

Approved By: _____
Meeting Date: _____

**TOWNSHIP OF MOORESTOWN
ORDINANCE NO. 22-2008
AN ORDINANCE OF THE TOWNSHIP OF MOORESTOWN AMENDING CHAPTERS
158 AND 160 OF THE CODE OF THE TOWNSHIP OF MOORESTOWN CREATING
STANDARDS FOR CONSERVATION SUBDIVISION DESIGN FOR PROPERTIES
LOCATED IN THE R-1, R-1-A AND R-2 RESIDENCE DISTRICTS**

BE IT ORDAINED by the Township Council of the Township of Moorestown, County of Burlington and State of New Jersey that Chapter 180 shall be amended as follows:

Article I: Definitions

[Add] Primary Conservation Areas – Floodplains, wetlands and transition areas, stream corridors, slopes over 20%, and vernal pools.

[Add] Secondary Conservation Areas – Areas of High Groundwater Recharge (12-16 inches per year), slopes between 10% and 20%, Natural Heritage Priority Sites, and Critical Habitat Areas as designated by the New Jersey Division of Fish & Wildlife’s Landscape Project, as well as other scenic, natural, cultural and historic features such as viewsheds, natural swales, groves of trees, local landmarks, and historic structures that may be unmapped but should be incorporated into site plans during the site visit.

[Add] Conservation Area/Conservation Area Lands – Any parcel or area of land or water which is essentially unimproved and devoted to an open space use, including but not limited to areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas that preserve historic and cultural resources. Specifically, Conservation Areas are delineated, designed, and/or dedicated during the Conservation Design Subdivision Process.

[Add] Site Inspection – An organized, pre-arranged site visit during which Municipal Agency members and planner, environmental committee members, municipal officials, and applicant (including site designer and engineer) walk the property together. Applicant should distribute Existing Resources and Site Analysis Map to all participants at or prior to this meeting. The purpose of the site inspection is to familiarize all parties with the property’s existing conditions and special features, to identify potential site design issues, and to provide an informal opportunity to discuss site design concepts.

[Add] Country Properties – Large lots in Conservation Design subdivisions and/or site plans that have a conservation easement placed on them that protects the natural features on the site and prohibits further subdivision of the lot. In Conservation Design Subdivisions with country properties, no common Open Space/Conservation Area land is provided.

[Add] Existing Resources and Site Analysis Map – A map, or set of maps, prepared at the scale of 1" = 100' or 1" = 200' on a standard size sheet of 24" by 36" that is used throughout the Conservation Design Four-Step Process. The map should include both natural land cover and man-made structures/features found on the site prior to any clearing.

[Add] Scenic Roads: Haines Drive along Strawbridge Lake, Garwood Road, Cox Road, and McElwee Road, as designated in the Master Plan.

[Add] Historic Roads: Old Salem Road, Kings Highway, Riverton Road, Lenola Road, and Church Street, as designated in the Master Plan.

[Replace existing definition with new definition] Sketch Plan – A sketch or rough layout of proposed development areas and conservation areas. In their most basic form, they may consist of simple "bubble maps" drawn on clear overlay sheets placed on top of the Existing Resources and Site Analysis Map. Sketch Plans involve little engineering input except for a general knowledge of soil and slope conditions (which are pertinent for septic and street alignments).



Example Sketch Plan, courtesy Natural Lands Trust

Article II: Purpose

[Add] Section 158-6.1: Written application for consideration of a proposed land development for all Conservation Design Subdivisions – tracts 5 acres or more in R-1 and R-1-A Residence Districts and tracts 3 acres or more in R-2 Residence District.

Prior to the preparation of any preliminary plat of a subdivision, or a preliminary site plan for land development of any site that is five acres or more in size in the R-1 or R-1-A Districts, and three acres or more in size in the R-2 District, the applicant shall file with the Zoning Officer a written application for initial consideration of the proposed Conservation Design Subdivision or land development. At this time, the Zoning Officer will explain, in person, the Conservation Design Process, including the 1) Pre-Application Meeting; 2) Existing Resources and Site Analysis Map; 3) the Site Inspection; 4) the Sketch Plan submittal; and 5) the Four-Step Conservation Design Process.

[Add] Section 158-7.1: Submission of plats or plans to comply with requirements, for major site plans and major subdivisions

(1.) All preliminary and final subdivision or site plan reviews for tracts over 5 acres (R-1 and R-1-A Residence Districts) or tracts over 3 acres (R-2 Residence Districts) shall be referred to, reviewed, and approved or disapproved by the Planning Board in accordance with the procedures specified in this Article and in other sections of this ordinance. Any application not processed as required herein shall be null and void unless it was made prior to the adoption of these regulations.

