



3) ARCHITECTURAL AND LANDSCAPE DESIGN GUIDELINES

i) INTENT

These Design Guidelines are intended to provide high quality commercial and mixed use buildings with their attendant site development and landscaping that:

- are reflective of the heritage of Harris Ranch and traditional towns in the Intermountain West;
- are in a pedestrian friendly, urban configuration in order to shape a lively and comfortable environment for business, living, and recreating; and
- ensure quality building materials and their applications are used to support property values and investment.

In the event of a conflict with local safety codes, these regulations will be adjusted in collaboration with the Harris Ranch Review Board (HRRB). In no way does compliance with these regulations exempt a structure from conformance with other applicable codes.

Exemptions from compliance with these regulations may be granted on the basis of architectural merit, at the discretion of the HRRB. The HRRB reserves the right to reject any design for architectural inappropriateness.

How to Use These Guidelines

1. Find Block number of property on the Land Use Development Plan.
2. Find corresponding Block Prototypes from Block Prototype Chart.
3. Select Block Prototype.
4. Note specific requirements in Block Summary Chart.
5. Comply with Design Guidelines herewith.

ii) INTRODUCTION -

History, Community Patterns, and Character

History:

Harris Ranch is nestled in a valley between the Boise River and the Boise foothills east of downtown Boise. Historically, lumber mills were located near the river along with storage ponds and manufacturing buildings. The company town called Barberton, once the largest city in Idaho, served the employees and included a village store, hotel, inns and homes.

Sheep and cattle ranching occupied the majority of upland areas, sharing native grasses with larger wildlife animals.

Community Patterns:

Harris Ranch today is still surrounded by open space near the Boise River and in the rolling foothills. These connected environments support wildlife habitat and provide attractive panoramic views for residents.

Neighborhood homes, businesses and parks are concentrated in a connected grid pattern based on traditional intermountain western towns, including a focal main street and village green. The regular street grid creates terminal views of the foothills and river from most streets.

Tree-lined boulevards with planted medians, bike lanes and wide sidewalks guide visitors to the village center.

Commercial and mixed-use buildings are primarily located in the southern portion of the village, between the parkway and Warm Springs Avenue, and along the main street.

Character:

Building and site design emphasize pedestrian friendliness characteristic of 1900's western towns, such as storefronts and bay windows, front porches and entrances, rear alleys and garages.

Larger mixed use and commercial buildings are "shoulder to shoulder" in amiable companionship, sharing the village green and broad sidewalks.

These buildings focus on the pedestrian environment with large, inviting storefronts protected with retractable awnings, outdoor seating areas, beautiful long lasting materials, and engaging signage.

Upper floors include large office or residential windows, balconies, and bay windows from which to view the lively street scenes or the nearby river and foothills.



iii) GUIDELINES

a. Building Types



Community Centers, Recreation Centers, Park Structures Including in-park Commercial Use Buildings, Civic, Cultural, Religious And School Buildings

Community centers, recreation centers, park structures including in-park commercial use buildings, civic, cultural, religious and school buildings are awarded “pride of place” at Harris Ranch. They may be freestanding and sit behind ‘build-to lines’ with space around them to set them apart. Building height limits do not apply. Parking is in structures or at the rear or side non-street side of the building to support a pedestrian friendly environment.



Office

Office Buildings are predominately used for office and service functions. Harris Ranch office buildings are characterized by highly transparent street facing facades at the first floor and large windows above. Parking is in structures or at the rear or side non-street side of the building to support a pedestrian friendly environment.



Mixed Use--Retail with Office above

Mixed use retail buildings with office above have street-facing retail at the ground floor and offices above. Entrances to both must be at the street side. Parking is in structures or at the rear or side non-street side of the building to support a pedestrian friendly environment.



Mixed Use--Retail with Housing above

Mixed use retail buildings with housing above have street-facing retail at the ground floor and housing above. The entrances to the housing must be visible from the street. Parking is in structures or at the rear or side non-street side of the building to support a pedestrian friendly environment.

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(counted in the page numbering of Harris Ranch Specific Plan)

A. VOLUME I

3) ARCHITECTURAL AND LANDSCAPE DESIGN GUIDELINES

a) COMMERCIAL, MIXED-USE, MULTI-FAMILY HOUSING AND TOWNHOUSE BUILDINGS



Light Industrial

Light industrial structures are characterized by high bays and rear truck access. Parking and loading are in structures or at the rear or side non-street side of the building to support a pedestrian friendly environment.



Mixed Use--Work/Live

Mixed use Work/Live structures have both uses in any combination and size. These structures must adhere to the prevailing building code for fire separation of uses. Entrances to each use must be visible from the street side and clearly identified. Parking is in structures or at the rear or side non-street side of the building to support a pedestrian friendly environment.



Live/Work

Live/Work structures are defined here as townhouses or condominium buildings in which most of the structure is residential and the remainder is used for office, shop, or commercial use.



High Density Residential

High Density Residential buildings are predominately used for housing. The first residential floor may be raised to a maximum of 5' to provide privacy from the sidewalk, while not allowing the floor below to dominate the streetscape. High density residential may take the form of attached single family townhouses (row houses), live/work, or multiple dwelling, multiple-story apartment, loft, or condominium structures. Parking is in structures or at the rear or side non-street side of the building to support a pedestrian friendly environment.



2-8 Unit Multifamily Dwellings

2-8 Unit Multifamily Dwellings will be designed to have the look of large homes while allowing individual expression. The buildings have larger roof forms and include bay windows, porches and chimneys.



Townhouses

Townhouses are abundant at Harris Ranch. They should have individual expression and be varied from one to the next with a variety of façade and porch designs. All townhouses will require party wall agreements.



b. Building Height

Buildings heights are identified in the Block Summary Chart associated with each Block Prototype.

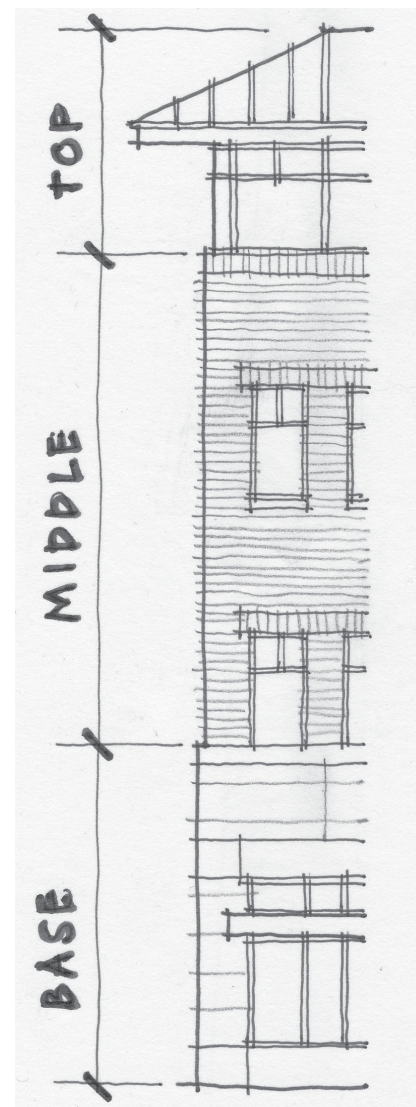
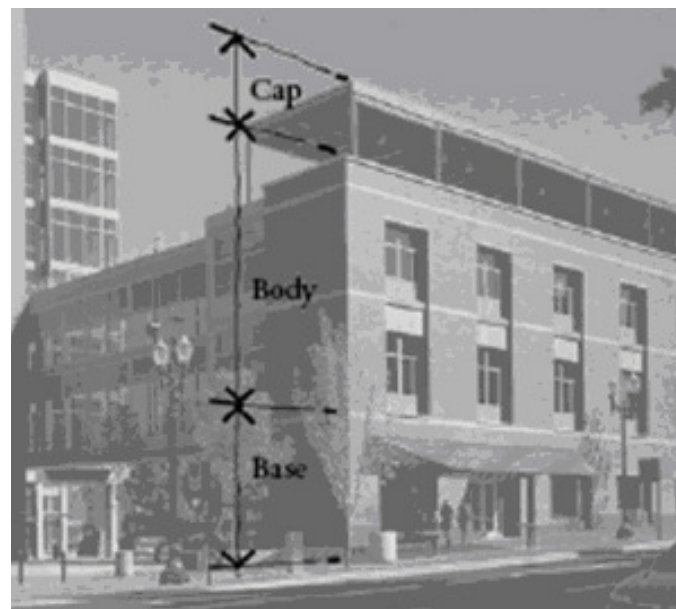
Method of Measurement: Top of parapet for flat-roofed buildings or mid-point of a sloped roof. Mechanical equipment screening and mechanical penthouses may exceed parapet heights in unoccupied space.

c. Form

Commercial and mixed-use buildings are intended to form a continuous, modulated “street wall” along the block, shaping one side of a lively village “outdoor room” with the buildings across the street. Buildings shall front on the “build to” line at the street frontages and be attached at interior sidewalls.

Ground level corner or mid-block plazas may be included in order to maintain continuous pedestrian interest. Each plaza may not exceed 30 feet in width along a block face. All plazas along a block face must not exceed 20% of a block face. All plazas must contain permanent or movable seating at a minimum of 1 seat per 100 sq. ft. Other public amenities are encouraged as per LANDSCAPE DESIGN GUIDELINES i) **General Requirements**, Section J.

Covered or uncovered mid-block pedestrian pathways extending from rear parking areas to the street may be included. Such pathways must be a minimum of 10 feet in width, be adequately lit for safety, and include no recesses for hiding places. Plantings are encouraged. To



encourage visibility, shrubs must be less than 3 feet high and trees must be limbed to at least 7 feet.

To maintain pedestrian scale, building form must be articulated with a Base, Middle, and Top.

1. Top elements define the roof or parapet with a distinct three dimensional outline or profile, achieved with projecting cornices and parapets or pitched roof eaves with changes in material and color.

2. Middle elements must be distinct in material and color from the top and the base.

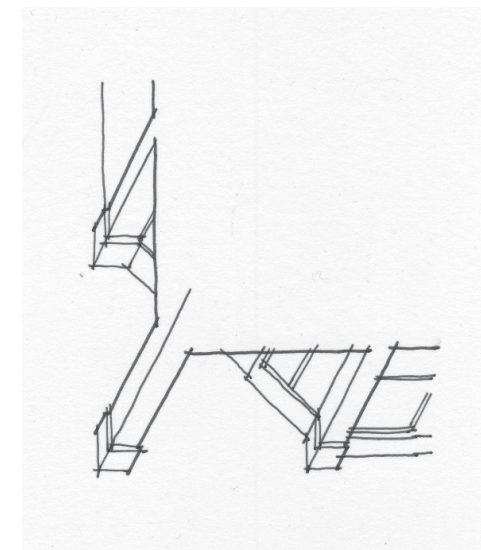
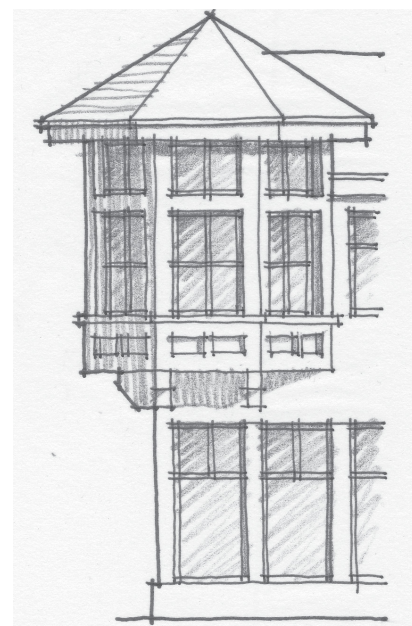
3. Base elements must be 5' tall at a minimum, (preferably closer to a full story in height), and must be made with an enduring material such as stone or brick. Concrete masonry is not allowed.

Single-story commercial and self-storage buildings with long elevations must have modulated facades but may deviate from Base, Middle, Top requirements with Harris Ranch Review Board approval. Base or Top elements are required subject to dimensional requirements as may be identified by the Harris Ranch Review Board.

Form for 2-8 Unit Multi-family Dwellings and townhouses is intended to be more residential and intimate in character. Townhouses should be articulated to be different from each other by using different roof lines, porches, and bays. 2-8 Unit Multi-family Dwelling buildings can appear as townhouses or appear as large homes with a single entrance. In the case of the latter, individual units should be expressed with window groupings, porches, balconies, bay windows and other three dimensional articulation to break up the mass.



Building forms may include corner elements that celebrate the corner such as towers, projecting bays and balconies. Uninhabited corner elements may exceed the height limit by 8 feet.

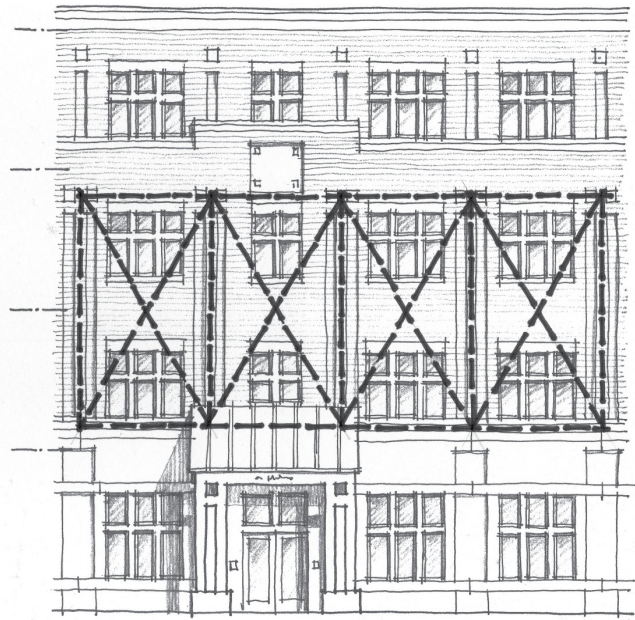


Ground level building corners, on corner lots only, may be chamfered or notched for entrances and plazas.



