

p) Other project specific improvements, if any.

602. DESIGN STANDARDS: STREETS

602.1 General Requirements

602.1.1 Purpose and Intent of Design Standards for Streets

All platted streets shall be of sufficient width and construction and shall be suitably located so as to: conform to applicable provisions of the Master Plan; safely and conveniently accommodate transportation and access needs of the public; and provide reliable access for ~~fire fighting~~firefighting and other essential public and private services.

602.1.2 Arrangement of Streets

The horizontal alignment of streets shall be platted so as to: comprise a convenient transportation system; provide for the continuation of streets to adjoining neighborhoods and collector streets; provide for future right-of-way extensions to undeveloped properties; and to facilitate efficient future extensions of public and private utilities. Streets shall be arranged to provide maximum separation of through and local traffic and to discourage through traffic in residential neighborhoods.

602.1.3 Relationship of Streets to Topography

Streets within any platted subdivision shall be designed to form a logical relationship between the vertical and horizontal alignments of such streets and the topography of adjoining land. Specifically, the horizontal and vertical alignment of platted streets shall: avoid the need for cut and fill depths, which in the opinion of the Planning Board, are unreasonably severe; and shall afford a minimum of one location where safe and convenient driveway access can be achieved along the frontage of each platted lot without need for excessive excavation.

602.1.4 Protection of Residential Properties

In instances where a planned residential subdivision abuts an arterial or collector street, the

Planning Board may limit vehicular access to such street by requiring the platting of double frontage or reverse frontage lots, or by requiring access restrictions for certain lots. Alternately, the Planning Board may require vegetated screens or buffers be maintained or planted in order to both minimize adverse visual and noise impacts and to provide for adequate separation between residential properties and streets having a high through traffic volume.

602.1.5 Dedication of Supplemental Right-of-way

In instances where land, which is the subject of an application for approval under these Regulations, fronts upon an existing Class V public street having a right-of-way width less than that required, based upon the classification of that street, under these Regulations, the applicant shall dedicate supplemental right-of-way if needed to create a continuous public right-of-way having a dimension equal to not less than one-half the full right-of-way width required under these Regulations, as measured from the occupied centerline of such street to the front line of the subject land.

602.1.6 Drainage

All streets must be constructed with closed drainage systems unless otherwise allowed by the Planning Board as detailed in Section 610.

~~**602.1.6**~~ **602.1.7** Street Names

Proposed street names shall neither duplicate nor be phonetically similar to existing or proposed street names within the Town of Windham. Street names shall be subject to review and comment by the Planning Board and approval by the Board of Selectmen. Private driveways shall not be named nor are they permitted to be posted as named.

~~**602.1.7**~~ **602.1.8** Adoption of Reference Specification

All workmanship and materials incorporated into the construction of streets and related improvements shall conform to applicable requirements of Standard Specifications for Road and Bridge Construction, latest edition, as published and amended by the New Hampshire Department of Transportation unless otherwise specified in these Regulations.

602.2 Geometric Design Standards for Streets

602.2.1 Classification of Streets

For the purposes of these Regulations, all streets shall be classified based upon use, as follows:

- Residential – 1: A low volume residential street which accommodates an average daily traffic volume (ADT) of not more than 400 vehicles per day (VPD);
- Residential – 2: A residential street which accommodates an ADT of 401 to 1,000 VPD;
- Non-Residential: A street whose primary function is to provide frontage and local access to non-residential properties in a business or industrial park subdivision;
- Collector: A street which accommodates an ADT of 1,001 to 5,000 VPD; and
- Arterial: A street which accommodates an ADT of more than 5,000 VPD.

602.2.2 Table of Geometric Design Standards for Streets

The Table of Geometric Design Standards for Streets, which is a part of these Regulations, provides design values for common geometric design parameters for streets including, but not limited to: (a) right-of-way and pavement width; (b) vertical alignment; (c) horizontal alignment; and (d) road base material and pavement thickness.

The values presented in this Table shall serve as design criteria for all platted streets classified as Residential -1, Residential – 2, Non-Residential, or Collector.

Design criteria for Arterial Streets shall be derived from A Policy on Geometric Design of Streets and Highways, latest edition, as published by the American Association of State Highway & Transportation Officials (AASHTO).

602.2.3 Typical Cross-Section for Construction of Streets

The Typical Cross-Section for Construction of Streets (Figure 1), which is a part of these Regulations, shall be recognized as the standard typical cross-section for Residential – 1, Residential – 2, Non-Residential and Collector Street construction.

Several minimum dimensions specified on Figure 1 vary with street classification and are therefore specified in the Table of Geometric Design Standards for Streets.

All street construction shall conform to the standards specified on the Typical Cross-Section for Construction of Streets unless otherwise approved by the Planning Board.

As an alternative, the Planning Board may, at its option, permit Residential-1 streets to be constructed in accordance with the Alternative Typical Cross-Section for Construction of Streets (Figure 1-A) provided the Board determines or anticipates:

(a) the average daily traffic volume to be served by the street(s) in question will not exceed 400 vehicles per day;

(b) the construction will satisfy the requirements of Sections 602.1.1 through 602.1.3 of these Regulations; and

(c) construction in accordance with Figure 1-A will better facilitate the installation of stormwater management improvements required in order to satisfy the provisions of Section 610.2 of these Regulations.

602.2.4 Design Requirements for Cul-De-Sac Streets

All permanent dead-end streets shall terminate in a cul-de-sac designed, laid-out and constructed in accordance with the Typical Permanent Cul-De-Sac detail (Figure 2) contained within these Regulations.

The maximum length of any cul-de-sac street, as measured from the occupied centerline of the existing or proposed street to be intersected by said cul-de-sac street to the radius point of the cul-de-sac, shall not generally exceed 1,200-feet; however, the Planning Board may permit the construction of cul-de-sac streets with lengths of up to 2,400-feet provided ~~the~~:

i. The road is classified as a Residential 1 or a Residential 2 road, and:

ii. The road design meets all slope, sight distance and curve design standards, and;

iii. There is an imminent planned connection to an existing or planned road; or there is clear potential for future access to undeveloped land or a road network. In either case, a designated ROW shall be provided.

iv. The applicant is able to demonstrate to the satisfaction of the Board that ~~such action is otherwise~~the extended cul de sac length is consistent with the requirements of Sections 602.1.1 and 602.1.2 of these Regulations.

v. At no point shall the distance from the centerline of the existing street to the most distant point of the proposed road be greater than 1200' or 2400' as determined by the above.

All temporary cul-de-sacs shall be planned, designed and constructed to the same standards as permanent cul-de-sacs unless the Planning Board determines that a subsequent extension of the street in question is imminent. In such instances, the Planning Board may permit the construction of a temporary "hammerhead" style turn-around having dimensions acceptable to the Board.

602.2.5 Design Requirements for Intersections of Streets

All intersections of streets shall be designed and constructed in accordance with the following standards:

602.2.5.1 Not more than two streets shall intersect with a third street at a single point; and those two streets must align such that their respective centerlines intersect with the centerline of the third street at a single point.

602.2.5.2 Successive intersections on the same side of a single street by two or more subsequent streets shall be separated by a minimum horizontal distance of 750-feet, as measured along the centerline of the intersected street, in order to satisfy the minimum block length requirements of Section 604.2 of these Regulations. Successive intersections on opposite sides of a single street by two or more subsequent streets shall be separated by a minimum horizontal distance of 125-feet, as measured along the centerline of the intersected street.

602.2.5.3 The vertical alignment of any street intersecting with a through street at a stop condition shall be such that: (a) the intersecting street slopes away from the through street at a grade of not less than 2-percent and not more than 3-percent for a distance of not less than 50-feet, as measured along the centerline of the intersecting street from the edge of travelled way of the through street; and (b) the maximum grade of the intersecting street does not exceed 3-percent for a distance of 100-feet, as measured along the centerline of the intersecting street, from the edge of travelled way of the through street.

602.2.5.4 Right-of-way lines of intersecting streets shall be joined by curves having a minimum radius of 25-feet. The edges of pavement of intersecting streets shall be joined by curves having a minimum radius of 30-feet unless a larger radius is warranted in order to accommodate vehicular turning movements without encroaching upon an opposing lane of traffic.

602.2.5.5 A minimum of 335-feet of all-season safe sight distance shall be provided at all intersections of Residential – 1, Residential – 2 and Non-Residential Streets. A

minimum of 400-feet of all-season safe sight distance shall be provided at an intersection involving one or more Collector or Arterial Streets.

602.2.5.6 No plantings or foliage, to include (but not limited to) trees, shrubs, bushes, and ornamental grasses shall be placed within 10' of the established curb or street line.

~~602.2.5.6~~602.2.5.7 Signage and pavement markings conforming to recommendations offered in the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD), as well as street name signs conforming to local design standards, shall be furnished and installed at all intersections of streets.

~~602.2.5.7~~602.2.5.8 For reasons of proper night-time intersection recognition and public safety, the Planning Board may require the installation of street lamps at any proposed intersection of streets.

602.2.6 Design Standards Governing the Horizontal and Vertical Alignments of Streets

602.2.6.1 Taken together, the horizontal and vertical alignments of Residential – 1, Residential – 2 and Non-Residential Streets shall permit maintenance of not less than 200-feet of stopping sight distance.

602.2.6.2 Taken together, the horizontal and vertical alignments of a Collector Street shall permit maintenance of not less than 305-feet of stopping sight distance.

602.2.6.3 All changes in the vertical alignment of streets in excess of 1-percent shall be connected by a vertical curve of a length sufficient to attain the minimum stopping sight distance value specific in Section 602.2.6.1 or Section 602.2.6.2 of these Regulations, as applicable.

