

## **SECTION 8. CONSERVATION SUBDIVISION DESIGN**

### Section 8 Conservation Subdivision Design

#### 8.1 Purpose and Intent

##### 8.1.1. Primary purposes:

- a) To allow for greater flexibility and creativity in the design of residential developments;
- b) To encourage the permanent preservation of open space, forest, wildlife habitat, and historical resources;
- c) To encourage a less sprawling and more efficient form of development that consumes less open land and conforms to existing topography and natural features better than a conventional subdivision;
- d) To protect wetlands, aquifers, the Ipswich River, and other waterbodies through water conserving landscapes, reduction of impervious surfaces, and promotion of on-site wastewater treatment;
- e) To minimize overall environmental disturbance on a site;
- e) To facilitate the construction and maintenance of housing, streets, utilities,

and public services in a more economical and efficient manner;

#### 8.1.2 Secondary Purposes:

- a) To preserve and enhance community character;
- b) To promote the preservation of remaining agricultural land and pastures;
- c) To protect the value of real property;
- a) To reduce the impact of new development on existing residential neighborhoods.

#### 8.2 Eligibility

- 8.2.1 There is no minimum tract size for Conservation Subdivision Design. This Conservation Subdivision Design bylaw is an option for any proposed subdivision.

- 8.2.2 Any proposed residential development on a parcel or contiguous parcels under common ownership of more than 20 acres shall submit a Conservation Subdivision Design application to the Planning Board. After submittal, the developer maintains the option of proceeding with either a conservation subdivision or a conventional subdivision.
- 8.2.3 Zoning Classification: Only those tracts wholly (or partially) in residential districts shall be eligible for consideration as a CSD. If any portion of a tract is outside of a residential district, that portion of the site shall not be considered in the determination of the Basic Maximum Number of Housing Units, but shall be eligible to count as open space.
- 8.2.4 Contiguous Parcels: To be eligible for consideration as a CSD, the tract shall consist of a single parcel or multiple parcels held under common ownership or site control.
- 8.2.5 Land Division: To be eligible for consideration as a CSD, the tract or tracts may be a subdivision or a division of land pursuant to M.G.L. c. 41, s. 81; provided, however, that CSD may also be permitted where intended as a condominium on land not divided or subdivided.
- 8.2.6 Permissible Uses: Land uses within a CSD development may include the following: single-family homes, both attached and detached; two-family structures; and multifamily structures (townhouses, apartments, condominiums). The mix of housing types shall be in accordance with the Site Specific Design Standards outlined in 8.10.2.1 below. Within CSD developments of more than

50 housing units, the CSD application may also include no more than 1000 square feet for a convenience retail business catering primarily to residents of the development and the surrounding neighborhood.

### 8.3 Special Permit Required

The Wilmington Planning Board may authorize a Conservation Subdivision Design project pursuant to the granting of a Special Permit. Special Permits shall be acted upon in accordance with all provisions below.

### 8.4 Pre-Application

8.4.1 Conference: The applicant is very strongly encouraged to request a pre-application review at a regular business meeting of the Wilmington Planning Board. If such a review is requested, the Planning Board shall invite the Conservation Commission, Board of Health, Historical Commission, and other bodies as appropriate. The purpose of a pre-application meeting is to minimize the applicant's cost of engineering and other technical experts, and to commence negotiations with the Planning Board at the earliest possible stage in the development. At the pre-application review, the applicant may outline the proposed CSD, seek preliminary feedback from the Planning Board, other Boards and Commissions, or other experts. The applicant may also set a timetable for submittal of a formal application. At the request of the applicant, and at the expense of the applicant, the Planning Board may engage technical experts to review the informal plans of the applicant and to facilitate submittal of a formal application for a CSD permit.

8.4.2 Submittals: In order to facilitate review of the proposed CSD at the pre-application stage, applicants are encouraged to submit the following information.

8.4.2.1 Site Context Map. This map illustrates the parcel in connection to its surrounding neighborhood. Based upon existing data sources and field inspections, it should show various kinds of major natural resource areas or features that cross parcel lines or that are located on adjoining lands. This

map enables the Planning Board to understand the site in relation to what is occurring on adjacent properties.