Balconies, bay windows, chimneys, step backs and other forms are encouraged for visual variety. (See Exterior Walls and Projections Section f.).

A. VOLUME I
3) ARCHITECTURAL AND LANDSCAPE DESIGN GUIDELINES
a) COMMERCIAL, MIXED-USE, MULTI-FAMILY HOUSING AND TOWNHOUSE BUILDINGS



d. Proportion

The facade of buildings shall be articulated into architecturally-distinct sections with each section taller than it is wide. Articulation must be, at a minimum, a change in plane or material.

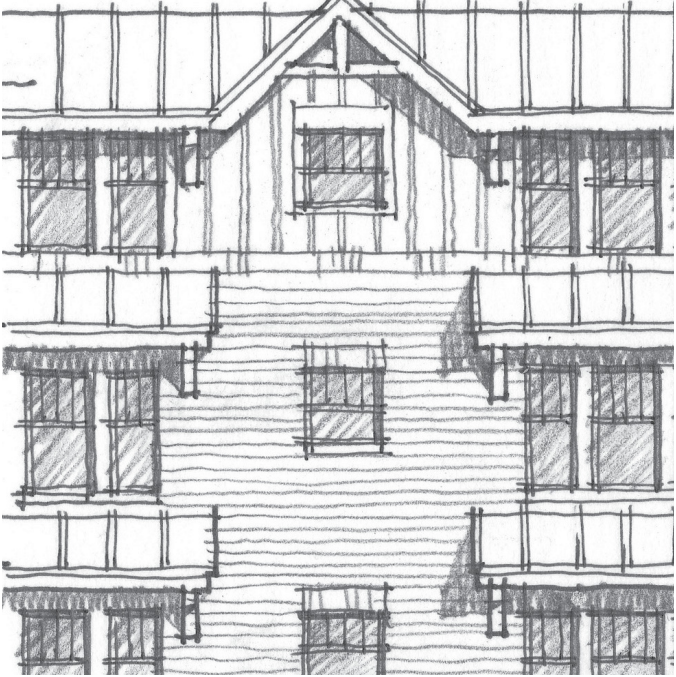


To create human scale within the first 10' of building wall (measured vertically from the sidewalk), facades shall incorporate one or a combination of the following:

1. Two (2) visually continuous horizontal details refined to the scale of 12 inches or less. The details may be interrupted by windows and doors;

2. Vertical elements placed at a maximum horizontal spacing of 12 feet; and
3. Enhanced window treatments or surrounds consisting of a change of material and/or texture.

Single-story commercial and self-storage buildings with long elevations must have modulated facades but may deviate from Proportion requirements with Harris Ranch Review Board approval. Base or Top elements are required subject to dimensional requirements as may be identified by the Harris Ranch Review Board.



e. Roofs

Roofs may be either flat or sloped, and must be made of durable, quality materials consistent with first-class commercial construction. Sloped roofs must use long lasting materials such as architectural grade composition shingles, concrete tile, ceramic tile, or seamed metal roofing materials.

Roof terraces and gardens are encouraged, and may include pavilions, pergolas, trellises and other enlivening structures made of compatible materials.

Parapets or cornices are required for flat roofs. Parapets must be capped with a 1.5 foot minimum band. Parapets may be stepped. Decorative elements of parapets may exceed height limits by 4 feet, maximum, and are restricted to 50% of the parapet length.

Cornices must project beyond the building face and be made of a contrasting material. Gutters are required and downspouts may not distribute water across pedestrian ways.

Roofscapes should be attractive and uncluttered when viewed from above. Roof top equipment must be screened to the top of the equipment (See Screening Walls below).

Rooftop hardware must not produce glare.

f. Exterior Walls and Projections

Building walls should have texture and modulation for visual interest and human scale, including balconies, bay windows, step backs, chimneys and public art.

Balconies may project beyond the façade up to 6 feet if at least 15 feet above ground for commercial buildings and 10 feet for residential buildings. Such projections must also comply with Ada County Highway District right-of-way requirements.

Bay windows and other elements may project up to 3 feet beyond the “build to line” or as specified in Block Prototype Summary Charts.”



Retractable fabric awnings or permanent canopies for sun protection and the creation of protected sidewalk space are encouraged. Temporary and permanent awnings of plastic are not allowed.

Building walls shall include brick, cast stone, stone, formed concrete, or other high quality, long-lasting masonry material covering a minimum percentage of non-glass surface area of the wall (excluding windows, doors and curtain walls). Concrete block may be used only with Harris Ranch Review Board approval.

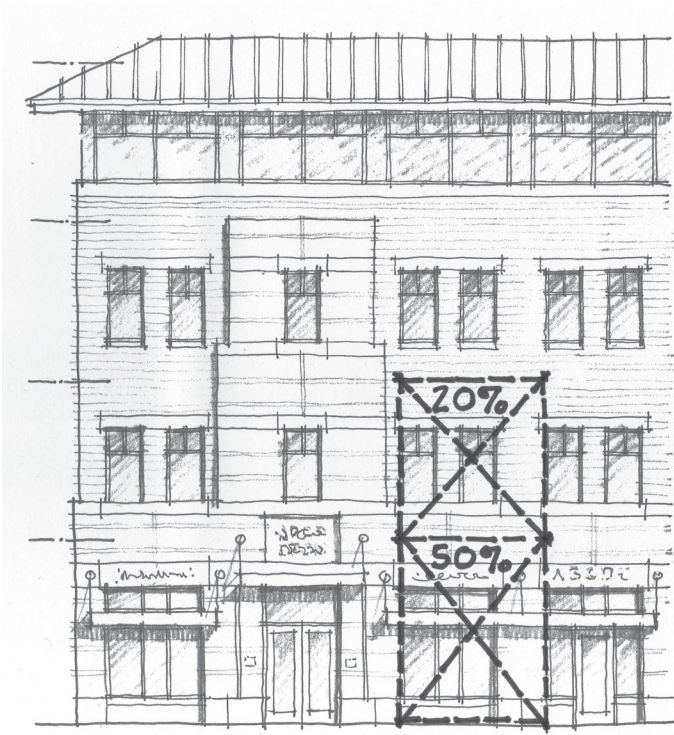
Minimum percentages are outlined as follows:

- Commercial, light industrial, mixed-use and high density housing buildings: 75% of surface area at a minimum; and
- Attached residential buildings: 25% of non-glare surface area at a minimum.

The HRRB may, for good cause shown, permit deviations to the foregoing percentages. These percentages apply to walls that are expected to remain exposed for the long term, (including those on pedestrian pathways), with the exclusion of alley facades. Interior side property walls built at the lot line, where a future abutting structure will be built, must be painted to compliment the front façade.

The remainder of wall area may be of other carefully detailed materials such as wood, fiber cement and/or stucco. Metal siding will be considered upon submission of samples and detailing drawings.





Railings shall be finished consistently with the high level of adjacent finishes. Stained wood may be approved if consistent with other stained elements on the building.

Screening Walls: On-grade screen walls shall be constructed of materials similar to those of the building façade if visible from the street (alley view is excluded). Roof-top screening materials shall be compatible with building façade materials.

g. Transparency

Transparency of the ground level shall be calculated within the first 15 feet of the building wall, measured vertically from the sidewalk.

The need for transparency requirement applies to facades facing public streets.

All ground level commercial windows shall provide direct views to the building's interior or to a lighted display area which must extend a minimum of 12 feet behind the window. Ground level windows shall extend above an 18 to 24 inch base.

To create an interesting and safe environment for pedes-

trians, glass must be clear with no mirroring and minimal or no tinting. Low E windows and comparable products are acceptable. Mirrored glass is not allowed.

Street fronting facades shall include transparent elements for a minimum percentage of the surface area to create inviting facades and encourages 'eyes on the street' for safety.

Minimum percentages for different building levels are as follows:

- Ground level of retail, office and other commercial uses: 50% of surface area at a minimum;
- Upper levels of all uses: 20% of surface area at a minimum; and
- All Residential uses: 15% of surface area at a minimum.

These percentages apply to walls that are expected to remain exposed for the long term (including those on pedestrian pathways), with the exclusion of alley facades. Interior side property walls built at the lot line, where a future abutting structure will be built, must be painted to compliment the front façade.

h. Entrances and Storefronts

Entrances must be oriented to the street, and easily identifiable. A protective covering is required, such as a canopy, porch or portico. Other additional enhancement must be provided near the entrance such as seating, ornamental potted plantings or special paving pattern.

To ensure a high degree of visual interest in the heart of Harris Ranch, storefronts are required on the main street and the blocks facing the village green.

Storefronts must include the following components:

- Large, raised storefront windows with projecting sills (see g. Transparency this page)
- Pedestrian scale signage (see Signage Section n.)
- Awning or canopy at entrance
- Horizontal human scale element (see Proportion above)

Other pedestrian friendly elements are encouraged:



- Planter boxes and hanging baskets
- Detailed/decorated piers between storefronts
- Public art such as sculpture or murals
- Seating such as chairs and benches

i. Windows and Doors

To create activity on the sidewalk special attention should be given to windows and doors as they offer activity and visual excitement to the commercial areas of Harris Ranch and are highly encouraged to have active doors every 30 feet along storefront buildings.

Entry doors shall be recessed to create a modulated "street wall" and create an interesting contrast of shade and shadow.

Doors shall be celebrated with contrasting colors, materials, and surrounds to call attention to building entrances.

Windows shall be of differing sizes reflecting the various public or private rooms within. Vertically rectangular windows should predominate, being consistent with what is typically found in small intermountain western towns. Shallow arched windows are allowed in masonry openings.

Sliding windows are discouraged unless determined to be an element of an identifiable style

Recessing and trimming of doors and windows is highly encouraged to create shade and shadow across the face of the building. Doors and windows should be consistent throughout the building.

Window shading devices are highly encouraged for summer sun protection.

(See g. Transparency this page for glazing).

Temporary exterior weather vestibules are not allowed.



j. Materials and Colors

Materials for buildings at Harris Ranch should reflect the heritage of Harris Ranch and local materials found in the vicinity. These include a combination enduring materials such as limestone, sandstone, granite, basalt and brick as the dominant exterior wall material.

Formed concrete may be used if detailed to human scale with horizontal joint work at less than 3 feet apart.

Use of concrete block as a finish material will be considered on an individual basis at the HRRB pre-application meeting.

Accent materials include wood and fiber cement paneling, stucco and formed metal.

Material change must occur at a clear break in the surface plane of the structure. Materials shall be consistently applied to street facing elevations with materials wrapping corners.

Undersides of decks, balconies, bay windows, etc. if visible from below, shall be finished consistently with adjacent level of finish. Similarly, topsides of such elements shall also be finished with consistent high level finish

(See Exterior Walls above for percentages of materials required to cover the non-glass surface of a wall).

Large areas of color shall reflect the neighboring natural landscape and natural materials. Deep colors may be used as accents. A minimum of three colors should be used in the wall materials of each building. Colors should celebrate and differentiate homes and commercial buildings from each other and be consistently applied.

Adjacent buildings may not have the same color scheme, though similarity of materials is allowed.

k. Out-buildings and Landscape Structures

Out-buildings and landscape structures may be located in or on plazas and behind buildings and must be of compatible colors and materials with the main structure.

l. Exterior Lighting

Exterior lighting is intended to serve three purposes - enhance safety, conserve the “dark sky”, and create a cohesive pedestrian identity.

- Low intensity light sources shall be used with frosted or translucent lenses and “cut-off” fixtures
- Light sources shall be low pressure sodium, metal halide, or LED.
- Light sources shall be directed downward shall not be visible off-site.
- Uplighting of trees, vegetation, buildings, outbuildings, and landscape structures is not allowed.
- Average lighting levels shall not exceed 1.0 footcandle measured at the frontage of buildings.
- Holiday lights are allowed for seasonal celebrations.
- Lighting shall comply with Boise City Code standards regarding LED signage regarding intensity, frequency, and prohibition of animation and flashing

m. Miscellaneous (dumpsters, satellite dishes, mechanical equipment, etc.)

Dumpsters, trash disposal equipment, mechanical equipment, meters, satellite dishes and exterior work areas must be completely screened from view except at alleys. Dumpsters must have hinged tops to prevent unsightliness as well as wildlife access.

Satellite dishes and other communication paraphernalia may be no larger than 18” in diameter and screened from public areas.

n. Signage

Building signage is important for the identity of Harris Ranch and should be integrated into the design and order of the building. To create an interesting pedestrian street scene, creative and lively signs are highly encouraged.

All signage must be submitted for review with the building design review submission.

o. Parking

Vehicular parking within buildings is encouraged.

Vehicle parking within structures will not be allowed within the first 30 feet of street-facing, first floor facades to reserve this area for active uses.

Vehicles must be solidly screened from street view to a minimum height of 42 inches.

Interior lighting shall not be striplights and lights shall be screened as much as possible from the exterior views.

