

# **HARVARD DRAFT OPEN SPACE RESIDENTIAL DESIGN (OSRD) DEVELOPMENT**

## **NOVEMBER 3, 2021 - 2<sup>nd</sup> DRAFT**

### **A. Purpose and Intent**

The purpose and intent of the Open Space Residential Development (OSRD) development option is to permit high-quality residential development in harmony with the natural features of the land that is consistent with historic land use patterns of village-like areas where residences are grouped, surrounded by areas of open space used for agriculture, forestry, recreation and similar purposes. It is also the purpose of the OSRD option to:

- (1) Preserve open space, scenic landscapes, water resources, wetlands, natural (particularly native) vegetation, habitat, prime agricultural land, key natural features, and cultural and historic resources with emphasis on goals and actions included in Harvard's 2016 Master Plan and 2016 Open Space and Recreation Plan.
- (2) Reduce site development and public and private maintenance costs.
- (3) Promote a diversity of housing opportunities within the Town, while respecting and enhancing neighborhoods, and promoting attractive standards of appearance and aesthetics consistent with town character.
- (4) Reduce the anticipated negative fiscal impact on the Town associated with conventional residential development by reducing street length and width, public utility extent, providing efficient stormwater runoff technology, and other public infrastructure.
- (5) Encourage the siting of homes in a manner that clusters units together in well-designed village settings, on buildable portions of the site, as a distinct alternative to the more arbitrary siting associated with lot-by-lot development typically reflected in plans submitted pursuant to Massachusetts General Laws Chapter 41, Sections 81K through 81GG, the Subdivision Control Law. At least 80 percent of dwellings shall be contiguous with some type of Open Space, and all OSRDs shall generally contain at least one neighborhood green or common, bounded by a street or streets in the traditional New England manner.
- (6) Prohibit a lot that has been approved for OSRD to apply for further subdivision of the lot for ten (10) years after the first approval. Plan shall also include a notation that states: "*Designated Open Space shall not be further subdivided or used for future building lots.*"

### **B. Applicability**

- (1) OSRD is generally a by-right development option for residential development. The Planning Board may grant approval of an OSRD on an Agricultural-Residential (AR) zoned tract of land.
- (2) If the proposed OSRD involves one or more common driveways, density bonuses, and/or any other use that requires a Special Permit, the proceedings for all such Special Permits and the Site Plan review shall occur in one Consolidated Special Permit proceeding before the Planning Board.

### **C. Open Space**

- (1) Generally – A minimum of fifty (50%) percent of an OSRD must be open space made up of conservation areas and other open spaces such as commons or greens, parks, historic or cultural

sites and features, and passive and active recreation areas. The specific allocation of this open space shall be as follows:

- (a) Determine the acreage of Primary Resource Protection Areas (PRPAs), as defined in Section C. above.
  - (b) Determine the acreage of Secondary Resource Protection Areas (SRPAs), as defined in Section C. above.
  - (c) The combination of PRPA and SRPA area must equal at least 50% of the total site area.
  - (d) At least 50% of the SRPA must remain in its natural state, completely devoid of any structure, parking, loading and unloading space, or as private yards, patios, or gardens for the exclusive or principal use by residents of individual dwelling units, unless the conservation or preservation value is as an improved asset such as a farm field, stone wall, well, historic building or structure, or other modified landscape, protecting those assets that were agreed upon by the Planning Board and Conservation Commission.
  - (e) The remaining 50% of SRPA may be improved into commons or greens, parks, and passive and active recreation areas, which may include unpaved walking paths and trails. All OSRDs shall generally contain at least one neighborhood green or common, bounded by a street in the traditional New England manner. The common open space described herein is in substitution of and supersedes any other reference to common open space that may be described elsewhere in the Bylaw.
  - (f) All open space, to the extent possible, shall be appropriate in size, shape, dimension, location, and character to assure its use as a conservation area, and where appropriate, a recreational area, and be a visual and natural amenity for the development and the Town. Preserved open space shall also be contiguous to the greatest extent practicable, except for neighborhood greens. Where noncontiguous pockets of open space are preferable to protect features of high conservation value, applicants shall attempt to connect these resource areas to the greatest extent practicable through the use of trails, vegetated corridors, or to adjacent external open space. Open Space will still be considered contiguous if it is separated by common elements such as a shared driveway, roadway, or an accessory amenity (such as a barn, paved pathway or trail, or shed for the storage of recreational equipment).
  - (g) The remaining land area, after all open space has been established, is available for the infrastructure, dwelling units, accessory buildings, and exclusive use areas (if a part of the design scenario).
- (2) Open Space Criteria –For the purpose of this Section, open space, as defined generally in Section 125-2, shall include and be qualified as active recreation space, common open space, conservation open space, stormwater open space, or utility open space. The following are the three (3) primary types of open space within an OSRD parcel (See Section 125-2 for definitions):
- (a) Open Space, Primary Resource Protection Area
  - (b) Open Space, Non-Common
  - (c) Open Space, Common Use
- (3) Permanent Open Space

