

CHAPTER 11: GENERAL DESIGN STANDARDS FOR CONSTRUCTION AND DEVELOPMENT

The regulations hereinafter set forth in this Chapter qualify or supplement, as the case may be, the zone regulations appearing elsewhere in this Code.

11.1 LOT STANDARDS

- a. The minimum area and dimensions of all lots shall conform to the requirements of the Zone District in which the lot is located.
- b. All lots or parcels created by a subdivision shall have direct access with frontage on a dedicated street improved to standards hereinafter required. Private streets shall be permitted only in a Master Planned Development (Chapter 16) that is approved as provided in this Code. Land designated as public right-of-way shall be separate and distinct from lots adjoining such right-of-way and shall not be included in the area of such lots.
- c. All subdivisions shall result in the creation of lots which are developable and capable of being built upon. A subdivision shall not create lots and no building permit shall be issued for any lots that would make building or access impractical due to size, shape, steepness of terrain, location of watercourses, problems of sewerage or driveway grades, or other physical conditions, except where such lots are suitable and dedicated for a common open space, private utility or public purpose.
- d. The side lines of all lots, so far as possible, shall be at right angles to each street on which the lot faces, or approximately radial to the center of curvatures. Exceptions may be made to this requirement where considerations for solar orientation are involved.
- e. Corner lots for residential use shall be platted wider than interior lots in order to permit conformance with the required front setback requirements of both streets.
- f. A City boundary line shall not divide a lot. Each such boundary line shall be made on a lot line.
- g. Lot numbers shall begin with the number "1" and shall continue consecutively through the subdivision with no omissions or duplications; no block designations shall be used.
- h. Except as specifically authorized by this Code, not more than one dwelling unit shall occupy any one lot.
- i. No area needed to meet the minimum width, yard area, coverage, parking or other requirements of this Code for a lot or building may be sold or leased away from such lot or building for the purpose of installing any kind of structure.
- j. No portion of a lot may be cut off from another portion of a lot that has been created through a subdivision action.

11.2 DEVELOPMENT DESIGN AND LAYOUT

- a. The design of the development shall avoid or fully mitigate hazardous site conditions. (unstable slopes, geologic faults or flood potential, etc.).
- b. Drainage from individual lots shall be coordinated with the general storm drainage pattern for the area and shall avoid conveying to adjacent lots runoff flows higher than historic patterns.

- c. Recreation facilities should be located central to all residents of the development.
- d. All lots should have reasonable access to open space, trails, park land or recreation facilities that are set aside for either development use or use by the general public.
- e. Access to public trails and open space abutting the property shall be provided.
- f. Utility extensions required for future development shall be provided.
- g. Maintenance of common facilities must be accomplished through either covenants and a homeowner's association, a separate maintenance agreement, or some other perpetual agreement.
- h. The layout of lots should provide desirable settings for structures by making use of natural contours, maintaining views, affording privacy, and protection from wind, noise and vehicular traffic.
- i. Development design should provide for efficiency in the installation and provision of all public and private utilities and services.
- j. Common water and sanitation facilities should be located on separate outlots commonly owned by the users.

11.3 CONSTRUCTION ON SLOPES EXCEEDING 10%

Lots or buildings proposed on slopes exceeding ten percent (10%) warrant especially close review to assure that all grading, retaining wall, cut/fill and road/driveway grade standards will be met. All buildings, lots and developments which meet this criteria shall only be approved once a Hillside Development Permit has been issued by the City pursuant to Chapter 14 of this Code.

11.4 LANDSCAPING

- a. The design of developments and placement of buildings shall preserve the natural terrain, drainage, existing topsoil, tree groupings, large individual trees, and large rocks.
- b. Natural, informal landscape design should be used in Toquerville, rather than formal, geometric designs. Different types of adjacent uses both within and between developments should be buffered (separated), or screened, by extensive tree planting.