All lots, as applicable, shall utilize alley access for off-street parking. Back up distance from garage face across alley shall be a minimum of 22 feet.

Off-street parking for condominiums shall comply with Harris Ranch Specific Plan, Parking Standards, Chapter 11-013-01.9.

p. Commercial Buildings and Parking Lots

Commercial buildings will be located up to the sidewalk and facing the street as per diagrams in the Block Prototypes and as per the Primary and Secondary Block Frontage Map (to be developed with City staff). Parking lots shall be located at the rear of buildings and only be visible at the Secondary Frontage when necessary and accompanied by a “Future Development Buildout Plan”. Parking lots should be accessed by an alley when an alley is present. Primary frontage streets shall not have parking visible from the street, but may have parking access between buildings (maximum 30 foot width) only if alley is not available. Temporary parking is excluded from this requirement.

The building setback shall be reduced from 20 feet to 10 feet at the 4-lane Parkway Boulevard shown on Block Prototypes 12, 20, 22, and all other locations along the Parkway Boulevard. With a 10 foot setback from the back of the sidewalk, the buildings will be 28 feet from back of curb.

q. Private Outdoor Space for Residential Uses

Private outdoor space for residential townhouses and 2-8 multi-family uses must be adjacent to the home and may be on the ground anywhere on a private lot or parcel, including, without limitation: in a required yard, on a covered porch, deck, upper deck, or roof deck. The minimum dimensions of such private open space are 5 feet x 8 feet unless otherwise stated in the Block Prototypes. Ground materials in private open space that is less than 100 sq. ft. shall include a minimum 8 feet x 8 feet area of smooth concrete, walkable pavers, or wood/wood-like decking. The remaining open space may be plantings (except at porches and decks where the required open space shall be included the porch or deck). Ground materials in private open space greater than 100 sq. ft. shall include a smooth area of concrete, walkable pavers, or wood/wood-like decking, in the amount of 10 percent of the open space or 100 sq. ft., whichever is less. The remainder of the open space shall be in landscape plantings (excluding connecting pathways).



i) General Requirements

LANDSCAPE GUIDELINES INTRODUCTION

In order to comply with the rural setting of the surrounding area and to reduce the impacts of the built environment, development in Harris Ranch must comply with the following requirements:

All areas of the site being developed that are not otherwise devoted to site improvements shall be planted and/or maintained with plant material meeting the requirements of this section:

A. Design Considerations

Plant material should consist mainly of native and/or drought resistant species that are adapted to the region’s climatic conditions. (Refer to Section vi) Plant Palette Recommendations.) The developer shall endeavor to provide year round interest in site landscape planting through the use of evergreens, fall color and plants with distinct twig colors and/or persistent fruits. The use of perennials and annuals is encouraged to accent building and vehicular access areas, entrances, pedestrian areas, etc.

B. Landscape Plan

A landscape plan is required for all parts of the development prior to construction. All landscape plans shall be prepared by a landscape architect or landscape designer and shall have a minimum scale of 1” = 20’. The approved landscape plan shall not be altered without prior approval of the Planning Director. No significant field changes to the plan are permitted. (This may include, but is not limited to, changes in plant quantities, species change, placement, etc.) Prior written approval of all material changes is required. All approved changes to the landscape plan must be documented prior to issuance of an Occupancy Permit. Landscape plans shall be required in future expansions, alterations or changes of use.

The proposed landscape submittal shall include:

1. Landscape Layout Plan - include landscape structures, out-buildings, outdoor lighting, signs, walls, fences, gates, service areas and all other site improvements. Provide drawings detailing the design and construction of these elements and include specifications for all materials proposed on the plan.

2. Grading Plan - include existing and proposed contours at two-foot intervals, spot elevations, drainage patterns, and rim and invert elevations.
3. Planting Plan - include a plant material legend which lists common and botanical names, plant sizes and plant quantities which are keyed to locations on the plan. The water-use calculations from Section P. Water Budget shall also be shown on the Planting Plan. Show Clear Vision Triangles.
4. Irrigation Plan - include available gallons per minute, available water pressure and point of connection.

C. Water-Wise Landscape

The Harris Ranch setting is perfectly suited for adopting a water-efficient built-landscape. In this region western expanding development has made water an increasingly valuable resource. Adopting a water-efficient built-landscape promotes a spirit of ecological stewardship as well as moderates the financial burden of escalating water costs associated with landscape irrigation. The following design considerations shall be of the highest priority:

1. Plan and design for water conservation and aesthetics from the beginning of a project.
2. Create practical turf areas of manageable sizes and shapes based on appropriate uses.
3. Group plants of similar water needs together, then experiment to determine how much and how often to water the specific site
4. Use soil amendments like compost or manure.
5. Use mulches such as woodchips, especially in high and moderate hydrozones.
6. Irrigate efficiently with properly designed systems and by applying the right amount of water at the right time, (water management).
7. Maintain the landscape appropriately by mowing, pruning and fertilizing properly.

Water-wise landscape is not a “dry only” concept. Water-wise landscape allows for practical uses of heavily irrigated athletic turf and limited areas of high water use plants. Water-wise landscape is not necessarily about rocks and gravel. Although rock gardens can be quite beautiful, there are many other choices for water-wise

designs. Water-wise is not “lawnless” but is “less-lawn.” Further, water-wise is not about native plants only. While the use of native plants is encouraged, it is also important for designers to be able to choose from the vast variety of non-invasive introduced plants that are well adapted to the climate.

It is important to realize that a water-wise landscape is not finished once the design is complete. It requires conscientious follow-through during construction, and then, again, through the life of the landscape by routine and knowledgeable maintenance. These guidelines strive to address each piece, but it is expected that a truly successful project will depend upon genuinely invested participants throughout.

D. Plant Quality

All plant material installed shall meet or exceed the minimum federal standards as regulated by ANSI Z60.1, American Standard for Nursery Stock.

All landscape plans shall state that plant material shall have a 1 year warranty from the date of occupancy or substantial completion of construction.

E. Planting Standards

1. All trees, shrubs, and other plant material shall be planted using accepted nursery standards as published by the American Association of Nurserymen (latest edition) including hole size, backfilling and fertilization.
2. Tree staking is not required, but may be used in areas susceptible to high winds or other situations that make staking desirable. If trees are staked, the stakes must be removed within 12 months to prevent damage to the tree. Staking and guy wires will not be permitted in areas of high pedestrian flow.
3. Organic - rich, friable sandy loam topsoil shall be used to these depths:
Lawn Areas: 6 inch minimum
Shrub Areas: 18 inch minimum
Tree Pits: 2 times the diameter of the root ball and 12 inches deeper.
4. A bark shall be applied to all planting areas for moisture retention, weed control and moderation of soil temperatures. Impermeable plastic weed barrier

is prohibited because it restricts water and oxygen to the roots. Gravel/rock mulch is allowed only on a case by case basis as a strictly ornamental part of the approved landscape plan.

F. Tree Species Diversity

To increase habitat variety and reduce risk of depletion by pest or disease, the developer shall make an effort to diversify the urban forest. When 5 or more trees are to be planted to meet the requirements of any portion of the development, including street trees, street buffers, parking lot landscape and other landscape areas, a mix of species shall be provided. The number of species to be planted shall vary according to the overall number of trees required to be planted. See the table below:

Required Number of Trees	Minimum Number of Species
5-10	2
11-30	3
31-50	4
50+	5

Note: When the total number of trees is greater than 10, one species cannot amount to more than 40% of the total.

Exception: When Trees are planted in the Urban Streetscape, 1 species may be used if 10 or fewer trees are to be planted.

G. Tree Permits within Street Rights-of-Way

In addition to required zoning approvals, anyone planting, pruning, removing or trenching/excavating near any tree(s) on ACHD or State rights-of-way must obtain a permit from Boise Community Forestry at least one week in advance of such work.



H. Slopes

Landscape areas may not have grades greater than 2:1 (horizontal: vertical); 3:1 maximum slopes are recommended. Grass that requires mowing shall not be used on slopes steeper than 4:1.

I. Erosion Control

Soil and slope stabilization shall result from the landscape installation, and shall be in accordance with City of Boise Storm Water Management and Discharge Control Ordinance, the Construction Site Erosion Control Ordinance and the Foothills Ordinance.

1. Appropriate seed mixes shall include, but are not limited to:

Unmown Grasses		
Common Name	Botanic Name	Lbs./acre
Chewings Fescue	Festuca rubra commutata	14
Hard Fescue	Festuca longifolia	14
Canada Ruebens Bluegrass	Poa compressa ‘Ruebens’	12

Revegetation Seeding		
Common Name	Botanic Name	Lbs./acre
Siberian Wheatgrass P-27	Agropyron fragile ssp. sibericum ‘p-27’	4
‘Appar’ Blue Flax	Linum lewisii (Appar)	2
‘Bozoisky’ Russ. Wildrye	Elymus junceus	2
‘Delar’ Small Burnet	Sanguisorbaminor	1

Native and Drought Tolerant		
Common Name	Botanic Name	Lbs./acre
Nordan Crested Wheatgrass	Agropyron desertorum	12
Rush Intermediate Wheatgrass	Thinopyrum intermedium	12
Regreen Sterile Wheatgrass	Triticum aestivum x Elytrigia elongata	6
Hard Fescue	Festuca longifolia Thiull.	12
Sheep Fescue	Festuca ovina	12
Sherman Big Bluegrass	Poa secunda	4.8
Big Sagebrush	Artemisia tridentata	0.6
Rubber Rabbitbrush	Chrysothamnus nauseosus	0.6
Wild Flower Seed	Various spp.	0.6

Upland Species		
Common Name	Botanic Name	Lbs./acre
Sterile Wheatgrass	Tritcum sp. (L.) Pall.	30
Great Basin Wildrye	Leymus cinereus	2
Bluebunch Wheatgrass	Psuedorogneria spicata	2
Idaho Fescue	Festuca idahoensis	1
Sandberg Bluegrass	Poa secunda	2
Big Squirrel Tail	Elymus multisetus	0.5
Indian Ricegrass	Oryzopsis hymenoides	1
Sand Dropseed	Sporobolus cryptandrus	1
Thurber’s Needlegrass	Stipa thurberiana	0.5
Lewis’s Flax	Linum lewisii	0.5
Small Burnet	Sanguisorba minor	2
Western Yarrow	Achillea millefolium	0.5
Munro’s Globemallow	Sphaeralcea munroana	0.5
Palmer Penstemon	Penstemon palmeri	0.5
Sillyk Lupine	Lupinus sericeus	0.5
Annual Sunflower	Helianthus annuus	0.5
Gray Rabbitbrush	Chrysothamnus nauseosus	0.5

Wood fiber mulch and tackifie , or approved equivalent by the HRRB, shall be mixed into the seed slurry to aid in soil erosion protection. This rate may require an increase on steeper slopes. The mulch shall be treated with a dye to facilitate the monitoring of application coverage on the slopes.

J. Public Amenities

The following public amenities are encouraged:

- Exterior public spaces which are to be available to the public for the period between 7a.m. and dusk. These spaces provide a great opportunity for creative use of plants, textured paving, and pedestrian-scaled lighting. Seating and visibility are key to the success of such spaces.
- Public art or water features to enhance an outdoor or indoor public space. This element has limitless possibilities and may, for example, address a building façade or courtyard. It may be freestanding or a part of another landscape element. The art or water feature may be designed apart from the setting, or as a part of a larger concept. This amenity is an ideal way to support the local artist community, and may qualify the property owner for public appreciation awards.
- Additional streetscape features including, but not limited to, seating, dining, retail, pedestrian-scaled lighting, and special paving in addition to any that are required by the design standards and guidelines.
- Common courtyard or green most often associated with a multi-family residential development. There should be both paved areas and planting as well as seating and pedestrian-scaled lighting. These areas, if designed well, can encourage positive resident interaction.
- Alley enhancements which do not impede the flo of vehicular traffic, but which encourage pedestrian use of the alley. This may include pedestrian-scaled lighting, special paving, shorter or transparent fencing materials and rear entrances.

K. Mailbox Requirements

Mailboxes shall be clustered in designated areas throughout the project; refer to Phasing Plan for location.

L. Micro Paths

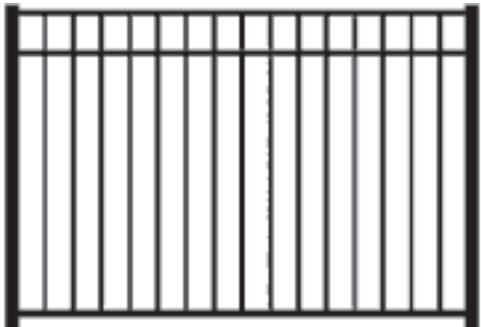
Micro paths shall be 7 feet in width and will be paved. Corners and curves will be avoided. Bollards are to be placed at the terminal ends of the path to prohibit motor vehicle access, see Section iii) Streetscape Furnishings. A 5 foot landscaped setback is required from each edge of the Micro Path. There will be no buildings or fences within this setback. Landscape inside this area may grow to no more than 3 feet at mature height. Fencing adjacent to Micro paths will be of the type from Section M. Fences and Walls along Sidewalks, noting that transparency is very important for public safety. Although the pathway shall be the responsibility of the Owners Association, lighting will be provided and maintained as determined by Boise Department of Public Works, see Section 2) DETAILED PLANS d) COMMUNITY SERVICES PLAN Item iv) Electrical, Communications and Street Lighting Plan. The landscape, fence and building regulations for this area shall be indicated by a note on the plat.