(2.) Overview of Procedures: Items a-d and f-j below are required under this Ordinance for all major subdivisions and site plans. Item (e) Sketch Plan Submission and Review is optional but strongly encouraged as an important, valuable and highly recommended step that will speed the review process and may result in lower costs for the project. These steps shall be followed sequentially, and may be combined or waived only at the discretion of the municipality:

a. Pre-Application Meeting

A pre-application meeting is encouraged between the applicant, the site designer, the Planning Board and the municipal agency planner to introduce the applicant to the municipality's zoning and subdivision regulations and procedures, to discuss the applicant's objectives, and to schedule site inspections, meetings and plan submissions as described below. Applicants may present the Existing Resources and Site Analysis Map at this meeting.

b. The Existing Resources and Site Analysis Map, as described in Section 158-1: Definitions and Section 158-7.2 [Existing Resources and Site Analysis Map Requirements] of this Ordinance. A Yield Plan, as described in Section 180-10.2, 180-12.1, and Section 180-22.1 [Conservation Design Subdivisions in R-1, R-1-A, and R-2 Residence Districts], shall use the Existing Resources and Site Analysis Map as a base map to determine density of the proposed Conservation Design Subdivision.

Applicants shall submit an Existing Resources and Site Analysis Map, in its context, prepared in accordance with the requirements contained in

Section 158-7.2. The purpose of this key submission is to familiarize officials with existing conditions on the applicant's tract and within its immediate vicinity, and to provide a complete and factual reference for them in making a site inspection. This map shall be provided prior to or at the site inspection, and shall form the basis for the development design as shown on the diagrammatic Sketch Plan.

c. Site Inspection by municipal agency and applicant.

After preparing the Existing Resources and Site Analysis Map, applicants shall arrange for a site inspection of the property by the Municipal Agency members and planner, environmental committee members, and other municipal officials, and shall distribute copies of said Existing Resources and Site Analysis Map at that on-site meeting. Applicants, their site designers, and the landowner are encouraged to accompany the Planning Board.

The purpose of the visit is to familiarize local officials with the property's existing conditions and special features, to identify potential site design issues, and to provide an informal opportunity to discuss site design concepts, including the general layout of designated conservation area lands (if applicable), and potential locations for proposed buildings and street alignments. Comments made by municipal officials or their staff and consultants shall be interpreted as being only suggestive. It shall be understood by all parties that no formal recommendations can be offered, and no official decisions can be made, at the Site Inspection.

d. Pre-Sketch Plan Conference.

Following the Site Inspection and prior to the submission of a diagrammatic Sketch Plan, the applicant shall meet with the Planning Board and/or Planning Board designee to discuss the findings of the site inspection and to develop a mutual understanding on the general approach for subdividing and/or developing the tract in accordance with the Four-Step Design Process described in Section 158-8.1 and Section 158-32 of this ordinance, where applicable. At the discretion of the Board, this conference may be combined with the site inspection.

e. Sketch Plan Submission and Review (diagrammatic sketch, optional step).

A Sketch Plan may be submitted by the applicant as a diagrammatic basis for informal discussion with the Planning Board regarding the design of a proposed major or minor subdivision or site plan. Sketch Plan submission is strongly encouraged by the municipality as a way of helping applicants and officials develop a better understanding of the property and to help establish an overall design approach that respects its special or noteworthy features, while providing for the density permitted under the Zoning Ordinance.



Example Sketch Plan – courtesy Natural Lands Trust

- f. Preliminary Plan Submittal, Determinations of completeness, Review and Approvals. (In the R1, R-1-A, and R2 Districts where Conservation Design applies, the Four-Step Design Process described in Section 158-8.1 of this Ordinance must be followed.)
- g. Detailed Final Plan, Preparation: Incorporation of all Conceptual Preliminary Plan Approval Conditions, Documentation of all other agency approvals, as applicable
- h. Detailed Final Plan, Submission: Determination of Completeness, Review, and Approval
- i. Municipal Board signatures
- j. Recording of approved Detailed Final Plan with County Recorder of Deeds

158-7.2 Existing Resources and Site Analysis Map Requirements

For all subdivisions, an Existing Resources and Site Analysis Map shall be prepared to provide the developer and the municipality with a comprehensive analysis of existing conditions, both on the proposed development site and within 500 feet of the site. Conditions beyond the parcel boundaries may be described on the basis of existing published data available from governmental agencies, and from aerial photographs.

The municipality shall review the Plan to assess its accuracy, conformance with municipal ordinances, and likely impact upon the natural and cultural resources on the property. Unless otherwise specified by the Planning Board, such plans shall generally be prepared at the scale of 1" = 100' or 1" = 200',

whichever would fit best on a single standard size sheet (24" x 36"). The following information shall be included in this Plan:

- a. A vertical aerial photograph enlarged to a scale not less detailed than 1 inch = 400 feet, with the site boundaries clearly marked.
- b. Topography, the contour lines of which shall generally be at two-foot intervals, determined by photogrammetry (although 10-foot intervals are permissible beyond the parcel boundaries, interpolated from U.S.G.S. published maps). The determination of appropriate contour intervals shall be made by the Planning Board, which may specify greater or lesser intervals on exceptionally steep or flat sites. Slopes between 10 and 20 percent and exceeding 20 percent shall be clearly indicated. Topography for major subdivisions shall be prepared by a professional land surveyor or professional engineer from an actual field survey of the site or from stereoscopic aerial photography and shall be coordinated with official U.S.G.S. benchmarks.
- c. The location and delineation of vernal pools, streams, stream corridors, ponds, ditches, drains, and natural drainage swales, as well as the 100-year floodplains, and wetlands and transition areas, as defined in the Zoning Ordinance. Additional areas of wetlands on the proposed development parcel shall also be indicated, as evident from testing, visual inspection, or from the presence of wetland vegetation.
- d. Vegetative cover conditions on the property according to general cover type including cultivated land, permanent grass land, meadow, pasture, old field, hedgerow, woodland and wetland, trees with a caliper in excess of twelve inches, the actual canopy line of existing trees and woodlands. Vegetative types shall be described by plant community, relative age and condition.
- e. Soil series, types and phases, as mapped by the U.S. Department of Agriculture, Natural Resources Conservation Service in the published soil survey for the county, and accompanying data published for each soil relating to its suitability for construction (and, in un-sewered areas, for septic suitability).
- f. Ridge lines and watershed boundaries shall be identified.
- g. Identification of current views from Scenic Roads and Historic Roads (as designated in the Master Plan and defined in Chapter 180-2), public parks, public forests, and historic corridors as designated by the State Historic Preservation Office.
- h. Geologic formations on the proposed development parcel, including rock outcroppings, cliffs, sinkholes, and fault lines, based on available published information or more detailed data obtained by the applicant.
- i. All existing man-made features including but not limited to streets, driveways, farm roads, woods roads, buildings, foundations, walls, wells, drainage fields, dumps, utilities, fire hydrants, storm and sanitary sewers,

and septic systems and wells, on-tract as well as within 50 feet of property line, as best as can be determined.

- j. Locations of all historically significant sites or structures on the tract. This is to include those sites listed in the Master Plan, as well as unlisted structures found on tracts such as cellar holes, stone walls, earthworks, and graves.
- k. Locations of trails and waterways that have been in public use (pedestrian, equestrian, bicycle, non-motorized boat, etc.).
- l. All easements and other encumbrances of property which are or have been filed of record with the Recorder of Deeds of Burlington County shall be shown on the plan.
- m. Total acreage of the tract and the constrained land area with detailed supporting calculations.

158-7.3. Sketch Plan Review by the Planning Board

(1.) Applicability

A diagrammatic Sketch Plan is strongly encouraged for all proposed minor or major subdivisions. Such plans are for informal discussion only. Submission of a Sketch Plan does not constitute formal filing of a plan with the municipality, and shall not commence the statutory review period as required by the Municipal Land Use Law. The procedures for submission of a diagrammatic Sketch Plan are described below, and may be altered only at the discretion of the municipality.

(2.) To provide a full understanding of the site's potential and to facilitate the most effective exchange with the Planning Board, a Sketch Plan should be drafted and should include the information listed below. Many of these items can be taken from the Existing Resources and Site Analysis Map, a document that must in any case be prepared and submitted no later than the date of the Site Inspection, which precedes the Preliminary Plan (see Section 158-7.1 (2)). In fact, the diagrammatic Sketch Plan may be prepared as a simple overlay sheet placed on top of the Existing Resources and Site Analysis Map.

- 1. Name(s) and address(es) of the legal owner, the equitable owner, and/or the applicant;
- 2. Name(s) and address(es) of the professional engineer, surveyor, planner, architect, landscape architect, or site designer responsible for preparing the plan;
- 3. Graphic scale (not greater than 1" = 200 ft.; however, dimensions on the plan need not be exact at this stage) and north arrow;
- 4. Approximate tract boundaries, sufficient to locate the tract on a map of the municipality;

5. Location map;
 6. Zoning district;
 7. Streets on and adjacent to the tract (both existing and proposed);
 8. 100-year floodplain limits, and approximate location of wetlands and transition areas, vernal pools, streams, and stream corridors, if any.
 9. Topographic, physical, and cultural features including fields, pastures, meadows, wooded areas, trees with a diameter of twelve inches or more, hedgerows and other significant vegetation, steep slopes (over 10%), soil types, ponds, ditches, drains, dumps, storage tanks, streams within two hundred (200) feet of the tract, and existing rights-of-way and easements, and cultural features such as all structures, foundations, walls, wells, trails, and abandoned roads;
 10. Schematic layout indicating a general concept for land conservation and development ("bubble" format is acceptable for this delineation of Step One of the four-step design process described in Section 158-8.1 (A) of this ordinance);
 11. Proposed general street and lot layout; and
 12. In the case of land development plans, proposed location of buildings and major structures, parking areas and other improvements.
 13. General description of proposed method of water supply, sewage disposal, and stormwater management.
- (3.) The fee schedule for a Sketch Plan review is \$1,000, and is also shown in Section 158-14. Fees.
- (4.) The developer shall not be bound by any Concept Plan/Sketch Plan for which the review is requested, and the Planning Board shall not be bound by any such review.
- (5.) Sketch Plan Submission and Review
1. Copies of a diagrammatic Sketch Plan, meeting the requirements set forth above, shall be submitted to the Planning Board Secretary during business hours for distribution to the Planning Board, the Municipal Agency Planner, the Municipal Engineer and applicable municipal advisory boards at least seven (7) days prior to the Planning Board meeting at which the Sketch Plan is to be discussed. The Sketch Plan diagrammatically illustrates initial thoughts about a conceptual layout for Conservation Area lands, house sites, and street alignments, and shall be based closely upon the information contained in the Existing Resources and Site Analysis Map. The Sketch Plan shall also be designed in accordance with the Four-Step Design Process described in Section 158-8.1, and with the design review standards listed in Section 158-7.3 [Sketch Plan Review by the Planning Board].
 2. The Planning Board shall review the Sketch Plan in accordance with the criteria contained in this ordinance and with other applicable ordinances of the

municipality. Their review shall informally advise him/her of the extent to which the proposed subdivision or land development conforms to the relevant standards of this Ordinance, and may suggest possible plan modifications that would increase its degree of conformance. Their review shall include but is not limited to:

- a. the location of all areas proposed for land disturbance (streets, foundations, yards, septic disposal systems, storm water management areas, etc.) with respect to notable features of natural or cultural significance as identified on the applicant's Existing Resources and Site Analysis Map and on the township's Open Space Plan;
- b. the potential for street connections with existing streets, other proposed streets, existing bikeways, sidewalks, and multi-purpose trails, other proposed bikeways, sidewalks, and multi-purpose trails, or potential developments on adjoining parcels;
- c. the location of proposed access points along the existing road network;
- d. the proposed building density and impervious coverage;
- e. the compatibility of the proposal with respect to the objectives and policy recommendations of the Master Plan and the Open Space Plan; and
- f. consistency with the Zoning Ordinance.

[Add] Section 158-8.1: Four Step Design Process for tracts 5 acres or more in the R-1, R-1-A Districts and tracts 3 acres or more in R-2 Districts, submitted for public hearing and tentative and final approval

All Preliminary Plans for major subdivisions and site plans in the R-1, R-2 and R-1-A Districts shall include documentation of a Four-Step Design Process in determining the layout of proposed Conservation Area lands, house sites, streets and lot lines, as described below.

A. Step 1: Delineation of Conservation Area Lands

- (1) The minimum percentage and acreage of required Conservation Area lands shall be calculated by the applicant and submitted as part of the Sketch Plan or Preliminary Plan in accordance with the provisions of this ordinance and of the Zoning Ordinance. Conservation Area lands shall include all Primary Conservation Areas and those parts of the remaining buildable lands with the highest resource significance, as described below and in Section 158-1 [Definitions].
- (2) Proposed Conservation Area lands shall be designated using the Existing Resources and Site Analysis Map as a base map and complying with Article XXX: Conservation Area Land Use and Design Standards of the Zoning Ordinance and Sections 158-17 (G) [Resource Conservation and Conservation Area Delineation Standards] and (H) [Other Design Standards] herein, dealing with Resource Conservation and Conservation Area Delineation Standards.

Moorestown Township's Proposed Open Space Map in its Open Space and Recreation Plan shall also be referenced and considered. Primary Conservation Areas shall be delineated comprising floodplains, wetlands and slopes over 20 percent.

- (3) In delineating Secondary Conservation Areas, the applicant shall prioritize natural and cultural resources on the tract in terms of their highest to least suitabilities for inclusion in the proposed Conservation Area, in consultation with the Planning Board.
- (4) On the basis of those priorities and practical considerations given to the tract's configuration, its context in relation to resources areas on adjoining and neighboring properties, and the applicant's subdivision objectives, Secondary Conservation Areas shall be delineated to meet at least the minimum area percentage requirements for Conservation Area lands and in a manner clearly indicating their boundaries as well as the types of resources included within them.

B. Step 2: Location of House Sites

Potential house sites shall be tentatively located, using the proposed Conservation Area lands as a base map as well as other relevant data on the Existing Resources Plan such as topography and soils. House sites should generally be located not closer than 50 feet from Primary Conservation Areas and 25 feet from Secondary Conservation Areas, taking into consideration the potential negative impacts of residential development on such areas as well as the potential positive benefits of such locations to provide attractive views and visual settings for residences.

C. Step 3: Location of Infrastructure – Streets, Trails, Stormwater Management and Sewage Facilities

Upon designating the house sites, a street plan shall be designed to provide vehicular access to each house, complying with the standards in Chapter 158 herein and bearing a logical relationship to topographic conditions. Impacts of the street plan on proposed Conservation Area lands shall be minimized, particularly with respect to crossing environmentally sensitive areas such as wetlands and traversing slopes exceeding 10%. Street connections shall generally be encouraged to minimize the number of new cul-de-sacs to be maintained by the municipality and to facilitate access to and from homes in different parts of the tract (and adjoining parcels).

Preferred locations for stormwater and wastewater management facilities shall be identified using the Existing Resources and Site Analysis Map and proposed Conservation Area lands as the base maps. Opportunities to use these facilities as an additional buffer between the proposed Conservation Area lands and development areas are encouraged. These facilities should generally be designed to improve the quality of stormwater runoff and wastewater effluent with emphasis placed on achieving

maximum groundwater recharge. The facilities should be located in areas identified as groundwater recharge areas as indicated on the Existing Resources and Site Analysis Plan. The design of the facilities should strive to use the natural capacity and features of the site to facilitate the management of stormwater and wastewater generated by the development.

D. Step 4: Drawing in the Lot Lines

Upon completion of the preceding three steps, lot lines are drawn as required to delineate the boundaries of individual residential lots.