Open space set aside in an OSRD or as a condition of any Special Permit or Site Plan approval

shall be permanently preserved from development as required by this Section. The Planning Board may not require such open space land to be accessible to the public, unless a density bonus is allowed under Subsection D (4). Any development permitted in connection with the setting aside of open space land shall not compromise the conservation value of such open space land, based upon the conservation findings of the Planning Board.

[1] Permanent Preservation of Open Space Land – All land, except to be town-owned, required to be set aside as open space in connection with any OSRD shall be so noted on any approved plans and shall be protected by a 1) permanent conservation restriction, as defined in Article XIII, or 2) agricultural preservation restriction (APR), to be held by the Town of Harvard, the Commonwealth of Massachusetts, or a non-profit conservation organization qualified to hold conservation restrictions under G.L. Chapter 184, Section 31, and also qualified to hold tax-deductible conservation easements under Section 170(h) of the Internal Revenue Code. The restriction shall specify the permitted uses of the restricted land which may otherwise constitute development. The restriction may permit, but the Planning Board may not require public access or access by residents of the development to the protected open space land.

[2] Ownership of Open Space Land

At the applicant's discretion the open space may be owned by:

- (1) A private owner for agricultural, horticultural, forestry or any other purpose not inconsistent with the conservation restriction;
- (2) A non-profit organization or agency of the Commonwealth, with their consent, whose principal purpose is the conservation of open space for any of the purposes set forth herein;
- (3) The Harvard Conservation Commission; or
- (4) A homeowner's association (HOA) as defined herein owned jointly or in common by the owners of lots or units within the project. If option four is selected the following shall apply:
  - (a) The documents organizing the HOA shall be drafted and approved by the planning board before final approval of the OSRD development, recorded prior to the issuance of building permits, comply with all applicable provisions of state law, and pass with conveyance of the lots or units in perpetuity. Each individual deed, and the deed, trust, or articles of incorporation, shall include language designed to affect these provisions.
  - (b) Membership shall be mandatory for each property owner, who must be required by recorded covenants and restrictions to pay fees to the HOA for taxes, insurance, and maintenance of common open space, private roads, and other common facilities.
  - (c) The HOA must be responsible in perpetuity for liability insurance, property taxes, the maintenance of recreational and other facilities, private roads, and any shared driveways.
  - (d) Property owners must pay their pro rata share of the costs in subsection c above, and the assessment levied by the HOA must be able to become a lien upon individual properties within the OSRD.

- (e) The HOA must be able to adjust the assessment to meet changed needs.
- (f) The applicant shall make a conditional grant to the Town of Harvard, binding upon the HOA, of the fee interest to any open space to be conveyed to the HOA. Such offer may be accepted by the Town of Harvard, at the discretion of the Harvard Select Board, upon the failure of the HOA to take title to the open space from the applicant or other current owner, upon dissolution of the association at any future time, or upon failure of the HOA to fulfill its maintenance obligations hereunder or to pay its real property taxes.
- (g) Ownership shall be structured in such a manner that real property taxing authorities may satisfy property tax claims against the open space lands by proceeding against individual property owners in the HOA and the dwelling units they each own
- (h) Harvard Town Counsel must find that the HOA documents presented satisfy the conditions in Subsections a through g above, and such other conditions as the planning board shall deem necessary.