M. Fences and Walls along Sidewalks

If fences are used to provide privacy, control circulation, provide security, and emphasize entry ways next to sidewalks, the following guidelines must be met:

- Fences located adjacent to public streets must be more visually transparent than opaque. Fences shall be “stepped” rather than sloping with the grade. Wire fences constructed of “industrial” type materials such as chain link are not allowed when located adjacent to public streets.
- Fences shall be made from metal tubing and have a powder coat finish. Color shall be approved by HRRB. Fences may be 3, 4 or 6 feet tall and shall be of the following design. Additional ornamentation will be approved by review at residential gate entrances and in some commercial applications. Fences shall comply with Wildlife Impact Assessment and Management Plan (Revised), refer to Volume II, Appendix 6.

Placement of fences at least 1 foot from the sidewalk is strongly encouraged.



- Walls shall be detailed with reveals, caps, overhangs, soldier courses or other added visual interest. Walls shall be level, or “stepped” rather than sloped with the grade. Walls constructed of flat, unembellished poured concrete are not allowed when located adjacent to public streets. Block may be used for structural purposes. Finish materials shall match or compliment the accompanying architecture.

Wall heights may be either 3, 4, or 6 feet tall, and shall not exceed 3 feet in the front yard.

Placement of walls at least 1 foot from the sidewalk is strongly encouraged.



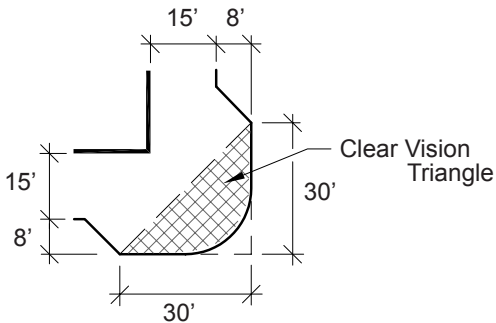
N. Clear Vision Triangles:

The following standards shall be observed within all clear vision triangles, both at controlled and uncontrolled intersections. In all cases, Idaho Transportation Department (ITD) and Ada County Highway District (ACHD) standards shall apply in addition to City of Boise standards. The most restrictive rules shall govern.

Any trees planted within clear vision triangles shall have branches pruned to a minimum height of 8 ft. above the ground or sidewalk surface. Should trees grow to extend over the adjacent roadway, branches shall be pruned to a minimum height of 14 ft. above travel lanes. No Class I, Class II or Evergreen trees shall be planted within any clear vision triangle. The maximum combined height of any berm or vegetative groundcover or walls/fences at maturity within the sight triangle is 3 feet. Fences and Walls along Sidewalks must comply with the Boise City Code.

When the City determines that a sight obstruction exists, it shall notify the owner of the property upon which the obstruction is located and order that the obstruction be removed within 30 days. The failure of the owner to remove the obstruction shall be punishable as a misdemeanor, and every day the owner fails to remove the obstruction shall be a separate and distinct offense.

The maximum combined height of any berm or vegetative groundcover or walls/fences at maturity with the sight triangle is 3 feet, as measured from the top of pavement where the driver would be located or stopped at a controlled intersection.

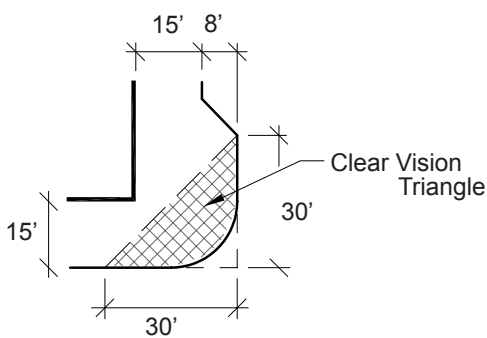


VILLAGE CENTER FULL BULBOUT
CLEAR VISION TRIANGLE

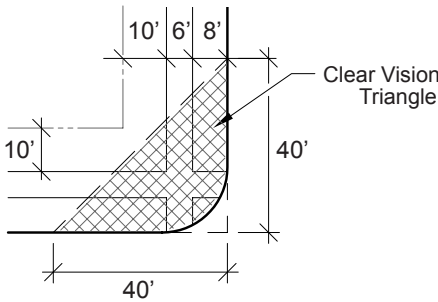
O. Utilities:

All trees shall be planted outside of any easement that contains a City water or sewer main, unless written approval is obtained from the City Engineer. If any utility easement precludes trees required by this or the City's ordinance, the width of the required buffer shall be increased to accommodate the required trees.

New underground utilities shall stay outside of the dripline of existing trees if trenched, or be tunneled a minimum of 3 ft. below existing grade within the tree's dripline. The guiding principle is that no root 2 in. or larger shall be cut.



VILLAGE CENTER HALF BULBOUT
CLEAR VISION TRIANGLE



MIXED-USE RESIDENTIAL
CLEAR VISION TRIANGLE

P. Water Budget

A water budget is the target amount of water a landowner should not exceed in a typical watering season. Working towards this target in the planting design phase helps the designer achieve realistic goals for landscape irrigation. Water budgeting focuses less on water time limits, and is more concerned with a user's water allotment and reducing over-watering. The water-use calculations shown in Table 1.1 shall be clearly denoted on the landscape plan. Explanation on how to use the calculations are as follows:

a. Gallons of Water Needed by Plant Category (Hydrozone):

Determine the water needs of the various plants in your design. Water requirements for a select representation of plant choices may be found in Section vi) Plant Palette Recommendations. Be sure to group only plants with similar water needs in the same irrigation zone. The following list is an approximation of the amount of water each hydrozone needs per square foot per season:

Plant Water Need Category Gallons of Water Used

- H = High Water Plants 18 gal./sq. ft./Season
- M = Moderate Water Plants 10 gal./sq. ft./Season
- L = Low Water Plants 0-3 gal./sq. ft./Season

b. Irrigation Areas based on Plant Water Need Category:

Calculate the area of each watering zone and place the square footage in the line provided. These areas can be determined by physically measuring the length (in feet) by the width (in feet).

Table 1.1

Water-Use Calculations:

High Water Zones:	_____ S.F. x (18 gal./sq. ft.)	= _____ gal./Season
Moderate Water Zones:	_____ S.F. x (10 gal./sq. ft.)	= _____ gal./Season
Low Water Zones:	_____ S.F. x (3 gal./sq. ft.)	= _____ gal./Season
TOTAL gallons needed by ALL ZONES:		= _____ gal./Season
TOTAL Square Feet (S.F.) of ALL ZONES:		= _____ gal./Season

Average Gals./S.F./Season, All Zones:

Total Gals/Total S.F. = _____ gal./sq. ft./Season

*The average cannot exceed a Maximum of 15 gal./sq. ft./Season. The irrigation season is mid-April to mid-October (6 months/26 weeks)

c. Water-Use Calculations:

Fill in the blanks with area and water need per zone. For example, you might have an area of 300 sq. ft. in a High Water Zone that would require 18 gallons of water per sq. ft. After multiplying you would find that area requires 5400 gal. of water per season.

After calculating the irrigation needs of all areas, determine your average overall water needs per season. To do this, add the total gallons needed for all zones, and divide by the total square footage for all zones. The average for the overall site cannot exceed 15 gal. per sq. ft. per season. If your average is more than this, the landscape design must be modified to increase the area of Low Water Zones, thus reducing your High/Moderate Water Zones. In this way, the overall level of water consumption may be reduced to 15 gal. per sq. ft. per season or less.

Q. Irrigation Water

Harris Family Limited Partnership (HFLP) has few surface water rights available for community irrigation. The highest priority for their use will be in common areas closest to allowable diversion points. Where surface water rights are utilized, redundant irrigation systems will be developed utilizing water from United Water. All private landscapes will be irrigated by water provided by United Water. Water-wise irrigation principles will be followed for all development within Harris Ranch.



R. Irrigation Requirements:

All landscape areas regulated by this ordinance shall be served with an automatic underground irrigation system.

An irrigation plan is required for all parts of the development prior to construction. The irrigation plan will include;

1. detailed irrigation performance specification including design requirements, materials and construction methods;
2. sprinkler head layout shall be shown on the plan;
3. sleeve, pipe, and valve sizing. All lines under pavement shall be sleeved;
4. available gallons per minute, available water pressure and point of connection; and
5. backflow preventer and controller location

Three copies shall be submitted with the landscape plan for all Final Plats and Certificates of Zoning Compliance.

At a minimum, the performance specifications shall address the following requirements:

- a. Specify an appropriate backflow prevention device
- b. The irrigation shall be designed to provide 100% coverage with head to head spacing or triangular spacing as appropriate.
- c. Sprinkler heads shall have matched precipitation rates within each control valve circuit.
- d. Sprinkler heads irrigating lawn or other high-water-demand areas shall be circuited so that they are on a separate zone or zones from those irrigating trees, shrubs, or other reduced-water-demand areas.
- e. Irrigation time clock controllers shall have the capability to allow for seasonal adjustments, including global water budget controls. All controllers shall allow for multiple programs and start times and shall allow individual time settings down to the minute. Controllers (excluding single-family detached) shall use evapotranspiration or soil moisture based programming, including either local sensors, remote or historic evapotranspiration based scheduling or soil moisture sensors.
- f. An automatic rain shutoff device shall be required for each separate irrigation system.
- g. Sprinkler heads shall be adjusted to reduce overspray onto impervious surfaces such as sidewalks, driveways,

and parking areas.

Immediately following installation, plants may require supplementary water for establishment. Within 6 weeks of completion of new landscape, the irrigation system installer shall reset the time clock controllers to the normal seasonal watering schedule. (Single-family detached homeowner exempt)

S. Maintenance Requirements:

All existing properties, excluding single-family detached homes, shall not modify any landscape area or plant materials without HRRB approval. Maintenance and minor improvements within existing landscape area or of plant materials must occur in a manner that complies with the standards herein or decreases existing aspects of non-conformance.

The property owner, homeowner's or business association shall be responsible for the continual adequate maintenance of the landscape and irrigation system required by and shown on the Final Plat.

All landscape and associated materials shall be continually maintained including irrigation, weeding, pruning and replacing in a substantially similar manner as originally approved. The following survival standards shall apply to all landscape areas and materials:

- a. All living plant materials, as indicated by the Final Plat must be maintained. The HRRB must approve replacement or alteration of plant material.
- b. Non-living ground covers, such as rock or organic mulch, must have 100% ground surface coverage and be maintained at the required depth.
- c. All plant material including trees, shrubs, groundcovers, vines and turf must have a 100% ongoing survival rate.
- d. Any dead or severely damaged (as determined by the HRRB) plant material shall be replaced by the owner or assigns within six months of notification by the HRRB
- e. Pruning of plant materials shall not drastically alter the natural growth pattern and maturing size, as determined by the HRRB. Tree pruning within City Rights-of-way is allowed by permit only and must be performed by a City approved contractor. Topping is expressly prohibited. If the City determines that pruning has occurred that violates

this requirement, the owner will be required to replace the affected plant with an equal plant within six months of notification by the City. This requirement also applies to plant material affected by storm damage.

f. Plants infected with insects or disease must be treated appropriately or removed from the property, as required by the City. Removed plants must be replaced with new, equal plant materials as determined by the City.

g. Weeds must be abated and removed.

h. Tree grates shall be widened to accommodate the growing tree trunk and prevent girdling of any trees planted in tree wells within sidewalks or other public rights-of-way.

i. Turf areas generally require periodic mowing, aeration, dethatching, fertilization, and weed abatement. Turf and grass areas must be maintained in a healthy condition without areas of dirt or dead grass, as determined by the HRRB.

j. Irrigation is discouraged in the heat of the day (between the hours of 10 a.m. and 6 p.m.) in order to reduce evaporation. Excessive water run off is not permitted.

k. Irrigation systems shall be maintained and periodically adjusted to assure watering efficiency and conservation methods. Replacement parts shall match or be compatible with the system requirements.

Street Trees are required on all public rights-of-way according to the Landscape Plans - Street Tree Plan and Streetscapes Details.

A. Urban Street Trees

All tree planting on the public rights of way (species and locations) must be approved by Boise Parks and Recreation Department's Community Forestry Unit (Boise City Ordinance Title 9, Chapter 16) and a permit must be obtained prior to planting. Harris Family Limited Partnership (HFLP) will adhere all conditions of the Boise Tree Ordinance. Contact Community Forestry at (208) 384-4083.

Street Trees in the urban core will be planted under 6' x 6' grates. (See Section iii) Streetscape Furnishings for grate and guard specifications.) Only the Class II trees from the following list will be permitted in these areas as noted on the Landscape Plans - Street Trees. Trees are to be spaced approximately 30' apart and should be placed near property lines or between store fronts wherever possible. Trees shall be spaced no closer than 80% of the average mature width of the trees. Trees shall be planted in rows according to the Landscape Plans - Streetscapes Details. The following is the approved list of Urban Street Trees:

- Green Ash - Fraxinus pennsylvanica, cultivars 'Cimarron', 'Patmore', 'Summit', and 'Urbanite'
- White Ash - Fraxinus americana, cultivars 'Autumn Applause', 'Autumn Purple', 'Rosehill' and 'Skyline'
- Ginkgo - Ginkgo biloba, male cultivars only, including 'Autumn Gold', 'Magyar', 'Princeton Sentry', 'The President' and 'Saratoga'
- Hackberry - Celtis occidentalis
- Hardy Rubber Tree - Eucommia ulmoides
- Honeylocust - Gleditsia tricanthos, cultivars 'Moraine', 'Shademaster' and 'Skyline'
- Littleleaf Linden - 'Corinthian' 'Glenleven' 'Greenspire'
- Norway Maple - 'Deborah' 'Cleveland' 'Clumnare' 'Crimson King' 'Crimson Sentry' 'Emerald Queen' 'Fairview' 'Parkway' 'Royal Red'

B. Park Strip Trees

Trees along the street in Park Strips as designated on Landscape Plan - Street Trees will be planted in 8' minimum landscape strips. (See Section 2) DETAILED PLANS a) CIRCULATION PLANS iv) Right of Way Sections.) Only

Class II trees from the following list will be permitted in these areas. Trees are to be spaced approximately 30' to 40' apart.

