CHAPTER 4 SITE DESIGN AND NATURAL RESOURCE STEWARDSHIP

ARTICLE 4-1 SITE LAYOUT

Division 4-1-1 Purpose and Application of Article

Sec. 4-1-1-1 Purpose of Article

A. The purpose of this Article is to establish standards for the way that the various elements that support new development and redevelopment are arranged on a parcel proposed for development.

Effective on: 7/1/2014

Sec. 4-1-1-2 Application of Article

A. Generally. The standards of this Article apply to:
   1. All new development and redevelopment, except development of individual residential lots in platted residential subdivisions, EN zones (all sub-districts), and EN-MF zones; and
   2. Substantial improvements to existing buildings, except development of individual residential lots in platted residential subdivisions, in EN zones (all sub-districts), and in EN-MF zones. However, in the case of substantial improvements, strict application of this Article is not necessarily required. (See Article 6-1, Nonconformities.)

B. General Standards for Site Layout. Division 4-1-2, General Standards for Site Layout, establishes qualitative standards to evaluate proposed site designs as to layout, circulation, open space / natural resource protection, snow storage, and flood damage prevention.

C. Site Layout for Specific Neighborhood Types. Division 4-1-3, Site Layout for Specific Neighborhood Types, establishes additional standards for site layout that apply only to particular types of development. These standards are applied in addition to the standards of Division 4-1-2, General Standards for Site Layout.

Effective on: 7/1/2014

Division 4-1-2 General Standards for Site Layout

Sec. 4-1-2-1 Design Objectives

A. Generally. The design objectives of this Section are intended to result in plans for development or redevelopment that reflect high quality design, but not to require a reduction of development potential to less than is allowed by this LUDC. The principal objective of this Division is to ensure that roads, lots, landscaping, common open space, and other elements of proposed development are appropriately configured.

B. Application of Design Objectives. These objectives are to be applied to new development or redevelopment to the extent that:
   1. They do not directly conflict with the other requirements of this LUDC;
   2. They do not result in conditions that further reduce the density or intensity of development that is permitted on the parcel proposed for development by compliance with the other standards of this LUDC; and
   3. They are used in ways that create unique, contextually responsive development.

C. General Design Objectives. Development in all zones shall result in harmonious, interrelated combinations of compatible buildings and uses that:
1. Provide appropriate space for buffers and transitions between:
   a. Incompatible land uses (see Article 4-6, Landscaping and Buffering); and
   b. Obvious changes in density or intensity along side and rear lot lines;
2. Provide vehicular and pedestrian linkages between residential uses and recreational, institutional, retail, service, and office uses, with anticipated and planned future linkages to new development;
3. Organize and lay out the development such that it minimizes interference with existing access to adjacent and nearby properties, unless new and improved access is provided by the proposed development;
4. Minimize impacts to water quality from runoff, erosion, or discharge of pollutants; and
5. If there is a discernible development pattern in the immediate area of the development:
   a. Reinforce that pattern, particularly at the edges where the proposed development is separated from existing development by a local street; or
   b. Implement a redevelopment plan for the area which anticipates a different pattern; or
   c. Create a strategically located landmark which gives a unique and positive identity to the area in which it is located.

D. Design Objectives Outside of the CB Zone. The following objectives apply within all zones except the CB zone:
   1. Development shall protect and enhance natural and historic resources through:
      a. Incorporation of natural topographic and geologic features and historic, archaeological, and / or natural resources in ways that are consistent with their preservation;
      b. Preservation of natural drainage patterns;
      c. Avoidance of, or minimization and mitigation of impacts upon geologic hazard areas; and
      d. Preservation of significant existing tree stands, provided that the trees are healthy and either native or non-invasive.
   2. Development shall protect views to natural features from public rights-of-way by:
      a. Locating and designing buildings to frame views from public rights-of-way to significant natural features, where practicable; and
      b. Designing and configuring buildings to allow for views from public rights-of-way to significant natural features.

Effective on: 7/1/2014

Sec. 4-1-2-2 Circulation Objectives

A. Internal Circulation.
   1. Internal circulation systems shall be interconnected.
   2. Pedestrian routes shall be located along (or visible from) all streets, except that, where street connections are not feasible or desirable, trails and paths may be used to provide pedestrian connections among buildings and land uses, and among abutting properties.
   3. If the proposed development includes more than one street or more than 100 parking spaces, then the internal circulation system (e.g., new minor streets, sidewalks, trails) shall be designed such that alternative travel routes are provided through the development.
   4. If the proposed development includes multiple intersecting streets, then, if the geometry of the parcel proposed for development permits, travel routes shall provide convergence to:
      a. Transit stops;
      b. Commercial areas;
      c. Schools;
d. Parks; and

e. Public buildings.

B. Cross Access / External Connections.

1. Cross-access shall be provided among nonresidential and mixed-use parcels that front on arterials, in order to
manage curb cuts and balance the need for mobility with the need for access to lots and buildings. See Division 4-2-4, Access Management.

2. External connections to existing and planned streets shall be incorporated into new developments and
redevelopments (streets shall be connected with streets). The City Engineer may grant exceptions to required
external connections if the connection will result in excessive commercial traffic in a residential area.

3. Paths, sidewalks, and trails from off site shall not be routed through parking lots (except to make connections to
buildings) if other practical alternatives exist. Where they must be routed through parking lots, they shall be
located between parking modules and protected by curbs.

Effective on: 7/1/2014

Sec. 4-1-2-3 Common Open Space Priorities

A. Generally. On parcels proposed for development that have multiple natural resources which are protected pursuant
to Article 4-4, Natural and Archaeological Resources, open space shall be preserved in the order of priority set out in
this Section.

B. Priorities for Common Open Spaces. Generally, open spaces shall be protected in the following order of priority
(listed in descending order):
1. Geologic hazard areas and unstable slopes for which hazard mitigation is impracticable;
2. River, creek, and riparian areas;
3. Floodways;
4. Wetlands;
5. Floodplains;
6. Steep slopes (except unstable slopes and geologic hazards);
7. Ridgelines;
8. Steep slopes (except unstable slopes and geologic hazards);
9. Mature woodlands, meadows, critical wildlife habitat, big game migration corridors, and big game winter range;
10. Distinctive land formations; and

C. Modification of Priorities. Priorities for protection of natural resources may be modified as follows:
1. If a resource has unusual significance due to its scarcity (e.g., a one-of-a-kind distinctive land formation) or critical
support for off-site resources (e.g., a critical link in a big game migration corridor), it may take priority over other
resources.
2. Several natural resources overlap (e.g., mature woodlands, distinctive land formations, and steep slopes may all
occupy the same area) in a manner that creates additional resource value, the area of combined resources may
take priority over other resources.
3. If the lower priority resource is of exceptional quality compared to the higher quality resource, and the higher
quality resource cannot be reasonably restored.

Effective on: 7/1/2014
Sec. 4-1-2-4 Common Open Space Configuration

A. Generally. Development shall be configured around common open space (including outdoor recreation and leisure areas) in a manner that supports the resource values of the open space in terms of its ecological function (e.g., habitat, water quality enhancement, energy efficiency, etc.), aesthetic contribution, recreational value, and buffering value.

B. Enhancement of Open Space / Open Space Corridors. Open space shall be organized so as to create integrated systems that connect with dedicated school lands, parklands, other open spaces, or public lands or trails within the parcel proposed for development or on abutting property.

C. Formal Open Spaces. Parks, plazas, greens, and other formal open spaces, when required, shall be:
   1. Situated as focal points of the development, and
   2. Visible and accessible from streets, sidewalks and trails.

D. Orientation of Streets. Where the geometry and orientation of the parcel proposed for development permits, streets should frame:
   1. Vistas of natural features (including distant peaks and ridges); and
   2. Landmarks or other focal points within or near the development (including formal open spaces).

E. Easements. If the development contains or abuts a publicly-owned open space, the development shall include such easements necessary to allow reasonable access to such open space, unless such access is:
   1. Unnecessary or undesirable for the proper public utilization of the natural area;
   2. Detrimental to the resource value of the publicly-owned open space (e.g., contrary to the protection of wildlife habitat); or
   3. A burden on development that is disproportionate to the impact of the development on access to such open spaces.

F. Credit. Any required access easement dedication shall be credited against any park or open space dedication or fee-in-lieu thereof required pursuant to Section 2-4-2-2, Residential Density, Open Space, and Recreation and Leisure Areas, and / or Section 5-2-2-4, Fees-in-Lieu of Park Dedication.

Effective on: 7/1/2014

Sec. 4-1-2-5 Snow Storage

A. Generally. Adequate areas for snow storage throughout the development shall be provided.

B. Location and Configuration. Snow storage areas shall be located and configured to safely and efficiently melt snow, and to minimize and manage the impacts of pollutants from the resulting runoff, as follows:
   1. Snow storage areas shall be located to drain away from pedestrian and vehicular use areas, and into vegetated buffer strips or other appropriate best management practices ("BMPs).
   2. Snow storage areas shall be configured so that stored snow does not obstruct:
      a. Visibility triangles at driveways and intersections;
      b. Emergency access routes;
      c. Required parking spaces; and
      d. Pedestrian routes.
   3. To the greatest extent feasible, snow storage areas shall be located in areas with solar exposure, away from streets.
   4. Snow storage areas shall not be located:
Sec. 4-1-2-6 Flood Damage Prevention

A. Generally. All subdivision proposals, including the placement of manufactured home parks and subdivisions, shall be reasonably safe from flooding. If a subdivision or other development proposal is in a flood-prone area, the proposal shall minimize flood damage. (See Division 4-4-6, Floodplain Management and Flood Damage Prevention.)

B. Floodplain Development Permit. All proposals for the development of subdivisions, including the placement of manufactured home parks and subdivisions, shall meet the floodplain development permit requirements of Division 4-4-6, Floodplain Management and Flood Damage Prevention.

C. Base Flood Elevation (BFE) Data. Base flood elevation (BFE) data shall be generated for subdivision proposals and other proposed development, including the placement of manufactured home parks and subdivisions, if not otherwise provided pursuant to Division 4-4-6, Floodplain Management and Flood Damage Prevention.

D. Adequate Drainage. All subdivision proposals, including the placement of manufactured home parks and subdivisions, shall have adequate drainage provided to reduce exposure to flood hazards.

E. Utilities and Public Facilities. All subdivision proposals, including the placement of manufactured home parks and subdivisions, shall have public utilities and facilities, such as sewer, gas, electrical and water systems, located and constructed to minimize or eliminate flood damage.

Effective on: 7/1/2014

Division 4-1-3 Site Layout for Specific Neighborhood Types

Sec. 4-1-3-1 Solar Access and Design

A. Generally. The purpose of this Section is to encourage neighborhood and building designs which optimize the use of the sun for passive heating, solar water heating, and / or electricity generation using photovoltaic systems. Application of this Section allows for flexibility regarding the setback standards of Article 3-2, Lot and Yard Standards, Building Height and Disposition, and the design standards of Section 4-1-2-4, Common Open Space Configuration. Such standards may be modified to accomplish a solar-oriented design, if all of the requirements of this Section are met.

B. Limitations. The following limitations apply to the application of this Section:

1. The requested modifications shall be those that are necessary to allow for development of the parcel proposed for development with the number of units allowed by this LUDC, while also providing for building designs that will materially increase the effectiveness of the solar technologies (e.g., photovoltaics, heat collectors, or solar water heaters) and / or passive solar designs for those units; and

2. The modifications are not used to create additional building envelope to increase the volume of the buildings when compared to buildings that could otherwise be developed without the requested modifications.

C. Minimum Solar Access Standards. The proposed development shall incorporate site design and building design techniques to provide solar access which reduce heating loads and optimize unshaded roof surfaces that are within 30 degrees of due South. The applicant shall demonstrate that the design will provide:
1. An overall reduction in heating load of at least 15 percent compared to a comparable design that does not include modified setbacks or design standards;

2. At least 80 percent of the buildings will present not less than 450 square feet of roof area within 30 degrees of due South, which is not shaded between the hours of 9:00 AM and 3:00 PM, on December 21;

3. Shading or overhangs shall be provided on Southern exposures to prevent direct sunlight from accessing the interior of buildings between the Spring equinox and the Fall equinox; and

4. Planting areas for large trees shall be located to protect the solar access to active solar technologies between 10 AM and 2 PM on December 21.

D. Pre-Wiring for Photovoltaics. Buildings that are constructed on sites which are approved for modified setbacks or design standards pursuant to this Section shall be designed to accommodate rooftop solar equipment (e.g., photovoltaic panels and/or solar water heaters), and shall be pre-wired for the installation of photovoltaic panels on the south-facing roof.

E. Landscaping. The impact of trees on solar access and shading that is required by Subsection C., above, shall be evaluated on an individual basis. Shading caused by deciduous trees can be beneficial in terms of reducing cooling loads, and is not necessarily prohibited.

F. Maintenance of Solar Access and Building Performance. A proposed landscape plan and appropriate easements and/or covenants shall be provided, which assure that solar access is maintained over the long term. If specific types of building materials or specific methods of construction are essential parts of the proposed design (in terms of its energy performance), then the covenants shall set out the minimum specifications that are required for new buildings and modifications to existing buildings.

Effective on: 7/1/2014

Sec. 4-1-3-2 Typical Residential Subdivisions

A. Generally. In addition to the requirements of Division 4-1-2, General Standards for Site Layout, typical residential subdivisions (see Section 2-4-2-1, Residential and Mixed-Use Neighborhood Types and Minimum Parcel Areas) shall be designed to mitigate the impacts of auto-oriented streets and paved areas on the experience of the quality and character of the place, and to provide comfortable alternative routes for pedestrians and bicyclists, including continuous sidewalks, tree-lined streets, and pedestrian-scaled details.

B. Creation of Neighborhoods.
   1. Typical residential development shall be designed to create identifiable "neighborhoods" of 30 to 175 units.
   2. If a typical residential development includes less than 30 units, it shall be integrated into an adjoining neighborhood, or shall be designed for future connection to adjacent development.
   3. If a typical residential development includes more than 175 units, it shall be designed as multiple "neighborhoods" with distinct boundaries and identities.

C. Configuration of Lots. Lots shall be configured to maximize the number of lots that are:
   1. Within 800 feet from a "useable" common open space (e.g., playground or trail); and
   2. Connected by trails or common greens that do not cross streets.

Effective on: 7/1/2014
Sec. 4-1-3-3 Multifamily Neighborhoods

Developments that include multiple multifamily buildings shall be designed according to the standards of Division 4-1-2, General Standards for Site Layout; Division 3-4-3, Multifamily Design Standards (for all zones except EN-MF); or Article 3-1, Established Neighborhood Zones (for the EN-MF zone).

Effective on: 7/1/2014

Sec. 4-1-3-4 Manufactured Home Parks and Subdivisions

A. Generally. Manufactured home parks and subdivisions shall be designed according to the minimum standards of this Section.

B. Manufactured Home Installation and Improvements.
   1. All manufactured homes shall meet the following specifications:
      a. The average elevation of a manufactured home frame above ground elevation, measured at 90 degrees to the frame, shall not exceed four feet from the top of the foundation pad.
      b. The wheels, axles, tongue, towing apparatus, and transporting lights shall be removed prior to final installation of the dwelling unit.
   2. Within manufactured home subdivisions, the space between the finished grade of the property on which a manufactured home is located and the exterior edges of the finished floor of the unit must be skirted with rock, brick, vinyl, or concrete masonry construction installed on a concrete footing so there is not a visible gap between the finished floor and the ground. All skirting materials shall be compatible in appearance with the home and shall allow for adequate ventilation and drainage. The skirting must be a continuous, complete, opaque, and rigid surface that lends permanency to the appearance of the unit and totally screens the crawlspace under the unit.
   3. All patio awnings, covered parking, or carports shall be regulated by the International Building Code (where applicable) and the applicable requirements of Article 3-2, Lot and Yard Standards; Building Height and Disposition.

C. Vehicular Circulation and Configuration of Internal Streets.
   1. Manufactured home parks and manufactured home subdivisions with more than 20 dwelling units shall be designed with a minimum of two points of vehicular access.
   2. Generally, internal streets shall be interconnected or looped. However, where site constraints required a dead-end, a cul-de-sac turnaround shall be provided with a minimum radius of 60 feet for service and emergency vehicles.
   3. Access to all manufactured home lots (spaces) shall be from interior streets.

D. Perimeter Setbacks. There shall be a minimum setback of 25 feet from any portion of a dwelling unit or accessory structure to any exterior boundary of the manufactured home park or subdivision.

E. Pedestrian Circulation.
   1. Sidewalks shall be installed within the development to provide for safe pedestrian access and circulation. Sidewalks shall be concrete and may be adjacent to streets, and / or between internal / external uses / areas. Sidewalks required for any public streets shall meet City street standards.
   2. A pedestrian circulation plan shall be submitted to indicate how the proposed arrangement of sidewalks, trails, and / or pedestrian ways will connect to features of the manufactured home park or subdivision, and to existing sidewalks or pedestrian ways.

F. Lighting. All interior roads and walkways shall be lighted for safe movement of vehicles and pedestrians at night.

G. Solid Waste Disposal and Recycling.
1. The manufactured home park or subdivision shall provide for solid waste collection as follows:
   a. By contract for curbside collection of solid waste and recyclable materials; or
   b. In centralized solid waste and recyclable material collection areas designed pursuant to Section 3-5-1-4, Refuse, Recycling, and Compost Containers, which shall be provided at a rate of one container of each type for every 10 dwelling units, rounded up.

2. If centralized solid waste and recyclable material collection areas are provided, their location shall be shown upon the site plan of the manufactured home park or subdivision.

H. Storage.
1. Detached storage buildings not exceeding 120 square feet in area are permitted on each manufactured home space. All storage buildings shall be located in the rear one-half of the space. Buildings shall be set back three feet from rear and side property lines.

2. A common storage area for the use of the residents shall also be provided, as follows:
   a. Minimum Area. 120 square feet per manufactured home space.
   b. Surfacing. The common storage area shall be paved.
   c. Enclosure. The common storage area shall be enclosed by a five-foot tall fence.
   d. Use. Recreational vehicles (not for occupancy in the park), boats, and similar vehicles are to be parked in the common storage area.

I. Accommodation of Occupied Recreational Vehicles.
1. There may be established a separate or optional area for recreational vehicles (RVs) in a manufactured home park. This optional area shall not exceed 10 percent of the land area of the manufactured home park. Occupancy per overnight camper shall not exceed 30 consecutive days. Streets within this optional area shall be designed and constructed to the standards required for public streets.

2. In the area designated for RVs, the following additional minimum design standards shall be met:
   a. The minimum area designated for each RV space shall be not less than 3,500 square feet, with a minimum width and frontage of 35 feet.
   b. The minimum depth of each RV space shall be 100 feet.

3. All RVs parked in the optional RV area shall be in good repair. Motorized camper vehicles shall have a valid motor vehicle inspection sticker with a proof of insurance.

4. Nothing in this Subsection shall be construed as prohibiting the parking or storage of a manufactured home owner's unoccupied travel trailer, overnight camper, or motorized camper in the storage area specified in Subsection H., above.

J. Buffers. A 40 percent opacity bufferyard shall be installed around manufactured home parks and / or subdivisions. The bufferyard shall have a minimum width of 10 feet, and the rear and side setbacks shall include a masonry wall, six feet in height, set back at least 10 feet from the property lines of the parcel proposed for development.

Effective on: 7/1/2014

Sec. 4-1-3-5 Cluster Development

A. Generally. In general, the layout of residential cluster neighborhoods shall promote the character of the zone in which they are located, and be designed to protect significant natural, historic, or archaeological resources on the parcel proposed for development, as applicable.

B. Design Approach. The approach to designing a cluster residential neighborhood shall follow a four-step process which emphasizes the protection of natural resources and meaningful open space:
1. First, a site fingerprint must be developed according to the standards in Article 4-4, Natural and Archaeological Resources.

2. Second, building sites shall be located to (in descending order of priority):
   a. Minimize the impacts of clearing and grading on riparian areas, steep slopes, wetlands, and woodlands;
   b. Protect buildings and sites of historic or archaeological significance or incorporate them through adaptive reuse, unless such treatment is inappropriate for protecting the resource;
   c. Minimize the visual impact of the cluster subdivision on the landscape;
   d. Provide contiguity of common open space, resource protection areas, and, if present, agricultural lands (on-site and, where possible, off-site);
   e. Preserve the open sky backdrop above any ridgelines; and
   f. Provide open space and scenic views for the principal buildings in the cluster residential neighborhood.

3. Third, the road system shall be designed to allow safe and efficient movement through the subdivision, and to abutting property, where appropriate. The road system should avoid impacts to natural resources, and should be designed to enhance views of significant vistas.

4. Fourth, lot lines and lot areas shall be established to provide for the most appropriate conservation of the open space areas of the development.

C. Design Standards.

1. Cluster residential neighborhoods shall have a defined conservation objective or combination of objectives based on either:
   a. Protecting priority resources identified on the site fingerprint (e.g., forest stewardship, water quality preservation and enhancement, etc.); or
   b. Providing a large common open space amenity (e.g., community gardens).

2. Designated resource protection areas shall be interconnected with other open space areas, greenways, and trail systems (if provided) within the parcel proposed for development and on abutting lands where such integration is practical and does not materially compromise the resource value of the resource protection areas.

3. Generally, open spaces shall be integrated into the development design to bring significant open space to the maximum number of properties, as well as visibility from public rights-of-way within the proposed development. However, physical or visual access to open spaces may be limited if such limitations would materially enhance natural resource management.

4. Streams and watercourses shall be buffered by common open spaces that extend at least 50 feet from the ordinary high water mark of the stream or watercourse. In these areas, landscaping shall be designed to enhance the filtering of surface and subsurface water flows. Trails may provide access along the greenway unless such location would be contrary to resource management objectives.

D. Lot Standards.

1. Dwelling units shall be set back from the perimeter of the parcel proposed for development at least the following distances, which are based on the number of lots in the cluster residential subdivision:
   a. 1 to 4 lots: as required for individual lots
   b. 5 to 20 lots: 75 ft.
   c. 20 or more lots: 100 ft.

2. All lots shall be accessed from an interior road or shared driveway.

3. Lots shall, where appropriate, be adjacent to or around one or more of the following:
   a. Central green or square;
   b. Physical amenity such as a meadow, stand of trees, stream, or other water body; or
   c. An existing or restored natural feature.
Sec. 4-1-3-6 Mixed-Housing Neighborhood

A. Generally. In general, the layout of mixed-housing neighborhoods shall promote the character of the zone in which they are located, and provide cohesive, connected neighborhoods with a variety of housing types.

B. Site Layout.
   1. Different housing types within a mixed-housing neighborhood shall be integrated together, as opposed to located within separate, disconnected pods. (See Figure 4-1-3-6A, Illustrative Integration of Housing Types.)
2. In locations where mixed-housing neighborhoods are located across a local residential street from existing housing, the housing types that front on the street shall be comparable to the existing housing types across the street in terms of housing type, frontage type, and method of access. (See Figure 4-1-3-6A, Illustrative Edge Compatibility.)
In the illustration below, the yellow houses on the right-hand side are existing homes that are across a local residential street from a mixed-use neighborhood. The edge of the mixed-housing neighborhood, shown as green houses, is developed with a comparable single-family detached housing type, with the same type of access (from the alley). The blue multifamily buildings are screened from the existing residents by the green houses.

3. Individual housing types (e.g., townhomes or multifamily) may have their own outdoor recreation and leisure areas. However, the mixed-housing neighborhood shall also provide common open spaces and outdoor recreation and leisure areas for the benefit and use of all residents of the neighborhood.

C. Access. Generally, all lots shall be accessed from an interior street, alley, parking court, or shared driveway. However, if a perimeter street is also a local residential street, lots shall front on the perimeter street and may take access from it if the lots across the street also take access from the street.

Effective on: 7/1/2014

Sec. 4-1-3-7 Traditional Neighborhood Development

A. Generally. In general, the layout of traditional neighborhood developments (TNDs) shall promote the character of the zone in which they are located, and provide cohesive, connected neighborhoods with a variety of housing types.

B. Pattern Book Required. Pattern books are required for TND development. (See Section 6-3-6-11, Pattern Books.)

C. Special Requirements for Nonresidential and Mixed-Use Buildings in Traditional Neighborhood Developments.

1. Generally. TNDs are residential or predominately residential developments that are designed and scaled for pedestrian use, with continuous sidewalks, tree-lined streets, pedestrian-scaled amenities, and a neighborhood center for commercial and/or civic activity. Parking areas and garages are not dominant visual features along the public rights-of-way.

2. Site Planning Requirements. The applicant for a site plan or plat for a TND shall apply and indicate the location of the following subdistricts on the site plan or plat:
   a. Neighborhood Center, which is the most intensively developed part of the TND, and which may include mixed-uses as provided in Division 2-1-3, Use/Zone Matrices.
   b. Neighborhood Residential, which is less intensively developed than the neighborhood center, and which is used for residential and recreational purposes.
c. Edge Residential, which is used exclusively for single-family detached, open space, and/or outdoor recreation development types. This subdistrict is optional depending on the type and density of the abutting residential development.

3. **Nonresidential Development Standards.** The standards that are applicable to nonresidential and mixed-use development in the neighborhood center subdistrict of a TND are as provided in Section 3-2-3-3, *Nonresidential and Mixed-Use Lots in Traditional Neighborhood Developments*; and Section 3-2-3-4, *Nonresidential and Mixed-Use Lot and Building Standards in Traditional Neighborhood Developments*, except that the minimum landscape surface ratio (LSR) of the entire Neighborhood Center subdistrict shall be 10 percent, which shall be counted within the open space ratio (OSR) calculation for the overall parcel proposed for development as a TND neighborhood type.

D. **Arrangement of TND Subdistricts.**
1. TNDs shall include a neighborhood center and a neighborhood residential subdistrict. TNDs may also include an edge residential subdistrict at the developer’s option, depending on the type and density of the abutting residential development.

2. The boundaries of development areas shall be shown on the TND master plan.

3. Development areas shall be arranged as follows:
   a. Neighborhood residential areas shall surround neighborhood center subdistricts, except in locations where:
      1. Unique topographical or other natural resource constraints exist which create a conflict with Article 4-4, *Natural and Archaeological Resources*; or
      2. The neighborhood center subdistrict abuts an arterial or collector street at the boundary of the parcel proposed for development.
   b. Neighborhood residential subdistricts shall be arranged so that the edge of the neighborhood center subdistrict is not more than a one-quarter mile walk from any lot in the neighborhood residential subdistrict.
   c. Edge residential subdistricts, if used, shall abut neighborhood residential subdistricts but not neighborhood center subdistricts.

4. Residential lots within each development area shall meet the applicable requirements of Division 3-2-2, *Housing Palette*, unless modified using Division 3-2-4, *Alternative Development Standards*.

E. **General Design Principles.** TNDs shall be designed according to the following principles:
1. The TND shall provide a distinct physical settlement, but shall not be walled off from the rest of the City.

2. Buildings shall front on and align with streets.

3. Civic buildings, such as places of public assembly, shall be sited and designed as landmarks.

4. The neighborhood center subdistrict shall be oriented towards a principal green, plaza, or public square, which shall be oriented for solar access in winter months.

5. Generally, the density of housing shall decrease as distance from the neighborhood center subdistrict increases. However, housing types within a TND may be mixed on individual street segments.

6. In locations where TNDs are located across a local residential street from existing housing, the housing types that front on the street shall be comparable to the existing housing types across the street in terms of housing type, frontage type, and method of access. (See, e.g., Figure 4-1-3-6B, *Illustrative Edge Compatibility*.)

F. **Street Network Design Principles.**
1. Streets and blocks shall be organized in a generally rectilinear or radial pattern. However, a strict grid is not required, and street layout shall take into account the following, in descending order of priority:
   a. The design and location of streets shall minimize the alteration of natural resources and significant natural features of the site;
   b. Streets, alleys, sidewalks, and trails shall provide multiple travel routes within and through the TND; and
c. Street orientations shall provide views of prominent natural vistas and of TND landmarks.

2. Streets shall be organized in a hierarchical manner to provide for a balanced mix of pedestrian and automobile travel routes.

3. Squares, greens, parks, plazas, and landscape areas shall be included in the block patterns of the neighborhood center and neighborhood residential subdistricts, providing focal points and areas for activity, recreation, and views.

4. Street rights-of-way shall provide for parallel parking in the neighborhood center and neighborhood residential subdistricts.

5. Alleys shall provide service access in the neighborhood center and neighborhood residential subdistricts. Alleys are optional in the edge residential subdistrict.

G. Block Length.

1. Street segments in the neighborhood center subdistrict shall not be longer than 500 feet, unless buildings provide pedestrian access from the front sidewalk to rear parking areas or parking structures at intervals of not more than 300 feet.

2. Street segments in the neighborhood residential and edge residential subdistricts shall not be longer than 650 feet, and shall generally be shorter than 500 feet. This requirement does not apply where:
   a. The street segment traverses common open spaces that are wider than 650 feet; or
   b. The view along the segment is interrupted by a significant curve, jog, or offset in the street, provided that the curve, jog, or offset is situated not more than 650 feet from the intersections that define the street segment.

H. Cul-de-sacs.

1. Cul-de-sacs may be used only in the edge residential subdistrict, and only where necessary due to site constraints that cannot be addressed using loop streets or mews arrangements.

2. Cul-de-sacs shall not be longer than 350 feet, measured along the centerline of the street from the point of intersection to the middle of the cul-de-sac.

I. Access and Parking.

1. On-street parking shall be provided in the neighborhood center and neighborhood residential subdistricts. On-street parking is optional in the edge residential subdistrict.

2. Off-street parking for residential development shall be accessed by an alley or parking court in the neighborhood center and neighborhood residential subdistricts.

3. Off-street parking for nonresidential and mixed-use buildings in the neighborhood center and neighborhood residential subdistricts shall be located behind principal buildings, and shall be accessed:
   a. From streets that define the border of the neighborhood center subdistrict;
   b. From a mid-block connection to a street within the neighborhood center subdistrict; or
   c. From an alley.

Effective on: 7/1/2014

ARTICLE 4-2 STREETS, SIDEWALKS, TRAILS, AND UTILITIES

Division 4-2-1 Purpose and Application of Article
Sec. 4-2-1-1 Purpose of Article

A. **Generally.** The purposes of this Article are to set out the general rules for the arrangement and construction of streets, sidewalks, trails, paths, and utilities, and to ensure that access to streets is managed to preserve the efficiency and functional integrity of collector and arterial streets.

B. **Complete Streets Policy.** It is the intent of the City Council that all new and upgraded or reconstructed streets in the City be designed to be "complete," that is, to accommodate all modes of travel (e.g., motor vehicle, bicycle, pedestrian), for all ages, and for all levels of mobility.

C. **Engineering Standards.** It is not the purpose of this Article to set out specific engineering standards for construction of infrastructure. Such standards are promulgated by the Engineering Department.

Effective on: 7/1/2014

Sec. 4-2-1-2 Application of Article

A. **Generally.** The requirements of this Article apply to all applications for approval of new development, redevelopment, or substantial improvements to buildings or structures on a parcel proposed for development, and to all other development that involves construction of, reconstruction of, or substantial repairs to infrastructure that is addressed by this Article. If the City finds that the impact of the proposed development on the abutting streets is negligible, then the City may limit the requirement of compliance with this Section to dedication of right-of-way pursuant to Section 4-2-2-17, Street Dedication Requirements.

B. **Construction of Improvements.** The improvements required by this Article shall be constructed by the Applicant throughout the development, including along the frontages of abutting streets, at no cost to the City.

C. **Fee-in-Lieu Alternative.** For off-site improvements, the City may require a fee-in-lieu of construction or installation of improvements if the applicant's fair share contribution would result in an impractical or incomplete improvement (e.g., installation of a traffic signal or major street improvements), and therefore, the City finds that it should be subsumed into a more comprehensive capital improvements project.

Effective on: 7/1/2014

Division 4-2-2 Streets, Driveways, and Access Points

Sec. 4-2-2-1 Street Design Objectives

A. **Generally.** Streets shall be designed in accordance with the standards of this Division, which implement the objectives of this Section.

B. **Complete Streets Design.**
   1. Streets shall be designed and engineered to be safe and efficient for all users and all modes of travel (e.g., motor vehicles, bicycles, pedestrians, service vehicles, emergency services, and transit, including people with disabilities).
   2. The design and layout of streets shall consider the routing of bicycles to and through the proposed development.
   3. The City may permit off-street facilities for pedestrians and bicyclists to be substituted for on-street accommodations, provided that the proposed facilities provide equal or better access, mobility, and safety for pedestrians and bicyclists.
   4. The City may waive specific accommodations within the right-of-way if the City Engineer and the Administrator find that, due to the physical location of the street (e.g., on a very steep slope in an infrequently traveled
location), the expected short and long-term benefits of the accommodation will be substantially outweighed by the estimated costs of its implementation and continuing maintenance.

C. **Street Plans.** Streets shall be located and configured to implement adopted plans of the City that show the general location of new streets. The exact location of new streets will be determined during the development review process.

D. **Integration.** New streets shall integrate into the existing street pattern so as to:
   1. Address the new development's access and circulation needs;
   2. Provide a pattern of streets that facilitates mobility and provides a choice of routes and travel modes, in that:
      a. Existing and planned streets (including streets that are shown on pending applications for development approval on abutting property) are continued in a similar alignment on the parcel proposed for development and at a comparable right-of-way and pavement width, unless the City Engineer finds that:
         1. There is a demonstrated need to change the street cross-section in order to improve the safety of the traveling public (all modes), or to provide on-street parking in areas where it is appropriate;
         2. The right-of-way or pavement section of the existing street is substandard;
         3. The continuation would create incompatibility or materially concentrate through-traffic in residential neighborhoods; or
         4. Conditions of topography or geology make the continuation of the right-of-way alignment infeasible or undesirable in terms of initial construction or continuing operations and maintenance; and
      b. When a tract is subdivided into larger than normal building lot(s) or parcel(s), such lot(s) or parcel(s) shall be so arranged as to permit the logical location and opening of future streets and appropriate resubdivision, with provision for adequate utility easements and connectors for such resubdivision; and
   3. Facilitate City-wide and regional traffic movements (where higher-order functional classifications are involved).

E. **Character.** New streets shall correspond to and reinforce the community character of the district(s) in which they are constructed.

F. **Natural Resources.** Streets shall be located with appropriate regard for topography, creeks, wooded areas, and other natural features that would enhance attractive development, or that are locally or regionally significant for their natural resource value.

G. **Utilities.** Rights-of-way shall be sufficient to accommodate underground utility lines.

H. **Snow Storage.** Streets shall be designed to accommodate snow storage in a manner that does not interfere with the use of sidewalks and bicycle lanes. Typically, sidewalks are separated from curbs and the resultant landscape strips are used for snow storage.

**Effective on: 7/1/2014**

**Sec. 4-2-2-2 Functional Classifications**

A. **Generally.** Streets shall be classified according to the following functional classifications:
   1. Major Arterial (i.e., State Road / U.S. Highway);
   2. Minor Arterial;
   3. Collector;
   4. Local; or
   5. Cul-de-sac.

B. **Alleys.** Alleys are not "streets," but the functional classification of "alley" is assigned to them.
C. **Street Classification Map.** The functional classification of existing streets shall be as shown on the Street Classification Map.

Effective on: 7/1/2014

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**Sec. 4-2-2-3 Standard Street Cross-Sections**

A. **Generally.** Minimum rights-of-way for streets shall be dedicated to the City pursuant to Subsection B. below. Streets within these rights-of-way shall be designed to conform to the standard street cross sections of this Section, unless an alternative street cross-section is approved pursuant to Section 4-2-2-4, *Alternative Street Cross-Sections*. Cross-sections shall be modified as necessary to conform to additional requirements of this Division (e.g., Section 4-2-2-8, *Traffic Calming*; or Section 4-2-2-14, *Transit Stops*) or engineering standards which may require additional components, such as center turn lanes, acceleration lanes, or deceleration lanes.

B. **Minimum Rights-of-Way and Standard Street Cross-Sections.**

1. Rights-of-way shall be dedicated to the City that are sufficient to accommodate:
   - a. The street cross-section identified in an adopted transportation or right-of-way plan, if one applies to the parcel proposed for development;
   - b. The standard street cross-section, with any additional elements required by the development (e.g., center turn lanes, acceleration lanes, medians or diverters, or deceleration lanes), plus one foot; or
   - c. If no additional elements are required, the standard street cross-section, plus one foot;

2. Unless an adopted transportation or right-of-way plan provides for a different street cross-section, the standard street cross-sections set out in Table 4-2-2-3, *Standard Street Cross-Sections*, may be used to satisfy the requirements for development of streets in each functional classification.

3. Residential cul-de-sacs shall be designed with center landscaped islands.

---

### Table 4-2-2-3

**Standard Street Cross Sections**

<table>
<thead>
<tr>
<th>Type of Street</th>
<th>ROW Width</th>
<th>Sidewalk</th>
<th>Landscape Strip</th>
<th>Curb and Gutter</th>
<th>Parking Lanes</th>
<th>Bike Lane</th>
<th>Drive Lane</th>
<th>Turn Lane / Median</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td>Width</td>
</tr>
<tr>
<td>Cul-de-Sac, Residential</td>
<td>55 ft. (radius)</td>
<td>1</td>
<td>6 ft.²</td>
<td>1</td>
<td>5 ft.²</td>
<td>2</td>
<td>2 ft.</td>
<td>1</td>
</tr>
<tr>
<td>Cul-de-Sac, Nonresidential</td>
<td>59 ft. (radius)</td>
<td>1</td>
<td>8 ft.²</td>
<td>1</td>
<td>7 ft.²</td>
<td>2</td>
<td>2 ft.</td>
<td>1</td>
</tr>
<tr>
<td>Local, Residential</td>
<td>60 ft.</td>
<td>2</td>
<td>6 ft.</td>
<td>2</td>
<td>5 ft.</td>
<td>2</td>
<td>2 ft.</td>
<td>2</td>
</tr>
<tr>
<td>Local, Nonresidential (Except Industrial Park)</td>
<td>76 ft.</td>
<td>2</td>
<td>8 ft.</td>
<td>2</td>
<td>5 ft.</td>
<td>2</td>
<td>2 ft.</td>
<td>2</td>
</tr>
<tr>
<td>Local, Industrial Park</td>
<td>75 ft.</td>
<td>2</td>
<td>6 ft.</td>
<td>2</td>
<td>5.5 ft.</td>
<td>2</td>
<td>2 ft.</td>
<td>2</td>
</tr>
<tr>
<td>Collector</td>
<td>90 ft.</td>
<td>2</td>
<td>8 ft.</td>
<td>2</td>
<td>7 ft.</td>
<td>2</td>
<td>2 ft.</td>
<td>2</td>
</tr>
<tr>
<td>Minor Arterial</td>
<td>115 ft.</td>
<td>2</td>
<td>8 ft.</td>
<td>2</td>
<td>7.5 ft.</td>
<td>2</td>
<td>2 ft.</td>
<td>2</td>
</tr>
<tr>
<td>Main Avenue / CBD</td>
<td>83 ft.</td>
<td>2</td>
<td>12 ft.</td>
<td>NA</td>
<td>NA</td>
<td>2</td>
<td>2 ft.</td>
<td>2</td>
</tr>
<tr>
<td>State Highways</td>
<td>95 ft.</td>
<td>2</td>
<td>10 ft.</td>
<td>2</td>
<td>5 ft.</td>
<td>2</td>
<td>2 ft.</td>
<td>NA</td>
</tr>
</tbody>
</table>

**TABLE NOTES:**

- In addition to the width set out in the table, 6 in. of permeable surface / sidewalk construction and repair zone must be provided on the outside of each sidewalk edge.
- This right-of-way element shall be located on the outside edge of the cul-de-sac.
- NA = Not Applicable
C. **Local Residential Streets with Parallel Alleys.** Where one or more alleys provides rear access to lots that front on a local residential street, one parking lane along the local residential street may be removed from the street cross-section (and the right-of-way may be reduced by a corresponding dimension), provided that the average frontage of the lots along the affected street segment is not less than 40 feet. One side of the street shall be posted "No Parking".

Effective on: 7/1/2014

Sec. 4-2-2-4 Alternative Street Cross-Sections

A. **Generally.** The City may approve alternative right-of-way widths and street cross-sections in unique circumstances where the standard street cross-sections of Section 4-2-2-3, *Standard Street Cross-Sections*, are less suitable for the intended purpose, as provided in this Section.

B. **Requirements for Approval.** The City may approve an alternative street cross-section only if it is demonstrated that one of the following alternative thresholds are met:

1. **Alternative 1.**
   a. The proposed new street cross-section reduces costs of operations and maintenance, including resurfacing, pavement repairs, snow plowing and removal, stormwater management system maintenance, street sweeping, and comparable programs; and
   b. Compared to the standard street cross-section, will:
      1. Maintain or improve the safety of the traveling public;
      2. Maintain or improve the quality of stormwater runoff;
      3. Reduce the quantity of stormwater runoff; and
      4. Facilitate snow plowing / snow removal.

2. **Alternative 2.** The proposed new street cross-section will provide materially better environmental performance in terms of the protection of wetlands, steep slopes, geologic hazard areas, mature tree stands, riparian areas, or wildlife habitat.

3. **Alternative 3.** The alternative street cross-section implements adopted City plans better than the standard street cross-section.

C. **Right-of-Way Width.**

1. Alternative right-of-way widths may be approved after analysis of the following factors:
   a. Site features including topography, soils, geology, or drainage/flood patterns;
   b. A traffic study for an existing neighborhood and / or a proposed development indicates a need for an alternative street right-of-way dimension or design to accommodate the anticipated traffic demands of all modes of travel; or
   c. Other conditions exist that are unusual and that were not anticipated by the street classification plan or other adopted plans related to transportation or street design.

2. The right-of-way width shall be sufficient to accommodate vehicular traffic, bicycles, pedestrians, service vehicles, emergency services, transit (along existing and proposed transit routes), maintenance vehicles, snow plows, public utilities, on-street parking, special storm drainage facilities, or other appropriate treatments, such as medians, traffic calming, or traffic channelization.

3. Street rights-of-way shall be dimensioned to serve the purposes set out in Section 4-2-2-1, *Street Design Objectives*.

D. **Alternative Cross-Section Design.**
1. **General Standards for Approval.** Street rights-of-way shall be designed to serve the purposes set out in Section 4-2-2-1, Street Design Objectives.

2. **Minimum and Maximum Width of Street Cross-Section Elements.** Individual elements within an alternative street cross-section shall be dimensioned such that their widths are within the ranges set out in Table 4-2-2-4, Minimum and Maximum Width of Street Cross-Section Elements.

### Table 4-2-2-4
**Minimum and Maximum Width of Street Cross-Section Elements**

<table>
<thead>
<tr>
<th>Type of Street</th>
<th>Sidewalk</th>
<th>Landscape Strip</th>
<th>Curb and Gutter</th>
<th>Parking Lanes</th>
<th>Bike Lane</th>
<th>Drive Lane</th>
<th>Center Turn Lane</th>
<th>Median³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Residential</td>
<td>5 ft.¹</td>
<td>NA</td>
<td>5 ft.</td>
<td>NA</td>
<td>2 ft.</td>
<td>2 ft.</td>
<td>6 ft.</td>
<td>6.5 ft.</td>
</tr>
<tr>
<td>Local Nonresidential</td>
<td>6 ft.</td>
<td>NA</td>
<td>5 ft.</td>
<td>NA</td>
<td>2 ft.</td>
<td>2 ft.</td>
<td>6 ft.</td>
<td>6.5 ft.</td>
</tr>
<tr>
<td>Collector</td>
<td>6 ft.</td>
<td>NA</td>
<td>5 ft.</td>
<td>NA</td>
<td>2 ft.</td>
<td>2 ft.</td>
<td>6 ft.</td>
<td>6.5 ft.</td>
</tr>
<tr>
<td>Minor Arterial</td>
<td>8 ft.</td>
<td>NA</td>
<td>5 ft.</td>
<td>NA</td>
<td>2 ft.</td>
<td>2 ft.</td>
<td>6 ft.</td>
<td>6.5 ft.</td>
</tr>
<tr>
<td>Major Arterial</td>
<td>8 ft.</td>
<td>NA</td>
<td>5 ft.</td>
<td>NA</td>
<td>2 ft.</td>
<td>2 ft.</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**TABLE NOTES:**
A 6 foot wide sidewalk is required along designated safe routes to school. If there is no striped bicycle lane and no on-street parking, 14 ft. wide outside lanes may be approved to accommodate shared use with bicyclists. If provided.

NA = Not Applicable

E. **Relationship to Other Requirements.** This Section provides a method of developing alternatives to the standard street cross-sections set out in Section 4-2-2-3, Standard Street Cross-Sections. It shall not be used to avoid other standards of this Division.

*Effective on: 7/1/2014*

**Sec. 4-2-2-5 Alleys**

A. **Generally.** Alleys established after the effective date of this LUDC shall comply with the standards of this Section.

B. **No Parking in Alleys.** All alleys shall be posted "No Parking".

C. **Use of Alleys.** Alleys may be used only:
   1. In residential development, where the average lot width along the block face is less than 50 feet.
   2. In nonresidential and mixed-use development:
      a. Within traditional neighborhood developments; and
      b. Within activity centers, where necessary to provide service access to buildings.

D. **Standard Alley Cross-Section.** The standard alley cross-section is:
   1. **Right-of-Way Width.** Min. 24 feet
   2. **Pavement Width, Generally.**
      a. In RH, LI, CG, CR, MU-N, and MU-A districts: 18 feet
      b. All Other Districts: 16 feet
   3. **Pavement Width, Within 20 Feet of Intersection with Street.** 22 feet

E. **Surfacing and Edging.** The surfacing and edging of alleys shall be in accordance with the City's Development Standards and Construction Manual.

F. **Connectivity.**
1. Generally, alleys shall connect to public streets on both ends, and shall be dedicated to the City as public rights-of-way.

2. Dead-end alleys may be developed if:
   a. They are shorter than 150 feet in length;
   b. There is no feasible alternative for lot access due to topography or geology;
   c. The alley is owned and maintained by a property owners' association and posted as such;
   d. The buildings that take access from the alley are constructed with fire protection sprinklers;
   e. Trash collection facilities are located in a screened enclosure that is located within 10 feet of the edge of pavement of the public right-of-way; and
   f. The dead end alleys include a turning area at the terminus of the alley, as shown in the International Fire Code, Appendix D, Section D103 as amended from time to time.

G. Crossings. Sidewalks shall continue across alleys at points of intersection.

H. Alley Aprons. Alley aprons shall be of a "wing-type" design, such that:
   1. The sidewalk continues across the alley apron without a change of elevation; and
   2. The alley apron does not go through the sidewalk. (See Figure 4-2-2-5, Alley Apron Design)

I. Services. New alleys shall be constructed as service streets, as follows:
   1. Concrete pads for trash pickup from nearby residential lots shall be installed on one side of the alley (for one-pass service by a side-loaded garbage collection vehicle), in locations approved by the City Engineer.
   2. Concrete pads for trash pickup from nearby commercial lots shall be installed to allow for front-loaded garbage collection vehicles, in locations approved by the City Engineer.
   3. Natural gas and electric meters shall be readable from alleys, and shall be located on the opposite side of the alley as trash pickup, and not obstructed by fencing or landscaping.
   4. No structures or trees shall be built or planted within the visibility triangle.

J. Snow Storage. Alleys shall be designed to accommodate snow storage, such that snow is stored on the side of the alley where meters are located. See Subsection I., above.

Effective on: 7/1/2014

Sec. 4-2-2-6 Grades

A. Generally. The maximum vertical grade of new streets shall be as provided in this Section.
B. **Grade Based on Abutting Uses.** The maximum vertical grade of a street shall be dependent upon the use of the street, as follows:
   1. Abutting nonresidential and mixed-use development: 6 percent
   2. Abutting residential development (all types): 10 percent

C. **Grade at Intersections.** Notwithstanding the uses that abut the street, the maximum vertical grade near intersections shall be as follows:
   1. Within 100 feet of 4-way Intersections: 5 percent
   2. Within 50 feet of 3-way Intersections: 5 percent

**Effective on:** 7/1/2014

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**Sec. 4-2-2-7 Street Intersections, Curves, and Offsets**

A. **Generally.** Street intersections and offsets shall be designed according to the standards of this Section.

B. **Angle of Intersection.** All street intersections shall be at right angles. However, where topography, natural resources, geology, or other site conditions justify variations from right angles, intersections between 70 degrees and 110 degrees are allowed, provided that the intersection is as close to 90 degrees as feasible.

C. **Intersections with Railroad Tracks.**
   1. Street intersections with railroad tracks shall be designed to allow for the safe crossing of bicycles at angles as close to 90 degrees as feasible, but not less than 45 degrees nor more than 135 degrees.
   2. Tracks shall intersect streets at grade. Compressible flangeway fillers or comparable devices to reduce the gap between the track and the street pavement shall be installed if necessary to ensure safe bicycle and wheelchair crossing.
   3. Bicycle crossings may be implemented by separating the bicycle lane from the street or bulbing out the shoulder to allow for a bicycle to cross at a right angle. See Figure 4-2-2-7A, *Illustrative Bicycle Crossing.*

![Figure 4-2-2-7A](image)

**Figure 4-2-2-7A**

Illustrative Bicycle Crossing

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D. **Intersections with Curved Street Segments.** No intersections are allowed on curved street segments where the curve has a centerline radius of less than 500 feet.

E. **Spacing of Intersections.**
   1. *Opposite Sides of the Street.* Streets that intersect on opposite sides of another street shall either be directly across from each other or offset by at least 125 feet from centerline to centerline. See Figure 4-2-2-7B, *Spacing on Opposite Sides of the Street.*
2. *Same Side of the Street.* Streets that intersect on the same side of a street shall be separated by at least 300 feet from centerline to centerline. See Figure 4-2-2-7C, *Spacing on Same Side of the Street.*

F. **Curves.** Curves on collector and local streets shall meet the minimum radii set out in Table 4-2-2-7, *Minimum Curve Radii.*

<table>
<thead>
<tr>
<th>Type of Street</th>
<th>Minimum Radius Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collector</td>
<td>400 ft.</td>
</tr>
<tr>
<td>Local</td>
<td>200 ft.; or 125 ft. where superelevation is used</td>
</tr>
</tbody>
</table>

G. **Street Jog Offsets.** The offset of the centerlines of street jogs (see Figure 4-2-2-7D, *Street Jog Offsets*) shall be at least the following distances:

1. *Arterials.* One quarter mile (1,320 feet).
2. *All Other Streets.* 125 ft.
Sec. 4-2-2-8 Traffic Calming

A. Generally. Traffic calming is required on local residential streets that:
   1. Carry 100 or more vehicles per hour during peak hours and have a relatively straight alignment for a distance of 500 feet or more; or
   2. Are configured or connected in such a way that they are likely to be attractive as a short-cut to avoid congested intersections or difficult turning movements.

B. General Design Requirements. Traffic calming devices shall be designed to:
   1. Provide a focal point or aesthetic asset to the street segment or intersection in which they are located;
   2. Allow for access by emergency vehicles and snow plows; and
   3. Allow for cost-effective long-term maintenance (including irrigation if necessary).