Applicants shall be prepared to submit four separate sketch maps indicating the findings of each step of the design process.

[Add] Section 158-8.2 Preliminary Conservation Area Ownership and Management Plan

Using the Preliminary Plan as a base map, the boundaries, acreage and proposed ownership of all proposed Conservation Areas shall be shown. In addition, the applicant shall also submit a Preliminary Conservation Area Ownership and Management Plan detailing the entities responsible for maintaining various elements of the property, and describing management objectives and techniques for each part of the property. Such management plans shall be consistent with the requirements of Section 180-122 [Ownership of Conservation Areas and Common Facilities] of the Zoning Ordinance.

158-17 Requirements

[Add] G. Resource Conservation and Conservation Area Delineation Standards (Planning and Design Standards to minimize adverse impacts)

The standards for resource conservation, as set forth in this Section, shall apply to all major subdivision and major site plans in the municipality. The standards for Conservation Area delineation shall apply to all major and minor subdivisions and major site plans undergoing the Four-Step Conservation Design Process in the R-1, R-2 and R-1-A Districts. All subdivisions and land developments shall avoid or minimize adverse impacts on the municipality's natural, cultural and historic resources, as defined below.

(1) Groundwater Resources

The proposed subdivision and land development of any tract shall be designed to cause the least practicable disturbance to natural infiltration and percolation of precipitation to the groundwater table, through careful planning of vegetation and land disturbance activities, and the placement of streets, buildings and other impervious surfaces in locations other than those identified on the Existing Resources and Site Analysis Map as

having the greatest permeability where precipitation is most likely to infiltrate and recharge the groundwater.

(2) Stream Valleys, Swales, Springs, Vernal pools, and Other Lowland Areas

The Existing Conditions and Site Analysis Map describes and maps stream valleys (which include stream channels and flood plains), swales, springs and other lowland areas as resources that warrant restrictive land use controls because of flooding hazards to human life and property, their ground water recharge functions, their importance to water quality and the health of aquatic communities, and their wildlife habitats. They are generally poorly suited for on-site subsurface sewage disposal systems.

The following activities shall be minimized:

- a. Disturbance to streams, stream corridors and drainage swales.
- b. Disturbance to wetlands and transition areas and vernal pools, areas with seasonally high water tables, and areas of surface water concentration.
- c. Because of their extreme limitations, stream valleys, swales and other lowland areas warrant designation as Conservation Area lands. They may also require adjoining buffer lands to be included in the Conservation Area, to be determined by an analysis of the protection requirements of such areas on a case-by-case basis. In certain instances, seasonal high water table soils may be excluded from the Conservation Area where it can be demonstrated that they are suitable for low density residential uses and conventional on-site sewage systems.

(3) Woodlands

Woodlands occur extensively throughout the municipality, often in association with stream valleys and wet areas, poor and erodible agricultural soils, and moderate to steep slopes.

Because of their resource values, all woodlands on any tract proposed for subdivision or land development shall be evaluated by the applicant to determine the extent to which such woodlands should be designated partly or entirely as Conservation Area or development lands. Evaluation criteria shall include: configuration and size; present conditions, i.e., stocking, health and species composition; site potential, i.e., the site's capabilities to support woodlands, based upon its topographic, soil and hydrologic characteristics; ecological functions: i.e., in protecting steep slopes, erodible soils, maintaining stream quality and providing for wildlife habitats; relationship to woodlands on adjoining and nearby properties and the potential for maintaining continuous woodland areas.

- a. The evaluation of the tract's woodlands shall be undertaken by a forester, landscape architect, horticulturist or another qualified

professional acceptable to the municipality. This evaluation shall be submitted as a report and made a part of the application for a preliminary plan. The report must include an existing canopy and significant tree inventory as well as a tree removal/replacement plan, in compliance with Chapter 160 of the Moorestown Township Code.

b. In designing a subdivision and land development plan for any tract, the applicant shall be guided by the following standards:

1. Healthy woodlands exceeding one acre shall be preserved and designated as Conservation Areas, to the maximum extent possible. Proposed site improvements shall be located, designed and constructed to minimize the loss or degradation of woodland areas.

2. Subdivisions shall be designed to preserve woodlands along roadways, property lines and lines occurring within a site such as streams, swales, stone fences and hedgerows. Such lines and the native vegetation associated with them shall be preserved as buffers between adjacent properties and between areas being subdivided within a property. Preservation shall include ground, shrub, understory and canopy vegetation.

3. Disturbance or removal of woodlands occupying environmentally sensitive areas shall be undertaken only when approved by the Board and on a limited, selective basis to minimize the adverse impacts of such actions. This shall include but not necessarily be limited to, vegetation performing important soil stabilizing functions on wet soils, stream banks and sloping lands.

4. No clearing or earth disturbance (except for soil analysis for proposed sewage disposal systems) shall be permitted on a site before the completion of subdivision and land development agreements. The determination of sight distance clearances along roadways shall be made graphically and not by clearing on-site prior to final plan approval.

