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

**October 19, 2021**

**1st DRAFT - ANNOTATED**

1. **Purpose and Intent**

***This section is to make clear what the ultimate purpose of the OSRD bylaw is, protecting natural and cultural resources in Harvard while permitting well-designed residential developments which provide a range of needed housing stock.***

The purpose and intent of the 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.

***OSRD developments have shorter and narrower streets and roads which reduce up front infrastructure costs and ongoing maintenance costs,***

1. 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.

***Currently, Harvard predominantly has large lot, sizeable single-family homes. This bylaw encourages other types of housing and for a broader, more inclusive market such as starter homes and homes for seniors.***

1. 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.
2. 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.

***Rather than the typically unremarkable and drab conventional subdivision, Harvard’s OSRD is explicitly promoting clusters of units that mimic the traditional New England town, village, or hamlet.***

1. Prohibit a lot that has been approved for Open Space Residential Design 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.*”
2. **Applicability**
3. Open Space Residential Development is 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.

***Harvard OSRD projects may be proposed for any eligible Agricultural-Residential (AR) zoned parcel. Note the change from Special Permit to By-Right.***

1. If the proposed Open Space Residential Design 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.

***To the extent possible, an OSRD with multiple special permits may have them considered simultaneously so as to expedite the application and not cause unwarranted delay.***

1. **Definitions**

***Definitions specific to this OSRD bylaw have been added which clarify terms that are important to understand related to the design of projects. Readers should note if there is a term used in the bylaw that needs to be defined but is not currently in this Section.***

* 1. Conservancy Lots – Land within large, individually-owned, private lots of at least ten acres in area. No more than 20 percent of the total required open space in any SRD may be non-common.
	2. Critical Wildlife Habitat - Habitat which supports a high degree of biodiversity of wildlife species native to Massachusetts. It is also a discrete, identifiable location that supports a significant concentration of one or more native wildlife species during vulnerable life-history stages which is necessary for self-sustaining populations (e.g., breeding, or nesting, or breeding sites, and wintering grounds. It provides physical and biological habitat features which are vital to the maintenance, successful recovery or reintroduction of one or more wildlife Species of Special Concern, Threatened Species, or Endangered Species.
	3. Mature Woodlands – Forested areas consisting of a mix of juvenile, early-mature, and late-mature trees not having been harvested for at least twenty-five (25) years and including a mix of understory vegetation and deadfall.
	4. Net Acreage – The amount of the project site remaining after Primary Resource Protection Area (PRPA) has been subtracted.
	5. Open Space - Open space for the purpose of this Bylaw shall be generally defined as areas of woodlands, fields, meadows, wetlands, and water resources, trails and other natural and man-made amenities not within individual building lots; and set aside for the use and enjoyment of residents, visitors and other persons, unoccupied by buildings or facilities unless related to recreational activities, and accessible to and adequate for persons and functions it is designed to serve. Generally, open space is intended to provide light and air and is designed for either conservation, scenic, or recreational purposes.
	6. Passive Recreation Area – Refers to open space where recreation that generally encompasses the less intensive range of outdoor activities compatible with preserving natural resource functions such as wildlife habitat and floodplain protection and that do not degrade or diminish the value of the open space. These activities include walking or hiking, jogging, cross-country skiing and snowshoeing, birdwatching, picnicking, painting, photography, canoeing and kayaking, and other similar outdoor activities. They do not include motorized activities, hunting, trapping, removing plants or wildlife, and cutting firewood. Activities such as fishing, cycling, and horseback riding may be conditionally permitted.
	7. Pocket Neighborhood – Is a type of planned community that consists of a grouping of smaller residences, often around a courtyard or common garden, designed to promote a close-knit sense of community and neighborliness with an increased level of contact. Considerations involved in planning and zoning pocket neighborhoods include reducing or segregating parking and roadways, the use of shared communal areas that promote social activities, and homes with smaller square footage built in closer proximity to one another. Pocket neighborhoods are typically used on infill sites in town centers or closer to centers or concentrations of existing housing.
	8. Primary Resource Protection Area (PRPA) – Primary resource protection areas are those lands that include unbuildable conservation resources such as wetlands, waterbodies, floodplains, and steep slopes.
	9. Secondary Resource Protection Area (SRPA) – Secondary Resource Protection Areas is that designated open space that includes resources that have historic, cultural, or conservation value but are technically buildable under conventional development rules.
	10. Shall Generally – Mandatory, unless determined otherwise by a super-majority vote of the Planning Board (e.g., four of five members)
1. **Open Space**