Trees shall be planted in rows according to Streetscape Details:

- Green Ash - 'Cimarron' 'Patmore' 'Summit' 'Urbanite'
- White Ash - 'Autumn Applause' 'Autumn Purple' 'Rosehill' 'Skyline'
- River Birch, single stem - 'Dura heat' 'Heritage'
- American Elm - 'New Harmony' 'Princeton' 'Valley Forge' (Disease Resistant Cultivars)
- Ginkgo - 'Autumn Gold' 'Magyar' 'Princeton Sentry' 'The President' 'Saratoga' - male trees only
- Hackberry
- Hardy Rubber Tree
- Honeylocust - 'Moraine' 'Shademaster' 'Skyline' Sunburst is NOT allowed due to pest problems
- Japanese Pagoda Tree
- Littleleaf Linden - 'Corinthian' 'Glenleven' 'Greenspire'
- American Linden (varieties include Redmond, Legend)
- Norway Maple - 'Deborah' 'Cleveland' 'Clumnare' 'Crimson King' 'Crimson Sentry' 'Emerald Queen' 'Fairview' 'Parkway' 'Royal Red'
- Pacific Sunset Maple
- Sugar Maple - 'Commemoratum' 'Legacy' 'Green Mountain'
- Sweetgum - 'Cherokee' 'Moraine'
- Turkish Hazel
- Yellowwood
- Kentucky Coffeetree

Due to growth habit, hardiness or pest problems, the following species are NOT allowed in the Park Strip:

- European Ash (Kimberly Blue)
- Paper Birch
- Sensation Maple
- Willows
- Quaking Aspen
- Red Maple or Autumn Blaze Maple
- Silver Maple
- Any Coniferous Tree (pine, spruce, larch, etc.)
- Any Class 1 species (except where required due to overhead power lines)

C. Roadway Median Trees

Trees in the Roadway Medians as designated on Landscape Plan - Street Trees will be planted in 8' landscape strips. (See Right of Way Sections.) Only Class II trees from the following list will be permitted in these areas. Trees are to be spaced approximately 30' to 40' apart. There shall be no lawn planted in the roadway medians.

- Green Ash - 'Cimarron' 'Patmore' 'Summit' 'Urbanite'
- White Ash - 'Autumn Applause' 'Autumn Purple' 'Rosehill' 'Skyline'
- River Birch, single stem - 'Dura heat' 'Heritage'
- American Elm - 'New Harmony' 'Princeton' 'Valley Forge' (Disease Resistant Cultivars)
- Ginkgo - 'Autumn Gold' 'Magyar' 'Princeton Sentry' 'The President' 'Saratoga'
- Hackberry
- Hardy Rubber Tree
- Honeylocust - 'Moraine' 'Shademaster' 'Skyline'
- Japanese Pagoda Tree
- Littleleaf Linden - 'Corinthian' 'Glenleven' 'Greenspire'
- Norway Maple - 'Deborah' 'Cleveland' 'Clumnare' 'Crimson King' 'Crimson Sentry' 'Emerald Queen' 'Fairview' 'Parkway' 'Royal Red'
- Pacific Sunset Maple
- Sugar Maple - 'Commemoratum' 'Legacy' 'Green Mountain'
- Sweetgum - 'Cherokee' 'Moraine'
- Turkish Hazel
- Yellowwood

Other species must be approved by the direct written consent of the City Forester.

D. Common Area Trees

The attached list of Class III trees are to be planted in the Village and neighborhood greens and in all other common areas. Common areas are as defined in Section i) General Requirements, subsection J. Public Amenities. There is to be a double row alle' along the perimeter of the Village Green as denoted on the Landscape Plan - Street Trees. If the design intent require this alle' may consist of as few as two different species; however the interior of the park must show a much greater diversity. Class III trees must be spaced 40' to 60' apart and must be placed five feet from any paved surface. Other landscape and trees may be included as needed to satisfy the design intent. See below, a list of approved Class II and Class I trees.

Trees may not be planted near underground utilities.

CLASS III

- London Planetree - 'Bloodgood' 'Yarwood'
- Bur Oak
- Red Oak
- Swamp White Oak

Class II – must be located a minimum of four feet from any paved surface.

- Green Ash - 'Cimarron' 'Patmore' 'Summit' 'Urbanite'
- White Ash - 'Autumn Applause' 'Autumn Purple' 'Rosehill' 'Skyline'
 - River Birch, single stem - 'Dura heat' 'Heritage'
 - American Elm - 'New Harmony' 'Princeton' 'Valley Forge' (Disease Resistant Cultivars)
 - Ginkgo - 'Autumn Gold' 'Magyar' 'Princeton Sentry' 'The President' 'Saratoga'
 - Hackberry
 - Hardy Rubber Tree
 - Honeylocust - 'Moraine' 'Shademaster' 'Skyline'
 - Japanese Pagoda Tree
 - Littleleaf Linden - 'Corinthian' 'Glenleven' 'Greenspire'
 - Norway Maple - 'Deborah' 'Cleveland' 'Clumnare' 'Crimson King' 'Crimson Sentry' 'Emerald Queen' 'Fairview' 'Parkway' 'Royal Red'
 - Sugar Maple - 'Commemoratum' 'Legacy' 'Green Mountain'

Class I – must be located a minimum of 7' from any pedestrian way or sidewalk.

- Flowering Crabapples,
- Goldenrain Tree
- Lavalie Hawthorn
- Japanese Tree Lilac - 'Ivory Silk'
- Amur Maple
- Pacific Sunset Maple
- Sugar maple - 'Apollo'
- Flowering pear - 'Aristocrat' 'Chanticleer' 'Capital' 'Redspire' 'Cambridge'
- Flowering Plum - 'Newport' 'Mt St Helens'
- Eastern Redbud
- Serviceberry - 'Autumn Brilliance' 'Robin Hill'

Other species must be approved by the direct written consent of the City Forester.

Japanese Yew and Arbor Vitae are prohibited in Harris Ranch.



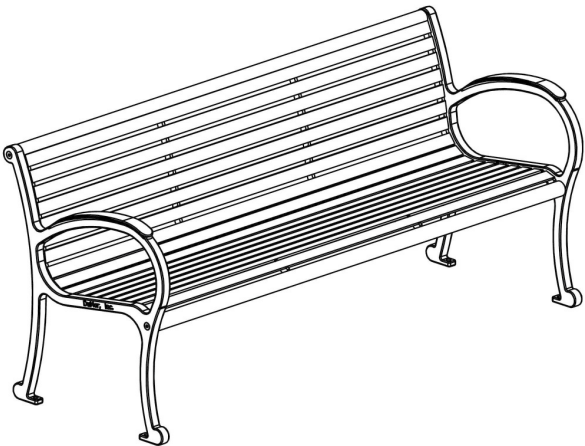
A. VOLUME I
3) ARCHITECTURAL AND LANDSCAPE DESIGN GUIDELINES
b) LANDSCAPE DESIGN GUIDELINES
iii) Streetscape Furnishings

To create a beautiful and cohesive streetscape, the following furnishings (or HRRB approved equal furnishings) shall be used according to the Landscape Plans - Streetscapes Plan and Streetscapes Details. Alternate manufacturers and/or models may be used so long as approved by the Harris Ranch Review Board and the City of Boise.

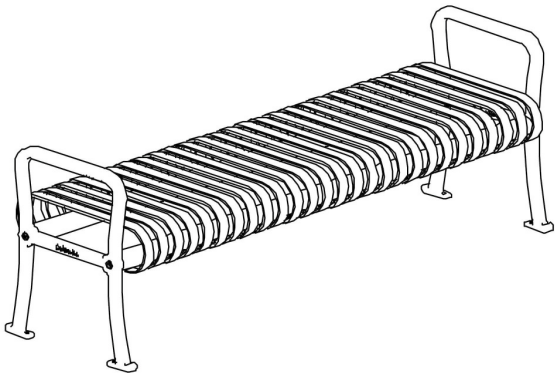
A. Urban Benches

In the Urban Sidewalk sections a selection from one of the following benches may be used:

- a. DuMor Series 160 Bench in Bronze Powder Coated Finish and 8 ft. length. Bench shall be installed according to manufacturer's instructions.



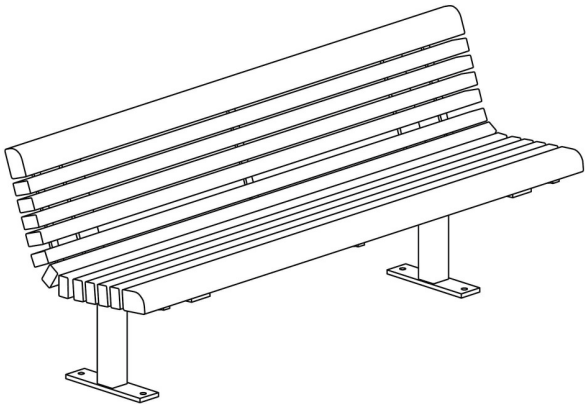
- b. DuMor Series 95 Bench in Bronze Powder Coated Finish and 8 ft. length. Bench shall be installed according to manufacturer's instructions.



B. Park Benches

The following bench is to be used in the Village Green, neighborhood greens, park strip streetscape and all other park settings that may arise:

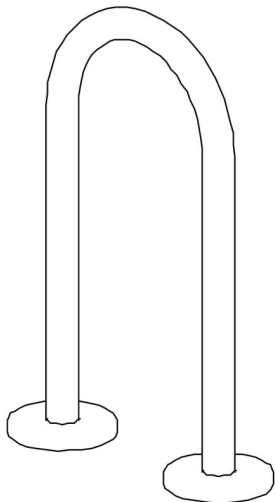
- b. DuMor Series 39 Bench in Douglas Fur and 8' length. Bench shall be installed according to manufacturer's instructions.



C. Urban Bike Racks

There shall be two bike racks for every 300 linear ft. of frontage in the Urban Sidewalk Streetscapes. The following bike rack is to be used:

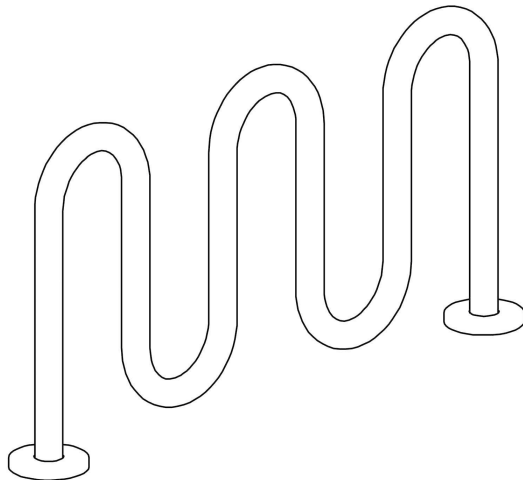
- a. DuMor Bike Rack 83 with S-2 Surface Mount in Bronze Powder Coated finish. Racks shall be installed according to manufacturer's instructions.



D. Park Bike Racks

In the Village Green, neighborhood greens, Park Strip Streetscape and all other park settings, the following bike rack is to be used. There shall be one bike rack for every 1,000 linear ft. of frontage. In parks, there shall be an additional 5 bike spaces for every 10,000 sq. ft. of footage:

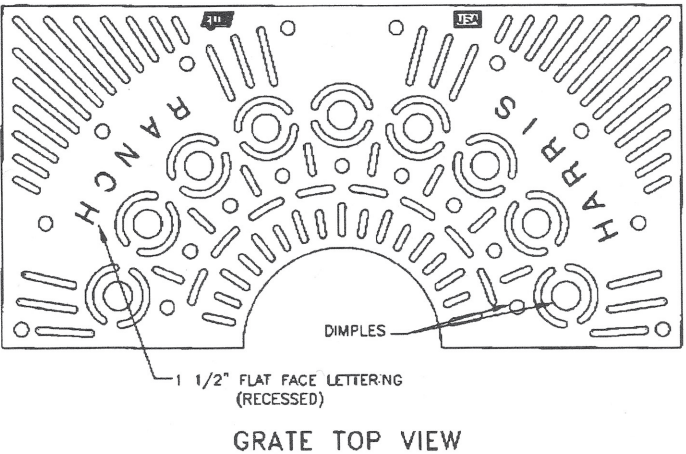
- a. DuMor 125 Series Bike Rack with S-1 Embedment Mount in Bronze Powder Coated finish. Model number shall be determined according to designer's discretion. Racks shall be installed according to manufacturer's instructions.