602.3 Driveway Design and Construction Standards

602.3.1 Prior to subdivision approval, the applicant shall demonstrate that each platted lot will enjoy at least one location along its frontage where a driveway for access to that lot can be safely accommodated. In order to satisfy this requirement, the plans shall:

(a) specify the location, dimensions and design elevations for driveway apron construction on each lot;
(b) demonstrate that a minimum of 200-feet of all-season safe intersection sight distance will be available at each proposed driveway if intersecting with a Residential – 1, Residential – 2, or Non-Residential Street; and 400-feet if intersecting with a Collector or Arterial Street within the Town of Windham's jurisdiction; and
(c) demonstrate such driveway construction can occur without interfering with utility installations and/or storm water management improvements.

602.3.2 All residential driveways shall intersect with streets at a driveway apron constructed to the following standards:

(a) all residential driveway aprons shall be paved to a minimum width of 12-feet and a maximum width of 20-feet between the edge of travelled way and limit of right-of-way;
(b) the minimum thickness and quality of materials used in driveway apron base construction and paving within the limits of the street right-of-way (gravel, crushed gravel and pavement), shall be equal to applicable design values for the classification of the street to which a specific driveway apron intersects (see Table of Geometric Roadway Design Standards for Streets);
(c) driveway aprons shall be graded so as to slope upwards from the edge of travelled way of the intersected street at a rate equal to ½-inch per foot for a distance of not less than 7-feet. At this point, the slope of the driveway surface may change, provided the algebraic difference in slope does not exceed 10-percent.

602.4 Street Right-of-Way Monumentation Standards

Final subdivision plans shall specify granite boundary monuments, measuring not less than 4-inches by 4-inches by 36-inches, shall be installed at all points defining the limits of street right-of-way by or under the supervision of a Licensed Land Surveyor.

602.5 Streetscape Design Standards

602.5.1 Street Tree Installation Requirements: At locations where subdivision streets are to pass through an open field, or at locations where existing vegetation must be removed in order to complete construction, salt tolerant deciduous street trees, having a minimum caliper diameter of 2 ½-inches at the time of planting, shall be installed along both sides of streets at intervals of not more than 100-feet. All street trees shall be planted at the outer limit of the street right-of-way.

602.5.2 Retention of Existing Stone Walls: The Planning Board may require an applicant to retain or reconstruct existing stone walls forming the limits of existing public right-of-way along the frontage of a subdivision; and further, may require, as a condition of final subdivision approval, that any rock from existing stone walls, both interior and exterior to the subdivision, which must be removed or otherwise disturbed in order to accommodate street or other infrastructure construction, be salvaged and used in the construction of streetscapes and amenities within the subdivision.

602.5.3 Avoidance of Right-of-Way Obstructions: In all instances, street trees, stone walls, lamp posts, transformers and other utility risers, as well as all other planned above-ground utility installations and aesthetic improvements shall be constructed or installed at or adjacent to the limit right-of-way so as not to interfere with routine maintenance of streets or compromise public safety.

603. EASEMENTS

603.1 Easements across lots or centered on rear or side lot lines shall be provided for utilities

where necessary and shall be at least thirty (30) feet wide.

603.2 Where a subdivision is traversed by a water course, drainage way, channel, or stream, there shall be provided a storm water easement or drainage right-of-way substantially with the lines of such water course, and such further width as may be required for proper maintenance and adequate access.

603.3 All trail right-of-ways and pedestrian easements that intersect with a roadway shall be clearly marked by a granite marker no smaller than four (4) inches by four (4) inches and three (3) feet in height above ground level. The granite marker shall be placed at the center of the trail where it intersects the roadway.

604. BLOCKS

604.1 The lengths, widths, and shapes of blocks shall be determined with due regard to:

> **604.1.1** Provision of adequate building sites suitable to the special needs of the type of use contemplated.
>
> **604.1.2** Zoning requirements as to lot sizes and dimensions.
>
> **604.1.3** Needs for convenient access, circulation, control, and safety of street traffic.
>
> **604.1.4** Impact of wetlands and water courses.

604.2 Block lengths should be 1200 feet, or as otherwise approved by the Planning Board. However, in no case shall block length be greater than 2400 feet or less than 750 feet.

605. LOTS

605.1 Lot area and dimensions shall conform to the requirements of the Zoning Ordinance. Lots that abut town lines shall have lot lines substantially the same as town lines and have the required area within the Town of Windham.

605.2 Corner lots for residential use shall have sufficient width to permit appropriate setback from and orientation to both streets.

605.3 The subdividing of the land shall be such as to provide each lot with the required frontage on an accepted Windham Town road. No road shall be accepted by the Town of Windham unless access to said road is from an existing approved paved road in the Town of Windham.

605.4 Double frontage and reverse frontage lots shall be avoided except where essential to provide separation of residential development from traffic arteries or to overcome specific disadvantages of topography and orientation. A planting screen of a minimum of five (5) feet height, and across which there shall be no right of access, shall be provided along the line of lots abutting such a traffic artery, or other disadvantageous use.

605.5 Side lot lines for the first 100 feet shall be at right angles to straight streets or radial to curved streets.

605.6 When subdividing tracts which contain areas that are zoned differently, every attempt should be made to run lot lines along the zoning boundary line.

606. PUBLIC SITES AND OPEN SPACES

606.1 Where a proposed park, playground, school, or other public use shown in the Master Plan is located in whole or in part in a subdivision, the Planning Board may require the dedication or reservation of such area with the subdivision in those cases in which the Planning Board deems such requirements to be reasonable.

606.2 Where deemed essential by the Planning Board, upon consideration of the particular type of development proposed in the subdivision, and especially in large scale neighborhood unit development not anticipated in the Master Plan, the Board may require the dedication or reservation of such other areas or sites of a character, extent, and location suitable to the needs created by the development for schools, parks, and other neighborhood purposes.

607. EROSION AND SEDIMENTATION CONTROL

607.1 Plans and other information indicating how increased runoff, sedimentation, and erosion shall be controlled during and after construction of required improvements shall be submitted. All Plans should conform to the recommendation of the STORMWATER AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE and to N.P.D.E.S. II.

607.2 Erosion Control Measures

> **607.2.1** The smallest practical area of land shall be disturbed at any one time. Stripping of vegetation, silt removal and regrading shall be accomplished so as to minimize erosion.
>
> **607.2.2** Hay-bale barriers, stump grinding barriers and sediment traps shall be installed as required. Barriers, grindings and traps are to be maintained and cleaned until all slopes have a healthy stand of grass or other approved vegetation.
>
> **607.2.3** Baled hay, mulch, and/or erosion control matting shall be used to stabilize disturbed areas. Baled hay and mulch shall be mowings of acceptable herbaceous growth, free from noxious weeds or woody stems, and shall be dry. No salt hay shall be used.
>
> **607.2.4** Stockpiles of loam shall be protected by siltation fence and temporarily seeded to prevent erosion. These measures shall remain until all material has been placed or disposed off site.
>
> **607.2.5** All disturbed areas shall be loamed and seeded with grass or other approved vegetation. A minimum of six (6) inches of loam shall be installed with not less than one (1) pound of seed per fifty (50) square yards of area.
>
> **607.2.6** After all disturbed areas have been stabilized, the temporary erosion control measures are to be removed. Disturbed areas resulting from removal of the temporary erosion control measures shall be repaired and seeded.
>
> **607.2.7** All slopes not stabilized by grown vegetation by October 31 shall be stabilized by non-vegetative methods.

608. CREATION OF NONBUILDABLE LOTS

608.1 The Planning Board may, if it finds good and sufficient reason, create a lot which would

not otherwise comply with other provisions of these regulations (e.g., lot line configurations, area, soil composition, and frontage). Any lot so created may be done so only for the following listed purposes, and subject to the provisions of this subsection which follow. Unbuildable lots may be created for the purposes of 1: recreation, 2: open space, buffer zone, or 3: conservation land.

608.2 Lots created under this subsection for recreational use shall be approved only after the Board is in receipt of certification by the Recreation Committee that the lot would be appropriate for recreational uses, and that a need exists for such facilities in the adjoining areas, or town-wide. The Board shall condition creation of such lots on the conveyance to the Town of the land, or an easement therein, or the execution of such restrictive covenants as may be necessary to assure that the premises are used for recreational purposes. Subsequent development of said lots for recreational use shall:

608.2.1 require site plan approval by the Board**;**

608.2.2 be limited to improvements incidental to recreational use.

608.3 Lots created under this subsection as open space or buffer zone land shall normally be allowed only to divide or set apart differing land uses. Lots adjoining streams or waterways may also be established for preservations of watershed areas. No development or improvement shall be permitted and the land shall remain undisturbed. The Board shall condition the creation of such lots on the conveyance to the Town of the land, or a conservation easement therein which would prevent use of activity on such land.

608.4 Lots created under this subsection as conservation land shall be approved only after the Board is in receipt from the Conservation Commission that the lot is appropriate for such use, that a need exists for the conservation area, and that the Commission is prepared to assume management or oversight of the area. The Board shall condition the creation of such lots on the conveyance to the Town of the land or an easement therein restricting the use of the lot to conservation uses under the jurisdiction of the Conservation Commission.

608.5 Any lots created under this subsection are to be noted on the final plan as "NOT BUILDABLE" and a note to the plan shall reference the provisions of this subsection of the Subdivision Regulations.