***This section on Open Space is lengthy and descriptive, to the point where it may be confusing to most readers. The challenge here is to simplify the language but keep the desired nuances of open space types and purposes. This first Section “Generally” is intended to note how much open space is to be set aside overall and how it is determined.***

1. Generally – A minimum of fifty (50%) percent of an Open Space Residential Development 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:
2. Determine the acreage of Primary Resource Protection Areas (PRPAs), as defined in Section C. above.
3. Determine the acreage of Secondary Resource Protection Areas (SRPAs), as defined in Section C. above.
4. The combination of PRPA and SRPA area must equal at least 50% of the total site area.
5. 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.
6. 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.
7. 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).
8. 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).

***Open Space Criteria defines the three (3) primary types of open space which includes those unbuildable areas that have conservation value, non-common conservancy lots that are not generally accessible to residents except for a conservancy caretaker/steward, and finally open space for common use. Common open space is further sub-allocated between active recreation, passive recreation, lands with conservation and preservation value, land for stormwater drainage and retention, and utility parcels where water and/or wastewater facilities may be located.***

1. Open Space Criteria –For the purpose of this Section, open space, as defined above, 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:
2. Open Space, Primary Preservation Area: This is made up of primarily PRPA area such as wetlands and steep slopes and shall be undisturbed and not generally intended for common or public use or access unless an exception is made by the Planning Board in consultation with the Conservation Commission. Further, a conservation restriction must be applied to preservation area open space if public ownership of open space is the option.
3. Open Space, Non-Common: Land within large, individually-owned, private “conservancy lots” of at least ten acres in area. No more than 20 percent of the total required open space in any OSRD may be non-common. Such lot owners shall be responsible for its ongoing and regular management and maintenance.
4. Open Space, for Common Use: This is defined as land within, or related to, a development not individually owned which is designed or intended for the common use or enjoyment by the residents of the development and may include such complementary structures and improvements as are necessary and appropriate. Unless approved by the Planning Board and Conservation Commission, common open space shall not be considered usable if the slope of the finished grade exceeds 25%, unless it is intended as a sledding hill. Unless approved by the Planning Board, the nearest part of the common open space shall not be more than 100 feet from any house lot that it is proposed to serve. With the exception of neighborhood greens and trail corridors, no common open space shall be considered usable unless it is contiguous and has no dimension of less than 50 feet. Common open space is made up of the SRPA designated area and may be further allocated for the following uses:
5. Active and passive recreation: Active recreation areas shall not comprise more than ten percent of the total common open space.
6. Accessible conservation and other resource lands. This includes resources of a natural, cultural, or historic nature that can be, and in some cases, are encouraged to be, available to residents and the public for the respectful appreciation of the resource. These may include hiking trails, forest lands, rock outcrops, historic buildings or grounds, or other resources. This type may be up to 100 percent of common open space but shall be no less than 25 percent.
7. Stormwater retention and drainage. Common open space that includes Low Impact Development (LID) stormwater facilities that aid in the infiltration and recharge of groundwater, such as well-landscaped rain gardens. Stormwater open space can occupy no more than ten (10%) percent of SRPA area.
8. Wastewater facilities, limited to at- or below-grade infrastructure.
9. Permanent Open Space

***Open space set aside in an approved OSRD shall be permanently preserved and may, but not necessarily have to be, accessible to the public at large.***

Open space set aside in an Open Space Residential Development 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.