- 8.4.2.2 Existing Conditions/Site Analysis Map. This map familiarizes officials with existing conditions on the property. Based upon existing data sources and field inspections, this base map locates and describes noteworthy resources that should be left protected through sensitive subdivision layouts. Resources depicted on the existing conditions maps should include wetlands, riverfront areas, floodplains and steep slopes, but may also include mature undegraded woodlands, hedgerows, farmland, unique or special wildlife habitats, historic or cultural features (such as old structures or stone walls), unusual geologic formations and scenic views into and out from the property. By overlaying this plan onto a development plan the parties involved can clearly see where conservation priorities and desired development overlap/conflict.
- 8.4.2.3 Other Information. In addition, applicants are invited to submit the information set forth in Section 8.6.1 in a form acceptable to the Planning Board.
- 8.4.3 Site Visit. Applicants are very strongly encouraged to request a site visit by the Planning Board and/or the Planning and Conservation Director in order to facilitate pre-application review of the CSD. If such a site visit is requested, the Planning Board shall invite the Conservation Commission, Board of Health, the Historical Commission, and other bodies as appropriate.
- 8.4.4 Design Criteria. The parties should discuss the design process and criteria set forth below in Section 8.5 at the pre-application conference and site visit.

## 8.5 Design Process

At the time of the application for a special permit for a CSD project in conformance with Section 8.6 the applicant shall demonstrate to the Planning Board that the following Design Process was performed by a registered Landscape Architect, and that this process was considered in determining the layout of proposed open space, house sites, streets, and trails.

- 8.5.1 Step One: Identify Conservation Areas. Identify preservation land in two steps. First, identify and delineate Primary Conservation Areas, such as wetlands, riverfront areas, and floodplains regulated by state or federal law or local bylaw, as well as vernal pools and direct recharge areas for public water supply wells. Also identify Secondary Conservation areas, including steep slopes, mature woodlands, agricultural land, meadows, significant wildlife habitat, historical and archaeological features, and scenic views on to or off of the site. Second, identify and delineate Potentially Developable Areas. To the maximum extent feasible, the Potentially Developable Area shall consist of land outside of the Primary and Secondary Conservation Areas.
- 8.5.2 Step Two: Locate House Sites. Locate the approximate sites of individual houses within the Potentially Developable Area and include the delineation of private yards and shared amenities, so as to reflect an integrated community. The number of homes enjoying the amenities of the development (views, abutting common open space, etc.) should be maximized.
- 8.5.3 Step Three: Align the Streets and Trails. Align streets in order to efficiently access the house lots and minimize impacts to Primary and Secondary Conservation Areas. Also lay out new pedestrian trails to create connections among houses, conservation areas, and existing and future streets, sidewalks and trails.
- 8.5.4 Step Four: Lot Lines. Draw in the lot lines and delineate the common open space.

## 8.6 Procedures

- 8.6.1 Application. An Application for a special Permit for a Conservation Subdivision Design project shall be submitted on the form(s) provided by the Planning Board in accordance with the subdivision rules and regulations of the Board. Applicants for a CSD special permit shall also submit to the Planning Board 16 copies of a Concept Plan.
- 8.6.2 The Concept Plan shall include a Sketch Plan and a Yield Plan (see section 8.7). The applicant shall submit both the Site Context Map and Existing Conditions / Site Analysis Map prepared according to

Section 8.4.2 above. Additional information reasonably necessary to make the determinations and assessments cited herein shall be provided, including existing site contour maps and existing soil maps.

8.6.2.1 Sketch Plan: The Sketch Plan shall be prepared by a registered Landscape Architect, or by a multidisciplinary team of which one member must be a registered Landscape Architect. The Sketch Plan shall identify Primary and Secondary Conservation Areas, and shall address the general features of the land, and give approximate configurations of the lots, open space, roadways, and trails. The Sketch Plan shall demonstrate the four-step design process described in Section 8.5 above, and the Design Standards outlined in Section 8.10 below. The Sketch Plan shall include the following:

- a) The Subdivision Name, boundaries, north point, date, legend, title "Concept Plan," and scale.
- b) The names of the record owner, the applicant, and the name of the registered landscape architect who prepared the plan.
- c) The names, approximate location, and widths of adjacent streets.
- d) The proposed topography of the land shown at a contour interval no greater than 2 feet in areas proposed for development, and no greater than ten feet in areas that will not be developed or altered. Elevations shall be referred to mean sea level.
- e) The location of existing landscape features, including wetlands; forests; fields; meadows; riverfront areas; waterbodies; archaeological and historic structures or features; rock outcrops; stone walls; high points; views; major tree groupings; noteworthy tree specimens; rare habitats; and habitats of rare, endangered, or threatened wildlife. Proposals for all features to be preserved, demolished, removed, or relocated shall be noted on the Sketch Plan.

- f) All on-site local, state, and federal regulatory resource areas and buffer zones. All wetland flag locations shall be numbered and placed on the Sketch Plan.
  
- f) Lines showing proposed private residential lots, as delineated during Step Four of the Design Process (Section 8.5.4), with approximate areas and dimensions.
  
- g) The location of all existing and proposed features and amenities, including trails, recreation areas, pedestrian and bicycle paths, community buildings, and off street parking areas. A brief narrative shall be provided, as necessary, to explain features on the Plan.
  
- h) The existing and proposed lines of streets, ways, common driveways, easements, and any parcel of land intended to be dedicated for public use or to be reserved by deed covenant for use of all property owners in the subdivision, or parcels of land or lots to be used for any purpose other than private residential uses, shall be so designated within the subdivision in a general manner.
  
- j) Proposed roadway grades.
  
- k) In general, official soil percolation tests for the purpose of siting wastewater treatment options are not required for the concept plan. However, a narrative explanation shall be prepared by a certified Professional Engineer detailing the proposed wastewater systems that will be utilized by the development and its likely impacts on-site and to any abutting parcels of land. For example, the narrative will specify whether individual on-site systems (conventional or alternative Title 5 systems), shared on-site systems, or any combination of these or other methods will be used.
  
- l) A narrative explanation prepared by a certified Professional Engineer

proposing systems for stormwater drainage and its likely impacts on-site and to any abutting parcels of land. For example, the narrative will identify the structural and non-structural engineering methods that will be used and the number of any detention/retention basins or infiltrating catch basins; it is not intended to include specific pipe sizes. Any information needed to justify this proposal should be included in the narrative. The approximate location of any stormwater management detention/retention basins shall be shown on the plan and accompanied by a conceptual landscaping plan. Specific stormwater management design information is not required for the Concept Plan. However, the development must meet the stormwater management standards outlined in the Massachusetts Wetlands Protection Act (regardless of whether the project falls under Wetlands Protection Act jurisdiction). Approval of the Planning Board will be contingent on the development meeting these standards.

- m) A narrative explanation prepared by a certified Professional Engineer detailing the proposed drinking water supply system.
- n) A narrative explanation of the proposed quality, quantity, use, and ownership of the open space. Open Space parcels shall be clearly shown on the plan.
- o) All proposed landscaped and buffer areas shall be noted on the plan and generally explained in a narrative.
- p) A list of all legal documents necessary for implementation of the proposed development, including any Conservation Restrictions, land transfers, and Master Deeds, with an accompanying narrative explaining their general purpose.
- q) A narrative indicating all requested waivers, reduction, and modifications as permitted within the requirements of this bylaw.

8.6.2.2 Yield Plan: Applicant shall submit a narrative explanation detailing

the results of the determination of any proposed allocation of yield determined according to Section 8.7, Basic Maximum Number, below.

8.6.3 Relation between Concept Plan and Definitive Subdivision Plan: The Concept Plan special permit shall be reconsidered if there is substantial variation between the Definitive Subdivision Plan and the Concept Plan, as determined by the Planning Board. If the Planning Board finds that a substantial variation exists, it shall hold a public hearing on the modifications to the Concept Plan. A substantial variation shall be any of the following:

8.6.3.1 Any increase in the number of building lots or the number of housing units;

8.6.3.2 A significant (>10%) decrease in the open space acreage;

8.6.3.3 A significant change in the lot layout;

8.6.3.4 A significant change in the general development pattern which adversely affects natural landscape features and open space preservation, including a significant increase in the amount of land proposed to be cleared of trees (either temporarily or permanently);