Selection of ownership option one, two, or four requires:

- (a) The conveyance of a conservation restriction as outlined herein; and
- (b) The granting of an access easement over such land sufficient to ensure its perpetual maintenance as agricultural, conservation, or recreation land. Such easement shall provide that in the event the trust or other owner fails to maintain the open space in reasonable condition, Town of Harvard may, after notice to the lot owners and public hearing, enter upon such land to maintain it in order to prevent or abate a nuisance. The cost of such maintenance by the Town of Harvard shall be assessed against the properties within the development and/or to the owner of the open space. Pursuant to G.L. Chapter 40 Section 58 the Town of Harvard may file a lien against the lot or lots to ensure payment for such maintenance. Pursuant to G.L. Chapter 40 Section 57 the Town of Harvard may also deny any application for, or revoke or suspend a building permit or any local license or permit, due to neglect or refusal by any property owner to pay any maintenance assessments levied. The Town of Harvard also reserves the option of requiring the posting of a performance bond to ensure upkeep of the area according to the requirements of Chapter 130-19 of the Town of Harvard Subdivision Control Regulations.

### [3] Maintenance Standards for Open Space

- [a] Ongoing maintenance standards shall be established in a formal Maintenance Plan as a condition of development approval to ensure that the open space land is not used for storage or dumping of refuse, junk, or other offensive or hazardous materials, and to ensure that it is maintained properly. Maintenance Plans shall therefore delineate all conservation lands within the OSRD into various land-types (such as woodlands, fields, meadows, pastures, neighborhood greens, active recreation areas, etc.) and shall describe in some detail the maintenance regime and schedule for each of those areas, to be implemented by the owners of those conservation lands. (For example, neighborhood greens and active recreation areas shall be mowed weekly during the growing season.)
- [b] Such standards shall be enforceable by the Town against any owner of open space land,

including an HOA.

- [c] If the Board of Selectmen finds that the provisions of Subsection [a] above are being violated to the extent that the condition of the land constitutes a public nuisance, it may, upon 30 days written notice to the owner, enter the premises for necessary maintenance, and the cost of such maintenance by the Town shall be assessed ratably against the landowner or, in the case of an HOA, the owners of properties within the development, and shall, if unpaid, become a property tax lien on such property or properties.

#### **D. Development Density**

The method for determining the maximum number of residences is defined as the Formula Method:

- (1) **Formula Method:** The maximum number of residences is determined by dividing the area of the tract of land by the minimum conventional lot size specified in the underlying zoning. No density credit shall be given to bodies of open water over 5000 square feet contiguous area, or to land lying within the rights-of-way of existing or proposed streets.

- (1) **Determine Parcel Size:** The gross acreage of the parcel or parcels under consideration for the project shall be the starting point in determining density. This number shall be designated as Gross Acreage (GA).

$$\text{Parcel Size} = \text{Gross Acreage (GA)}$$

- (2) **Minimum Open Space**—The minimum acreage required to be set aside for open space is 50% of Gross Acreage.

$$\text{GA} \times 50\% = \text{Required Minimum Open Space (RMOS)}$$

Refer to Section D(2) above to determine the minimum requirements for open space.

- (3) **Base Development Density (BD)** – The maximum number of dwelling units per acre permitted in an OSRD shall not exceed one (1) unit per 1.5 acres and no more than 2.0 bedrooms per acre of the net density of the land area.

$$\text{BD} = 0.667 \text{ units/acre}$$

- (4) **Permitted Yield (PY)** – The Permitted Yield (PY) is the maximum number of residential units in an Open Space Residential Design and is calculated by multiplying the allowed (base) density or BD by the Gross Acreage (GA). Fractional units of less than 0.5 shall be rounded down and 0.5 or more shall be rounded up.

$$\text{PY} = \text{GA} \times \text{BD}$$

- (5) **Total Open Space Set Aside (TOS)** is the total amount of open space set aside for the project. This is calculated by taking the Minimum Open Space from (2) above and adding any additional open space set aside to achieve a density bonus for Bonus Open Space or BOS to the minimum 50% so thus:

$$\text{TOS} = \text{RMOS} + \text{BOS}$$

In these calculations, density credit may be applied to certain other unconstrained parts of

the site, such as land used for onsite sewage disposal, including nitrification fields and fields used for “spray irrigation” (sometimes called “land treatment”). Unless specified otherwise, these lands may also be counted toward meeting the minimum open space requirements for Open Space developments.