***Methods of protecting open space include gifting to the Town as parkland and/or conservation land, a conservation restriction, or an agricultural preservation restriction.***

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 Open Space Residential Design 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.

***Modes of ownership of open space lands include private ownership, non-profit organization such as a conservation trust, agency of the Commonwealth such as DCR, Conservation Commission, or a homeowner’s association. It is intended that one or more mode can be assigned as part of an OSRD as long as all other requirements and conditions of approval are met in full.***

1. 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 in 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:
	1. 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.
	2. Membership must 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.
	3. 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.
	4. 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.
	5. The HOA must be able to adjust the assessment to meet changed needs.
	6. The applicant shall make a conditional grant to the Town of Harvard, binding upon the HOA, of the fee interest to all 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.
	7. 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
	8. 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:

***Based on the ownership type(s) preferred, specific mechanisms will be required to insure permanent protection.***

1. The conveyance of a conservation restriction as outlined herein; and
2. 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.

***To make certain that open space is properly maintained, kept clean and litter free, uncontaminated, and minimally encroached and inhabited by invasive or non-native species that could harm the ecological balance, protected open space shall be governed by a formal maintenance plan and overseen by responsible maintenance providers. Failure to properly maintain such open space shall be addressed by the Town through enforcement actions.***

1. Maintenance Standards for Open Space
2. 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.)
3. Such standards shall be enforceable by the Town against any owner of open space land, including an HOA.
4. 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.

1. **Development Density**

***Development density of OSRD projects are generally that of the underlying zoning district, in this case Agricultural-Residential (AR), which is one (1) unit per one (1.5) and a half acres. There are several options to slightly increase development density up to no more than twenty-five (25%) percent.***

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).

Parcel Size = Gross Acreage (GA)

1. Minimum Open Space–The minimum acreage required to be set aside for open space is 50% of Gross Acreage.

GA x 50% = Required Minimum Open Space (RMOS)

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

1. 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.

BD = 0.667 units/acre

1. 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.

PY = GA x BD

1. 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:

TOS = RMOS + BOS

**Note**: 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.

1. 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 public benefits:
3. Additional Open Space – For projects that provide SCA open space in excess of the minimum fifty percent (50%), a density bonus of one (1%) percent for each five (5%) percent of additional open space provided, up to a five (5%) percent bonus.
4. 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%) 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;
5. Affordable Component – The Planning Board may award a density bonus 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;
6. Age Restricted or Age Targeted Housing – The Planning Board may award a density bonus of up to ten (10%) percent for a development that is certified as restricted age 62 and older active adult housing;
7. Starter Home Development – The Planning Board may award a density bonus 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 2,000 s.f. of floor area.
8. Green Score - If the applicant provides a minimum Green Score for the site of at least 0.35, a density bonus of 10%. See Section 133, Article XII for Green Score criteria and scoring.
9. 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 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 |

1. **Permitted Uses**

***Permitted uses limited to those appropriate for residential areas.***

Permitted uses include the following:

1. Single-family and two-family detached dwellings (Type I Residential);
2. 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;
3. Open space, active and passive; trails; and bikeways.
4. Educational and other uses not mentioned above which are exempt from regulation by zoning under Massachusetts General Laws Chapter 40A, Section 3;
5. Accessory residential/recreational uses (e.g., tennis court, pool, playground);
6. Clubhouse or community building;
7. **Conditional Uses**

***Conditional uses are appropriate for a more village-like development design including civic uses, limited commercial, townhouses, and small-scale multi-family.***

1. Civic uses (e.g. library);
2. Townhouse dwellings (Type II Residential);
3. Multifamily condominiums (Type III Residential).
4. **Dimensional and Design Requirements**