C. Mid-Block Traffic Calming. The following traffic calming devices may be approved by the City Engineer for use in straight street sections:
   1. Pavement changes (materials or colors);
   2. Elevated pedestrian crossings, which may be combined with tapered bulb-outs that narrow the street from the sides;
   3. Tapered bulb-outs in parking lanes; and
   4. Chicanes and comparable devices that narrow lanes and shift traffic by changing the location of curbs on the sides of the street. See Figure 4-2-2-8A, Illustrative Mid-Block Traffic Calming Measures.
<table>
<thead>
<tr>
<th>Illustrative Mid-Block Traffic Calming Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pavement Material Change</strong></td>
</tr>
<tr>
<td><img src="image1" alt="Pavement Material Change" /></td>
</tr>
<tr>
<td><strong>Pavement Color Change</strong></td>
</tr>
<tr>
<td><img src="image2" alt="Pavement Color Change" /></td>
</tr>
<tr>
<td><strong>Elevated Pedestrian Crossing</strong></td>
</tr>
<tr>
<td><img src="image3" alt="Elevated Pedestrian Crossing" /></td>
</tr>
<tr>
<td><strong>Interruption in Parking Lane</strong></td>
</tr>
<tr>
<td>(one or both sides of the street)</td>
</tr>
<tr>
<td><img src="image4" alt="Interruption in Parking Lane" /></td>
</tr>
</tbody>
</table>
D. **Intersection Traffic Calming.** The following traffic calming devices may be approved for use at intersections:
   1. Roundabouts;
   2. Neckdowns;
   3. Textured pavements, provided that crosswalks are not textured; and
   4. Diverters and median barriers. See Figure 4-2-2-8B, *Illustrative Intersection Traffic Calming Measures.*
Sec. 4-2-2-9 Half Streets and Reserve Strips

A. **Half Streets.** Half streets are not allowed, except to complete abutting half streets that were dedicated before the effective date of this LUDC.

B. **Reserve Strips.** Reserve strips are not allowed.

Effective on: 7/1/2014
Sec. 4-2-2-10 Cul-De-Sacs, Dead-Ends, and Turnarounds

A. Generally. Dead-ends and turnarounds are not allowed except as provided in Subsection C., below. Cul-de-sacs are allowed only as provided in this Section.

B. Cul-de-sacs. Cul-de-sacs shall meet all of the following standards:

1. The maximum length of the cul-de-sac street shall be not more than the maximum length set out in Table 4-2-2-10, Maximum Cul-de-Sac Length. The length of the cul-de-sac street shall be measured from a point beginning at the intersection of the cul-de-sac street centerline with the projection of the intersecting street’s curb line, along the centerline of the cul-de-sac street to the cul-de-sac, and directly through the cul-de-sac to its furthest point from the point of beginning. See Figure 4-2-2-10A, Measurement of Cul-de-Sac Length.

<table>
<thead>
<tr>
<th>Development Served by Cul-de-Sac</th>
<th>Maximum Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer than 20 residential units, or other uses that, in total, generate less than 200 Average Daily Traffic (ADT)</td>
<td>1,000 ft.</td>
</tr>
<tr>
<td>20 or more residential units or other uses that, in total, generate 200 or more ADT</td>
<td>500 ft.</td>
</tr>
</tbody>
</table>

2. Driveways that connect to a cul-de-sac shall be separated at the curb cut by at least:
   a. Residential: three ft. on one side and 40 ft. (distance along curve) on the other side. See Figure 4-2-2-10B, Spacing of Cul-de-sac Driveway Connections.
   b. Shared Residential (see Section 4-2-2-18, Driveways and Access Points): 30 ft. on both sides.
   c. Nonresidential: five ft. on one side and 40 ft. (distance along curve) on the other side.
4. Driveway widths shall meet the standards set out in Section 4-2-2-18, Driveways and Access Points.

5. Width of curb cuts shall meet Section 4-2-2-1D Driveways and Access Points, Subsection E.

6. On residential cul-de-sacs, pedestrian and bicycle access shall be provided from the cul-de-sac end to existing and proposed streets and trails that are located (or planned to be located) within two tiers of lots from the cul-de-sac, or in locations where needed to complete a planned trail section. See Figure 4-2-2-10C, Cul-de-Sac Pedestrian and Bicycle Connections.

7. Where the Applicant does not control all of the property between the cul-de-sac and the street or trail that is necessary to create the connection, the access through the development shall be dedicated in anticipation of connecting the access at a later date when the adjacent property is developed or redeveloped. See Figure 4-2-2-10C, Cul-de-Sac Pedestrian and Bicycle Connections.

7. Cul-de-sacs that terminate residential streets shall have a landscaped island at the center, planted with no fewer than one large tree. The landscaped island shall be enclosed by a mountable curb that facilitates the use of the island for snow storage.
8. The design of all cul-de-sacs shall provide for the storage of cleared snow, based on a six-inch snowfall, without:
   a. Blockage of driveways that connect to the cul-de-sac; or
   b. Causing snow plow operators undue hardship in the performance of their duties.

C. Temporary Turnarounds. Dead-end streets that are planned for extension to connect to future development shall terminate in a temporary turnaround with a minimum 35 foot radius, which allows for emergency vehicles to turn around without backing (T and Y-shaped turnarounds are not allowed). The turnaround shall have a paved surface and a base that meets the requirements for a public street. A gravel surface may be allowed if the temporary turnaround will be in use for less than 12 months and security is provided to pave the turnaround if the anticipated connection is not made within 12 months.

Effective on: 7/1/2014

Sec. 4-2-2-11 Private Streets

A. No private streets shall be approved after the effective date of this LUDC. All access to residential, nonresidential, or mixed-use parcels (except oil and gas wells) shall be by a public street.

Effective on: 7/1/2014

Sec. 4-2-2-12 Corner Sight Distance

A. Generally. Intersections shall be designed and maintained with adequate corner sight distance, pursuant to this Section. No obstructions shall be constructed, placed, or installed in the area where the horizontal clear area defined in Subsection B.1., below, and the vertical clear area defined in Subsection B.2., below, overlap (pedestrians, bicyclists, and operating motor vehicles are not obstructions).

B. Clear Areas. Clear areas are required at each corner of street intersections, with the following dimensions:

   1. Horizontal Clear Area. Right triangles are defined in the horizontal plane by the following points (see Figure 4-2-2-12A, Illustrative Horizontal Clear Area):
      a. Point 1 is on the centerline of the right-hand travel lane of the lower classification street, 15 feet back from the extension of the face of the curb of the major street.
      b. Point 2 is on the centerline of the nearest travel lane (one in each travel direction) of the intersecting major street.
      c. Point 3 is on the centerline of the nearest travel lane (one in each travel direction) of the intersecting major street, the required sight distance from Point 1.
2. **Vertical Clear Area.** Within the horizontal plane defined by Subsection B.1., above, a clear area must be maintained from a height of 3.75 feet on the local street to a height of 4.5 feet on the centerline of the travel lanes of the major street.

C. **Sight Distances.**

1. **Generally.** Sight distances (measured from Point 1 to Point 3) shall be as follows:
   a. Local and Collector Streets: 200 ft.

2. **Engineering Discretion.** The City may require greater sight distances where necessary to ensure safety given topography and/or street curvature.

_Effective on: 7/1/2014_

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**Sec. 4-2-2-13 Visibility Triangles for Minor Streets and Driveways**

A. **Generally.** In addition to any corner sight distance required by Section 4-2-2-12, **Corner Sight Distance**, visibility triangles are required at street intersections and intersections of streets and driveways, as provided in this Section.

B. **Obstructions.** Visibility triangles shall be maintained free of visual obstructions, including structures and vegetation, from a height of 30 inches to a height of seven feet above the centerlines of the abutting intersecting streets. The City Engineer may waive this requirement if the City Engineer finds that:
   1. The requirement would result in the destruction of a healthy, mature, non-invasive tree, either by removal or by pruning that would result in structural harm to the tree, and the marginal impact of the removal or pruning of the tree on public safety is slight and may be addressed through other means, such as signage; or
   2. The encroachment into the sight triangle is by a healthy, mature, non-invasive tree; is slight; and results in a de minimus impact on public safety.

C. **Visibility Triangle Dimensions.** The legs of visibility triangles are measured from the point of intersection of lines that extend along the face of the curb at street intersections and driveway-street intersections. See Figure 4-2-2-13, **Visibility Triangle Measurement.** The measurements shall be as follows:
   1. All Street Intersections (shown as "street leg" in Figure 4-2-2-13): 35 ft.
   2. Driveways or Alleys and Local Streets (shown as "driveway leg" in Figure 4-2-2-13): 18 ft.
   3. Driveways and Collector Streets: 23 ft. (both "driveway leg" and "street leg")
   4. Driveways and Arterial Streets: 28 ft. (both "driveway leg" and "street leg")

D. **Exceptions.** Visibility triangles may be modified in cases where:
   1. Engineering standards indicate that a greater clear area is necessary, as determined by the City Engineer; or
   2. The clear area does not contribute to the safe operation of the street, intersection, or driveway.
Sec. 4-2-2-14 Transit Stops

A. Generally. Transit stops are required according to the standards of this Section.

B. Locations. Transit stops are required as follows:
   1. Adopted Plans. Transit stops shall be provided in locations specified in the Multi Modal Transportation Master Plan.
   2. Significant Generators and Destinations. Adjacent to proposed significant transit generators or destinations, in locations approved by the transit agency. Significant transit generators or destinations are:
      a. Residential developments that will, at build-out, provide housing for 300 or more people (135 units), based on average household size from the most recent official U.S. Census counts or estimates.
      b. Nonresidential developments that are:
         1. Projected to generate 1,350 average daily trips (ADT), according to the most recent Trip Generation Manual; and
         2. Are not located within 1/4 mile (1,320) feet of an existing, conforming transit stop (see Subsection C., below).

C. Transit Stop Standards.
   1. Transit stops shall include the following elements, which shall meet the standard specifications of the transit agency and the Americans with Disabilities Act (ADA):
      a. Concrete shelter pad;
      b. Shelter;
      c. Bench;
      d. Bus pad;
e. Trash receptacle;

f. Transit stop and route signage; and

g. Bicycle rack.

2. If a proposed development is a significant generator or destination that is served by an existing transit stop which does not include all of the enumerated elements or does not meet the current specifications of the transit agency or Americans with Disabilities Act, then the Applicant shall upgrade the existing transit stop according to the requirements of Subsection C.1., above.

3. Where transit stops are required on new streets associated with new developments, the streets shall include bus turn-outs, unless waived by the City Engineer.

Effective on: 7/1/2014

Sec. 4-2-2-15 Street Naming and Addressing System

A. Generally.

1. All public streets shall be named and approved by the Administrator. Private driveways, accesses, and entrances shall not be named.

2. The street naming and addressing system shall be maintained to facilitate the provisions of necessary public services (police, fire, mail, deliveries), reduce public costs for administration, and provide more efficient movement of traffic. An illustration of the requirements of this Section is provided in Illustration 4-2-2-15A, Illustrative Application of Street Naming and Addressing System.

Illustration 4-2-2-15A
Illustrative Application of Street Naming and Addressing System

B. Applicability. For consistency, this street naming and addressing system shall be adhered to on all newly platted, dedicated, and named streets, and for all newly numbered buildings or parcels. The Department shall check all new street names for compliance with this system and issue all street addresses. Existing streets that are not conforming to this system shall be made conforming as the opportunity occurs.

C. Order of Naming Elements. Streets shall be identified with a direction, a name or number, and a street type, in that order. Illustrative examples are shown in Illustration 4-2-2-15B, Components of Street Identifiers (Illustrative). Streets
shall not be identified in a manner in which the street type precedes the street name or numbers (e.g., Avenue of Mountain View), unless:
1. The street is an extension of an existing street, and retains the name of the existing street; or
2. The name of the street is a Spanish phrase (e.g., "Camino del Rio") that does not include an English suffix (see Subsection E.7.a., below).

Illustration 4-2-2-15B
Components of Street Identifiers (Illustrative)

<table>
<thead>
<tr>
<th>Prefix Direction Element</th>
<th>Street Name or Number Element</th>
<th>Street Type Element</th>
<th>Suffix Direction Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>Main</td>
<td>Avenue</td>
<td>NA</td>
</tr>
<tr>
<td>East</td>
<td>Second</td>
<td>Street</td>
<td>NA</td>
</tr>
<tr>
<td>NA</td>
<td>Oso Grande</td>
<td>Drive</td>
<td>NA</td>
</tr>
<tr>
<td>NA</td>
<td>Kingfisher</td>
<td>Court</td>
<td>East</td>
</tr>
<tr>
<td>NA</td>
<td>Knolls</td>
<td>Circle</td>
<td>North</td>
</tr>
</tbody>
</table>

TABLE NOTES:

NA = Not Applicable

D. Prefix Direction Elements.
1. A prefix direction, indicating whether the street (or street segment) is East or West of Main Avenue is required where:
   a. The street is numbered (instead of named); or
   b. The street crosses Main Avenue.
2. In other situations, a prefix direction is optional, but if used, it shall follow the conventions in Subsection D.1., above.

E. Street Name or Number Element. Street names or numbers are always required, according to the following naming conventions:
1. The names of streets shall not exceed 15 characters, including spaces, unless the name represents a person, place, or event of historic significance to Durango.
2. Generally, a street shall only have one name. However, U.S. Highways and Colorado State Highways shall be given their federal or state designations and may also have a local identifier.
3. Proliferation of similar street names (except numbers) within a subdivision or in the general vicinity is discouraged (e.g., Eagle Street, Eagle Lane, Eagle Court, Eagle Circle, Eagle Avenue, and Eagle Way in the same subdivision or small area).
4. Street names should be continuous through subdivisions or areas of the City where they align.
5. Blisters (cul-de-sacs without "necks") and spur roads shall have the same name as the street to which they are connected.
6. 4th order streets (see Table 4-2-2-15A, Order of Streets, below) are subject to the following additional conventions:
   a. 4th order streets that align with 1st, 2nd, or 3rd order streets across an intersection shall have the same street name or number element and the same street type element as the street with which they are aligned.
   b. 4th order streets that align with each other across an intersection (including a "T" intersection) shall have the same street name or number element (see Subsection F., below, for street type element requirements and Subsection G., below for suffix direction element requirements).
   c. Disconnected 4th order streets that align with each other shall have substantially different names unless a connection between the streets is planned.
7. The following may not be used as street names:
   a. A word that is also a street type (e.g., Court Avenue), unless the word is a Spanish word (e.g., Calle, Camino, Avenida) and there is no English suffix in the street name (e.g., "Camino del Rio Street" is not allowed);
   b. A name that is already used elsewhere in La Plata County on a different alignment;
   c. A name that is a homonym of, or easily phonetically confused with, a name that is already used elsewhere in La Plata County (e.g., Main Avenue and Maine Avenue); or
   d. A name that includes hyphens, apostrophes, special characters, or other punctuation.

F. Street Type Element.
   1. **Order of Streets.** All streets shall be assigned a functional classification according to Section 4-2-2-2, **Functional Classifications.** In addition, for naming purposes, streets shall be assigned an "order," based on their functional classification and level of connectivity, according to the standards of Table 4-2-2-15A, **Order of Streets.**

<table>
<thead>
<tr>
<th>Order</th>
<th>Functional Classification</th>
<th>Connectivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Arterial, Collector, or Local</td>
<td>Spans multiple blocks, usually beyond the boundaries of a single subdivision plat or parcel proposed for development</td>
</tr>
<tr>
<td>2nd</td>
<td>Local</td>
<td>Connects roughly parallel 1st order streets, but does not span multiple blocks</td>
</tr>
<tr>
<td>3rd</td>
<td>Local</td>
<td>Circles and arc-shaped streets that connect to one street or two roughly perpendicular streets</td>
</tr>
<tr>
<td>4th</td>
<td>Local</td>
<td>Cul-de-sacs</td>
</tr>
</tbody>
</table>

2. **Assignment of Street Type Element.** Street types shall be assigned based on the general alignment and order of the street, according to the standards of Table 4-2-2-15B, **Assignment of Street Type Element.**

<table>
<thead>
<tr>
<th>Street Type</th>
<th>General Alignment</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>North-South</td>
<td>East-West</td>
</tr>
<tr>
<td>Boulevard</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Parkway</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Avenue</td>
<td>✔</td>
<td>NA</td>
</tr>
<tr>
<td>Drive</td>
<td>✔</td>
<td>NA</td>
</tr>
<tr>
<td>Street</td>
<td>NA</td>
<td>✔</td>
</tr>
<tr>
<td>Way</td>
<td>NA</td>
<td>✔</td>
</tr>
<tr>
<td>Lane</td>
<td>✔</td>
<td>NA</td>
</tr>
<tr>
<td>Place</td>
<td>NA</td>
<td>✔</td>
</tr>
<tr>
<td>Loop</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Circle</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Square</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Court</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Cove</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Point</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

**TABLE NOTES:**
NA = Not Applicable
G. **Suffix Direction Element.**

1. A suffix direction is required where:
   a. The street terminates in a cul-de-sac at both ends, with an intersection in the middle, in which case the suffix direction shall indicate which side of the intersection the street segment is located on; or
   b. The street is a circle or comparable curvilinear street that intersects with another street in two separate locations, in which case the suffix shall be used to divide the street into up to four sections, based on their location in the circle or arc.

2. A suffix direction is not allowed in other circumstances.

H. **Variations.** Should situations arise THAT are not covered in this Section, street names will be determined by the Administrator in coordination with emergency service departments and service-providing agencies (police, fire, post office, etc.).

I. **Addressing Conventions.**

1. South and east sides of streets are to receive addresses ending in even numbers;
2. North and west sides of street are to receive addresses ending in odd numbers; and
3. Half addresses (e.g., 15 1/2 3rd St.) are not allowed.

*Effective on: 7/1/2014*

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**Sec. 4-2-2-16 Posting Requirements**

A. **Generally.** New streets shall be posted as provided in this Section. All signs in public rights-of-way shall conform to the requirements of the *Manual on Uniform Traffic Control Devices (MUTCD).*

B. **Street Identification.** Street identification signs shall be provided in a format approved by the City Engineer at each intersection.

C. **Traffic Control.** Traffic control signage shall be installed where necessary for safe operation of the street, as required by the *Manual on Uniform Traffic Control Devices (MUTCD),* or as determined by the City Engineer.

D. **Odd / Even Parking During Snow Events.** Streets that provide on-street parking on both sides shall be posted as shown in Figure 4-2-2-16, *Illustrative Odd / Even Parking Signage.* The specifications for the signage shall be promulgated by the City Engineer.

![Figure 4-2-2-16](image-url)  
**illustrative Odd / Even Parking Signage**

| Side of the Street with Odd Numbered Addresses | Side of the Street with Even Numbered Addresses |
Sec. 4-2-2-17 Street Dedication Requirements

A. Generally.
   1. Right-of-way shall be dedicated to provide sufficient area for street cross-sections that comply with the requirements of this Division, with respect to both:
      a. Internal streets; and
      b. Streets that abut the parcel proposed for development.
   2. Where right-of-way dedication is required for a street that abuts the parcel proposed for development, the Applicant shall dedicate right-of-way such that:
      a. Any existing, abutting half street is brought into compliance with the right-of-way width requirements of this Section;
      b. Any existing, abutting street that does not comply with the right-of-way width requirements is brought into compliance with the right-of-way width requirements of this Section on the side of the centerline that abuts the parcel proposed for development; and
      c. All right-of-way elements that are required for the Applicant's proposed development are provided (e.g., transit stops, acceleration lanes, deceleration lanes, traffic calming devices, intersection improvements, and comparable features, where required).

B. Additional Right-of-Way. Additional right-of-way may be required for acceleration or deceleration lanes, center turn lanes, intersection improvements, traffic calming or other traffic controls, or comparable features on internal streets and / or streets that abut the parcel proposed for development, if the City Engineer determines that such features are warranted to address the impacts of the proposed development.

Effective on: 7/1/2014

Sec. 4-2-2-18 Driveways and Access Points

A. Generally. The maintenance, design, dimension, and number of driveways / access points shall be as provided in this Section. Generally, the standards of this Section apply to driveways, which are the portion of the access that is located outside of the public right-of-way, and, if there is a sidewalk, between the property line and the edge of the
sidewalk. The connection to the public right-of-way that is located within the public right-of-way (except between the sidewalk edge closest to the property line and the property line itself) is called the "driveway apron," and is regulated by this Section where specifically referred to as "driveway apron." See Figure 4-2-2-18A, Driveways and Driveway Aprons.

![Figure 4-2-2-18A](image)

B. Design.
   1. All driveways except those that provide access from local streets to individual dwelling units shall be designed to prevent backing of vehicles into public streets.
   2. No driveway shall interfere with fire hydrants, storm inlets, or other curb frontage improvements.
   3. In EN districts on lots where front-yard parking is allowed, not more than two surface parking spaces are allowed in a front yard setback area.

C. Width of Driveways. Maximum width of driveways shall be:
   1. Residential: 22 feet.
   2. Commercial: 24 feet.

D. Number of Driveways.
   1. Single-Family Detached and Duplex Uses. For single-family detached and duplex uses:
      a. Not more than one driveway is allowed per dwelling unit. Shared driveways are allowed as provided in Subsection H., below.
      b. In the EN-1 or EN-2 zones, no driveway is allowed to access the street upon which the lot fronts if alley access is available to the lot.
   2. Other Uses. Other uses are allowed the minimum number of driveways that are necessary to serve the use, based on:
      a. Compliance with the access management standards of this Division; and
      b. The findings of a traffic study, if required.

E. Width of Curb Cuts. The maximum width of curb cuts shall be as follows:
      a. Lot width of 50 ft. or less: 12 ft.
      b. Lot width of more than 50 ft.: 16 ft.
c. Shared driveways (see Subsection H., below): 20 ft.

2. All Other Uses. 24 ft.,

3. Wider curb cuts may be approved by the City Engineer for industrial uses upon a finding that the curb cut design:
   a. Does not materially compromise multimodal traffic safety; and
   b. Is necessary to serve the industrial use.

F. Surfacing.

1. Driveway Aprons. Driveway aprons for all uses shall be concrete.

2. Driveways. Driveways shall be surfaced in one of the following ways:
   a. All Uses. All uses may use the following driveway surfaces:
      1. Concrete, including decorative concrete, patterned concrete, and exposed aggregate concrete.
      2. Asphalt.
      3. Porous asphalt, concrete pavers, paving blocks, or similar materials approved by the City Engineer.
   b. Additional Options for Residential Uses, Except Multifamily. In addition to the surfaces set out in Subsection E.2.a., above, all residential uses, except multifamily, may use the following driveway surfaces:
      1. Permeable or porous pavers; or
      2. Paver blocks or brick.
   c. Concrete Ribbon Driveways. Concrete ribbon driveways may be used to provide individual access to single-family detached lots, provided that:
      1. The ribbons are located only on the driveway, and the driveway apron is paved with concrete across its entire width;
      2. The ribbons are at least two feet wide, but not more than three feet wide; and
      3. The ribbons are three feet apart measured from their nearest edges. See Figure 4-2-2-18B, Illustrative Concrete Ribbon Driveway.

\[\text{Figure 4-2-2-18B}
\text{Illustrative Concrete Ribbon Driveway}\]

G. Grade.

1. Driveways shall be properly graded for drainage, and to minimize erosion that results from drainage.
2. The maximum running slope of a driveway shall not exceed:
   a. Driveway that provides individual access to a residential use: 12 percent.
   b. All other driveways (including shared driveways): 10 percent.
3. If the maximum running slope of the driveway must exceed the standards set out in Subsection F.2., then the following additional standards apply for slopes up to 30 percent:
   a. The driveway shall generally follow existing contours, and grading to accommodate the driveway shall be minimized (all development on the site shall be designed to further this objective). Driveways should be used to take up the grade of the slope, rather than cutting into or manipulating the topography.
   b. Shared driveways should be utilized to minimize hillside cuts. Such driveways shall have 16 feet of pavement width, with two foot gravel shoulders on each side, or 20 feet of pavement width.
   c. Non-shared drives that serve individual residential units should be narrowed to 12 feet of pavement width, when feasible.
   d. Driveway hillside cuts shall be screened with a rock wall, plant materials, or a building.

H. Turns, Pullouts, and Turnarounds.

1. Where a driveway is designed with a turn, the centerline radius shall be 35 feet, unless the City Engineer determines, after consultation with the fire service provider, that a different centerline radius is necessary for fire protection.
2. Pullouts or turnarounds may be required on driveways that are longer than 100 feet or that provide access across steep slopes, if the City Engineer, after consultation with the fire service provider, determines that such features are needed for fire protection.

I. Shared Residential Driveways.

1. Generally. Shared residential driveways are allowed according to the following standards:
   a. The minimum lot width for a lot that is served by a shared driveway is 40 feet.
   b. Garage doors shall be either:
      1. Side-facing; or
      2. Set back at least 30 feet behind the front building line.
   c. If the garage is located behind the principal building, the driveway is set back at least two feet from the sides of the principal building.
   d. If the garage is located in front of the principal building, then:
      1. The turnout from the shared driveway to the garage shall have a radius of at least five feet; and
      2. The area between the turnout and the sidewalk shall include shrubs, ornamental grasses, or boulders to screen the garage access from the street.
2. Shared Driveways in RL and RA Zones or Shared Driveways that Serve Three Residential Lots. Shared residential driveways in the RL and RA zones, or shared driveways in any zone that serves three single family residential lots or two duplex lots with a total of four units, are allowed according to the following standards:
   a. The minimum width of a shared driveway shall be a 20 foot wide paved driving surface, or a 16 foot paved driving surface with two-foot gravel shoulders on each side;
   b. Pullouts and turnarounds may be required on driveways over 250 feet in length.
   c. Individual driveways that connect to the shared driveway are at least 22 feet long;
   d. Access easements are provided for lot owners who take access from the shared driveway and for public safety personnel;
   e. Maintenance agreements for the shared driveway are provided; and
f. The Administrator finds that the driveway will not compromise the safety of any of the lot owners, after consultation with police and fire service providers.

J. Driveway Aprons. Driveway aprons shall be of a "wing-type" design, such that:
   1. The sidewalk continues across the driveway without a change of elevation; and
   2. The driveway apron does not go through the sidewalk. See Figure 4-2-2-18C, Driveway Apron Design.

K. Maintenance. Driveways and driveway aprons shall be maintained in good condition, free of weeds, dust, trash, and debris.

Effective on: 7/1/2014

Division 4-2-3 Sidewalks and Trails

Sec. 4-2-3-1 Pedestrian System

A. Generally.
   1. Generally, the pedestrian system is made up of a range of on- and off-street facilities including sidewalks, paved and unpaved multi-use trails and side paths, and natural surface trails. Pedestrian access and circulation shall be provided as required by this Section.
   2. For purposes of this Division, the term "Paved Multi-Use Trail" can be used interchangeably with the term "Shared Use Path."

B. Design Objectives.
   1. Sidewalks and trails shall be designed to meet the Americans with Disabilities Act (ADA).
   2. Sidewalks, crosswalks, and / or trails shall provide a continuous circulation system.
   3. The pedestrian system shall be designed to minimize conflicts among vehicles, pedestrians, and bicyclists.
   4. The on-site pedestrian system shall be connected to existing and planned (including the Parks, Open Space, Trails, and Recreation Master Plan ("POST&R Plan");) off-site pedestrian facilities that:
      a. Abut the parcel proposed for development;
      b. Can be reached by crosswalk; or
      c. Can be reached by an existing or planned trail, pedestrian bridge, or underpass.
   5. The pedestrian system of residential development within a school walk zone shall provide a safe link to the pedestrian route to school, as determined by the City Engineer.
C. **Sidewalks.**

1. Commercial, institutional, and multifamily uses shall provide a direct, clearly defined walkway connection across the parcel proposed for development to link the uses to the public sidewalk. The linkage shall be located to facilitate access to existing or planned transit stops. See Figure 4-2-3-1, *Illustrative Connection Between Sidewalk and Commercial Building.*

2. Nonresidential and mixed-use developments shall provide direct, clearly defined walkways to connect to pedestrian walkways on abutting nonresidential and mixed-use properties, as well as from parking areas to buildings.

**Trails.**

1. Trails shall be provided as set out in the adopted POST&R Plan, an element of the City of Durango Comprehensive Plan.

2. Connections between land uses and trails shall be provided where the trail crosses or abuts the parcel proposed for development.

3. Connections to abutting land shall be provided where the abutting land is under public ownership or otherwise open to the public or the occupants of the parcel proposed for development.

4. Within the River Corridor Overlay Zone (RCOZ), public pedestrian access that connects the public street right-of-way to the Animas River Trail shall be provided if the parcel proposed for development is either:
   a. Intensified by change or expansion of use; or
   b. Developed, redeveloped, or expanded in a manner such that site plan approval is required.

5. Parcels that abut other existing or planned trail corridors shall provide access from the sidewalk to the trail if the parcel proposed for development is either:
   a. Intensified by change or expansion of use; or
   b. Developed, redeveloped, or expanded in a manner such that site plan approval is required.

**Sec. 4-2-3-2 Sidewalk Design**

A. **Generally.** Sidewalks shall be designed in accordance with this Section and the City's *Development Standards and Construction Specifications Manual.*

B. **Dimensions and Location.** Sidewalks shall be provided on one or both sides of the street according to the number and dimensions set out in Table 4-2-2-3, *Standard Street Cross Sections,* or other approved cross section, for each
street in the parcel proposed for development, except cul-de-sacs (where sidewalks are only required on the outside edge of the cul-de-sac). Sidewalks shall be provided along streets that abut the parcel proposed for development on the abutting side of the right-of-way.

C. **Separation from Street.** New, expanded, and reconstructed sidewalks shall be separated from the street by a planting or landscape strip if a planting or landscape strip is a component of the applicable street cross-section. See Section 4-2-2-3, *Standard Street Cross-Sections*, and Section 4-2-2-4, *Alternative Street Cross-Sections*.

D. **Design and Grade.** The design and grade of sidewalks and curb ramps shall be compliant with the Americans with Disabilities Act (ADA).

E. **Surfac ing.** Sidewalks shall be surfaced with concrete according to the City’s *Development Standards and Construction Specifications Manual*.

F. **Curb Ramps.** Curb ramps shall be installed as follows:
   1. At intersections, a curb ramp shall directly face the crosswalk in each direction. See Figure 4-2-3-2, *Illustrative Curb Ramp Configurations*.
   2. In order to facilitate pedestrian access onto the sidewalk, curb ramps shall be provided at crosswalks and accessible parking spaces.
   3. Curb ramps shall be designed and constructed according to the City's *Development Standards and Construction Specifications Manual*.

G. **Preservation of Right-of-Way.** In the RA and OS districts, sufficient right-of-way shall be provided for subsequent retrofit of the street to accommodate a five-foot wide sidewalk.

*Effective on: 7/1/2014*

### Sec. 4-2-3-3 Paved Multi-Use Trails

A. **Generally.** Paved multi-use trails shall be designed in accordance with this Section, and to the extent they are consistent with this Section, the POST&R Plan, the most recently published volume of the AASHTO Guide for the Development of Bicycle Facilities, and the Americans with Disabilities Act (ADA).

B. **Design.**
1. The multi-use trail shall be a minimum of 10 feet wide, six-inch thick concrete paving with a two foot, soft-surface shoulder on each side of the trail. Trail rights-of-way shall have a minimum width of 20 feet. Additional right-of-way and pavement width may be required if:
   a. The POST&R Plan specifies it;
   b. The Administrator finds that the likely volume of use of the trail requires additional width, up to 14 feet total; and/or
   c. Trail construction requires the construction of a retaining wall, additional area for earthwork to provide tie-in to adjacent grades, or other feature for stabilization or drainage.
2. The alignment shall preserve stands of existing vegetation whenever possible, and minimize the amount of cut, fill, and retaining walls, when practical.
3. Trail intersections shall be designed to accommodate a 25-foot turning radius for maintenance vehicles.
4. A design speed of 20 miles per hour shall be utilized in design of the trail unless otherwise specified by the City Engineer. The design speed for grades over four percent shall be increased to 25 miles per hour. Horizontal and vertical trail alignment shall be per the most recently published volume of the AASHTO Guide for the Development of Bicycle Facilities. Trail grades shall meet all recommendations of the AASHTO Guide for the Development of Bicycle Facilities and requirements of the Americans with Disabilities Act (ADA).
5. Site grading shall provide for drainage away from the trail surface. All trail surfaces shall be above the elevation of a 10-year storm event. Trails shall have a two percent cross slope to promote drainage.
6. All trail intersections and trail signage shall be designed to meet MUTCD requirements and AASHTO guidelines.
7. Trails and structures shall provide for an AASHTO H10 vehicle design that is capable of withstanding use by maintenance, utility, and emergency service vehicles.

C. Setbacks and Clearance.
   1. Setbacks. Trails shall be set back 15 feet from buildings except at points of connection to the building, and where no practicable alternative exists.
   2. Clearance. Trails shall have at least 12 feet of overhead clearance.
   3. No trail shall be installed within 150 feet of an existing oil and gas wellhead.
   4. On riverfront property in the Central Business River Corridor Overlay Zone (RCOZ), at least 70 percent of the trail shall be adjacent to the river or riparian buffer.
   5. Hand and Safety Rails. Hand and safety rails may be required for the safety of the trail users, pursuant to referenced standards, or as determined by the Administrator. Hand and safety rail design, materials, and construction shall be per the current City trail standard or as designated by the Administrator.

D. Lighting. Pedestrian scale lighting shall be required in accordance with referenced standards. All lighting shall comply with the applicable requirements of Division 4-3-2, Lighting. Trail lighting design, manufacturer, model, and installation shall be per the current City trail standard or as designated by the Administrator.

Effective on: 7/1/2014

Sec. 4-2-3-4 Other Trails

A. Generally. Other trails may include unpaved multi-use trails and natural surface trails as defined and generally specified in the POST&R Plan.

B. Design. Design of other trails shall conform to, or be generally consistent with, specifications outlined in Section 5.9 of the POST&R Plan, as amended from time to time.

Effective on: 7/1/2014
Sec. 4-2-3-5 Trailheads and Access Points

A. Generally. Trailheads and trail access points shall be provided between new land uses and adjacent publicly accessible lands. The developer shall work with Administrator in determining level of service facility needs for trailheads based on anticipated level of use.

B. Design. Trailheads and trail access points shall be improved as follows:

1. Destination / Community Trailheads. Trailheads that are expected to attract visitors from more than one-quarter mile from the location of the trailhead shall be developed with:
   a. Four to six parking spaces (depending upon the level of anticipated use determined by the Administrator), designed in accordance with Article 4-5, Parking and Loading, and bounded by curb and gutter or other appropriate, City-approved traffic control and storm water management mechanisms.
   b. Landscaping for the parking lot, as may be required by Article 4-6, Landscaping and Buffering.
   c. Parking lot lighting in accordance with the applicable requirements of Division 4-3-2, Lighting. The Administrator may establish requirements for trailhead parking lot lighting design and installation, including the make and model numbers for fixtures and equipment.
   d. Motor vehicle access barrier(s) between the parking lot and the trail.
   e. Trailhead sign and/or kiosk.
   f. Trash receptacle.

2. Neighborhood Trail Access Points. Trail access points that are expected to predominately attract visitors from within one-quarter mile from the location of the trail access shall provide a trail entrance sign and, if necessary to prevent access by passenger vehicles, a motor vehicle access barrier. Neighborhood trail access points shall be designed to assure drainage and or sediment is not deposited on City streets.

3. Backcountry Trailheads and Access Points. Backcountry trailheads and access points may be established from time to time in areas that are located in a more natural setting where urban design standards may not be appropriate or warranted. In these cases, the Administrator shall define appropriate level of service and design standards for consideration and approval.

Effective on: 7/1/2014

Sec. 4-2-3-6 Hard-Surfaced Trail and Trailhead Design

A. Generally. Hard-surfaced trails, trail heads, and trail access points shall be designed in accordance with this Section, and to the extent they are consistent with this Section, the most recent adopted POST&R Plan, and the most recently published volume of the AASHTO Guide for the Development of Bicycle Facilities.

B. Dimensions and Location.

1. No trail shall be installed within 150 feet of an existing oil and gas wellhead.

2. Trail rights-of-way shall have a minimum width of 20 feet, which shall include a minimum trail surface width of 10 feet, with a minimum of two-foot wide shoulders on each side. Additional right-of-way and / or pavement width may be required if:
   a. The POSTR plan specifies it;
   b. The Administrator finds that the likely volume of the trail requires additional width, up to 14 feet total; and / or
   c. Trail construction requires the construction of a retaining wall or other feature for stabilization or drainage.

3. Trail intersections shall be designed to accommodate a 25-foot turning radius for maintenance vehicles.

4. Trail curves shall be designed with radii of at least 100 feet.
5. On riverfront property in the CBD River Overlay District, at least 70 percent of the trail shall be adjacent to the river or riparian buffer.

C. **Setbacks and Clearance.**
   1. **Setbacks.** Trails shall be set back 15 feet from buildings except at points of connection to the building, and where no practicable alternative exists.
   2. **Clearance.** Trails shall have at least 12 feet of overhead clearance.

D. **Surfacing.** Hard-surfaced trails shall be concrete that meets City standards, and that is capable of withstanding use by City maintenance and emergency service vehicles.

E. **Grade.**
   1. Generally, running slope of a trail shall be less than five percent. However, if such grade is not feasible due to topographic or geological conditions, then trails may be terraced with resting intervals of five percent slope or less, which are at least the width of the trail and not less than five feet in length, which may be connected by:
      a. Up to 8.33 percent grade for runs of 50 feet or less; and
      b. 8.33 to 10 percent grade for runs of 30 feet or less.
   2. Steeper grades than those set out in Subsection E.1., above may be approved if the City Engineer finds that there is no reasonable alternative configuration and the proposal complies with all applicable Americans with Disabilities Act requirements (ADA).
   3. Cross-slope shall not exceed two percent grade.

F. **Hand Rails.** Hand rails may be required as necessary for the safety of the trail users, as determined by the Administrator.

G. **Lighting.** Trails that are shown in the POST&R Plan shall be lit with pedestrian lighting spaced according to specifications promulgated by the City, which shall be consistent with Division 4-3-2, **Lighting.** The Animas River Trail shall be lit with historic pedestrian lighting specified by the City. All lighting shall comply with the applicable requirements of Division 4-3-2, **Lighting.**

H. **Trailheads and Access Points.** Trailheads and trail access points shall be improved as follows:
   1. **Destination / Community Trailheads.** Trail heads that are expected to attract a material number of visitors from more than one-quarter mile from the location of the trail head shall provide:
      a. Hard-surfaced parking in accordance with Article 4-5, **Parking and Loading,** bounded by curb and gutter or other appropriate, City-approved traffic control, and storm water management mechanism;
      b. Landscaping for the parking lot, as required by Article 4-6, **Landscaping and Buffering;** and
      c. A low maintenance, city-approved fence or boulders between the parking lot and the trail.
   2. **Neighborhood Trail Access Points.** Trail access points that are expected to attract predominately visitors from within one-quarter mile from the location of the trail access shall provide a trail sign and a low maintenance, city-approved fence or boulders between the street and the trail.

Effective on: 7/1/2014

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**Division 4-2-4 Access Management**

**Sec. 4-2-4-1 General Access Management Provisions**

A. **Generally.** Access to collector and arterial streets shall be managed according to the standards of this Division.

B. **Restrictions on Access to Curved Streets.** Curb cuts are not allowed on street segments with inside curb radii of less than 150 feet.
C. **Single-Family Detached and Duplex Uses.** Lots that are proposed to be developed with single-family detached or duplex uses shall not take direct access to an arterial or collector street unless no other access is feasible, alternative use is not practical, and the driveway is designed so that vehicles do not back into traffic.

D. **All Uses Except Single-Family Detached and Duplex.** Parcels proposed for development with uses other than single-family detached or duplex uses shall comply with the following access management standards:

1. Parcels that front on arterials and collectors shall provide cross-access to each other unless cross-access is infeasible due to topography or geology.
2. Where connections to abutting parcels are possible, but not currently provided:
   a. The parcel proposed for development shall include a stub-out at a location that allows for a reasonable connection on the abutting parcel (i.e., one that allows for reasonable development of both parcels) in the future; and
   b. The Applicant shall record a cross-access easement, approved as to form by the City Attorney, to allow for future connection of the stub-out to a comparable facility on the abutting parcel.
3. Access shall be spaced according to the standards of Section 4-2-4-2, *Access Spacing and Corner Clearance*. Temporary access (or a continuation of current access) may be provided to parcels which cannot comply with this requirement, provided that reasonable access is unavailable through improved cross-access easements or consolidation of abutting lots.
4. Access shall be designed so that vehicles do not back into traffic.

E. **Degree of Compliance.** If the width of a lot or other constraint prevents an individual access from being compliant with Section 4-2-4-2, *Access Spacing and Corner Clearance*, then common access shall be provided via joint access and/or cross-access easements. Even if common access does not achieve compliance with Section 4-2-4-2, *Access Spacing and Corner Clearance*, it shall be utilized if it creates a wider or safer spacing between access points than would be provided in the absence of common access.

F. **Alternative Access for Corner Lots.** Lots that abut intersections of arterial streets and local streets shall take access from the local street if the access meets the corner clearance requirements of Section 4-2-4-2, *Access Spacing and Corner Clearance*.

G. **Timing of Compliance with this Division.**

1. New development shall demonstrate compliance with this Division for each required development approval.
2. Properties with access connections that do not meet the requirements of this Division shall be brought into compliance to the greatest extent practicable when modifications to the street are made, or when a change in use results in one or more of the following conditions:
   a. A connection permit is required.
   b. A site plan is required.
   c. The site will generate an increase of 20 percent or greater in peak hour trips or 100 vehicles per hour in the peak hour, whichever is less, as determined by one of the following methods:
      1. An estimation based on the Institute of Traffic Engineers (ITE) Trip Generation manual (latest edition) methodology for typical land uses;
      2. Traffic counts made at similar traffic generators located in the City; or
      3. Actual traffic monitoring conducted during the peak hour of the adjacent roadway traffic for the property.
3. If the principal activity on a parcel with access connections that do not meet the regulations of this Division, is discontinued for a period of one year or more, then upon establishment of any use, the parcel must comply with all applicable access requirements of this Division to the extent practicable.

*Effective on: 7/1/2014*
Sec. 4-2-4-2 Access Spacing and Corner Clearance

A. Generally. The minimum spacing requirements of this Section are measured along the edge of the travel way (including curvature, if present), as follows (see Figure 4-2-4-2A, Illustrative Access Spacing and Corner Clearance Measurements, for illustration):

1. Spacing between access points (driveways or alleys) on the same side of the street is measured from the closest points of the curb cuts at the edge of the travel way (the curb face or, if no curb is present, the edge of pavement). This type of spacing is shown in Figure 4-2-4-2A, Illustrative Access Spacing and Corner Clearance Measurements, as "spacing, same side."

2. Spacing between access points (driveways or alleys) on opposite sides of the street is measured along the centerline of the street, as the distance between lines that are parallel to the centerline of the access point, which extend from the closest points of the curb cuts to the centerline of the street. This type of spacing is shown in Figure 4-2-4-2A, Illustrative Access Spacing and Corner Clearance Measurements, as "spacing, opposite side."

3. Spacing between access points (driveways or alleys) and street intersections is measured from the closest point of the curb cut of the access point to a point on a line extending from the edge of the travel way (the curb face or, if no curb is present, the edge of pavement) of the intersecting street. This type of spacing is shown in Figure 4-2-4-2A, Illustrative Access Spacing and Corner Clearance Measurements, as "corner clearance."

B. Access Spacing, Same Side of Street. The minimum access spacing for access points on the same side of the street is set out in Table 4-2-4-2A, Access Spacing, Same Side of Street.

---

**Table 4-2-4-2A**

<table>
<thead>
<tr>
<th>Street Classification</th>
<th>Posted Speed Limit (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Local</td>
</tr>
<tr>
<td>any access</td>
<td></td>
</tr>
<tr>
<td>any</td>
<td></td>
</tr>
<tr>
<td>Access Serves Residential Land Use</td>
<td>20 ft.</td>
</tr>
<tr>
<td>Access Serves Nonresidential or Mixed-Use, Except Industrial Land Use</td>
<td>40 ft.</td>
</tr>
<tr>
<td>Access Serves Industrial Land Use</td>
<td>60 ft.</td>
</tr>
</tbody>
</table>
C. **Access Spacing, Opposite Sides of Street.** In order to prevent conflicting left-turn movements, connections on opposite sides of arterial and collector streets shall be directly opposite each other or offset by a distance of at least 75 feet, unless a median or diverter prevents the potential conflicts.

D. **Corner Clearance.**

1. The minimum corner clearance for access points is set out in Table 4-2-4-2B, *Minimum Corner Clearance*. Figure 4-2-4-2B, *Minimum Corner Clearance Illustration*, illustrates how to use the table.

2. The distances that are set out in the table are the minimum requirements. Since site and intersection design must be considered on an individual basis, greater clearance lengths may be required by the City Engineer if necessary to protect public safety.

3. Shared access may be used to meet the requirements of this Subsection. If the dimensions of an existing lot and the absence of a reasonable opportunity for shared access make compliance with this Subsection impractical, then right-in, right-out access may be permitted by the City Engineer at the farthest available point away from the intersection. For example, a fueling station that cannot establish shared access with neighboring properties may be permitted to have two right-in, right-out access points (one on each frontage), provided that they are located as far away from the intersection as possible.

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**Figure 4-2-4-2B**

**Minimum Corner Clearance Illustration**

![Diagram showing minimum corner clearance](image)

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**Table 4-2-4-2B**

**Minimum Corner Clearance**

<table>
<thead>
<tr>
<th>Intersecting Street Classifications</th>
<th>Minimum Corner Clearance for Access Points on . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street A</td>
<td>Street B</td>
</tr>
<tr>
<td>Residential Driveways</td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>Local 40 feet</td>
</tr>
<tr>
<td>Local</td>
<td>Collector 40 feet</td>
</tr>
<tr>
<td>Collector</td>
<td>Collector 50 feet(^1)</td>
</tr>
<tr>
<td>Arterial</td>
<td>Local 125 feet(^1)</td>
</tr>
<tr>
<td>Arterial</td>
<td>Collector 125 feet(^2)</td>
</tr>
</tbody>
</table>

---

\(^1\) Measured from the outer edge of the street.

\(^2\) Measured from the outer edge of the street.
Table 4-2-4-2B
Minimum Corner Clearance

<table>
<thead>
<tr>
<th>Intersecting Street Classifications</th>
<th>Minimum Corner Clearance for Access Points on . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Street A</td>
</tr>
<tr>
<td>Arterial</td>
<td>Arterial</td>
</tr>
<tr>
<td>Commercial, Mixed-Use, and Industrial Driveways</td>
<td>Local</td>
</tr>
<tr>
<td></td>
<td>Collector</td>
</tr>
<tr>
<td>Collector</td>
<td>Collector</td>
</tr>
<tr>
<td>Arterial</td>
<td>Local</td>
</tr>
<tr>
<td>Arterial</td>
<td>Collector</td>
</tr>
<tr>
<td>Arterial</td>
<td>Arterial</td>
</tr>
</tbody>
</table>

Table Notes:
- Single-family detached and duplex driveways are generally not allowed on this street classification. This standard applies to access to other types of residential development.
- Entrances to multifamily development only, except as provided in Section 4-2-4-1, General Access Management Provisions. An area for stacking vehicles at ingress points to multifamily development may be required by the City Engineer to prevent disruption of traffic flow on the arterial street.
- A variance is required for corner lots with arterial street frontage where the required corner clearance cannot be met as a result of the lot width or depth.

Effective on: 7/1/2014

Sec. 4-2-4-3 Minimum Arterial Frontage

A. **General.** In general, the minimum arterial frontage that is required of lots that take direct access from an arterial of any type shall not be less that that shown in Table 4-2-4-3, Minimum Arterial Lot Frontage. No new lots shall be created that have less frontage than set out in Table 4-2-4-3, Minimum Arterial Lot Frontage, unless the new lots are combinations of smaller lots or the subdivider provides for common access as set out in Subsection C.

<table>
<thead>
<tr>
<th>Posted Speed Limit (mph)</th>
<th>Minimum Lot Frontage (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 30</td>
<td>225</td>
</tr>
<tr>
<td>35</td>
<td>275</td>
</tr>
<tr>
<td>40</td>
<td>330</td>
</tr>
<tr>
<td>45</td>
<td>385</td>
</tr>
<tr>
<td>≥ 50</td>
<td>450</td>
</tr>
</tbody>
</table>

B. **Increased Frontage Requirement.** A greater lot frontage may be required for driveways greater than 25 feet in width, or development that requires more than one access connection to the arterial street.

C. **Decreased Frontage Alternative.** A lesser lot frontage may be provided for lots with common access easements and shared access driveways, provided that the standards of Section 4-2-4-2, Access Spacing and Corner Clearance, are met, and legal instruments are recorded, approved as to form by the City Attorney, as provided in Section 4-2-4-5, Cross Access Easements.

Effective on: 7/1/2014
Sec. 4-2-4-4 Modification of Access Management Requirements

A. Generally. The access management requirements of this Division may be modified according to the standards of this Section.

B. Reduction of Spacing Requirements. The spacing requirements of Section 4-2-4-2, Access Spacing and Corner Clearance, may be reduced if an assessment by the City Engineer of the individual safety and operational considerations of the proposed connection so justifies and:

1. Adequate access connection spacing cannot be achieved, but shared access is established with an abutting property. A shared access agreement, approved as to form by the City Attorney, shall be executed and recorded as provided in Section 4-2-4-5, Cross Access Easements; or

2. No other alternatives exist, and construction of the access connection is along the property line farthest from the intersection or closest access point. To provide reasonable access under these conditions, but also the safest operation, consideration should be given to designing the driveway connection to allow only the right-in turning movement or only the right-in/right-out turning movements, if feasible. In such a case, the Applicant shall also demonstrate that:
   a. The inability to meet the access spacing requirements was not due to the owner subdividing the property after the effective date of this LUDC without providing internal access;
   b. A reasonable offer with regard to cross-access was refused by the adjacent landowner; and
   c. A covenant acceptable to the Administrator to ensure that the connection will be provided and access will be consolidated upon the earlier of:
      1. Approval for development, substantial improvement, or redevelopment of the adjacent property, if providing such connection is a requirement of the approval; or
      2. The Applicant's parcel and the adjacent parcel coming under common ownership.

C. Increase of Spacing Requirements. The City Engineer may require greater access spacing if the use will generate significant truck traffic.

Effective on: 7/1/2014

Sec. 4-2-4-5 Cross Access Easements

A. Generally.
   1. Access that is shared by adjacent properties, whether under single or separate ownership, requires that an appropriate legal instrument, approved as to form by the City Attorney, to ensure continued shared access be approved by the Administrator and recorded in the official public record at the Applicant's expense. The recorded book and page number shall be referenced on any subsequent subdivision plats of the property.

   2. If there is an existing shared access for which there is no recorded legal documentation, such documentation shall be approved as to form by the City Attorney, executed, and recorded.

B. Terms. The City may require that common and cross access easements include one or more of the following:
   1. Agreement for maintenance of shared cross access.
   2. Sufficient width to accommodate a two-way access between properties, designed to accommodate automobiles and service and loading vehicles.
   3. Stub-outs and other design features to allow abutting properties to be tied in to provide future cross access.
   4. Linkage to other cross access drives in the area.

Effective on: 7/1/2014
Division 4-2-5 Utilities

Sec. 4-2-5-1 Utility Connections Required

A. Generally. The City finds that the public health, safety, and welfare is protected and advanced by a safe, reliable, and sustainable water supply and safe and effective treatment of effluent.

B. Connections Required. All new development that is within the City’s utility service area shall be connected to the City’s potable water and sanitary sewer lines or other central community sewer system. Water and/or sewer utilities are subject to payment of water and sewer plant investment fees (PIF) in effect at the time of issuance of a building permit or connection to the utility if no permit is required.

C. Standards and Specifications. All utility construction shall comply with the requirements of the City’s Development Standards and Construction Specifications Manual.

Effective on: 7/1/2014

Sec. 4-2-5-2 Location of Utilities

A. Generally. All new utility lines shall be located underground.

B. Upgrades. Where above-ground utilities must be upgraded to serve development, redevelopment, or substantial improvement of development, they shall be relocated underground along the boundaries of the parcel proposed for development. This requirement may be waived in order to protect significant natural resources or mature vegetation if the application of the requirement would necessarily result in their significant degradation or destruction.