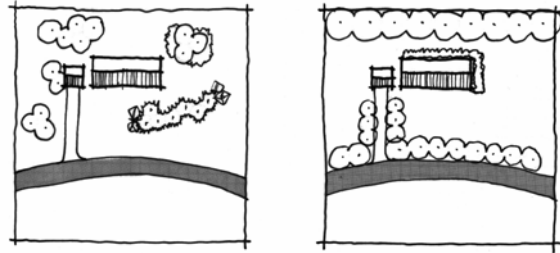


Figure 11.1: Informal planting (left) is preferred. Formal planting (right) is discouraged in Toquerville.

11.5 BUILDINGS

11.5.1 Height

- a. Building heights are specified in each zone district. (See Chapter 6; See also "Building Height" definition in the Appendix.)
- b. Public and quasi-public utility buildings, when authorized in a District, may be erected to a height greater than the Zone District height limit by Conditional Use permit.

- c. No dwellings shall be erected to a height less than one (1) story above grade, unless specifically designed and approved as an earth sheltered structure.
- d. The area of open loft cannot exceed fifty per cent (50%) of the area of the floor above which the loft is located. Any loft exceeding fifty per cent (50%) shall be considered an additional floor for purposes of IBC compliance. Lofts shall be considered to be bedrooms for parking requirement calculations.

11.5.2 Fire Standpipes

Standpipes complying with IBC shall be required for ALL commercial and multi-residential buildings, regardless of the number of stories.

11.5.3 Provisions for Handicapped

Provisions for physically handicapped persons shall be provided in all new buildings as required by the Americans with Disabilities Act (ADA).

11.5.4 Elevator Emergency Requirements

All elevator emergency operation and special provisions shall comply with the requirements of IBC, and ANSI ASME A17.1, Section 211, and shall include the following provisions:

- a. Commandeering switch
- b. Heat and smoke sensing devices
- c. Recall system
- d. Emergency operation switch
- e. Separate power distribution source
- f. Connection to emergency power system
- g. Emergency communication system

11.5.5 Construction Debris Removal

All building/construction sites shall provide debris removal sufficient to facilitate the regular clean-up and removal of construction debris from the site. Each site shall be cleaned and all construction debris removed on a weekly basis. Failure to comply with this Ordinance, by allowing debris to accumulate on the premises, may result in the suspension of building permits, fines or such other appropriate penalties as the City Council shall direct.

11.6 ROADS

11.6.1 Road Layout And Geometry

- a. The Standards and Specifications for Design and Construction re: road standards are made part of this Chapter by reference. The design and arrangement and construction of all roads, public and private, shall be in conformance with said road standards, other provisions of this Chapter and Code, and any City Design Guidelines as adopted.
- b. Road systems shall provide efficient internal circulation, reasonable access to public highways, minimize congestion and unsafe conditions, and shall be in conformance with

- the City's General Plan.
- c. The arrangement of roads shall provide for the continuation of major roads between adjacent properties when the continuation is necessary for the convenient movement of traffic, emergency or maintenance vehicles, or the efficient provision of utilities. Proposed streets shall be continuous and in alignment with existing planned or platted streets with which they are to connect.
 - d. Roads shall be designed to provide emergency access and egress for residents, occupants and emergency equipment providing width, curve radii and strength for emergency and maintenance vehicles used by or available to the City.
 - e. Where the potential traffic impacts on the existing street systems are considered to be great, or in the case of unique circumstances concerning topography or street layout, the Subdivider may be required to prepare a detailed engineering study of the road system.
 - f. Proposed streets shall intersect one another as nearly at right angles as topography and other limiting factors of good design permit. "T" intersections rather than "cross" intersections shall be used wherever possible for local streets.
 - g. Where a road does not extend to the boundary of the development and its continuation is not required, its terminus should be no closer than 50 feet from the boundary.
 - h. Strips of land reserved to control or restrict access to perimeter or stubbed roads shall be utilized only where the reserve strip is deeded to and accepted by the City.
 - i. Lawful right of vehicular access must be demonstrated before the City will issue a building permit.
 - j. The installation of curbs, gutters, and sidewalks of a type approved by the City Council may be required on any existing or proposed street adjoining a lot on which a building is to be constructed or remodeled, or on which a new use is to be established. Such curbs, gutters, and sidewalks may be required as a condition of building or use permit approval.
 - k. Excessively long and straight streets which are conducive to high-speed traffic shall be prohibited.
 - l. Every cul-de-sac and permanent dead-end street shall comply with the following requirements:
 - i. End at a turnaround area having a radius no less than 50 feet and an all-weather-surface;
 - ii. Not exceed 650 feet in total length.
 - m. Temporary dead-end streets, intended as access to future development parcels, shall be a minimum of one lot depth in length (or as determined by the Planning Commission) and shall meet all of the other requirements for permanent dead-end streets set forth above.
 - n. Driveways, mailboxes, fire hydrants and all other obstructions at such turnaround areas shall be designed in such a way as to provide an area for the piling of snow.