***Dimensional requirements govern the minimum size of developments, minimum lot sizes (where individual lots are feasible), minimum frontage and setback requirements. The purpose of allowing smaller lots in some cases is to facilitate the development of clustered village-like concentrations of units, often surrounding a town common or green. Note that there are four types of development permitted to allow the maximum site development flexibility and to facilitate a wider range of housing types.***

1. Development Types – There are three (3) primary OSRD development types as follows:
	1. Condominium w/ Exclusive Use Area – This option provides for single- or two-family development but instead of private house lots, the residences would be located on common area designated as “exclusive use areas” that would have some of the rights and responsibilities of private lot ownership. This device allows the developer to offer a degree of privacy in yards, decks, driveways, garages, attics, and similar spaces that are affiliated with, but outside of, a unit.
	2. Condominium – A standard condominium development would have common area divided between structures with units, infrastructure, and dedicated open space. Residential units can consist of single-family homes, two-family homes, townhouses, and multi-family homes either exclusively or a mix of different unit types.
	3. Hybrid Planned Development – A development may consist of a combination of subdivided lots and condominium area.
2. Minimum Private Lot Sizes in Open Space Residential Developments – 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:

***Development parcel dimensions dictate the minimum size of an OSRD development. Pocket neighborhoods may be developed by Special Permit in appropriate locations (see definition above). Additionally, each type of housing has a minimum lot area and set of dimensional requirements which are also applicable for exclusive use areas in condominium developments.***

1. 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)** |
| --- | --- | --- | --- | --- | --- |
| **Residential Village (RV) Development Parcel:**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 |
| **Residential Infill (RI) Development Parcel:**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[[1]](#footnote-1)** | **Frontage** | **Building Size** | **Project Type** |
| **Open Space**Passive and active recreation, parks, squares, natural areas, plazas and courtyards (see definition) | Minimum 50% of Net Acreage (NA) | NA | NA | N/A | All |
| **Civic/Institutional Building**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 |
| **Residential Type I**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 |
| **Residential Type II**Townhouses and attached dwellings. | Minimum: 500 s.f. per unit | Front: 5’Side: 10’ InteriorSide: 50’ ExteriorRear: 30’ InteriorRear 50’ Exterior | Minimum: 16’/unitMaximum 30’/unit | Maximum eight (8) units in building grouping | Residential Infill (RI) |
| **Residential Type III**Multifamily dwellings. | Minimum: 350 s.f. per unit | Front: 5’Side: 20’ InteriorSide: 50’ ExteriorRear: 30’ InteriorRear 50’ Exterior | Minimum: 10’/unitMaximum 20’/unit | Maximum 55,000 s.f. per building | Residential Village (RV) |

1. 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).

1. The maximum height of proposed buildings shall be 35 feet, and shall not exceed 2 1/2 stories;
2. Exclusive use areas or lots proposed for a width of 60’ or less, townhomes, or duplexes shall use rear-facing garages on alleys or back lanes.

***Lot arrangement is intended to facilitate the village-like character including a viable pedestrian circulation system, to protect open space views and vistas, and to prevent encroachment into high-value open space elements.***

1. Arrangement of Lots and Structures – Structures and other site features shall be located and arranged in a manner that protects:

	1. Views from public roads and other publicly accessible points such as parks or land trust preserves;
	2. Farmland, including fields and pastures;
	3. Wildlife habitat;
	4. Large intact forest areas, particularly ones older than 75 years, as seen on early aerial photographs;
	5. Hilltops;
	6. Ponds, creeks, and streams;
	7. Steep slopes; and
	8. 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.