609. Section Intentionally Omitted.

610. DESIGN & CONSTRUCTION STANDARDS FOR DRAINAGE & STORMWATER MANAGEMENT FACILITIES

Closed drainage is the standard roadway drainage requirement. The Planning Board may consider Open Drainage provided the applicant can demonstrate that there are environmental benefits or protections provided by the application of an open drainage system, and:

i. The roadway or roadway section is less than a 4% grade, or;

ii. The roadway or roadway section is 600’ or less in length, including any cul-de-sac or hammerhead.

610.1 Stormwater Drainage Report

A Stormwater Drainage Report, together with corresponding Drainage Area Plans and Hydrologic Soil Group Plans, prepared in accordance with the provisions of Parts Env-Wq 1504.08 through Env-Wq 1504.14 of the New Hampshire Code of Administrative Rules, shall be prepared and sealed by a Licensed Professional Engineer and submitted together with any application for subdivision approval under these Regulations involving the construction of new streets.

In addition to providing calculations for the family of return frequency storm events specified in Part Env-Wq 1504.08(b) of the New Hampshire Code of Administrative Rules, the Stormwater Drainage Report shall also provide pre and post-construction stormwater drainage calculations for the 25-year return frequency storm event, which shall include an evaluation of downstream public and private drainage facilities to the extent necessary to demonstrate that:

(a) such facilities are adequate to accommodate design flow volumes applicable to both the pre and post-development conditions; or

(b) such facilities are inadequate to properly accommodate design flow volumes associated with the pre-development condition.

If it is determined one or more public or private downstream drainage facilities are

inadequate to properly accommodate design flow volumes associated with the pre-development condition, the report shall demonstrate such inadequacies will not be exacerbated upon build out of the proposed subdivision.

610.2 Requirements for Permanent Methods for Protecting Water Quality

In addition to satisfying the requirements of Section 610.1 specified above, prior to final approval of an application for subdivision approval under these Regulations, a Stormwater Drainage Report and corresponding project plans submitted to the Planning Board shall successfully demonstrate that such proposal satisfies requirements established under Parts Env-Wq 1507.03 through 1507.06 of the New Hampshire Code of Administrative Rules related to stormwater treatment, groundwater recharge, channel protection, and control of peak stormwater runoff volumes respectively.

610.3 Design & Construction Standards for Storm Drains & Stormwater Management Facilities

610.3.1 All culverts, storm drains, drainage structures and related improvements furnished and installed shall conform to applicable provisions of Standard Specifications for Road and Bridge Construction, latest edition, as published and amended by the New Hampshire Department of Transportation.

610.3.2 All culverts and storm drains, except driveway culverts, shall have a minimum diameter of 15-inches and be constructed of either reinforced concrete or high density polyethylene pipe. Driveway culverts shall have a minimum diameter of 12-inches and be constructed or either reinforced concrete or high density polyethylene pipe. A minimum of 4-feet of soil cover shall be maintained over all culverts and storm drains situated beneath paved streets. A minimum of 3-feet of soil cover shall be maintained at all other locations. All culverts and storm drains shall be designed to accommodate

tributary flow volumes for the 25-year return frequency storm event. All bridges and culverts over 36-inches in diameter shall be designed to accommodate tributary flow volumes for the 50-year return frequency storm event.

610.3.3 Concrete or mortar rubble masonry headwalls shall be furnished and installed on the inlet ends of all culverts of any diameter and on the discharge ends of all culverts and storm drains 24-inches of more in diameter. Flared end sections may be installed in lieu of headwalls on the discharge end of culverts and storm drains having a diameter of less than 24-inches. Appropriate outlet protection shall be provided at all concentrated stormwater discharge points.

610.3.4 Catch basins shall be positioned and spaced accordingly along the curb lines of proposed streets such that the design flow volume tributary to any given catch basin grate shall not exceed 80-percent of maximum grate capacity during a 25-year return frequency design storm event.

610.3.5 Underdrain, of a type corresponding to specifications contained in these Regulations, shall be installed at all locations where either the seasonal high groundwater elevation or bedrock is found to be located within 4-feet of the finish grade elevation of any roadway surface. To the extent practicable, all underdrain shall either discharge at a catch basin, drain manhole, or headwall.

610.3.6 In instances where the construction of proposed streets, driveways, or other infrastructure improvements necessitate crossing a perennial or intermittent stream, the design and construction of such improvements shall conform to the requirements of CHAPTER Env-Wt 900 of the New Hampshire Code of Administrative Rules entitled Stream Crossings, unless otherwise exempted under the same Rules.

610.3.7 Bottomless box culverts shall be used for wetland crossings. <Consult Steve Keach for wording of this language and for specified minimums>

SECTION 700: PLANS AND DATA FOR FILING

701. SUBMITTAL OF THE FINAL PLAN

701.1 One copy of the Final Plan for recording with the Registry of Deeds, which shall conform to the requirements of the Registry of Deeds, shall be on Mylar with all markings on the material to be permanent ink. One copy of the Final Plan for recording with the Town shall be on Mylar, which shall include the full plan set as approved by the Planning Board, inclusive of the Conditions of Approval, and; three paper copies of this Final Plan, and a PDF, must also be provided.

701.2 The following shall be provided on all mylar copies of the plan: Name, original signature, and seal of registered land surveyor certifying to the accuracy of the survey and the plan; the name, original signature, and seal of a registered professional engineer to certify the accuracy of road design features, structural and drainage calculations, and drainage system design; and name, original signature, seal of the Soil Scientist certifying

the accuracy of the Soil Map, and original signatures and seal all other responsible licensed professionals who oversaw the creation of the plan.

701.3 The size of all plans is limited to 22" x 34", or such specifications and sizes as may be required by the Rockingham County Registry of Deeds in order to insure suitable, permanent records.

702. FAILURE TO TAKE ACTION

702.1 The Planning Board shall begin formal consideration of the application within 30 days after submission of the completed application.

702.2 The Planning Board shall act to approve, conditionally approve, or disapprove as provided in Section 404.1, within sixty-five (65) days after formal acceptance for public hearing, subject to extension.

702.2.1 Upon failure of the Planning Board to approve, conditionally approve, or disapprove the application, the Board of Selectmen shall, upon request of the applicant, immediately issue an order directing the Planning Board to act on the application within 30 days.

702.2.2 If the Planning Board does not act on the application within that 30 day time period, then within 40 days of the issuance of the order, the Board of Selectmen shall certify on the applicant's application that the plan is approved pursuant to this paragraph, unless within those 40 days the Board of Selectmen has identified in writing some specific subdivision regulation or zoning or other ordinance provision with which the application does not comply. Such a certification, citing this paragraph, shall constitute final approval for all purposes including filing and recording under RSA 674:37 and 676:18, and court review under RSA 677:15. 2007

702.2.3 Failure of the Board of Selectmen to issue an order to the Planning Board under Section 702.2.2, or to certify approval of the plan upon the Planning Board's failure to comply with the order, shall constitute grounds for the superior court, upon petition of the applicant, to issue an order approving the application if the court determines that the proposal complies with existing subdivision regulations and zoning or other ordinances. If the court determines that the failure of the Board of Selectmen to act was not justified, the court may order the municipality to pay the applicant's reasonable costs, including attorney's fees, incurred in securing such order.

703. ACTIVE AND SUBSTANTIAL DEVELOPMENT

703.1 Approved subdivisions shall be protected from future changes in regulations and ordinances in accordance with RSA § 674:39 as summarized by the following:

703.2 Every subdivision approved by the Planning Board shall be exempt from all subsequent changes in subdivision regulations and zoning ordinances adopted by the Town of Windham, except those regulations and ordinances which expressly protect public health standards, such as water quality and sewage treatment requirements, for a period of five (5)years after the date of approval of the subdivision by the Planning Board; provided, however, that once active and substantial development of the improvements as shown on the

plans have occurred in compliance with the approved plans, or the terms of said approval or unless otherwise stipulated by the Planning Board, the rights of the owner or the owner's successor in interest shall vest and no subsequent changes in site plan regulations or zoning ordinances shall operate to affect such improvements, except impact fees adopted under *RSA 674:21*; and further provided that:

703.3 Active and substantial development or buildings has begun on the site by the owner or the owner's successor in interest in accordance with the approved plans within 24 months after the date of approval or in accordance with the terms of the approval, and, if a bond or other security to cover the costs of roads, drains, or sewers is required in connection with such approval, such bond or other security is posted with the Town, at the time of commencement of such development;

704.3.1 The development remains in full compliance with the public health regulations and ordinances of the Town of Windham; and

704.3.2 At the time of approval, the subdivision conforms to the subdivision regulations and zoning ordinance then in effect at the site of such plan.

703.4 For purposes of these regulations, "active and substantial development" shall be defined as:

703.4.1 Construction of and/or installation of basic infrastructure to support the development (including all of the following: roadways, access ways, parking lots, etc. to a minimum of the first coat of pavement; and installation of underground conduit ready for connection to proposed structures) in accordance with the approved plans; and

703.4.2 Construction and completion of drainage improvements to service the development (including all of the following: detention/retention basins, treatment swales, pipes, under-drain, catch basins, etc.) in accordance with the approved plans; and

703.4.3 All erosion control measures (as specified on the approved plans) must be in place and maintained on the site; and

703.4.4 Items 703.4.1, 703.4.2 and 703.4.3 shall be reviewed and approved by the Community Development Department Staff or designated agent.

703.4.5 Movement of earth, excavation, or logging of a site without completion of items 703.4.1, 703.4.2, 703.4.3, and 703.4.4 shall not be considered "active and substantial development." Plans approved in phases shall be subject to this definition for the phase currently being developed. The Planning Board may, for good cause shown, extend the 12-month period set forth in this section.