11.6.2 Road Grades

- a. Intersections, switchbacks and cul-de-sacs shall not exceed a 12% grade with cul-de-sac area having a maximum grade of 6%.
- b. No public or private roadway or street shall exceed *an 15%* grade, except that grades up to 15% for public or private roadways and streets may be allowed by the Planning Commission upon review and finding that all of the following conditions are met:
 - i. No more than 10 residential units are served by the over-12% section or the lots have separate, emergency access that does not exceed 12%.
 - ii. For roadways of 12% or greater grade, the applicant shall stake the centerline and both edges in the field for the inspection of the City Engineer to assure full

- compliance with this section.
- iii. Such other reasonable conditions the Planning Commission deems necessary to protect the health, safety and/or welfare of Toquerville residents and public safety officers under all the factual circumstances existing in each application.
- iv. When approval has been granted for a roadway in excess of 12%, the security requirements may be adjusted to require a security instrument in excess of 125% in order to cover the cost of removal and reclamation of such roadway, should constructed roadway exceed the above conditions.
- v. Roadways and streets exceeding a 15% grade shall not be permitted. If new roads are constructed with actual as-built grade steeper than 15% they must be rebuilt to 15% or less or the area reclaimed to natural conditions.
- vi. All streets and roads with grades in excess of 12% shall also comply the requirements set forth in Chapter 14 of this Code (Hillside Regulations).

11.6.3 Street Names

- a. Each street that is a continuation of, or an approximate continuation of, any existing dedicated street shall be given the name of such existing street. When any street forms a portion of a proposed street previously ordered by the City Council to be surveyed, opened, widened or improved, the street shall be given the name established in said Council order.
- b. The names of newly created streets shall not duplicate or nearly duplicate the names of any streets in the City or in adjacent areas of Washington County.
- c. Any named street shall also have the proper compass direction coordinate as approved by the Public Works Department and/or City Engineer.
- d. Subdividers are encouraged to do an investigation of local history regarding the names and references to geological and historical features located in the subdivision and wherever possible incorporate the historical names and references into the names and designations of streets.

11.7 DRIVEWAYS

- a. No driveway shall exceed 150 feet in length and/or 15% in grade.
- b. Driveways serving single residential dwellings shall be a minimum of 12 feet wide. Driveways serving two residential dwellings shall be a minimum of 26 feet wide. No driveway shall serve more than two residences.
- c. Exceptions exceeding 150 feet in length and/or 15% in grade may be granted by the Planning Commission. Such a review shall include a review of the application by the fire marshal/chief of the fire department contracted to provide fire service for Toquerville City and shall include any conditions imposed by the fire department as conditions for the exception and use of the driveway. Such conditions may include without limitation, installation of a fire hydrant on applicant's property at applicant's expense. Any such extension may be denied based on lack of water fire flow pressure at the applicant's property.