E. Tree Grates

In the Urban Sidewalk Streetscapes the following tree grates shall be used:

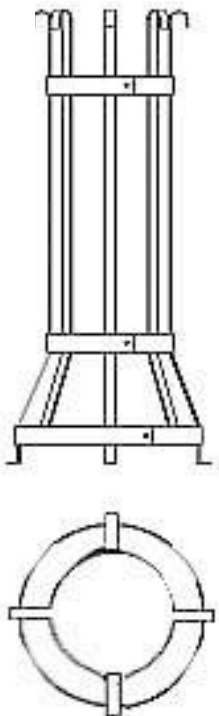
- a. East Jordan Iron Works Tree Grate 60 in. square, Catalog 8580, Product No. NCR08-2392G with frames, natural unfinished, with custom "Harris Ranch" Logo.



F. Tree Guards

In the Urban Sidewalk Streetscapes the following tree guards shall be used. When tree guards are used, there shall be no guying or staking for support:

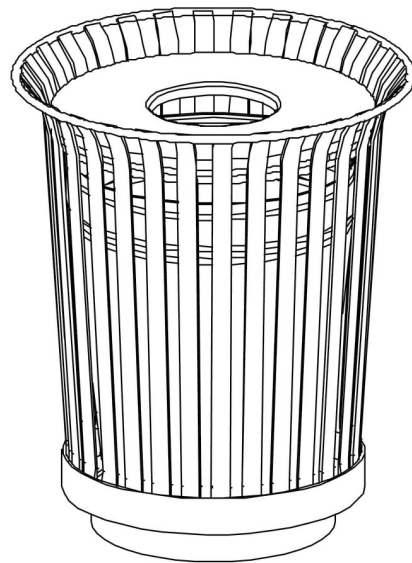
- a. Ironsmith M5 Tree Guard, custom 48 in. height and standard 16 in. opening, black powder coat finish.



G. Trash Receptacles

Trash Receptacles are to be placed 1 for every 500 linear ft. in Urban Sidewalk Streetscapes and 1 for every 1,000 linear ft. in Park Strip Streetscapes. In the Village Green, neighborhood greens and all other park settings, there shall be an additional 5 bike spaces and 1 trash receptacle for every 10,000 sq. ft. of area. The following trash receptacle is to be used:

- a. DuMor Receptacle 84, 32 Gallon with cover, model 84-32, Bronze Powder Coat Finish, S-2 Surface Mount.



H. Trench Grates

In the Urban Sidewalk Streetscapes the following trench grates shall be used:

- a. Ironsmith Briar Cast Iron Trench Grate, model M9049, natural unfinished. Sizing shall be based on flows as determined on Final Plat.



I. Planters

If planters are to be placed in the Streetscape, the following shall be used:

- a. Dura Art Stone Cast Stone Planter "Ribbed," Sand Buff, Medium Sand Blast Finish. A mixture of sizes is encouraged, however, pots shall be round. Square or oblong planters will not be permitted.



J. Tables

If picnic tables are to be placed in the Village Green and Neighborhood Greens or any other park settings, the following shall be used:

- a. Wabash Valley 46 in. Square Table, Inground, Basic Frame, Diamond, model numbers SG230D or SG235D. 3 and 4 seat models are approved.

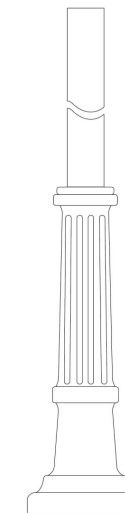
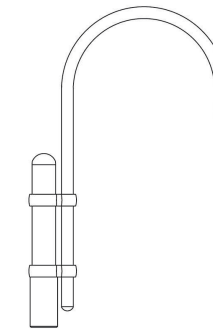
Top Color: Burgundy
Leg Color: Beige
Seat Color: Burgundy



K. Pedestrian Street Lights

Pedestrian Street Lights shall be placed in the Urban Sidewalk Streetscape. The following shall be used:

- a. InVUE Epic Series, Classical Medium, High Pressure Sodium Lamp, Flat Glass Lens, Slot Mid Section, Bell Shade, Black Finish, Bishop Single Pole Mount Arm, Sheridan Style Base.
- b. Light - Holophane Bern GBL F2 P20 40R AS 2 B L3, Arm: Cordoba Arm CR30/1-CA/BK Pole: KW RSP25-5.0 11-BLK BC or RSP 30-5.0-11-BLK BC



If applicable, Harris Family Limited Partnership will formally request the formation of a special lighting district.

L. Urban Bollards

If bollards are to be placed in the Urban Streetscape, the following shall be used:

- a. Sheridan Style Base to match pedestrian street lights.

M. Park Strip Bollards

In the Village Green, neighborhood greens, Park Strip Streetscape and all other park settings, the following bollard shall be used:

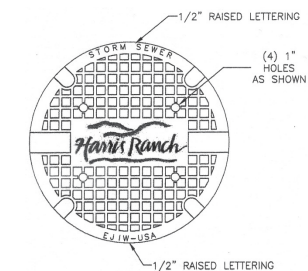
- a. DuMor Steel Bollard 400, 36 in. height, S-1SL Removable Mount, Bronze Powder Coated Finsh. Install per manufacturer's instructions.



N. Manhole Covers

Manhole Covers throughout Harris Ranch are to be as follows:

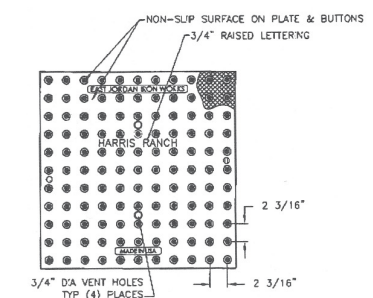
- a. East Jordan Iron Works, Catalog No. 2440C, Product No. NCR08-2392A & NCR08-2392B with custom "Harris Ranch" Logo.



O. Detectable Warning Plates

When Detectable Warning Plates are use in the Streetscape, the following shall be used:

- a. East Jordan Iron Works, Catalog No. 7005-7, Product No. NCR08-2392C with custom "Harris Ranch" Logo.



A. Landscape Requirement

To enhance the environmental health and human habitability of the urban environment, multi-family, mixed-use and commercial developments shall have 1 tree per every 1,000 sq. ft. of landscape area. This requirement is in addition to the landscape requirements set in Section D. Parking Lot Landscape, this page. Tree selections may be made from the list in LANDSCAPE DESIGN GUIDELINES, Section ii) Street Tree Requirements, D. Common Area Trees and minimum soil area requirements for class shall be adhered to. Additional tree species will be considered at the discretion of the City Forester. Developer shall pay attention to species diversity.

Common areas are as noted on Prototypical Blocks. On blocks where prototypes are not clearly defined, the developer of a multi-family or mixed-use residential is required to provide a common area for use by the block residents. The common area requirement may be satisfied either through the use of open space or through the use of courtyards or greens (as defined in Section i) General Requirements, subsection J. Public Amenities). Street rights-of-way and parking lot landscape areas shall not contribute towards the common area requirement.

Common areas for condominium plats, as noted on Prototypical Blocks 6B, 7B, 10B and 11C, shall be a minimum of 1600 sq ft. with a minimum of 40 feet in both directions unless otherwise stated in the Block Prototypes. A4-foot paved pathway must connect through the common area to all adjacent streets and any parking areas.

Lawn shall consist of no greater than 50% of the total landscape area and must be of a grass mix no greater than 5% Kentucky Bluegrass. Common areas may be excluded from this requirement. Please see Section vi) Plant Palette Recommendations.

Private Outdoor space shall be required for each dwelling unit and may be on the ground anywhere on the property including in a yard, on a covered porch, deck, upper deck, or roof deck. The minimum dimensions on or near ground floor shall be 8' x 8' and at second floor and above minimum dimension shall be 6' unless otherwise stated in the Block Prototypes. Ground materials in areas less than 100 sq. ft. shall include a minimum 8 feet x 8 feet area of smooth concrete, walkable pavers, or wood/wood-like decking. Asphalt may not be used to satisfy this requirement. The remaining open space may be plantings (except at porches and decks where the required area shall be included in the porch or deck). Ground materials in private open space greater than 100 sq. ft. shall include a smooth area of concrete, walkable pavers, or wood/wood-like decking, in the amount of 10

percent of the open space or 100 sq. ft., whichever is less. The remainder of the open space shall be in landscape plantings (excluding connecting pathways).

B. Curb Cuts

The sidewalk pattern and material shall carry across the driveway. Adjacent developments shall share driveways, to the greatest extent possible.

a. Non-residential curb cuts shall not exceed 24 ft. for combined entry/exits for every 100 ft. of street frontage.

b. Residential curb cuts occur as designated on Prototypical Blocks. On blocks where vehicular access is not define , curb cuts for multi-family residential and single family attached uses shall not exceed 24 ft. for combined entry/exits for every 100 ft. of street frontage.

C. Location of Parking Lots

To reduce the visual impact of parking areas to the streetscape and to enhance the pedestrian experience, parking lots shall be located behind buildings to the greatest extent possible. If necessary, parking lots may be located to the side of the building. Parking lots should never be located between the public street and the building or at intersection corners.

D. Parking Lot Landscape

In order to reduce the visual and environmental disturbance of surface parking lots, the following requirements shall be met:

a. Screening Requirements

A 5 ft. minimum perimeter landscape strip shall be required along all interior lot lines that are adjacent to parking, loading, or other paved vehicular use areas. Parking lot screening shall be accomplished by planting evergreen shrubs spaced according to species characteristics such that they provide an opaque screen with 75% coverage at time of planting and 100% within 5 years. Height of screen shall be three feet minimum to five feet maximum. The setback shall be measured as the soil surface area of the planter. The screen may be one or a combination of the following treatments:

i. Landscape plantings consisting of evergreen shrubs and groundcover materials;

ii. Low walls made of concrete, masonry, or other similar materials, see section 3.b.i.m.3 for further

explanation;

iii. Continuous raised planters planted with evergreen shrubs;

iv. An approved Green Street trial, see section 5.F. Green Streets for further information;

iv. Exceptions: In the event that there is insufficien space to allow the use of evergreen plant material or low walls to screen parking areas, a railing may be used from the list of approved commercial fencing types, see section A.3.b.i.m.1&2 or as approved by the HRRB.

b. Internal Landscape

Interior parking lots landscape shall be required on any parking lot with more than 10 spaces. No linear groupings of spaces shall exceed 10 in a row without an internal planting island. Landscape shall, insofar as possible, be used to delineate and guide major traffic movement within the parking area so as to prevent cross-space driving. Interior landscape planters shall be spaced as evenly as feasible and at the ends of rows of parking throughout the lot to consistently reduce the visual impact of long rows of parked cars.

The required amount of landscape is based on a sliding scale as follows:

No. of Spaces	Percentage Landscape Area
13 – 100	4%
101 – 200	6%
201+	8%

(Landscape area is based on the percentage of the total parking lot area including driveways.)

c. Planter Size

Landscape planters shall contain a minimum of 50 sq. ft. and the planting area shall not be less than 5 ft. in any dimension, measured from the inside of the curb. The only exception to the minimum dimension is at the tip of triangular planters located at the end of rows of angles parking. Minimum size planters for trees are as follows:

4 - 6' width	Class I only
6' - 10' width	Class I and Class II
> 10' width	All deciduous trees permitted

See section 2.D. Common Area Trees for approved

species list.

d. Trees Required

Each interior planter that serves a single row of parking spaces shall be landscaped with at least one tree and shall be covered with low shrubs or other vegetative groundcover. Each interior planter that serves a double row of parking spaces shall have at least two trees and shall be covered with low shrubs or other vegetative groundcover. Deciduous shade trees must be pruned to a minimum of 8 ft. above the adjacent parking areas. Evergreen trees are prohibited in interior planters. Caution must be used in designing with Class I trees. Low branching habits typical of most Class I trees may create pedestrian/vehicular conflicts. Stormwater management basins and Green Streets shall not be part of required landscape area calculations unless developer can show they can be successfully sustained well-vegetated, including trees.

Class III trees shall be allowed where applicable, particularly in the parks and along the arterials.

e. Exception

In the event that the above guidelines will severely limit the function and circulation of the lot, up to 50 percent of the required landscape may be located near the perimeter of the paved area to emphasize corridors or special landscape areas within the general parking area. Such required interior landscape which is relocated shall be in addition to perimeter landscape and right of way screening requirements.

f. Screening Walls

On-grade screen walls shall be constructed of materials similar to those of the building façade if visible from the street (alley view is excluded). Dumpsters, trash disposal equipment, mechanical equipment, meters, satellite dishes and exterior work areas must be completely screened from view except at alleys. Dumpsters must have hinged tops to prevent unsightliness as well as wildlife access. Satellite dishes and other communication paraphernalia may be no larger than 18" in diameter and screened from public areas.

g. Curbing

All planting areas that border driveways, parking lots and other vehicle use areas shall be protected by curbing,



A. Detached Residential Landscape

In order to enhance the environmental health and human habitability of the urban environment, each single family home will have at least 1 tree in the front yard, and an additional tree per every 5,000 sq. ft. of yard area. Tree selections may be made from the list in section 2.D. Common Area Trees, and minimum soil area requirements shall be adhered to. Additional tree species may be approved at the discretion of the City Forester. Developer shall pay special attention to species diversity.

Lawn shall consist of no greater than 50% of the total yard area and must be of a grass mix no greater than 5% Kentucky Bluegrass. Please see section vi) Plant Palette Recommendations.