703.5 Phased developments requiring over two (2) years to comply with the active and substantial development standards shall submit a detailed development agreement contract with their subdivision application for review and approval by the Planning Board. The purpose of this agreement is to avoid unnecessary delays in the completing a development to extend the exemption from new regulations and ordinances under RSA 674:39.

703.4.6 All conditional approvals are valid for a period of not more than 365 days or one (1) year, unless the Planning Board, for good cause shown, chooses to extend the number of days required to meet precedent conditions. All precedent conditions of approval must be met within this 365 day period (or time period established by the Planning Board at time of

conditional approval) or the approval shall be considered null and void. In cases where extenuating circumstances prevent the meeting of precedent conditions within 365 days, the applicant may request an extension, to be filed (in writing and with justification) with the Board no later than 14 days prior to the expiration day of the conditions. The Planning Board shall then vote on whether or not to grant such extensions.

704. CERTIFICATE BY TOWN ENGINEER

704.1 A certificate by the Town Engineer is required certifying that the applicant has complied with one of the following alternatives:

704.1.1 All improvements have been installed in accordance with the requirements of these regulations and with the action of the Planning Board giving approval of the Final Plan.

704.1.2 Before Planning Board endorsement of a plan for an approved subdivision there shall be filed, by the applicant, a bond or other surety sufficient to cover the cost of the preparation and maintenance of: streets, street lights, street signs, drainage, traffic signals, the extension and installation of water and sewer lines, setting highway bounds, boundary monuments, parks and recreational areas, where applicable. The bond or other surety shall be approved by the Planning Board with the guidance of the Town Engineer and/or Community Development Department Staff in an amount and form acceptable to the Town.

704.1.3 No occupancy permit shall be issued before a base coat of paving has been applied and all drainage facilities are built and functioning as designed to conform with the approved subdivision plans and regulations and inspected and approved by the Town Engineer or his designee.

704.1.4 Before Planning Board endorsement of the approved final plan, the applicant shall file with the Planning Board, a Warranty Deed conveying to the Town of Windham, all streets, rights-of-way, and any site for public use in fee simple, free from all encumbrances. Protective covenants, certificates, affidavits, endorsements, or deductions as may be required by the Planning Board in the enforcement of these regulations shall be filed if appropriate.

SECTION 800: FINAL ACCEPTANCE

801. RETURN OF ESCROW: The amount of escrow held may be returned in the following manner upon written request from the owner or his/her authorized agent on a form approved by the Planning Board.

801.1 Upon inspection and approval of the sub-base 90% of the sum allocated for that stage.

801.2 Upon inspection and approval of storm drainage, electrical, telephone, TV cable, sewer, water and under drains, 90% of the sum allocated for that stage.

801.3 Upon inspection and approval of base gravel compacted, graded to grade and rough grade of side slopes and ditch lines, 90% of the sum allocated for that stage.

801.4 Upon inspection and approval of process gravel compacted graded to grade and the

submitting of an as-built plan showing location of all structures, location of all utilities, underground pipes, conduits and the elevation and horizontal alignment, 90% of the sum allocated for that stage.

801.5 Upon final inspection and approval of the entire project and after maintenance escrow has been accepted by the Planning Board, 100% of remaining money held in escrow.

SECTION 900: CONSTRUCTION REQUIREMENTS AND SPECIFICATIONS

901. GENERAL RULES

901.1 Any item of work for which there are no specifications contained herein, shall conform to the current "Standard Specifications for Road and Bridge Construction of the State of New Hampshire, Department of Public Works and Highways", hereinafter referred to as the "Standard Specifications".

901.2 All road and drainage construction shall be performed in accordance with the plans and profiles and typical details approved by the Board. Minor changes or revisions to the approved road plans, road profiles and drainage plans caused by unanticipated conditions encountered during construction shall be reviewed, approved or denied by the Board's Agent. The Board's Agent may confer with the Planning Board, the Road Agent or other Town agencies for input in the approval or denial decision. The owner/developer may appeal the Board's Agent decision to the Planning Board at a Public Meeting. Major changes or revisions and all lot line changes shall require the approval of the Planning Board at a public hearing. Minor changes include but are not limited to changes in catch basins (CB) locations, drainage swale and pipe locations, underdrains and road grade elevation changes affecting less than 400 feet in road length. Major changes are those revisions that eliminate drainage pipes, drainage catch basins and guardrails, increase side slope grades or involve road grade changes affecting more than 400 feet in road length. In all cases the revised plans shall be designed by the developer's engineer and as built plans shall indicate the changes and revisions approved by the Board's Agent which shall be submitted to the Planning Board for their review.

901.3 Preparation of Rights-of-Way:

901.3.1 All stumps, soft clay, mulch, loam, peat, and all other yielding material or material subject to organic decomposition, shall be removed from the entire areas within the slope limits in accordance with the "Standard Specifications".

901.3.2 All excavating and filling required for construction of improvements shall be as specified herein and in accordance with Section 203 of the NHDPW&H "Standard Specifications". The entire area of work shall be brought to the required lines and grades by excavations or filling. Excavation material, if suitable, may be used in making embankments and filling low areas. All streets shall be graded to approved grade and cross section.

901.4 No stumps, wood, roots, sod or other fibrous material shall be placed in any embankment. In those locations where the alignment crosses swamp or marshlands, or other similar soil that is incapable of withstanding expected loads, such inadequate soil shall be entirely removed and replaced with adequate material. The materials so removed shall not be placed in embankment, but may be used in flattening embankment slopes or for filling low spots outside the road section. The Board may require the developer to submit evidence of

boring and/or other soil investigations to determine the depth, composition and stability of the subgrade within the road section.

901.5 Embankments shall be formed of suitable and acceptable excavated materials and brought to the required lines and grades. The materials for embankments and subgrades shall be placed in successive compacted horizontal layers not exceeding twelve (12) inches in loose depth, extending across the entire fill area. They shall be spread by a bulldozer or other acceptable methods, and shall be thoroughly compacted. Successive layers shall not be placed until the layer under construction has been thoroughly compacted. Where embankments are made of rock, the rock shall be so deposited that all voids are filled with earth and in such a way that the compaction specified above may be secured.

901.6 Upon completion of filling and excavating, the subgrade shall be formed to the required grade and contour, and the entire surface again rolled as specified above. High spots shall be removed and low spots filled with an acceptable material and the process of leveling and rolling continued until no further depression results.

901.7 It shall be the responsibility of the developer to have grade stakes put in at 50-foot intervals. Each stake shall be driven firmly beyond the toe or top of the slope in a location where it will not be disturbed by construction operations and be clearly marked to give the following information:

901.7.1 Station

901.7.2 Offset from center-line

901.7.3 Cut or fill to finished centerline grade.

The developer shall preserve the grade stakes until the completion of the streets and if stakes are removed or destroyed so that the Board's Agent cannot readily check the grade at any location, the stakes shall be replaced at the expense of the developer. A centerline stake at 50-foot intervals (station cut or fill).

901.8 Side slopes shall be constructed to the line and grade specified on the approved cross-sections. Side slopes in embankment and on roadside drainage ditches shall normally descend one (1) foot vertically for at least each three (3) feet horizontally (3 on 1). Surplus material resulting from excavation of the road shall be used to flatten slopes of embankment so that they ascend one (1) foot vertically for at least three (3) feet horizontally (3 on 1). Side slopes in rock excavation shall ascend two (2) feet vertically for at least each one (1) foot horizontally (1 on 2). Where rock cuts have a face higher than ten (10) feet vertically, a three (3) foot berm shall be provided at each ten (10) foot level above the grade at the edge of the pavement. Refer to the Typical Roadway Sections for more information on side slope construction. All cuts into embankments shall require under-drains installed at edge of road to minimize road bed deterioration from water saturation.

901.9 Ditches and culverts shall be installed as shown on the final plan (plan), profile, typical sections and cross-sections as approved by the Planning Board. If during construction it develops that additional drainage pipes or structures are needed, the Board's Agent shall require, with Planning Board approval, such additional installations before acceptance of the road(s).

All drain pipes shall be reinforced concrete pipe, except pipes for off road under-drain and driveway pipes. The material for these pipes must be approved by the Board's Agent.

No part of any culvert or drainage pipe shall be installed above subgrade level.

Driveway drains shall be installed if their omission will cause standing water in the normal ditch line.

Catch basins and other drainage structures shall be built to the standards of New Hampshire Department of Public Works and Highways. Attention shall be made to specify, on the construction plans, the proper type of grate for each basin installation.

All pipes shall be laid upon a firm bed of stone, true to line and grade, back-filled and tampered in layers not exceeding six (6) inches in a workman like manner. Any pipe not true in alignment and grade**,** or that shows undue settlement after placement**,** or that is damaged shall be removed and replaced. Reinforced concrete pipe shall be placed on a minimum six (6) inch bed of crushed stone up to one-half (1/2) the diameter of the pipe and backfilled with sand or gravel material free from stones greater than three (3) inches in diameter or other unsuitable material. Care shall be taken that the pipe shall be securely attached to the adjoining section by the approved methods for the type of joint being used prior to backfilling.

901.10 The base of the road shall be composed of a minimum of fourteen (14) inches of bank-run gravel, including material up to six (6” x 6” x 6”) inches diameter. The gravel shall meet the specifications for gravel set forth in Section 304 of the NHDOT "Standard Specifications". The base shall be laid in separate seven (7) inch compacted layers to the required width, centered within the right-of-way. All stones greater than six (6” x 6” x 6”) inches in diameter shall be removed.