8.6.3.5 Significant changes to the stormwater management facilities;

8.6.3.6 Significant changes in the wastewater management systems; or

## 8.7 Basic Maximum Number of Housing Units

8.7.1 The Basic Maximum Number of Housing Units shall be no greater than the

number of single-family units permissible under conventional subdivision development. The Basic Maximum Number of Units shall be derived from a Yield Plan. The Yield Plan shall show the maximum number of single family house lots that could be created upon the site through a conventional subdivision of land. The Yield Plan shall contain a level of detail sufficient to determine the maximum yield of a tract. Yield plans shall demonstrate conformity to all Zoning, Health, and Environmental regulations, including dimensional requirements, maximum impervious surface, property line setbacks, wetland setbacks, riverfront restrictions, Title 5 requirements, local or state stormwater management requirements, and design and construction requirements outlined in the Wilmington Subdivision Rules and Regulations.

8.7.2 The proponent shall have the burden of proof with regard to the Basic Maximum

number of lots (or dwelling units) resulting from the design and engineering specifications shown on the Yield Plan.

## 8.8 Reduction of Dimensional Requirements

The Planning Board encourages applicants to modify lot size, shape, and other dimensional requirements for lots within a CSD, subject to the following limitations:

8.8.1 Lots having reduced area or frontage shall not have frontage on a street other than a street created by the CSD; provided, however, that the Planning Board may waive this requirement where it is determined that such reduced lot(s) will further the goals of this bylaw.

8.8.2 At least 50% of the required setbacks for the district shall be maintained in the CSD unless a reduction is otherwise authorized by the Planning Board.

8.8.3 Lot frontage shall not be less than 50 feet. The Planning Board may waive this requirement where it is determined that such reduced frontage will further the goals of the bylaw.

## 8.9 Open Space Requirements

- 8.9.1 Open Space. A minimum of thirty-five percent (35%) of the tract shown on the development plan shall be open space. Any proposed open space--unless conveyed to the Town of Wilmington, the Wilmington Conservation Commission, or a local or regional open space land trust--shall be subject to a permanent recorded deed restriction enforceable by the Town, providing that such land shall be perpetually kept in an open state, that it shall be preserved exclusively for the purposes set forth herein, and that it shall be maintained in a manner which will ensure its suitability for its intended purposes.
- 8.9.1.1 The percentage of the open space that is wetland shall not significantly exceed the percentage of the entire tract which is wetland; provided, however, that the applicant may include a greater percentage of wetlands in such open space upon a demonstration that such inclusion promotes the purposes of this bylaw.
- 8.9.1.2 The open space shall be contiguous. Contiguous shall be defined as being connected. Open Space will still be considered connected if it is separated by a roadway, driveway, pathway, or accessory amenity. The Planning Board may waive this requirement for all or part of the required open space where it is determined that allowing non-contiguous open space will promote the goals of this bylaw and/or protect identified primary and secondary conservation areas.
- 8.9.1.3 The bulk of the open space shall not be in buffer strips, undeveloped 'fingers' between house lots, or other narrow linear forms.
- 8.9.1.4 The open space shall be used primarily for wildlife habitat, conservation, and passive recreation. The Planning Board shall also permit where appropriate the following uses: historic preservation, outdoor education, active recreation, parks, agriculture, horticulture, or a combination of these uses. The open space shall be served by suitable access for all stated purposes. If the open space is conveyed to the Town, Conservation Commission, or a local or regional land trust, provisions for public access

shall be made, including signage. The Planning Board may permit up to 10% of the open space to be paved or built upon for structures accessory to the dedicated use or uses of such open space (i.e., pedestrian walks, bike paths, and parking for public visitors to the open space).

8.9.1.5 Wastewater disposal facilities and stormwater management systems

serving the CSD may be located within the open space. However, these systems shall not qualify towards the minimum open space required. Land upon which wastewater disposal facilities (including leach fields) are located shall remain under the possession of a homeowners association or similar entity dedicated to the maintenance of such facilities even if the balance of the open space is conveyed to another entity.

