



Memorandum

To: Planning Commission
From: Niall Connolly, Principal Planner
Date: May 30, 2025
Re: Parking in the Special Flood Hazard Area - Revisions

Background

On May 7th, the Planning Commission discussed the direction given by the Town Council on the proposed ordinance revision relating to parking and the floodplain. The Commission decided to divide this topic into two separate projects, as follows:

1. A shorter term project which would specifically address parking in the floodplain. This would expand on the work done to date (removing the restriction on parking in the special flood hazard), but would broaden this to address other riparian zone issues, such as water quality. It would also potentially limit the amount and types of parking spaces that could be in the special flood hazard area.
2. A longer term project, building on the work started by the Virgin River Management Plan. This project might include adopting a river corridor overlay zone or some other measures to protect the Springdale's riparian corridor.

1. Short Term Project

The Planning Commission discussed various ways to address the concerns surrounding allowing parking in the Special Flood Hazard Zone. These include:

- Requiring permeable paving for any parking spaces in the special flood hazard area. (This is suggested in the Virgin River Management Plan).
- Restricting the number of parking spaces per property that could be in the special flood hazard area.
- Differentiating between residential parking and commercial parking.

Permeable Paving

Staff has done some additional research on permeable paving, and has also consulted with the Town Engineer. Permeable paving can be an excellent stormwater management technique. It slows down the rate of stormwater runoff from paved surfaces because it allows water to infiltrate into the ground and replenishes aquifers. It also filters out pollutants (e.g. oils, grease and sediment) from getting into the river. Property owners should be aware that permeable paving needs to be cleaned out periodically, because it can get clogged with sediment and debris.

Permeable paving functions best in locations where the water table is not too high. If the earth beneath the pavers is already saturated, it will not be able to absorb rainwater. The water table is typically high near rivers, which means permeable paving may not be suitable in every case. In addition, permeable paving relies on porous soils. The clay common to much of Springdale is generally not very porous, and may not be well suited to permeable paving.

For these reasons, permeable paving might not be suitable for parking spaces in every instance. Nevertheless, it should not be disregarded as an option. Staff recommends instead that a requirement for “Low Impact Design” more broadly be adopted, with permeable paving listed as one of a menu of options. “Low Impact Design” (LID) refers to drainage techniques which mimic natural stormwater drainage, rather than traditional underground piped systems. They have numerous advantages, including:

- Often a reduced maintenance burden;
- Water quality benefits, because they typically include filtration of pollutants before they get into the river or aquifer;
- Reduced run-off speeds, which helps reduce the risk of flash floods;
- Habitat benefits, as they sometimes use native vegetation as part of the design.

Staff has drafted ordinance language which includes a menu of LID techniques that the property owners or developer can choose from. The intention is to allow them to select a design that best suits their site.

Commercial Parking v Residential Parking

The Commission indicated that they may seek to retain the parking restriction on commercial properties, but remove it from residential properties. The draft ordinance language reflects this. The Commission wished to know roughly how many commercial parking spaces were already located in the Special Flood Hazard Area. The following non-residential properties have some or all of their parking lots in the Special Flood Hazard Area:

- Town Hall
- Cable Mountain Lodge/ Zion Canyon Village
- Zion Canyon Campground
- 75 Manzanita Drive (recently approved, but yet to be developed commercial project)
- Some spaces at the Bumbleberry
- The River Park
- Wild Thyme Cafe (Tree’s Ranch)
- Zion Park Motel/ incl. Laundry

These are legally non-conforming, and based on the draft ordinance wording, this would continue to be the case.

Quantity of allowed spaces

In addition, the commission considered introducing a maximum to the number of parking spaces per residential property that would be allowed in the special flood hazard area. One option is that the maximum would be three parking spaces in the Special Flood Hazard Area per residential parcel. This is because three spaces is the maximum that would normally be required by the Code for any individual residential parcel. This is based on a theoretical duplex development on a valley residential parcel (1.5 spaces per multi-family residential unit).

It is possible that a residential parcel may have a higher parking requirement, if, for example, the workforce housing overlay zone were approved on a residential parcel. It is not possible to predict exactly how many parking spaces would be required in every such instance, and how many would reasonably need to be located in the Special Flood Hazard Area. But if the Commission wished to allow flexibility for such situations, the maximum number could be increased.

2. Longer Term Project: Virgin River Management Plan Implementation

The Commission will be considering a re-prioritization of 2025 work items as another agenda item during tonight's meeting. Staff recommends the Commission consider what priority to give this longer term project as part of the discussion on that topic.

It was suggested at the last work meeting that a sub committee could be formed to explore this topic in more detail. If the Commission decides to place a high priority on this item one of the first actions could be to organize a sub committee. The sub committee could be formed by two commissioners, National Park representative(s), Town staff and potentially a Town Council representative. The committee could explore whether or not it would be feasible to adopt a river corridor overlay zone, and if so, what protections or interventions would take place in this area. Colleagues from the National Park have particular expertise in the river and its ecology, which they may be able to share. Town staff recommend that the committee's first meeting could be a workshop, to identify the scope of this project.

Planning Commission Action

The Commission should discuss the proposed ordinance revisions and provide staff with direction on next steps.