Prior to the placement of any gravel material, a sieve analysis shall be done and the results sent to the Board’s Agent for review. Each gravel lift shall be properly crowned with a tolerance of one-half (1/2) an inch.

901.11 On the base shall be laid a minimum of eight (8) inches of crushed gravel minus two (2” x 2” x 2”), spread to the required width (see the approved typical section for the exact crushed thickness). The crushed gravel shall meet the specifications for crushed gravel set forth in Section 304 of the NHDOT "Standard Specifications".

901.12 Fine Grading Procedure: Prior to the start of fine grading the contractor shall stakeout the centerline of the road at 100 foot intervals. The stakes shall be flagged in blue showing crushed gravel grade, and corresponding slope grade on side stakes. These stakes and grades shall be kept throughout the fine grading operation in order to check alignment and crown in the road, and may not be removed until just prior to paving. Grades shall be checked and rechecked during final grade in order to get a uniform grade. Grades shall be maintained in front of the water trucks and rollers in order to get grade and essential compaction. This grade shall remain undisturbed until paving.

901.13 The pavement shall be a two-course hot bituminous pavement constructed to the widths shown on the approved typical section and will include a two (2) inch base course and one (1) inch wearing surface. The average application rate shall be .057 tons per square yard per inch of thickness.

901.14 The compaction requirements for materials placed as backfill, subgrade, base course and pavement shall be as specified for each separate item in the "Standard Specifications".

901.15 A minimum of six (6) inches of rolled top soil shall be provided to cover over all

finished slopes and it shall be spread uniformly over all finished slopes. Finished slopes shall be loamed, fertilized, limed, seeded and mulched in accordance with Sections 641 thru 647 of the "Standard Specifications for Road and Bridge Construction of the NH DOT". Alternate seed mixes selected for public improvement, except mentioned therein, shall be approved by the CEA.

901.16 The owner, contractor, or applicant is responsible for all engineering work and all references to measurement and payment therein are for the convenience of the owners and sub-dividers in dealing with their own contractors and shall not refer to the Town of Windham. These State specifications and the Town of Windham typical roadway cross section and details are for the specified roadway classifications and may be changed in the case of streets for commercial or industrial areas that would receive heavy truck traffic.

901.17 All detention ponds, drainage swales, level spreaders, and drainage outflows shall be constructed and stabilized with vegetation or erosion control matting prior to the construction of approved roads. Inspections during and after the construction of these facilities by the Planning Board or its Agent shall take place to ensure conformance to Town regulations.

901.18 Fill material shall be a granular material with no more than fifteen (15) percent passing the number 200 sieve (based on the fraction passing the number four (4) sieve). No stones greater than two-thirds (18 inches maximum) the lift thickness shall be allowed. Any segregation of larger stones shall be filled in with a sand material ensuring no voids within the subgrade. Loose lift thickness shall not exceed twenty-four (24) inches in depth.

901.19 A temporary mud tracking bed (construction entrance) shall be put in place at each site entrance. This tracking bed shall consist of a four (4) inch minimum layer of 2 1/2”– 4” crushed stone and shall be thirty (30) feet in length and fifteen (15) feet wide. This bed shall be maintained during construction to prevent tracking or flowing of sediment onto the public right-of-way and shall be removed prior to placement of gravel base and pavement.

901.20 No paving will be allowed between November 1 and April 15, except for roads that are completely ready for pavement prior to November 1. The ground temperature for base course paving shall be forty (40) degrees F and rising. The ground temperature for wearing course pavement shall be fifty (50) degrees F and rising. Base course pavement will not be accepted until it has been in place for a minimum of one (1) winter season at which time the wearing course can be placed.

901.21 All building lots shall be clearly marked by a lot number at the driveway entrance.

901.22 It shall be the responsibility of the contractor to control blowing dust and soil. A functional water truck or any other town accepted dust control measure must be available on site at all times.

901.23 All transformer and utility pads and boxes shall be located a minimum of ten (10) feet from the edge of pavement. If any of these are beyond the right-of-way, they shall require**,** and be defined within a recordable easement.

901.24 ~~Drainage~~**Prior to acceptance by the Town,** drainage structures shall be cleaned at least twice annually, including once during the month of May and once during the month of October – and at such other times as the ~~Board~~Road Agent shall direct. The Owner shall deliver to Community Development Department staff a paid invoice indicating the date and location of the cleaning and the number of drainage structures cleaned, and shall report any

observed damage or deterioration to them.

902. INSPECTION AND ACCEPTANCE

902.1 The Board Agent or his designee shall make all the required inspections, or he may accept reports of inspection by authoritative and recognized services or individuals; and all reports of such inspections shall be in writing and certified by a responsible officer of such authoritative service or by the responsible individual; or he may engage such expert opinion as he may deem necessary to report upon unusual technical issues that may arise. The Board Agent or his designee shall require that sufficient technical data be submitted to substantiate the proposed use of any material or assembly, and if it is determined that the evidence submitted is satisfactory proof of performance for the use intended, he may approve its use subject to the requirements of this ordinance. The cost of all tests, reports and investigations required under these provisions shall be paid by the applicant.

902.2 General rules for construction phase inspections. Each of the following operations shall be completed, inspected, and approved in writing before the next step is begun.

902.2.1 After clearing, stumping, grubbing and mulch removal; all work prior to subgrade.

902.2.2 After the subgrade has been completed.

902.2.3 After the underground utilities and drainage have been completed; (No work to be covered until inspection is completed).

902.2.4 After application of the gravel, prior to placing crushed gravel.

902.2.5 After application of the crushed gravel, prior to paving.

902.2.6 Final inspection after cleanup.

902.3 It is required that the General Contractor at the subdivision contact the Board's Agent before construction to discuss inspection procedures, construction specifications, material testing program and any other details relating to the construction and inspection of the subdivision roads.

902.3.1 Prior to construction, the applicant and his contractor shall attend a pre-construction meeting with the Board Agent and Town Engineer to discuss construction specifications and inspection procedures and any other details relating to construction and inspection.

902.3.2 The cost of special inspections and investigations shall be at cost and shall be listed as special cost. All special cost shall be paid prior to final approval of the construction.

903. DETAIL OF REQUIRED INSPECTIONS

903. 1 Inspections 902.2.1, 902.2.2, and 902.2.4 shall be visual inspections by the Board's Agent and/or the Planning Board.

903. 2 For inspection 902.2.3, the applicant shall cause to have prepared, by a competent engineer or surveyor, as-built plans showing the location, invert, and top grade of all

drainage structures and other underground public utilities, the centerline street grades on 100 foot stations, to the nearest 0.1 foot. This information shall be inked and ringed on the original drawings, and corrected as-built reproducible and two (2) prints submitted to the Board's Agent for inspection and approval. The as-built plans shall carry the signed certificate of the subdivider's engineer or land surveyor, attesting that the survey and results reported are in conformity with these regulations.

903. 3 For inspection 902.2.5, the applicant shall cause to have prepared plans, generally as under 903.2 above, but showing all street centerline and ditch grades to the nearest 0.01 foot on 50 foot stations.

NOTE: The Board's Agent may require that material testing be conducted to verify that the specified roadway materials have been furnished and constructed according to specifications. Material testing may proceed at the maximum rate of one test sample (for quality and compaction determinations) per item per 200 feet of roadway, one test per pipe culvert or pipe section between basins, and at other locations as required. These tests are to be performed by an approved, independent materials testing contractor. The test results shall be mailed directly to the Board's Agent and cost of such testing shall be borne by the subdivision applicant. Repeat testing for material that fails to meet specifications shall be required.

903. 4 Cleanup: Before acceptance, a street shall be cleaned up, by hand if necessary, to make sure that it shall be left in a safe, neat and presentable condition. All catch basins, detention ponds, drainage swales, level spreaders, and drainage outflows shall be cleaned, stabilized against erosion, and functioning in compliance with local, state, and federal regulations no more than 30 days prior to the street’s proposed Town acceptance.

903. 5 Final Acceptance: Upon written request of the owner or his/her authorized agent to the Planning Board, the Planning Board will cause a final inspection to be made of the project to determine that the project has been constructed in conformance with the plans and specifications and that all the required inspections and approvals and documentation has been submitted and accepted by the Planning Board, including the acceptance of the maintenance escrow by the Planning Board.

903. 6 Maintenance Escrow: The Owner or his/her authorized agent shall guarantee the quality and workmanship of the project for a period of one year from the date of designated completion by filing a maintenance escrow of at an amount established by the Town Engineer and/or Planning Board Agent.

903. 7 Maintenance Escrow Release: After the one year period the owner or his/her authorized agent may request in writing to the Planning Board for the return of the maintenance escrow. Upon receipt of said request the Planning Board shall cause the project to be inspected. The Planning Board upon receipt of the inspection report shall approve the return of the maintenance escrow or shall order any necessary repairs to be made and shall set a date for the completion of the required repairs.

The failure of the owner to complete the required repairs by the specific date shall be cause for the Planning Board to take the monies in the maintenance escrow and cause the required repairs to be completed and unexpended monies shall be returned to the owner.

904. ADMINISTRATIVE PROVISIONS

904.1 Planning Board to Administer Subdivision

904.1.1 The Planning Board of the Town of Windham, herein referred to as the "Board", shall administer the provisions of these Regulations.