- (6) Bonus Units – The unit count determined above (PY) may be increased by a density bonus at the discretion of the Planning Board based upon the eligible density bonuses listed in (2) below. The density bonuses allowed above may not increase the density by more than 25 percent of the base number of units and said density bonuses may only be used if the resulting development complies with Title 5 of the State Environmental Code as determined by the Board of Health. Fractional units of less than 0.5 shall be rounded down and 0.5 or more shall be rounded up.
- (2) Residential Density Bonuses – Eligible residential density bonuses include the following as specific public benefits:
- (a) Additional Open Space – For projects that provide SCA open space in excess of the minimum fifty percent (50%), a by-right density bonus of one (1%) percent for each five (5%) percent of additional open space provided, up to a five (5%) percent bonus.
- (b) Public Access to Open Space – If the applicant allows deeded public access to all or a significant part of the open space portion of the property and the Planning Board finds that such public access provides a substantial recreational benefit to the Town (such as access to an important natural area or a trail system), a maximum five (5%) by-right density bonus. The Planning Board, in consultation with the Conservation Commission, should weigh the benefits of public access against potential detriment to the conservation values of the open space;
- (c) Affordable Component – The Planning Board may award a density bonus by special permit to increase the number of dwelling units/lots beyond the maximum number where affordable housing or affordable Over 55 Housing is provided. All affordable units shall meet the requirements of M.G.L. Chapter 40B and the developer shall demonstrate that said units will count towards the Town of Harvard’s 10% affordable quota as determined by the Massachusetts Department of Housing and Community Development. When affordable units exceed 15% and up to 25%, all of the affordable units on site must be Over 55 Housing. Computations shall be rounded to the highest number. The density bonus units may only be granted if they are restricted perpetually as SHI eligible affordable housing. The permanent restriction shall be approved as to form by legal counsel to the Planning Board, and a right of first refusal upon the transfer of such restricted units shall be granted to the Town of Harvard or its designee for a period of not less than 120 days after notice thereof. Designating 15% affordable units may be awarded a ten (10%) density bonus whereas any percentage in excess of 15% may be awarded one (1%) additional density for each percentage increase in affordability up to fifteen (15%) percent. Developers may pay a fee in lieu of unit designation to the Harvard Municipal Affordable Housing Trust to receive the density bonus. This fee is based on a formula established by the Harvard Housing Production Plan;
- (d) Age Restricted or Age Targeted Housing – The Planning Board may award a by-right density bonus of up to ten (10%) percent for a development that is certified as restricted age 62 and older active adult independent living units;
- (e) Starter Home Development – The Planning Board may award a density bonus by special permit of up to five (5%) percent for a development containing at least fifty (50%) percent of

the units as “starter” homes each with less than 1,750 s.f. of floor area.

- (f) Green Score Landscaping - If the applicant provides a minimum Green Score for the site of at least 0.35, a by-right density bonus of 10%. See Section 133, Article XII for Green Score criteria and scoring.

- (g) Sustainable Development – There are two categories of sustainable development including:

- [1] Green Buildings
- [2] Green Roofs and Stormwater Management

Applicants may gain an additional five (5%) percent by-right density bonus for each category met. See Section 133, Article XII for Sustainable Development criteria and scoring.

*Table 1 – Unit Calculation for Hypothetical 40 Acre Scenario*

Acres	Open Space (Acres)	Base Density (Units/Acre)	Base Units	Maximum Units (+25%)	Final Gross Density (Units/Acre)
40	20	0.667	27	34	0.850

## **E. Permitted Uses**

Permitted uses include the following:

- (a) Single-family and two-family detached dwellings (Type I Residential);
- (b) Agriculture and horticultural uses including but not limited to orchards, vineyards, forestry, farming for fruits and vegetables, and grazing animals including horses, donkeys, sheep, llamas, vicunas, and similar animals;
- (c) Open space, active and passive; trails; and bikeways.
- (d) Educational and other uses not mentioned above which are exempt from regulation by zoning under Massachusetts General Laws Chapter 40A, Section 3;
- (e) Accessory residential/recreational uses (e.g., tennis court, pool, playground);
- (f) Clubhouse or community building;

## **F. Conditional Uses**

- (a) Civic uses (e.g. library);
- (b) Townhouse dwellings (Type II Residential);
- (c) Multifamily condominiums (Type III Residential).