C. Flood Damage Prevention. Public utilities and facilities such as sewer, gas, electrical, and water systems shall be located and constructed to minimize potential damage to the utilities and facilities, and to other buildings and structures that may be affected by their failure, in the event of a base flood.

Effective on: 7/1/2014

Sec. 4-2-5-3 Water Supply

A. Generally. Water supply for new development shall be sufficient to provide for the development’s potable water demand, irrigation needs, and fire protection needs. Water shall be supplied using fire-rated lines that are acceptable to the Durango Fire & Rescue Authority, and installed to the specifications of the City Engineer.

B. Capacity. Applicants for approval of new development, or changes to existing development that the Administrator finds are likely to involve a material additional water demand, shall submit certification from the City Engineer that capacity is available to serve the proposed development.

C. Fire Hydrants. Fire hydrants shall be provided and spaced to the specifications of the Durango Fire & Rescue Authority.

Effective on: 7/1/2014

Sec. 4-2-5-4 Sanitary Sewers

A. Generally. Sanitary sewer service for new development shall be sufficient to provide for the development’s demand for such service. Sanitary sewer lines shall be installed to the specifications of the City Engineer.
B. **Capacity.** Applicants for approval of new development, or changes to existing development that the Administrator finds are likely to involve a material additional sanitary sewer demand, shall submit certification from the City Engineer that capacity is available to serve the proposed development.

Effective on: 7/1/2014

### ARTICLE 4-3 ENVIRONMENTAL QUALITY

### DIVISION 4-3-1 GRADING, EROSION, AND STORMWATER CONTROLS

#### Sec. 4-3-1-1 Legislative Intent and Liability

A. **Legislative intent.** The intent of this Section is to enhance the quality of water in the City’s drainage ways and subsequent receiving waters in order to promote the safety, public health, convenience, and general welfare of the City by:

1. Establishing requirements for stormwater quantity and quality control as part of new development and redevelopment to prevent impacts on the City’s storm sewer system and receiving waters from runoff leaving new development and redevelopment within the City.

2. Establishing requirements for stormwater quality permits for construction activities and development to prevent soil erosion, sedimentation, and other pollutants from leaving construction sites.

B. **Liability.** Any person who undertakes or causes to be undertaken any activity which involves disturbance of the land’s surface shall ensure that soil erosion, sedimentation, increased pollutant loads, and changed water flow characteristics resulting from the activity are controlled so as to minimize pollution of receiving waters. The requirements of this Section are the minimum standards, and a person’s compliance with the same shall not relieve such person from the duty of enacting all measures necessary to minimize pollution of receiving waters.

Effective on: 7/1/2014

#### Sec. 4-3-1-2 General Standards for the Use of Cut and Fill

A. **Generally.** Cut and fill shall be minimized, but where permitted, shall be designed according to the standards of this Section.

B. **Minimization.** Cut and fill shall be minimized in one or more of the following ways:

1. **Streets, Driveways, and Hard-Surfaced Trails.** Streets, driveways, and hard-surfaced trails shall follow existing contours, and shall be designed to minimize cuts and fill in a manner that is consistent with safe geometric design.

2. **Building Foundations.** Where feasible, building foundations shall be stepped to follow significant site contours. Using building foundations as a retaining wall is encouraged.

3. **Limitations on Extent.** On hillsides, grading shall be limited to the area within not more than 10 feet (horizontally) from the building foundation, in order to minimize its impact on existing slopes and vegetation.

C. **Mitigation.** The impacts of cut and fill slopes shall be mitigated according to the following standards:

1. **Regrading.**
   
   a. Where feasible, sites shall be regraded as a stable "natural" slope.
   
   b. Within the River Corridor Overlay Zone (RCOZ), grading shall be consistent with natural contouring and vegetation.
2. **Final Slope of Fill Surfaces.** The slope of fill surfaces shall be no steeper than is safe for the intended use. Fill slopes with a grade that is steeper than 50 percent shall be justified by soils reports or engineering data.

3. **Benching / Terracing.** Large-scale grade changes shall be divided into a series of benches and / or terraces, as follows:
   a. Terraces that are at least six feet in width shall be provided at not more than 30-foot vertical intervals on all cut or fill slopes, in order to control surface drainage and debris.
   b. Where more than two terraces are required, one terrace, located at approximately mid-height, shall be at least 12 feet in width.
   c. Terraces shall be accessible for cleaning and maintenance. Swales or ditches shall be provided on terraces as necessary to provide drainage.
   d. Parking areas that are planned for steep slopes shall be located on terraces that designed to follow site contours.

D. **Screening.** Where cuts are necessary, they shall be screened in one or more of the following ways:
   1. Rock walls;
   2. Landscaping;
   3. Building walls; or

E. **Stabilization and Planting.**
   1. Exposed areas of cut and fill shall be planted with at least two genera of native plants that are selected for their ability to stabilize the slope and prevent erosion. *See Appendix B, Approved Plant List.*
   2. Generally, planting shall be timed within 90 days of the completion of final grading unless other construction activities are planned within 90 days of that date. However, if final grading is completed between October 1 and March 15, planting is required by no later than June 15.
   3. The Administrator may require on-site improvement bonds to guarantee completion of the work.

Effective on: 7/1/2014

**Sec. 4-3-1-3 Design of Drainage Facilities**

A. **Generally.** Open drainage systems and underground drainage systems shall be designed according to the standards of this Section and shall be engineered to comply with applicable state and / or federal water quality or water quantity requirements.

B. **Design Objectives for Open Drainage Systems.** Site drainage using open systems shall be planned such that it:
   1. Minimizes negative impacts on natural site features (e.g., through grading or erosion) and minimizes obstructions or alterations of natural drainageways;
   2. Creates an amenity that is incorporated into the overall landscape scheme, as follows:
      a. Detention and drainage areas with a volume of less than 1,000 cubic feet should be designed as natural landscape amenities;
      b. If feasible, detention and drainage areas with a volume of 1,000 cubic feet or more should be designed as recreational amenities; and
   3. Appears natural in character, even if stabilized for erosion control. For example:
      a. Natural drainage ways should be incorporated into the drainage plan and the site design should feature them as amenities.
b. Storm drains may be developed as an open landscaped feature that is lined with native grasses and indigenous plants, while also meeting technical engineering standards.

c. The use of riprap and other devices that do not appear natural in character should be avoided in favor of treatments that appear more natural in the context of the City and the region, such as local stone, evergreens, and drought tolerant grasses.

C. **Design Objectives for Underground Systems.** When a drainage system cannot be designed as a site amenity, or the drainage system is located in the CB, MU-A, MU-N, and RH districts, an underground drainage system may be developed according to the following parameters:

1. Parking areas shall be designed to minimize stormwater runoff.
2. Porous paving materials, such as interlocking pavers or turf block, may be used to optimize infiltration of storm water into soils.
3. Biofilters shall be incorporated, if feasible, in order to maintain and convey shallow depths of runoff over vegetation.

**Effective on: 7/1/2014**

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**Sec. 4-3-1-4 Stormwater Quality Permit Requirement**

A. **Permit Requirement.** It shall be unlawful for any person to conduct any land disturbing activity without first obtaining a stormwater quality permit when such disturbances occur under the following conditions:

1. Land disturbance activities that result in a total disturbed area of one acre or more, including projects less than one acre that are part of a larger common plan of development or sale.
2. Land disturbing activities occurring in a sensitive area.
3. Land disturbing activities have the potential to affect a sensitive area, as determined by the City Engineer.
4. The City Engineer may also require a stormwater quality permit regardless of the size of the total disturbed area in conjunction with approval of a final subdivision plat, site development plan, or other permit issued by the City.
5. A stormwater quality permit is required for construction activity located within the River Corridor Overlay Zone (RCOZ).
6. A stormwater quality permit is required for locations where the cumulative effect of physical features, such as steep slopes (three feet horizontal to one foot vertical or steeper), will create erosion problems. Stormwater discharges from areas dedicated to producing earthen materials, such as soils, sand, and gravel, for use at a single construction site are subject to stormwater quality permits as well.
7. Stormwater quality permits for stormwater discharges from dedicated asphalt batch plants and dedicated concrete batch plants.
8. A stormwater quality permit does not authorize the discharge of mine water or process water from such areas.

B. **Permits from Other Jurisdictions.** Issuance of a permit by the City does not exempt the parties from obtaining any permits required by the State of Colorado or the Federal Government.

C. **Refer to Appendix C, Stormwater Quality Permits, for further details regarding Stormwater Quality Permits.**

**Effective on: 7/1/2014**

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**Sec. 4-3-1-5 General Stormwater Requirements**

A. **Generally.** The following provisions apply to activities that may impact water quality. More specific standards may be applied, as codified in this Article.
1. Stormwater discharges from construction activities shall not cause, have the reasonable potential to cause, measurably contribute to an exceedance of any water quality standard, including narrative standards for water quality, or threaten to cause pollution, contamination, or degradation of waters of the state.

2. All temporary and permanent erosion control facilities intended to control erosion of any earth disturbance operation shall be installed before any construction activities take place.

3. Any earth disturbance shall be conducted in such a manner so as to effectively reduce accelerated soil erosion and resulting sedimentation, and should not exceed the erosion expected to occur for the site in the site's totally undeveloped state.

4. All earth disturbances shall be designed, constructed, and completed in such a manner so that the exposed area of any disturbed land shall be limited to the shortest possible period of time.

5. Sediment caused by accelerated soil erosion shall be removed from runoff water before it leaves the site of the disturbed area.

6. Any temporary or permanent facility designed and constructed for the conveyance of water around, through, or from the earth disturbance area shall be designed to limit the water flow to a non-erosive velocity.

7. Construction site operators shall control waste such as, but not limited to, discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.

8. Concrete washout water shall not be discharged to the municipal separate storm sewer system (MS4) or waters of the state. On-site permanent disposal of concrete washout waste is not authorized by the permit. Discharge to the ground of concrete washout waste that will subsequently be disposed of off-site is authorized by the permit. See Section 4-3-1-8 Prohibition of Non-Stormwater Discharges, for more information about concrete washout.

9. Off-site vehicle tracking of sediments shall be minimized. Vehicle tracking on City streets shall not be allowed to enter the MS4 or waters of the state.

10. Bulk storage structures for petroleum products and other chemicals shall have secondary containment or equivalent adequate protection so as to contain all spills and prevent any spilled material from entering the MS4 or waters of the state.

11. No chemicals are to be added to the discharge unless the Colorado Department of Public Health and Environment (CDPHE) grants permission for the use of a specific chemical and documentation of which is presented to the City.

12. Solids, sludges, or other pollutants removed in the course of treatment or control of wastewaters shall be properly disposed of in a manner such as to prevent any pollutant from such materials from entering the MS4 or waters of the state.

13. All wastes composed of building materials must be removed from the site for disposal in licensed disposal facilities. No building material wastes or unused building materials shall be buried, dumped, or discharged at the site.

14. All discharges must comply with the lawful requirements of Federal, State, City, La Plata County, and other local agencies regarding any discharges of stormwater to the MS4 or waters of the State of Colorado under their jurisdiction, including applicable requirements.

15. Temporary soil erosion control facilities shall be removed and earth disturbance areas graded and stabilized with permanent soil erosion control measures pursuant to standards and specifications prescribed in accordance with the provisions of the latest revision of the stormwater management plan guidance document prepared by the CDPHE, and in accordance with the permanent erosion control features shown on the Stormwater Management Plan (SWMP) approved by the City.

16. The City reserves the right to require sampling and testing on a case-by-case basis in the event that there is reason to suspect that compliance with the SWMP is a problem, or to measure the effectiveness of the Best Management Practices (BMPs) in removing pollutants in the effluent. Such monitoring may include whole effluent toxicity testing.
17. Construction sites with more than five acres of land disturbance (or any site required to obtain a State permit from the Colorado Discharge Permit System) shall purchase a City approved weather station to record precipitation events at the site.

18. The permit does not relieve the permittee of reporting the federal requirements of 40 CFR 110, 40 CFR 117, or 40 CFR 302. Any discharge of hazardous materials must be handled in accordance with the City's noncompliance notifications requirements.

19. The permittee shall take all reasonable steps to minimize any adverse impacts to waters of the State resulting from noncompliance with any effluent limitations specified in the permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

Effective on: 7/1/2014

Sec. 4-3-1-6 Best Management Practices (BMPs) Design Standards

A. New Development and Redevelopment Stormwater Quality Requirements. New development and redevelopment projects that disturb at least one acre of land, including projects less than one acre that are part of a larger common plan of development or sale or are within the Riverfront Corridor Overlay Zone (RCOZ), must address stormwater runoff quantity and quality through the use of structural and nonstructural BMPs.

1. Criteria for new development and redevelopment planning, water quality protection, the selection, and the design of which BMPs are adequate for specific developments shall be determined using the latest revision of the Urban Drainage and Flood Control District's ("UDFCD") Urban Storm Drainage Criteria Manuals ("USDCM"). BMPs selected must be designed and implemented according to the UDFCD-USDCM specifications and following good engineering, hydrologic, and pollution control practices. For purposes of stormwater detention design, the following specific criteria within the latest revision of the UDFCD-USDCM must be followed: For design of stormwater detention facilities, the full-spectrum detention sizing criteria must be used.

2. Use of manufactured devices, such as stormwater quality vaults, are subject to the approval of the City Engineer and are restricted to the following conditions:
   a. The paved area served by the device shall be no greater than three acres;
   b. There shall be paved access to such devices at a minimum of five feet in distance between the pavement and the maintenance hatch to the vault; and
   c. Salts, metals, pesticides, organic solvents, fertilizers, and other water-soluble materials shall not be stored in areas served by water quality vaults.

3. Structural BMPs shall be located on private property when possible.
   a. When so located, the BMP shall be owned and operated by the owner of the property on which the facility is located.
   b. As a condition of approval of the BMP, the owner shall agree to operate and maintain the BMP to its design capacity unless / until the City shall relieve the property owner of that responsibility in writing.
   c. The obligation to maintain the BMP shall be memorialized on a subdivision plat, annexation plat, or in another form acceptable to the City Attorney, and shall be recorded in the office of the La Plata County Clerk and Recorder.
   d. If the property owner(s) do not successfully complete all required work or violate any requirement of this Section, the City may take corrective measures and charge the cost of such to the permittee.
      1. Such costs shall include the actual cost of any work deemed necessary by the City.
      2. If the total of such costs exceeds the security, the permittee shall be responsible for payment of the remaining balance in addition to an administrative fee equal to 10 percent of the actual cost of any work deemed necessary by the City within 30 calendar days of receipt of an accounting of such from the City.
3. The City may place a lien on the property or properties for which the permit covers for failure by the permittee or property owner to provide payment to the City of the remaining balance, in addition to the administrative fee until such time all outstanding payments to the City have been processed.

4. When the BMP must be located within the public right-of-way or within property owned by the City of Durango, the City shall own, operate, and maintain the facility. The City may take measures to restrict flows from properties using the BMP and the owner of the property whose flow is restricted may be required to treat stormwater upon reasonable notice from the City.

B. BMPs not included within the latest revision to the UDFCD-USDCM may be used for this requirement only with the approval of the City Engineer.

C. BMPs implemented at the site must be adequately designed to provide control for all potential pollutant sources associated with construction activity to prevent pollution or degradation of the MS4 or waters of the State.

D. Construction BMPs implemented at the site shall be described in the Stormwater Management Plan (SWMP), and shall be updated regularly to accurately reflect onsite conditions. (See Division 5-5-3, Stormwater Management Plans and Stormwater BMPs).

Effective on: 7/1/2014

Sec. 4-3-1-7 Post-Construction Best Management Practices (BMPs)

A. Generally. Under the post-construction stormwater management in new development and redevelopment provisions, the MS4 General Permit (CWQCD 2008) requires the permittee to address stormwater runoff from new development and redevelopment that discharge into the MS4.

B. The permittee must address stormwater quality through the use of structural and nonstructural BMPs designed to prevent or minimize water quality impacts. The selection, design, and installation of appropriate structural and nonstructural BMPs must be done in accordance with the latest revision of the Urban Drainage and Flood Control District’s Urban Storm Drainage Criteria Manual.

C. Post-Construction (Permanent) Stormwater BMPs are generally divided into two categories: Treatment BMPs and Source Control BMPs.

1. Treatment BMPs. Post-Construction Treatment BMPs include a variety of alternatives generally categorized as conveyance practices and storage practices (e.g. a grass swale, retention pond, or sand filter) that provide treatment of the stormwater runoff quantity and quality.

2. Source Control BMPs. Proactively controlling pollutants at their source is fundamental to effective stormwater quality. Typically, it is easier and more cost-effective to prevent stormwater pollution than to remove contaminants once they have entered the storm sewer system or receiving water. A good Source Control BMP is one that is effective at stopping and / or redirecting pollutants prior to entering the storm sewer system. A Source Control BMP can be a structural component of a planned site (e.g. a covered area for material storage) or a procedural BMP. Procedural BMPs depend on behavior change accomplished through public education, training, and development of standard operating procedures.

Effective on: 7/1/2014

Sec. 4-3-1-8 Prohibition of Non-Stormwater Discharges

A. Except as provided in Subsections B., C., and D. below, all discharges covered by the permit shall be composed entirely of stormwater associated with construction activity. Discharges of material other than stormwater must be addressed in a separate Colorado Discharge Permit System (CDPS) permit issued for that discharge.
B. Discharges exempt from discharge prohibitions (See Article VI of Chapter 25 of City Municipal Code) that are combined with stormwater discharges associated with construction activity may be authorized by the permit, provided that the non-stormwater component of the discharge is identified in the SWMP in accordance with the most recent SWMP guidance document prepared by the Water Quality Control Division (WQCD) of the Colorado Department of Public Health and Environment (CDPHE).

C. Discharges to the ground of concrete washout water from washing of tools and concrete mixer chutes may be authorized by the permit, provided that:
   1. The source is identified in the SWMP;
   2. BMPs are included in the SWMP in accordance with the most recent SWMP guidance document prepared by the WQCD and to prevent pollution of groundwater in violation of Subsection A. of Section 4-3-1-4, Stormwater Quality Permit Requirement; and
   3. These discharges do not leave the site as surface runoff to the MS4 or waters of the State.

D. Discharges to the ground of water from construction dewatering activities may be authorized by this permit, provided that;
   1. These discharges do not leave the site as surface runoff to the MS4 or to waters of the State;
   2. BMPs are included in the SWMP in accordance with the most recent SWMP guidance document prepared by the WQCD;
   3. The source is identified in the SWMP; and
   4. The source is groundwater and / or groundwater combined with stormwater that does not contain pollutants in concentrations exceeding the State groundwater standards in Regulations 5 CCR 1002-41 and 42.

E. Discharges to the ground from construction dewatering activities that do not meet the above criteria must be covered under a separate CDPS discharge permit. Contaminated groundwater requiring coverage under a separate CDPS discharge permit may include groundwater contaminated with pollutants from a landfill, mining activity, industrial pollutant plume, underground storage tank, or other source.

Effective on: 7/1/2014

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**Division 4-3-2 Lighting**

**Sec. 4-3-2-1 Purpose and Applicability of Division**

A. **Purpose**. The purposes of this Division are to:
   1. Allow for the reasonable use of outdoor lighting;
   2. Minimize adverse offsite impacts, including light trespass and glare;
   3. Improve views of the night sky;
   4. Improve sleeping conditions for City residents and visitors; and
   5. Conserve energy.

B. **Applicability**. This Division applies to all outdoor lighting that is installed (including replacement fixtures) after the effective date of this LUDC. Section 4-3-2-3, Lumen Allowance, through Section 4-3-2-7, Intense and Specialty Lighting, apply to all development; except individual residential lots used for single-family detached or duplex units. Section 4-3-2-8, Single-Family and Duplex Lighting, applies to individual lots used for single-family detached and duplex units. Conformance with this Division is required for the following:
   1. Design Review Board and Historic Preservation Board Applications: Compliance with this Division is required for all Design Review Board and Historic Preservation Board submittals for activities affecting uses other than single...
family / duplex uses. Lighting plans shall be submitted with these applications when required by the Administrator.

2. **Land Use Applications**: Compliance with this Division is required for all land use applications. Lighting Plans shall be submitted with all conditional use permits and site plan reviews. Lighting plans may be required for special use permits and limited use permits, when required by the Administrator.

3. **Building Permit Applications**: Lighting plans shall be submitted with building permit applications. Lighting improvements shall be installed prior to a final inspection for any redevelopment or remodeling of an existing structure that entails expansion to the square footage or an exterior remodel of the building other than single-family detached or duplex units.

C. **Exemptions.** Except as specifically provided in Section 4-3-2-7, *Intense and Specialty Lighting*, this Division does not apply to any of the following:
   1. Lighting within the public right-of-way that is used principally to illuminate streets.
   2. Lighting of signs, which is regulated by Article 3-6, *Signs*.
   3. Temporary lighting of construction sites and special events.
   4. Holiday lighting, displayed for less than 60 days, provided that individual lamps are less than 10 watts and 70 lumens.
   5. Emergency lighting.

D. **Resolution of Conflicts.**
   1. When the requirements of this Division conflict with lighting that is required by Federal or State law, the Federal or State requirements control, but only to the extent of the specific conflict.
   2. In the alternative to applying standards of this Division which may conflict, the City may implement recommendations by the Federal Aviation Administration (FAA) regarding the use of lighting to avoid or mitigate hazards to air navigation.

Effective on: 7/1/2014

Sec. 4-3-2-2 Lighting Zones

A. **Generally.** Lighting zones are established in order to provide for lighting standards that are contextually appropriate for the different locations and functions within the City. The zones established by this Section are used throughout this Division.

B. **Establishment of Lighting Zones.** The City is divided into five lighting zones:
   1. **LZ0: No Ambient Lighting.** This zone includes areas where the natural environment will be seriously and adversely affected by lighting. Impacts include disturbing the biological cycles of flora and fauna and/or detracting from human enjoyment and appreciation of the natural environment. Human activity is subordinate in importance to nature. The vision of human residents and users is adapted to total darkness, and they expect to see little or no lighting. When not needed, lighting should be extinguished.
   2. **LZ1: Low Ambient Lighting.** This zone includes areas where lighting might adversely affect flora and fauna or disturb the character of the area. The vision of human residents and users is adapted to low light levels. Lighting may be used for safety, security, and/or convenience, but it is not necessarily uniform or continuous. After curfew, most lighting should be extinguished or reduced as activity levels decline.
   3. **LZ2: Moderate Ambient Lighting.** This zone includes areas of human activity where the vision of human residents and users is adapted to moderate light levels. Lighting may typically be used for safety, security, and/ or convenience, but it is not necessarily uniform or continuous. After curfew, lighting may be extinguished or reduced as activity levels decline.
4. **LZ3: Moderately High Ambient Lighting.** This zone includes areas of human activity where the vision of human residents and users is adapted to moderately high light levels. Lighting is generally desired for safety, security, and / or convenience, and it is often uniform and / or continuous. After curfew, lighting may be extinguished or reduced in most areas as activity levels decline.

5. **LZ4: High Ambient Lighting.** This zone includes areas of human activity where the vision of human residents and users is adapted to high light levels. Lighting is generally considered necessary for safety, security, and / or convenience, and it is mostly uniform and / or continuous. After curfew, lighting may be extinguished or reduced in some areas as activity levels decline. This zone is very rarely applied. Lighting plans in this zone are approved through a specialty lighting permit as described in Section 4-3-2-7, *Intense and Specialty Lighting*.

### C. Application of Lighting Zones.

1. **In General.** Lighting zone boundaries correspond to zoning district boundaries, as set out in Table 4-3-2-2A, *Lighting Zones by Zoning District*.

<table>
<thead>
<tr>
<th>Lighting Zone</th>
<th>Residential</th>
<th>Mixed-Use</th>
<th>Nonresidential</th>
<th>Rural</th>
<th>Public and Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EN / EN-MF</td>
<td>RL</td>
<td>RM</td>
<td>RH</td>
<td>CB</td>
</tr>
<tr>
<td>LZ0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>LZ1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>NA</td>
</tr>
<tr>
<td>LZ2</td>
<td>NA</td>
<td>NA</td>
<td>Note 1</td>
<td>Note 1</td>
<td>✓</td>
</tr>
<tr>
<td>LZ3</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>LZ4</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**TABLE NOTE:**
LZ2 applies to public schools and to neighborhood center subdistricts of TNDs
NA = Not Applicable

2. **Special Conditions.** The lighting zones of Table 4-3-2-2A, *Lighting Zones by Zoning District*, are superseded for special conditions, as set out in Table 4-3-2-2B, *Lighting Zones for Special Conditions and Specific Uses*.

<table>
<thead>
<tr>
<th>Special Condition or Specific Use</th>
<th>LZ0</th>
<th>LZ1</th>
<th>LZ2</th>
<th>LZ3</th>
<th>LZ4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ridgeline or Skyline Outside of OS Zone</td>
<td>NA</td>
<td>✓</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Play Courts, Athletic Fields, Fairgrounds and Stadiums, During Events</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>✓</td>
</tr>
</tbody>
</table>

**TABLE NOTES:**
NA = Not Applicable

Effective on: 7/1/2014
Sec. 4-3-2-3 Lumen Allowance

A. Generally. The total installed initial lamp lumens of all outdoor lighting on a parcel proposed for development or redevelopment shall not exceed the lumen allowance. The initial lamp lumens are typically found on the manufacturer's specifications. The lumen allowance is established using any one of the applicable alternative methodologies of this Section.

B. Calculation of Lumens.

1. The total installed lumens on a parcel proposed for development is calculated as:
   a. The sum of initial lamp lumens for all luminaires tested with relative photometry; plus
   b. 1.4 times the sum of the initial lamp lumens for all luminaires tested with absolute photometry.

2. On parcels where there is existing lighting that will be retained, such lighting is included in the calculation of total installed lumens.

C. Parking Space and Hardscape Methods. The lumen allowance may be calculated by the parking space method or hardscape area method, as set out in Table 4-3-2-3A, Lumen Allowance; Parking Space and Hardscape Methodologies. If a use has 10 or fewer parking spaces, the Applicant may choose which method they would like to use to calculate Total Lumen Allowance. If the use has more than 10 parking spaces, the Hardscape Area Method shall be used. The table does not limit the location or direction of luminaires.

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Initial Lumens by Lighting Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LZ0</td>
</tr>
<tr>
<td>Parking Space Method (allowed only if use has 10 or fewer parking spaces), lumens per parking space</td>
<td>500</td>
</tr>
<tr>
<td>Hardscape Area Method (allowed for all projects), lumens per square foot of hardscape</td>
<td>1.5</td>
</tr>
</tbody>
</table>

D. Performance Method. In the alternative to the Parking Space Method or Hardscape Method, the lumen allowance may be calculated by taking the sum of the allowances for site, hardscape, and hardscape perimeter, as set out in Table 4-3-2-3B, Lumen Allowance; Performance Methodology. The specific applications that are set out in Table 4-3-2-3C, Additional Lumen Allowances, are subject to their own requirements, and not the general lumen allowance established by Table 4-3-2-3B, Lumen Allowance; Performance Methodology.

<table>
<thead>
<tr>
<th>Allowance</th>
<th>Initial Lumens by Lighting Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site</td>
<td>LZ0</td>
</tr>
<tr>
<td>Hardscape, per square foot</td>
<td>0</td>
</tr>
<tr>
<td>Hardscape Perimeter, per linear foot</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location or Type of Luminaire</th>
<th>Allowance Available If...</th>
<th>Measurement Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Initial Lumens by Lighting Zone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LZ0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L20</td>
</tr>
<tr>
<td>Luminaire at Building Entrance</td>
<td>Luminaire is located within 20 feet of Building Entrance or Exit, or within 100 feet of Building Entrance or Exit of Police, Fire, EMT, or Nursing Home facility</td>
<td>Total Lumens</td>
</tr>
<tr>
<td>Building Facade Lighting</td>
<td>Luminaires must face facade, illuminate it without obstruction, and may not spill over into other areas</td>
<td>Lumens per sf. of Facade Plane</td>
</tr>
<tr>
<td>Outdoor Sales Lot Lighting</td>
<td>Lights are located on parcel proposed for development within 30 feet of sales lot area, which does not include parking, driveways, and areas not used for sales</td>
<td>Base Allowance, Plus Lumens per sf. of Sales Lot Area</td>
</tr>
<tr>
<td>Hardscape Ornamental Lighting</td>
<td>Luminaires are 1,000 initial lumens or less</td>
<td>Lumens per sf. of Illuminated Hardscape</td>
</tr>
<tr>
<td>Drive-Through Windows</td>
<td>Luminaires are within 20 feet of the center of the window</td>
<td>Lumens per Drive-Through Window</td>
</tr>
<tr>
<td>Guard Stations</td>
<td>Luminaires are within 40 feet of vehicle lane or guard station</td>
<td>Lumens per (sf. of Guard Station + 2,000 sf. per Vehicle Lane)</td>
</tr>
<tr>
<td>Outdoor Dining</td>
<td>Luminaires are within 30 feet of the hardscape used for outdoor dining</td>
<td>Lumens per sf. of hardscape area used for outdoor dining</td>
</tr>
<tr>
<td>Light Automobile Service / Fueling Station Hardscape</td>
<td>Luminaires must be illuminating hardscape area, and must not be within a building, below a canopy, beyond property lines, or obstructed by a sign or other structure</td>
<td>Lumens per sf. of hardscape area that is not within a building, under a canopy, off property, or obstructed by signs or other structures</td>
</tr>
<tr>
<td>Light Automobile Service / Fueling Station Canopies</td>
<td>Luminaires are located under the canopy and are not visible from abutting properties or public rights-of-way</td>
<td>Lumens per sf. of Area within Drip Line of a Canopy</td>
</tr>
<tr>
<td>Fueling Station Fuel Dispensers</td>
<td>Luminaires are within two mounting heights of dispensers</td>
<td>Lumens per fueling side (2 maximum) per dispenser</td>
</tr>
<tr>
<td>All Other Sales Canopies</td>
<td>Luminaires are located under the canopy and are not visible from abutting properties or public rights-of-way</td>
<td>Lumens per sf. of Area within Drip Line of a Canopy</td>
</tr>
<tr>
<td>Non-Sales Canopies</td>
<td>Luminaires are located under the canopy and are not visible from abutting properties or public rights-of-way</td>
<td>Lumens per sf. of Area within Drip Line of a Canopy</td>
</tr>
</tbody>
</table>

**Effective on: 7/1/2014**

### Sec. 4-3-2-4 Off-Site Impacts

**A. Generally.** Off-site impacts shall be limited through the orientation, shielding, and screening of fixtures, and one of the two alternative performance measures of this Section (see Subsection C. or Subsection D., below). Only one of the alternative performance measures may be applied per site plan.

**B. Required Orientation of Fixtures.**

1. Except as may be allowed by Section 4-3-2-7, *Intense and Specialty Lighting*, all fixtures shall be oriented, shielded, and / or screened such that the source of light is not visible from off-site (including but not limited to property that is downhill from the fixtures).

2. All fixtures that are less than two mounting heights to a property line shall be oriented so that their backlight is directed toward the property line.
3. Building-mounted luminaires that cannot be mounted with their backlight to the property line shall meet the following standards:
   a. The glare rating ("G") shall not exceed the standard for "all luminaires that are not building-mounted," as set out in Table 4-3-2-4, *Maximum BUG Ratings by Type, Location, and Lighting Zone*.
   b. The light from the luminaire shall not exceed the backlight ("B") rating in the direction of the property line.

4. Luminaires that have adjustable mounts that permit aiming in the field are not allowed.

C. **Tabular Alternative Performance Measure.** Lighting plans may be approved if it is demonstrated that luminaires will not exceed any of the maximum BUG ratings based on their locations and lighting zones, as set out in Table 4-3-2-4, *Maximum BUG Ratings by Type, Location, and Lighting Zone*. BUG ratings are typically provided on manufacturer's specifications for lighting fixtures.

<table>
<thead>
<tr>
<th>Mount Type; Distance from Property Line to Fixture</th>
<th>BUG Rating by Lighting Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LZ0</td>
</tr>
<tr>
<td>Allowed Backlight (&quot;B&quot;) Rating</td>
<td></td>
</tr>
<tr>
<td>Any mount type; More than 2 x mounting height</td>
<td>B1</td>
</tr>
<tr>
<td>Any mount type; 1 to 2 x mounting height</td>
<td>B1</td>
</tr>
<tr>
<td>Any mount type; 0.5 to 0.99 x mounting height</td>
<td>B0</td>
</tr>
<tr>
<td>Any mount type; Less than (0.5 x mounting height to right-of-way property line, plus 2.5 ft.)</td>
<td>B0</td>
</tr>
<tr>
<td>Any mount type; Less than 0.5 x mounting height to interior property line</td>
<td>B0</td>
</tr>
<tr>
<td>Allowed Uplight (&quot;U&quot;) Rating</td>
<td></td>
</tr>
<tr>
<td>Any mount type; any distance to property line</td>
<td>U0</td>
</tr>
<tr>
<td>Allowed Glare (&quot;G&quot;) Rating</td>
<td></td>
</tr>
<tr>
<td>All luminaires that are not building-mounted</td>
<td>G0</td>
</tr>
<tr>
<td>Building mounted; More than 2 x mounting height</td>
<td>G0</td>
</tr>
<tr>
<td>Building mounted; 1 to 2 x mounting height</td>
<td>G0</td>
</tr>
<tr>
<td>Building mounted; 0.5 to 0.99 x mounting height</td>
<td>G0</td>
</tr>
<tr>
<td>Building mounted; Less than 0.5 x mounting height to property line</td>
<td>G0</td>
</tr>
</tbody>
</table>

C. **Modeling Alternative Performance Measure.** Lighting plans may be approved if it is demonstrated that they comply with the requirements of this Subsection. This alternative requires that the entire outdoor lighting design be analyzed using industry standard lighting software approved by the Administrator. The analysis shall include inter-reflections in the following manner:

1. **Input Data.** Input data shall appropriately describe the lighting system, and shall include:
   a. Luminaire locations, mounting heights, and aiming directions;
   b. Photometric data tested in accordance with Illuminating Engineering Society of North America ("IES") guidelines; and
   c. Buildings and other physical objects on the site within three object heights of the property line.

2. **Analytical Requirements.** The analysis shall assume an enclosure around the property with vertical planes along each property line and a horizontal plane that is 10 feet above the height of the tallest (or highest) luminaire. Calculations shall include the total lumens upon the inside surfaces of said horizontal and vertical planes, and the maximum line of sight (or "TV") illuminance (foot-candles) on the sides of the enclosure.

3. **Compliance Thresholds.** The lighting design is in compliance with this Section if:
   a. The total lumens on the inside surfaces of the planes assumed by Subsection C.2., above, is less than 10 percent of the lumen allowance established by Section 4-3-2-3, *Lumen Allowance*. 
b. The maximum line of sight (or "TV") illuminance on any vertical plane assumed by Subsection C.2., above, is less than the permitted maximum TV illuminance that is set out in Table 4-3-2-4, *Maximum TV Illuminance by Lighting Zone*.

<table>
<thead>
<tr>
<th>Illuminance Unit</th>
<th>LZ0</th>
<th>LZ1</th>
<th>LZ2</th>
<th>LZ3</th>
<th>LZ4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Footcandles</td>
<td>0.05</td>
<td>0.10</td>
<td>0.30</td>
<td>0.80</td>
<td>1.50</td>
</tr>
</tbody>
</table>

D. **Light Trespass.** Neither internal nor exterior lighting shall be the cause of light trespass.

1. Light trespass is measured by vertical readings in footcandles (fc) at the brightest point on the property line.
2. Light from multifamily residential, public, commercial, and industrial properties or properties with a 5 foot or less building setback (front, side, or rear) may trespass onto public rights-of-way to a level not to exceed 1.5 fc as measured from the property line.
3. Light from multifamily residential, public, commercial, and industrial properties may trespass onto adjacent multifamily residential, public, commercial, and industrial properties to a level not to exceed 1.5 fc as measured from the property line.
4. Light from multifamily residential, public, commercial, and industrial properties may trespass onto adjacent single or two family residential properties to a level not to exceed 0.8 fc as measured from the property line.
5. Light from a single or two family residential property may trespass onto adjacent single or two family residential properties to a level not to exceed 0.8 fc as measured from the property line.

*Effective on: 3/2/2016*

**Sec. 4-3-2-5 Lighting Controls**

A. **Lighting Controls Required.** Outdoor lighting shall be controlled by automatic switches that turn the lights off during periods when daylight exceeds the maximum illuminance of the lighting zone. Such switches may include:

1. Photoelectric switches;
2. Astronomic time switches or equivalent functions from programmable lighting controllers, building automation systems, or lighting energy management systems; or
3. Play courts and athletic fields shall have auto-control based on time so that lights go out after a certain length of time or at a certain time of day.

B. **Exceptions.** Automatic controls are not required for:

1. Lighting under canopies;
2. Lighting of parking structures; and
3. Fairgrounds and stadiums. (See Section 4-3-2-7, *Intense and Specialty Lighting.*)

*Effective on: 7/1/2014*
Sec. 4-3-2-6 Lighting Curfew

A. Generally. A lighting curfew is established, after which lights must be dimmed or extinguished. The requirements for each lighting zone are established in Subsection B., and exceptions are set out in Subsection C.

B. Lighting Curfew. Total outdoor lumens shall be reduced by at least 30 percent not later than:
   1. One hour after the close of business.
   2. For 24-hour businesses: 11:00 PM

C. Exceptions. The following are not subject to lighting curfew requirements:
   1. Lighting on residential property, except landscape lighting (which is subject to the lighting curfew).
   2. Code required lighting for steps, stairs, walkways, and building entrances.
   3. Motion sensor lights that are illuminated for not more than five minutes after motion within the sensor area stops.
   4. Administratively-approved waiver issued by the Administrator for special circumstances showing a unique need for lighting outside of the curfew requirements.

Effective on: 7/1/2014

Sec. 4-3-2-7 Intense and Specialty Lighting

A. Generally. The lighting systems described in this Section require a specialty lighting permit. Such permit is subject to the standards of Subsection C.

B. Specialty Lighting Permit Requirement. A specialty lighting permit is required for:
   1. High-Intensity and Special Purpose Lighting.
      a. Temporary lighting in which any single luminaire exceeds 20,000 lumens or the total lighting exceeds 160,000 lumens;
      b. Aerial lasers; and
      c. Other lighting with a light source exceeding 200,000 lumens or an intensity in any direction of more than 2,000,000 candelas.
   2. Complex Uses. Lighting that does not comply with the technical requirements of this Division but is consistent with its intent may be approved for complex sites or uses that have demonstrated special lighting needs, including but not limited to:
      a. Sports facilities;
      b. Construction sites;
      c. Industrial sites;
      d. Parking structures;
      e. Urban parks; and
      f. Public monuments and bridges.

C. Standards for Permit Issuance. A specialty lighting permit may be issued if it is demonstrated that:
   1. The Applicant has made every reasonable effort to mitigate the effects of light on the environment and surrounding properties (e.g., selection and orientation of luminaires, bufferyard plantings, fences or walls, etc.), and the effort is documented according to the performance method set out in Section 4-3-2-4, Off-Site Impacts. Among the efforts shall be a project-specific curfew that shall be incorporated into the permit.
   2. The lighting system includes controls to reduce lighting at the project-specific curfew. (See Section 4-3-2-6, Lighting Curfew.)
3. The parcel proposed for development shall comply with the standards of the performance method set out in Section 4-3-2-4, Off-Site Impacts, after the project-specific curfew.

Effective on: 7/1/2014

Sec. 4-3-2-8 Single-Family and Duplex Lighting

A. Generally. The standards of this Section apply to outdoor lighting on individual single-family detached and duplex lots. Motion sensor security lighting is exempt from this Section, provided that:
   1. Detection sensors do not activate the light due to off-site motions;
   2. The security lighting is not illuminated off-site; and
   3. The security lighting is illuminated for not more than five minutes after motion within the sensor area stops.

B. Direction of Lighting. All directional lighting shall be aimed away from adjacent properties and rights-of-way.

C. Nuisance Lighting. Outdoor residential lighting shall not cast more than 0.10 foot-candles of light on abutting property, measured horizontally and vertically at the property line.

Effective on: 7/1/2014

Division 4-3-3 Noise, Vibration, and Pollution

Sec. 4-3-3-1 Noise and Vibration

A. Noise. Unless noise is further limited by application of Article 2-2, Special, Limited, and Conditional Use Standards, noise shall be limited as provided in Chapter 16, Noise, City of Durango Code of Ordinances.

B. Vibration. Ground vibrations shall not be perceptible at the property lines of the use which generates them.

Effective on: 7/1/2014

Sec. 4-3-3-2 Pollution

Dust, fumes, odors, refuse matter, smoke, and vapor will be effectively confined to the premises where located, or effectively minimized, so as not to be injurious to the neighborhood or detrimental to the general public.

Effective on: 7/1/2014

ARTICLE 4-4 NATURAL AND ARCHAEOLOGICAL RESOURCES

Division 4-4-1 Purpose and Application of Article

Sec. 4-4-1-1 Purpose of Article

Appropriate stewardship of the natural resources of the City is vital to the City's environmental, economic, and social sustainability. It is the purpose of this Article to establish parameters for such stewardship, including protecting and replenishing key resources, avoiding natural hazards, and minimizing impacts of extractive activities. Individual Divisions of this Article may enumerate additional purposes.

Effective on: 7/1/2014
Sec. 4-4-1-2 Application of Article

A. Generally. This Article applies as set out in the individual Divisions herein. A general overview of the Divisions is set out below:

B. Resource Protection Standards. The resource protection standards in Division 4-4-2, Resource Protection Standards, are intended to require development designs that avoid and minimize impacts on identified natural resources. Most of the standards are applied to nonresidential and subdivision development. A more limited set of standards may apply to the development of individual residential lots or parcels. In some zones, clustered development designs may be used in order to minimize the impact of resource protection on development yield.

C. Hillsides, Ridgelines, and Topographic Features. Division 4-4-3, Hillsides, Ridgelines, and Topographic Features, provides development standards where slopes of 20 percent or greater are impacted.

D. Protection of Wildlife Corridors, Ranges, and Habitat. Division 4-4-4, Protection of Wildlife Corridors, Ranges, and Habitat, provides standards for the protection of wildlife corridors, ranges, and habitat. These standards are applied to new subdivisions and nonresidential development.

E. River Corridor Overlay Zone. The standards in Division 4-4-5, River Corridor Overlay Zone (RCOZ), are intended to ensure the continuation and improvement of the special character of the Animas River corridor. These standards are applied in addition to any other applicable standards in this Article.

F. Floodplain Management and Flood Damage Prevention. Division 4-4-6, Floodplain Management and Flood Damage Prevention, applies to all development within areas of special flood hazard. This Division is intended to reduce flood losses, and is required for participation in the National Flood Insurance Program (NFIP).

G. Geologic and Wildfire Hazard Areas. Division 4-4-7, Geologic and Wildfire Hazard Areas, applies to development within areas that are susceptible to geologic hazards or high risks of wildfire (i.e., the wildland-urban interface). The standards provide for the mitigation of risks through special planning and engineering.

H. Cultural Resources. Division 4-4-8, Cultural Resources, applies to development in areas of known archaeological or comparable cultural resources, and to discoveries of such resources during development.

I. Minerals. Division 4-4-9, Minerals, establishes standards for the extraction of minerals.

J. Oil and Gas. Division 4-4-10, Oil and Gas, establishes standards for the extraction of oil and gas.

Effective on: 7/1/2014

Division 4-4-2 Resource Protection Standards

Sec. 4-4-2-1 Site Fingerprinting

A. Generally.
   1. All subdivisions and site plans shall show the boundaries of areas of the natural resources listed in Subsection B., if such areas exist on the parcel proposed for development. Such delineation shall be by a qualified professional.
   2. Development that does not require a site plan, but is located on a parcel or lot which was not subdivided in accordance with the requirements of this Article shall provide site fingerprinting in accordance with Subsection C., below.

B. Resource Mapping Criteria. The following resources on a parcel proposed for development shall be mapped according to the stated criteria or methodologies. These resources are subject to the resource protection requirements of this Article.
1. **Riparian Buffers.** Riparian buffers shall be mapped as an area that extends 25 feet landward of the ordinary high water mark or top of bank, as applicable, from rivers, streams, and creeks.

2. **Floodplains, Floodways, and Floodway Fringes.** Floodplains, floodways, and floodway fringes shall be mapped according to their boundaries as shown on the most recent maps available from the Federal Emergency Management Agency (FEMA).

3. **Wetlands.** Wetlands shall be delineated according to the most recent version of the *U.S. Army Corps. of Engineers Wetland Delineation Manual*.

4. **Forests and Woodlands.** Forests and woodlands are areas that are at least 10 contiguous acres in area in which trees have overlapping crowns that provide at least 50 percent cover. Forests and woodlands are delineated by the edges of the crowns.

5. **Critical Wildlife Habitat, Winter Range for Elk and Mule Deer, and Big Game Migration Corridors.** Critical wildlife habitat, winter range for elk and mule deer, and big game migration corridors shall be mapped in consultation with the Colorado Division of Wildlife. (See *Division 4-4-5, Protection of Wildlife Corridors, Ranges, and Habitat.*)

6. **Steep Slopes.** Steep slopes shall be mapped as those areas on a parcel proposed for development with an average grade of 30 percent or more.

7. **Geologic Hazard Areas.**
   a. Geologic hazard areas shall be mapped after geotechnical analysis for those sites which are shown on Map 3 of the 2007 Comprehensive Plan as "geologic constraints," or for sites that are known to the Administrator to contain geologic hazards.
   b. Each type of geologic hazard on a parcel proposed for development shall be mapped.

C. **Abbreviated Resource Mapping Criteria.**

1. Development which meets the criteria set out in Subsection A.2., above, shall provide a site fingerprint of riparian buffers; floodplains, floodways, and floodway fringes; steep slopes; wetlands; forests and woodlands; and geologic hazard areas, and shall be required to comply with the requirements of Section 4-4-2-2, *General Resource Protection Standards*; Section 4-4-2-3, *Constrained Site Resource Protection Standards*; and Section 4-4-2-4, *Alternative Minimum Resource Protection Standards*, only with respect to those resources.

2. The Administrator may waive the fingerprinting requirement for one or more of the listed resources if the Administrator determines that there is no evidence of the presence of the resource or resources on the parcel or lot proposed for development.

Effective on: 7/1/2014

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**Sec. 4-4-2-2 General Resource Protection Standards**

A. **Generally.**

1. Natural resources shall be protected by leaving a portion of the area occupied by the resource undisturbed and:
   a. Designated as open space in residential developments; or
   b. Designated as undisturbed landscape surfaces in nonresidential developments.

2. Some uses are permitted on areas designated as open space or landscape surface. They are set out in Section 4-4-2-5, *Uses in Common Open Space*.

B. **Minimum Requirements.**

1. **Generally.** The minimum amount of each area of natural resources that must be set aside as protected open space or landscape surface is set out in Table 4-4-2-2, *General Resource Protection Standards*. 
2. **Overlapping Resource Areas.** Protection of areas where resources overlap counts towards protection of each individual overlapping resource (e.g., if an area of a riparian buffer is also a forest with a 30 percent slope, then the protection of that area counts towards protection of the riparian buffer, the forest, and the slope).

<table>
<thead>
<tr>
<th>Resource</th>
<th>RA, OS</th>
<th>RL, PD</th>
<th>RM, RH, BP, U, PB, CR</th>
<th>EN, CB, MU-N, MU-A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water-Oriented Resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riparian Buffers</td>
<td>0.90</td>
<td>0.85</td>
<td>0.80</td>
<td>0.70</td>
</tr>
<tr>
<td>Floodway</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Floodplain</td>
<td>0.90</td>
<td>0.75</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>Wetlands</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Biological Resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woodlands</td>
<td>0.50</td>
<td>0.35</td>
<td>0.20</td>
<td>0.00</td>
</tr>
<tr>
<td>Critical Wildlife Habitat</td>
<td>0.98</td>
<td>0.95</td>
<td>0.95</td>
<td>0.95</td>
</tr>
<tr>
<td>Big Game Migration Corridors</td>
<td>0.90</td>
<td>0.90</td>
<td>0.90</td>
<td>0.00</td>
</tr>
<tr>
<td>Big Game Winter Range</td>
<td>0.90</td>
<td>0.80</td>
<td>0.70</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Steep Slopes (&gt;20% grade) and Geologic Hazard Areas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30% and Greater</td>
<td>0.98</td>
<td>0.95</td>
<td>0.90</td>
<td>0.90</td>
</tr>
<tr>
<td>20% - &gt;30%</td>
<td>Note 1</td>
<td>Note 1</td>
<td>Note 1</td>
<td>Note 1</td>
</tr>
<tr>
<td>Riparian</td>
<td>0.98</td>
<td>0.95</td>
<td>0.95</td>
<td>0.95</td>
</tr>
<tr>
<td>Geologic Hazard Areas</td>
<td>1.00²</td>
<td>1.00²</td>
<td>1.00²</td>
<td>1.00²</td>
</tr>
</tbody>
</table>

**TABLE NOTES:**
- There is no quantified protection ratio for the Hillsides between 20% - >30% slopes. However, design standards apply, see Section 4-4-3-5, Hillside and Ridgeline Design Standards.
- Geologic hazard areas may be developed if the hazard is fully mitigated. See Section 4-4-7-3, Geologic Hazard Mitigation.

Effective on: 7/1/2014

**Sec. 4-4-2-3 Constrained Site Resource Protection Standards**

A. **Applicability.** The Administrator shall allow the use of constrained site resource protection standards set out in this Section when application of the resource protection standards in Section 4-4-2-2, General Resource Protection Standards, would result in no capacity on the site due to the extent and configuration of protected resources, and either:
   1. The parcel proposed for development is for residential use; or
   2. The parcel proposed for development is a lot of record that is proposed for a nonresidential use that is less than 15,000 square feet in gross floor area.

B. **Minimum Constrained Site Requirements.**
   1. Minimum open space requirements are set out in Table 4-4-2-3, Constrained Site Resource Protection Standards. Standards are provided for each type of protected resource.
   2. **Overlapping Resource Areas.** Protection of areas where resources overlap counts towards protection of each individual overlapping resource (e.g., if an area of a riparian buffer is also a forest with a 30 percent slope, then the protection of that area counts towards protection of the riparian buffer, the forest, and the slope).
### Table 4-4-2-3
Constrained Site Resource Protection Standards

<table>
<thead>
<tr>
<th>Resource</th>
<th>RA, OS</th>
<th>RL, PD</th>
<th>RM, RH, BP, LI, PB, CG, CR</th>
<th>EN, CB, MU-N, MU-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water-Oriented Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riparian Buffers</td>
<td>0.85</td>
<td>0.80</td>
<td>0.75</td>
<td>0.65</td>
</tr>
<tr>
<td>Floodway</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Floodplain</td>
<td>0.80</td>
<td>0.70</td>
<td>0.40</td>
<td>0.40</td>
</tr>
<tr>
<td>Wetlands</td>
<td>1.00</td>
<td>1.00</td>
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</tr>
<tr>
<td>Biological Resources</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Woodlands</td>
<td>0.25</td>
<td>0.15</td>
<td>0.10</td>
<td>0.00</td>
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<tr>
<td>Critical Wildlife Habitat</td>
<td>0.90</td>
<td>0.90</td>
<td>0.90</td>
<td>0.90</td>
</tr>
<tr>
<td>Big Game Migration Corridors</td>
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<td>0.80</td>
<td>0.80</td>
<td>0.00</td>
</tr>
<tr>
<td>Big Game Winter Range</td>
<td>0.70</td>
<td>0.60</td>
<td>0.50</td>
<td>0.00</td>
</tr>
<tr>
<td>Steep Slopes (20% and greater) and Geologic Hazard Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30% and Greater¹</td>
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<td>0.80</td>
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</tr>
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<td>20% - &gt;30%</td>
<td>*²</td>
<td>*²</td>
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<td>*²</td>
</tr>
<tr>
<td>Riparian</td>
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<td>0.95</td>
<td>0.95</td>
<td>0.95</td>
</tr>
<tr>
<td>Geologic Hazard Areas</td>
<td>1.00³</td>
<td>1.00³</td>
<td>1.00³</td>
<td>1.00³</td>
</tr>
</tbody>
</table>

**TABLE NOTES:**

The resource protection standard in this row applies only to land areas that have slopes of 30 percent or more.