904.2 Sale or Transfer of Lots

904.2.1 In accord with RSA Chapter 676:16, as amended, the owner or agent of the owner of any land located within a subdivision in the Town of Windham, who transfers or sells any land before a plan of said subdivision has been approved by the Planning Board and recorded or filed in the office of the Registry of Deeds of Rockingham County shall forfeit and pay a penalty of one thousand dollars for each lot or parcel so transferred or sold, and the description by metes and bounds in the instrument or transfer or other document used in the process of selling or transferring shall not exempt the transaction from such penalties. The Town of Windham, through its Counsel or other official designated by the Board of Selectmen, may enjoin such transfer or sale and may recover said penalty by civil action.

904.3 Building Permits

904.3.1 No building permit shall be issued and no building or other structure shall be erected on any lot within the Town of Windham without compliance with the provisions of *RSA 674:41,* as amended. Any building erected in violation of these provisions is an unlawful structure and the Board of Selectmen or appropriate agent of the governing authority shall enjoin any erection or cause the building to be vacated or removed.

904.4 Acceptance of Streets

904.4.1 No public authority shall accept, improve, or maintain any street not shown on an approved and recorded final plan unless such street has received the legal status of a public street.

904.5 Maintenance of Streets & Related Improvements

Applicant's shall be required to provide for proper maintenance of all subdivision streets, utilities, stormwater management facilities and related public improvements until such time as streets within a subdivision are formally accepted by the Town of Windham's Board of Selectmen pursuant to RSA 674:40-a. In the event an applicant fails to fulfill this requirement in a reasonable manner, the Town of Windham may, at its option, rely upon the surety given by the applicant, pursuant to the provisions of Section 704.1.2 of these Regulations, to cause such maintenance to be performed at no cost to the public or individual owners of parcels of land situated within a subdivision. Commencing at the time of issuance of the first Certificate of Occupancy for any dwelling or structure accessed by a subdivision street, winter maintenance of said street(s) shall be performed by the Town of Windham provided the applicant shall, by November 1st of each applicable year: (a) provide the Town with a signed statement holding the Town harmless from any and all liability claims in the event the Town's winter maintenance activities cause damage to persons or property; and (b) provide the Town with a signed statement acknowledging the Town's assumption of winter maintenance duties in no way constitutes any form of public acceptance of subdivision streets and/or infrastructure in whole or in part; and (c) if required by the Board of Selectmen, reimburse the Town in

full for its anticipated cost in providing for winter maintenance of streets on behalf of the applicant.

905. LEGAL PROVISIONS

905.1 Effective Date

905.1.1 These regulations shall become effective upon their official adoption by the Planning Board in accordance with the provisions of RSA Chapter 675:6 and shall apply thereafter to all subdivisions within the Town of Windham.

905.2 Exemption

905.2.1 Every plan approved by the Planning Board and properly recorded in Rockingham County Registry of Deeds shall be exempt from all subsequent changes in these Regulations and the Windham Zoning Ordinance, except those regulations and ordinances which expressly protect public health standards such as water quality and sewage treatment requirements, for a period of five (5) years after the date of recording, provided however, that once substantial completion of the improvements as shown on the plan have occurred in compliance with the approved plan, or the terms of said approval, the rights of the owner or his successor in interest shall vest and no subsequent changes in these Regulations or the Zoning Ordinance shall operate to affect such improvements, except impact fees adopted under *RSA 674:21*, and further, provided that:

905.2.1.1 Active and substantial development or building shall have commenced on the site by the owner or his successor in interest in accordance with the approved plan within 24months after the date of approval, or in accordance with the terms of said approval, and where a bond to cover the costs or roads, drains or sewers is required in connection with such approval, such bond is posted with the Town at the time of commencement of such development; and

905.2.1.2 Development remains in full compliance with the public health regulations and ordinances specified herein; and

905.2.1.3 At the time of approval and recording, the plan conforms to these Subdivision Regulations and the Zoning Ordinance then in effect at the site of such plan.

<u>SECTION 1000 - DEVELOPMENT OF REGIONAL IMPACT PROCESS</u>

1001 Determination of Regional Impact

1001.1 In accordance with RSA 36:56, the Planning Board shall make a determination as to whether the development application, if approved, reasonably could be construed as having the potential for regional impact. Doubt concerning regional impact shall be resolved in a determination that the development has a potential regional impact.

1001.2 In determining whether a project has regional impact, the Planning Board may consider, but is not limited to the consideration of, such factors as: the number

of dwelling units, the proximity to the border of a neighboring community, transportation networks, and anticipated environmental impacts.

1001.3 This determination will be made during the Final Subdivision Application.

1002 Procedures for Development of Regional Impact

1002.1 Upon determination that a proposed development has a potential regional impact, the Planning Board shall afford the Regional Planning Commission and the affected communities the status of abutters, as defined in RSA 672:3, for the limited purposes of providing notice and giving testimony.

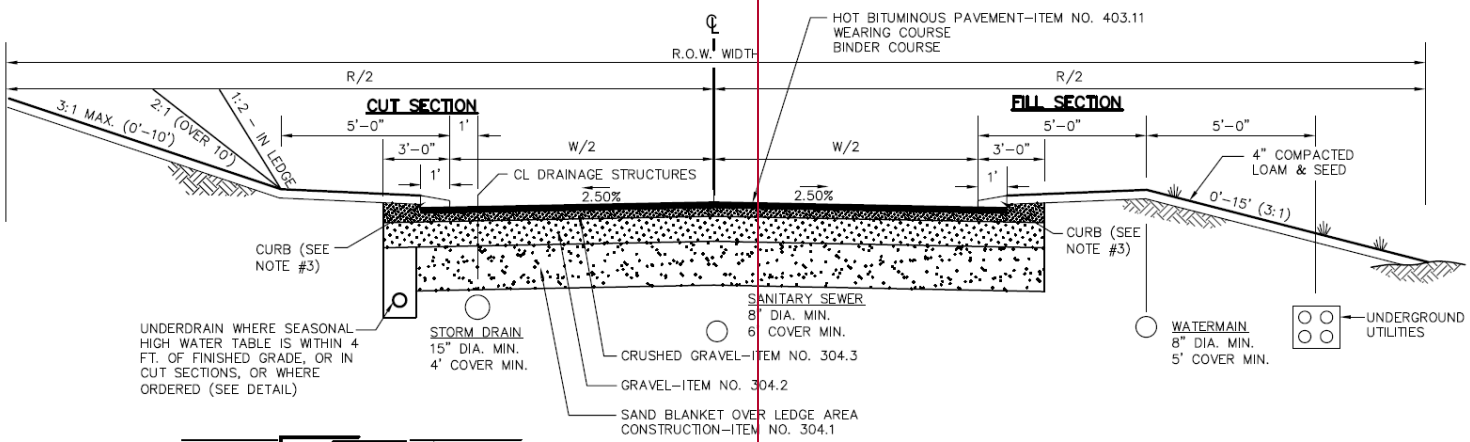
1002.2 The Planning Board shall provide to the Regional Planning Commission and the affected communities the following notifications:

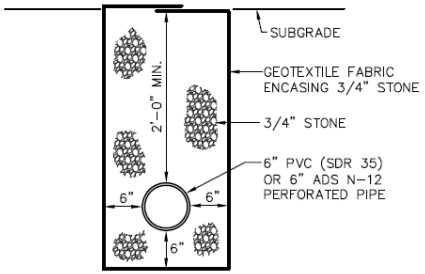
1002.2.1 Within 5 business days of the Planning Board reaching a decision that the development has the potential for regional impact, the Community Development Department shall notify the Regional Planning Commission and the affected municipalities by mail that the determination of regional impact was made.

1002.2.2 At least 14 days prior to the public hearing for the development of regional impact, the Community Development Department shall notify, via certified mail, the Regional Planning Commission and the affected municipalities of the date, time and place of the hearing and their right to testify concerning the development.

TYPICAL CROSS-SECTION FOR THE CONSTRUCTION OF STREETS

-NOT TO SCALE-





UNDERDRAIN DETAIL
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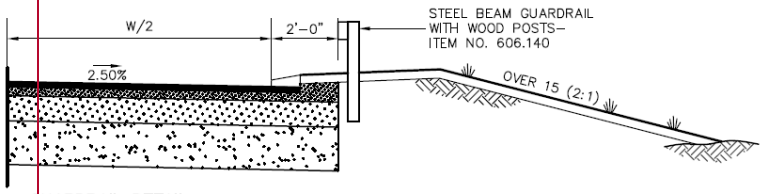

GUARDRAIL DETAIL
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NOTES:

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2. FULL WIDTH OF RIGHT-OF-WAY SHALL BE CLEARED OF ALL EXISTING BRUSH AND TREES UNLESS OTHERWISE DIRECTED OR APPROVED BY THE PLANNING BOARD.