Residential curb cuts occur as designated on Prototypical Blocks. On blocks where vehicular access is not defined, curb cuts for single-family detached residential shall not exceed 12 ft. per household.

Private outdoor space may be on the ground anywhere on the particular lot or parcel. The minimum dimensions will be 15 ft. x 15 ft. unless otherwise stated in the Block Prototypes, and shall include a minimum 8 ft. x 8 ft. area of smooth concrete, walkable pavers, or wood/wood-like decking. Asphalt may not be used to satisfy this requirement. The remaining open space may be plantings. Ground materials in private open space greater than 100 sq. ft. shall include a smooth area of concrete, walkable pavers, or wood/wood-like decking, in the amount of 10 percent of the open space or 100 sq. ft., whichever is less. The remainder of the open space shall be in landscape plantings (excluding connecting pathways).

B. [Reserved]

C. Roundabouts

Roundabouts provide the community with an opportunity to express itself with plantings, special pavements, water features and art.

Plantings in the central and splitter islands are limited only as to height in specific vision zones. Refer to the Circulation Plans for more detailed information regarding clear vision zones.

The central island should be made more conspicuous than its surroundings. Accordingly, the center of the island has an unrestricted planting height. Care should be given to placement of walls and sculpture; large rocks are to be avoided. The central island landscape can enhance traffic safety by making the intersection a focal point that assists in lowering speeds and clearly indicating to the driver that the driver cannot pass straight through the intersection.

Plant material shall be selected so that sight distances are maintained, and shall include consideration of future maintenance requirements to ensure adequate sight distance for the life of the project.

D. Foothills Landscape

Development in the foothills will not have associated street trees to preserve the natural environment of the landscape. In contrast to development in the plains, the driveways and yards are to be stepped in elevation. Identity will be created using stone terraces and walls. (Materials shall match or compliment accompanying architecture.) Where space allows, one tree must be planted in the yard of each single family housing unit. In multi-family developments, the landscape must include one tree per every four parking spaces. The ratio of evergreen to deciduous trees must be equal for each developed portion. Landscape must replicate spontaneous highland plant communities. Rocks and boulders collected on-site may be used to enhance plantings. The rear yard may be fenced; however the front yard may not. There shall be no lawn in the front yard; lawns in rear yards must be a type of grass mix with moderate to low water requirement. Kentucky Bluegrass may constitute up to 5% of the seed or sod mixture. Only plants from the following list will be approved for planting in the front yard. Porches and driveways may be enhanced through the use of pots or hanging planters and small architectural elements. Please note that deer are an expected nuisance in this area,

and while there are many ways to deter them, method effectiveness differs from season to season depending on environmental conditions. With that said, deer resistant plant choices are noted with an “*”:

Class I Trees

Russian Hawthorn*	Crataegus ambigua
Cockspur Hawthorn*	Crataegus crus-galli
Wafer Ash/Hop Tree	Ptelea trifoliata
Amur Maple varieties	Acer ginnala cultivars
Serviceberry varieties	Amelanchier spp.
Canada Red Chokecherry	
Prunus virginiana “Canada Red”	
Alder*	Alnus glutinosa

Class II and III Trees

Hackberry	Celtis occidentalis
Kentucky Coffeetree	Gymnocladus dioica
Burr Oak	Quercus macrocarpa
Yellowhorn	Xanthoceras sorbifolium
Black Walnut	Juglans nigra
Purple Robe Locust	
Robinia psuedoacacia ‘Purple Robe’	
Ginkgo	
Ginkgo biloba, female cultivars	
Swamp White Oak	Quercus bicolor

Evergreen/Conifer Trees

Upright Junipers:*

One Seed, Tocky Mountain, Cologreen, Gray Gleam, Green Ice, Medora, Moonglow, Pathfinder, Skyrocket, Welchi, Whichita Blue

Eastern Red Cedar*	Juniperus virginiana
Bristlecone Pine	Pinus aristata
Pinion Pine*	Pinus cembroides edulis
Limber Pine	Pinus flexilus
Ponderosa Pine	Pinus ponderosa
Southwestern White Pine	Pinus strobiformis
Colorado Spruce	Picea pungens
Douglas Fir*	Psuedotsuga menziesii

Shrubs

All shrubs, grasses and vines from the Low and Moderate lists are approved for the Foothills development.

Forsythia*	Forsythia x intermedia
Dwarf Arctic Willow	Salix purpurea nana
Elder*	Sambucus spp.
Dwarf Korean Lilac*	
Syringa patula and S. meyeri	
Oregon Grape Holly*	Mahonia aquifolium
Honeysuckle varieties*	Lonicera spp.

Japanese Yew and Arbor Vitae are prohibited in Harris Ranch.

E. Wildfire Management Standards

1. Any new construction, alteration, moving, or change of use of a habitable structure shall be required to establish a minimum 50-foot defensible space around the perimeter. Non-habitable structures shall be exempt from these standards, except when located within the defensible space. Property owners shall be responsible for maintaining the defensible space. The defensible space shall meet the following criteria:

a. Only single specimens of trees, ornamental vegetation, cultivated ground cover (such as green grass, ivy, succulents, or similar plants), or native grasses and weeds trimmed to a maximum height of 4 inches, are allowed within the defensible space, provided any such plants do not form a means of readily transmitting fire. All other vegetation shall be removed from the defensible space.

b. All deadwood shall be removed from trees within the defensible space. Clusters or groups of trees shall be thinned such that the tree crowns do not overlap. Trees within the defensible space shall be pruned to remove all limbs located below 6 ft. from the adjacent grade.

c. Tree crowns shall be pruned to maintain a minimum horizontal clearance of 10 ft. from any structure or outlet of a chimney.

d. Firewood and combustible material shall not be stored in unenclosed spaces beneath structures, on decks, or under eaves, canopies, or other projections or overhangs. All firewood and combustible material stored in the defensible space shall be located a minimum of 20 ft. from structures and separated from the crown of trees by a minimum horizontal distance of 15 ft..

e. The width of an abutting public street or approved private road shall be counted as part of the defensible space.



A. VOLUME I
3) ARCHITECTURAL AND LANDSCAPE DESIGN GUIDELINES
b) LANDSCAPE DESIGN GUIDELINES
v) Additional Requirements

2. All areas adjacent to private roads and driveways shall be cleared of vegetation. Single specimens of trees, ornamental vegetation, cultivated ground cover (such as green grass, ivy, succulents, or similar plants), or native grasses and weeds trimmed to a maximum height of 4 inches, are allowed within the defensible space, provided any such plants do not form a means of readily transmitting fire.

- a. For driveways, all areas within 5 feet of each side of the driveway shall be cleared.
- b. For private roads, the entire width of the private road easement shall be cleared.

3. All vegetation shall be cleared from within 31 inches of any above-grade electrical distribution and transmission lines.

4. All vegetation shall be cleared from within 10 radial feet of any non-insulated energized electrical conductor and associated live parts. Cultivated ground cover (such as green grass, ivy, succulents, or similar plants), or native grasses and weeds trimmed to a maximum height of 4 inches, are allowed within the defensible space, provided any such plants do not form a means of readily transmitting fire.

5. The term “cleared” shall mean the removal of all vegetation with the following exception: single specimens of trees, ornamental vegetation, cultivated ground cover (such as green grass, ivy, succulents, or similar plants), and native grasses and weeds trimmed to a maximum height of 4 inches, are allowed within the defensible space, provided any such plants do not form a means of readily transmitting fire.

6. It is not the intent of the Design Guidelines to require an owner to relocate existing habitable structures, driveways, or utilities, nor to require an owner to remove vegetation from an abutting property.

F. Recommended Native Seed Mix - Foothills. In accordance with the recommendations of Boise City Parks Department, the following seed mix is recommended in foothills areas within Harris Ranch:

Common Name	Type	Native	Aspect	Soil
Bluebunch Wheatgrass	Grass	Yes	North	Any
Snake River Wheatgrass	Grass	Yes	North	Any
Thickspike Wheatgrass	Grass	Yes	North	Any
Sheep Fescue	Grass	No	North	Any
Sandberg bluegrass	Grass	Yes	North	Any
Sand dropseed	Grass	Yes	South	Sand
Thurber's needlegrass	Grass	Yes	South	Sand
Needle and thread	Grass	Yes	South	Sand
Purple threeawn	Grass	Yes	South	Sand
Sandberg bluegrass	Grass	Yes	South	Sand
Bluebunch Wheatgrass	Grass	Yes	South	Loam
Sandberg bluegrass	Grass	Yes	South	Loam
Thickspike Wheatgrass	Grass	Yes	South	Loam
Sheep Fescue	Grass	No	South	Loam
Squirreltail	Grass	Yes	South	Loam
Munro's globemallow	Wildflower	Yes	North	Any
Common yarrow	Wildflower	Yes	North	Any
Firecracker penstemon	Wildflower	Yes	North	Any
Lupine	Wildflower	Yes	North	Any
Alfalfa	Wildflower	No	North	Any
Small burnet	Wildflower	No	North	Any
Blanket flower	Wildflower	Yes	North	Any
Lewis flax	Wildflower	Yes	North	Any
Munro's globemallow	Wildflower	Yes	South	Any
Palmer's penstemon	Wildflower	Yes	South	Any
Scabland Penstemon	Wildflower	Yes	South	Any
Hoary aster	Wildflower	Yes	South	Any
Common yarrow	Wildflower	Yes	South	Any
Shaggy fleabane	Wildflower	Yes	South	Any



- A. VOLUME I
 - 3) ARCHITECTURAL AND LANDSCAPE DESIGN GUIDELINES
 - b) LANDSCAPE DESIGN GUIDELINES
 - vi) Plant Palette Recommendations

A. Landscape Trees and Shrubs

In consideration of the historical high plains prairie context of Harris Ranch and to make the most efficient use of our water resources, the development will concentrate on the use of xeric (low water requirement) plants in the urban landscape. In certain ornamental situations, a plant with a high water requirement may be appropriate. See section 1. General Landscape Requirements for guidelines as to how these may be incorporated into your design. The attached list is intended as a guide only, and the designer is encouraged to pursue other xeric landscape plants. The design will be subject to review and the designer will be required to submit a table outlining mature landscape size and water requirement. Deer resistant plants are noted with an ¹⁴ ¹⁵ Japanese Yew and Arbor Vitae are prohibited in Harris Ranch.

Low Hydrozones

Deciduous		Ornamental Grasses	
Leadplant	Amorpha canescens	Big Bluestem*	Andropogon gerardii
Indigobush	A. fruticosa	Feather Reed*	Calamagrostis x acutifolia 'Strictus'
Silver Sage	Artemisia cana	Karl Foerster Feather Reed	C. arundinacea 'Karl Foerster'
Fringed Sage	A. frigida	Blue Fescue*	Festuca glauca 'Elijah Blue'
Tall Western Sage	A. tridentata	Blue Oat*	Helictotrichon sempervirens
Four Wing Saltbush	Atriplex canescens	Switchgrass	Panicum virgatum
Siberian Peashrub	Caragana arborescens	Hardy Dwarf Fountain	Pennisetum alopecuroides 'Hameln'
Fern-leaf Siberian Peashrub	C. arborescens 'Lobergii'	Little Bunny Fountain	P. alopecuroides 'Little Bunny'
Globe Peahsurb	C. frutex 'Globosa'	Karley Rose Fountain	P. orientale 'Karley Rose'
Blue Mist Spirea*	Caryopteris x clandonensis	Plume Grass	Saccharum ravannae
Dark Knight Spirea*	C. x incana 'Dark Knight'	Little Bluestem*	Schizachyrium scoparium
Winterfat	Cerotoides lantana	Blue Indian	Sorghastrum nutans 'Souix Blue'
Curl Leaf Mountain Mahogany*	Cercocarpus ledifolius		
True Leaf Mountain Mahogany*	C. montanus		
Fernbush	Chamaebatiaria millefolium	Vines	
Rabbitbrush*	Chrysothamnus nauseosus	Virginia Creeper*	Parthenocissus quinquefolia
Cliffrose	Cowania mexicana	Silver Lace Vine	englemannii
Allgold Warmister Broom	Cytisus x praecox 'Allgold'		Polygonum aubertii
Apache Plume*	Fallugia paradoxa		
New Mexican Privet	Forester neo-mexicana		
Sea Buckthorn	Hippophae rhamnoides		
Rock Spirea	Holodiscus dumosus	Class ITrees	
Waxflower	Jamesia Americana	Russian Hawthorn*	Crataegus ambigua
Russian Sage*	Perovskia atriplicifolia	Cockspur Hawthorn*	Crataegus crus-galli
Lewis Mockorange	Philadelphus lewisii	Wafer Ash/Hop Tree	Ptelea trifoliata
Antelope Bitterbrush	Purshia tridentate		
Smith's Buckthorn	Rhamnus smithii	Class II and III Trees	
Gro-Lo Sumac*	Rhus aromatica 'Gro-Lo'	Hackberry	Celtis occidentalis
Smooth Sumac	R. glabra	Kentucky Coffeetree	Gymnocladus dioica
Rocky Mountain Sumac	R. glabra cismontane	Burr Oak	Quercus macrocarpa
Three-leaf Sumac	R. typhina	Yellowhorn	Xanthoceras sorbifolium
Golden Currant	Ribes aureum		
Wax Currant	R. cereum		
Yellow Flowering Currant	R. odoratum		
Crandall Clove Currant	R. odoratum 'Crandall'		
Silver Buffaloberry	Shepherdia argentea		
Altai Spirea	Sibeiraea laevigata		
Saugeana Chinese Lilac	Syringa x chinensis 'Saugeana'		
		Evergreen and Conifer Trees	
Evergreen		Upright Junipers	One Seed, Tocky Mountain, Cologreen, Gray Gleam, Green Ice, Medora, Moonglow, Pathfinder, Skyrocket, Welch, Wichita Blue
Junipers	Armstrong, Gold Coast, Holbert, Old Gold, Green Pfitzer, Gold Tip Pfitzer, Compact Pfitzer, Blue Pfitzer, Sea Green, Bar Harbor, Blue Chip, Hughes, Prince of Wales, Wilton Carpet, Scandia, Tami, New Blue Tami, Blue Creeper, Table Top Blue	Eastern Red Cedar	Juniperus virginiana
Tyrolean Mugo Pine	Pinus mugo 'Mughus'	Bristlecone Pine	Pinus aristata
Colorado Manzanita	Arctostaphylos x coloradoensis	Pinion Pine	Pinus cembroides edulis
		Limber Pine	Pinus flexilis
		Ponderosa Pine	Pinus ponderosa