(4) Upland Rural-Agricultural Areas

These areas comprise fields, pastures, meadows, and former agricultural areas in early stages of woodlands succession, with fences, stone walls, tree copses and hedgerows, typically bordered by stream valleys and upland woodlands. These comprise the municipality's historic working landscape, dotted with historic houses, barns and other structures. They give the municipality much of its rural character. They also contain the greatest concentration of prime agricultural soils. Because of their openness and high visibility, development in these areas is likely to be most readily seen and disruptive to the historic landscape. They

sometimes provide habitat for wildlife, in conjunction with nearby woodlands and stream valleys. However, it is recognized that these areas also frequently offer the fewest constraints for development.

a. Several elements of these working landscapes lend themselves to incorporation into the municipality's open space network. These include prime agricultural soils and natural features which visually punctuate the landscape, such as hedgerows, tree copses, stone walls, and visually prominent places such as knolls and hilltops.

b. These areas can also accommodate development, with preferred locations being the non-prime agricultural soils and lower topographic settings where development will be visually less obtrusive. Compact clustered residential designs, with coordinated architectural and landscape architectural themes, are encouraged in highly visible locations where future development cannot be avoided (such as at the far edge of open fields).

(5) Slopes

Moderately sloping lands (10 to 20 percent) and steeply sloping lands (over 20 percent) are prone to severe erosion if disturbed. Erosion and the resulting overland flow of soil sediments into streams, ponds and public roads, are detrimental to water quality and aquatic life, and a potential hazard to public safety.

1. Areas of steep slope shall be preserved.
2. All grading and earthmoving on slopes exceeding 10 percent shall be minimized.
3. No site disturbance shall be allowed on slopes exceeding 20 percent except grading for a portion of a driveway accessing a single family dwelling when it can be demonstrated that no other routing which avoids slopes exceeding 20 percent is feasible.
4. On slopes of 10 to 20 percent, the only permitted grading beyond the terms described above shall be in conjunction with the siting of a single family dwelling, its access driveway and the septic system (which should typically be designed with a long, narrow drainage field following the land contours.
5. Grading or earthmoving on all sloping lands of 10 percent or greater shall not result in earth cuts or fills whose highest vertical dimension exceeds six feet, except where in the judgment of the Board no reasonable alternatives exist for construction of roads, drainage structures and other public improvements, in which case such vertical dimensions shall not exceed 12 ft. Roads and driveways shall follow the line of existing topography to minimize the required cut and fill. Finished slopes of all cuts and fills shall be as required to minimize disturbance of natural grades.

(6) Significant Natural Areas and Features

Natural areas containing rare or endangered plants and animals, as well as other features of natural significance exist throughout the municipality. Some of these have been carefully documented, e.g., by the New Jersey Landscape Project and the Natural Heritage Database, whereas for others, only their general locations are known. Subdivision applicants shall take all reasonable measures to protect significant natural areas and features identified in the Existing Resources and Site Analysis Map (as required in Section 158-7.2 [Existing Resources and Site Analysis Map Requirements]) by incorporating them into proposed Conservation Areas or avoiding their disturbance in areas proposed for development.

(7) Historic Structures and Sites

The municipality's documented historical resources begin with the Native Americans and extend through its colonial agricultural, residential and industrial development in the late 18th and 19th centuries. Many of the municipality's historic structures and sites have been extensively researched and remain intact. The municipality's extensive historic records are maintained by the Historical Society of Moorestown and the municipal library.

a. Plans requiring subdivision and land development approval shall be designed to protect existing historic resources of all classes. The protection of an existing historic resource shall include the conservation of the landscape immediately associated with and significant to that resource, to preserve its historic context. Where, in the opinion of the Board, a plan will have an impact upon an historic resource, the developer shall mitigate that impact to the satisfaction of the Board by modifying the design, relocating proposed lot lines, providing landscape buffers, or other approved means.

b. Applicant should provide evidence of interaction and consultation with the Moorestown Historical Preservation Commission and State Historic Preservation Office with regard to the preservation of historic resources, when appropriate.

(8) Historic Roads , Heritage Corridors, Scenic Roads, and Scenic Viewsheds

All applications for subdivision and land development shall attempt to preserve the scenic and visual views along scenic and historic roads, as defined in Section 158-1. Definitions, by incorporating them into Conservation Area lands or otherwise providing for building setbacks and architectural designs to minimize their intrusion. In instances where such designs fail to satisfactorily protect corridors, applicants will be required to provide naturalistic landscape buffers to minimize their adverse visual impacts.

(9) Trails

a. When a subdivision or site plan proposal is traversed by or abuts an existing trail customarily used by pedestrians, equestrians, and/or other non-motorized users, the Municipal Agency may require the applicant to make provisions for continued recreational use of the trail.

b. The applicant may alter the course of the trail within the tract for which development is proposed under the following conditions:

1. The points at which the trail enters and exits the tract remain unchanged.

2. The proposed alteration exhibits quality trail design according to generally accepted principles of landscape architecture.