11.8 CUTS, FILLS AND RETAINING WALLS

Because of the dramatic visual impact of cuts, fills and retaining walls in a desert environment such as Southern Utah and the public safety factors that may arise with significant cuts and fills in unsuitable soils, design plans for cuts, fills and retaining walls shall conform to the following criteria as well as any other criteria set forth in Chapter 14 (Hillside Regulations) and other applicable sections of this Code, and the Standard Specifications for Design and Construction:

- a. No cuts or fills will be allowed on slopes with grades exceeding 30%
- b. Unretained cuts that exceed 2:1 slope shall not exceed 8 feet in height.
- c. Unretained fills may not exceed 12 feet in height pursuant to paragraph 11.8.1.(Measuring Cut/Fill Heights)
- d. No single retaining wall or retaining system may exceed 12 feet in height and/or 40 feet in length; retaining systems less than 12 feet may exceed 40 feet.
- e. Up to three terraced cuts may be created under a terraced cuts retaining system, so long as each wall is separated by a minimum 4 foot setback (measured from face to face) for visual relief and re-vegetation. The total maximum height for cuts retained under a terraced retaining system shall not exceed 18 feet.
- f. *All fills over four feet shall be engineered and approved by a licensed engineer.*

11.8.1 Measuring Cut/Fill Heights

Cuts and/or fills shall be measured vertically, from the natural grade at the lowest point of disturbance to natural grade at the highest point of disturbance.

11.8.2 Maximum Slope Grades

Unretained cut and fill slopes shall be no steeper than 2 feet horizontal to 1 foot vertical, except that cuts in bedrock materials, the stability of which is verified by a geologist and/or soils engineer with demonstrated expertise, may be steeper as approved by the City Engineer.

11.8.3 Retaining Walls

All retaining walls and/or approved retaining systems shall be constructed of decorative materials (i.e., textured surfaces, colored or tinted materials) and should be designed to blend into and enhance the natural desert environment and must be approved by the Building Department before grading or excavation permits shall be granted.

11.8.4 Engineering/Geologic Analysis

An engineering/geologic report in compliance with 3.2.7 (Soil, Geology Report) shall be prepared by a registered geologist or engineer at the schematic plan stage of the Subdivision Ordinance to demonstrate that the hillside above any proposed cut will remain stable after the proposed cut/fill and retaining system, if any, has been completed.

11.8.5 Re-Vegetation

- a. All unretained cut and fill slopes must be naturalized and re-vegetated within 1 year after the start of construction.

- b. Unretained cuts and fills should be naturalized by rounding edges, placing boulders in natural fashion and planting native plants, including trees, brush, and ground cover, to match surrounding areas. A landscape/re-vegetation plan shall be submitted to the Planning Commission for review and approval with the cut/fill design plans.
- c. All retaining systems shall incorporate planter spaces and shall require native re-vegetation.

11.9 BRIDGE AND TUNNEL REGULATIONS

The design of bridges and/or tunnels shall conform to the following regulations:

- a. All bridges and tunnels must be detailed in separate design plans submitted to the Planning Commission for its review.
- b. Bridge abutments shall not exceed 18 feet in height, as measured from top to original grade.
- c. All wing walls shall be constructed of decorative materials (i.e., textured surfaces, colored or tinted materials) and shall be submitted and approved by the City Planner. Wing walls shall be feathered back into cut and fill slopes in terraces not exceeding 6 feet in height. Wing wall systems shall be designed to maximize re-vegetation under the criteria outlined in 11.8.3.
- d. *Bridge and Tunnel plans shall be reviewed and approved by the City Engineer.*

11.10 BUILDING SETBACKS FROM WATERWAYS AND FLOOD HAZARD AREAS

No building, either residential or commercial, shall be permitted within six (6) vertical feet or one hundred and twenty-five (125) horizontal feet of the existing flow line of any river, creek, stream, or other waterway, measured at right angles to the center line of the drainage course *or within any flood plain or flood way designated on the most current FEMA flood map. The vertical feet calculation specified herein shall be applied to the elevation of the top of a building's foundation wall.*

11.11 UTILITIES

11.11.1 Construction

All utility connections and lines shall be installed underground. Before any installations are covered, material and service must be inspected and approved by the City Building Department. During the construction period, temporary power poles and lines shall be allowed within the boundaries of the construction project; however, such poles and lines must be taken down within thirty (30) days after the final certificate of occupancy for the project is granted.