There is no quantified protection ratio for the Hillsides between 20% - >30% slopes. However, design standards apply, see Section 4-4-3-5, **Hillside and Ridgeline Design Standards**.

Geologic hazard areas may be developed if the hazard is fully mitigated. See Section 4-4-7-3, Geologic Hazard Mitigation.

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**C. Definition of No Capacity.** For the purposes of this Section, Section 4-4-2-4, **Alternative Minimum Resource Protection Standards**, and Section 4-4-2-5, **Uses in Open Space**, "no capacity" means that the application of the protection ratios to the resources on the parcel proposed for development:

1. Precludes the development of a single-family home with a footprint of 1,500 square feet (including garage) and a driveway connection to the street; or
2. Limits nonresidential floor area to less than 1,500 square feet of gross floor area with required parking.

**Effective on: 7/1/2014**

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**Sec. 4-4-2-4 Alternative Minimum Resource Protection Standards**

**A. Generally.** If the application of Section 4-4-2-3, **Constrained Site Resource Protection Standards**, results in no capacity, then resource protection shall be reduced from the constrained site resource protection standards until the result is that the parcel proposed for development may be developed with 1,000 square feet of gross floor area.

**B. Resource Protection Priorities.** Reductions in protection standards shall be guided by the following priorities, in descending order:

1. Development in areas that could endanger public safety (e.g., geologic hazard areas) should be avoided.
2. The overall impacts to natural resources on the parcel proposed for development shall be minimized.
3. If there is only one potential point of access, then the protection ratios for the resources that are closest to that access may be reduced first.
4. If there are multiple potential points of access, then the access shall be provided at the point which minimizes impacts to priority resources.
5. Natural resources shall be protected in the following order of priority (from greatest priority to least priority):
   a. Unmitigated geologic hazard areas;
   b. Floodways;
   c. Wetlands;
   d. Critical wildlife habitat;
   e. Steep slopes in riparian areas;
   f. Steep slopes 30% and greater;
   g. Floodplains; and
   h. Woodlands.

Effective on: 7/1/2014

Sec. 4-4-2-5 Uses in Common Open Space

A. Generally. Table 4-4-2-5, Uses in Common Open Space, lists uses that may be permitted in open space areas that are required by this LUDC. Any use not listed in the table is not allowed in designated open space or landscape surface areas. For temporary use regulations, see Division 2-3-3, Temporary Uses.

<table>
<thead>
<tr>
<th>Use</th>
<th>General Open Space</th>
<th>Riparian Buffer</th>
<th>Floodway</th>
<th>Floodplain</th>
<th>Wetlands</th>
<th>Woodlands</th>
<th>Critical Wildlife Habitat</th>
<th>Wildlife Range / Corridors</th>
<th>Steep Slopes</th>
<th>Geologic Hazard Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agricultural and Ecological Uses</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Apiaries</td>
<td>A</td>
<td>A</td>
<td>-</td>
<td>A^1</td>
<td></td>
<td>A</td>
<td>A</td>
<td>A</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Agriculture</td>
<td>A</td>
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<td>A^1</td>
<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>Community Gardens</td>
<td>A</td>
<td>-</td>
<td>-</td>
<td>A^1</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>Detention / Retention / Flood Control</td>
<td>A</td>
<td>A^1</td>
<td>A^1</td>
<td>A^1</td>
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<tr>
<td>Natural Area / Ecosystem Restoration</td>
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<td>A</td>
<td>A</td>
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<tr>
<td><strong>Recreational Uses</strong></td>
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<td>A^1</td>
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<tr>
<td>Play Courts</td>
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<tr>
<td>Pool</td>
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<tr>
<td>Trails (pedestrian / bicycle)</td>
<td>A</td>
<td>A^1</td>
<td>A^1</td>
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<td>A^1</td>
<td>A^1</td>
<td>A^1</td>
<td>A^1</td>
<td>A</td>
<td>A^2</td>
</tr>
<tr>
<td>Water Dependent Uses</td>
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<tr>
<td><strong>Public Facilities</strong></td>
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<tr>
<td>Streets or Access Easements</td>
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<td>A^1</td>
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<td>A^1</td>
<td>A^1</td>
<td>A^1</td>
<td>A^2</td>
</tr>
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<td>A^1</td>
<td>A^1</td>
<td>A^1</td>
<td>A^2</td>
<td>A^1</td>
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<tr>
<td><strong>Essential Access</strong></td>
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<td>Essential Access</td>
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</tr>
</tbody>
</table>
### Table 4-4-2-5
Uses in Common Open Space

<table>
<thead>
<tr>
<th>Use</th>
<th>General Open Space</th>
<th>Riparian Buffer</th>
<th>Floodway</th>
<th>Floodplain</th>
<th>Wetlands</th>
<th>Woodlands</th>
<th>Critical Wildlife Habitat</th>
<th>Wildlife Range / Corridors</th>
<th>Steep Slopes</th>
<th>Geologic Hazard Areas</th>
</tr>
</thead>
</table>

**TABLE NOTE:**
Refers to allowed uses that are subject to standards in Subsection B. though E., of this Section.

#### B. Specific Requirements for Agricultural and Ecological Uses
The following specific requirements apply to agricultural and ecological uses shown in Table 4-4-2-5, *Uses in Open Space*, as "A1":

1. **Apiaries.** Apiaries shall be located at least one foot above the base flood elevation, and shall be anchored to resist lateral movement in the event of a base flood.
2. **Agriculture.**
   a. Agricultural uses shall be set back 50 feet from the bank of any waterbody. The setback area shall be maintained with native vegetation.
   b. If the agricultural use involves livestock, a fence shall be constructed to prevent livestock access to the protected areas.
3. **Community Gardens.**
   a. Community gardens shall be set back 50 feet from any stream or river bank. The setback area shall be maintained with native vegetation.
   b. Compensatory floodwater storage shall be provided in the floodplain in an equivalent volume to areas which are built up to elevate planting beds above the base flood elevation.
   c. Storage buildings associated with the community garden shall comply with the elevation and floodproofing requirements of Division 4-4-6, *Floodplain Management and Flood Damage Prevention*.
   d. Parking areas shall utilize gravel or permeable pavers.
4. **Detention / Retention / Flood Control.** Detention, retention, and flood control facilities are allowed in riparian buffers, floodways, floodplains, wetlands, critical wildlife habitat, and wildlife ranges and corridors, provided that:
   a. Such facilities are designed to treat water before discharge into surface waters or wetlands;
   b. Such facilities do not interfere with wildlife movement; and
   c. The banks of detention and retention areas are not steeper than one foot of rise to three feet of run.

#### C. Specific Requirements for Recreational Uses
The following specific requirements apply to recreational uses shown in Table 4-4-2-5, *Uses in Open Space*, as "A1":

1. **Ball Fields.** Ball fields and associated bleachers or stands shall be set back 50 feet from any floodway, wetland, water body, or wellhead. The setback area must be maintained as a natural area. Fill is prohibited in the setback area, except to the extent required to control and treat stormwater runoff.
2. **Golf Courses.**
   a. Golf courses may include riparian buffers, floodways, and floodplains if it is demonstrated that:
      1. There will be no change in the flood elevation due to the construction.
      2. Tees and greens are not located in riparian buffers or floodways. If they are located in floodplains, they must be elevated above the base flood elevation. Elevating tees and greens with fill is only allowed in locations where the floodplain is less than one foot in depth.
      3. Golf course trails and bridges are designed to cross riparian buffers, floodways, or floodplains in ways that minimize the volume and velocity of stormwater runoff into waterbodies and floodways.
4. Where the course parallels a water body, there is no clearing of natural vegetation in the riparian buffer, except as necessary for ecosystem restoration or maintenance.

5. The course is designed to provide a 20 percent increase in stormwater storage (compared to the pre-development condition) during a base flood.

b. Wetlands, woodlands, and critical wildlife habitat may be integrated into a golf course if it is demonstrated that:

1. The wetlands, woodlands, and critical wildlife habitat will be preserved (the course is designed so that these protected areas are natural hazards).
2. There is no filling of wetlands.
3. A buffer of low-maintenance native vegetation at least 15 feet in width will be maintained around the border of all wetlands and critical wildlife habitat.

3. Picnic Area.

a. In riparian buffers and floodplains, picnic areas shall be set back 25 feet from any stream channel or water body.

b. All restroom facilities shall be located outside the floodplain and elevated at least two feet above the base flood elevation.

c. Trash receptacles are provided for every cluster of tables, and an agreement acceptable to the City is executed with regard to trash removal.


a. Play courts and pools shall not account for more than 10 percent of areas that are designated as required open space.

b. Play courts and pools shall not be located in the floodplain unless the elevation of the floodplain is within six inches of the base flood elevation.

c. No fill shall be used to raise the elevation of play courts or pools, or materially alter the topography around the courts that are located in the floodplain.

d. Additional stormwater storage shall be provided to lower the depth of the regulatory flood.

e. Play courts shall be designed and situated so as to minimize the risk that debris that could cause floodwater backups will be trapped.

f. Parking areas within the floodplain shall be made of gravel, pervious paving blocks or grids, or reinforced turf.

g. A clear flow channel shall be provided in swales, minimizing the impact of the play courts and pools on storm flows.

5. Trails (Pedestrian / Bicycle).

a. Trails are not allowed in wetlands, floodways, or critical wildlife habitat unless:
   1. The trail must cross the wetland, floodway, or critical wildlife habitat for educational purpose; or
   2. The trail must cross the wetland or floodway to connect a trail system that cannot otherwise be connected.

b. Where hard-surfaced trails are allowed in wetlands or floodways, they shall be elevated.

c. In wetlands, there shall be a minimum of 18 inches of freeboard under the bottom of the elevated walkway, and such walkways shall be installed using hand-carried equipment to minimize damage to the wetland.

d. In floodways, any trail crossings shall be on bridge structures that are designed to withstand the forces of the base flood and provide at least two feet of freeboard.

e. On steep slopes, trails shall avoid areas that are prone to slippage due to soil or subsurface conditions, and shall be designed in a manner to avoid concentrating runoff.
f. Where cut and fill will be used, the standards of Section 4-3-1-2, General Standards for the Use of Cut and Fill, apply.

6. **Water Dependent Uses.**
   a. Water dependent uses shall be located and designed to minimize adverse impacts to water quality from erosion, pollutants, and turbidity, and minimize adverse impacts to riparian zone flora and habitat from construction activities or the water dependent use.
   b. The dimensions of the access are not more than the minimum necessary to provide reasonable access for the purpose of the water dependent use.
   c. Any facilities that support the water dependent use that do not require direct access to water shall be located away from the water, to minimize their impact on riparian buffers, floodplains, and wetlands.
   d. No construction of water dependent uses under the jurisdiction of the U.S. Army Corps of Engineers shall commence until all required permits are issued.

D. **Public Facilities.** Protected resource areas shall not be crossed with streets, access easements, or water / sewer utility lines (except those that serve only the uses that are allowed by this Division), except as follows:

1. **Threshold Determinations.** Generally, where it is not possible to make reasonable use of a parcel proposed for development without crossing a resource, the resource may be crossed if it is demonstrated that:
   a. No feasible alternative to crossing the resource exists;
   b. The route selected is the least disruptive, based on a review of at least three crossings, and the application of the resource protection priorities set out in Section 4-4-2-4, Alternative Minimum Resource Protection Standards; and
   c. Mitigation is undertaken to minimize the impact of the crossing on the resource, pursuant to Subsection D.2., below.

2. **Mitigation Standards.**
   a. Floodway crossings for vehicular access shall be on bridges that are designed to withstand the regulatory flood and provide at least six feet of freeboard over the Animas River (to allow for safe navigation), and two feet of freeboard over other floodways.
   b. Floodplains shall be mitigated as follows:
      1. All streets shall be elevated a minimum of one foot above the base flood elevation. Streets shall be designed with culverts to allow for the passage of water under the street at rates which do not cause downstream scouring during a base flood event.
      2. All manholes or access to underground utilities shall be protected so the access is water-proofed to two feet above the base flood elevation.
      3. Compensatory storage shall be provided in the floodplain in an amount equal to the volume of fill used to elevate the street.
   c. Cleared forest land shall be mitigated through tree planting on-site, or off-site within the same watershed, but not more than one-quarter mile from the parcel proposed for development. Trees shall be planted at a ratio of 20 plant units per cleared acre. (See Section 4-6-2-2, Plant Units.)
   d. Steep slopes shall be mitigated as follows:
      1. Erosion controls shall be promptly put in place to prevent erosion, and geotextile nets or other appropriate Best Management Practices ("BMPs") shall be applied to ensure that the ground cover is established quickly over the disturbed area.
      2. Impacted slope areas shall be designed and stabilized according to the standards of Division 4-4-3, Hillsides, Ridgelines, and Topographic Features.
      3. Each disturbed acre of the protected slope area that is not paved or structurally stabilized shall be planted with 20 plant units. (See Section 4-6-2-2, Plant Units.)
E. Essential Access.

1. Essential access shall be permitted only upon demonstration that there is an area of buildable land on the property that must be accessed across protected resources in order to avoid a situation of "no capacity" (see Section 4-4-2-3, Constrained Site Resource Protection Standards). The permit shall be denied if different development options can avoid the need for the essential access without a loss of density.

2. If several properties in the area have a need for essential access, then as few essential access points as possible shall be designed to serve all properties, and access easements shall be provided. If abutting property owners do not cooperate, the property owner making the improvements may submit a certified billing on the cost of the access. Subsequent essential access requests in the area shall be denied. Instead, the property owners shall be required to use the initial access and pay for their share of the documented expenses based on their pro-rata share of the number of dwellings or lots served.

Effective on: 7/1/2014

Division 4-4-3 Hillsides, Ridgelines, and Topographic Features

Sec. 4-4-3-1 Findings, Purpose, and Intent

A. Findings.

1. Durango's unique natural setting is one of the City's greatest assets, attracting tourists and new residents from across the nation. It is an essential part of our community's health, character, and identity, providing a multitude of economic and recreation opportunities. Durango's natural environment is primarily defined by the mountains, ridges, deep valleys, and slopes in its setting at the edge of the San Juan Mountains. The surrounding hillsides and ridgelines define Durango. These topographical features constitute a unique natural resource meriting protection and preservation.

2. The quality of Durango's lifestyle is attracting new residents in ever greater numbers. Durango's flat areas have, for the most part, been built out, causing hillside development to become more common.

B. Purpose and Intent. Because these ridgelines and hillsides are key to Durango's identity, these hillside building regulations are intended to guide and regulate this type of development. This Section is designed to protect Durango's natural setting by evaluating community context, slope conditions, visual impacts, design, grading, and access issues. Protection of hillside areas is achieved through subdivision design, site design, and structure design standards which are meant to reduce the impact of development on highly visible hillsides.

Effective on: 7/1/2014

Sec. 4-4-3-2 Protection of Hillsides and Ridgelines

A. Generally.

1. The development standards set out in this Division apply to those portions of parcels or lots proposed for development where slopes of 20 percent or greater are impacted. These standards also apply to flat areas on top of ridgelines or hillcrests that have significant visibility or that may be identified as significant natural features or distinctive landforms, as identified in conjunction with the adopted Parks, Open Space, Trails and Recreation Master Plan. Section 4-4-3-2, Streets, Driveways, Parking, and Emergency Vehicle Access on Hillsides, provides special provisions for hillsides that meet this slope threshold that are located within 100-feet from the top of bank of a natural waterway.
2. Any rezoning, subdivision, annexation, development, planned development, site plan, or building approval or permit shall be subject to compliance with the hillside regulations, regardless of whether specific reference to the hillside regulations is made in the LUDC section governing such approval or permit process.

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>&lt; 20%</th>
<th>20% - 29.9%</th>
<th>30% or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Residential - Existing Lot</td>
<td>No Hillside Review</td>
<td>Admin.</td>
<td>Admin.</td>
</tr>
<tr>
<td>Single Family Residential - New Lot Subdivision</td>
<td>No Hillside Review</td>
<td>Admin. &amp; Subd.</td>
<td>Prohibited</td>
</tr>
<tr>
<td>Multifamily - Existing Lot</td>
<td>No Hillside Review</td>
<td>Admin.</td>
<td>Admin.</td>
</tr>
<tr>
<td>Multifamily - New Lot Subdivision</td>
<td>No Hillside Review</td>
<td>Admin. &amp; Subd.</td>
<td>Prohibited</td>
</tr>
<tr>
<td>Commercial or Mixed Use - Existing Lot</td>
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</tr>
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<td>Commercial or Mixed Use - New Lot Subdivision</td>
<td>No Hillside Review</td>
<td>Admin. &amp; Subd.</td>
<td>Prohibited</td>
</tr>
<tr>
<td>Access to an Existing Lot</td>
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<td>Admin.</td>
<td>Admin.</td>
</tr>
<tr>
<td>Access to a New Lot Subdivision</td>
<td>No Hillside Review</td>
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</tr>
<tr>
<td>Significant Vegetation Removal²</td>
<td>No Hillside Review</td>
<td>Admin.</td>
<td>Prohibited</td>
</tr>
</tbody>
</table>

Admin- Administrative Review  
Subd. - Subdivision Process  
B.E. - Building Envelope Plans  
1 - Fire mitigation projectst in the Wildfire-Urban Interface are exempt

B. Hillside Protection Review Process and Required Submittals.

1. The development review and permitting process is determined by the slope of the area on which the work is to be done. All proposals or development activity including grading, modifying, and / or disturbing of slopes of 20 percent or greater require application, review, and approval. An application is also required for all annexations, rezonings, or subdivisions of properties which have slopes of 20 percent or greater.

2. A completed application must be filed with the Department along with the appropriate fee and all required submittal materials. An application is required for all persons desiring to remove significant vegetation (coniferous trees six feet and taller, deciduous trees four inches in circumference or greater, and stands of gambel oak with more than three trees) on slopes of twenty percent or greater. The topography of a parcel is measured using actual ("natural") slope instead of average slope.

3. Required submittal materials are kept at the Department in the Hillside Protection Administrative Manual.

4. A rejection of the project may be appealed to the Planning Commission in accordance with the procedures set out in Division 6-3-17, Administrative Appeals.

C. Landscape Anomalies and Cut Slopes. Under certain conditions, the grading standards can be administratively waived due to the existence of landscape anomalies or slopes which were created by a previous excavation. A landscape anomaly, such as a mound or pit, or cut slope may create a steep slope within an otherwise relatively flat area of land. A small land form may be allowed to be graded, so that a small feature would not render unbuildable an otherwise buildable location.

D. Conflicting Requirements. In the event of overlapping or conflicting requirements between the hillside regulations and other provisions or regulations under the LUDC, the more restrictive provisions shall apply.

Effective on: 7/1/2014
A. **Generally.** The standards of this Section apply to the design of streets, driveways, parking, and emergency vehicle access ("vehicular improvements") on hillsides. The limitations of Subsection B., below, apply in riparian areas with qualifying slopes.

B. **Riparian Areas.** When a hillside is within 100 feet of the top of bank of a natural waterway, streets, driveways, access, and parking shall not be constructed on that hillside except as necessary to provide essential access or a necessary crossing of a waterway.

C. **Design and Grading.** The grading of slopes shall be minimized by aligning vehicular improvements to conform to existing grades as closely as is possible, and consistent with safe geometric design. Vehicular improvements shall be designed to:
   1. Minimize the alteration of the physical and visual character of the hillside (e.g., large notches in ridgelines should be avoided); and
   2. Retain natural landforms by utilizing gentle horizontal and vertical curves in alignments (i.e., alignments on the hillside should be neither wider nor straighter than necessary).

D. **Streets.** The City Engineer may allow a proposed street to cross a 30 percent slope only if it is demonstrated that:
   1. The street serves one or more of the following purposes:
      a. The street is necessary in order to serve a dwelling unit on an existing lot of record;
      b. The street is shown on the Comprehensive Plan's Official Street Classification and / or Future Land Use Map;
      or
      c. The street provides a community benefit that cannot be provided in a cost-effective and technically feasible manner in an alternative location.
   2. The street shall be designed to meet the following objectives:
      a. The street is aligned in a location that:
         1. Is least disruptive to the steep slope; and
         2. Minimizes cut and fill by following natural contours.
      b. Streets and driveways that are necessary to serve dwellings on existing lots shall limit the amount of grading necessary by designing the dwelling placement and access points where they have the least impact on the hillside.
      c. Streets may be split into two, parallel one-way streets (thereby effectively functioning as a two-way street with a land "median") in steeper areas to minimize grading and to blend with the terrain. Culs-de-sac or loop roads are encouraged where necessary to fit the terrain.
      d. Modified street standards may be approved by the City Engineer to reduce required grading.
      e. Retaining walls shall blend with the natural features of the setting. Use of native rock or use of other masonry shall convey a scale and texture similar to that of traditional rock or traditional materials found within the natural setting. Limit the height of a retaining wall to less than eight feet. Where greater heights in a retaining wall must occur, use a series of terraced or stepped walls. The width of a retaining terrace shall not be less than five feet. The Administrator may vary the retaining wall height and width requirements depending on site conditions.
      f. Screen road cuts and retaining walls with plant materials.
   3. When no retaining wall is to be used, avoid making cuts too steep to accomplish revegetation of the affected hillside.

E. **Curb Cut Width.** No curb cut for driveway access shall be greater than 16 feet in width on lots with a width of 50 feet or more. No curb cut for driveway access shall be greater than 12 feet in width on lots with a width less than 50 feet. No curb cut width for a shared driveway shall be greater than 20 feet in width.
F. **Garage Location.** Generally, garages shall not be located in the front of the lot or parcel proposed for development. However, an exception may be granted by the Administrator where necessary to avoid extensive cut and fill. In such circumstances, the appearance of the garage doors shall be minimized from street level vantage points.

G. **Driveways.** In order to limit the impact of driveways on sloped lands, the following standards apply:

1. Grading of slopes of 30 percent or more in order to construct a driveway shall be allowed only if it is necessary to serve a dwelling unit on an existing lot of record and there are no feasible alternative locations for access with lesser slope.

2. Driveways shall generally follow existing contours.

3. Minimum grading shall occur to accommodate the driveway. Minimizing grading shall be a priority in terms of driveway design and building placement.

4. Non-shared driveways should be narrowed to 12 feet, when feasible.

5. Shared drives shall be a maximum of a 20 foot wide paved driving surface and should be narrowed to a 16 foot wide paved driving surface with two-foot gravel shoulders on each side, when feasible.

6. Shared driveways shall be utilized to minimize hillside cuts whenever feasible.

7. Driveways should take up the grade of the slope rather than cutting into or manipulating the topography.

8. Driveway cuts shall be screened with a rock wall, plant materials, and / or other features.

9. Driveways shall be designed to minimize erosion due to drainage.

**Effective on: 7/1/2014**

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**Sec. 4-4-3-4 Utilities**

All utilities shall follow road and driveway corridors where possible. New utilities shall be underground, unless the situation where burying the lines would require significant blasts to clear masses of outcrops or rock formations. Alternatives to utility placement shall be approved by the City Engineer.

**Effective on: 7/1/2014**

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**Sec. 4-4-3-5 Hillside and Ridgeline Design Standards**

A. **Generally.** Development activities that impact slopes of 20 percent or greater shall meet the design objectives set out in this Section.

B. **Building and Respect for the Natural or Existing Topography.**

1. **Location and Site Design Standards.**
   a. Buildings shall be designed to fit the lot or parcel, rather than substantially modifying the grade of the lot or parcel to fit the building. Buildings, access drives, and lawns shall be designed and configured to maintain as much of the natural landform as possible.
   b. Where areas of the parcel or lot are already disturbed, the existing, disturbed areas shall be used for building envelopes rather than undisturbed areas, provided that such areas are of an adequate area and shape and do not pose a geological hazard or other safety issues.
   c. Structures should be located to preserve or protect significant natural features of the site, such as landforms, rock outcroppings, mature trees and vegetation, drainage courses, hilltops, and ridgelines.
   d. Locate buildings to balance the following objectives for the optimization of the site for outward views:
      1. To retain or enhance view from off-site view points; and
      2. To respect privacy, access to light, and safety of neighboring properties.
2. **Building Elevations.** No single-family, duplex, townhome, or multiplex building elevation shall appear as more than two and one-half stories in height.

3. **Building Heights.** No building shall exceed a height to roof ridge of 28 feet for a sloping roof, or parapet height of 16 feet for a flat roof.

4. **Building Mass and Scale.**
   a. Building form shall be planned to enhance the site's natural features (if practicable), and to blend with the natural terrain.
   b. The mass and scale of buildings shall respect the natural surroundings and unique visual resources by incorporating designs which minimize or mitigate bulk and mass, follow natural topography, and minimize visual intrusion on the natural landscape.
   c. Structures shall be designed to blend into the natural character of the hillside by reducing the visual bulk through landscaping, terraced building forms, appropriate building materials and colors, and height variations. Split-pad and stepped foundations shall be used where necessary to minimize cut and fill, and to create forms that step down or step up with the natural slope to avoid padding and to mitigate the appearance of building mass.
   d. A series of smaller, visually distinct roofs, specifically pitched, gabled and hipped roofs, shall be utilized on buildings with a floor plate that is larger than 2,500 square feet, in order to reflect the visual diversity of the natural hillsides, except that in the wildland-urban interface, fire-resistant design shall take priority over varied roof forms.
   e. Reflective materials shall not be used for roofing.
   f. The maximum overhang for any deck or cantilevered building design which extends over a downhill slope is 10 feet. In the wildland-urban interface, overhanging decks and cantilevered building elements are not allowed.

5. **Design with Slope.**
   a. When feasible, locate the principal building on the flat part of the site and off the slope. Where such locations are not feasible, foundation systems, home designs, and driveways shall be used to take up grade.
   b. Foundation corners shall match the natural grade as much as practicable.
   c. Buildings that must be constructed on steep slopes shall be designed with stepped foundations and structures that follow the slope, unless the size of the building does not warrant such design.

6. **Grading.**
   a. Grading shall be limited to that which is necessary to construct the house, driveway, and a limited area for yard purposes.
   b. No site alterations shall exceed a one-foot elevation change within one foot of any property line.
   c. A grading permit shall be required prior to the commencement of grading activities on slopes of 20 percent or more.

7. **Retaining Walls.**
   a. Generally, retaining walls should be used to minimize the impacts of cut and fill on steep slopes on a site (for example, to ensure the safe development of a lot or parcel, or for the control of stormwater runoff or erosion). Otherwise, retaining walls shall be avoided. Retaining walls are not acceptable when their purpose is to create flat yards.
   b. Retaining walls shall blend with the natural features of the setting. Use of native rock or use of other masonry shall convey a scale and texture similar to that of traditional rock or traditional materials found within the natural setting. Limit the height of a retaining wall to less than eight feet. Where greater heights in a retaining wall must occur, use a series of terraced or stepped walls. The width of a retaining terrace shall not be less than five feet. The Administrator may vary the retaining wall height and width requirements depending on site conditions.
8. **Ridgeline Setback and Landscape Buffer.**
   a. Generally, buildings shall be set back 45 feet from top of slope or ridgeline.
   b. A landscape buffer of at least 0.50 plant units per 1,000 square feet of area between the building and the ridgeline shall be installed and maintained. Existing, healthy vegetation shall be counted towards this requirement. (See Section 4-6-2-2, *Plant Units.*)
   c. Property owners may elect to dedicate a ridgeline easement to protect highly visible and significant ridgelines and views. In the case of a ridgeline easement, the height of any structure shall be not less than 50 vertical feet below the low point of the easement, and the structure must be at least 200 horizontal feet from the nearest edge of the easement.
      1. Easements may also be dedicated on hillsides that are not ridgelines.
      2. In the area of the ridgeline easement native vegetation shall remain undisturbed.

9. **Subdivisions and Developments with Multiple Buildings.**
   a. Development clusters are encouraged to preserve natural features, reduce grading and impervious surface area, increase usable open space areas, and preserve views of the hillsides.
   b. For developments with multiple buildings, buildings should have height variations in order to minimize a "walled" effect or a repetitive appearance. Wherever possible, the buildings should be positioned so that they appear to be "tucked" into the hillside and not easily visible from below.

C. **Slopes of 30 Percent or More.** On slopes of 30 percent or more, the following standards apply in addition to the standards of Subsection B., above:
   1. For new subdivisions, building envelopes shall be created outside of the 30 percent or greater slope areas. In areas in which this is not possible, new lots shall not be created.
   2. No construction activities shall occur outside of the building envelope except approved driveways that are designed according to the standards of Section 4-4-3-3, *Streets, Driveways, Parking, and Emergency Vehicle Access on Hillsides.*
   3. The standards set out in Subsections D.1. and D.2., above, shall not be interpreted to preclude development of an existing lot or parcel with a single-family detached dwelling unit. On existing lots or parcels that are developed or redeveloped with single-family detached buildings, detached garages or garages below grade are encouraged. Garages that are constructed below grade shall be screened from views from vantage points that are parallel to the contour lines of the hillside where such designs are feasible.

D. **Modification of Setbacks.** Flexibility in required setbacks may be considered in order to avoid altering steep slope areas. The Administrator may allow the application of alternative setbacks in order to avoid or minimize alterations to steep slope areas, as follows:
   1. Front and side setback requirements may be varied to protect an existing slope. Minimum setbacks shall be established during the preliminary design review. Setback adjustments shall ensure at least 20 feet of spacing between the proposed development and buildings on abutting lots.
   2. Setbacks along the portion of a lot furthest from a ridgeline may be reduced to minimize encroachment on the skyline.
   3. Varied and staggered front building setbacks are encouraged in hillside residential subdivision layout. This is consistent with the natural hillside character and will reduce the visual monotony and "walled" effect of repetitive setbacks.
   4. Setback adjustments shall not create or exacerbate encroachments into Special Flood Hazard Areas.

*Effective on: 7/1/2014*
Sec. 4-4-3-6 Design Standards for Riparian Areas with Qualifying Slopes

A. Generally. The design standards set out in this Section are intended to preserve natural topographic features, foster resource preservation, protect water quality, and minimize degradation of the visual character of hillsides in riparian areas. The standards in this section apply when a proposed development activity will impact hillsides with slopes of 20 percent or greater that are located within 100-feet from the top of bank of a natural waterway. Development proposals within riparian areas shall conform to the design standards in Section 4-4-3-5, Design Standards, above, as well as, the standards in this Section.

B. Limitation on Creation of New Lots. New lots that are less than five acres in area shall not be created if the topography of the lot necessitates locating the building envelope on an average slope of 20 percent or greater to the top of bank of a river, creek, or stream, or to the ordinary high water mark of any other waterbody.

C. Waterfront Setbacks for New Buildings. New buildings shall be set back from the ordinary high water not less than 50 feet, plus 10 feet for each five percent of average slope above 20 percent between the building and the top bank or ordinary high water mark.

D. Rear Setbacks for New Buildings. In riparian areas with qualifying slopes, the rear setback adjustments allowed in Section 4-4-3-5, Hillside and Ridgeline Design Standards shall be allowed only if a vegetated buffer of at least 20 feet in width is provided between the principal building and the ordinary high water mark.

E. Waterfront Setbacks for Existing Buildings.
   1. Existing residential buildings that do not meet the standards set out in Subsection C., above, shall not be considered "nonconforming," and may be redeveloped or replaced in their existing footprints. Such buildings may also be expanded landward of their existing footprints according to the standards of this LUDC.
   2. Manufactured homes that do not meet the standards of this Section may be replaced with other manufactured homes, provided that the new manufactured home is not more than 25 percent larger than the manufactured home it replaced.

Effective on: 7/1/2014

Division 4-4-4 Protection of Wildlife Corridors, Ranges, and Habitat

Sec. 4-4-4-1 Identification of Wildlife Habitat, Ranges, and Corridors

A. Generally. Critical habitat, big game winter ranges, and big game migration corridors shall be identified in a wildlife report. This report shall consist of narrative and maps necessary to identify wildlife habitat areas, winter ranges, and migration corridors and describe proposed mitigation measures for the protection of wildlife, their habitats, and migration corridors (including but not limited to the application of the resource protection standards in Division 4-4-2, Resource Protection Standards). This report shall be prepared in consultation with the Colorado Parks and Wildlife ("CPW") personnel and resources, including documentation of any CPW recommendations.

B. Exceptions. The Administrator may waive the requirement of a wildlife report for properties that are located in areas where the existence of habitat, winter range, or migration corridor is highly unlikely, or where, due to existing development patterns and / or the size, location, and condition of the parcel proposed for development, the proposed development would have a de minimus impact on wildlife.

Effective on: 7/1/2014
Sec. 4-4-4-2 Avoidance and Mitigation of Wildlife Impacts

A. Generally. Wildlife reports shall include proposed design parameters and management techniques to avoid, minimize, and mitigate impacts on critical habitat, big game migration corridors, and big game winter range.

B. Connectivity. Critical habitat, big game migration corridors, and big game winter range that is protected by Division 4-4-2, Resource Protection Standards, shall be selected for its continuing value to wildlife, as follows:
   1. Elements of habitat or range that are interdependent shall not be separated in ways that materially compromise the overall habitat.
   2. Protected areas of big game migration corridors and big game winter ranges shall provide a continuous connection to off-site big game migration corridors and big game winter ranges, such that large-scale regional wildlife movements are not impeded by the proposed development.
   3. Fencing and grading shall not materially interfere with wildlife movement across critical habitats, big game migration corridors, and big game winter ranges.

Effective on: 7/1/2014

Division 4-4-5 River Corridor Overlay Zone (RCOZ)

Sec. 4-4-5-1 Purpose and Application of Division

A. Purpose of Division.
   1. Views to and from the Animas River are important to the special character of the City of Durango, which increase its attractiveness as a place to live, work, play, and visit. The aesthetic and ecological qualities of the Animas River are intertwined and provide substantial economic benefit to Durango. As such, viewsheds and access shall be protected in the River Corridor Overlay Zone (RCOZ) as provided in this Division.
   2. The quality of the water in the Animas River is also an important asset to the City of Durango. Water quality is affected by the use and development of land near the river. As such, design and development techniques which avoid, minimize, and mitigate impacts to water quality shall be used according to the provisions of this Division and this LUDC.
   3. The performance standards that are set out in this Division are intended to provide flexible ways to achieve the purposes of the RCOZ. (See Section 2-1-2-2, Overlay Zones Established.) Rather than specifying exactly what must be done in each situation, the performance standards provide a range of alternatives from which to choose to achieve compliance with this LUDC. This approach allows for maximum flexibility in the design, review, and approval of development within the RCOZ.

B. Application of Division. The standards of this Division are applied to all land located within the RCOZ as follows:
   1. All new development and construction proposals for land that is located within the boundaries of the RCOZ.
   2. Any renovation or remodeling of existing structures, if such renovation or remodeling involves any of the following:
      a. A site plan review requirement;
      b. An expansion of space devoted to principal uses within a property; or
      c. Any change in use of all or any portion of a structure or site to a more intensified use.
   3. Subdistrict-specific provisions do not apply outside of the named Subdistrict.
   4. The standards of Section 4-4-5-6, Impacts to Riverside Vegetation, and Section 4-4-5-7, Riverbank Protection, apply to all activities within the RCOZ, and are not limited to the activities listed in Subsections B.1. and B.2., above.

Effective on: 7/1/2014
Sec. 4-4-5-2 Viewsheds in the River Corridor Subdistrict (Outside of Downtown Subdistrict)

A. **Viewshed Design Objectives.** There are three related design objectives with respect to views:
   1. Views from the Animas River to the shore should create the impression of an undeveloped, natural condition along the course of the river.
   2. Views across the river from the opposite river bank should create the impression of a sparsely developed condition along the course of the river.
   3. Views to the water from trails and paths along the river should not be obstructed by buildings.

B. **General Screening Requirement.**
   1. **General Landscaping and Screening Requirement.**
      a. All buildings, except single-family detached and duplex buildings, shall be screened from view from the Animas River by a 50 percent opacity bufferyard that is preserved and/or planted in an apparently informal, "natural" pattern. The bufferyard shall not include structures, but the screening effects of topography may be considered in the evaluation of the bufferyard's opacity. (See Division 4-6-3, Buffering Requirements.)
      b. In general, the landscape buffer required by Subsection B.1.a., above, shall include not less than 1.5 plant units per 1,000 sf. of required setback area between the top of bank of the river and the building, excluding areas used for public paths or trails. Planting requirements may be reduced if:
         1. The City Arborist finds that conditions are unfavorable to healthy growth of trees; and
         2. Other land features provide comparable screening.
      c. Where vegetation is planted to meet this requirement, it shall be arranged to maximize the screening effect for the viewpoint described in Subsection B.1., above.
   2. **Alternative Mitigation Requirement.** Landscaping shall be utilized as the principal method of screening buildings. If it is demonstrated that it is not feasible to completely screen a building from views from the Animas River due to topography, parcel size and shape, and the scale and bulk of the proposed development, then in addition to landscape screening, the impact of the encroachment into the viewshed shall be mitigated using other techniques. Such techniques include, but are not limited to, the following, either separately, or in combination:
      a. A fence or wall made of natural materials, such as wood or stone, to screen the structure from being seen from the river. When possible, such fence or wall shall be located behind trees and shrubs.
      b. Use of muted earhtone colors which are selected to blend in with the natural background (i.e., surrounding plants, soil, and rocks).
      c. Avoiding or minimizing the use of reflective surfaces on walls, windows, and roofs that are oriented toward the river.
      d. Setting the building back from the top bank of the river the maximum feasible distance after taking into consideration other essential site factors such as:
         1. Required setbacks from streets and property lines;
         2. Off-street parking;
         3. Size and shape of the building so that it functions adequately for its intended use;
         4. Landscaping;
         5. Trails and trail easements;
         6. Utilities; and
         7. Orientation of the building so that it is visually compatible with surrounding development when viewed from the street.
      e. Orienting large buildings that are larger than 5,000 square feet of gross floor area (to the extent practical given the considerations listed in Subsection B.2.d., above), so that the visual impact on views from the river are minimized.
f. Modulate building planes to minimize the perceived mass. Appropriate design techniques include varying the primary building planes, alternating architectural elements and materials, and stepping back building stories above the second floor.

C. Single-Family Detached and Duplex Requirements.

1. In general, single-family and duplex buildings shall provide a landscape buffer of not less than 0.75 plant units per 1,000 sf. of required setback area between the top bank of the river and the building. Planting requirements may be reduced if:
   a. The City Arborist finds that conditions are unfavorable to healthy growth of trees; or
   b. Topographic features provide comparable screening.

2. If the single-family detached or duplex building is visible from the river or the top of the opposite river bank, then:
   a. The use of reflective surfaces on walls, windows, and roofs that are oriented towards the river shall be avoided or minimized;
   b. Buildings shall use muted earthtone colors that are selected to blend in with the natural background (i.e., surrounding plants, soil, and rocks); and
   c. Buildings shall be designed with features which tend to break up the building mass.

D. Signs. Signs or advertising shall not be placed within view from the river or the top bank of the river, except for pedestrian-oriented signs that the City may install along paths and trails.

E. Trail or Path Setbacks. New buildings and expansions of existing buildings shall be set back at least 25 feet from existing or proposed trails and paths.

Effective on: 7/1/2014

Sec. 4-4-5-3 Viewsheds in the Downtown Subdistrict

A. Viewshed Design Objectives. The design objectives for the Downtown Subdistrict with respect to views are as follows:

1. The design objective for views from the Animas River and from the opposite river bank (facing downtown) is to create a high-quality, ecologically responsible commercial and mixed-use waterfront softened with appropriate native vegetation and pedestrian linkages from the river to downtown.

2. The design objective for views from Camino del Rio is visual access to the water where topography permits.

3. The obstruction of existing views and vistas shall be discouraged. Creative use of landscaping and structures to frame or enhance views and vistas shall be encouraged.

B. Viewshed Protection. Viewsheds shall be protected as follows:

1. General Landscaping and Screening Requirement.
   a. Buildings shall be screened from view from the Animas River by topography and native vegetation that is either preserved or planted to appear as if it were in its natural state.
   b. In general, the landscape buffer required by Subsection B.1.a., above shall include not less than 0.75 plant units per 1,000 sf. of required setback area between the top bank of the river and the building, excluding areas used for public paths or trails. Planting requirements may be reduced if:
      1. The City Arborist finds that conditions are unfavorable to healthy growth of trees; and
      2. Other land features provide comparable screening.

2. Building and Site Design. Buildings and sites shall be designed as follows:
   a. Avoid or minimize the use of reflective surfaces on the windows, walls, and roofs of buildings.
b. Orient large buildings (larger than 5,000 square feet) so that the visual impact on views from the river are mitigated, taking into account the following factors:
   1. Required setbacks from streets and property lines;
   2. Off-street parking;
   3. Size and shape of the building so that it functions adequately for its intended use;
   4. Landscaping;
   5. Trails and trail easements;
   6. Utilities; and
   7. Orientation of the building so that it is visually compatible with surrounding development when viewed from the street.

c. Modulate building facades to minimize the perception of building mass when viewed from the river, through design techniques including varying the primary building planes, alternating architectural elements and materials, and stepping back upper building stories above the second floor.

d. Obstructions of views to the river from Camino del Rio shall be avoided when practical alternative designs could avoid the obstruction.

C. **Trail or Path Setbacks.** New buildings and expansions of existing buildings shall be set back at least 15 feet from existing or proposed trails and paths.

Effective on: 7/1/2014

**Sec. 4-4-5-4 Downtown Subdistrict Development Standards.**

A. **Generally.**
   1. Within the Downtown Subdistrict of the River Corridor Overlay Zone, the standards of this Section control over conflicting standards within this LUDC.
   2. The treatment and retreatment of any site shall be sensitive to the systems of the riverbank, climate of the region, any microclimates that might be recreated by development, the public spaces that are critical to the CB River District, and the views that exist or can be created.

B. **Setbacks.**
   1. *Property lines that abut public rights-of-way:* 0 ft. (except that view triangles shall be kept clear, see Section 4-2-2-12, *Corner Sight Triangles*, and Section 4-2-2-13, *Sight Triangles for Minor Streets and Driveways*).
   2. *All other property lines:* 7.5 ft.
   3. *Setback from existing or proposed non-motorized trail that runs parallel to the Animas River:* 15 ft.
   4. *Path or trail connections from Camino del Rio to an existing or proposed non-motorized trail that runs parallel to the Animas River:* Three ft. from the boundary of the path or trail easement (entries along the easement shall be recessed to provide for pedestrian safety).

C. **Building Spacing.** When more than one building is constructed on a lot, a minimum distance of 15 feet shall be provided between buildings. The distance is inclusive of porches, eaves, overhangs, or balconies.

D. **Open Space Credit.** In recognition of the intent of the Downtown Subdistrict to provide both developed and undeveloped areas of open space for public and private enjoyment along and near the riverfront, the dedication of a 20 foot wide pedestrian easement through any parcel will be counted towards the open space requirements for the parcel.
E. **Consolidation of Access.** To further the objective of encouraging pedestrian activity and discouraging vehicular traffic, attempts shall be made to consolidate service roads and to limit interior roads to service vehicles whenever possible.

F. **Pedestrian Access.** Entrances to development and structures shall be oriented to pedestrian traffic and pedestrian-focused activities shall be located along public pedestrian easements, where available.

*Effective on: 7/1/2014*

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**Sec. 4-4-5-5 Path and Trail Access**

A. **Generally.** The term "access" refers to the provision of access from a public right-of-way to a publicly accessible trail or path and/or to the water's edge of the Animas River. The access standards are provided in conformance with adopted policies in the Animas River Corridor Plan.

B. **Effect on Other LUDC Requirements.** In exchange for providing access easements as described in this Section, an Applicant may apply for a reduction of certain other dedication or installation requirements, such as sidewalks and/or open space dedication and/or the number of required parking spaces.

C. **Performance Standards.** Parcels that are located adjacent to an existing or proposed trail or path and parcels through which an existing or proposed trail or path traverses shall provide a nonmotorized access easement to the trail or path from an existing public right-of-way. This requirement may be waived by the Administrator if the Administrator determines that access through a specific parcel to a trail or path is not feasible or appropriate.

D. **Provision of Trails and Paths.**
   1. In exchange for providing a trail easement and/or making improvements to the trail segment, an Applicant may apply for a reduction of certain other dedication or installation requirements, such as sidewalks, open space dedication, and/or the number of required parking spaces.
   2. Standards for parcels located along proposed sections of trails or paths are as follows:
      a. If a proposed trail or path traverses a parcel proposed for new development, redevelopment, or major expansion, the site plan shall include provisions for dedication of a trail easement in accordance with the City parkland dedication requirements (see Table 2-4-2-2B, On-Site Recreation and Leisure Areas), and provisions for making improvements, such as grading and/or paving, as appropriate to the particular trail segment.
      b. Requirements for making improvements to trails or paths shall not apply to single-family and duplex residences located on individual parcels, or within a subdivision or planned development of single-family and duplex residences which includes five or fewer principal buildings.

E. **Downtown Subdistrict Trail Standards.** Standards for non-motorized trails and public easements connecting public street rights-of-way to a path or trail in the Downtown Subdistrict are as follows:
   1. The trail shall be at least 14 feet in width, running in continuous length through the property. For properties bordering the river, it is recommended that no less than 70 percent of this trail easement shall be within 10 feet of the top of the riverbank.
   2. The trail shall be located at ground level and shall connect with all other adjacent public pedestrian easements.
   3. The trail shall be located in a safe and logical fashion, and be usable by pedestrians, bicyclists, and other appropriate non-motorized vehicles.
   4. The trail shall have a minimum finished height clearance of at least 12 feet.
   5. The trail shall be of a concrete surface capable of withstanding four-wheel drive vehicles for purposes of maintenance and snow removal.
   6. The trail shall be lighted according to the standards promulgated by the Parks and Recreation Department.
7. The trail shall meet all other standards as set forth in Division 4-2-3, Sidewalks and Trails, and applicable City engineering standards.

Effective on: 7/1/2014

Sec. 4-4-5-6 Impacts to Riverside Vegetation

A. Generally.

1. Vegetation is a multifunctional asset within the River Corridor Overlay Zone (RCOZ). Vegetation has inherent aesthetic qualities and it screens development from view in many areas. Vegetation is also vital to maintain and preserve the natural ecology of the river corridor:
   a. It provides habitat (and critical habitat) for a variety of species;
   b. It provides food and moderates water temperatures for aquatic species; and
   c. It helps to maintain water quality and enhance bank stability by:
      1. Acting as a filter to prevent pollutants in runoff from reaching the river; and
      2. Providing friction to slow flood flows and prevent erosion.

2. Careful site planning shall consider site erosion, riverbank stability, soil types, and discharge.

3. Vegetation within the river corridor consists of three basic types:
   a. Wetland species;
   b. Riparian species; and
   c. Upland species.

B. General Performance Standard for Wetland and Riparian Vegetation. Wetland and riparian vegetation shall not be disturbed during development.

C. Alternative Performance Standard for Wetland and Riparian Vegetation.

1. For parcels containing single-family and duplex residences, riparian vegetation may be selectively removed or pruned to provide a view to the river from the residence, provided that the applicable planting density standards in Section 4-4-5-2, Viewsheds in the River Corridor Subdistrict (outside of the Downtown Subdistrict), are met. The extent of removal or alteration of riparian vegetation for such parcels shall be reviewed and approved by the Department.

2. For parcels that are not subject to Subsection C.1., above, in circumstances where the general standard cannot be met (e.g., the need for river access, trail location, or the entire parcel is located within the riparian corridor), disturbance of wetland and riparian vegetation shall be minimized as follows:
   a. Areas that will be disturbed during construction activities shall be delineated on a site plan (general vegetation maps on file at the Department may be referred to). The site plan shall show how the development minimizes impacts to wetland and riparian vegetation.
   b. Prior to removal or alteration of riparian vegetation, impacts of such removal or alteration shall be documented, and any other required permits (e.g., Army Corps of Engineers) shall be obtained. Impacts shall be mitigated using the techniques in Subsection C.3., below

3. Mitigation techniques may include, but are not necessarily limited to, the following:
   a. Where vegetation is disturbed during construction, identical or similar vegetation should be promptly replanted. Non-native or invasive vegetation must be replaced with native species.
   b. Where opportunities exist to enhance riparian vegetation, including removal of non-native or invasive species, new plantings are encouraged.

4. Disturbance of wetlands may be subject to review by other jurisdictions, such as the Army Corps of Engineers.
D. **General Standard for Disturbance of Upland Vegetation.** Disturbance of upland vegetation should be minimized.

E. **Mature Vegetation.** The removal of mature vegetation (except invasive exotic species) is discouraged.

**Effective on: 7/1/2014**

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**Sec. 4-4-5-7 Riverbank Protection**

A. **Generally.** There shall be no alteration of the riverbank except as necessary to eliminate an existing hazard or to clean up or restore the riverbank. Prior to any such alteration, a permit shall be obtained from the Department and any other agency having jurisdiction (e.g., Army Corps of Engineers).

B. **Dumping.** The dumping into the river of any debris, dirt, fill, vegetation, street snow, or other material is strictly prohibited. Stormwater runoff and snow melt are not considered "dumping," but may be subject to other standards of this LUDC, as well as State and Federal law.

**Effective on: 7/1/2014**

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**Division 4-4-6 Floodplain Management and Flood Damage Prevention**

**Sec. 4-4-6-1 Flood Hazard Areas; Statutory Authorization**

The Legislature of the State of Colorado has, in Article 23 of Title 31 C.R.S., delegated the responsibility to local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City Council has adopted the regulations, standards, and procedures of this Division.

**Effective on: 7/1/2014**

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**Sec. 4-4-6-2 Flood Hazard Areas; Findings of Fact**

A. The City Council finds the following facts:

1. The flood hazard areas of the City are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

2. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards, which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately flood-proofed, elevated, or otherwise protected from flood damage also contribute to flood loss.

**Effective on: 7/1/2014**

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**Sec. 4-4-6-3 Statement of Purpose**

A. It is the purpose of this Division to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

1. Protect human life and health;

2. Minimize expenditure of public money for costly flood control projects;
3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. Minimize prolonged business interruptions;
5. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, sewer lines, streets, and bridges located in areas of special flood hazard;
6. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future blight areas;
7. Ensure that potential buyers are notified that property is in an area of special flood hazard; and
8. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

Effective on: 7/1/2014

Sec. 4-4-6-4 Application

A. Generally. This Division shall apply to all areas of special flood hazards within the jurisdiction of the City as reflected on the flood insurance rate map, and areas removed from the floodplain by issuance of a FEMA Letter of Map Revision Based on Fill (LOMR-F), which are on file at the Department of Community Development ("Department").

B. Establishment of Areas of Special Flood Hazard. The areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) in a scientific and engineering report entitled "Flood Insurance Study for La Plata County, Colorado and Incorporated Areas", dated August 19, 2010, with accompanying flood insurance rate maps ("FIRM"), and any revisions thereto, are hereby adopted by reference and declared to be a part of this LUDC. The flood insurance study and FIRM are on file and may be reviewed at the offices of the Department.

C. Compliance. No structure within an area of special flood hazard shall hereafter be constructed, located, extended, or converted, nor shall any structure or land within an area of special flood hazard be altered, without full compliance with the terms of this Division and other applicable regulations.