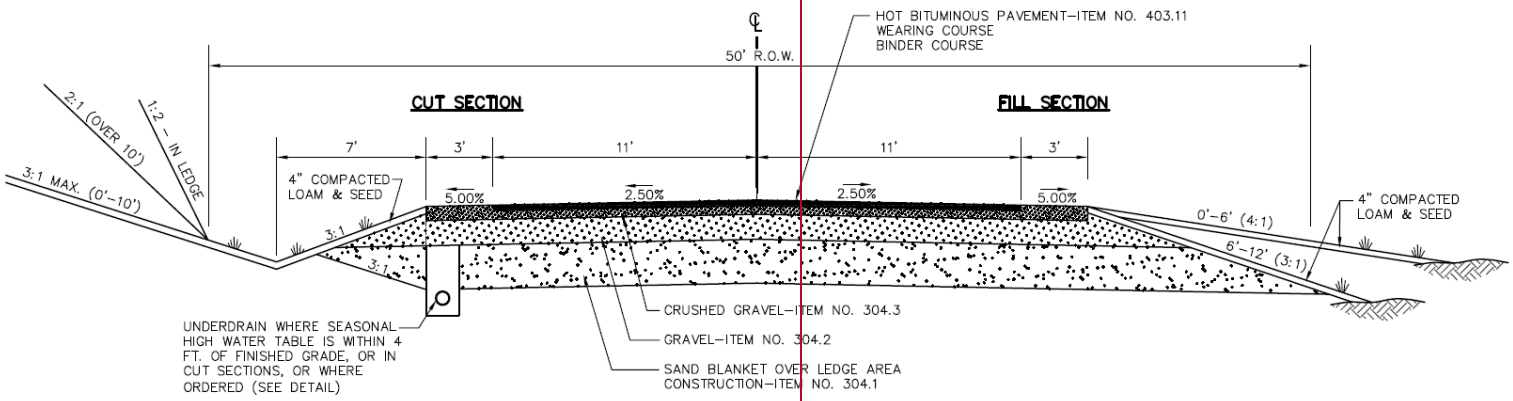
3. CURB TYPE SHALL BE AS FOLLOWS:
   - COLLECTOR & NON-RESIDENTIAL STREETS: STRAIGHT GRANITE SLOPE CURB-6" HIGH (ITEM NO. 609.216)
   - RESIDENTIAL-1 & RESIDENTIAL-2 STREETS: CAPE COD BERM (SEE DETAIL)

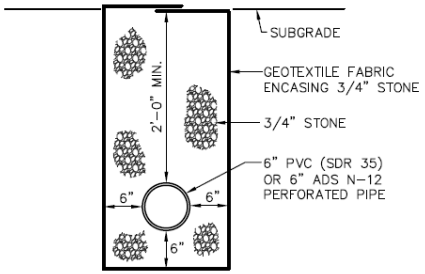
TOWN OF WINDHAM, NEW HAMPSHIRE

SUBDIVISION REGULATIONS

FIGURE I

ALTERNATE CROSS–SECTION FOR CONSTRUCTION OF STREETS
–NOT TO SCALE–





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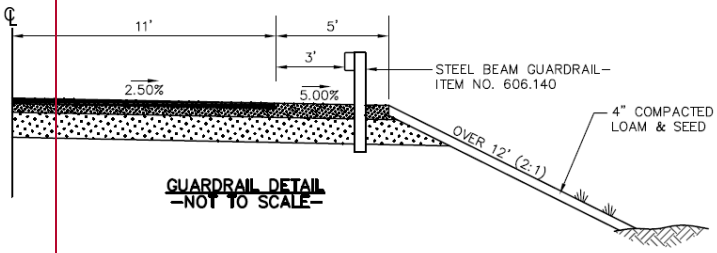

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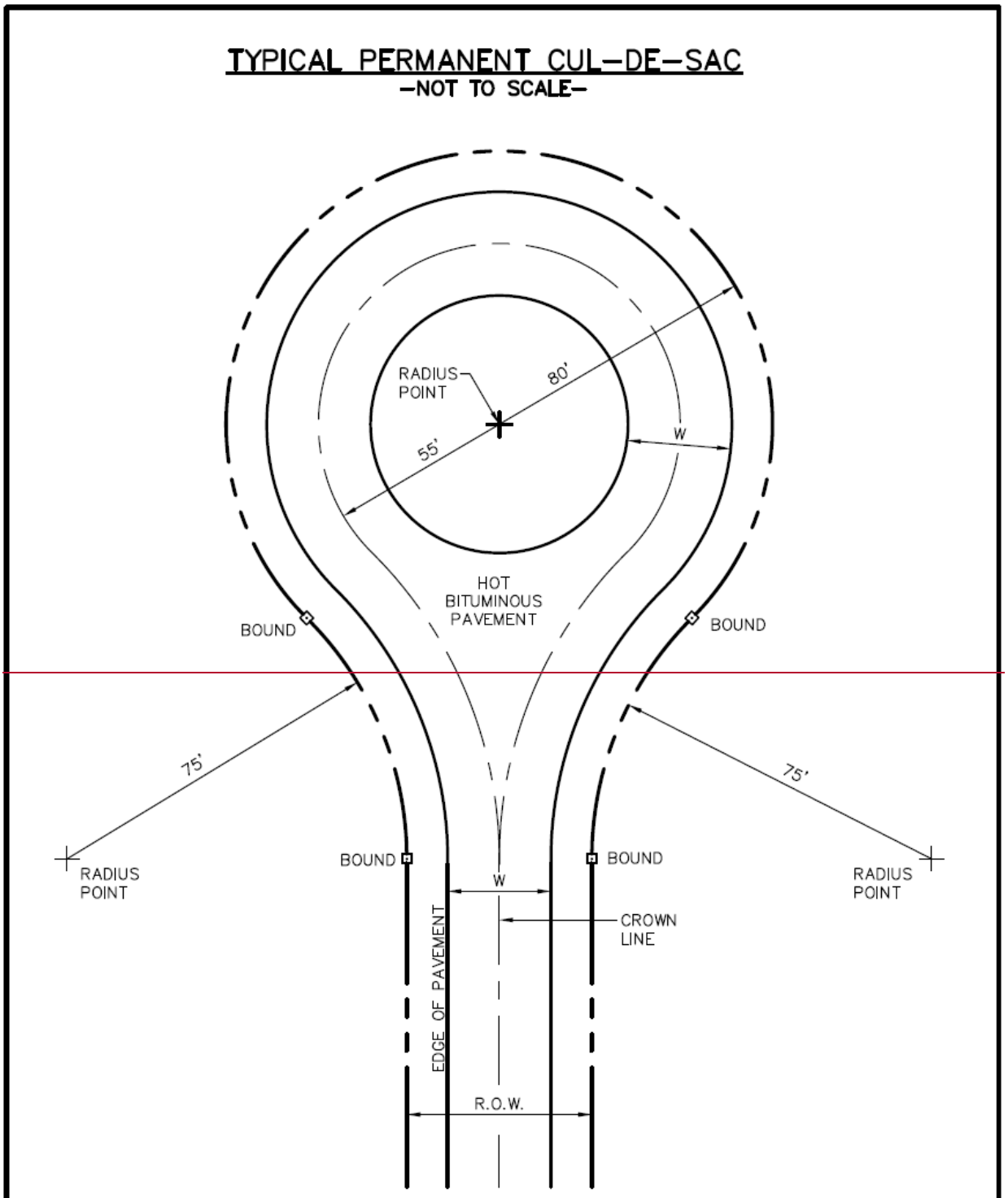
TOWN OF WINDHAM, NEW HAMPSHIRE
SUBDIVISION REGULATIONS
FIGURE I–A