Moderate Hydrozones

Deciduous		Class I Trees	
Amur Maple varieties	Acer ginnala cultivars	Amur Maple	Acer ginnala
Tatarian Maple	Acer tataricum	Flame Amur Maple	A. ginnala 'Flame'
Serviceberry varieties	Amelanchier spp.	Wasatch Maple	A. grandidentatum
Barberry varieties	Berberis spp.	Tatarian Maple	A. tataricum
Butterfly Bush	Buddleia davidii cultivars	Ohio Buckeye	Aesculus glabra
Flowering Quince	Chanomeles cultivars	Red Buckeye	A. pavia
Cotoneaster varieties*	Cotoneaster spp.	Autumn Brilliance Serviceberry	Amelanchier 'Autumn Brilliance'
Rock Spirea	Holodiscus dumosus	Shadblow Serviceberry	A. canadensis
Twinberry Honeysuckle	Lonicera involucrate	Gray Dogwood	Cornus racemosa
Lewis Mockorange	Philadelphus lewisii	Russian Hawthorn	Crataegus ambigua
Mountain Ninebark	Physocarpus monogynus	Cockspur Hawthorn	C. crus galli
Potentilla varieties*	Potentilla fruticosa cultivars	Thornless Cockspur Hawthorn	C. crus galli inermis
Ground Cherry	Prunus fruticosa	Downy Hawthorn	C. mollis
Nanking Cherry	P. tomentosa	Toba Hawthorn	C. x mordenensis 'Toba'
Native Chokecherry	P. virginiana	Washington Hawthorn	C. phaenopyrum
Shubert Chokecherry	P. virginiana 'Shrubert'	Apples and Crabapples	Malus spp.
Fern-leaf Buckthorn	Rhamnus frangula 'Aspenfolia'	Amur Corktree	Phellodendron amurense
Columnar Buckthorn	R. frangula 'Columnaris'	American Plum	Prunus americana
Alpine Currant	Ribes alpinum cultivars	Mayday Tree	Prunus padus
Pixwell Gooseberry	R. 'Pixwell'	Canada Red Chokecherry	Prunus virginiana 'Canada Red'
Red Jacket Gooseberry	R. uva crispata 'Red jacket'	Wafer Ash/Hop Tree	Ptelea trifoliata
Shrub Rose	Rosa varieties and cultivars	Pear	Pyrus calleryana
Siberian Spirea	Siberaea laevigata	Prairie Gem Pear	Pyrus ussuriensis 'Mordak'
Ash-Leaf False Spirea	Sobaria sorbifolia	Japanese Pagoda Tree	Sophora japonica
White Snowberry*	Symphoricarpos alba	Peking Lilac	Syringa pekinensis
Hancock Coralberry*	S. chenaultii 'Hancock'	Japanese Tree Lilac	S. reticulata
Magic Berry Coralberry*	S. doorenbosii 'Magic Berry'		
White Hedge Coralberry*	S. doorenbosii 'White Hedge'		
Western Snowberry*	S. occidentalis		
Red Coralberry*	S. orbiculatus		
Mountain Snowberry*	S. oreophilus		
Chinese Lilac	Syringa chinensis		
Miss Kim Lilac	S. patula 'Miss Kim'		
Late Lilac	S. villosa		
Wayfaringtree Viburnum	Viburnum lantana		
Mohican Viburnum	V. lantana 'Mohican'		
Nannyberry Viburnum	V. lentago		
Alleghany Leatherleaf Viburnum	V. rhytidophylloides 'Alleghany'		
Evergreen		Class II and III Trees	
Effusa Juniper	Juniperus communis var. depress 'Effusa'	Horsechestnut	Aesculus hippocastanum
	J. communis 'Silver Miles'	Hackberry	Celtis occidentalis
Silver Miles Juniper	J. procumbens 'Nana'	Green Ash	Fraxinus pennsylvanica lanceolata
Dwarf Japanese Garden Juniper	J. sabina 'Arcadia'	Fallgold Ash	F. nigra 'Fallgold'
Arcadia Juniper	J. sabina 'Broadmoor'	Imperial Honeylocust	Gleditsia tricanthos inermis 'Impcole'
Broadmoor Juniper	J. sabina 'Buffalo'	Shademaster Honeylocust	G. tricanthos inermis 'Shademaster'
Buffalo Juniper	J. sabina 'Calgary Carpet'	Skyline Honeylocust	G. tricanthos inermis 'Skyline'
Calgary Carpet Juniper	J. squamata 'Blue Star'	Sunburst Honeylocust	G. tricanthos inermis 'Sunburst'
Blue Star Juniper	Picea abies 'Nidiformis'	Kentucky Coffeetree	Gymnocladus dioica
Bird's Nest Spruce	P. pungens 'R.H. Montgomery'	Black Walnut	Juglans nigra
R.H. Montgomery Spruce	Pinus mugo 'Big Tuna'	White Oak	Quercus alba
Big Tuna Mugo Pine	P. mugo 'Mops'	Swamp White Oak	Q. bicolor
Mops Mugo Pine	P. mugo 'Pumilo'	Burr Oak	Q. macrocarpa
Dwarf Mugo Pine		English Oak	Q. robur
		Columnar English Oak	Q. robur 'Fastigiata'
		Purple Robe Locust	Robinia pseudoacacia 'Purple Robe'
		Frisia Black Locust	R. pseudoacacia 'Frisia'
		Yellowhorn	Xanthoceras sorbifolium
Ornamental Grasses		Evergreen and Conifer Trees	
Japanese Sedge	Carex morrowii	Serbian Spruce	Picea omorika
Feather Reed*	Calamagrostis x acutiflora 'Strictus'	Baby Blue Eyes Spruce	P. pungens 'Baby Blue Eyes'
Northern Sea Oats	Chasmanthium latifolium	Bakeri Spruce	P. pungens 'Bakeri'
Hardy Pampass	Erianthus ravennae	Fat Albert Spruce	P. pungens 'Fat Albert'
Maiden Grass	Miscanthus sinensis varieties	Hoopsi Spruce	P. pungens 'Hoopsii'
		Arctic Night Pine	Pinus cembra 'Arctic Night'
		Lacebark Pine	P. bungeana
		Limber Pine	P. flexilis
		Tanyosha Pine	P. densiflora umbraculifera
		Bosnian Pine	P. heldreichii var. leucodermis
		Austrian Pine	P. nigra
		Southwestern White Pine	P. strobfiformis
		Scotch Pine	P. sylvestris
Vines			
Trumpet Vine	Campsis radicans		



High Hydrozones

Deciduous		Boston Ivy	Parthenocissus tricuspidata	In consideration of the historical high plains prairie context of Harris Ranch and to make the most efficient use of water resources, the development will concentrate on the use of xeric (low water requirement) plants in the urban landscape. As mentioned in previous sections, ornamental plants have a reasonable place in the landscape and may be used in moderation. Designers shall be aware of hydrozone and plant similar water requirement plants together. Below is a list of recommended xeric perennials. This list is not expected to be comprehensive, but is simply a representation. Deer resitant plants are noted with an “*”, and inundatable plants are noted with an “^”:			
Rocky Mountain Maple	Acer glabrum	English Ivy	Hedera helix				
Dogwood varieties	Cornus spp.	Hop Vine	Humulus lupunus				
Cranberry cotoneaster	Cotoneaster apiculatus	Honeysuckle varieties	Lonicera spp.				
Burning Bush	Euonymous alatus	Grape varieties	Vitis spp.				
Compact Burning Bush	Euonymous alatus ‘Compacta’	Class II and III Trees					
Carol Mackie Daphne	Daphne burkwoodii ‘Carol Mackie’						
Shrub Euonymous	Euonymous fortunei						
Forsythia varieties	Forsythia x intermedia cultivars	Maple varieties	Acer varieties				
Anabelle Hydrangea	Hydrangea arborescens ‘Anabelle’	Ginkgo	Ginkgo biloba, female varieties				
Pee Gee Hydrangea	H. paniculata ‘Grandiflora’	Linden varieties	Tilia spp.				
Hidcote St. John’s Wort	Hypericum patalum ‘Hidcote’	English Oak	Quercus robur				
Honeysuckle varieties	Lonicera spp.	Northern Red Oak	Q. rubra	Coronation Gold Yarrow*	Achillea filipendosa ‘Coronation Gold’	Lavender species*	Lavandula spp.
Purple Leaf Plum	Prunus cistena	Swamp White Oak	Q. bicolor	Moonshine Yarrow*	Achillea x ‘Moonshine’	Shasta Daisy*	Leucanthemum spp.
Rose Tree of China	P. triloba	White Ash	Fraxinus americana	Lady’s Mantle**^	Alchemilla mollis	Dotted Gay Feather*	Liatris punctata
Shrub Roses	Rosa varieties	Class I Trees		Columbine hybrids*	Aquilegia hybrids	Sea Lavender*	Limonium latifolium
Dwarf Arctic Willow	Salix purpurea nana			Double Bubble Mint*	Agastache cana	Honeysuckle	Lonicera spp.
Elder	Sambucus spp.	Alder	Alnus glutinosa	Porter’s Aster*	Aster Porteri	Native Four O’Clock*	Mirabilis multiflora
Spirea varieties	Spirea spp.	Serviceberry varieties	Amelanchier spp.	Basket of Gold*	Aurinia saxatalis	Daffodils*	Narcissus spp.
Dwarf Korean Lilac	Syringa patula and S. meyeri	River Birch	Betula occidentalis	Bergenia^	Bergenia cordifolia	Catmint**^	Nepeta x faassenii
Viburnum varieties	Viburnum spp.	Hornbeam	Carpinus betulus	Chocolate Flower*	Berlandiera lyrata	Evening Primrose spp.	Oenothera spp.
		Redbud	Cercis canadensis	Poppy Mallow*	Callirhoe involucrata	Penstemon cultivars	Penstemon mexicale cultivars
		Crabapples	Malus spp.	Centranthus*	Centranthus ruber	Pineleaf Penstemon*	P. pinifolius cultivars
		Ornamental Pear varieties	Pyrus spp.	Snow-in-summer*	Cerastium tomentosum	Rocky Mountain Penstemon*	P. strictus
		Newport Plum	Prunus ceracifera ‘Newport’	Coreopsis*	Coreopsis spp.	Russian Sage*	Perovskia atriplicifolia
		Princess Kay Plum	P. nigra ‘Princess Kay’	Crocus species	Crocus spp.	Himalayan Border Jewel	Persicaria affinis
		Cherry varieties	Prunus spp.	Hardy Pink Ice Plant*	Delosperma cooperi	Moss Phlox*	Phlox subulata
		Japanese Tree Lilac	Syringa reticulata	Coneflower*	Echinacea purpurea cultivars	False Dragonhead^	Physostegia virginiana
		Evergreen and Conifer Trees		Native Gaillardia*	Gaillardia aristata	Pitcher Sage*	Salvia azurea var. grandiflora
				Whirling Butterflies	Gaura lindheimeri	May Night Salvia	Salvia sylvestris x ‘Mainacht’
		White Fir	Abies concolor	Hardy Colorado Gold Gazania^	Gazania linearis ‘Colorado Gold’	Santolina*	Santolina chamaecyparissus
		Norway Spruce	Picea Abies	Maximilian’s Sunflower*	Helianthus maximiliani	Soapwort*	Saponaria ocymoides
		Black Hills Spruce	P. glauca ‘Densata’	Daylily cultivars**^	Hemerocallis cultivars	Broom Groundsel*	Senecio spartoides
		Colorado Spruce	P. pungens		Heuchera sanguina	Goldenrod	Solidago canadensis ‘Golden Bells’
		Fastigate White Pine	Pinus strobis ‘Fastigiata’		Hosta spp.^	Crater Lake Veronica	Veronica austriaca ‘Crater Lake’
		Douglas Fir	Pseudotsuga menziesii		Candytuft	Sunny Border Blue Veronica	V. ‘Sunny Border Blue’
					Bearded Iris*	Periwinkle	Vinca minor ‘Bowles’
					Buchara Iris*	Iris germanica cultivars	Zauschneria arizonica
						Iris bucharia	Zinnia grandiflora
Ornamental Grasses							
Japanese Blood Grass*	Imperata cylindrical ‘Red Baron’						
Ribbon Grass	Phalaris arundinacea ‘Picta’						
Note: These species are considered invasive and should be contained. Possible uses include Green Street trials.							