8.9.2. Ownership of the Open Space. The open space shall, at the Planning Board's election, be conveyed to:

8.9.2.1 The Town or its Conservation Commission;

8.9.2.2 A nonprofit organization, the principal purpose of which is the conservation of open space and any of the purposes for such open space set forth above;

8.9.2.3 A corporation or trust owned jointly or in common by the owners of lots within the CSD. If such a trust or corporation is utilized, ownership thereof shall pass with conveyance of the house lots (or condominiums) in perpetuity. Maintenance of such open space and facilities shall be permanently guaranteed by such corporation or trust which shall provide for mandatory assessments for maintenance expenses to each lot. Each such trust or corporation shall be deemed to have assented to allow the Town to perform maintenance of such open space and facilities, if the trust or corporation fails to provide adequate maintenance, and shall grant the town an easement for this purpose. In such event, the town shall first provide fourteen (14) days written notice to the trust or corporation as to the inadequate maintenance, and, if the trust or corporation fails to complete such maintenance, the town may perform it. Each individual deed, and the deed or trust or articles of incorporation, shall include provisions designed to

effect these provisions. Documents creating such trust or corporation shall be submitted to the Planning Board for approval, and shall thereafter be recorded.

## 8.10 Design Standards

The following Generic and Site Specific Design Standards shall apply to all CSD developments and shall govern the development and design process:

### 8.10.1 Generic Design Standards

8.10.1.1 The landscape, including topography, tree cover, and natural drainage ways, shall be preserved in its natural state, insofar as practicable, by minimizing tree and soil removal. Any grade changes shall be in keeping with the general appearance of the neighboring developed areas. The orientation of individual building sites shall be such as to maintain maximum natural topography and cover.

8.10.1.2 Streets shall be designed and located in such a manner as to maintain and preserve natural topography, significant landmarks, and trees; to minimize cut and fill; and to preserve and enhance views and vistas on or off the subject parcel, insofar as practicable.

8.10.1.3 Mixed-use development shall be related harmoniously to the terrain and the use, scale, and architecture of existing buildings in the vicinity that have functional or visual relationship to the proposed buildings. Proposed buildings shall be related to their surroundings.

8.10.1.4 All open space (landscaped and usable) shall be designed to add to the visual amenities of the area by maximizing its visibility for persons passing the site or overlooking it from nearby properties.

- 8.10.1.5 The removal or disruption of historic, traditional or significant uses, structures, or architectural elements shall be minimized insofar as practicable, whether these exist on the site or on adjacent properties.

#### 8.10.2 Site Specific Design Standards

- 8.10.2.1 **Mix of Housing Types.** The CSD may consist of single-family (attached or detached), two-family and multifamily residential structures, or a combination of these housing types. A multifamily structure shall not contain more than 6 dwelling units.
- 8.10.2.2 Where the CSD development will include a mix of housing types, the developer shall seek to place single family houses towards the perimeter of the site, especially where it abuts residentially zoned and occupied properties. Within the site, residential structures shall be oriented toward the street serving the premises and not the required parking area.
- 8.10.2.3 Multifamily structures shall be sited and screened to minimize any potential negative visual impact on abutting single-family structures, both on and off site.
- 8.10.2.4 **Parking.** Each dwelling unit shall be served by two (2) off-street parking spaces, except where the development is located within 1/2 mile of an MBTA commuter rail station, in which case each dwelling unit shall be served by no less than 1.5 off-street parking spaces. Parking spaces in front of garages may count in this computation. Resident parking for multifamily structures shall be placed to the side or rear of the building, and the primary pedestrian / visitor entrance shall face the street. All parking areas with greater than 6 spaces shall be screened from view.
- 8.10.2.5 Developers are encouraged to provide outdoor living spaces, such as porches, on the front of residential structures, facing the street.