TOWN OF WINDHAM, NEW HAMPSHIRE

SUBDIVISION REGULATIONS

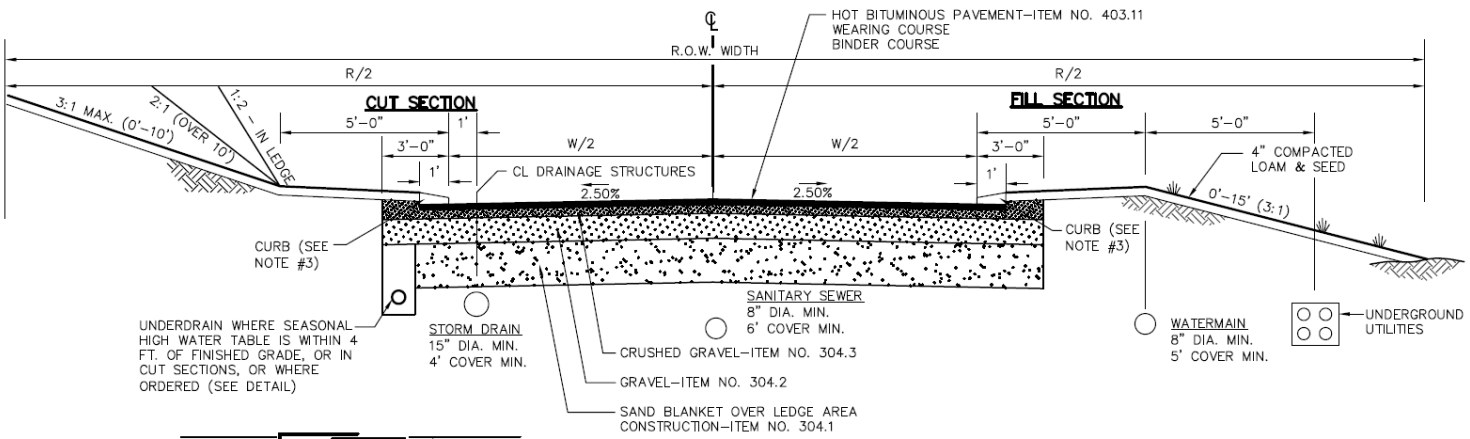
FIGURE 2

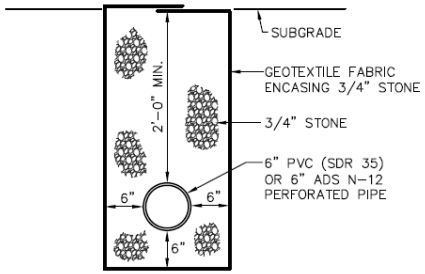
TOWN OF WINDHAM SUBDIVISION REGULATIONS

TABLE OF GEOMETRIC ROADWAY DESIGN STANDARDS FOR STREETS

ITEM	COLLECTOR	NON–RESIDENTIAL	RESIDENTIAL 2	RESIDENTIAL 1
1. AVERAGE DAILY TRAFFIC	1,001–5,000	–	401–1,000	0–400
2. DESIGN SPEED	40 MPH	30 MPH	30 MPH	30 MPH
3. MINIMUM WIDTH OF RIGHT–OF–WAY (R)	60'	60'	50'	50'
4. MINIMUM PAVEMENT WIDTH (W)	30'	30'	26'	22'
5. MINIMUM GRADE	1.0%	1.0%	1.0%	1.0%
6. MAXIMUM GRADE	6.0%	6.0%	8.0%	8.0%
7. MINIMUM ANGLE OF INTERSECTIONS	90°	90°	90°	80°
8. MINIMUM CENTER–LINE RADII ON CURVES	600'	300'	300'	150'
9. MINIMUM TANGENT LENGTH BETWEEN REVERSED CURVES	300'	200'	200'	100'
10. ROAD BASE (MINIMUM) CRUSHED GRAVEL (304.3) (THICKNESS) GRAVEL (304.2) (THICKNESS) SAND (304.1) (THICKNESS)	 8" 16" 12"	 8" 16" 12"	 8" 16" 12"	 8" 12" 12"
11. BITUMINOUS CONCRETE (403.11) PAVING BINDER COURSE THICKNESS WEARING COURSE THICKNESS	 2–1/2" 1–1/2"	 2–1/2" 1–1/2"	 2" 1"	 2" 1"
12. ROAD CROWN (MINIMUM)	0.025	0.025	0.025	0.025
13. CUL–DE–SAC STREETS RADIUS OF TURN–AROUND R.O.W ℄ RADIUS OF TURN–AROUND	 – –	 80' 55'	 – –	 80' 55'

TYPICAL CROSS-SECTION FOR THE CONSTRUCTION OF STREETS
-NOT TO SCALE-





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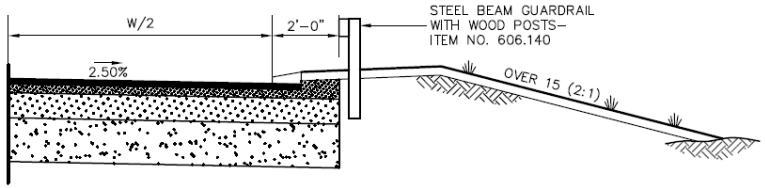

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TOWN OF WINDHAM, NEW HAMPSHIRE
SUBDIVISION REGULATIONS
FIGURE I

Note: Depth of shoulder drainage swale shall be 2'.

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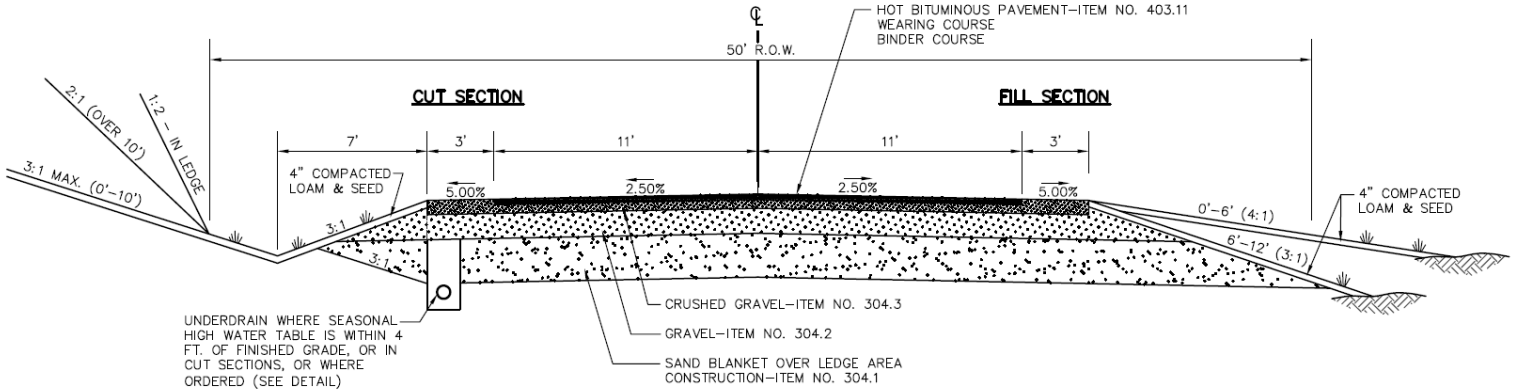

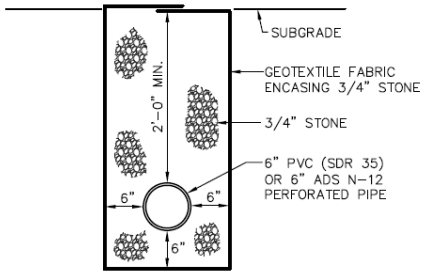

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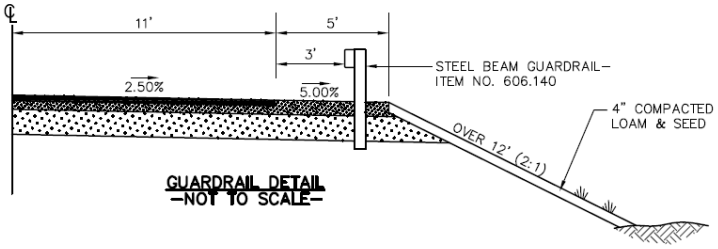

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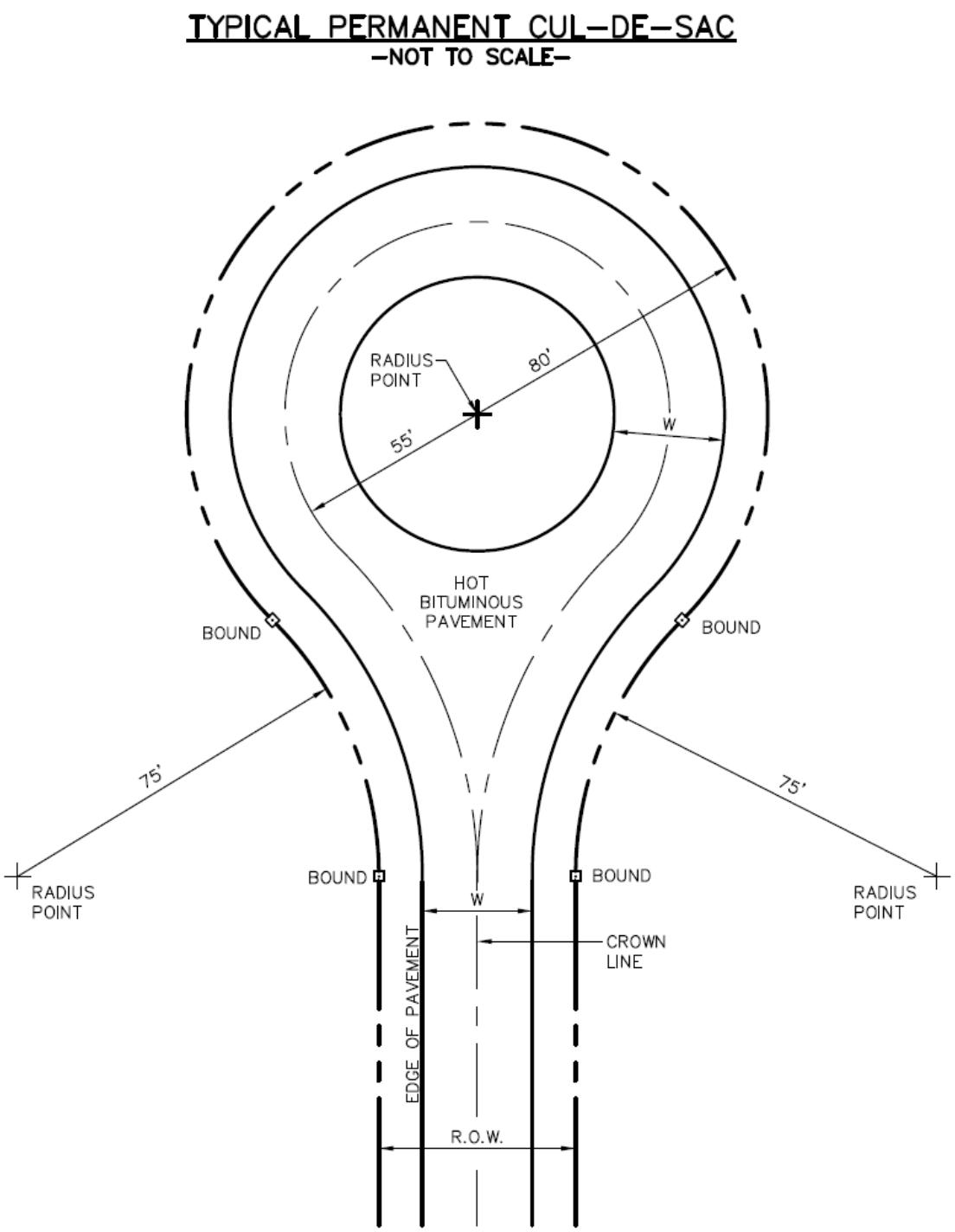
TOWN OF WINDHAM, NEW HAMPSHIRE
SUBDIVISION REGULATIONS
FIGURE I–A



TOWN OF WINDHAM, NEW HAMPSHIRE

SUBDIVISION REGULATIONS

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The following document was adopted by the Windham Planning Board on _____

Signed_____

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