D. Abrogation and Greater Restrictions. This Division is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions; however, where this Division and other ordinances, easements, covenants, or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

E. Interpretation. In the interpretation and application of this Division, all provisions shall be:
1. Considered as minimum requirements;
2. Liberally construed in favor of the City; and
3. Deemed neither to limit nor repeal any other powers granted under state statutes.

F. Warning and Disclaimer of Liability. The degree of flood protection required by this Division is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This Division does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This Division shall not create liability on the part of the City, any officer or employee thereof, FEMA, or any other governmental agency for any flood damages that result from reliance on this Division or any administrative decision lawfully made thereunder.

G. Methods of Reducing Flood Losses. In order to accomplish its purposes, this Division includes methods and provisions for:
1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
2. Requiring that uses that are vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

3. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers which help accommodate or channel flood waters;

4. Controlling filling, grading, dredging, and other development which may increase flood damage; and

5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters, which may increase flood waters, or which may increase flood hazards in other areas.

Effective on: 7/1/2014

Sec. 4-4-6-5 General Provisions and Standards for Flood Hazard Reduction

A. Generally. In all areas of special flood hazard, the standards of this Section apply.

B. Anchoring.
   1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure, and to withstand hydrostatic and hydrodynamic loads.
   2. All manufactured homes shall be installed using methods and practices which minimize flood damage. Manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable anchoring requirements for resisting wind forces.

C. Construction Materials and Methods.
   1. All new construction and substantial improvements shall be constructed with materials and utility equipment recognized as resistant to flood damage.
   2. All new construction and substantial improvements shall be constructed using recognized methods and practices that minimize flood damage.
   3. For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
      a. A minimum of two openings having a total net area of not less than one square inch per every square foot of enclosed area subject to flooding shall be provided.
      b. The bottom of all openings shall be no higher than one foot above the grade.
      c. Openings may be equipped with screens, louvers, or other covering or devices, provided that they permit the automatic entry and exit of flood waters.
   4. This provision applies only to homes constructed with the lowest floor at or above the base flood elevation.

D. Utilities.
   1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
   2. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.
   3. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and / or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

E. Development and Subdivision Proposals.
   1. All proposals shall be consistent with the need to minimize flood damage.
2. All proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.

3. All proposals shall have adequate drainage provided to reduce exposure to flood damage.

4. Base flood elevation data shall be provided for subdivision proposals and other proposed development which contain at least 50 lots or five acres, whichever is less.

Effective on: 7/1/2014

Sec. 4-4-6-6 Specific Standards for Flood Hazard Reduction

A. Generally. In all areas of special flood hazard, where base flood elevation data has been provided as set out in Section 4-4-6-4, Application, or Section 6-3-4-2, Floodplain Development Permits, the standards of this Section shall be required:

B. Residential Construction. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated a minimum of one foot above base flood elevation.

C. Nonresidential Construction. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated a minimum of one foot above base flood elevation, or together with attendant utility and sanitary facilities, shall:

   1. Be floodproofed so that all areas of the structure which are one foot above the base flood level or below are watertight with walls substantially impermeable to the passage of water.

   2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

   3. Provide that where a nonresidential structure is intended to be made watertight below the base flood level:

      a. A registered professional engineer or architect shall develop and / or review structural design, specifications and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the applicable provisions of this Division; and

      b. A record of such certificates, which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed, shall be maintained by the Department.

D. Manufactured Homes.

   1. Manufactured homes shall be anchored in accordance with Section 4-4-6-5, General Provisions and Standards for Flood Hazard Reduction, Subsection B.

   2. Manufactured homes that are placed or substantially improved within zones A1-30, AH, and AE on the flood insurance rate map ("FIRM") on sites outside of a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of flood, shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated at least one foot above the base flood elevation and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

   3. Manufactured homes that are placed or substantially improved on sites in existing manufactured home parks or subdivisions within the FIRM zones A1-30, AH, and AE that are not subject to the provisions of Subsection D.2., above, shall be elevated so that either:

      a. The lowest floor of the manufactured home is at or above the base flood elevation; or

      b. The manufactured home chassis is supported by reinforced piers or other foundation elements that are not less than 36 inches in height above grade and is securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
c. Further guidelines and examples of foundation, reinforced pier and anchoring system designs are contained in Federal Register of September 29, 1989 (Vol. 54, No. 188) and in FEMA publication "Manufactured Home Installation in Flood Hazard Areas," copies of which are available for review at the Department.

E. Fill. The use of fill to achieve the required elevation of the lowest floor is strongly discouraged.

F. Conditions of Permit Issuance. A Floodplain Development Permit shall not be issued for the construction of a new structure or addition to an existing structure on a property removed from the floodplain by the issuance of a FEMA Letter of Map Revision Based on Fill (LOMR-F), unless such new structure or addition complies with the following:

1. Elevation. The lowest floor (including basement) electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork), must be elevated to one foot above the base flood elevation that existed prior to the placement of fill.

2. Nonresidential Construction. The lowest floor (including basement) electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork), must be elevated to one foot above the base flood elevation that existed prior to the placement of fill, or together with attendant utility and sanitary facilities, shall be designed so that the structure or addition is watertight to at least one foot above the base flood level that existed prior to the placement of fill with the walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loss and effects of buoyancy.

G. Recreational Vehicles. Recreational vehicles shall:

1. Be on the site for fewer than 180 consecutive days;

2. Be fully licensed and ready for highway use; or

3. Meet the permit requirements and elevation and anchoring requirements for manufactured homes.

Effective on: 7/1/2014

Sec. 4-4-6-7 Floodways

A. Floodways are areas located within areas of special flood hazard as established under Section 4-4-6-4, Application. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

1. Encroachments, including fill, new construction, substantial improvements, and other development shall be prohibited unless certification by a State-registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

2. If the standard set out above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this Division.

Effective on: 7/1/2014

Sec. 4-4-6-8 Critical Facilities

A. Generally. A critical facility is a structure or related infrastructure, but not the land on which it is situated, as specified in Rule 6 of the Rules and Regulations for Regulatory Floodplains in Colorado, that if flooded may result in significant hazards to public health and safety, or interrupt essential services and operations for the community at any time before, during, and after a flood.
B. Protection for Critical Facilities. All new and substantially improved critical facilities and new additions to critical facilities located within the special flood hazard area shall be regulated to a higher standard than structures not determined to be critical facilities. For the purpose of this Division, protection shall include one of the following:
   1. Location outside of the special flood hazard area; or
   2. Elevation of the lowest floor or floodproofing of the structure, together with attendant utility and sanitary facilities, to at least two feet above the base flood elevation.

C. Ingress and Egress for New Critical Facilities. New critical facilities shall, when practical as determined by the City Engineer, have continuous, non-inundated access (ingress and egress for evacuation and emergency services) during a 100-year flood event.

Effective on: 7/1/2014

Division 4-4-7 Geologic and Wildfire Hazard Areas

Sec. 4-4-7-1 Disclaimer

The degree of hazard protection intended to be provided by this Division is considered reasonable for regulatory purposes and is based on engineering and scientific methods of study. This regulation does not imply that the areas outside of established hazard boundaries or uses permitted within these boundaries will be totally free from damage caused by these hazards. This regulation shall not create any liability on the part of, or cause an action against, the City, the City Council, or any officer or employee or official (elected or appointed) thereof for damages that may result from reliance on the regulations set out in this Division.

Effective on: 7/1/2014

Sec. 4-4-7-2 Designation of Hazard Areas

A. Official Hazard Area Maps. Maps and documentation regarding the general location of geologic and wildfire hazard areas ("Official Hazard Area Maps") are on file at the Department.
   1. Geologic Hazard Areas. Geologic hazard areas are identified on maps prepared by the Colorado Geological Survey and other qualified geological professionals.
   2. Wildfire Hazard Areas. Wildfire hazard areas are identified on maps prepared by the Colorado Forest Service.

B. Site-Specific Delineation. The maps described in Subsection A., above, define only approximate boundaries of hazard areas. The maps serve primarily as notice that geologic and / or wildfire hazards are known to exist on or near a parcel proposed for development, such that further analysis may be necessary. Precise boundary delineations require site-specific evaluation by qualified professionals.

Effective on: 7/1/2014

Sec. 4-4-7-3 Geologic Hazard Mitigation

A. Generally. This Section is not intended to categorically preempt all future development. The mitigation that may be required by this Section shall be proportionate to the nature, severity, and frequency of the hazard and the nature and intensity of the proposed land use.

B. Engineering Study.
1. If a parcel proposed for development is known or reasonably suspected to be in a geologic hazard area or wildfire hazard area, then the City may require the applicant to provide a site-specific engineering study to:
   a. Delineate the hazard;
   b. Define its degree of severity;
   c. Determine its frequency / probability of recurrence;
   d. Evaluate the compatibility of the proposed land use;
   e. Propose appropriate mitigation measures to reduce risks to people, property, and natural resources; and
   f. Propose ongoing operations and maintenance programs to ensure that the mitigation measures function properly.

2. All reports and studies required by this Section shall be prepared by a "professional geologist", as defined by C.R.S. § 34-1-01, as amended, or a "registered professional engineer," as defined by C.R.S. § 12-25-102, as amended, under the direction of and at the expense of the owner or applicant.

3. The extent of the site-specific investigation required shall be determined by the geologist or engineer who is responsible for the investigation; however, the investigation shall be of sufficient thoroughness and accuracy to allow such expert to certify to one of the following:
   a. The site can be developed for the specific development that is proposed, without corrective engineering, engineered construction, or other mitigation or alterations;
   b. The site is a geologically sensitive area, but the specific development that is proposed:
      1. Can be constructed with corrective engineering, engineered construction, or other mitigation or alterations which mitigate the risks to the occupants of the development such that they are reasonable; and
      2. Will not increase the hazard to other property or structures or to public buildings, rights-of-way, streets, easements, utilities or facilities, or other properties of any kind; or
   c. The site is a geologically sensitive area on which the specific proposed development is not appropriate because there are no mitigation techniques that could reduce the risks created by the geologic hazard to a reasonable level with respect to:
      1. Occupants and property on the parcel proposed for development; and
      2. Other property or structures, public buildings, rights-of-way, streets, easements, utilities, or facilities of any kind that are currently affected by the hazard or that would likely be affected by the hazard if the proposed development occurred.

C. Effect of Study.

1. If the conclusion of the engineer or geologist performing the investigation is that the site can be developed for the specific structure or activity proposed without corrective engineering, or engineered construction, or other mitigation or alterations, the subdivision plan, building permit, or grading permit may be approved without conditions relating to the mitigation of the areas of geologic sensitivity.

2. If the finding of the engineer or geologist performing the geologic investigation is that the site is a geologically sensitive area, but that corrective engineering, engineered construction, or other mitigation or alterations can be accomplished to reduce the danger to the public health and safety or to property to a reasonable level, and such mitigation does not increase the hazard to other property or structures, or to public buildings, roads, streets, rights of way, easements, utilities, or facilities, approval of the development plan and / or the issuance of the building or grading permit shall be conditional and contingent upon approval of plans for corrective engineering and engineered construction or other litigation or alterations as set out in this Division.

3. If the conclusion of the geologist or engineer performing the site specific geologic investigation is that the site cannot be developed for the structure or use proposed because the danger posed by the geologically sensitive
area cannot be reduced or mitigated to a reasonable level, the subdivision plan or building permit or grading permit shall be denied.

D. Techniques. Mitigation techniques shall be consistent with the purposes of this LUDC. Examples of mitigation techniques which may be acceptable are:
1. Retaining walls, fill, rock bolting, or pilings.
2. Diversion, channeling, damming, or barriers.
3. Excavation of unstable areas, bridging of weak zones, or proper distribution of loading.
4. Improvement of surface and subsurface drainage.

E. Construction Requirements. The following requirements shall pertain to the construction of any building or structure to be built in an identified or designated area of geologic sensitivity and which requires corrective engineering or engineered construction or other mitigation or alterations to reduce the danger to public health and safety or to property posed by the development of a geologically hazardous area:
1. The certified site specific reports and plans required by this Section shall be prepared by each engineer and geologist as applicable to their area of expertise and specialty, and shall certify that:
   a. Adequate base data as may be pertinent has been provided.
   b. Said base data is utilized in the design and planning of the proposed project or structure.
   c. Design and construction procedures derived from said base data are executed.
   d. Design and construction will reduce danger to the public health, safety, or property due to geologic sensitivity to a reasonable level.
2. No certificate of occupancy, temporary or permanent, shall be issued until the following have been approved by the Department:
   a. Inspection and certification by the Building Official and the engineer or geologist who prepared the plans and specifications that the work was properly performed in accordance with the plans and specifications.
   b. If the engineer, geologist, or Building Official find that the work is not being done in accordance with the approved plans and specifications, the discrepancy shall be reported immediately in writing to the contractor and to the Department. Recommendations for corrective measures, if necessary, shall also be submitted.
   c. All geologic reports prepared under this Section shall be signed by and prepared by or under the responsible direction of "professional geologists" as defined by Colorado Revised Statutes Section 34-1-201, as amended. Such professional geologist shall be experienced and competent in the geologic specialty required to meet the objectives of this Division. Such professional geologist shall be responsible for certification of all geologic maps and reports prepared by him/her under his/her responsible direction as specified in this Section. All engineering reports required by this Section shall be done by a "registered professional engineer" as defined by Colorado Revised Statutes Section 12-25-102, as amended.

F. Existing Uses Continued; Exceptions. Existing use of land, structures, or premises which are not in conformity with the provisions of this regulation may be continued, except that no building permit will be issued for the exterior expansion, alteration, or addition to existing structures in geologically sensitive areas except for windows, skylights, and other similar minor alterations, unless all of the requirements of this Section are met.

G. Notice Requirements. In order to provide reasonable notice to the public of the problems related to geologically sensitive areas, the following notice regulations and requirements are hereby adopted for all real property and structures located in geologically sensitive areas:
1. All subdivision plats recorded after the effective date of this LUDC shall identify and designate each lot and block, or portions thereof, located within any geologically sensitive area, together with applicable subzone designations by a stamp or writing in a manner providing reasonable notice to interested parties.
2. All plans submitted after the effective date of this LUDC with the building permit application for property within said areas shall be stamped by the Applicant "Geologically Sensitive Area" together with the applicable zone designation.

Effective on: 7/1/2014

Sec. 4-4-7-4 Wildfire Hazard Mitigation

A. Generally. The Wildland-Urban Interface ("WUI") is a geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels. The WUI creates a potentially dangerous situation for flames or embers from a wildland fire to come in contact with structures. The purpose of this Section is to provide a means to protect the public health, safety, and welfare by establishing standards for development within a WUI area in order to:

1. Reduce threats to life safety, property, and resources by improving development and construction standards, access to and defensibility of developments, homes, and other property in WUI areas;
2. Minimize the potential of spreading fire from wildland areas to structures and from structure fires to wildland areas;
3. Identify the appropriate use of cul-de-sacs, hammer head turnarounds, and turnouts on streets and roads providing legal and physical access to subdivisions with the intent to provide better emergency access to remote areas; and
4. Require homeowners and neighborhoods to plan, create, and maintain defensible space that utilizes fire resistant construction and landscaping.

B. Wildfire Mitigation Plan Required. Proposed development that is located in the WUI shall provide and implement a wildfire hazard mitigation plan according the standards of Appendix C, Wildfire Mitigation Plan Guidance.

C. Site Design. The following design standards apply to parcels proposed for development within the WUI. The City may approve alternative standards if it is demonstrated that they are consistent with current State and / or Federal guidance on wildfire hazard mitigation for development within the WUI.

1. Defensible Space. Development sites shall be designed to provide three zones of defensible space, as described in Appendix C, Wildfire Mitigation Plan Guidance.
2. Chimneys. Buildings and building sites shall be located outside of ravines or other topographical features which constitute "fire chimneys," and within 150 feet of the apex of "fire chimneys." Any proposed lot within a new subdivision with a "fire chimney" located on the lot should have a no-build area / zone designated on the face of the final plat for the subdivision that prohibits future development within "fire chimneys" and within 150 feet of the apex of "fire chimneys." This standard may be modified to allow development at RA zone density if it is demonstrated that the fire risk is appropriately mitigated and there is no other feasible option for development of the parcel proposed for development.
3. Improvements Prior to Construction. Water sources, wells, draft sites, hydrants, fire breaks, access routes, and other fire protection equipment or features required by the preliminary plat approval shall be installed prior to construction of any buildings in a new subdivision.
4. Fuelbreaks and Greenbelts. WUI fire protection may rely on fuelbreaks and greenbelts to separate communities, groups of structures, or individual homes. These breaks can slow or stop the spread of an oncoming fire.
   a. Fuelbreaks and greenbelts shall be located to protect both existing and planned developments and adjacent wildlands. Fuelbreaks shall not be a bare soil trail which is bulldozed around a subdivision. However, they may be as simple as the removal of dead and fallen trees, tree limbs, shrubs, and other flammable vegetation, together with breaking the continuity of vegetation around the perimeter of the development.
b. Natural features such as rocky formations with little or no vegetation, or rivers or streambeds in which vegetation has been thinned and dead and dying materials removed can also be utilized.

5. **Access.** Access to the parcel proposed for development shall be designed to provide for the safe movement of firefighters and their equipment.

D. **Building Design and Materials.** Buildings in the Wildland-Urban Interface (WUI) shall incorporate fire-resistant design techniques and utilize fire-resistant building materials.

**Effective on: 7/1/2014**

### Division 4-4-8 Archaeological Resources

#### Sec. 4-4-8-1 Archaeological Resources

A. **Generally.** The City recognizes the existence and importance of buried prehistoric and historic archaeological resources in the City, and declares as a matter of public policy that strong and consistent efforts will be made to identify, preserve, and protect such resources wherever possible and reasonable.

B. **City Activities.** Any work carried on by employees of the City involving archaeological sites, structures, or artifacts shall be appropriately documented and reported according to accepted professional standards, including the filing of a copy of any such report with the Colorado Historic Preservation Office.

C. **Historical and Archaeological Report.**
   1. Development proposals shall be reviewed by the City to determine if a historical / archaeological report shall be prepared by the Applicant. Approval of the report by the Historic Preservation Officer or the City Archeologist is required prior to final approval of the project and the issuance of any permits.
   2. **Historical / Archaeological Report.** This report shall consist of narrative and maps necessary to identify sites of historical and / or archaeological significance, to discuss the impacts of the development on the archaeological resources, and to describe measures taken to mitigate those impacts. The report shall meet the standards outlined by the Colorado Office of Archaeology. The sources of information used in preparing the report shall be listed.

D. **City-Owned Resources.**
   1. All archaeological sites, whether designated or nondesignated, archaeological structures, and artifacts on City-owned property are the collective property of the citizens of the City. It is unlawful to remove, plunder, or disturb any such site, structure, or artifact without prior written authorization having first been obtained from the office of the City Manager.
   2. If archaeological resources of significance to the community, State, or nation are found on City property, the City shall undertake necessary mitigation programs for such resources.

E. **Resources on Private Property.**
   1. Development proposals shall be reviewed by the Historic Preservation Officer or City Archaeologist, who shall determine if a historical / archaeological report shall be required. The City shall review the report and make appropriate recommendations in advance of the issuance of any City development approval or permit to ensure that all potential archaeological resources have been identified, professionally evaluated, and appropriate mitigation measures are outlined.
   2. If resources are present that are of archaeological significance to the community, State, or nation, the City shall encourage the implementation of necessary mitigation programs for such resources on private property if the archaeological resources are threatened with damage by any construction or development proposed to be permitted, licensed, or funded by the City.
F. **Mitigation Measures.** Mitigation programs shall include, to the extent feasible:
   1. The preservation of archaeological resources in their original location.
   2. Necessary excavations for purposes of recording and documenting the archaeological site, structure, or artifact.
   3. Examination and investigation sufficient to obtain necessary information to ensure the preservation of the historic, archaeological, and other scientific significance of the site, structure, or artifact.
   4. The completion of necessary mapping, photographing, or recording of any historical structure in accordance with standards of the Historical American Building Survey and the Historic American Engineering Record.

G. **Register of Historic and Archaeological Properties.** Nominations to the register of historic and archaeological properties may be made by any private or public entity or person, and shall be reviewed by a Committee established by the City Council for such purpose. The Committee shall make the necessary recommendations for inclusion within the register to the City Council. The register of historic and archaeological properties shall be independent of any similar Federal or State register.

*Effective on: 7/1/2014*

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### Sec. 4-4-8-2 Discovery of Archaeological Resources During Development

A. **Generally.** Archaeological resources may be discovered during development activities. In such cases, the developer shall adhere to the standards of this Section, except in locations where the resources are subject to State or Federal laws concerning the same subject matter (e.g., the Native American Graves Protection and Repatriation Act of 1990).

B. **Inadvertent Discoveries of Archaeological Resources.** In the case of an inadvertent discovery of an archaeological resource:
   1. The developer shall contact the Administrator immediately.
   2. No person shall move, photograph, or discuss the item or items with anyone other than the Administrator or their designated staff.
   3. Work shall be stopped in the immediate area, which is generally considered to be a 100-foot radius from the location of the discovery, and staff and / or contractors shall be instructed to leave the area.

C. **Inadvertent Discoveries of Possible Human Remains.** In the case of an inadvertent discovery of possible human remains:
   1. The developer shall contact the Administrator immediately, unless the discovery appears to be a crime scene, in which case the developer shall call 9-1-1 and follow the instructions of the operator and law enforcement officers.
   2. No person shall move, photograph, or discuss the items with anyone other than law enforcement, the Administrator, or their designated staff.
   3. Work shall be stopped in the immediate area, which is generally considered to be a 100-foot radius from the location of the discovery, and staff and / or contractors shall be instructed to leave the area.
   4. If the discovery is not a crime scene, then:
      a. The developer shall cover the suspected remains with soil, plain cloth, or similar material.
      b. The developer shall inform those present about the confidential nature of the issue.

D. **Subsequent Action to Preserve Archaeological Resources.** Following a discovery of archaeological resources or human remains:
   1. In consultation with the City Archaeologist, the City Council may negotiate with the owner and with any other affected parties in an effort to find an appropriate means of preserving the resource or human remains, which may include reburial, relocation, excavation and removal, or other appropriate mitigation measure described in Section 4-4-8-1, *Archaeological Resources.*
2. During the negotiation period, and where such action is reasonably necessary or appropriate for the continued preservation of the resource or remains, the City Council may enter into negotiations with the owner for the acquisition by gift, purchase, or exchange of the property or any interest therein.

Division 4-4-9 Minerals

Sec. 4-4-9-1 Master Plan for Extraction

A. Generally. Minerals shall not be extracted except according to a Master Plan for Extraction prepared by the Planning Commission, pursuant to Section 1-304, 34 C.R.S., Master Plan for Extraction, and any applicable standards of Federal and State law and this LUDC. As of the effective date of this LUDC, no Master Plan for Extraction has been adopted. If commercially viable mineral deposits which are not currently being mined are discovered in Durango, it is the intent of the City to develop a Master Plan for Extraction, and hold applications for extraction in abeyance until the plan is adopted.

B. Master Plan for Minerals Extraction. If a Master Plan for Extraction has not yet been adopted by the City at the time of application for approval for any extraction use, such application shall be held in abeyance for a period of up to 12 months, during which time the Master Plan for Extraction will be developed. The Master Plan for Extraction shall take into account:

1. Any system adopted by the Colorado geological survey grading commercial mineral deposits according to such factors as magnitude of the deposit and time of availability for and feasibility of extraction of a deposit;
2. The potential for effective multiple sequential use which would result in the optimum benefit to the landowner, neighboring residents, and the community as a whole;
3. The development or preservation of land to enhance development of physically attractive surroundings compatible with the surrounding area;
4. The quality of life of the residents in and around areas which contain commercial mineral deposits;
5. The Comprehensive Plan and specific area or topical plans;
6. Maximization of extraction of commercial mineral deposits;
7. The ability to reclaim the area pursuant to the provisions of Section 32-101, et seq., 34 C.R.S., Colorado Mined Land Reclamation Act; and
8. The ability to reclaim an area owned by the City or other governmental authority, pursuant to an adopted plan, to be used for public purposes by the City or governmental authority consistent with such proposed use.

Division 4-4-10 Oil and Gas

Sec. 4-4-10-1 Purpose and Application of Division

A. Generally. This Division is adopted in order to protect and promote the health, safety, values, convenience, order, prosperity, and general welfare of the present and future residents of the City. It is the City's intent by enacting this Division to allow for the development of oil and gas resources, while mitigating potential land use conflicts between such development and existing and planned land uses.

B. Balance of Interests.
1. The City recognizes that surface and mineral estates are distinct interests in land, and that one may be severed from the other.
   a. Owners of subsurface mineral interests have certain legal rights and privileges, including the right to use that part of the surface estate reasonably required to extract and develop their subsurface mineral interests, subject to compliance with the provisions of this Division and all other applicable statutory and regulatory requirements.
   b. Owners of the surface estate also have certain legal rights and privileges, including the right to have the mineral estate developed in a reasonable manner, and to have the adverse impacts upon their property that are associated with the development of the mineral estate mitigated through compliance with this Division.

2. Should it be established by competent evidence that a proposed major or minor facility cannot be operated in compliance with this Division, City land use approval for such a major or minor facility may be denied.

C. Relationship to State Law and COGCC Jurisdiction and Rules.
   1. The regulation of oil and gas facilities is partially preempted by the "Oil and Gas Conservation Act," C.R.S. § 34-60-101, et seq., as may be amended from time to time. Oil and gas facilities must comply with the Oil and Gas Conservation Act and the administrative rules of the Colorado Oil and Gas Conservation Commission (COGCC) according to their terms and procedures.
   2. To the extent that COGCC's rules reference local zoning regulations, in the absence of a "mixed-use" category in the COGCC's rules, the mixed-use zones of this LUDC shall be considered "Residential" for the purposes of oil and gas regulation.

D. Interpretation of this Division; Waivers.
   1. The regulations of this Division are intended to be interpreted in harmony with the purposes of the Oil and Gas Conservation Act, and are not intended to result in operational conflicts with said Act.
   2. City interests in regulation pursuant to this Division shall not be interpreted to materially impede or destroy state interests articulated in the Oil and Gas Conservation Act. As such, where an applicant demonstrates to the Administrator that a regulation under this Division creates an operational conflict that frustrates articulated State interests, the Administrator is authorized to waive the requirement from this Division and rely on the COGCC's administration of the Oil and Gas Conservation Act and regulations promulgated thereunder.

E. Existing Uses. The oil and gas regulations apply to all major and minor facilities for which construction has not commenced or a building permit has not been issued as of the effective date of this LUDC. Such application includes but is not limited to:
   1. Minor facilities that are subject to COGCC jurisdiction for which COGCC approval has not been obtained as of the effective date of this LUDC; and
   2. Minor facilities which have received COGCC approval, but have not been commenced by either construction or drilling operation as of the effective date of this LUDC.

F. Requests for COGCC Hearings. The City may request hearings before the COGCC with respect to individual applications pursuant to C.R.S. § 34-60-108, Rules - Hearings - Process.

Effective on: 7/1/2014

Sec. 4-4-10-2 Classifications of Oil and Gas Facilities

A. Generally. There are two classifications of oil and gas facilities for the purposes of this Division: "minor facilities" and "major facilities." Minor facilities are further subdivided into "minor facilities" and "minor facilities requiring special mitigation measures."

B. Major Oil and Gas Facilities. Major oil and gas facilities are:
1. Centralized facilities.

2. Water injection, centralized water transfer stations, centralized water pump stations (except as may be reclassified pursuant to Subsection C., below), and associated facilities serving multiple well pads.

3. Storage yards and construction staging yards in place for longer than six months.

4. Any permanent equipment facility or structure related to the production of oil and / or gas which contains internal combustion engines with a cumulative horsepower, de-rated for elevation, of 200 BHP or greater.

5. Transmission line or any pipelines for which the power of eminent domain is exercised.

6. Any oil and gas facility that does not qualify as a minor oil and gas facility (see Subsection C., below).

C. Minor Oil and Gas Facilities.

1. Minor Oil and Gas Facilities, Generally. Minor oil and gas facilities are:
   a. An individual well pad built with one or more wells and operated to produce liquid petroleum and / or natural gas, including associated equipment required for such production.
   b. Intermediate lines that extend beyond one-quarter mile (1,320 feet) from the wellhead, gathering lines, and ancillary equipment, including but not limited to, drip stations, vent stations, pigging facilities, chemical injection stations, and valve boxes.
   c. Temporary storage and construction staging yards in place for less than six months.
   d. A centralized water pump station, if upon submission of a site plan and narrative, the Administrator determines that any potential visual impacts will be mitigated. If the Administrator determines that reclassification to minor facility (from major facility) is appropriate, the Applicant shall follow the minor facility process and all relevant performance standards.

2. Minor Oil and Gas Facilities Requiring Special Mitigation Measures. Minor oil and gas facilities requiring special mitigation measures are:
   a. An individual wellsite built and operated to produce petroleum and / or natural gas and associated equipment (as defined above) which does not meet the minimum setback and other requirements specified in this Division for minor facilities.
   b. Any of the facilities specified under Subsection C.1., above, which do not comply with all applicable standards and requirements, as set forth in this Division, unless such noncompliance would result in classification as a major facility.
   c. Continuous drilling and completion operations of wells or well legs on a well pad that are planned to continue for longer than six weeks.

Effective on: 7/1/2014

Sec. 4-4-10-3 Permit Required

A. Generally. An oil and gas permit is required from the City prior to any oil and gas development.

B. Standard of Proof. Should an Applicant fail to establish by a preponderance of competent, substantial, and credible evidence that a proposed major or minor facility will operate in compliance with this Division (including the alternative standards provided herein), then the City shall deny the application for an oil and gas permit.

Effective on: 7/1/2014

Sec. 4-4-10-4 General Requirements

A. Generally. Oil and gas facilities shall meet the standards and policies set forth in the following documents:
1. The oil and gas regulations of this Division (which include the "performance standards" set out in Section 4-4-10-5, Siting of Facilities, through Section 4-4-10-18, Geologic and Special Flood Hazard Areas);
2. For major facilities, the standards of Section 4-4-10-19, Review Criteria for Major Facilities;
3. All other applicable regulations in this LUDC;
4. The Durango Comprehensive Plan;
5. City of Durango street and drainage design specifications and standards;
6. The International Building Code as amended and adopted by the City (see Chapter 6, Buildings and Building Regulations, Durango Municipal Code); and
7. All other applicable municipal, State, and Federal plans, policies, and regulations.

B. Major Street Impact Fees. New oil and gas wells are subject to the major street impact fee. See Division 5-5-3, Major Street Impact Fees.

Effective on: 7/1/2014

Sec. 4-4-10-5 Siting of Facilities

A. Generally. The standards presented in this Section shall be used to site oil and gas facilities.

B. Location on Private Property. Recognizing the need to avoid operational conflicts, yet recognizing the rights of surface owners, the right of the City to determine land uses, and the right of the mineral estate to extract minerals, the following criteria shall be used in siting oil and gas facilities on private property:

1. The siting of a minor or major facility shall adhere to the standards outlined in this Division to the maximum extent practical.
2. The standards in this LUDC shall not cause the operator to site the facility in:
   a. A geologic hazard area or an area with slopes exceeding 30 percent;
   b. An area of wetlands under the jurisdiction of the U.S. Army Corps of Engineers;
   c. An area of special flood hazard; or
   d. An area designated as restricted surface occupancy for wildlife resources by the Colorado Division of Wildlife ("CDOW"), unless after consultation with CDOW, a written waiver is provided by CDOW.
3. For minor oil and gas facilities not covered by a memorandum of understanding, the number of well pads shall not exceed four within any single 640-acre governmental section of real property. Notwithstanding the foregoing, nothing contained in this Section shall be construed so as to require the closure or abandonment of any existing oil or gas well. Limited waivers to this Section may be granted when one or more of the following factors apply in a manner such that use of only four well pads per governmental section is rendered impractical:
   a. Topographic characteristics of the site;
   b. Natural resource constraints (e.g., wetlands);
   c. The location of utilities or similar services;
   d. Demonstratively insurmountable technical issues related to the development or management of the mineral resource;
   e. Other site conditions beyond the control of the applicant; or
   f. Demonstratable safety concerns.

C. Application of Ranked Siting Standards. The siting standards set out in Subsection D., below, are ranked in descending order of priority. Facilities that cannot comply with the siting standards shall be denied, unless:
1. The impacts created by noncompliance with such standards are mitigated with a visual mitigation plan (see Section 4-4-10-12, Visual Mitigation Standards), and / or special noise mitigation measures (see Section 4-4-10-9, Special Noise Mitigation Standards);

2. The Administrator waives the mitigation requirements based on existing topography and vegetation that provide comparable mitigation; or

3. The mitigation required to comply with the siting standard would cause a conflict with a higher-ranked standard.

D. Ranked Siting Standards. The following are the ranked siting standards:

1. Minor facilities shall be constructed using existing infrastructure, including the use of existing roads, pipeline routes, and well pads. This standard shall not be applied if the use of existing infrastructure would impact an area 50 percent or greater of the property which is the subject of the minor facility, unless the surface owner provides written consent.

2. Minor facilities shall adhere to the setback and location requirements found in Section 4-4-10-6, Setbacks for Oil and Gas Facilities.

3. Minor and major facilities shall be sited to minimize the impacts to existing residences, commercial structures, public buildings, and approved platted building envelopes.

4. Minor and major facilities shall be sited to minimize the impacts to agricultural operations.

5. Minor and major facilities shall be sited in order to minimize the amount of cut and fill needed to construct the facility.

6. Minor and major facilities shall be sited in areas that maximize the amount of natural screening available for the facility. Natural screening includes, but is not limited to, the use of existing vegetation to screen or background the construction of the facility in canyons or behind ridges and natural rock formations.

7. Minor and major facilities shall be sited at the base of slopes to provide a background of topography and / or natural cover.

8. Minor and major facilities shall avoid siting on or across hilltops and ridges, or silhouetting.

9. Minor and major facilities shall be sited away from prominent natural features such as distinctive rock and land forms, vegetative patterns, river crossings, and other landmarks.

10. The provisions of any existing surface use agreement should be taken into consideration regarding the siting of a minor or major facility.

E. Alternative Compliance with Siting Standards. The City Council, on appeal or as the decision-maker, may allow compliance with two or more lower-priority siting standards instead of one higher-priority siting standard if it finds that such alternative compliance would provide a greater public benefit.

Effective on: 7/1/2014

Sec. 4-4-10-6 Setbacks for Oil and Gas Facilities

A. Generally. Oil and gas facilities shall be set back as required by this Section and, where applicable, COGCC rules.

B. Wellheads.

1. Generally.
   a. A setback of at least 500 feet shall be required between the wellhead and the closest existing residential structure or platted building envelope, unless verified written consent is obtained from the surface property owner of the affected buildings to a waiver of this standard.

   b. A setback of at least 150 feet shall be required between the wellhead of a minor facility and the closest property line, unless verified written consent is obtained from the affected property owner, and at least 200 feet from buildings, public roads, major aboveground utility lines, and railroads.
c. Setbacks between a major facility structure boundary and the closest existing residential, commercial, or industrial building or property line shall be determined on a site-specific basis, based on the major facility review criteria identified in Section 4-4-10-19, *Additional Review Criteria for Major Facilities*, as applicable, but shall be not less than those required for a minor facility, except as provided in Subsection B.2., below.

2. **Alternative Setbacks.** Wellhead setbacks may be reduced as follows:
   a. Verified written consent to a specific reduced setback, executed by all affected surface property owners; or
   b. Where site conditions or state or federal regulations make it technically impractical for the Applicant to meet the setbacks of this Section, and a waiver is not obtained from the affected property owner, the City may approve a reduced setback that is the maximum setback possible given the circumstances. Special noise mitigation measures as described in Section 4-4-10-9, *Special Noise Mitigation Measures*, may be required.

C. **Lines.**

1. Setback requirements for flowlines, intermediate lines, gathering lines, and transmission lines from general residential, commercial, and industrial buildings that are not part of the oil and gas facility shall be at least 50 feet. The setback distance shall be measured from the nearest edge of the affected pipeline or pipelines to the building wall.

2. The City Engineer may require an Applicant for a pipeline to provide a risk-based engineering study for all or part of its proposed pipeline right-of-way that may require the implementation of more stringent construction or operation standards or greater setbacks.

*Effective on: 7/1/2014*

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**Sec. 4-4-10-7 Private Access**

In those instances where an Applicant accesses facilities through a private road(s), the Applicant shall use best efforts to negotiate a fair and reasonable road maintenance or road improvement agreement, approved as to form by the City Attorney, with the private entity or entities that maintain the road for the purpose of paying or making in-kind contributions for its pro rata share of the cost of maintaining or improving the affected road(s). An Applicant that fails to reach an agreement shall document its actions to the City, and the existence, or lack thereof, of such executed agreements shall be noted in the application.

*Effective on: 7/1/2014*

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**Sec. 4-4-10-8 Noise Mitigation**

A. **Generally.** Noise shall be addressed according to the performance standards set out in this Section.

B. **Site Design and Equipment Orientation.**
   1. The exhaust from all engines, motors, coolers, and other mechanized equipment shall be vented up or in a direction away from the closest existing residences or platted subdivision lots.
   2. All mechanized equipment associated with minor and major facilities shall be anchored so as to minimize transmission of vibration through the ground.

C. **Electrification.** All minor facilities with engines or motors (excepting wellhead compressor engines) shall be electrified if located within 1,320 feet of distribution voltage. The electrification requirements contained herein refer to the use of three-phase power and “distribution voltage” means 12.47 kV 3 phase power. Applicants may provide information demonstrating that such electrification is infeasible. The Department shall review this information and may provide a waiver of this requirement. If distribution voltage is not currently within 1,320 feet of the proposed minor facility, the Applicant will contact and provide the surface owner an opportunity at the surface owner’s cost to
extend distribution voltage to within 1,320 feet of the proposed facility. Internal combustion engine powered artificial lift equipment may be used prior to the time that a site facility is electrified. All minor and major facilities that are not electrically operated shall be equipped with quiet design mufflers (also referred to as hospital grade or dual dissipative) or equivalent. Such equipment mufflers shall be properly installed and maintained in proper working order.

Effective on: 7/1/2014

Sec. 4-4-10-9 Special Noise Mitigation Standards

A. Generally. Where a minor facility or major facility does not comply with the required setbacks or other portions of the performance standards, additional mitigation may be required as provided in this Section.

B. Site-Specific Analysis. In determining noise mitigation, specific site characteristics shall be considered, including but not limited to, the following:

1. The nature and proximity of adjacent development (design, location, type, etc.).
2. The prevailing weather patterns, including wind directions.
3. Vegetative cover on or adjacent to the site.
4. Topography.

C. Mitigation Measures. The level of required mitigation may increase with the proximity of the facility to existing residences and platted subdivision lots, and/or the level of noise emitted by the facility. One or more of the following noise abatement measures may be required:

1. Acoustically insulated housing or cover enclosing the motor or engine.
2. Vegetative screen consisting of trees and shrubs, which may be placed within a fenced enclosure.
3. Solid wall or fence of acoustically insulating material surrounding all or part of the facility.
4. Acoustically insulated building enclosing the installation.
5. Noise management plan identifying hours of maximum noise emissions, type, frequency, and level of noise to be emitted, and proposed mitigation measures.
6. Construction of buildings or other enclosures, if the facilities create noise and visual impacts that cannot otherwise be mitigated because of proximity, density, and/or intensity of adjacent land use.
7. The exhaust from all engines, motors, coolers, and other mechanized equipment shall be vented up or in a direction away from the closest existing residences or platted subdivision lots.
8. All minor facilities with engines or motors (excepting wellhead compressor engines) shall be electrified if located within 1,320 feet of distribution voltage. All minor and major facilities which are not electrically operated shall be equipped with quiet design mufflers (also referred to as hospital grade or dual dissipative) or equivalent. Such equipment mufflers shall be properly installed and maintained in proper working order.
9. All mechanized equipment associated with minor and major facilities shall be anchored so as to minimize transmission of vibration through the ground.

D. Compliance with State Requirements. Sound emissions shall, at minimum, be in accordance with the standards as adopted and amended from time to time by the Colorado Oil and Gas Conservation Commission (COGCC). In all instances a major facility or minor must comply with sound emission standards designated for residential land uses, unless a specific exemption is granted by the City or the COGCC.

Effective on: 7/1/2014
Sec. 4-4-10-10 Security and Safety

A. **Generally.** Security and safety for oil and gas facilities shall meet at least the minimum performance standards of this Section.

B. **Fencing.**
   1. Security fencing and a locked gate for minor and major facilities are required in the following locations:
      a. Where there are four or more existing residences within 660 feet of the facility site perimeter;
      b. Where there is a public or private school within 660 feet of the facility site perimeter;
      c. Where there is any other existing structure with commercial occupancy, as defined by the building code, within 660 feet of the facility site perimeter; and
      d. Where there is an existing recreational facility designated by an appropriate Federal, State, or local authority within 660 feet of the facility site perimeter.
   2. Where the Applicant’s visual mitigation plan specifies alternative security fencing, the alternative fencing shall apply pursuant to Department review.

C. **Practices.** Safety practices in accordance with State and Federal law, including the Occupational Safety and Health Act of 1970, Public Law 91-596 84 Stat. 1590 91st Congress, S.2193, December 29, 1970, as amended, shall be used at all times during site development, drilling, and production to minimize the danger to the general public.

D. **Security.** Open-ended discharge valves on all storage tanks, pipelines, and other containers shall be secured where the facility site is unattended and/or accessible to the general public.

E. **Maintenance.** All land within 25 feet of any tank, pit, or other structure containing flammable or combustible materials shall be kept free of dry weeds, grass, or rubbish.

Effective on: 7/1/2014

Sec. 4-4-10-11 Surface Disturbance Standards

A. **Generally.** Surface disturbances are subject to the standards of this Section, which are adopted to minimize interference with surface activities and damage to surface conditions.

B. **Minimization of Disturbances.**
   1. Minor and major facilities shall be located so as to use only as much of the surface as is reasonably necessary for the operation of the facility and to avoid the unreasonable loss of agricultural land or any other vegetated land surface.
   2. Dust shall be suppressed throughout construction, drilling, and operations activities.

C. **Roads and Access.** New streets and access driveways for all facilities shall be constructed in compliance with the City’s engineering standards. In addition, minor and major facilities must meet the following standards:
   1. Chains shall be removed from heavy equipment before the equipment enters a public street.
   2. If mud and / or debris is tracked onto a public street, the Applicant shall remove it and restore the condition of the street as promptly as is reasonable under the circumstances. A vehicle tracking pad with a length of 60 feet shall be provided.
   3. If access to the parcel proposed for development requires crossing private property, the applicant shall demonstrate that it has a right of access to the parcel on which a facility is proposed to be located.
   4. The Applicant shall obtain a City permit or CDOT access permit, as applicable. Temporary widening of driveways for the transportation of heavy machinery may be allowed with a valid driveway permit, provided that:
      a. The duration of the permit does not exceed one year;
b. The driveway is returned to applicable standards at the end of the permit term; and

c. The widened street does not exceed 90 feet in width.

5. The Applicant shall provide a traffic control plan to the City prior to the use of heavy equipment, mobilization, demobilization, or any other disruption of two-way traffic.

D. Waste Disposal.

1. When a minor or major facility becomes operational, all construction-related debris shall be removed from the site for proper disposal, including temporary fencing material. The site shall be maintained free of debris and excess materials at all times during operation.

2. No burning of trash shall occur on the site without prior authorization of the surface owner, fire district, or appropriate entity having jurisdiction over air quality. All burning of trash shall be done within a container such as a wire cage or excavated pit covered with wire. All residual material from burning shall be removed from the site for proper disposal.

E. Weed Control.

1. The applicant shall be responsible for ongoing minor and major facility sites and access road weed control during construction and operation of the facility, until abandonment and final reclamation is completed per La Plata County or other applicable agency regulations.

2. The appropriate weed control methods and species to be controlled shall be determined through review and recommendation by the La Plata County Weed Office, in coordination with the requests of the surface owner.

F. Best Management Practices. At all times, Best Management Practices (BMPs) will be used to prevent stormwater discharges from impacting surface water quality in accordance with Division 4-3-1, Grading, Erosion, and Stormwater Controls.

Effective on: 7/1/2014

Sec. 4-4-10-12 Visual Mitigation

A. Generally. A visual mitigation plan is required for all minor and major facilities.

B. Visual Mitigation Plan. The visual mitigation plan shall incorporate the appropriate design elements described in this Subsection. The visual mitigation guidelines for oil and gas facilities in La Plata County (or equivalent guidance document cited by the Applicant and approved by the City) shall be used for guidance in the creation of the visual mitigation plan. The visual mitigation plan shall be approved or denied based on its adequate mitigation of public visual resource concerns identified during the application review process.

C. Minimum Visual Mitigation Requirements.

1. To the maximum extent practicable, the Applicant shall use structures and surface equipment of minimal size to satisfy present and future functional requirements.

2. When clearing trees and vegetation for construction of minor and major facilities, the applicant shall feather and thin the edges of vegetation.

3. The Applicant shall replace earth adjacent to water crossings at slopes less than the natural angle of repose for the soil type of the site.

4. To the maximum extent practicable, the Applicant shall align access roads to follow existing grades and minimize cuts and fills.

5. Minor and major facilities shall be colored as follows:

   a. Uniform or camouflaging, noncontrasting, nonreflective color tones, similar to the BLM Standard Environmental and Supplemental Colors coding system.
b. Color matched to the land, not the sky, slightly darker than the adjacent landscape.

6. The Applicant shall minimize damage to existing trees and vegetation.

7. Pad dimensions for a minor facility shall be the minimum size necessary to provide a safe work area and minimize surface disturbance. This Section may be waived by the Department if well pad dimensions are related to a visual mitigation plan proposal to blend with the natural topographical conditions.

D. Additional Visual Mitigation Requirements. One or more of the following landscape practices shall be applied, on a site specific basis, as required by the LUDC or a specific permit:
1. Establishment of berms, ground covers, shrubs, and trees.
2. Shaping slopes (cuts and fills) to appear as natural forms.
3. Cutting rock areas to create irregular forms.
4. Designing the facility to utilize natural screens.
5. Construction of fences, such as woven wood or rock, for use with or instead of landscaping.
6. Visual mitigation techniques described in the visual mitigation guidelines for oil and gas facilities in La Plata County (or equivalent guidance document approved by the Administrator).

E. Lighting. Exterior lighting, when required, shall comply with Division 4-3-2, Lighting. However, facilities do not have to comply with any exterior lighting standard that contradicts required industry safety standards.

Effective on: 7/1/2014

Sec. 4-4-10-13 Revegetation Standards

A. Generally. Revegetation is required according to the standards of this Section.

B. Revegetation Plans. Where minor and major facilities reduce or destroy existing vegetation, the Applicant, after reviewing Natural Resources Conservation Service (NRCS) guidance documents, shall develop a revegetation plan for the remainder of the facility site for approval by the Administrator. The plan shall specify species, planting schedule, planting method, quantity of seed or plant material to be used, and other related activities.

C. Revegetation Standards.
1. When a well is completed for production, all disturbed areas that are no longer reasonably needed for production operations or for subsequent drilling operations shall be reseeded and revegetated as soon as practicable, in accordance with applicable state laws and regulations.
2. If there is no applicable Federal or State law or regulation, then the owner or operator shall complete restoration and revegetation in accordance with the following:
   a. Reseeding of disturbed areas shall occur immediately after disturbed areas have been graded to return contours as nearly as practical to their original relative positions, unless extenuating circumstances are present. In any event, seeding shall be completed within 30 days after completion of grading.
   b. Crop lands shall be revegetated as follows:
      1. All segregated soil horizons removed from crop lands shall be replaced to their original relative positions and contour, and shall be tilled adequately to re-establish a proper seedbed.
      2. The area shall be treated (if necessary and practicable) to prevent invasion of undesirable species and noxious weeds, and to control erosion.
      3. Any perennial forage crops that were present before disturbance shall be re-established to the same plant density as undisturbed adjacent cropland, unless otherwise agreed by the surface owner.
   c. Non-crop lands shall be revegetated as follows:
1. All segregated soil horizons removed from non-crop lands shall be replaced to their original relative positions and contour as near as practicable to achieve erosion control and long-term stability, and shall be tilled adequately in order to establish a proper seedbed.

2. The disturbed area shall then be reseeded in the first favorable season. Reseeding with species consistent with the adjacent plant community is encouraged.

3. In the absence of an agreement between the operator and the affected surface owner as to what seed mix should be used, the operator shall consult with NRCS guidance documents, as maintained by and available from the City, to determine the proper seed mix to use in revegetating the disturbed areas, according to each type of affected terrain.

**D. Completion of Reclamation / Revegetation.** Interim reclamation of all disturbed areas no longer in use is complete when all ground surface disturbing activities at the site have been completed, and all disturbed areas have been either built on, compacted, covered, paved, or otherwise stabilized in such a way as to permanently prevent erosion; or when all of the following criteria have been met:

1. A uniform vegetative cover has been established with total non-noxious plant cover of at least 80 percent of average surrounding area levels.

2. Vegetative cover is such that the disturbed area for shrub and grass cover is expected to develop through plant successional processes. Expectation of plant succession shall be deemed adequate when the number of species having between three and 50 percent of relative plant cover is at least half that of the average surrounding area.

3. The total cover of noxious weeds is no greater than that which exist in the average surrounding area.

*Effective on: 7/1/2014*

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**Sec. 4-4-10-14 Wildlife**

**A. Generally.** Impacts to wildlife shall be evaluated and mitigated according to the standards of this Section. This Section contains a list of standard operating practices ("SOPs") for the protection of wildlife resources during oil and gas development activities. The SOPs shall provide for a written consent of the surface owner in order to address the agricultural production needs of the surface owner and the timing of oil and gas development activities on the surface owner’s agriculturally producing property.

**B. Site Specific Mitigation Conditions.**

1. The Applicant for approval of a major or minor facility shall mail notice to Colorado Division of Wildlife (CDOW) in the form described in Section 6-3-8-2, Application; Determination of Completeness; Notice, no less than 10 days prior to the application being submitted to the Department. CDOW shall have 15 days from receipt of the written notice to provide written comments to the Department regarding the potential conflicts with wildlife resources during oil and gas development, and potential site-specific wildlife mitigation measures. The Administrator may consider the comments of CDOW and shall rely on any of the SOPs in the creation of conditions of approval to address site specific wildlife mitigation measures for a minor or major facility.

2. If the Applicant is unable to comply with the SOPs due to conflicts with other provisions of the LUDC, or the inability to obtain the surface owner's consent, the Applicant shall identify any conflict(s) and propose alternate site-specific mitigation or best management practices for the protection of wildlife resources. The alternate site-specific mitigation or best management practices, at the discretion of the Administrator, may be included as conditions of approval for a minor or major facility permit.

**C. Standard Operating Practices.** The following is a list of SOPs:

1. Inform and educate employees and contractors on wildlife conservation practices, including, but not limited to:
   a. Driving the speed limit in rural areas to avoid animal-vehicle collisions, especially during the early morning and evening hours.
b. Prohibiting intentionally harassing or frightening wildlife.
c. Removing all food and trash items to avoid attracting wildlife to facility sites.

2. The Colorado Division of Wildlife’s fencing guidelines found in *Fencing with Wildlife in Mind* (or equivalent guidance document cited by the Applicant and approved by the Department) shall be used for developing wildlife appropriate fencing.

3. Provide to the Department a list of species identified by the National Diversity Information Service as occurring at the facility.

D. **Multiple Sites.** In lieu of a site-specific mitigation review for each facility, the Applicant may submit a multi-site plan addressing the cumulative impacts to wildlife from the estimated total number of facilities, and setting out SOPs to be used at multiple sites.