3. The proposed alteration does not coincide with a paved road intended for use by motorized vehicles.

c. When trails are intended for public or private use, they shall be protected by a permanent conservation easement on the properties on which they are located. The width of the protected area in which the trail is located should be a minimum of ten feet. The language of the conservation easement shall be to the satisfaction of the Governing Body upon recommendation of the Municipal Solicitor.

d. The land area permanently designated for trails for public use may be credited toward the Conservation Area land requirement described in Section 158-8.1 (A) [Four Step Design Process] of the Subdivision Ordinance and Section 180-10.2 [Conservation Design Subdivisions in R-1 Residence Districts], Section 180-12.1 [Conservation Design Subdivisions in R-1-A Residence Districts] and Section 180-22.1 [Conservation Design Subdivisions in R-2 Residence Districts] in the Zoning Ordinance.

e. An applicant may propose and develop a new trail. If said trail is available for use by the general public and connects with an existing trail, the land area protected for said trail may be credited toward the Conservation Area land requirement described in 158-8.1 (A) [Four Step Design Process] of the Subdivision Ordinance.

f. Trail improvements shall demonstrate adherence to principles of quality trail design.

g. Trails shall have a vertical clearance of no less than ten (10) feet.

h. Width of the trail surface may vary depending upon type of use to be accommodated, but in no case shall be less than three (3) feet or greater than eight (8) feet.

- i. No trail shall be designed with the intent to accommodate motorized vehicles.

[Add] H. Other Design Considerations. The configuration of proposed Conservation Area lands set aside for common use in residential subdivisions shall comply with the following standards:

1. They shall be free of all structures except historic buildings, stone walls, and structures related to Conservation Areas, open space, and recreation uses. The Planning Board may grant approval of structures and improvements required for storm drainage, sewage treatment and water supply within the Conservation Area provided that such facilities would not be detrimental to the Conservation Area (and that the acreage of lands required for such uses is not credited towards minimum Conservation Area acreage requirements for the tract, unless the land they occupy is appropriate for passive recreational use).
2. They shall generally not include parcels smaller than three acres, have a length-to-width ratio of less than 4:1, or be less than 75 feet in width, except for such lands specifically designed as neighborhood greens, playing fields or trail links.
3. They shall be directly accessible to the largest practicable number of lots within the subdivision. Non-adjointing lots shall be provided with safe and convenient pedestrian access to Conservation Area land.
4. They shall be suitable for active recreational uses to the extent deemed necessary by the Planning Board, without interfering with adjacent dwelling units, parking, driveways, and roads. Setback and siting requirements for recreation uses are referenced in Section 180-10.2 (F) [Conservation Design Subdivisions in R-1 Residence Districts - Design Standards for Option One and Option Two Subdivisions], Section 180-12.1 (F) [Conservation Design Subdivisions in R-1-A Residence Districts – Design Standards for Option One and Option Two Subdivisions], and Section 180-22.1 (F) [Conservation Design Subdivisions in R-2 Residence Districts – Design Standards for Option One and Option Two Subdivisions] of the Zoning Ordinance.
5. They shall be interconnected wherever possible to provide a continuous network of Conservation Area lands within and adjoining the subdivision.
6. They shall provide buffers to adjoining parks, preserves or other protected lands.
7. Except in those cases where part of the Conservation Area is located within private houselots, they shall provide for pedestrian pathways for use by the residents of the subdivision. Consideration shall be given to providing for public access on such trails if they are linked to other publicly-accessible pathway systems within the municipality. Provisions should be made for access to the Conservation Area lands, as required for land management and emergency purposes.

8. They shall be undivided by public or private streets, except where necessary for proper traffic circulation.
9. They shall be suitably landscaped either by retaining existing natural cover and wooded areas and/or according to an approved landscaping plan to protect Conservation Area resources.
10. They shall be made subject to such agreement with the municipality and such conservation easements duly recorded in the office of the Burlington County Recorder of Deeds as may be required by the Municipal Agency for the purpose of preserving the common open space for such uses.
11. They shall be consistent with the municipality's Master Plan and its Open Space Plan.

[Add] I. Ownership and Maintenance. Applicants shall demonstrate compliance with Conservation Area ownership and maintenance standards in Section 180-122 of the Zoning Ordinance.

158-32 Subdivision for industrial, commercial, institutional, or other nonresidential purposes.

[Add] I. Conservation Design approach shall be applied to any major subdivision or major site plan. Conservation Design Approach shall be applied to any tract 5 acres or more in R-1 and R-1-A Districts, and any tract 3 acres or more in R-2 District.

A. All Conservation Design Subdivisions shall include documentation of a Four-Step Design Process in determining the layout of proposed Conservation Area lands, building sites, streets and lot lines, as described below.

(1) Step 1: Delineation of Conservation Area Lands

- (a) Conservation Area lands (the undeveloped portions of non-residential subdivisions and site plans) shall include all Primary Conservation Areas and those parts of the remaining buildable lands with the highest resource significance, as described in Section 158-17 (G) [Resource Conservation and Conservation Area Delineation Standards].
- (b) Proposed Conservation Area lands shall be designated using the Existing Resources and Site Analysis Map as a base map and complying with Section 180-17 (G) [Resource Conservation and Conservation Area Delineation Standards] of the Zoning Ordinance and Section 158-17 (G) [Resource Conservation and Conservation Area Delineation Standards].of the Subdivision Ordinance, dealing with Resource Conservation and Conservation Area Delineation Standards. Primary Conservation Areas shall be delineated comprising floodplains, wetlands and slopes over 20 percent.