***Architectural and site design are critical components of OSRD developments. In the spirit of ensuring that developments are highly compatible and complementary to the existing built environment of the Town of Harvard and reflect the cultural and historic character of the town, these requirements shall be adhered to. Note that all projects shall be reviewed and approved by the Design Review Board.***

1. Design Requirements – Open Space Residential Design (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:
	1. 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.
	2. Lots and Buildings
2. All lots shall share a frontage line with a street, square, courtyard, neighborhood green, or park (public access).
3. All buildings, except accessory structures, shall have their main entrance (include in definitions) opening onto a street, square, courtyard, neighborhood green, or park.
4. Unenclosed porches may encroach into front setbacks as indicated in this bylaw.
5. All residences shall be within 600 feet of trailheads or other pedestrian facilities.
6. 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.
7. Proposed two-family residences shall either be designed as a “Shaker Double” or a corner opposed front entrance double.
8. Miscellaneous Design Standards
9. Porches. Unenclosed front or side Porches are encouraged for residential uses and may be built within the setback line or required front area.
10. 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.
11. Design Review: OSRD projects shall be reviewed by the Design Review Board based on the criteria in this Section H. This process is outlined in Chapter 133, Article XII, of the Planning Board Rules and Regulations.
12. **Project Site Design Process**

***OSRD projects typically progress through a four (4) step design process that is predictable and is intended to identify the most valuable open space on the parcel, find the most viable land for water and wastewater facilities, and site homes and infrastructure that is well designed and incorporates nice views.***

***These steps include the identification of all potential conservation areas within PRPAs and SRPAs and setting aside the 50% of SRPAs intended as permanently protected open space, locating the house locations on the remaining lands, designing in streets and trails, and if necessary, establishing exclusive uses areas for cottages or townhouses.***

The design of an OSRD shall adhere to the following four (4) step design process:

1. Step One: Identifying All Potential Resource Protection Areas. As provided for in Section C. above. The applicant, in conjunction with the Planning Board and Conservation Commission, shall identify all Primary and Secondary Resource Protection Areas for open space set aside. Septic drain fields and well locations shall also be preliminarily identified in this step if shared or community systems are proposed.
2. Step Two: Locating the Building Sites. The next design step is to identify potential building site locations. Emphasis in this step is to maximize the access to and views from each site area related to the open space. Other points of emphasis include grouping or clustering the building sites or in a manner that is reminiscent of traditional village or hamlet centers, particularly when sites are proposed to be less than 12,000 SF in area.
3. Step Three: Designing Street Alignments and Trails. After conservation lands have been determined and house sites identified, the applicant shall determine the most efficient means to access each residence with a street system. Emphasis shall be on minimizing street lengths and avoiding traversing steep slopes and/or the crossing of wetlands, disturbing mature tree stands, or other noted valuable conservation resources. Specific recommendations include:
	1. Avoid long straightaways (greater than 600 feet) and instead provide curving streets, shorter straight segments, “Y” intersections, terminal vistas, reverse curves with gentle connecting radii, and other street designs typical of formal town-like street systems;
	2. Connect multiple streets with each other to the extent possible, or with cross-block footpaths;
	3. Consider single-loaded streets to increase open-space vistas and access;
	4. Connect streets with other existing streets and developments external to the development, future planned projects, or leave stub street for future connections. Ensure that pedestrian connections such as sidewalks, pathways, and multi-use trails can also connect externally and should seek to directly connect to the existing sidewalk or trail system;
4. Step Four: Drawing in Lot Lines or Exclusive Use Areas (Optional). This step is only applicable for projects with multiple buildings parcels. Since many residences will be located adjacent to protected open space, a key feature of Open Space Residential Design developments is reducing the need for large front and rear yards. Lot design should provide for reasonable side yards to allow for privacy but designers are encouraged to minimize front and rear yard depth as a means to maximize conservation area and provide for resident interaction. This step shall be unnecessary if the development is proposed to be a condominium. On narrow lots privacy can be enhanced by using clerestory windows on one or both sides of houses.

Note that the above sequence of steps may be modified in situations where a more formal, “neo-traditional” or village-type layout is desired. In such cases, Step Two becomes “Location of Streets” and Step Three is “Locating the House Sites.”

1. **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.

***Please refer to the separate document for the application process for OSRD projects.***

1. Minimum rear setbacks will be waived if a rear facing garage and alley is proposed. [↑](#footnote-ref-1)