E. **Non-Mitigable Impacts.** Impacts from oil and gas facilities which threaten endangered species (as defined by the Colorado Division of Wildlife) shall be considered non-mitigable and shall result in denial.

*Effective on: 7/1/2014*

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**Sec. 4-4-10-15 Water**

If fresh or potable water is required for minor and / or major facility operation, the Applicant shall identify the proposed source of water. On-site containment and disposal of water associated with minor and major facilities shall be in accordance with any applicable Federal, State, County, or City requirements.

*Effective on: 7/1/2014*

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**Sec. 4-4-10-16 Chemical Products**

A. **Generally.** Onsite containment, disposal, and disclosure and retention of information related to chemical products associated with minor and major facilities shall be conducted in accordance with applicable State laws or regulation. If however, a State or Federal law or regulation does not exist or is not applicable, the owner or operator shall comply with this Section. In the event that a vendor or service provider does not provide the information required by this Section directly to the Department, the owner or operator is responsible for providing the required information.

B. **Permittee Records and Disclosures.**

1. All entities holding a permit issued pursuant to the oil and gas regulations shall make and keep appropriate records pertaining to chemical products covering their operations in the City, from which they may be able to make and substantiate the reports required by the Colorado Oil and Gas Conservation Commision ("COGCC"), its Director or, in the absence of State laws or regulations on this topic, as may be required by the City.

2. Owners or operators shall maintain material safety data sheets for any chemical products brought to a wellsite for use during downhole drilling, completion, and workover operations including fracture stimulation.

3. Owners or operators shall maintain a chemical inventory by wellsite for each chemical product used downhole or stored in an amount exceeding 500 pounds during any quarterly reporting period and the maximum capacity of fuel stored on the oil and gas location during drilling, completion, and workover operations including fracture stimulation. Entities maintaining chemical inventories under this Section shall update these inventories quarterly throughout the life of the wellsite. These records must be maintained in a readily retrievable format. The La Plata County Health Department may obtain information provided to the Department or Administrator in a chemical inventory upon written request to the Administrator.
C. **Timing of Required Disclosures.** Upon the Administrator's written request for information required to be maintained or provided under this Section, the record-keeping entity or third-party vendor shall supply the Administrator with the requested information within three business days in a format readily-reviewable by the Administrator, except in the instance where such information is necessary to administer emergency medical treatment in which case such information shall be provided as soon as possible.

D. **Trade Secret Chemical Products.**

1. Where the composition of a chemical product is considered trade secret by the vendor or service provider, owners or operators shall only be required to maintain the identity of the trade secret chemical product and shall not be required to maintain information concerning the identity of chemical constituents in a trade secret chemical product or the amounts of such constituents. The vendor or service provider shall provide to the Department a list of the chemical constituents contained in a trade secret chemical product upon receipt of a letter from the Administrator stating that such information is necessary to respond to a spill or release of a trade secret chemical product, or a complaint from a potentially adversely impacted landowner regarding impacts to public health, safety, welfare, or the environment.

2. Upon receipt of a written statement of necessity, information regarding the chemical constituents contained in a trade secret chemical product shall be disclosed by the vendor or service provider directly to the Administrator. The Administrator may disclose information regarding those chemical constituents to additional City staff members or public safety personnel to the extent that such disclosure is necessary to allow the staff member or public safety personnel receiving the information to assist in responding to the spill, release, or complaint, provided that such individuals shall not further disseminate the information.

3. In addition, the Administrator may disclose information regarding those chemical constituents to the La Plata County Public Health Department's Director of Environmental Programs upon request by that individual, provided that the County will consider the information to be confidential, that it does not become part of the chemical inventory, that it will not be construed as publicly available, and that disclosures to Health Department staff members will be under the same terms and conditions as were applied to its Director.

E. **Disclosures to Health Professionals.**

1. The vendor or service provider shall provide the chemical constituents of a chemical product to any health professional as may be provided under State law or regulation. In the event that no State law or regulation so provides, the vendor or service provider shall provide the chemical constituents of a chemical product to any health professional who requests such information in writing if the health professional provides a written statement of need for the information and a written confidentiality agreement.

2. The written statement of need shall be a statement that the health professional has a reasonable basis to believe that:
   a. The information is needed for purposes of diagnosis or treatment of an individual;
   b. The individual being diagnosed or treated may have been exposed to the chemical concerned; and
   c. Knowledge of the chemical constituents of such proprietary chemical product will assist in such diagnosis or treatment.

3. The confidentiality agreement shall state that the health professional shall not use the information for purposes other than the health needs asserted in the statement of need and that the health professional shall otherwise maintain the information as confidential. Where a health professional determines that a medical emergency exists and the chemical constituents of a trade secret chemical product are necessary for emergency treatment, the vendor or service provider shall immediately disclose the chemical constituents of a trade secret chemical product to that health professional upon a verbal acknowledgement by the health professional that such information shall not be used for purposes other than the health needs asserted and that the health professional shall otherwise maintain the information as confidential. The vendor or service provider may request a written statement of need, and a confidentiality agreement from all health professionals to whom information regarding the chemical constituents was disclosed, as soon as circumstances permit. Information so disclosed to a health professional shall be available only to that professional and to any health professional with whom the health professional shared the information.
professional shall not become part of the chemical inventory and shall in no way be construed as publicly available.

F. **Department Records.** Such books, records, inventories, and copies of said reports required by the City shall be kept on file and available for inspection by the Department for a period of at least five years, except for the chemical inventory, which shall be kept on file and available for inspection by the Department for the life of the applicable oil and gas well or oil and gas location, and for five years after plugging and abandonment.

G. **Protection of Confidential Information.**
   1. Information provided to the Administrator under this Section that is entitled to protection under State or Federal law, including C.R.S. § 24-72-204, as a trade secret, privileged information, or confidential commercial, financial, geological, or geophysical data shall be kept confidential and protected against public disclosure unless otherwise required, permitted, or authorized by other State or Federal law. Any disclosure of information entitled to protection under any State or Federal law made pursuant to this Section shall be made only to the persons required, permitted, or authorized to receive such information under State or Federal law in order to assist in the response to a spill, release, or complaint and shall be subject to a requirement that the person receiving such information maintain the confidentiality of said information.
   2. The Administrator shall notify the owner, holder, or beneficiary of any such protected information at least one business day prior to any required, permitted, or authorized disclosure. This notification shall include the name and contact information of the intended recipient of such protected information, the reason for the disclosure, and the State or Federal law authorizing the disclosure. Information so disclosed shall not become part of the chemical inventory and shall in no way be construed as publicly available.

Effective on: 7/1/2014

**Sec. 4-4-10-17 Pits and Pit Liners**

A. All pits shall be constructed in accordance with applicable State or Federal laws or regulation. If however, a State or Federal law or regulation does not exist or apply, the owner or operator shall comply with the following:
   1. All pits shall be fenced in order to prevent access by persons, stock, or wildlife unless the Applicant provides alternate mitigation measures satisfactory to the City, which achieves the goal of protecting against entry into pits by unauthorized persons, stock, or wildlife.
   2. All pit liners and any materials not meeting the standards set forth in 2 CCR 404-1 Section 910 (inclusive of table 910-1) shall be removed from the property upon completion of construction and disposed of at an approved facility.

Effective on: 7/1/2014

**Sec. 4-4-10-18 Geologic and Special Flood Hazard Areas**

Major facilities shall not be located in geologic hazard areas or area of special flood hazard.

Effective on: 7/1/2014

**Sec. 4-4-10-19 Additional Review Criteria for Major Facilities**

A. **Generally.** The decision to approve or deny an application for a major facility shall be made and determined based upon its compliance with all applicable performance standards and other requirements of this LUDC, and by applying the criteria of this Section to the evidence in the record of proceedings before the City.
B. Need. The need for the major facility, in the location proposed, to serve the Applicant's existing and projected oil and gas development, production, and operational requirements shall be demonstrated.

C. Suitability. The suitability of the location of the proposed facility, given its size, design, and operational characteristics, shall be demonstrated. Factors to be considered include noise levels, impacts upon air and water quality, vibration and odor levels, fire protection and access requirements, visual impacts, wildlife impacts, and public safety. These factors will be evaluated in accordance with applicable State, County, and Federal standards and criteria.

D. Adequacy of Existing Streets and Access to the Site. The adequacy of existing streets and access to the site shall be demonstrated. Factors for consideration are existing and proposed road alignment, intersections, condition, structure and sight distances, traffic volumes and types of equipment, dust control, and existing street uses.

E. Site Characteristics. The characteristics of the site shall be appropriate for the proposed use. Factors to be considered are topography, natural hazards (e.g., the potential for landslides, flooding, wildfire), cultural and historical uses on the proposed site and in the notice area, and current resource values (e.g., open space corridors, prime farmland as designated by the Natural Resource Conservation Service ("NRCS"), and wildlife habitat).

F. Compatibility. The compatibility of the proposed use with existing uses, approved uses, and future land uses that are shown in adopted City plans in the vicinity shall be demonstrated. A facility's compatibility with land uses in the surrounding area, which the City finds will be affected by its operation, shall be determined by the facility's estimated or projected ability to mitigate the impacts which it generates, as set forth in the facility operational plan, and in accordance with applicable City, State, and Federal rules, regulations, and standards.

Effective on: 7/1/2014

ARTICLE 4-5 PARKING AND LOADING

Division 4-5-1 Purpose and Application of Article

Sec. 4-5-1-1 Purpose of Article

A. Generally. The purpose of this Article is to ensure that:

1. Adequate off-street motor vehicle and bicycle parking is provided for uses that are permitted by this LUDC;
2. Sufficient motor vehicle parking is provided in nonresidential areas that are near residential neighborhoods, so that the character and quality of life in the residential neighborhoods are protected from excessive overflow parking;
3. The sharing of off-street parking spaces among uses that have different peak parking demands allows for a reduction in the number of parking spaces that are required to serve mixed-use development;
4. Adequate loading areas and (where appropriate) stacking areas are provided that do not interfere with the function of adjacent streets and on-site vehicular use areas; and
5. Sites that are used for infill, adaptive re-use, or redevelopment have flexibility and multiple alternatives for compliance with this Article, such that investments in upgrades to real property are promoted.

B. Parking Districts. This Article establishes parking districts in which different parking requirements apply. These districts are created in recognition of the fact that certain areas of the City generate more automobile trips than other areas, and therefore, have different parking demands.

C. Parking Reductions. In addition to establishing parking requirements that provide for convenience, neighborhood protection, and mobility, this Article provides several ways to reduce the number of parking spaces that are required for development, in order to promote the efficient use of land and reduce the expanse of paved areas.
D. **Residents and Visitors with Disabilities.** This Article ensures that appropriate parking areas and accessible routes will be provided for disabled persons when parking lots or structures are developed, expanded, or reconfigured.

Effective on: 7/1/2014

### Sec. 4-5-1-2 Application of Article

A. **Generally.** This Section describes how the Sections of Article 4-5, Parking and Loading, are applied, and how they relate to other provisions of this LUDC.

B. **Parking Districts.** There are three parking districts in Durango: General, Enhanced Multimodal Area, and CBD.

1. **General.** The General parking district applies within the EN (all sub-districts), RL, RM, CG, CR, BP, I, RA, OS, PB, and PD zones.

2. **Enhanced Multimodal Area.** The Enhanced Multimodal Area ("EMA") parking district applies within that portion of the RH, MU-N, and MU-A zones displayed in Appendix B, EMA Area, where nonvehicular modes of travel are more prevalent, and where there is a reduced need for vehicle storage.

3. **CBD.** The CBD parking district applies within the CB zone.

C. **Number of Required Parking and Loading Spaces.** The number of parking and loading spaces that must be provided for a proposed development is calculated as provided in Division 4-5-2, Parking and Loading Calculations. Section 4-5-2-1, Calculation of Required Parking Spaces, establishes the methodology for calculating the number of required parking spaces, including measurement of independent variables and application of available credits and reductions that are allowed by Section 4-5-2-6, Parking Credits and Reductions: General, and Section 4-5-2-9, Shared Parking.

D. **Bicycle Parking.** Bicycle parking is required as set out in Section 4-5-2-10, Bicycle Parking Calculations, and must be designed as set out in Section 4-5-3-4, Bicycle Parking Design.

E. **Stacking Spaces.** Stacking spaces (spaces for cars that are waiting for drive-up or drive-through services) are required for drive-up and drive-through uses as provided in Section 4-5-3-6, Vehicular Stacking Requirements.

F. **Design of Parking and Loading Areas.** The size and configuration of parking and loading spaces shall be as set out in Division 4-5-3, Parking and Loading Design.

G. **Surfacing, Use, and Maintenance of Parking and Loading Areas.** Standards for the surfacing, use, and maintenance of parking and loading areas are set out in Division 4-5-4, Use and Maintenance of Parking Areas. Standards that apply to temporary uses in parking and loading areas are set out in Division 2-3-3, Temporary Uses.

Effective on: 7/1/2014

### Division 4-5-2 Parking and Loading Calculations

#### Sec. 4-5-2-1 Calculation of Required Parking Spaces

A. **Generally.** Section 4-5-2-2, Required Off-Street Parking Spaces (Parking Tables), sets out the number of parking spaces that are required for each land use that is listed in Division 2-1-3, Use / Zone Matrices. The number of parking spaces is based on one or more independent variables, which are measured as provided in this Section.

B. **Independent Variables.** The independent variables for parking calculations are measured as follows:

1. **Per sf. GFA.** The phrase "per sf. GFA" means that the number of parking spaces is calculated based on the number of square feet of gross floor area put to the use, as calculated using the methodology in Section 7-2-1-2, Gross Floor Area, as it relates to "gross floor area (parking)."
2. Per sf. GLA. The phrase "per sf. GLA" means that the number of parking spaces is calculated based on the number of gross square feet of leasable floor area put to the use, as calculated using the methodology in Section 7-2-1-2, Gross Floor Area, as it relates to "gross leasable area (parking)."

3. Per dwelling unit or per BR. The phrase "per dwelling unit" means that the number of parking spaces is calculated based on the number of dwelling units. In some cases, the parking requirements are based on the number of bedrooms (per "#" BR unit) in the dwelling units.

4. Per Bed. The phrase "per bed" means that the number of parking spaces is based on the number of beds in the facility instead of the number of sleeping rooms or some other measure. Per bed calculations are normally applied to uses that offer residential care or overnight accommodations with shared rooms.

5. Per Employee. The phrase "per employee" means that the number of parking spaces is based on the number of employees (full-time and part-time equivalent) on the maximum shift, that is, the work shift in which the maximum number of employees are present.

6. Per Seat / Per Seat Design Capacity. The phrase "per seat" means that the number of parking spaces is based on the number of seats that are provided to guests (patrons, members, etc.); and the phrase "per seat design capacity" means that the number of parking spaces is based on the maximum seating capacity of the use as determined by applicable fire codes.

7. Per Person Design Capacity. The phrase "per person design capacity" means that the number of parking spaces is based on the maximum number of people who may occupy the use pursuant to applicable fire code standards.

8. Others. Other independent variables are measured according to their common meanings.

C. Rounding. When the calculation of required parking spaces results in a fractional parking space, the result of the parking calculation shall be rounded up to the nearest whole number.

D. Parking Reductions. Generally, the total number of required parking spaces is equal to the sum of the required parking for each use of a parcel proposed for development. However, parking requirements may be reduced according to the methodology of Section 4-5-2-9, Shared Parking, and the provisions of Section 4-5-2-6, Parking Credits and Reductions: General. Section 4-5-2-6, Parking Credits and Reductions: General, sets out the order of the reductions if shared parking and parking credits are both used.

E. Calculations within Main Avenue Character Area of Downtown Design Overlay Zone.

1. Within the Main Avenue Overlay Zone, as defined in Section 2-1-2-2, Overlay Zones Established, additional parking is not required for a change of use of gross floor area which existed on the effective date of this LUDC, including gross floor area which was not previously put to a use which generated parking demand (e.g., an unoccupied basement).

2. Parking shall be provided in an amount equal to the marginal increase in required parking (see Section 4-5-2-2, Required Off-Street Parking Spaces (Parking Tables)) attributable to:
   a. New gross floor area added to a building after the effective date of this LUDC, according to the use of the new gross floor area; and
   b. Changes in use of residential units.

Effective on: 7/1/2014

Sec. 4-5-2-2 Required Off-Street Parking Spaces (Parking Tables)

A. Generally. Parking shall be provided as set out in the tables of this Section.

B. Residential, Transient Residential, and Overnight Accommodations Uses. The required off-street parking for residential, transient residential, and overnight accommodation uses is set out in Table 4-5-2-2A, Parking Requirements for Residential, Transient Residential, and Overnight Accommodations.
<table>
<thead>
<tr>
<th>Land Use</th>
<th>Parking Requirements for Residential, Transient Residential, and Overnight Accommodation Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential Land Uses</strong></td>
<td></td>
</tr>
<tr>
<td>Single-Family Detached or Manufactured Home (outside of Manufactured Home Park or Subdivision)</td>
<td>2 spaces¹, 2 spaces¹, 2 spaces¹</td>
</tr>
<tr>
<td>Duplex</td>
<td>2 spaces per dwelling unit, 2 spaces per dwelling unit, 2 spaces per dwelling unit</td>
</tr>
<tr>
<td>Townhomes</td>
<td>1.7 spaces per studio unit, 2 spaces per 1 BR unit, 2.3 spaces per 2 BR unit, 2.5 spaces per 3 BR unit, 1.7 spaces per studio unit, 2 spaces per 1 BR unit, 2.3 spaces per 2 BR unit, 2.5 spaces per 3 BR unit, 1 space per studio unit, 1.5 spaces per 1 BR unit (* multiplex is not allowed in CBD)</td>
</tr>
<tr>
<td>Multiplex or Multi-Unit Building</td>
<td>1.7 spaces per studio unit, 2 spaces per 1 BR unit, 2.3 spaces per 2 BR unit, 2.5 spaces per 3 BR unit, 1.7 spaces per studio unit, 2 spaces per 1 BR unit, 2.3 spaces per 2 BR unit, 2.5 spaces per 3 BR unit³</td>
</tr>
<tr>
<td>Manufactured Home Park or Subdivision</td>
<td>2 spaces per dwelling unit; plus 1 space in common parking area per 2 dwelling units, Note 2</td>
</tr>
<tr>
<td>Group Home</td>
<td>By dwelling unit type, By dwelling unit type, By dwelling unit type</td>
</tr>
<tr>
<td>Live-Work Unit</td>
<td>3 spaces; plus 1 space per employee who does not live in the live-work unit, 2 spaces; plus 1 space per employee who does not live in the live-work unit, 2 spaces; plus 1 space per employee who does not live in the live-work unit</td>
</tr>
<tr>
<td>Work-Live Unit</td>
<td>1 space for the dwelling unit; plus spaces as required by this table for the nonresidential use, 1 space for the dwelling unit; plus spaces as required by this table for the nonresidential use, 1 space for the dwelling unit; plus spaces as required by this table for the nonresidential use</td>
</tr>
<tr>
<td>On-Site Employee Housing Unit</td>
<td>1 spaces per studio or 1 bedroom unit, 2 spaces per 2 BR or 3 BR unit, 1 spaces per studio or 1 bedroom unit, 2 spaces per 2 BR or 3 BR unit, 1 spaces per studio or 1 bedroom unit, 2 spaces per 2 BR or 3 BR unit</td>
</tr>
<tr>
<td>Dormitory / Fraternity / Sorority</td>
<td>1 space per 2 beds, 1 space per 2 beds, 1 space per 2 beds, Note 2</td>
</tr>
<tr>
<td>Boarding House</td>
<td>2 spaces, plus 1 space per rental room, 1 space, plus 1 space per rental room, 1 space, plus 1 space per rental room, Note 2</td>
</tr>
<tr>
<td><strong>Transient Residential Land Uses and Overnight Accommodations</strong></td>
<td></td>
</tr>
<tr>
<td>Bed and Breakfast</td>
<td>1 space; plus 1 space per guest room, 1 space; plus 1 space per guest room, 1 space; plus 1 space per guest room</td>
</tr>
<tr>
<td>Bed and Breakfast Inn</td>
<td>1 space; plus 1 space per guest room, 1 space; plus 1 space per guest room, 1 space; plus 1 space per guest room</td>
</tr>
<tr>
<td>Guest Ranch</td>
<td>2 spaces; plus 1 space per guest room, Note 2, Note 2</td>
</tr>
<tr>
<td>Hostel</td>
<td>2 spaces; plus 1 space per 2 beds, 1 space per 2 beds, 1 space per 2 beds</td>
</tr>
<tr>
<td>Hotel / Motel, Tourist or Business</td>
<td>1.1 spaces per guest room; plus 50% of required parking for integrated restaurant, and alcoholic beverage sales, 1.1 spaces per guest room; plus 50% of required parking for integrated restaurant, and alcoholic beverage sales, 1.1 spaces per guest room; plus 50% of required parking for integrated restaurant, and alcoholic beverage sales</td>
</tr>
<tr>
<td>Hotel / Motel, Convention</td>
<td>1.1 spaces per guest room; plus 1 space per 150 sf. of meeting area; plus 50% of required parking for integrated restaurant, and alcoholic beverage sales, 1 space per guest room; plus 1 space per 150 sf. of meeting area; plus 50% of required parking for integrated restaurant, and alcoholic beverage sales, 1 space per guest room; plus 1 space per 150 sf. of meeting area; plus 25% of required parking for integrated restaurant, and alcoholic beverage sales</td>
</tr>
<tr>
<td>Timeshare / Fractional Ownership</td>
<td>1 space per unit; plus 1 space per 8 units, 1 space per unit; plus 1 space per 8 units, 1 space per unit; plus 1 space per 10 units</td>
</tr>
<tr>
<td>Vacation Home / Vacation Rental</td>
<td>1 space per bedroom, 1 space per bedroom, 1 space per bedroom⁴</td>
</tr>
</tbody>
</table>

**TABLE NOTES:**
Additional parking is required if the lot includes an accessory dwelling unit. See Section 2-3-2-3, Accessory Dwelling Units
The use is not allowed in this parking district. Where the use already exists as a nonconforming use, the “General” parking regulations apply.
For multifamily developments with three to 10 units, a 15 percent reduction in required parking is allowed.
Parking can be reduced in the CB zone for Vacation Rentals with three or more bedrooms. See Section 2-2-3-4(G)(6)(c)
C. **Institutional, Education, Protective Care, and Health Care Uses.** The required off-street parking for institutional, education, protective care, and health care uses is set out in Table 4-5-2-2B, *Parking Requirements for Institutional, Education, Protective Care, and Health Care Uses*.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Parking District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General</td>
</tr>
<tr>
<td><strong>Institutional Uses</strong></td>
<td></td>
</tr>
<tr>
<td>Cemetery</td>
<td>5 spaces per acre of grave sites (may be provided &quot;on-street&quot; within cemetery grounds)</td>
</tr>
<tr>
<td>Day Care, Adult</td>
<td>1.2 spaces per employee on maximum shift</td>
</tr>
<tr>
<td>Day Care, Child (6 or fewer attendees)</td>
<td>1 space per employee on maximum shift</td>
</tr>
<tr>
<td>Day Care, Child (7 to 12 attendees)</td>
<td>1 space per employee on maximum shift</td>
</tr>
<tr>
<td>Day Care, Child (13 or more attendees)</td>
<td>1 space per employee on maximum shift; plus 1 drop-off / pick-up space for up to 24 attendees; plus 1 drop-off / pick-up space per 12 attendees thereafter</td>
</tr>
<tr>
<td>Funeral Home</td>
<td>1 space per 4 seats design capacity</td>
</tr>
<tr>
<td>Institutional Residential</td>
<td>1 space per 2 beds; plus 1 space per employee on maximum shift</td>
</tr>
<tr>
<td>Library</td>
<td>3.5 spaces per 1,000 sf. GFA</td>
</tr>
<tr>
<td>Place of Assembly</td>
<td>The lower of 1 space per 250 sf. GFA or 1 space per 150 sf. of assembly area</td>
</tr>
<tr>
<td>Police or Fire Station</td>
<td></td>
</tr>
<tr>
<td>Police Station</td>
<td>1 space per 250 sf. GFA; plus spaces required for vehicle storage</td>
</tr>
<tr>
<td>Fire Station</td>
<td>4 spaces per emergency vehicle bay; plus 1 space per 300 sf. of public meeting area</td>
</tr>
<tr>
<td>Post Office</td>
<td>1 space per 225 sf. GFA; plus postal vehicle storage</td>
</tr>
<tr>
<td><strong>Education Uses</strong></td>
<td></td>
</tr>
<tr>
<td>College / University / Vocational School</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
</tr>
<tr>
<td>College / University</td>
<td>1 space per 50 sf. of classroom space; or, for industrial or auto-related training, same as comparable industrial or auto-related use</td>
</tr>
<tr>
<td>Vocational School</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
</tr>
<tr>
<td>School, Boarding</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
</tr>
<tr>
<td>School, Middle</td>
<td>2 spaces per room used for instruction (e.g., classrooms, gymnasiums, libraries, art studios, and computer labs)</td>
</tr>
<tr>
<td>School, High</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
</tr>
<tr>
<td>School, Pre-School or Elementary</td>
<td>2 spaces per room used for instruction (e.g., classrooms, gymnasiums, libraries, art studios, and computer labs)</td>
</tr>
</tbody>
</table>
Table 4-5-2B
Parking Requirements for Institutional, Education, Protective Care, and Health Care Uses

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Parking District</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Enhanced Multimodal Area</td>
</tr>
<tr>
<td>Protective Care, Safehouse, and Shelter Uses</td>
<td></td>
</tr>
<tr>
<td>Protective Care</td>
<td></td>
</tr>
<tr>
<td>Jail or Prison</td>
<td>1 space per 500 sf. GFA</td>
</tr>
<tr>
<td>All Other</td>
<td>3 spaces per 1,000 sf. GFA</td>
</tr>
<tr>
<td>Safehouse</td>
<td>3 spaces (one may be tandem)</td>
</tr>
<tr>
<td>Shelter</td>
<td>1 space per 500 sf.</td>
</tr>
<tr>
<td>Health Care Uses</td>
<td></td>
</tr>
<tr>
<td>Assisted Living / Congregate Care</td>
<td>1 space per 3 beds; plus 2 spaces per 3 employees on maximum shift</td>
</tr>
<tr>
<td>Hospitals</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
</tr>
<tr>
<td>Medical Labs / Clinics / Urgent Care</td>
<td>1 space per 300 sf. GFA</td>
</tr>
<tr>
<td>Nursing Home</td>
<td>1 space per 4 beds; plus 2 spaces per 3 employees on maximum shift</td>
</tr>
<tr>
<td>Office, Medical</td>
<td>1 space per 300 sf. GFA</td>
</tr>
</tbody>
</table>

**TABLE NOTE:**
The use is not allowed in this parking district. Where the use already exists as a nonconforming use, the general parking regulations apply.

D. **Commercial Retail and Service, Marijuana, and Restaurant Uses.** The required off-street parking for commercial retail and service, marijuana, and restaurant uses are set out in Table 4-5-2-2C, *Parking Requirements for Commercial Retail and Service, Marijuana, and Restaurant Uses*.

Table 4-5-2C
Parking Requirements for Commercial Retail and Service, Marijuana, and Restaurant Uses

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Parking District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General</td>
</tr>
<tr>
<td><strong>Commercial Uses</strong></td>
<td></td>
</tr>
<tr>
<td>Alcoholic Beverage Sales, On-Premise Consumption</td>
<td>1 space per 50 sf. of Customer Access Area</td>
</tr>
<tr>
<td>Brewing / Distillery / Winery, Production with On-Premise Consumption</td>
<td>1 space per 50 sf. of Customer Access Area plus 1 space per 300 sf. of other floor area</td>
</tr>
<tr>
<td><strong>Commercial Retail and Commercial Retail, Late Night / 24-Hour (includes standard, drive-in, and drive-through uses)</strong>*</td>
<td></td>
</tr>
<tr>
<td>High Volume</td>
<td>1 space per 200 sf. GFA</td>
</tr>
<tr>
<td>Medium Volume</td>
<td>1 space per 250 sf. GFA</td>
</tr>
<tr>
<td>Low Volume</td>
<td>1 space per 300 sf. GFA</td>
</tr>
<tr>
<td>Shopping Center, 25,000 sf. GFA or less</td>
<td>1 space per 200 sf. GLA</td>
</tr>
<tr>
<td>Shopping Center, more than 25,000 sf. GFA</td>
<td>1 space per 250 sf. GLA</td>
</tr>
<tr>
<td>Land Use</td>
<td>General</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Handcrafted Small Scale Food and Beverage Production with On-Premise Consumption or Sales</td>
<td>1 space per 75 sf. of floor area accessible to customers for on-premise consumption, plus 1 space per 300 sf. of other floor area</td>
</tr>
<tr>
<td>Kennel</td>
<td>1 space per 500 sf. GFA</td>
</tr>
<tr>
<td>Mixed-Use</td>
<td>Shared parking (see Section 4-5-2-9, Shared Parking)</td>
</tr>
<tr>
<td>Office, General</td>
<td>1 space per 300 sf. GFA</td>
</tr>
<tr>
<td>Outdoor Retail, Heavy</td>
<td>1 space per 1,000 sf. of outdoor display area</td>
</tr>
<tr>
<td>Outdoor Retail, Light</td>
<td>1 space per 400 sf. of outdoor display area</td>
</tr>
<tr>
<td>Services, Commercial</td>
<td>1 space per 250 sf. GFA</td>
</tr>
<tr>
<td>Services, Personal</td>
<td>1 space per 250 sf. GFA</td>
</tr>
<tr>
<td>Sexually-Oriented Retail Establishment</td>
<td>1 space per 250 sf. GFA</td>
</tr>
<tr>
<td>Veterinarian, Small Animal (Dogs, Cats, Exotic Pets)</td>
<td>1 space per 300 sf. GFA</td>
</tr>
<tr>
<td>Marijuana Uses</td>
<td></td>
</tr>
<tr>
<td>Medical Marijuana Center</td>
<td>1 space per 200 sf. GFA</td>
</tr>
<tr>
<td>Retail Marijuana Store</td>
<td>1 space per 200 sf. GFA</td>
</tr>
<tr>
<td>Retail Marijuana Testing Facility</td>
<td>1 space per 300 sf. GFA</td>
</tr>
<tr>
<td>Restaurant Uses</td>
<td></td>
</tr>
<tr>
<td>Restaurant; Drive-In or Drive-Through</td>
<td>1 space per 50 sf. Customer Access Area</td>
</tr>
<tr>
<td>Restaurant; Drive-In or Drive-Through, Late Night / 24-Hour</td>
<td>1 space per 50 sf. Customer Access Area</td>
</tr>
<tr>
<td>Restaurant, No Drive-In or Drive-Through</td>
<td>1 space per 75 sf. Customer Access Area</td>
</tr>
</tbody>
</table>

**TABLE NOTE:**
The use is not allowed in this parking district. Where the use already exists as a nonconforming use, the general parking regulations apply.

**E. Motor Vehicle and Heavy Equipment, and Recreation and Amusement Uses.** The required off-street parking for motor vehicle and heavy equipment and recreation and amusement uses are set out in Table 4-5-2-2D, *Parking Requirements for Motor Vehicle and Heavy Equipment, and Recreation and Amusement Uses*. 

<table>
<thead>
<tr>
<th>Land Use</th>
<th>General</th>
<th>Enhanced Multimodal Area</th>
<th>CBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Vehicle and Heavy Equipment Related Uses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fueling or Charging Station</td>
<td>1 space per 375 sf. GFA of convenience store or payment kiosk</td>
<td>1 space per 375 sf. GFA of convenience store or payment kiosk</td>
<td>1 space per 375 sf. GFA of convenience store or payment kiosk</td>
</tr>
<tr>
<td>Heavy Equipment Rental and Sales</td>
<td>1 space per 500 sf. GFA; plus 1 space per 10,000 sf. outdoor storage area</td>
<td>Note 1</td>
<td>Note 1</td>
</tr>
<tr>
<td>Motor Vehicle Repairs and Service, Heavy</td>
<td>1 space per 300 sf. GFA</td>
<td>Note 1</td>
<td>Note 1</td>
</tr>
<tr>
<td>Motor Vehicle Repairs and Service, Light</td>
<td>1 space per 300 sf. GFA</td>
<td>1 space per 300 sf. GFA</td>
<td>Note 1</td>
</tr>
</tbody>
</table>
## Table 4-5-2-2D

### Parking Requirements for Motor Vehicle and Heavy Equipment, and Recreation and Amusement Uses

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Parking District</th>
<th>CBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Vehicle Sales or Rental, Commercial or Construction Vehicles</td>
<td>General: 1 space per 500 sf. GFA; plus 1 space per 10,000 sf. outdoor storage area</td>
<td>Note 1 Note 1</td>
</tr>
<tr>
<td>Motor Vehicle Sales or Rental, Motorcycles, Scooters, Snowmobiles, and ATVs</td>
<td>Enhanced Multimodal Area: 1 space per 400 sf. GFA; plus 1 space per 5,000 sf. outdoor storage area</td>
<td>1 space per 400 sf. GFA; plus 1 space per 5,000 sf. outdoor storage area</td>
</tr>
<tr>
<td>Motor Vehicle Rental, Passenger Vehicles</td>
<td>General: 1 space per 100 sf. GFA</td>
<td>Note 1 Note 1</td>
</tr>
<tr>
<td>Motor Vehicle Sales, Passenger Vehicles</td>
<td>Enhanced Multimodal Area: 1 space per 500 sf. GFA of showroom and office area; plus 1 space per 5,000 sf. outdoor vehicle storage area</td>
<td>1 space per 500 sf. GFA showroom and office area</td>
</tr>
<tr>
<td>Recreational Vehicle and Boat Sales</td>
<td>General: 1 space per 750 sf. GFA of showroom and office area; plus 1 space per 10,000 sf. outdoor vehicle / boat storage area</td>
<td>Note 1 Note 1</td>
</tr>
<tr>
<td>Vehicle Wash</td>
<td>General: 1 space per 2 bays for self-service vehicle washes (bay does not count as a parking space); 1 space per unattended, automated wash; 5 spaces per attended, automated wash with detail or hand-finishing services</td>
<td>1 space per 2 bays for self-service vehicle washes (bay does not count as a parking space); 1 space per unattended, automated wash; 5 spaces per attended, automated wash with detail or hand-finishing services</td>
</tr>
</tbody>
</table>

### Recreation and Amusement Uses

#### Amusement Park

<table>
<thead>
<tr>
<th>Activity</th>
<th>Parking District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batting Cages</td>
<td>2 spaces; plus 1.25 spaces per station</td>
</tr>
<tr>
<td>Go Cart Racing; Bumper Cars; or Bumper Boats</td>
<td>1.25 spaces per car or boat</td>
</tr>
<tr>
<td>All Other and / or Mixed</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
</tr>
<tr>
<td>Campground or RV Park</td>
<td>1 space per RV space or campsite</td>
</tr>
<tr>
<td>Driving Range</td>
<td>1 space per platform; plus 1 space per employee on maximum shift</td>
</tr>
<tr>
<td>Fairgrounds</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
</tr>
<tr>
<td>Health and Exercise Club / Instruction</td>
<td>1 space per 150 sf. GFA</td>
</tr>
</tbody>
</table>

#### Indoor Commercial Amusement

<table>
<thead>
<tr>
<th>Activity</th>
<th>Parking District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arcade / Gameroom</td>
<td>1 space per 200 sf. GFA</td>
</tr>
<tr>
<td>Bowling Alleys</td>
<td>4 spaces per lane; plus 75 percent of sum of required parking for incorporated uses, as applicable (e.g., alcoholic beverage sales, on-premises consumption; restaurant, no drive-in or drive-through; arcade / gameroom; and / or pool / billiard room)</td>
</tr>
<tr>
<td>Indoor Skating Rink</td>
<td>1 space per 75 sf. GFA</td>
</tr>
<tr>
<td>Pool / Billiard Room</td>
<td>1 space per 50 sf. GFA</td>
</tr>
<tr>
<td>Not Specifically Listed Above</td>
<td>1 space per 150 sf. GFA</td>
</tr>
<tr>
<td>Indoor Recreation</td>
<td>1 space per 150 sf. GFA</td>
</tr>
</tbody>
</table>
### Table 4-5-2-2D
Parking Requirements for Motor Vehicle and Heavy Equipment, and Recreation and Amusement Uses

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Parking District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General</td>
</tr>
<tr>
<td>Indoor Stadium, Arena, or Theater</td>
<td>1 space per 4 seats; or if no seats, 1 space per 150 sf. GFA</td>
</tr>
<tr>
<td>Night Club</td>
<td>1 space per 50 sf. GFA</td>
</tr>
<tr>
<td>Outdoor Recreation</td>
<td></td>
</tr>
<tr>
<td>Golf Courses</td>
<td>4 spaces per hole</td>
</tr>
<tr>
<td>Tennis / Handball / Racquetball Courts</td>
<td>3 spaces per court</td>
</tr>
<tr>
<td>All Other Outdoor Recreation</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
</tr>
<tr>
<td>Outdoor Shooting / Archery Range / Paintball Field</td>
<td>1 space per station; plus 1 space per employee on maximum shift</td>
</tr>
<tr>
<td>Paintball Field</td>
<td>1 space per player at maximum capacity</td>
</tr>
<tr>
<td>Outdoor Stadium, Arena, Amphitheater, or Drive-In Theater</td>
<td>1 space per 3 seats of seating capacity; or if no seats, 1 space per 100 sf. GFA of assembly area</td>
</tr>
<tr>
<td>Race Track, Motor Vehicle</td>
<td>1 space per 3 seats of seating capacity</td>
</tr>
<tr>
<td>Sexually-Oriented Theater / Dancing Establishment</td>
<td>1 space per 50 sf. GFA</td>
</tr>
<tr>
<td>Tours (Bus, Trolley, Van or Walking) and River Guide / Watercraft Rental</td>
<td>1 space per 150 sf. GFA</td>
</tr>
<tr>
<td>Zoo</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
</tr>
</tbody>
</table>

**TABLE NOTE:**
The use is not allowed in this parking district. Where the use already exists as a nonconforming use, the general parking regulations apply.

---

**E. Utility and Telecommunications Uses.** The required off-street parking for utility and telecommunications uses is set out in Table 4-5-2-2E, *Parking Requirements for Utility and Telecommunications Uses*.

### Table 4-5-2-2E
Parking Requirements for Utility and Telecommunications Uses

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Parking District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General</td>
</tr>
<tr>
<td>Utility Uses, General</td>
<td></td>
</tr>
<tr>
<td>Potable Water Plant</td>
<td>1 space per employee</td>
</tr>
<tr>
<td>Sanitary Sewer Plant</td>
<td>1 space per employee</td>
</tr>
<tr>
<td>Small Power Production Facility</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
</tr>
<tr>
<td>Utility Uses, Major Electrical and Natural Gas Facilities2</td>
<td></td>
</tr>
<tr>
<td>Electrical Substation</td>
<td>1 space</td>
</tr>
<tr>
<td>Telecommunications Uses</td>
<td></td>
</tr>
<tr>
<td>Broadcasting Center</td>
<td>1 space per 300 sf. GFA</td>
</tr>
<tr>
<td>Telephone Exchange / Telecommunications Hotel / Server Farm</td>
<td>1 space per 800 sf. GFA</td>
</tr>
<tr>
<td>Wireless Telecommunications Facilities</td>
<td>NA</td>
</tr>
</tbody>
</table>
### Table 4-5-2-2E
Parking Requirements for Utility and Telecommunications Uses

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Parking District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TABLE NOTES:</strong></td>
<td></td>
</tr>
<tr>
<td>The use is not allowed in this parking district. Where the use already exists as a nonconforming use, the general parking regulations apply. In this category of uses, only electrical substations are subject to parking requirements.</td>
<td></td>
</tr>
<tr>
<td>NA = Not Applicable</td>
<td></td>
</tr>
</tbody>
</table>

F. **Industrial, Wholesale, and Solid Waste Processing and Recycling Uses.** The required off-street parking for industrial, wholesale, and solid waste processing and recycling uses is set out in Table 4-5-2-2F, *Parking Requirements for Industrial, Wholesale, and Solid Waste Processing and Recycling Uses*.

### Table 4-5-2-2F
Parking Requirements for Industrial, Wholesale, and Solid Waste Processing and Recycling Uses

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Parking District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **TABLE NOTE:** 
The use is not allowed in this parking district. Where the use already exists as a nonconforming use, the general parking regulations apply. NA = Not Applicable |         |                         |     |

G. **Storage, Transportation and Logistics Uses.** The required off-street parking for storage, transportation, and logistics uses is set out in Table 4-5-2-2G, *Parking Requirements for Storage, Transportation, and Logistics Uses*.

### Table 4-5-2-2G
Parking for Storage, Transportation, and Logistics Uses

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Zoning Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Airport</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
</tr>
<tr>
<td>Airstrip</td>
<td>NA</td>
</tr>
</tbody>
</table>
### Table 4-5-2-2G
Parking for Storage, Transportation, and Logistics Uses

<table>
<thead>
<tr>
<th>Land Use</th>
<th>General</th>
<th>Enhanced Multimodal Area</th>
<th>CBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight Yard</td>
<td>1 space per 5,000 sf. of parcel area used for freight yard</td>
<td></td>
<td>Note 1</td>
</tr>
<tr>
<td>Heliport</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
<td>Note 1</td>
<td>Note 1</td>
</tr>
<tr>
<td>Helistop</td>
<td>2 spaces</td>
<td></td>
<td>Note 1</td>
</tr>
<tr>
<td>Taxi or Bus Station</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
<td>Note 1</td>
</tr>
<tr>
<td>Truck Stop</td>
<td>1 space per 200 sf. GFA</td>
<td></td>
<td>Note 1</td>
</tr>
<tr>
<td>Package Delivery, Small</td>
<td>1 space per 300 sf. GFA; plus 1 space per vehicle used for delivery if stored on-site</td>
<td>1 space per 300 sf. GFA; plus 1 space per vehicle used for delivery if stored on-site</td>
<td>1 space per 300 sf. GFA; plus 1 space per vehicle used for delivery if stored on-site</td>
</tr>
<tr>
<td>Parking Lot</td>
<td>0.75 spaces per attendant on maximum shift²</td>
<td>0.75 spaces per attendant on maximum shift²</td>
<td>0.75 spaces per attendant on maximum shift²</td>
</tr>
<tr>
<td>Parking Structure</td>
<td>0.75 spaces per attendant on maximum shift²</td>
<td>0.75 spaces per attendant on maximum shift²</td>
<td>0.75 spaces per attendant on maximum shift²</td>
</tr>
<tr>
<td>Rail Station</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
<td>Note 1</td>
<td>Special study (see Section 4-5-2-5, Special Studies)</td>
</tr>
<tr>
<td>Self-Storage, Outside Access</td>
<td>1 space per 300 sf. GFA of office use; other marked spaces within the facility are not required</td>
<td>Note 1</td>
<td>Note 1</td>
</tr>
<tr>
<td>Self-Storage, Interior Access</td>
<td>1 space per 1,000 sf. GFA</td>
<td>1 space per 1,250 sf. GFA</td>
<td>1 space per 1,500 sf. GFA</td>
</tr>
<tr>
<td>Warehousing / Distribution</td>
<td>1 space per 1,000 sf. GFA</td>
<td></td>
<td>Note 1</td>
</tr>
</tbody>
</table>

**TABLE NOTES:**
The use is not allowed in this parking district. Where the use already exists as a nonconforming use, the general parking regulations apply. The spaces required for parking lots are spaces that are allocated to attendants, if the lots are attended. These spaces may not be allocated for other purposes, such as credits to other land uses.

NA = Not Applicable

### G. Agricultural Uses
The required off-street parking for agricultural uses is set out in Table 4-5-2-2H, Parking Requirements for Agricultural Uses.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>General</th>
<th>Enhanced Multimodal Area</th>
<th>CBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apiaries</td>
<td>NA</td>
<td>Note 1</td>
<td></td>
</tr>
<tr>
<td>Community Garden</td>
<td>1 space per 4 plots or 1 space per 500 sf. of garden area if not divided into plots; NA if the garden is less than 1/4 acre in total area</td>
<td>1 space per 5 plots or 1 space per 650 sf. of garden area if not divided into plots; NA if the garden is less than 1/4 acre in total area</td>
<td>NA</td>
</tr>
<tr>
<td>Dairy</td>
<td>1 space per employee</td>
<td>Note 1</td>
<td></td>
</tr>
<tr>
<td>Farm / Ranch</td>
<td>2 spaces per dwelling unit</td>
<td>Note 1</td>
<td></td>
</tr>
<tr>
<td>Feed and Seed Store</td>
<td>1 space per 400 sf. GFA</td>
<td>Note 1</td>
<td></td>
</tr>
<tr>
<td>Greenhouse, Wholesale</td>
<td>3 spaces per 1,000 sf. of office or sales floor area; plus 1 space per 2,500 square feet of greenhouse space; plus 10 spaces per acre of outdoor nursery area</td>
<td>Note 1</td>
<td></td>
</tr>
</tbody>
</table>
**Table 4-5-2-2H**

Parking Requirements for Agricultural Uses

<table>
<thead>
<tr>
<th>Land Use</th>
<th>General</th>
<th>Enhanced Multimodal Area</th>
<th>CBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery, Wholesale</td>
<td>3 spaces per 1,000 sf. of office or sales floor area; plus 1 space per 2,500 square feet of greenhouse space; plus 10 spaces per acre of outdoor nursery area</td>
<td>Note 1</td>
<td>Note 1</td>
</tr>
<tr>
<td>Packing, Flowers, Fruits, Nuts, Grains, and Vegetables</td>
<td>1 space per employee</td>
<td>Note 1</td>
<td>Note 1</td>
</tr>
<tr>
<td>Packing or Processing, Meat</td>
<td>1 space per</td>
<td>Note 1</td>
<td>Note 1</td>
</tr>
<tr>
<td>Veterinarian, Large Animal / Livestock</td>
<td>1 space per 400 sf. GFA</td>
<td>Note 1</td>
<td>Note 1</td>
</tr>
</tbody>
</table>

**TABLE NOTE:**
The use is not allowed in this parking district. Where the use already exists as a nonconforming use, the general parking regulations apply. NA = Not Applicable

Effective on: 3/2/2016

**Sec. 4-5-2-3 Required Accessible Parking Spaces**

A. **Generally.** Parking spaces that are accessible to disabled persons ("accessible parking spaces") shall be provided as set out in this Section. Such spaces shall be counted toward the total number of spaces that are provided for compliance with Section 4-5-2-2, Required Off-Street Parking Spaces (Parking Tables), after applicable reductions pursuant to Section 4-5-2-6, Parking Credits and Reductions: General, through Section 4-5-2-9, Shared Parking.

B. **Number of Required Spaces.** Accessible parking spaces shall be provided as set out in Table 4-5-2-3, Number of Accessible Parking Spaces, or as required by the 2010 ADA Standards for Accessible Design, Section 208 (as may be amended or retitled from time to time), whichever requires more parking spaces for disabled persons.

**Table 4-5-2-3**

Number of Accessible Parking Spaces

<table>
<thead>
<tr>
<th>Number of Parking Spaces Required by this Article ¹</th>
<th>Number of Accessible Spaces</th>
<th>Number of Spaces that Must be Van Accessible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 25</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>26 to 50</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>51 to 75</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>76 to 100</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>101 to 150</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>151 to 200</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>201 to 300</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>301 to 400</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>401 to 500</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>501 to 1,000</td>
<td>2 percent of total number of parking spaces</td>
<td>1 out of 8 accessible parking spaces, rounded up</td>
</tr>
<tr>
<td>1,001 and over</td>
<td>20, plus 1 for each 100 parking spaces in excess of 1,000 parking spaces</td>
<td>1 out of 8 accessible parking spaces, rounded up</td>
</tr>
</tbody>
</table>
Table 4-5-2-3
Number of Accessible Parking Spaces

<table>
<thead>
<tr>
<th>Number of Parking Spaces Required by this Article</th>
<th>Number of Accessible Spaces</th>
<th>Number of Spaces that Must be Van Accessible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE NOTE: This number includes all applicable reductions in the number of required off-street parking spaces. However, on-street parking spaces that are credited to a proposed use shall be included in this number.

Effective on: 7/1/2014

Sec. 4-5-2-4 Required Loading Spaces

A. Generally. Loading spaces shall be provided for multifamily, dormitory / fraternity / sorority, bed and breakfast inn, hotel / motel, timeshare / fractional ownership (attached units), nonresidential, and mixed-use development, as set out in this Section.

B. CB Zone. Uses in the CB zone to the East of Narrow Gauge Avenue are not required to provide loading spaces on-site. Loading is allowed from alleys, or over-the-curb along street rights-of-way at times and locations approved by the City Engineer.

C. Multifamily. Multifamily development of more than 10 units shall include one loading space per 50 units, or fraction thereof.

D. Dormitory / Fraternity / Sorority; Bed and Breakfast Inn. Dormitories, fraternities, sororities, and bed and breakfast inns shall provide one loading space.

E. Hotel / Motel; Timeshare / Fractional Ownership (attached units). Hotel / motel, and timeshare / fractional ownership uses that are configured as attached units shall provide one loading space for the first 50 hotel rooms or timeshare units, then one loading space per 100 rooms or units (or fraction thereof) in excess of 50.

F. Institutional Uses and Health Care. Uses that are listed in Table 2-1-3-3, Institutional and Health Care, shall provide loading spaces as required by Table 4-5-2-4A, Institutional and Health Care Loading Requirements.

Table 4-5-2-4A
Institutional and Health Care Loading Requirements

<table>
<thead>
<tr>
<th>GFA of Building</th>
<th>Number of Loading Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 10,000 sf.</td>
<td>0</td>
</tr>
<tr>
<td>10,001 to 25,000 sf.</td>
<td>1</td>
</tr>
<tr>
<td>25,001 to 80,000 sf.</td>
<td>2</td>
</tr>
<tr>
<td>More than 80,001 sf.</td>
<td>3; plus 1 per 100,000 sf. or fraction thereof</td>
</tr>
</tbody>
</table>

G. Commercial, Recreation, and Amusement Uses; Agricultural Uses.

1. In general, uses that are listed under the heading "commercial uses" in Section 2-1-3-5, Commercial Retail and Service, Marijuana, and Restaurant Use / Zone Matrix, and feed and seed stores and veterinarian, large animal / livestock, which are listed in Section 2-1-3-10, Agricultural Use / Zone Matrix, shall provide loading spaces as required by Table 4-5-2-4B, Commercial, Recreation, and Amusement Loading Requirements.

2. Loading spaces are not required for the following uses, which are listed under the heading "commercial uses" in Section 2-1-3-5, Commercial Retail and Service, Marijuana, and Restaurant Use / Zone Matrix:
a. Kennel;
b. Medical Marijuana Center;
c. Services, Commercial;
d. Services, Personal;
ev. Sexually-Oriented Retail Establishment; or
f. Veterinarian, Small Animal (Dogs, Cats, Exotic Pets).

3. Loading spaces for Agricultural Uses (other than feed and seed stores and veterinarian, large animal / livestock), Motor Vehicle and Heavy Equipment Related Uses (Restaurant Use / Zone Matrix listed in Section 2-1-3-5, Commercial Retail and Service, Marijuana, and trix), and Recreation and Amusement Uses (listed in Section 2-1-3-5, Commercial Retail and Service, Marijuana, and Restaurant Use / Zone Matrix) shall be provided as necessary to support the use and prevent the parking of trucks in locations that obstruct parking spaces during business hours, or in locations within street rights-of-way.