11.11.2 Easements

All utilities shall be placed within public road right-of-ways or specific right-of-ways or easements free of legal encumbrances. Multiple use of a given easement is encouraged. The final plat shall note all easements.

11.12 PARKING

11.12.1 General Provisions

Except as may be provided elsewhere in this Code, minimum off-street parking space according to this Section, with adequate provisions for ingress and egress by standard-sized automobiles, shall be provided at the time of construction or expansion of any building or recreation facility, or change in use which requires more off-street parking spaces.

11.12.2 Parking Lot Characteristics

Each parcel of land developed for off-street parking in response to the requirements of this Ordinance shall provide the following characteristics:

- a. **SURFACING**
Each lot shall have hard surface and be maintained in good condition and kept clear and in unobstructed and usable condition at all times. Responsibility for maintenance of the lot shall rest with the property owner. The lot shall provide adequate access to a street or alley.
- b. **GRADING**
Parking lots shall be graded for proper drainage with surface water diverted in such a way as to keep the parking area free of accumulated water or ice and to prevent erosion.
- c. **LIGHTING**
Lots shall be properly illuminated with sharp cut-off luminaries to prevent direct light from spillover onto adjoining buildings, grounds, and the night sky. All lighting shall comply with Chapter 18 (Exterior Lighting Regulations) of this Code.
- d. **SIZE OF SPACES**
Each parking space shall measure at least nine feet (9') wide by eighteen feet (18') long.
- e. **LOT LAYOUT**
Whenever right angle parking is employed, a minimum of twenty-five feet (25') shall be required between rows of parking. Whenever other angle parking (i.e., 30-degree angle) is employed, a minimum of eighteen feet (18') shall be required between rows of parking. The width of the ingress and egress to the parking lot shall be the same as the minimum distance between the rows.
- f. **LANDSCAPING**
A minimum of 15% of the parking lot shall be dedicated to landscaping.

11.12.3 Required Spaces

The requirements below may be superseded by requirements provided in a specific zone district. If the calculation of required space results in a fractional number, such fraction should be rounded off to the next higher whole number.

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| a. | Residential Uses | |
| | • Single-Unit dwelling | Two (2) parking spaces. |
| | • Two-Unit dwelling | Two (2) parking spaces per unit. |
| | • Three-Unit dwelling | Two (2) parking spaces per unit. |
| | • Four-Unit dwelling | Two (2) parking spaces per unit. |
| | • Multi-Unit dwelling | Minimum of eight (8) spaces, 2 spaces for each unit. |
| | • Apartment House | Two (2) spaces for each unit. |
| b. | Tennis, skating- | Determined by specific review of comparables. |
| c. | Hotel, motel, condo- | Minimum of one (1) space per unit and (2) for staff |
| d. | Retail- | One (1) space for each shop's 1,000 square feet and (2) staff. |
| e. | Offices- | Two (2) spaces per 1,000 square feet. |
| f. | Restaurants, bars- | One (1) space for every four seats and (2) for staff |
| g. | Theaters- | One (1) space for every five (5) seats. |
| h. | Civic buildings- | Determined by specific review. |

11.12.4 Parking Heavy Equipment

Heavy equipment in excess of 12,000 lb. gross vehicle weight excluding pick-up trucks and including, but not limited to, construction equipment, excavation equipment, dump trucks, front end loaders, road graders, 18-wheel semi trailer rigs, and livestock trucks may be parked only in agricultural zones, multiple use zones, and highway commercial zones providing the following restrictions are met:

- a. Equipment shall be parked on property owned by the same person who is the registered owner of the equipment;
- b. Equipment shall not be parked on any roadway, street or highway fronting or bordering the property, but shall be parked on the lot and/or parcel itself.
- c. The equipment shall be parked in a place and manner so as to be reasonably screened from view from the roadway on which the property fronts;
- d. The equipment engines and/or associated motors (i.e., refrigeration units) shall not be allowed to run while parked; and
- e. All equipment used for construction may be parked at the construction site during the period of ongoing construction that is authorized by a current Toquerville City building permit.