- 8.10.2.6 Buffer Areas. A vegetated buffer area of 30 feet shall be provided at the following locations: (a) the perimeter of the property where it abuts residentially zoned and occupied properties; (b) Conservation Areas, including ponds, wetlands, streams and riverfront areas, agricultural or recreational fields, and land held for conservation purposes; and (c) existing public ways. Driveways necessary for access and egress to and from the tract may cross such buffer areas. No vegetation in this buffer area will be disturbed, destroyed or removed, except for normal maintenance of structures and landscapes approved as part of the project. The Planning Board may modify or waive the buffer requirement in these locations when it determines that a smaller buffer (or no buffer) will suffice to accomplish the objectives set forth herein.
- 8.10.2.7 Drainage and Stormwater Management. All CSD developments shall conform to the Massachusetts Wetlands Protection Act Stormwater Management Standards (regardless of whether the project falls under Wetlands Protection Act jurisdiction). Developers shall seek to reduce the amount of impervious surface through the use of shared driveways, parking lots of gravel or pervious pavement, and reduction in the width of streets. Development shall not increase the peak rate of discharge for the 2-, 10-, and 100-year storms. Stormwater management systems shall recharge to groundwater as much water as possible. Appropriate water quality treatment best management practices shall be used for runoff from roads and driveways. All rooftop runoff shall be infiltrated on site. A landscape architect should be employed to develop screening and landscaping for structural stormwater management facilities (swales, detention ponds, etc.)
- 8.10.2.8 Roadways. Developers shall balance the need to minimize the amount of paved surface on the site with the need to route roadways carefully in order to minimize environmental impact. Developers shall establish a right-of-way no greater than 50 feet. The Planning Board will consider permitting reduction of roadway width or other Roadway and Driveway Design Requirements (outlined in the Rules and Regulations Governing the Subdivision of Land) in order to reduce environmental impacts of the development, so long as the proponent demonstrates that such reduction will not decrease pedestrian and vehicular safety and or impeded access for emergency vehicles.
- 8.10.2.9 Common/Shared Driveways. Common or shared driveways are permitted in CSD developments. Driveways serving single residences shall be 10-12 feet in width, and those serving multiple residences 16-20 feet in width, unless the proponent demonstrates that increased widths are necessary to ensure vehicular and pedestrian safety or to provide access for emergency vehicle.

- 8.10.2.10 Pedestrian and Bicycle Connections. Walkways and bicycle paths shall be provided to link residences with parking areas, open spaces, and recreation facilities. Developers shall also create pedestrian and bicycle links to off site land uses, including nearby key destinations (schools, neighborhood activity centers, recreational facilities) and existing or proposed segments of the town's trail network.
- 8.10.2.11 Disturbed Areas. Not more than 65% of the site shall be disturbed areas. A disturbed area is any land not left in its natural state. Undisturbed areas may be within the common open space or within individual house lots.
- 8.10.2.12 Landscaping. Developers shall employ a landscape architect to design landscape features harmonious with the site's natural state and will make water conservation a priority for the landscape design. Drought-resistant plantings are strongly encouraged. The size of individual and common lawns should be minimized. Developers are encouraged to use natural, low-maintenance grasses and meadow plantings for open areas.

## 8.11 Decision of the Planning Board

The Planning Board may grant a special permit for a proposed CSD development if it determines that the proposed project has less detrimental impact on the property and surrounding areas than a conventional development proposed for the tract, after considering the following factors:

- 8.11.1 Whether the CSD achieves greater flexibility and creativity in the design of residential developments than a conventional plan;
- 8.11.2 Whether the CSD promotes permanent preservation of open space, agricultural land forestry land, other natural resources including waterbodies and wetlands, and historical and archeological resources;

- 8.11.3 Whether the use of CSD reduces the impacts of development on the Ipswich River and other waterbodies, through the reduction of water consumption, by minimizing impervious surfaces, and through the use of on-site or decentralized wastewater management systems.
- 8.11.4 Whether the CSD promotes a less sprawling and more efficient form of development that consumes less open land and conforms to existing topography and natural features better than a conventional subdivision;
- 8.11.5 Whether the CSD reduces the total amount of disturbance on the site;
- 8.11.6 Whether the CSD furthers the goals and policies of the open space plan and Wilmington Master Plan;
- 8.11.7 Whether the CSD facilitates the construction and maintenance of streets, utilities, and public service in a more economical and efficient manner;
- 8.11.8 Whether the CSD contributes to increasing the diversity of available housing in Wilmington;
- 8.11.9 Whether the Concept Plan and its supporting narrative documentation complies with all sections of this zoning bylaw; or do anything in relation thereto.