## **G. Dimensional and Design Requirements**

- (1) Development Types – There are three (3) primary OSRD development types as follows:

- (a) Condominium w/ Exclusive Use Areas
- (b) Condominium
- (c) Hybrid Planned Development – A development may consist of a combination of subdivided lots and condominium area.

(2) Minimum Private Lot Sizes in OSRDs – The limiting factor on private lot size in OSRD is the need for adequate water supply and sewage disposal. Applicants shall work with the Board of Health to determine the most appropriate area(s) on a lot or project site for the disposal of sewage and the protection of water supply.

(3) Dimensional Requirements – The following provisions shall apply:

(a) Dimensional Requirements Table:

Specific dimensions depend on the form of development in H(1) above.

Project Type	Minimum/Maximum Project Area Size	Setbacks (Min/Max)	Frontage	Maximum Build-Out	Zoning District(s)
<b>Residential Village (RV) Development Parcel:</b> Requirements for project parcels	Min. 3.0 acres except that the Planning Board may allow smaller pocket neighborhoods by Special Permit. Max. 30.0 acres	50' to external side and rear lot lines and 10' for pocket neighborhoods.	50'	Base zoning plus density bonus.	A-R, MR
<b>Residential Infill (RI) Development Parcel:</b> Requirements for project parcels	Min. 1.0 acres except that the Planning Board may allow smaller pocket neighborhoods by Special Permit. Max. 10.0 acres	Adjacent equivalent determined by four (4) step process	Same as existing but no less than 25'	Base zoning plus density bonus. Maximum gross density cannot exceed the density of the surrounding neighborhood.	A-R Historic Districts Only

Land Use	Lot or Exclusive Use Area (EUA) Size	Setbacks (Minimum) From Lot Line or EUA Boundary <sup>1</sup>	Frontage	Building Size	Project Type
<b>Open Space</b> Passive and active recreation, parks, squares, natural areas, plazas and courtyards (see definition)	Minimum 50% of Net Acreage (NA)	NA	NA	N/A	All
<b>Civic/Institutional Building</b> Community space, library, house of worship, museum, theater, or similar	Minimum: 5,000 s.f.	Front: 10' Side: 8' Rear: 30'	Minimum: 24' Maximum 75'	5,000 s.f.	All
<b>Residential Type I</b> One and two-family detached dwellings	Minimum: 4,000 s.f. Maximum 30,000 s.f.	Front: 10' Side: 8' Rear: 25'	Minimum: 36' Maximum 75'	None	All
<b>Residential Type II</b> Townhouses and attached dwellings.	Minimum: 500 s.f. per unit	Front: 5' Side: 10' Interior Side: 50' Exterior Rear: 30' Interior	Minimum: 16'/unit Maximum 30'/unit	Maximum eight (8) units in building	Residential Infill (RI)

<sup>1</sup> Minimum rear setbacks will be waived if a rear facing garage and alley is proposed.



		Rear 50' Exterior		grouping	
<b>Residential Type III</b> Multifamily dwellings.	Minimum: 350 s.f. per unit	Front: 5' Side: 20' Interior Side: 50' Exterior Rear: 30' Interior Rear 50' Exterior	Minimum: 10'/unit Maximum 20'/unit	Maximum 55,000 s.f. per building	Residential Village (RV)

- (b) The Planning Board may waive the minimum requirements for frontage and/or yard requirements that would normally be applicable in order to achieve maximum open space area, and may permit more than one single or two-family dwelling be located on a lot in an OSRD, except as provided below;

A buffer and/or screening may be required adjacent to sites outside of the OSRD if it is determined that such a buffer will provide relief from potential nuisances. Such buffers shall provide visual screening at all times of year, and preferred options include evergreen planted screening, except those that lose their lower branches as they grow (such as pines) or which are highly susceptible to deer damage (such as arborvitae).