<table>
<thead>
<tr>
<th>Table 4-5-2-4B Commercial, Recreation, and Amusement Loading Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>GFA of Building</td>
</tr>
<tr>
<td>Up to 7,500 sf.</td>
</tr>
<tr>
<td>7,501 to 20,000 sf.</td>
</tr>
<tr>
<td>20,001 to 80,000 sf.</td>
</tr>
<tr>
<td>80,001 to 140,000 sf.</td>
</tr>
<tr>
<td>More than 140,000 sf.</td>
</tr>
</tbody>
</table>

H. Industrial, Utility, and Telecommunications Uses. Uses that are listed in Table 2-1-3-7, Industrial, Utility, and Telecommunications Uses, shall provide loading spaces as required by Table 4-5-2-4C, Industrial, Utility, and Telecommunications Loading Requirements. Utility lines, lift stations, substations, and wireless telecommunications facilities are exempt from this requirement.

<table>
<thead>
<tr>
<th>Table 4-5-2-4C Industrial, Utility, and Telecommunications Loading Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>GFA of Building</td>
</tr>
<tr>
<td>Up to 3,000 sf.</td>
</tr>
<tr>
<td>3,001 to 20,000 sf.</td>
</tr>
<tr>
<td>20,001 to 50,000 sf.</td>
</tr>
<tr>
<td>50,001 to 100,000 sf.</td>
</tr>
<tr>
<td>More than 100,000 sf.</td>
</tr>
</tbody>
</table>

I. Mixed Use.
1. Mixed-use development shall provide loading spaces for each building according to the requirements of this Section.
2. Vertically mixed-use buildings shall provide loading spaces equal to the total number required for each individual use. However, if all uses have reasonable access to the loading spaces, then the total number of loading spaces required may be reduced by 25 percent, rounded up.

J. All Other Uses. All other uses not specifically exempted from loading requirements by Subsection A. or B., above, shall provide loading as needed to facilitate their operations.

Effective on: 7/1/2014
Sec. 4-5-2-5 Special Studies

A. Generally.
   1. Some of the uses that are listed in the tables set out in Section 4-5-2-2, Required Off-Street Parking Spaces (Parking Tables), have nonlinear or widely varying parking demand characteristics. Accordingly, their parking requirements are listed in the table as "special study." Required parking for these uses shall be established according to the standards of this Section.
   2. Special studies may also be submitted to support a request to reduce the number of required parking spaces to less than that set out in Section 4-5-2-2, Required Off-Street Parking Spaces (Parking Tables), due to the nature of the operations and / or location of a proposed use. Such special studies shall include and support all requested reductions in parking. Further parking credits and reductions that are otherwise available pursuant to Section 4-5-2-6, Parking Credits and Reductions: General, and Section 4-5-2-9, Shared Parking, shall not be applied when parking reductions are granted pursuant to this Section, unless such reductions are supported by the special study.

B. Special Study Requirements.
   1. A special study shall be conducted by a qualified transportation planner or traffic engineer at the Applicant's expense. The Administrator shall develop and maintain a list of qualifications and / or certifications that are acceptable to the City for this purpose.
   2. The special study shall provide:
      a. A peak parking analysis of at least five functionally comparable uses.
      b. Documentation regarding the comparability of the referenced uses, including: name, function, location, gross floor area, parking availability, access to transportation network (including vehicular, bicycle, pedestrian, and transit), use restrictions, and other factors that could affect the parking demand.

C. Abbreviated Special Study Requirements. The analytical requirements set out in Subsection B., above, may be reduced to two functionally comparable uses if:
   1. The uses are located in the City or within five miles of its corporate limits;
   2. The use has less than 5,000 square feet of gross floor area; or
   3. The special study is used to justify a reduction in required parking and the requested reduction is 15 percent or less.

D. Approval of Special Study.
   1. The City may rely upon the special study or may request additional information or analysis, including, but not limited to: alternative or new data points, or consideration of additional or alternative factors related to comparability or peak demand, as supported by sound engineering principles.
   2. As a condition of approval of a special study, the City may require that land be reserved or land-banked for additional parking if there is a demonstrably high probability the use could change, resulting in a higher demand for parking.

Effective on: 7/1/2014

Sec. 4-5-2-6 Parking Credits and Reductions: General

A. Generally. This Section sets out several ways to reduce the number of off-street parking spaces that must be provided, as set out in Section 4-5-2-2, Required Off-Street Parking Spaces (Parking Tables). If used in conjunction with shared parking (see Section 4-5-2-9, Shared Parking), these reductions may be applied to one type of use to reduce the parking requirement for the use prior to calculating the shared parking reduction. The credits and reductions set out in this Section are not available to uses that base their parking on a special study (see Section 4-5-2-5, Special Studies).
2-5, Special Studies), unless the special study's methodology specifically addresses these credits and reductions and determines that they are appropriate.

B. **On-Street Parking Credits.** In approved mixed-use developments that provide new on-street parking along internal streets, on-street parking may be credited to particular uses in accordance with the formula: Parking Credit = (Sa x P), where:
   1. \( \text{Sa} \) = the area of the Applicant's parcel divided by the area of the mixed-use development; and
   2. \( \text{P} \) = the total parking that is available on-street in the mixed-use development.

C. **Replacement of Off-Street Parking Spaces with Bicycle Parking Spaces.** Any nonresidential development in any zone may convert or substitute up to five percent of the required off-street automobile parking spaces (to a maximum of five automobile parking spaces) into additional bicycle parking spaces (not already required by the LUDC) at the following ratios:
   1. One automobile parking space for every six covered bicycle spaces (including spaces within covered bicycle cages); and
   2. One automobile parking space for every two bicycle lockers.

D. **Reduction of Parking Requirements by Restricting Occupancy Numbers.** The off-street parking requirements for multifamily dwelling units may be reduced if the Applicant restricts the occupancy of all of the units in the project to one person per bedroom. Reductions shall apply as follows:
   1. **Studio:** 1 space per dwelling unit
   2. **1 BR:** 1.25 spaces per dwelling unit
   3. **2 BR:** 1.75 spaces per dwelling unit
   4. **3+ BR:** 2.25 spaces per dwelling unit

E. **Reduction of Parking Requirements for Age-Restricted Multifamily Residential Development.** The off-street parking requirements for dwelling units may be reduced if the Applicant restricts the occupancy of all the units in the project to persons aged 67 years and older. Reductions shall apply as follows:
   1. **Studio, 1 BR, and 2 BR:** 1 space per dwelling unit
   2. **3+ BR:** 2 spaces per dwelling unit

F. **Reduction of Parking Requirements by Re-Use for a Beneficial Purpose.** Up to five percent of parking spaces that existed on the effective date of this LUDC may be converted to other functions, provided that:
   1. The reduction is used to improve the design or overall function of a site with an existing building, and not to maximize the building envelope of a redevelopment site;
   2. The conversion is used to provide an area for:
      a. Bringing the site into compliance with disabled parking and / or accessibility requirements (see Section 4-5-2-3, Required Accessible Parking Spaces);
      b. A screened enclosure for recycling bins;
      c. Utility pedestals used for the relocation of overhead utilities underground, provided that the utility providers agree that the best location for the pedestals requires displacement of the parking space or spaces; and / or
      d. Adding landscaped area to a lot which does not conform to the landscape requirements of this LUDC (See Article 4-6, Landscaping and Buffering).
   3. The reduction does not reduce the amount of parking provided in the lot to less than 90 percent of the parking spaces that are required by the uses located on the lot; and
   4. There are no practical alternative locations for the functions that displace the parking spaces.

*Effective on: 7/1/2014*
Sec. 4-5-2-7 Parking Credits and Reductions: Transportation Demand Management Programs

A. Generally.
   1. This Section sets out several ways to reduce the number of required off-street parking spaces using Transportation Demand Management ("TDM") programs. These credits and reductions are based on programs that tend to reduce the peak demand for parking spaces. If used in conjunction with shared parking (see Section 4-5-2-9, Shared Parking), these reductions may be applied to one type of use to reduce the parking requirement for the use prior to calculating the shared parking reduction.
   2. The credits and reductions set out in this Section are not available to uses that base their parking on a special study (see Section 4-5-2-5, Special Studies), unless the special study's methodology specifically addresses these credits and reductions and determines that they are appropriate.
   3. The credits and reductions set out in this Section are available only if the Applicant provides for regular monitoring and reporting of the use of the TDM program and its effect on parking demand.

B. Reduction of Parking Requirements by Provision of Shuttle Connections to the Durango-La Plata County Airport.
   1. For hotel / motel and bed and breakfast inn uses, parking may be reduced by 10 percent if on-demand shuttle service is provided to and from the Durango-La Plata County Airport. If the shuttle service is discontinued, the required parking must be provided.
   2. Shuttle services that are provided in order to utilize the off-street parking reductions allowed by this Subsection shall have a designated loading and unloading area with reasonable access to the principal building.

C. Reduction of Parking Requirements by Provision of Car-Share Program in the CB Zone.
   1. Multifamily residential uses may reserve one of the parking spaces required by Section 4-5-2-2, Required Off-Street Parking Spaces (Parking Tables), for every 20 dwelling units (rounding up), for a car-share program.
   2. For each space reserved for a car-share program, the overall parking requirement may be reduced by two spaces. For example, if a studio apartment building was constructed with 15 units, 15 parking spaces would be required. If the building provides a car-share program which reserved one of the spaces, then the overall parking requirement (including the space used for the car share program) would be 13 spaces.
   3. To qualify for the car-share program reduction, the Applicant must demonstrate that the program will be operational when the building is fully occupied, and that one car will be available for each reserved parking space.
   4. If the program is terminated or reduced, the Applicant must provide the parking spaces for which credit is no longer due or pay a fee-in-lieu of those spaces if permitted by Section 4-5-2-8, Fee-in-Lieu of Required Parking.

D. Reduction of Parking Requirements by Employer-Based TDM Programs.
   1. Land uses which provide employment for 50 or more full-time equivalent employees may qualify for a reduction of up to 25 percent of their required parking by implementation of a TDM program. The amount of the reduction shall correspond to the reduction in peak hour trip generation that is directly attributable to the implementation of the TDM program. The reduction requested shall be supported by a study by a qualified transportation engineer.
   2. The TDM program shall include:
      a. Proposed performance targets;
      b. Justifications for estimations of single-occupancy vehicle trips and anticipated reductions in parking demand;
      c. Designation of a single "responsible entity" (e.g., the property owner or business owner) to implement and regularly monitor the required measures;
      d. A monitoring and reporting procedure; and
      e. A list of supplementary measures that will be implemented if the initial performance targets are not met, as determined by the monitoring procedures.
3. Monitoring reports shall be submitted to the Administrator two years after building occupancy and on an annual basis thereafter for an additional five years. After the expiration of the five-year period, the Administrator may require monitoring and reporting if spillover parking or undue localized congestion attributable to the use is observed or reported.

   a. If the monitoring reports indicate that the performance measures are not met, then the responsible entity must implement the supplemental measures identified in the TDM Plan.

   b. If the monitoring reports indicate that the performance measures are not met during the subsequent reporting cycle, the City may require compliance with the parking requirements of this Division through further adjustments to the program, provision of additional parking spaces, or payment of fees-in-lieu (if authorized and approved pursuant to Section 4-5-2-8, Fee-in-Lieu of Required Parking) sufficient to address the shortfall of required parking spaces.

   c. In addition to the remedies available through the application of Subsections D.3.a. and D.3.b., above, the City may seek an injunction to revoke the project’s permits or approvals upon:
      1. Failure to submit required monitoring reports within 120 days of their due date; or
      2. Failure to meet performance targets after implementation of supplemental measures pursuant to Subsections D.3.a. and D.3.b., above.
      3. As a condition of approval, the City may require that land be reserved or land-banked for additional parking if there is a demonstrably high probability the use could change, resulting in a higher demand for parking.

Effective on: 7/1/2014

Sec. 4-5-2-8 Fee-in-Lieu of Required Parking

A. Generally. Parking requirements in the CB zone may be met (or partially met) through payment of a fee-in-lieu according to the standards of this Section.

B. Discretionary Approval of Fee-in-Lieu. In the CB zone, the Planning Commission may, upon request of an Applicant, permit the Applicant to make a payment to the City in lieu of providing off-street parking spaces. The Planning Commission may allow the payment of a fee in lieu if it finds that:
   1. There are site-specific physical constraints or reasonable site design requirements that restrict the ability to provide the parking on-site.
   2. The historic significance of existing on-site or adjacent buildings, or other site features, would be affected adversely if the parking requirements were met on-site.
   3. The subject property is located near public parking lots or public transportation routes.
   4. The fee-in-lieu allowance will not result in unfair impacts on any adjacent properties.

C. "As-of-Right" Fee-in-Lieu. In the CB zone, an Applicant may make a payment to the City in lieu of providing parking spaces on a lot or parcel if a minimum of 75 percent of the required parking is provided on-site or by remote parking agreement (see Section 4-5-3-2, Remote Parking).

D. Amount of Fee. The fee amount shall be set by resolution of the City Council and shall be computed on a per parking space basis (fractional space shall be utilized rather than rounding to the next greatest number). The fee amount shall be based upon up to 100 percent of the estimated cost of providing a new above-ground structured parking space in the CB zone for the year in which the fee is established or amended. Estimates shall be provided by the Administrator in consultation with the City Engineer. The fee amount may be amended by the City Council from time to time, to account for changes in the cost of providing an above-ground structured parking space within the CB Zone.
E. **Special Fund Created.** Proceeds from the in-lieu parking fee shall be deposited in a special fund which shall be utilized for the acquisition and / or construction of parking improvements within the CB zone. The balance in such fund shall accrue until authorized for expenditure by the City Council. Such expenditure shall be in accordance with a program for public parking improvements adopted by the City Council. Monies from the fund shall only be expended on acquisition of land, construction costs, or operation and maintenance of the off-street parking facilities within the CB Zone.

F. **Refunds.** Upon petition by the present owner or owners of property for which a fee was paid, monies collected pursuant to this Section, including any interest earned, shall be returned to the present owner or owners of the property if the fees have not been expended within seven years from the date that fees were paid, unless the City Council shall have designated the funds for expenditure on a specific parking project, in which case the City Council may, by motion, extend the time period for expenditure up to an additional three years.

Effective on: 7/1/2014

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**Sec. 4-5-2-9 Shared Parking**

A. **Generally.** The City encourages the sharing of parking for its potential to reduce impervious surfaces and / or enhance the efficiency of land use. Thus, where a mix of uses creates synergy with respect to the utilization of parking spaces due to differences in peak parking demand periods, the City may reduce the required number of spaces according to the provisions of this Section.

B. **Shared Parking Table.** Shared parking allows a reduction in the total number of required parking spaces when a parcel is occupied by two or more uses which typically do not experience peak parking demands at the same time. When any land or building is used for two or more uses that are listed below, the minimum total number of required parking spaces may be determined by the following procedures:

1. Multiply the minimum required parking for each individual use, excluding spaces reserved for use by specified individuals or classes of individuals (except car share programs), by the appropriate percentage listed in Table 4-5-2-9, **Shared Parking Table, for each of the designated time periods.**

2. Calculate a sum for all uses for each of the five time periods (columns). The minimum parking requirement is the highest of these sums, plus any reserved spaces that were excluded from the calculation in the first step. Figure 4-5-2-9, **Illustrative Shared Parking Credit Calculation,** provides an example of how to use Table 4-5-2-9, **Shared Parking Table,** to calculate required parking.

<table>
<thead>
<tr>
<th>Use</th>
<th>Night (12 AM to 6 AM)</th>
<th>Day (6 AM to 6 PM)</th>
<th>Evening (6 PM to 12 AM)</th>
<th>Day (6 AM to 6 PM)</th>
<th>Evening (6 PM to 12 AM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>100%</td>
<td>60%</td>
<td>90%</td>
<td>80%</td>
<td>90%</td>
</tr>
<tr>
<td>Office</td>
<td>5%</td>
<td>100%</td>
<td>10%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Retail / Commercial</td>
<td>5%</td>
<td>70%</td>
<td>90%</td>
<td>100%</td>
<td>70%</td>
</tr>
<tr>
<td>Commercial Lodging</td>
<td>80%</td>
<td>80%</td>
<td>100%</td>
<td>50%</td>
<td>100%</td>
</tr>
<tr>
<td>Restaurant</td>
<td>10%</td>
<td>50%</td>
<td>100%</td>
<td>50%</td>
<td>100%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>10%</td>
<td>40%</td>
<td>100%</td>
<td>80%</td>
<td>100%</td>
</tr>
<tr>
<td>All Others</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
EXAMPLE: A mixed-use building has 50, 2-bedroom residences, 50,000 square feet of office space, and 50,000 square feet of retail space. Separately, these uses would require 450 parking spaces \(((50 \text{ sp. x } 2 \text{ sp. / unit}) + (50,000 \text{ sf. x (1 sp. / 250 sf.})) + (50,000 \text{ sf. x (3 sp. / 1,000 sf.})) = 450\). However, combined, they could share 350 parking spaces, as shown in the calculation below.

<table>
<thead>
<tr>
<th>Use</th>
<th>Weekday</th>
<th>Weekend</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Night (12 AM to 6 AM)</td>
<td>Day (6 AM to 6 PM)</td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 spaces</td>
<td>100% x 100  = 100</td>
<td>60% x 100   = 60</td>
</tr>
<tr>
<td>Office</td>
<td></td>
<td></td>
</tr>
<tr>
<td>150 spaces</td>
<td>5% x 150    = 8</td>
<td>100% x 150  = 150</td>
</tr>
<tr>
<td>Retail / Commercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200 spaces</td>
<td>5% x 200    = 10</td>
<td>70% x 200   = 140</td>
</tr>
<tr>
<td>Commercial Lodging</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>80% x 0 = 0  = 0</td>
<td>80% x 0 = 0  = 0</td>
</tr>
<tr>
<td>Restaurant</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10% x 0 = 0  = 0</td>
<td>50% x 0 = 0  = 0</td>
</tr>
<tr>
<td>Entertainment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10% x 0 = 0  = 0</td>
<td>40% x 0 = 0  = 0</td>
</tr>
<tr>
<td>All Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100% x 0 = 0  = 0</td>
<td>100% x 0 = 0  = 0</td>
</tr>
<tr>
<td>COLUMN TOTALS</td>
<td>118</td>
<td>350¹</td>
</tr>
</tbody>
</table>

TABLE NOTE:
The largest number, 350, is the number of parking spaces that are required. This example is a 22 percent reduction compared to individual calculations.

3. In general, the maximum reduction allowed by Table 4-5-2-9, Shared Parking Table, shall be 30 percent. However, a greater reduction is permitted, provided that:
   a. Sufficient land is set aside for each parking space in excess of the 30 percent reduction that is not constructed, so that the spaces may be constructed at a later date should the Administrator determine that they are necessary; and
   b. The property owner executes and records a document, approved as to form by the City Attorney, that guarantees that the spaces will be constructed upon written order of the Administrator.

C. Special Shared Parking Study.

1. In the alternative to the methodology in Table 4-5-2-9, Shared Parking Table, an Applicant may submit a special study to demonstrate that the parking required to serve mixed uses is less than the cumulative parking requirements for each individual use. The special study shall be conducted by a qualified transportation planner or traffic engineer at the Applicant’s expense (the Administrator shall develop and maintain a list of qualifications and / or certifications that are acceptable to the City for this purpose), and shall:
   a. Review peak parking demand periods for the proposed uses during a 24-hour weekday and each weekend day, and shall propose a required number of parking spaces based on the combined peak hour demand for parking.
   b. Provide data on the following:
      1. The sensitivity of the proposed uses to change. For example, a center with no restaurant could have significant changes in parking if a restaurant was added.
      2. Similar mixes of uses in other areas of the community.
      3. Degree of variability of parking for individual uses (average, range, and standard deviation).

2. The City may require a reserved open area if it finds that the risk of parking needs changing over time so warrants. Once the project is occupied and well established, if there is a surplus of parking, the Applicant may petition for additional development capacity and parking using the reserved area.
D. **Shared Parking Among Lots Under Different Ownership.** When a shared parking reduction is to be applied to uses on several lots under different ownership, the following shall be provided:

1. A plan that provides for interconnected parking lots; and

2. Recorded easements, approved as to form by the City Attorney, that provide, at a minimum, for:
   a. Cross-access among the parking areas and connections to permit parking by the different uses anywhere in the connected properties;
   b. Allocation of maintenance responsibilities;
   c. A pedestrian circulation system that connects uses and parking areas, making it easy and convenient to move between uses; and
   d. A right of enforcement by the City.

*Effective on: 7/1/2014*

**Sec. 4-5-2-10 Bicycle Parking Calculations**

A. **Generally.** Bicycle parking shall be provided as a proportion of required vehicular parking spaces as set out in this Section. If the number of vehicular parking spaces is modified by application of Section 4-5-2-9, **Shared Parking**, then the number of bicycle spaces shall be based on the number of spaces required after application of Section 4-5-2-9, **Shared Parking**, even if credits from other Sections (except those related to bicycle parking) are applied first. However, if the number of vehicular parking spaces is reduced by application of Section 4-5-2-6, **Parking Credits and Reductions**, then the number of bicycle parking spaces shall be based on the number of vehicular parking spaces that were required before application of the credit.

B. **Bicycle Parking Requirement.** One bicycle space is required for each 10 required off-street parking spaces; however, not less than three nor more than 30 bicycle spaces shall be required on any parcel proposed for development. This requirement does not apply to single-family detached, duplex, townhomes, multiplex, and group home uses.

*Effective on: 7/1/2014*

**Division 4-5-3 Parking and Loading Design**

**Sec. 4-5-3-1 Parking Space and Aisle Standards**

A. **Standard Parking Space Dimensions.**

1. Parking spaces shall have the following dimensions:
   a. Parallel parking spaces: 8 ft. stall width x 22 ft. stall length.
   b. Angled parking spaces (30 to 90 degrees from centerline in direction of travel): 8.5 ft. stall width x 18.5 ft. stall length.

2. A curb reduction of two feet is available for 90-degree angled spaces that abut a curb, provided that there is at least two feet of landscaped area immediately behind the curb, which will allow for the overlap. However, the two-foot wide landscaped area is not counted towards the open space or landscaping requirements.

B. **Compact Parking Spaces.** Compact parking spaces may be provided according to the standards of this Subsection. The presence of a compact off-street parking space does not authorize the parking of vehicles such that they encroach into public rights-of-way or abutting properties.

1. Generally, the dimensions of a parking space may be reduced to an 8 ft. stall width x 15 ft. stall length if it is demonstrated that:
a. The reduction will apply to not more than three spaces or 10 percent of the total required parking spaces (whichever is greater); and
b. The reduction is reasonably necessary to preserve a mature tree or improve the effectiveness of stormwater BMPs on properties that abut rivers, creeks, or streams.

2. Parking spaces for single-family detached dwelling units and accessory dwelling units ("ADUs") may be reduced to an 8 ft. stall width x 15 ft. stall length if it is demonstrated that:
a. The reduction will apply to not more than 50 percent of the total required parking spaces (rounded down); and
b. The reduction is not used to reduce a front building setback.

C. Valet Parking Spaces.

1. The dimensions of a valet parking space may be reduced to a 7.5 ft. stall width x 18 ft. stall length.
2. Valet parking spaces may be designed in tandem configurations.
3. Parking areas that are striped for valet parking shall be posted "valet parking only."
4. If valet parking is used to increase the parking yield of a site to conform to the requirements of Division 4-5-2, Parking and Loading Calculations, then valet parking shall not be discontinued unless:
a. The parking area is restriped according to the standards of this Section; and
b. Additional parking is provided to bring the use of the site into conformance with the requirements of Division 4-5-2, Parking and Loading Calculations, or a fee-in-lieu is allowed and paid according to the standards of Section 4-5-2-8, Fee-in-Lieu of Required Parking.

D. Accessible Parking Space Dimensions, Design, and Location.

1. The design and location of disabled parking spaces shall be as required by the 2010 ADA Standards for Accessible Design, Section 502, at the time the parking space is striped (however subsequently titled or numbered);
2. Accessible routes to and from accessible parking spaces shall be provided as required by the 2010 ADA Standards for Accessible Design, Section 502, at the time the parking spaces are striped (however subsequently titled or numbered); and
3. Accessible routes shall be graded according to the standards of the 2010 ADA Standards for Accessible Design, Section 502, at the time the parking lot is developed or any time it is regraded.

E. Vertical Clearance. A vertical clearance of not less than eight feet shall be provided over all parking spaces. Additional clearance shall be provided for larger vans, sport utility vehicles, and light trucks that require such clearance if parking demand from such vehicles is anticipated. All parking structure entrances shall include an overhead bar to alert oversized vehicles regarding vertical clearance.

F. Parking Aisle Widths. Parking aisles shall be dimensioned as shown in Table 4-5-3-1, Minimum Parking Aisle Width.

<table>
<thead>
<tr>
<th>Measurement</th>
<th>0 / Parallel Parking</th>
<th>30</th>
<th>45</th>
<th>60</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-Way Driving Aisle Width</td>
<td>13 ft.</td>
<td>12 ft.</td>
<td>15 ft.</td>
<td>18 ft.</td>
<td>24 ft.</td>
</tr>
<tr>
<td>Two-Way Driving Aisle Width</td>
<td>19 ft.</td>
<td>20 ft.</td>
<td>21 ft.</td>
<td>23 ft.</td>
<td>24 ft.</td>
</tr>
</tbody>
</table>

Effective on: 7/1/2014
Sec. 4-5-3-2 Remote Parking

A. Generally. For nonresidential development in mixed-use and nonresidential zones, and for residential development in the CB zone, required off-street parking may be provided on another parcel, pursuant to the standards of this Section.

B. Location of Remote Parking.
1. The distance from the boundary of the parcel proposed for development to the boundary of the remote parking spaces shall not exceed 1,320 ft.
2. Remote parking shall be located on property that is reasonably accessible to the parcel proposed for development, which is also:
   a. Zoned for mixed-use or nonresidential use; or
   b. Located on a single-family detached or duplex residential parcel which is in or across the alley from the CB, MU-A, or MU-N zones, provided that such parking is configured with direct access to an alley.

C. Shared Parking.
1. When the off-site parking area for a specific use(s) is also used as an on-site parking area by other uses, the shared parking formula of Section 4-5-2-9, Shared Parking, may be applied. The calculations may be modified if the hours of identified uses are restricted.
2. Shared parking reductions do not apply to parking spaces located on single-family detached or duplex residential lots. Parking spaces on such lots shall not be made available to remote users pursuant to this Section if such arrangements would reduce the available parking on the lot to less than the number of spaces required for the residential use (including an accessory dwelling unit, if present).

D. Parking Plan Required.
1. All uses that propose remote parking shall provide a parking plan that includes the following information:
   a. The location and names of the buildings, structures, and / or land uses for which the parking spaces are to be provided;
   b. Specific days and hours of operation of these buildings, structures, and / or land uses;
   c. Peak days and hours of operation of these buildings, structures, and / or land uses;
   d. The gross floor area of these buildings, structures, and / or land uses;
   e. Parking calculations for each use that utilizes the parking lot (including applicable reductions);
   f. Shared parking calculations, if used;
   g. The location of the parking area and the distance between it and the corresponding buildings and / or land uses;
   h. The path of pedestrian travel (e.g., sidewalk, across certain streets, parking lot(s), trail) between the buildings and / or land uses and the parking area;
   i. The number of parking spaces required per this LUDC; and
   j. The number of remote parking spaces proposed.
2. Upon approval of a parking plan, a copy of such plan and the legal agreement, approved as to form by the City Attorney, shall be recorded at the office of County Clerk, and shall thereafter be binding upon the applicants, their heirs, successors, and assigns. Such recordation shall limit and control the issuance of permits and certificates and the operation of all land uses and / or structures included within the parking plan.
3. The parking plan may be amended or withdrawn pursuant to the same procedure and subject to the same limitations and requirements by which the parking plan was approved and recorded. Specifically, it may be amended or withdrawn in the event that all of the required parking is provided either on-site or within a new parking plan.
E. **Required Legal Documentation.** A legal written agreement between the owners (or other parties of interest) of the properties for which remote parking arrangements are proposed, shall be approved as to form by the City Attorney and submitted. This legal agreement shall:

1. Include a legal description of the principal use parcel (and the parking parcel, if different from one another);
2. Indicate responsibilities for permanent improvement and maintenance of such parking areas;
3. Be permanently tied to the building(s) and/or land use(s) that require the parking;
4. Recognize the authority of the City to base decisions regarding development approvals for the parcels that are subject to the agreement upon the parking provided in the agreement and to seek enforcement against any or all parties if the parking is not provided according to the terms of the agreement; and
5. Include a provision that the agreement cannot be terminated or amended in a manner that affects the quantity of parking spaces available to the remote parcel, without the consent of the City.

F. **Review.**

1. The use of remote parking is not a matter of right.
2. The City may require a study by a parking or traffic consultant to demonstrate that there is no substantial conflict (e.g., materially increased risk of vehicular-pedestrian conflict or unreasonable traffic congestion) inherent in the proposed remote parking arrangement.

Effective on: 7/1/2014

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**Sec. 4-5-3-3 Marking of Parking Spaces and Traffic Control Devices**

A. **Generally.** All parking spaces shall be marked and maintained on the pavement and any directional markings / signs shall be installed and maintained as required by the approved parking plan.

B. **Accessible Parking Spaces.** Each accessible parking space shall be marked with a free-standing or wall mounted sign using the standard symbol that signifies the space as designed to be accessible to disabled persons, along with the phrase "ACCESSIBLE PARKING". In addition, the standard symbol shall be painted on the pavement within the parking space. (See Figure 4-5-3-3A, Illustrative Accessible Parking Spaces.) This requirement shall automatically change to conform to any amendments to the 2010 ADA Standards for Accessible Design (however subsequently titled or numbered) that may be in effect at the time the parking space is striped.
C. **Bumpers.** Wheel bumpers or curbs that serve a comparable function shall be installed in all parking spaces at the perimeter of the parking lot. Parking lots with more than four parking aisles that are roughly parallel to each other shall provide wheel or bumper guards or curbs that serve a comparable function in every third module (set of facing parking spaces), in order to prevent traffic from cutting across the lot outside of marked parking aisles. *(See Figure 4-5-3-3B, *Illustrative Bumper Configuration.*)*

D. **Traffic Control Devices.** All traffic control devices (signs, markings, and signals) shall conform to the *Manual on Uniform Traffic Control Devices (MUTCD)*, latest edition.

*Effective on: 7/1/2014*

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**Sec. 4-5-3-4 Bicycle Parking Design**

A. **Generally.** The bicycle parking spaces that are required by Section 4-5-2-10, *Bicycle Parking Calculations*, shall be designed according to the standards of this Section.

B. **Form of Bicycle Parking.** Bicycle parking shall be provided as:
   1. Bicycle lockers; or
   2. Bicycle racks that meet the following standards:
a. The bicycle frame and one wheel can be locked to the rack with a high security, U-shaped lock with both wheels left on the bicycle (designs that only allow one locking point at the wheel cannot be used to satisfy the bicycle parking requirements);
b. A bicycle that is six feet long can be securely held with its frame supported so that the bicycle cannot be pushed or fall in a manner that will damage the wheel components; and
c. The racks are securely anchored to a hard surface. (See Figure 4-5-3-4, *Illustrative Permitted Bicycle Parking Systems.*)

<table>
<thead>
<tr>
<th>Figure 4-5-3-4</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Illustrative Permitted Bicycle Parking Systems</em></td>
</tr>
</tbody>
</table>

### C. Surfacing and Clear Area.

1. The surface of bicycle parking spaces need not be paved, but shall be finished to avoid mud and dust.
2. Racks shall be bordered by physical barriers or located a sufficient distance from motor vehicles to prevent damage to parked bicycles.
3. Racks shall be installed with sufficient clearance from obstructions so that they can be used according to their design. (See Figure 4-5-3-4B, *Bicycle Rack Clearance.*)
4. A clear area of five feet shall be maintained on the parking side of the bicycle rack (both sides if the rack is designed and installed to be accessed from both sides). The clear area is measured away from the rack, from the furthest point of the back wheel of a six-foot long bicycle parked in the fashion for which the rack is designed. (See Figure 4-5-3-4B, *Bicycle Rack Clearance.*) In the CB zone, the clear area may overlap a public sidewalk if no alternative is feasible. In other zones, the clear area may not encroach into the travelway of the public sidewalk (i.e., it may include areas of the public sidewalk used for street furnishings and landscape planters).

<table>
<thead>
<tr>
<th>Figure 4-5-3-4B</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bicycle Rack Clearance</em></td>
</tr>
</tbody>
</table>

![Diagram of bicycle rack clearance]
D. **Location of Bicycle Parking Spaces.** Wherever possible, bicycle racks should be located within 100 feet of a building entrance and be clearly visible from the building entrance and its approaches. If necessary, signs should be posted that indicate the location of bicycle parking.

E. **Credit for Bicycle Lockers.** The provision of bicycle lockers is optional, but it is encouraged for assigned use by employees and regular bicycle commuters. Bicycle lockers that are installed in a building, covered parking area, or parking structure are counted as three bicycle parking spaces per locker.

**Effective on:** 7/1/2014

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**Sec. 4-5-3-5 Off-Street Loading**

A. **Generally.** All uses shall provide off-street loading as required by Section 4-5-2-4, *Required Loading Spaces*. Loading spaces shall be configured as provided in this Section.

B. **Dimensions.**
   1. *Minimum width of loading bay (side to side):* 12 feet.
   2. *Minimum length of loading bay (front to back):*
      a. For semi-trailers: 60 feet.
      b. All other loading spaces: 25 feet.

C. **Use of Rights-of-Way.** Where off-street loading areas are required, at no time shall any part of a truck or van be allowed to extend into a public right-of-way while the truck or van is being loaded or unloaded.

D. **Maneuvering Space.** Adequate off-street truck maneuvering space shall be provided on-site (and not within any public street right-of-way or other public land) so that trucks can maneuver to the docking area.

E. **Location.**
   1. Generally, all loading areas are required to be located on the same lot as the building or lot served by the loading area.
   2. Loading areas shall be located behind the principal building in the CG, CR, and BP zones, and in the MU-A and MU-N zone (if a loading area is required), and in mixed-use and multifamily buildings in any zone (if a loading area is required).
   3. In the CB and MU-N districts, uses may use over-the-curb loading from local streets or alleys, provided that the loading occurs during off-peak hours and the areas that are used for loading are approved by the City Engineer.
   4. In the LI district, truck loading may be in the front yard of the building if it is demonstrated that:
      a. The frontage street is not an arterial; and
      b. The property on the other side of the street is also zoned LI.
   5. Loading areas may be shared if:
      a. Shared loading is permitted by Section 4-5-2-4, *Required Loading Spaces*;
      b. The development is laid out as blocks with alleys, the size and number of loading spaces is calculated based on the development in each block, and the shared loading spaces are accessed via the alleys of the blocks they are intended to serve; or
      c. The uses that share loading areas meet all of the following criteria:
         1. The uses are adjacent;
         2. Convenient, complimentary hours are established for loading and unloading, and such hours are posted;
         3. The loading spaces are easily accessible and well-lit; and
4. The loading areas are not located on through traffic streets, and whenever possible, are located behind one of the buildings served by the loading areas.

F. **Design.** Off-street loading facilities shall be designed so as not to interfere with any fire exits or emergency access facilities to either a building or site.

G. **Service Areas Adjacent to District Boundaries or Open Space.** In the CR, CG, BP, LI, and MU-A zones, if loading, truck access, or solid waste collection facilities are located between a principal building and property that is used or zoned for residential purposes or open space, then the following additional standards apply:

1. The loading or service area shall be screened along the entire boundary by a bufferyard that is at least 10 percent more opaque than required at the zone boundary by Section 4-6-3-5, *Zone Boundary Bufferyards*.

2. The loading, truck access, or waste storage area is located under a roof as indicated in Figure 4-5-3-5, *Roof Enclosure*. If this option is used, the buffer along the length of the loading shed may be reduced from the requirement of Section 4-6-3-5, *Zone Boundary Bufferyards*, by 10 percent opacity.

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**Sec. 4-5-3-6 Vehicle Stacking Requirements**

A. **Generally.** Stacking spaces are used to measure the capacity of a drive-through lane to hold cars while transactions are taking place at drive-through stations. Stacking spaces measure eight feet wide by 20 feet long and provide direct access to a service window. The position in front of a drive-through station (i.e., a service window, ATM, or station at a drive-through bank) is counted as a stacking space.

B. **Requirements.** Uses that include drive-through service shall provide not less than the following numbers of stacking spaces:

1. Financial institutions, drive-through convenience retail, or pharmacies: Three stacking spaces per drive-through station.

2. Drive through restaurants:
   a. If two service windows are provided (one for payments and one for pick-up):
      1. Four stacking spaces to each menu board;
      2. Four stacking spaces between the menu board and the first window (including the position at the first window); and
      3. Two spaces between the first window and the second window (including the position at the second window). *(See Figure 4-5-3-6, *Illustrative Stacking Requirements*.)

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*Effective on: 7/1/2014*
b. If one service window is provided (for both payments and pick up):
   1. Six stacking spaces to the menu board; and
   2. Five stacking spaces between the menu board and the service window.
3. Drive-through only uses in buildings with less than 300 square feet of gross floor area and no separate menu board (e.g., coffee stands, photo processing): Three stacking spaces per service window.
4. Dry cleaners: Two stacking spaces, including the position at the window.
5. Vehicle Wash:
   a. Three stacking spaces for each bay in a self-service vehicle wash facility;
   b. Five stacking spaces for each in-bay or conveyor vehicle wash facility; and
   c. If the facility provides detailing, manual drying or polishing, and / or vacuuming, sufficient area to provide those services without creating additional demand for stacking at the vehicle wash entrance.
6. Stacking spaces for other uses are determined by the Administrator.

C. Design.
   1. Stacking lanes shall be clearly marked, and shall not interfere with on-site or off-site traffic circulation.
   2. Stacking areas shall not be located between the facade of a building and the public street upon which the building fronts unless there is a grade change of at least five feet between the centerline of the street and the stacking area or alternatively, there is a bufferyard of 20 percent opacity.
   3. Stacking lanes shall be designed with an abutting eight-foot wide bypass lane.

Effective on: 7/1/2014

Sec. 4-5-3-7 All-Season Circulation in Parking Areas

A. Generally. Circulation systems within parcels proposed for development shall provide for continuous traffic flow with efficient, non-conflicting movement throughout the site.

B. Vehicular-Pedestrian Conflicts.
   1. Conflicts between areas of significant pedestrian movement and vehicular circulation shall be minimized.
   2. Required drive-through stacking areas shall not intersect with pedestrian access to a public entrance of a building.
C. **Snow Storage.** Parking lots and abutting and / or incorporated landscaped areas shall be designed and configured so that snow can be efficiently plowed into storage areas on-site. Snow storage areas shall be located and designed so that:

1. The amount of parking on the site is not reduced below the number of spaces required by Division 4-5-2, *Parking and Loading Calculations*, when snow is stored on-site;
2. Storage of snow does not interfere with circulation on the site or with visibility at points of ingress or egress or at street intersections;
3. The location of the snow storage area does not create an unreasonable risk of snow being pushed into public street rights-of-way;
4. The snow storage area is located and configured so that snow can be removed from the site during periods of heavy snowfall that are combined with sub-freezing temperatures; and
5. The area under the stored snow is pervious landscape area, and runoff from snowmelt is directed through stormwater best management practices ("BMPs") to slow water and improve its quality.

Effective on: 7/1/2014

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**Sec. 4-5-3-8 Front Yard Surface Parking and Curb Cuts in EN Districts**

A. **Generally.** Within the EN districts (all sub-distincts), surface parking in front setback areas, and curb cuts to access driveways are allowed only in accordance with the requirements of this Section.

B. **Surface Parking in Required Front Setback Areas.**

   1. **Lots in EN-1 and EN-2 Districts with Alley Access.** No lot in the EN-1 or EN-2 district that abuts an alley shall have surface parking in the required front setback area.

   2. **Lots in EN-3, EN-4, and EN-5 Districts and Lots with No Alley Access in EN-1 and EN-2 Districts.** Lots in the EN-3, EN-4, and EN-5 districts, and lots in the EN-1 and EN-2 district that do not have access to an alley may have not more than two surface parking spaces in the required front setback area.

C. **Driveway Curb Cuts in EN Districts.** The width of a curb cut that is used to access a residential driveway shall not exceed:

   1. *Lot width of 50 feet or more:* 16 feet.
   2. *Lot width less than 50 feet:* 12 feet.

Effective on: 7/1/2014

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**Sec. 4-5-3-9 Tandem Parking**

A. **Generally.** Tandem parking spaces are counted towards required parking only if they meet the standards of this Section.

B. **Residential Uses.** For the uses classified as "residential land uses" in Section 2-1-3-3, *Residential, Transient Residential, and Overnight Accommodations Use / Zone Matrix*, except multifamily and dormitory / fraternity / sorority, on-lot tandem parking spaces are counted, provided that no more than half of the parking spaces for each unit (rounded down) are tandem spaces.

C. **Motor Vehicle Repairs and Service, Light.** For motor vehicle repairs and service, light, on-site tandem parking spaces are counted, provided that no more than 30 percent of the required parking spaces are tandem spaces.

D. **Valet Parking.** Valet parking spaces may be configured as tandem spaces. *See Section 4-5-3-1, Parking Spaces and Aisle Standards.*
Division 4-5-4 Use and Maintenance of Parking Areas

Sec. 4-5-4-1 Use of Parking and Loading Facilities

A. Generally. Required off-street parking spaces shall be available for operable passenger automobiles of the residents, customers, patrons, and employees of the use to which they relate.

B. Storage.
   1. Parking Spaces and Parking Aisles. Storing materials, boats, campers, recreational vehicles, or inoperable vehicles, or overnight parking of trucks or trailers is prohibited in parking areas of multifamily, nonresidential, and mixed-use developments, unless:
      a. The outdoor storage use is permitted in the applicable zone and approved for the subject property;
      b. The areas that are set aside for such parking are not counted towards the parking requirements for the use; and
      c. The areas that are set aside for such parking comply with the requirements for outdoor storage (e.g., buffering or screening of outdoor storage areas).
   2. Loading Spaces. The long-term storage of trailers in loading spaces is prohibited. Such spaces shall be available for routine use by delivery vehicles.

C. Prohibited Use of Parking Areas.
   1. No designated off-street parking facilities shall be used for the repair, display, service, or sales of any good or service unless expressly and specifically approved by the City. However, this paragraph does not apply to single-family detached and single-family attached driveways when they are used for garage sales or for minor repairs to vehicles owned by the resident of the property.
   2. No area required by the City for the use of private off-street parking shall be used by any party as a commercial parking lot during the hours of operation of the use to which they relate.

D. Blocking of Access Prohibited.
   1. Blocking loading spaces or parking spaces is prohibited, except as may be allowed by temporary use permit.
   2. Loading spaces or parking spaces shall not be designed or located in a manner that blocks access to other loading spaces, parking spaces, parking aisles, fire lanes, ingress or egress points, or building entrances.
   3. Parking, loading, and access areas shall be kept free of any type of permanent or movable structures which block access (e.g., trash receptacles or compactors).
   4. Parking within or otherwise obstructing a driveway approach or across public sidewalks is prohibited.

Sec. 4-5-4-2 Use and Maintenance of Parking Areas

A. Surfacing. Off-street parking areas shall be surfaced as follows:
   1. In general, off-street parking areas shall be graded and surfaced with concrete, bituminous asphalt, or other material approved by the City Engineer. The surfacing material shall protect against potholes, erosion, and dust.
   2. The City Engineer may permit less durable surfaces (such as grass pavers, crushed stone, or gravel) for off-street parking facilities that serve athletic fields, public or private parks, low-turnover uses, trail heads, and overflow parking needs, provided that:
      a. The perimeter of such parking areas is defined by curb and gutter, bricks, stones, or other similar devices; and
b. Surfaces with loose materials are set back at least 25 feet from the edge of pavement of the connecting public street.

B. Maintenance. Off-street parking surfaces shall be kept in good condition, free of weeds, dust, trash or debris, and parking space lines or markings shall be kept clearly visible and distinct.

Effective on: 7/1/2014

ARTICLE 4-6 LANDSCAPING AND BUFFERING

Division 4-6-1 Purpose and Application of Article; Landscape Design Principles

Sec. 4-6-1-1 Purpose of Article
The purpose of this Article is to establish landscaping standards that protect and preserve the appearance and character of the City, maintain and improve the walkability of the City's streets and sidewalks, improve the compatibility of abutting uses, protect the ecological and recreational value of the City's natural resources, and conserve scarce water resources through requirements regarding the planting of native and drought-resistant trees and shrubs.

Effective on: 7/1/2014

Sec. 4-6-1-2 Application of Article

A. Generally.

1. Generally, this Article applies to new development, redevelopment, and substantial improvements to property, and may apply to other development in accordance with Division 6-1-4, Incremental Compliance. However, individual residential lots are subject only to the applicable requirements of Section 4-6-4-3, Private Lots.

2. Section 4-6-5-1, Protected Trees; Section 4-6-5-3, Limitation on Tree Removal; and Section 4-6-5-4, Tree Replacement Standards, apply to protected trees City-wide (protected trees are defined in Section 4-6-5-1, Protected Trees).

3. Section 4-6-2-1, Approved and Prohibited Plant Lists; Section 4-6-6-4, Maintenance Standards; and Section 4-6-6-5, Invasive Species, Disease, and Pests, apply to all property within the City, except as may be provided within the referenced sections.

4. Section 4-4-5-2, Viewsheds in the River Corridor Subdistrict (Outside of Downtown Subdistrict) sets out the landscaping and screening requirements within the River Corridor Subdistrict, which are in addition to the requirements of this Article.

B. Calculation of Landscape Requirements. Division 4-6-2, Calculation of Landscape Requirements, sets out how the landscape planting requirements of this Article are calculated, and what types, quality, and sizes of plants may be used to meet the requirements of this Article. In sum:

1. Plants from the approved plant list in Section 4-6-2-1, Approved and Prohibited Plant Lists, are selected by the applicant and organized into "plant units" pursuant to Section 4-6-2-2, Plant Units. Plant units are the basic standard of measurement for most of the landscaping requirements of this Article.

2. Landscaping may be required in bufferyards, street tree lawns, protected open spaces, private lots, parking lots, common landscape areas, foundation landscape areas, and general landscape areas. Section 4-6-2-3, Identification of Landscape Areas, sets out how to identify these locations. Generally, these areas are exclusive of each other. The exceptions are:
a. Parking buffers, which may occupy the same area as other buffers (e.g., district boundary buffers), provided that each buffer's planting requirements are met, and there is sufficient area for healthy growth of the vegetation (the requirement is cumulative).

b. Common landscape areas and general landscape areas, which may physically include other identified landscape areas, but which exclude such other areas for the purposes of the planting requirements of Section 4-6-4-6, Common Landscape Areas and General Landscape Areas.

3. Planting requirements may be met by existing landscaping and/or new landscaping. Section 4-6-2-4, Tree Preservation Credits, sets out the level of credit towards landscaping requirements that is available for the preservation and maintenance of existing healthy trees on-site. Section 4-6-2-5, Size and Quality of Landscape Plants, sets out the minimum standards for the size and quality of new plantings that may be used to meet the requirements of this Article.

4. Section 4-6-2-7, Water-Wise Landscaping Requirement, provides that a portion of the landscaping requirements of this Article must be met using water-wise landscaping, and establishes minimum standards for water-wise landscapes.

C. Buffering. Landscape buffering of various intensities is required along some zone boundaries, and may also be required for certain land uses in certain zones. Division 4-6-3, Buffering Requirements, sets out the width and planting intensity requirements (i.e., how many plant units per 100 linear feet of bufferyard) for bufferyards of various opacities, and provides several alternative ways to achieve required levels of opacity.

D. Landscape Areas. Division 4-6-4, Requirements by Landscape Area, sets out requirements for planting street trees, protected open spaces, private lots in new subdivisions and EN zones, parking lots, areas around the foundations of nonresidential and mixed-use buildings, common landscape areas, and general landscape areas.

E. Protected Trees. Division 4-6-5, Protected Trees, identifies which trees are protected and sets standards for identifying, removing, and replacing them.

F. Landscape Maintenance and Warranties. Division 4-6-6, Landscape Elements, Maintenance, and Warranties, provides standards for maintenance of the landscape during and after construction. The tree preservation credits of Section 4-6-2-4, Tree Preservation Credits, are allowed only if the trees for which credit is given are protected pursuant to Section 4-6-6-4, Maintenance Standards. Section 4-6-6-6, Required Warranty, establishes the minimum warranty that must be provided for landscaping which is installed to meet the requirements of this Article.

G. Adjustments and Changes.
   1. Necessary or requested adjustments or changes to the requirements of this Section may only be by reason of:
      a. Site constraints or impracticalities that are due to special conditions of the property that do not exist on other properties in the same zone;
      b. Conditions that have not been brought about by action of the applicant or owner; and
      c. Unnecessary hardship caused by the strict interpretation of this Code.
   2. In these instances, the Planning Commission may consider allowing minor adjustments to the landscape plan if the standards of approval may not be reasonably met, by considering approval, approval with conditions, or denial of the site plan or development plan.

Effective on: 7/1/2014

Sec. 4-6-1-3 Landscape Design Principles

A. Generally. Landscapes shall be designed by a qualified landscape architect or design professional. The Administrator shall develop and maintain a list of qualifications and/or certifications that are acceptable to the City for this purpose.
B. **Design Principles.** Landscapes shall be designed according to the following principles:
   1. Consideration should be given to tree placement and selection in order to provide for summer cooling and winter solar heat gain.
   2. Spacing should allow for adequate growth of plants at maturity and for intersection visibility.

C. **Species Selection.**
   1. Native and low-water demanding plants and turf shall be used where practicable (water-wise landscaping in excess of the minimum requirements of this Article is encouraged).
   2. Protection and preservation of native species, drainage ways, and natural areas is encouraged.
   3. Plants shall be compatible with project soils.

D. **Irrigation and Soil Moisture Control.**
   1. Plants with similar water requirements shall be grouped together on the same irrigation hydrozone;
   2. High-irrigation turf and plantings shall be limited to appropriate high-use areas with high visibility and functional needs;
   3. An irrigation system with an efficient layout shall be used to minimize overspray and water waste;
   4. Soil improvements shall be incorporated where necessary;
   5. In permeable areas that are not covered by groundcover vegetation, mulches shall be used to help retain water in the soil and to help prevent erosion;
   6. Landscaping shall be designed to minimize water runoff and to take advantage of the water that runs on to the site; and
   7. Turf areas and shrubs should be primarily located to reduce heat near buildings and their openings, including windows and patios, or to serve as an active play area (cemeteries and recreational areas such as golf courses, public parks, schools, and athletic fields are considered appropriate areas for turf grasses).

Effective on: 7/1/2014

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**Division 4-6-2 Calculation of Landscape Requirements**

**Sec. 4-6-2-1 Approved and Prohibited Plant Lists**

A. **Generally.** Only those plants on the approved plant list may be used to meet the standards of this Article. Plants on the prohibited plant list shall not be installed, and the City may require their removal as a condition of development approval. Plants that are on neither the approved plant list or the prohibited plant list may be installed, but are not counted towards compliance with this Article. Applicants may request that plants which are not listed be included on the approved plant list.

B. **Approved Plant List.**
   1. The City of Durango Parks & Recreation Department shall maintain a list of approved plants in the following categories, which correspond to the categories used in the composition of plant units (See Section 4-6-2-2, Plant Units):
      a. Evergreen Trees;
      b. Deciduous Shade Trees;
      c. Deciduous Ornamental Trees; and
      d. Shrubs.
   2. The City of Durango Parks & Recreation Department may further classify the approved plant list according to:
      a. Locations where approved plants are appropriate or not appropriate (e.g., street tree tree species may be identified, etc.)
b. Drought-tolerance (e.g., identification of species which may be used to meet the requirements of Section 4-6-2-7, Water-Wise Landscaping Requirement).