- (c) In delineating Secondary Conservation Areas, the applicant shall prioritize natural and cultural resources on the tract in terms of their highest to least suitabilities for inclusion in the proposed Conservation Area, in consultation with the Planning Board.
- (2) Step 2: Location of Building Sites, Accessory Structures and Parking Lots
Potential building sites shall be tentatively located, using the proposed Conservation Area lands as a base map as well as other relevant data on the Existing Resources and Site Analysis Map such as topography and soils. Building sites should generally be located not closer than 50 feet from Primary Conservation Areas and 25 feet from Secondary Conservation Areas, taking into consideration the potential negative impacts of development on such areas as well as the potential positive benefits of such locations to provide attractive views and visual settings for buildings.
- (3). Step 3: Alignment of Streets and Trails
Upon designating the building sites, a street plan shall be designed to provide vehicular access, if appropriate, complying with the standards in Section 158-17 B herein, and bearing a logical relationship to topographic conditions. Impacts of the street plan on proposed Conservation Area lands shall be minimized, particularly with respect to crossing environmentally sensitive areas such as wetlands. Street connections shall generally be encouraged to minimize the number of new cul-de-sacs to be maintained by the municipality and to facilitate access to and from buildings in different parts of the tract (and adjoining parcels).
- (4) Step 4: Drawing in the Lot Lines
If appropriate given the proposed development, lot lines are drawn as required to delineate the boundaries of individual building lots.

Applicants shall be prepared to submit four separate sketch maps indicating the findings of each step of the design process to the Planning Board during preliminary and final approval as required in Section 158-7.3 [Sketch Plan Review by the Planning Board] and Section 158-8.1 [Four Step Design Process for tracts 5 acres or more in the R-1 and R-1-A Districts and tracts 3 acres or more in R-2 Districts].

Article V. Site Plan Review

Add:

Conservation Design's Four Step Design Process shall apply to all major subdivisions and major site plans. See Section 158-8.1 for outline of process.

[Add] Chapter 160-5 J. Resource Conservation Standards For Site Preparation and Cleanup

1. Protection of Vegetation from Mechanical Injury. Where earthwork, grading, or construction activities will take place in or adjacent to woodlands, old fields or other significant vegetation or site features, the Planning Board shall require that the limit of disturbance be delineated and vegetation protected

- through installation of temporary fencing or other approved measures. Such fencing shall be installed prior to commencing of and shall be maintained throughout the period of construction activity.
2. Protection of Vegetation from Grading Change. Grade changes to occur at any location of the property shall not result in an alteration to soil or drainage conditions which would adversely affect existing vegetation to be retained following site disturbance, unless adequate provisions are made to protect such vegetation and its root systems.
 3. Protection of Vegetation from Excavations
 - a. When digging trenches for utility lines or similar uses, disturbances to the root zones of all woody vegetation shall be minimized.
 - b. If trenches must be excavated in the root zone, all disturbed roots shall be cut as cleanly as possible. The trench shall be backfilled as quickly as possible and the area shall be re-vegetated with native species if the plants are destroyed.
 4. Protection of Topsoil
 - a. No topsoil shall be removed from the site.
 - b. Prior to grading operations or excavation, topsoil in the area to be disturbed shall be removed and stored on site.
 - c. Topsoil disturbed or moved on site shall be redistributed and stabilized immediately in Primary and Secondary Conservation areas and within seven days in all other areas following the establishment of required grades for a project or project phase. All exposed earth surfaces shall be stabilized by hydroseeding on slopes of less than ten percent, and by sodding, hydroseeding, or rip-rap on slopes exceeding ten percent.
 - d. Grading and earthmoving operations shall be scheduled to minimize site disturbance during the period from November 1 to April 1, when re-vegetation of exposed ground is difficult.

In all other respects, Chapters 158 and 160 shall remain in full force and effect.

Repealer. Any and all other ordinances inconsistent with any of the terms and provisions of this ordinance are hereby repealed to the extent of such inconsistencies

Severability. In the event that any section paragraph, clause phrase, term, provision or part of this ordinance shall be adjudged by a court of competent jurisdiction to be invalid or unenforceable for any reason, such judgment shall not effect, impair or invalidate the remainder thereof, but shall be confined in its operation to the section, paragraph, clause, term, provision or part thereof directly involved in the controversy in such judgment shall be rendered.

Effective Date. This Ordinance shall take effect twenty (20) days after the first publication thereof, after final passage and in accordance with law.

Short Title. This Ordinance shall be known as Ordinance 22-2008.

NOTICE

The ordinance published herewith was introduced and passed upon first reading at a meeting of the Township Council of the Township of Moorestown, County of Burlington, State of New Jersey, held on July 28, 2008. This ordinance will be further considered for final passage by the Township Council at a meeting to be held in the Auditorium of the William Allen Middle School, 801 North Stanwick Road, Moorestown, NJ on September 22, 2008 at 7:30pm or at any time and place to which such meeting may be adjourned. All persons interested will be given the opportunity to be heard concerning such ordinance. During the week prior to and including the date of such further consideration, copies will be made available at the Municipal Clerk's Office to any member of the general public who shall request such copies.

Patricia L. Hunt, RMC
Township Clerk