- (c) The maximum height of proposed buildings shall be 35 feet, and shall not exceed 2 1/2 stories;
- (d) Exclusive Use Areas (EUAs) or lots proposed for a width of 60' or less, townhomes, or duplexes shall use rear-facing garages on alleys or back lanes. EUAs wider than 60' are encouraged to have rear yard garages, side yard garages, or front facing garages offset behind the façade. Any project that requires a special permit, these recommendations may be requirements.
- (4) Arrangement of Lots and Structures – Structures and other site features shall be located and arranged in a manner that protects:
- (a) Views from public roads and other publicly accessible points such as parks or land trust preserves;
- (b) Farmland, including fields and pastures;
- (c) Wildlife habitat;
- (d) Large intact forest areas, particularly ones older than 75 years, as seen on early aerial photographs;
- (e) Hilltops;
- (f) Ponds, creeks, and streams;
- (g) Steep slopes; and
- (h) Other sensitive environmental resources deemed important (including resources noted by the 2016 Master Plan and the 2016 Open Space and Recreation Plan).

Siting shall be designed to facilitate pedestrian circulation and connect to other development assets such as common areas and facilities. Pedestrian facility type may be a formal sidewalk in a village center type of project or a pedestrian or multi-purpose path in a rural hamlet type of project.

The Planning Board shall take into consideration the conservation analysis and findings in approving the arrangement of lots but, to the extent possible, each lot shall either front or rear on Open Space.

- (5) Design Requirements –OSRD projects are also characterized by special attention to site and architectural design that directly reflects or highly complements the principles of town and architectural design that represents the character and history of the Town of Harvard. Specific design criteria are as follows:

(a) Project Site

- [1] Developments shall be designed in the manner of a rural New England village, hamlet, or neighborhood with clusters of residences within a square or fronting on a town common or green.
- [2] The development shall establish narrow, shaded streets conducive to pedestrians and cyclists.
- [3] Buildings shall be established close to the street to facilitate a pedestrian scale.
- [4] To the extent practicable and applicable, developments shall be integrated into the existing townscape by common edge treatments. This shall include frequent street connections and pathways to surrounding areas and a high degree of internal connectivity within the development.
- [5] Projects are encouraged to possess a wide range of housing types and sizes—such as large and small townhouses, duplexes, single-family homes, small apartment buildings, or special needs housing.

(b) Lots and Buildings

- [1] All lots shall share a frontage line with a street, square, courtyard, neighborhood green, or park (public access).
- [2] All buildings, except accessory structures, shall have their main entrance (include in definitions) opening onto a street, square, courtyard, neighborhood green, or park.
- [3] Unenclosed porches may encroach into front setbacks as indicated in this bylaw.
- [4] All residences shall be within 600 feet of trailheads or other pedestrian facilities.
- [5] Garages entrances for lots 60' width or less, townhomes, and duplexes shall be facing the rear of the lot Access to rear-facing garages should be from an alley or back lane, which may be a private common drive. For other lot types, garages may be side or front loaded but shall be recessed no less than 12' feet from the front façade in order to be visually subordinated.
- [6] Proposed two-family residences shall either be designed as a “Shaker Double” or a corner opposed front entrance double.

(a) Miscellaneous Design Standards

- [1] Porches. Unenclosed front or side Porches are encouraged for residential uses and may be built within the setback line or required front area.
- [2] Appearance/Architectural Design: Architectural design shall be compatible with the character and scale of buildings on the site, in the neighborhood, and in the Town through the use of appropriate building materials, screening, breaks in roof and wall lines and other architectural techniques. Variation in detail, form and siting shall be used to provide visual interest and avoid monotony. Proposed buildings shall relate harmoniously to each other with adequate light, air circulation, and separation between buildings where appropriate.
- [3] Design Review: OSRD projects shall be reviewed by the Design Review Board based on the criteria in this Section G. The design review process is outlined in Chapter 133, Article XII, of the Planning Board Rules and Regulations.

## **H. Project Site Design Process**

The site design process for OSRD is provided in Chapter 133, Planning Board Rules and Regulations, Section 133-21.

## **I. Formal Process and Application**

The process for seeking approval of an OSRD project is provided in Chapter 133, Planning Board Rules and Regulations, which provides applicants with the required steps, plans, and documents that will be required.