10-23-7: PARKING DESIGN STANDARDS:

All off street parking facilities shall be built in conformance with the following standards of design:

- A. *Dimensions:* All parking spaces shall have minimum dimensions of 8½ feet × 18 feet. Each parking space must be clearly delineated with striping, wheel stops, or other means.
- B. *Handicapped parking facilities:* Handicapped parking facilities shall conform to state standards.
- C. *Garages and Carports:* A garage or carport must have inside dimensions of not less than 8½ feet × 18 feet per space.
- D. *Backing space:* Backing space must be provided for parking areas which are composed of four or more spaces, and for all parking areas, public, private or residential, which are accessed from SR-9, so that vehicles need not back into a public street or alley. Public sidewalks shall not be permitted to be used as part of the required backing area.
- E. *Acute angle parking:* Acute angle parking, one degree to 89 degrees, shall be designed for one-way traffic only.
- F. *Access requirements:* Adequate ingress and egress to and from all uses shall be provided as follows (minimum widths of drives within parking lots are provided in section 10-23-9, "Design And Construction Standards", of this chapter).
 - 1. When providing access to a garage, carport or parking area having five or less parking spaces, a driveway shall be a minimum of 12 feet in width.
 - 2. When used for access to a garage, carport or parking area having six or more parking spaces, a driveway shall be a minimum of 20 feet in width for one- and two-way traffic.
 - 3. No driveway, including those designed for single- or two-family residential use, shall be closer to a side property line than five feet.
 - 4. Separate exits shall be provided for acute angle and one-way parallel parking of four or more spaces so that cars need not exit by backing onto a street or alley.
 - 5. Not more than two driveways shall be used for each 100 feet, or fraction thereof, of frontage on any street.
 - 6. No two of said driveways shall be closer to each other than ten feet.
 - 7. Each driveway shall not be more than 36 feet wide, measured at right angles to the centerline of the driveway, except as increased by permissible curb return radii. The entire flare of any return radius shall fall within the right-of-way.
 - 8. No driveway shall be closer than 20 feet of any street intersection at any corner as measured along the property line.
- G. *Location:* Parking areas shall not be located within any required front or side setback, unless otherwise allowed by this title.
- H. *Setback from floodplain:* No parking lot, area or space shall be constructed or maintained or allowed within ~~ten feet of any area of the S~~pecial ~~F~~lood ~~H~~azard ~~A~~rea, as defined and located by chapter 13, article A of this title, except parking spaces in residential zones. In the case of parking spaces in residential zones, a maximum of three spaces per parcel are allowed to be constructed within the Special Flood Hazard Area.
- I. *Maximum grade:* Parking lot grades shall be in accordance with specifications which shall be made available by the Town Engineer.

- J. *Additional design standards:* Off street parking areas shall be in conformance with the applicable design standards in section 10-23-9 of this chapter. Unmarked parking areas, whether paved or finished with a graveled all weather surface, shall meet the specifications of 90 degree angle parking.
- K. *Parking location:* In general, all on site parking should be located to the rear or side of buildings. In the central commercial zone, parking location must conform to the following standards:
 - 1. Parking areas (including parking spaces and backing space) must be set back a minimum of 30 feet from the SR-9 right-of-way.
 - 2. Within 100 feet of the SR-9 right-of-way no on site parking may be placed between the front of any building and the SR-9 right-of-way.

10-23-9: DESIGN AND CONSTRUCTION STANDARDS:

- A. *Standards:* Parking area design and construction must adhere to all the standards of the Town's Construction Design Details and Standards Manual.
- B. *Surfacing:* Parking areas, including parking access lanes, must be surfaced to minimum all-weather standards. Each parking area surface shall be designed to minimize stormwater runoff and reduce "heat island" effects. If asphalt or concrete are used as a surface material, the parking area must include features to reduce heat island impacts, including but not limited to shaded areas (provided by either landscape or structures), cool pavement applications, breaking up large pavement areas with landscape planter areas, or minimizing the amount of asphalt or concrete used.
 - 1. Acceptable parking area surfaces include:
 - a. Asphalt pavement.
 - b. Concrete (colored to meet Town standards).
 - c. Stone or brick pavers.
 - d. Permeable paver, permeable grid, or other engineered permeable surface specifically designed and engineered for parking uses.
 - e. Crushed stone or gravel, if the parking area contains 25 or fewer parking spaces. An owner of a crushed stone or gravel parking lot must take measures to prevent crushed stone or gravel from being tracked out to adjacent roadways. The crushed stone or gravel material used as the parking lot surface must be three-fourths inch in diameter or larger, a minimum of two inches deep, and placed on a subgrade of at least four inches of compacted road base.
 - 2. Prohibited parking area surfaces include:
 - a. Dirt.
 - b. Road base.
- C. *Maintenance:* Parking areas must be kept in a state of good repair. Cracks, potholes, and other uneven surfaces must be repaired in a timely manner. Parking areas must be kept weed-free. Garbage and debris must be picked up and removed from parking areas in a timely manner. Landscaping required for buffering or screening must be kept viable and in good health.
- D. *Low Impact Design:* The use of Low Impact Design (LID) stormwater management is encouraged in all parking areas. Parking spaces which are developed within or partially within the Special Flood Hazard Area must incorporate low impact design measures, in order to minimize stormwater runoff and improve its water quality. Developers of parking spaces completely or partially within a Special Flood Hazard Area must

implement at least two LID strategies from the list below. The combination of more than two of these design features to form a nature-based stormwater treatment train is encouraged.

- a. Permeable paving
- b. Vegetated swales and filter strips
- c. Bioswales
- d. Bioretention
- e. Tree Pits
- f. Natural vegetation retention ponds
- g. Stormwater bump-outs
- h. Stormwater wetland
- i. Vegetated buffers