3. The City of Durango Parks & Recreation Department may modify the approved plant list on its own initiative or in response to requests. Plants may be added to the list if the City Arborist finds that they are appropriate for planting in the City (or in certain locations (see Subsection 2.b., above), in consideration of:
a. Climate zone;
b. Growth habits;
c. Invasiveness;
d. Lifespan;
e. Habitat;
f. Hardiness (resistance to disease and harmful insects);
g. Leaf litter;
h. Structural strength; and
i. Watering needs / drought tolerance.

4. The City Arborist may approve proposed plantings for a specific development in order to determine their suitability for use in the City. Such plantings will be counted as "approved plants" for the purposes the proposed development's compliance with the standards of this Article.

C. Prohibited Plant List. Plants identified in this Subsection are not allowed in the City.

1. Plants that are identified as noxious, invasive, or prohibited in Durango by the United States or the State of Colorado shall not be installed in Durango.

2. The following plants are prohibited and shall be removed in cases of new development, redevelopment, or substantial improvement of existing buildings, structures, or site features:
a. Russian Olive (Elaeagnus angustifolia); and
b. Salt Cedar (Tamarix ramosissima).

3. The City of Durango Tree and Shrub Guide provides a list of trees that are prohibited within rights-of-way.

Effective on: 7/1/2014

Sec. 4-6-2-2 Plant Units

A. Generally. The plant unit is the basic unit of measurement for many of the requirements of this Article. It is a combination of plant material that provides a predictable volume of vegetation (at maturity) at multiple elevations. It also provides flexibility to the landscape designer with respect to the choice of plantings. In terms of volume, any plant unit is interchangeable with any other plant unit. However, certain plant units are preferable for specialized application, such as in parking lots or under utility lines.

B. Plant Unit Descriptions. The required plant material for each of five interchangeable plant units are set out in Table 4-6-2-2, Plant Unit Descriptions. The illustration is intended to show the relative volume at planting, but is not intended to suggest that any particular form or arrangement of the plant materials is required by a particular plant unit type. Minimum sizes for landscaping materials at planting are set out in Section 4-6-2-5, Size and Quality of Landscape Plants.
## Table 4-6-2-2
Plant Unit Descriptions

<table>
<thead>
<tr>
<th>Plant Unit</th>
<th>Preferred Application</th>
<th>Trees</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Unit</td>
<td>General</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Alternative A</td>
<td>General</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Alternative B</td>
<td>Year-round screening, but not along immediate West and South edges of streets</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Alternative C</td>
<td>Year-round screening, but not along immediate West and South edges of streets</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Alternative D</td>
<td>Mitigating building mass</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

C. Fractional Plant Units.
1. **Rounding.** Fractional plant units shall be rounded to the nearest five hundredths using standard rounding (e.g., if the calculated plant unit requirement is 1.63, it is rounded up to 1.65).
2. **Calculation of Planting Requirement.** The planting requirements of a fractional plant unit are calculated by multiplying the fraction by the required number of each type of plant in the plant unit, with the product rounded off using standard rounding. For example, 0.3 plant units, using the Standard Plant Unit as a base, would require 0 deciduous shade trees (0.3 x 1 = 0.3, rounded down to zero), 1 deciduous ornamental tree (0.3 x 2 = 0.6, rounded up to 1), 0 evergreens, and 4 shrubs (0.3 x 13 = 3.9, rounded up to 4).
3. **Small Fractions.**
a. A fractional plant unit of 0.10 or less shall be interpreted as a requirement for one shrub, regardless of the plant unit being used as the basis for the calculation.

b. Plant Unit Alternative D may not be rounded to less than one deciduous shade tree and one shrub.

4. **No Recombination.** Different plant unit types may not be divided into fractions and recombined for the purposes of reducing planting requirements.

**Effective on: 7/1/2014**

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**Sec. 4-6-2-3 Identification of Landscape Areas**

A. **Generally.** This Section sets out several different areas of a parcel proposed for development in which specific quantities or techniques of landscaping may be required.

B. **Identification of Landscape Areas in All Development Types.**

1. **Bufferyards.** Bufferyards are areas of a parcel proposed for development that are required to be used for buffering the parcel from abutting lots, parcels, or public rights-of-way. See Division 4-6-3, *Buffering Requirements.* Bufferyards are generally situated along (or close to) property lines.

2. **Street Tree Lawns.** Street tree lawns are areas of a parcel proposed for development or abutting right-of-way that are used for the planting of street trees. This landscape area may or may not be a part of the parcel proposed for development. See Section 4-6-4-1, *Street Tree Program.*

3. **Parking Lot Landscape Areas.** Parking lot landscape areas are those areas within surface parking lots that must be landscaped. Parking areas are delineated to include parking aisles and off-street parking spaces, and any corners that are necessary to give the parking area a relatively regular shape, except:
   a. Corners and other landscape areas that bound access points (the areas used for ingress / egress stacking at connections to streets). See Figure 4-6-2-3, *Parking Lot Landscape Areas.*
   b. Parking in service areas that are hidden by screen walls; and
   c. Individual driveways that provide access to single-family detached, single-family attached, duplex, and multiplex development.
4. **Protected Open Spaces.** Protected open spaces are the areas of a parcel proposed for development that meet the definition of open space and are protected by easement or dedication from future development.

C. **Landscape Areas in Single-Family, Duplex, Attached Single-Family, and Multiplex Development.**

1. **Private Lots.** Private lot landscape areas are the yards on lots that are intended for individual ownership, or, in the case of common maintenance communities or condominiums, areas around dwelling units that would be located within private lots if the subdivision were platted for conventional fee-simple ownership.

2. **Common Landscape Areas.** Common landscape areas are those areas of land on a parcel proposed for development that are either owned by a property owners' association or dedicated to the City or another governmental or non-profit entity for the purpose of maintaining the areas in their natural or landscaped condition. Bufferyards, street tree lawns along new streets, open stormwater retention and detention facilities, recreation areas, and protected open spaces may be components of the common landscape area.

D. **Landscape Areas in Multifamily, Mixed-Use, and Nonresidential Development.**

1. **Foundation Landscape Areas.** Foundation landscape areas are landscape areas which are close to exterior building walls, as described in Section 4-6-4-5, *Foundation Landscaping*.

2. **General Landscape Area.** General landscape areas are those areas of a parcel proposed for development that are required to be landscaped or protected as open space. They may be privately owned, owned by a property owners' association, or dedicated to the City or another governmental or non-profit entity for the purpose of maintaining the areas in their natural or landscaped condition. Bufferyards, street tree lawns along new streets, protected open spaces, open stormwater retention and detention facilities, foundation landscape areas, recreation areas, and parking lot landscape areas are components of the general landscape area.

**Effective on:** 7/1/2014

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**Sec. 4-6-2-4 Tree Preservation Credits**

A. **Generally.** Existing trees that are protected on a parcel proposed for development, excluding existing, individual residential lots, count towards the planting requirements of this Article, provided that:
1. They are either:
   a. On the approved plant list; or
   b. Established for at least five years and not on the prohibited plant list; and

2. They are not:
   a. Overmature;
   b. Diseased;
   c. Poor in form;
   d. Leaning heavily over buildings;
   e. Too close to building foundations;
   f. Damaging sidewalks and driveways; or
   g. Impacting utilities.

B. **Credit for Preservation of Trees.** Healthy, mature trees that are preserved on-site shall count as more than one tree for the purposes of the landscaping requirements, as set out in Table 4-6-2-4, *Tree Preservation Credits.*

<table>
<thead>
<tr>
<th>Min. Diameter</th>
<th>Up to, But Not Including</th>
<th>DBH of Tree to be Preserved</th>
<th>Large Tree Credit</th>
<th>Landscape Area Where Credit May Be Applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>10 inches</td>
<td>none</td>
<td>1</td>
<td>Location of preserved tree.</td>
</tr>
<tr>
<td>10 inches</td>
<td>15 inches</td>
<td>10 inches</td>
<td>2</td>
<td>Location of preserved tree.</td>
</tr>
<tr>
<td>15 inches</td>
<td>20 inches</td>
<td>15 inches</td>
<td>3</td>
<td>Location of preserved tree, or any other location except a bufferyard.</td>
</tr>
<tr>
<td>20 inches</td>
<td>no limit</td>
<td>20 inches</td>
<td>5</td>
<td>Location of preserved tree, or any other location except a bufferyard of 30 percent or more required opacity. If credit is applied to a bufferyard, no more than one deciduous shade tree credit may be applied per 100 linear feet of bufferyard.</td>
</tr>
</tbody>
</table>

Effective on: 7/1/2014

**Sec. 4-6-2-5 Size and Quality of Landscape Plants**

A. **Generally.** In general, plant materials that are installed according to the requirements of this Article shall meet the standards that are set out in this Section. However, larger sizes may be required to ensure survival or to implement a condition of approval of a special, limited, or conditional use.

B. **Minimum Size of Landscape Materials.** The minimum sizes of landscape materials used to satisfy the requirements of this Article are set out in Table 4-6-2-5, *Minimum Size of Landscape Materials.*

<table>
<thead>
<tr>
<th>Type of Plant Material</th>
<th>Minimum Caliper, Height, or Container Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evergreen Trees</td>
<td>6 ft. Height</td>
</tr>
<tr>
<td>Deciduous Shade Trees</td>
<td>2 in. Caliper</td>
</tr>
<tr>
<td>Deciduous Ornamental Trees</td>
<td>2 in. Caliper</td>
</tr>
<tr>
<td>Shrub</td>
<td>5 gallon minimum; If used in buffeyards, estimated growth to 3 ft. in height within 3 years</td>
</tr>
</tbody>
</table>
C. **Specification of Landscape Materials.**

1. All plant material shall meet specifications of the American Nursery and Landscape Association for Number 1 grade. Plant materials shall have normal, well-developed branches and vigorous root systems. They shall be healthy and free from defects, decay, sunscald injuries, abrasions of the bark, insect pests, and all forms of infestations or objectionable disfigurements.

2. Plant materials shall be true to name and type, and first class representatives of their species or varieties.

3. Trees shall be balled and burlapped, with the burlap wrapped in a metal wire basket. Container and bare root tree plantings are not permitted without the written permission of the City Arborist upon good cause shown.

*Effective on: 7/1/2014*

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**Sec. 4-6-2-6 Required Biodiversity**

A. **Generally.** Diversity of the genus and species of trees and shrubs is required in order to prevent monocultures which could result in large-scale losses in the event of disease or blight.

B. **Standards.**

1. Within each category of required landscaping (*i.e.*, deciduous canopy trees, deciduous ornamental trees, evergreens, and shrubs):
   a. Not more than 40 percent shall be of any one genus; and
   b. Not more than 20 percent shall be of any one species.

2. Each street block shall have at least three genera of street trees. For the purpose of this paragraph only, street trees shall include all trees that are planted within 10 feet of the public street right-of-way.

3. Not more than 40 percent of the street trees in the City shall be of the same genus.

4. Exceptions may be made with written permission of the City Arborist upon good cause shown.

*Effective on: 7/1/2014*

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**Sec. 4-6-2-7 Water-Wise Landscaping Requirement**

A. **Generally.** The requirements of this Section are applied to the total area of a parcel proposed for development.

B. **Plant Selection and Grouping Requirements.**

1. Plants shall be selected based on their adaptability to the site. Native species shall be installed, or protected and preserved when possible.

2. Not more than 50 percent of the trees and shrubs that are installed to meet the requirements of this Article shall be classified as high water use. Plants or trees growing produce for human consumption are not counted in this calculation.

3. Low water use plants (including grasses) are required on slopes that are steeper than 25 percent, and in all areas that are less than eight feet wide or otherwise difficult to irrigate and manage (unless such areas are characterized by hydric soils).

C. **Mulch.** Mulch, such as bark, stone, or other materials, left loose or other water-saving treatments applied to the soil surface at a depth of four inches for bark or two to four inches for stone shall be used for all planting areas except turf in order to help maintain soil moisture and inhibit weeds.

D. **Water Features.**

1. The total water surface of installed artificial features shall not exceed one-half of one percent of the area of the parcel proposed for development.
2. Raw water storage may exceed the above area limitation.

Effective on: 7/1/2014

Division 4-6-3 Buffering Requirements

Sec. 4-6-3-1 Purpose and General Design Parameters for Bufferyards

A. Purposes of Bufferyards. Bufferyards are used to screen development from streets and adjacent properties, to enhance the streetscape, to improve compatibility of adjacent uses, and to protect natural resources from impacts of nearby development.

B. Opacity and Width Standards.

1. Opacity Standards. The opacity of the bufferyard is a measure of the rough percentage of view that is blocked by the bufferyard from grade to 35 feet above grade. Opacity is related to planting density, plant forms, bufferyard widths, and the presence of structures (e.g., fences and walls) or topography (e.g., natural slopes or constructed berms).

2. Width Standards. Comparable opacities can be achieved with bufferyards of different widths. However, in certain circumstances (e.g., where noise, dust, runoff, or other non-visual impacts are to be mitigated by the bufferyard), the width of the bufferyard may be as important or more important than its opacity. Where bufferyard widths are specified by special, limited or conditional use standards, alternatives with narrower widths are not allowed.

C. Bufferyard Design.

1. Standard Bufferyards. Section 4-6-3-2, Standard Bufferyards, sets out standard bufferyard widths and planting requirements for each level of opacity that may be required by this LUDC.

2. Bufferyard Model. Section 4-6-3-3, Bufferyard Alternative Compliance Model, provides a model for the design of alternative bufferyards that, in most circumstances, can be used to meet the bufferyard opacity standards of this Division.

3. Constrained Bufferyards. Section 4-6-3-4, Constrained Bufferyards, sets out bufferyard widths and planting requirements that may be used as an alternative to the standard bufferyards if the installation of standard bufferyards would constrain development of the site beyond the thresholds established in this Section.

Effective on: 7/1/2014

Sec. 4-6-3-2 Standard Bufferyards

A. Generally. Standard bufferyards are set out in Table 4-6-3-2, Standard Bufferyards. The table includes three alternative configurations; one with landscaping only, one with berms or elevation increases from the property line to the interior boundary of the bufferyard, and one with fences or walls. Fences and walls shall meet the standards set out in Section 3-5-1-1, Fences and Walls.
Table 4-6-3-2
Standard Bufferyards

<table>
<thead>
<tr>
<th>Opacity</th>
<th>Alternative 1: Landscape Only</th>
<th>Alternative 2: Includes Berm or Topography</th>
<th>Alternative 3: Includes Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width (ft.)</td>
<td>Plant Units / 100 lf.</td>
<td>Width (ft.)</td>
</tr>
<tr>
<td>10%</td>
<td>10</td>
<td>0.75</td>
<td>10</td>
</tr>
<tr>
<td>20%</td>
<td>10</td>
<td>1.50</td>
<td>10</td>
</tr>
<tr>
<td>30%</td>
<td>15</td>
<td>2.25</td>
<td>15</td>
</tr>
<tr>
<td>40%</td>
<td>20</td>
<td>3.00</td>
<td>15</td>
</tr>
<tr>
<td>50%</td>
<td>25</td>
<td>3.75</td>
<td>20</td>
</tr>
<tr>
<td>60%</td>
<td>30</td>
<td>4.50</td>
<td>25</td>
</tr>
<tr>
<td>70%</td>
<td>35</td>
<td>5.00</td>
<td>25</td>
</tr>
<tr>
<td>80%</td>
<td>40</td>
<td>5.50</td>
<td>30</td>
</tr>
<tr>
<td>90%</td>
<td>50</td>
<td>5.50</td>
<td>35</td>
</tr>
<tr>
<td>100%</td>
<td>60</td>
<td>5.75</td>
<td>40</td>
</tr>
</tbody>
</table>

**TABLE NOTE:**
Fences may not be allowed in all locations. See Section 3-5-1-1, Fences and Walls.

B. **Existing Walls.** Existing walls may be counted towards the bufferyard requirements if they are of sound construction and in good repair. However, if more than one wall is installed in abutting bufferyards, only the tallest of the walls is counted towards the overall opacity of the combined bufferyard. Fences and walls in abutting bufferyards shall not be located closer than 10 feet to each other.

*Effective on: 7/1/2014*

Sec. 4-6-3-3 Bufferyard Alternative Compliance Model

A. **Generally.** In the alternative to manual calculations the bufferyards set out in Section 4-6-3-2, Standard Bufferyards, an Applicant may use the Bufferyard Model to determine the bufferyard requirements and alternatives for each level of opacity. The bufferyard model computes the opacity of bufferyards based on user-defined width, plant unit type, numbers of plant units per 100 linear feet of bufferyard, the presence and height of berms or increases in elevation, and the presence of, opacity of, location of, and height of fences and walls.

B. **Approval of Modeled Bufferyards.** Alternative bufferyards developed using the Bufferyard Model shall be approved if it is demonstrated that:

1. **Opacity.** The opacity of proposed bufferyards is at least that which is required by this LUDC.
2. **Width.**
   a. The width of the proposed bufferyard is not less than 10 feet, unless the site is constrained as defined in Section 4-6-3-4, Constrained Bufferyards.
   b. If a bufferyard width is mandated by a special, limited, or conditional use standard, no reductions from the specified width are permitted unless authorized by a variance. (See Section 6-3-5-2, Variances.)
c. The bufferyard model must show that the proposed bufferyard width is adequate, or a registered landscape architect shall certify that the plants selected for the bufferyard will fit in the proposed space at maturity without compromising their health, longevity, or stability.

3. **Planting Requirements.** The planting requirements of the bufferyard model are measured on a per 100 linear feet basis. Planting requirements for bufferyards shall be calculated as set out in Section 4-6-2-2, *Plant Units.*

Effective on: 7/1/2014

**Sec. 4-6-3-4 Constrained Bufferyards**

A. **Generally.**

1. The constrained bufferyard standards of this Section may be applied in the alternative to the application of the standards of Section 4-6-3-2, *Standard Bufferyards,* if in the determination of the Administrator their the application would:
   a. Cause the open space ratio (OSR) or landscape surface ratio (LSR) of the parcel proposed for development to exceed 150 percent of the applicable requirement of this LUDC; or
   b. Prevent practical development of the parcel proposed for development by creating a building envelope that will not accommodate parking modules or practical building designs.

2. The standards of this Section shall apply only to bufferyards between 10 and 40 percent opacity. Uses that require 50 to 100 percent opacity bufferyards should not be located on sites that cannot accommodate the bufferyard and the use.

3. The standards of this Section shall be applied as necessary to remove the constraint. Generally, standard bufferyards shall be replaced with constrained bufferyards, starting with the least opaque bufferyard and progressing to the most opaque bufferyard. However, if the application of this general rule would prioritize the installation of a masonry wall along a street bufferyard over a rear bufferyard, then the rear bufferyard shall be reduced before the street bufferyard.

B. **Constrained Bufferyard Requirements.** Constrained bufferyards are narrower than their standard counterparts, but generally have increased planting or structural (fence or wall) requirements. Table 4-6-3-4, *Constrained Bufferyards,* sets out the requirements.

<table>
<thead>
<tr>
<th>Opacity (%)</th>
<th>Width (ft.)</th>
<th>Plant Units (per 100 lf.)</th>
<th>Height of Masonry Wall (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>8</td>
<td>Same as required by Section 4-6-3-2</td>
<td>Same as required by Section 4-6-3-2</td>
</tr>
<tr>
<td>20</td>
<td>8</td>
<td>Same as required by Section 4-6-3-2</td>
<td>Same as required by Section 4-6-3-2</td>
</tr>
<tr>
<td>30</td>
<td>10</td>
<td>0.25 plant units more than required by Section 4-6-3-2</td>
<td>Same as required by Section 4-6-3-2</td>
</tr>
<tr>
<td>40</td>
<td>10</td>
<td>3.0 plant units</td>
<td>6 ft.</td>
</tr>
</tbody>
</table>

Effective on: 7/1/2014

**Sec. 4-6-3-5 Zone Boundary Bufferyards**

A. **Generally.** Table 4-6-3-5, *Zone Boundary Bufferyard Standards,* sets out the opacity of the bufferyard that is required between zones where:

1. The boundary line follows the property line of the parcel proposed for development;
2. The adjacent property is not separated from the parcel proposed for development by an easement, right-of-way, or permanent open space that is at least 50 feet in width, such as a public street, creek and trail, utility easement, or resource protection area; and

3. In the MU-A Zone District the adjacent property is not separated from the parcel proposed for development by an alley that is at least 20 feet in width and the alley provides access to on-site parking.

B. **Interpretation of Table.** The table is a matrix in which all districts are shown. Rows show the zoning of the parcel proposed for development, and columns show the zoning of the abutting property. The cells that indicate NA (not applicable) is where both properties have the same zoning classification. To calculate the required bufferyard for a proposed development:

1. The required bufferyard opacity is the number in the cell at the intersection between the row (which represents the zone of the parcel proposed for development) and the column (which represents the zone of abutting property). This opacity is required if the abutting property is developed but does not include a bufferyard as required by this Section.

2. A reduced bufferyard that is calculated as the difference between the bufferyard opacity indicated for the parcel proposed for development and the bufferyard that is required of the abutting property (but not less than zero) is allowed if:
   a. The abutting property is vacant; or
   b. The abutting property is developed and the development includes at least the bufferyard required by Table 4-6-3-5, **Zone Boundary Bufferyard Standards**.

3. The abbreviation "NA" means that no bufferyard is required on the parcel proposed for development, whether or not a bufferyard is provided on abutting property.

<table>
<thead>
<tr>
<th>Zoning of Proposed Development</th>
<th>EN-#</th>
<th>EN-MF</th>
<th>RL</th>
<th>RM</th>
<th>RH</th>
<th>CB</th>
<th>MU-N</th>
<th>MU-A</th>
<th>CR</th>
<th>CG</th>
<th>BP</th>
<th>I</th>
<th>PB</th>
<th>RA</th>
<th>OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN-#</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>EN-MF</td>
<td>10%</td>
<td>NA</td>
<td>20%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>RL</td>
<td>NA</td>
<td>NA</td>
<td>10%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>RM</td>
<td>10%</td>
<td>NA</td>
<td>20%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
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<td></td>
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<td>NA</td>
</tr>
<tr>
<td>RH</td>
<td>20%</td>
<td>NA</td>
<td>30%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
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<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>CB</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>MU-N</td>
<td>10%</td>
<td>10%</td>
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Table 4-6-3-5
Zone Boundary Bufferyard Standards

<table>
<thead>
<tr>
<th>Zoning of Proposed Development</th>
<th>Adjoining Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN-#</td>
<td>EN-MF</td>
</tr>
</tbody>
</table>

**TABLE NOTES:**
Existing bufferyards shall remain in place where present. Existing bufferyards shall remain in place where present. When an EN-MF parcel is redeveloped with a modified configuration that places additional building mass within 50 feet of the boundaries of the parcel proposed for development, the required bufferyard shall be 50 percent of the bufferyard that would be required of the abutting properties.
NA = Not Applicable

Effective on: 3/2/2016

Sec. 4-6-3-6 Corridor Bufferyards

A. **Generally.** Landscape bufferyards are required along certain corridors as provided in this Section.

B. **Applicability.** The standards of this Section apply to property that abuts the following rights-of-way:
   2. **Grandview / Highway 160 Corridor.** The corridor along U.S. Highway 160, from Farmington Hill east to Elmore's Corner at Highway 172.
   4. **Highway 3 / Sawmill Road Corridor.** The corridor along Highway 3 / Sawmill Road, from the intersection with U.S. Highway 550 / U.S. Highway 160 to Santa Rita Drive.

C. **Required Street Bufferyards.** Bufferyards are required along highway frontages in the corridors specified in subsection B., above, as provided in Table 4-6-3-6, **Corridor Bufferyards.** The required bufferyards shall not include structures or constructed berms. See Table 4-6-3-2, **Standard Bufferyards,** for the alternative planing requirements to meet the opacities set out in Table 4-6-3-6, **Corridor Bufferyards.**

<table>
<thead>
<tr>
<th>Corridor</th>
<th>Required Opacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Highway 550 / 160 Corridor</td>
<td>10%</td>
</tr>
<tr>
<td>Grandview / Highway 160 Corridor</td>
<td>20%</td>
</tr>
<tr>
<td>U.S. Highway 160 W Corridor</td>
<td>20%</td>
</tr>
<tr>
<td>Highway 3 / Sawmill Road Corridor</td>
<td>20%</td>
</tr>
</tbody>
</table>

Effective on: 7/1/2014
Division 4-6-4 Requirements by Landscape Area

Sec. 4-6-4-1 Street Tree Program

A. Generally. Street trees must be installed in public street rights-of-way or within 10 feet of public rights-of-way with approval by the City Arborist. Street trees shall be located and spaced in accordance with the standards of this Section.

B. Planting Strips and Sidewalk Cutouts. Street trees shall be installed in planting strips and / or sidewalk cutouts.
   1. Planting Strips. The following requirements apply to planting strips:
      a. Street trees shall be installed in planting strips that are at least five feet wide.
      b. Generally, street trees shall be centered within the width of planting strips that are eight feet wide or less; however, street trees may be planted closer to lot lines if such locations would provide:
         1. Equal or greater area for healthy root growth; and
         2. A preferable arrangement vis a vis underground or overhead utilities.
   2. Sidewalk Cutouts. Sidewalk cutouts are allowed in the RH, CB, MU-N, and MU-A districts, in the alternative to planting strips. Sidewalk cutouts must be at least 50 square feet in area, where practicable (exceptions may be approved by the City Engineer).
   3. Root barrier. A root barrier is required along all concrete sidewalks, curbs, and driveways.
   4. Technical Installation Specifications. The City Arborist is authorized to develop technical specifications for the installation of street trees.

C. Spacing Among Street Trees.
   1. Street trees shall be spaced from each other as follows:
      a. Deciduous Shade Trees: 35 feet on-center.
      b. Deciduous Ornamental Trees: 25 feet on-center.
   2. Intersections are not counted in the measurement of street tree spacing.
   3. Spacing may be adjusted, as approved by the City Arborist, based on field conditions.

D. Setbacks.
   1. The trunks of street trees shall be set back from sidewalks, buildings, and structures as follows:
      a. Driveways and alleys: 15 feet.
      b. Buildings, utilities, and other structures (except fences): 10 feet
   2. Street trees shall be planted so that:
      a. Their eventual growth can be reasonably controlled so as to avert interference with or obstruction of any improvements installed for public benefit; and
      b. Nearby overhead and underground utilities such as water, sewer, gas, communications, and electrical, will not be disrupted or materially affected by branches or roots.
   3. No street trees that are more than 25 feet in height at maturity shall be planted under or within 10 feet of any overhead power line, except street light or service lines.

Effective on: 7/1/2014

Sec. 4-6-4-2 Resource Protection Areas

A. Generally. Resource protection areas shall be protected in their natural condition. Generally, additional planting and landscape alteration is not required, except that:
1. If additional planting would enhance the resource value of a natural resource protection area (e.g., by improving a stream-buffering function or restoring impacted areas), the area shall be planted with native vegetation that would typically be found in the type of natural community that is being protected;

2. Prohibited plants that are identified as subject to removal by Section 4-6-2-1, Approved and Prohibited Plant Lists, shall be removed;

3. Other prohibited plants shall be removed if their presence degrades the resource value of the open space (e.g., due to invasive growth habits); and

4. Dead or diseased trees shall be replaced if such replacement would enhance the natural resource value of the open space (large organic debris may be left on-site if it enhances the ecology of the site).

B. Irrigation of Resource Protection Areas.
1. Plantings may be irrigated with temporary systems in order to ensure that they become established.
2. Permanent irrigation systems are not allowed in resource protection areas unless extraordinary circumstances (e.g., a federally-mandated habitat management plan or other unusual circumstance) justify the installation.

Effective on: 7/1/2014

Sec. 4-6-4-3 Private Lots

A. RL, RM, and RH Zone Requirements.
1. Private lots shall be planted with deciduous shade trees and/or evergreen trees as follows:
   a. RL Zone: One deciduous shade tree (see Subsection C., below) in the required front setback area.
   b. RM Zone:
      1. Single-family Detached and Duplex. One deciduous shade tree (see Subsection C., below) in the required front setback area.
      2. Other Housing Types. One deciduous shade tree or evergreen tree with a mature height of 30 feet or greater per 2,500 sf. of lot area. One tree may be substituted for a street tree on lots with actual front setbacks that are less than 20 feet.
   c. RH Zone: One deciduous shade tree or evergreen tree with a mature height of 30 feet or greater per 3,000 sf. of lot area.
2. Such plantings shall occur before issuance of a certificate of occupancy.

B. EN and EN-MF Zone Requirements.
1. The proportion of the front setback area that must be used for landscaping within EN (all sub-districts) and EN-MF zones is:
   a. Lots with Vehicular Access from Front: 60 percent
   b. Lots with Vehicular Access from Alley: 70 percent
2. All new development and redevelopment in the EN (all sub-districts) and EN-MF zones shall include one deciduous shade tree (see Subsection C., below) in the required front yard setback area.

C. Deciduous Shade Tree Requirement. The requirements for "deciduous shade trees" which are set out in this Section may be met by any of the following:
1. A new deciduous shade tree, provided that:
   a. It is of a type that is listed on the approved plant list;
   b. Its size and quality at planting complies with Section 4-6-2-5, Size and Quality of Landscape Plants; and
   c. It is located within the front setback area;
2. An existing deciduous shade tree, provided that:
   a. It is of a type that is listed on the approved plant list (see Section 4-6-2-1, Approved and Prohibited Plant Lists);
b. It is at least two and one-half-inch caliper at the time of application for development or redevelopment;

c. It is healthy; and

d. It is located within the front setback area;

3. An existing evergreen tree, provided that:
   a. It is of a type that is listed on the approved plant list;
   b. It has a mature height of at least 30 feet;
   c. It is at least six feet tall at the time of application for development or redevelopment; and
   d. It is located within the front setback area.

4. If the front setback is less than 20 feet, an existing street tree in the abutting right-of-way may meet the requirement, provided that it is healthy. If the City Arborist determines that the tree is unhealthy, it shall be replaced by a deciduous shade tree.

5. The required deciduous shade trees may be substituted with 2.5 deciduous ornamental trees (rounded up) per required deciduous shade tree if overhead utilities, setbacks, utility easements, or visibility triangles (see Section 4-2-2-12, Corner Sight Distance, and Section 4-2-2-13, Visibility Triangles for Minor Streets and Driveways) prevent the installation of deciduous shade tree varieties.

Effective on: 7/1/2014

Sec. 4-6-4-4 Parking Lots

A. Generally. Surface parking lots are subject to the standards of this Section as provided in Table 4-6-4-4, Applicability of Parking Lot Landscaping Standards.

<table>
<thead>
<tr>
<th>Size of Lot</th>
<th>Perimeter Buffer Standards (Subsection B.)</th>
<th>Tree Planting in Buffers (Subsection C.)</th>
<th>Tree Planting in Islands (Subsection C.3.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential driveway serving a single-family or two-family dwelling unit</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>1 to 3 surface parking spaces</td>
<td>Applicable, but limited to the area between the parking lot and street rights-of-way</td>
<td>Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>4 to 30 surface parking spaces, except as provided below</td>
<td>Applicable</td>
<td>Applicable</td>
<td>Optional</td>
</tr>
<tr>
<td>31 or more spaces; or 2 or more parking aisles; or 10 or more spaces on one side of a parking module.</td>
<td>Applicable</td>
<td>Applicable</td>
<td>Applicable</td>
</tr>
</tbody>
</table>

B. Perimeter Landscape Buffer Standards.

1. **Width and Location of Buffer.** A perimeter landscape buffer that is at least five feet in width is required around the perimeter of parking lots except at areas of ingress, egress, cross-access, and except at areas between the parking lot and buildings on the same parcel (these areas are subject to the requirements of Section 4-6-4-5, Foundation Landscaping). Areas used for vehicular overhangs pursuant to Section 4-5-3-1, Parking Space and Aisle Standards, are not counted towards this required width of perimeter landscape buffer.

2. **Planting and Screening Requirements.**
   a. Perimeter landscape buffers must be planted with, at a minimum, groundcovers, shrubs, and / or perennials. Perimeter landscape buffers may also include trees which are required by Subsection C., below.
b. Along areas in which the edge of the parking lot is closer than 20 feet to a property line, the perimeter landscape buffer shall be planted with a continuous hedge of shrubs, perennials, and / or ornamental grasses, maintained at a minimum height of three feet, unless the area is screened by building walls or masonry walls on the lot or parcel proposed for development.

c. If the boundary of a parking lot that contains 31 or more surface parking spaces is within 10 feet of a lot line that is shared by a single-family residential lot, a duplex lot, or an EN (all sub-districts), RL, or RM zone boundary, then the perimeter buffer or the bufferyard required by Division 4-6-3, Buffering Requirements, if any, that is required along said lot line shall include:
   1. A six-foot tall solid fence or wall which separates the parking lot from the abutting property; or
   2. A minimum of a 50 percent opacity bufferyard (combined parking lot buffer and buffer required by Division 4-6-3, Buffering Requirements), which is composed of plant units that are suitable for year-round buffering. (Alternative B or C set out in Table 4-6-2, Plant Unit Descriptions.)

3. Relationship to Other Required Buffers. The land area used for perimeter landscape buffers may be combined with or overlap other buffers (e.g., district boundary buffers), provided that:
   a. The width and location of the perimeter landscape buffer complies with Subsection B.1., above;
   b. The area within the perimeter landscape buffer is planted as required by Subsection C., below; and
   c. There is sufficient area within the combined buffer for healthy growth of all of the vegetation that is required by this Section and Division 4-6-3, Buffering Requirements.

C. Tree Planting.

1. Tree Planting Requirement. Parking lots shall be landscaped with at least one deciduous shade tree for each three parking spaces, with the quotient rounded up. This planting requirement is in addition to the other requirements of this LUDC (e.g., general landscaping requirements, bufferyards, and street trees).

2. Location, Spacing, and Distribution.
   a. Trees shall be located and spaced to promote healthy growing habits, and distributed such that each surface parking space is within 25 feet of the trunk of at least one tree.
   b. Required trees may be planted in the perimeter buffer (see Subsection B.1., above) and in tree islands within the parking lot, as necessary to meet the requirement of Subsection C.2.a., above.
   c. In general, designs with tree islands that are larger in area and fewer in number (including islands which separate parking modules, as in Figure 4-6-2-3, Parking Lot Landscape Areas) are preferred to designs with tree islands which meet minimum size requirements but are greater in number.

3. Tree Islands.
   a. Tree islands are allowed in any parking lot, but they are required in some parking lots (see Table 4-6-4-4, Applicability of Parking Lot Landscaping Standards).
   b. In parking lots with two or more drive aisles, a tree island shall be located at the end of each row of parking spaces (“endcap tree island”), except at corners which are counted in the perimeter landscape buffer.
   c. Interior tree islands shall have at least the following dimensions:
      1. Length: Not more than 4 feet shorter than the length of the abutting parking stall.
      2. Width: 7.5 ft.
   d. Endcap tree islands shall have at least the following dimensions:
      1. Length: Not more than 6 inches shorter than the length of the abutting parking stall.
      2. Width: 5 ft.
   e. All tree islands shall meet the following minimum design requirements:
      1. Islands shall be protected by a curb, which may include gaps to allow for stormwater flows into recessed landscape areas for detention and / or treatment.
Sec. 4-6-4-5 Foundation Landscaping

A. Generally. Foundation landscaping shall be provided as required by this Section.

B. Multifamily Residential Buildings.
   1. Generally. Landscape areas are required between multifamily residential buildings and streets (but not alleys), surface parking lots, public or private sidewalks, and public or private trails, extending the following minimum distances from the walls that enclose the building:
      a. RL Zone: 15 feet
      b. RM Zone: 10 feet
      c. All Other Zones: 6 feet
   2. Planting Requirement.
      a. The foundation landscape area shall be planted with 30 shrubs per 1,000 sf. of foundation landscape area.
      b. Shrubs may be substituted with deciduous ornamental trees or evergreen trees at a rate of three shrubs per small tree or evergreen tree. However, deciduous ornamental trees and evergreen trees shall be set back from building walls a sufficient distance to ensure that they have room to grow to maturity.
      c. Areas within the Wildland-Urban Interface (“WUI”) are exempt from the planting requirement of this Subsection B.2. Foundation landscape areas in the WUI may be covered with groundcovers or permeable inorganic surfaces.
   3. Encroachments. Covered stairs, stoops, and open porches may encroach into the required foundation landscape areas provided that at least 50 percent of the foundation landscape area on the same side of the building does not include such encroachments.
   4. Interruptions for Access. Foundation landscaping may be interrupted by paved areas only as necessary to provide walkways to building entrances and driveway access to garages. However, access to individual garage doors that serve different dwelling units shall be separated by landscape islands that are protected by curbs and that provide a planting area that is at least three feet wide. The length of the islands, measured from the building wall to the outside of the curb where it is most distant from the building wall (semicircular endcaps are permitted) shall be at least the distance specified in Subsection B.1., above.

C. Freestanding Multifamily Garage Buildings. Where multifamily development provides parking in freestanding garage buildings, landscape areas shall be located on the sides of freestanding garage buildings, as follows:
   1. Between the garage buildings and streets (but not alleys), surface parking lots, public or private sidewalks, or public trails, landscape areas shall extend at least 15 feet from the side wall of the garage building at their widest point (they may have semicircular endcaps). See Illustration 4-6-4-5, Illustrative Freestanding Multifamily Garage Landscaping.
   2. Garage buildings that are not separated from each other by a street or surface parking area shall be separated from each other by at least 25 feet of landscaped area.
   3. The foundation landscape area shall be planted with 30 shrubs per 1,000 sf. of foundation landscape area. Shrubs may be substituted with deciduous ornamental trees or evergreen trees at a rate of three shrubs per small tree or evergreen tree. However, deciduous ornamental trees and evergreen trees shall be set back from building walls a sufficient distance to ensure that they have room to grow to maturity.
Sec. 4-6-4-6 Common Landscape Areas and General Landscape Areas

A. **Generally.** Common landscape areas and general landscape areas that are not subject to the requirements of Section 4-6-4-1, Street Tree Program, to Section 4-6-4-5, Foundation Landscaping, shall be landscaped according to the standards of this Section.

B. **Planting Requirements.** Common landscape areas and general landscape areas shall be planted according to the requirements of Table 4-6-4-6, General Planting Requirements. See Table 4-6-2-2, Plant Unit Descriptions, for the alternative plant units and the respective planting requirements.

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Plant Units Per Acre of General Landscape Area or Common Landscape Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN-#</td>
<td>10</td>
</tr>
<tr>
<td>EN-MF</td>
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<td>NA</td>
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<tr>
<td>PD</td>
<td>By PD Approval</td>
</tr>
</tbody>
</table>

C. **Reductions and Exceptions.**

1. The amount of landscaping in common and general landscape areas may be reduced as part of an approved fuels mitigation plan.

2. The planting standards of this Section do not apply to the following common areas:
a. Play courts, athletic fields, and playground areas;
b. Open water;
c. Stormwater detention or retention; and
d. Rock outcroppings.

Effective on: 7/1/2014

Division 4-6-5 Tree Protection

Sec. 4-6-5-1 Protected Trees

A. Generally. This Division applies to the protection of existing trees on parcels proposed for development, excluding those on individual single-family and two-family residential zoned lots.

B. Protected Individual Trees. The following trees are protected, and shall be preserved and maintained according to the standards of this Division:
   1. Any tree (except those reflected in Appendix C, Prohibited Plant List) with a diameter at breast height (DBH) of 10 inches or more, except as provided in Section 4-6-1-2, Application of Article.
   2. Any tree that is shown on an approved landscape plan that is necessary to:
      a. Meet the planting requirements of this LUDC; or
      b. Meet a condition of approval of the development to which the landscape plan applies.
   3. Any tree with a DBH of five inches or more on a property which is:
      a. Designated as an historic landmark; or
      b. Within a local historic district.

C. Protection of Stands of Trees. Development shall be designed so that existing stands of native trees are preserved in designated open spaces, whenever practicable. In general, alternative development options are available to facilitate such designs.

Effective on: 7/1/2014

Sec. 4-6-5-2 Tree Survey Required

A. General. A tree survey performed by a certified arborist, registered landscape architect, or a registered land surveyor shall be submitted prior to any new development that is proposed where a landscape plan is required that would impact a protected tree.

B. Tree Survey. The tree survey shall address the location, species, size, and condition of all protected trees.

C. Partial Tree Survey. The City may accept a partial tree survey in lieu of a full tree survey if the Administrator finds that protected trees only exist on a portion of the site.

D. Tree Inventory Alternative. The City may accept a tree inventory in lieu of a tree survey if protected trees are located in areas of designated open space.

Effective on: 7/1/2014
Sec. 4-6-5-3 Limitation on Tree Removal

A. **Clear Cutting.** Parcels proposed for development that include stands of trees shall not be clear cut in preparation for development. Development shall be designed to preserve existing stands of trees unless:

1. No reasonable alternative site design at the same density and intensity could be approved that would, in descending order of priority, preserve:
   a. All of the trees in the stand;
   b. The largest of the trees in the stand; or
   c. A greater number of trees than the landscape plan shows as protected; and
2. Relocation of the largest of the protected trees to another location on-site or within the City is not practical or economically feasible.

B. **Designated Areas for Tree Removal.** Tree removal is allowed in the following areas of a parcel proposed for development:

1. In, and within 10 feet of, an approved building footprint or approved manufactured home space;
2. In fuel mitigation areas, according to an approved fuels mitigation plan;
3. Within clear areas of visibility triangles or sight distances (see Section 4-2-2-12, Corner Sight Distance, and Section 4-2-2-13, Visibility Triangles for Minor Streets and Driveways) for public safety, or in adjacent areas if removal is necessary to maintain the clear areas;
4. Within eight feet of an approved outdoor recreation area that by its nature requires the removal of the trees (e.g., ballfields);
5. Within an approved stormwater retention/detention area, if the trees are not adapted to such conditions; and
6. Within six feet of a utility easement, if the trees would interfere with the use of the easement.

C. **Individual Tree Removal in Other Areas.** No individual protected tree shall be removed unless it meets one of the criteria below and is approved by the City Arborist:

1. The tree is infected with an epidemic insect or disease where the recommended control is not applicable and removal is the recommended practice to prevent transmission.
2. The tree poses an extreme public nuisance because of its species, size, location, or condition. The nuisance could be caused by fruit or seed drop, harboring of insects, or excessive twig or limb breakage.
3. The tree poses a severe safety hazard that cannot be corrected by pruning, transplanting, or other treatments.
4. The tree severely interferes with the growth and development of a more desirable tree.
5. The aesthetic values of the tree are so low or negative that the site is visually enhanced by the tree’s removal.
6. The tree is a prohibited species as verified by City inspection.
7. The removal of the tree is necessary for implementation of a fuels mitigation plan.
8. No reasonable alternative site design at the same density and intensity could be approved and relocation of the protected tree to another location on-site or within the City is not practical or feasible for the survival of the tree.

*Effective on: 7/1/2014*

Sec. 4-6-5-4 Tree Replacement Standards

A. **General.**

1. Protected trees shall not be removed, damaged (e.g., through topping or other improper pruning), or destroyed unless a tree removal permit is issued by the City.
2. If a protected tree that is shown on an approved landscape plan (see Subsection 4-6-5-1.B.2) is removed for any reason set out in Subsection 4-6-5-3.C.1 through 4-6-5-3.C.8., it shall be replaced.

3. If a protected tree that is shown on an approved landscape plan (see Subsection 4-6-5-1.B.2) is removed in violation of this LUDC, the value of the tree removed (as determined by the City Arborist) will be assessed, and it shall be replaced according to the schedule in Table 4-6-5-4, Tree Replacement Standards, unless the City Arborist determines that there is insufficient room for healthy tree growth.

4. Trees that are not protected as provided in Section 4-6-5-1, Protected Trees, may be removed, subject to the limitations of Section 4-6-5-3, Limitation on Tree Removal, upon issuance of a building permit.

B. Relocation. Protected trees that are relocated to another place on the parcel proposed for development, or another location within the City, do not have to be replaced if they are relocated according to industry standard transplanting methods, as approved by the City Arborist.

C. Development. Trees may be removed from a parcel proposed for development if it is demonstrated that:

1. There is no reasonable alternative site design at the same density and intensity that could be approved and relocation of the protected tree to another location on-site or within the City is not practical or feasible for the survival of the tree; and

2. The trees are replaced or mitigated according to the replacement standards in Table 4-6-5-4, Tree Replacement Standards.

<table>
<thead>
<tr>
<th>DBH of Tree to be Removed</th>
<th>Min. DBH</th>
<th>Up to, But Not Including</th>
<th>Number of Required Three-Inch Caliper Replacements</th>
<th>Number of Required Two-Inch Caliper Replacements</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td></td>
<td>10 inches</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10 inches</td>
<td>10 inches</td>
<td>15 inches</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15 inches</td>
<td>15 inches</td>
<td>20 inches</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20 inches</td>
<td>20 inches</td>
<td>No limit</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

D. Relationship to Other Landscaping Requirements.

1. Replacement trees shall count toward the landscaping requirements of the areas in which they are planted. However, if this Section requires more trees than the other Divisions of this Article, then this Section controls.

2. Replacement trees are not required for trees which are cleared to implement a fuels mitigation plan.

E. Timing of Replacement. Replacement trees that are required by this Section shall be installed within 30 days of removal, or if such date is not within a growing season, within the first 30 days of the next growing season.

Effective on: 7/1/2014

Division 4-6-6 Landscape Elements, Maintenance, and Warranties

Sec. 4-6-6-1 Groundcovers.

A. Use of Rock in Rights-of-Way. Rocks greater than three-fourths inch and less than four inches in size are not allowed within the above-ground landscaped areas of the public right-of-way.

B. Erosion Control. All unimproved earth areas shall be planted, or otherwise protected from erosion.

Effective on: 7/1/2014
Sec. 4-6-6-2 Water Features

A. **Maximum Area.** The total water surface of installed artificial water features shall not exceed one-half of one percent of the lot area of the development. Raw water storage, constructed wetlands, and stormwater best management practices ("BMPs") may exceed this area limitation.

B. **Design Requirements.**
   1. Re-circulating water systems shall be used for decorative water features, such as fountains or ponds.
   2. Water features shall be designed to prevent water seepage or leaking.

Effective on: 7/1/2014

Sec. 4-6-6-3 Irrigation Systems

A. **Generally.** A water-efficient irrigation system is required for all new landscape plantings. All street trees must be irrigated.

B. **Design.** Special attention shall be given to avoid runoff on slopes and to avoid overspray in narrow planting areas and median strips by using irrigation methods with low precipitation rates.

C. **Use of Raw Water.** Where untreated water is available, it should be considered as a water source. Installations shall be identified by distinguishing equipment naming or coloring to assure public safety.

D. **Irrigation Design Criteria.**
   1. Soil types and infiltration rate must be taken into account when designing irrigation systems.
   2. Storm runoff shall be directed toward landscaping, where practical.
   3. All irrigation systems shall be designed to water only vegetated areas and avoid runoff, overspray, low head drainage, or other conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways, or structures.
   4. The irrigation method shall be selected to correlate with the plant density. For example, drip irrigation or bubblers should be used for sparsely planted trees and shrubs, and sprinklers should be used for turf grass.
   5. Plants that require different amounts of water shall be irrigated by separate valves.
   6. Where practical, areas with significantly different solar exposure shall be irrigated differently.

E. **Operation of Irrigation Systems.**
   1. All automated overhead sprinkler irrigation during the period beginning on May 1 and ending on October 1 of each year must occur between 7:00 p.m. and 9:00 a.m. This restriction does not apply to drip irrigation and low precipitation bubblers, hand watering, or watering of containerized plants and plant stock. This restriction also does not apply to periodic maintenance and repair of overhead systems.
   2. Irrigation necessary for the establishment of newly sodded lawns and landscaping within the first 30 days of planting or watering of newly seeded turf within the first year of planting is not subject to these requirements.

F. **Equipment.** For all new landscapes and reconstructed landscapes with a new irrigation system, the irrigation shall comply with the following:
   1. Separate landscape water meters shall be installed for all projects with a landscaped area of more than 2,000 square feet, except for single-family or two-family homes.
   2. Automatic control systems must be able to accommodate all aspects of the design including repeat start times and programmable seven-day watering schedules.
   3. Pressure regulating devices used to reduce water pressure are required wherever incoming pressure exceeds 80 psi.
4. Sprinkler heads shall be selected for proper area coverage, precipitation rate, operating pressure, adjustment capability, and ease of maintenance.

5. Rain sensing override devices shall be required on all irrigation systems in order to interrupt sprinklers in the event of a significant rainfall.

6. Anti-drain (check) valves shall be installed in strategic points to minimize or prevent low-head drainage.

7. Automatic drain valves are not allowed.

Effective on: 7/1/2014

Sec. 4-6-6-4 Maintenance Standards

A. Generally. All landscaping elements and irrigation equipment shall be maintained in good condition. Ongoing maintenance, including the replacement of dead or unhealthy plantings, is required for areas that are landscaped pursuant to an approved landscape plan.

B. Restrictions within Dripline or Critical Root Zone of Trees.
   1. No cutting or filling, nor storage of building materials or debris, nor disposal of wastes, shall take place within the larger of the dripline or critical root zone of any protected tree.
   2. No impervious paving shall be placed within the critical root zone of any protected tree.
   3. The larger of the dripline or critical root zone of all protected trees shall be barricaded during construction to prevent damage to the trees and their roots by construction equipment.

C. Prohibited Tree Pruning Techniques. The pruning techniques are prohibited on protected trees or trees that are preserved or planted pursuant to an approved landscape plan:
   1. Topping (cutting large vertical branches of the tree to reduce its height).
   2. Tipping (cutting branches between nodes).
   3. Bark ripping (cutting branches so that the bark rips when the branch falls).
   4. Flush cuts (cutting the branch too close to the collar, the area where the branch connects to the tree).
   5. Stub cuts (cutting branches too far away from the collar, the area where the branch connects to the tree).

Effective on: 7/1/2014

Sec. 4-6-6-5 Invasive Species, Disease, and Pests

A. Invasive Species. All invasive species shall be removed from property proposed for development, substantial improvement, or redevelopment. Developed property shall be kept free of invasive species.

B. Disease and Pests. Any tree which, because of an epidemic disease (e.g., Dutch Elm Disease) or insect infestation (e.g., Mountain Pine Beetle), poses a threat to other trees or plants in the community shall be treated so as to control the spread of the problem organism.

Effective on: 7/1/2014

Sec. 4-6-6-6 Required Warranty

A. Generally. Landscaping that is installed or protected according to this Article shall be guaranteed according to the standards of this Section. This warranty is in addition to the maintenance of the landscaping shown on an approved landscape plan, as required by Section 4-6-6-4, Maintenance Standards.
B. **Required Warranty.**

1. **Term.** The owner shall guarantee all plant material to be in healthy condition (free of dead or dying branch tips; bearing foliage of normal density, size, and color; and closely matching adjacent specimens of the same species) for a term of two years. The warranty term commences on the date of acceptance of installed plant materials. When work is accepted in parts, the warranty terms extend from each acceptance to the terminal date of the guarantee of the last acceptance.

2. **Guarantee.** During the required warranty term, the owner shall replace, without cost to the City, all plants determined by the City Arborist to be dead or in an unacceptable condition. Replacements shall be made within a specified planting period, as soon as weather conditions allow. Replacements shall meet the minimum specifications of the materials replaced.

C. **Extension of Warranty Term.** Replacement plants shall be guaranteed for a new warranty term according to the standards of this Section. In the event that a replacement plant is not acceptable during or at the end of said new warranty term, the City Arborist may require that a different genus, species, or type of plant material be installed.

*Effective on: 7/1/2014*