

Rio29

Form-Based Code



Building & Site
Orientation

July 1, 2020

Cover Memo

The Rio29 Small Area Plan envisions Rio29 as a “vibrant and diverse mixed-use community with interesting character and a human scale built environment.”

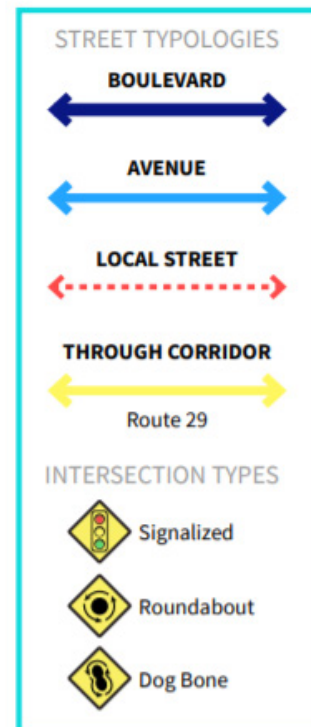
The goals for the Rio29 form-based code project are to:

- Support and incentivize development that aligns with the vision described in the Rio29 Small Area Plan.
- Establish clear expectations for residents, property owners, developers and the County.
- Balance regulation and flexibility: regulation to achieve the desired form and flexibility to accommodate market changes, creativity in design and a mixture of uses.
- Develop a draft ordinance through inclusive and transparent community engagement.

County staff will be working with a consultant team over the next few months. The team will review staff’s draft Rio29 form-based code and develop hypothetical scenarios based upon it. To frame this work, staff would like the ARB’s guidance on site and building orientation in the area, given its Entrance Corridor designation.

FUTURE STREET NETWORK

The Connectivity Plan proposes a grid-like street network for Rio29. A connected grid can better connect existing and future residents on the periphery of the Plan to Rio29’s center of activity (ie. the “Core” area, which is detailed in the next chapter). A connected grid can also connect neighborhoods to one another without diminishing the quality or the character of the neighborhoods within or around Rio29. Proposed streets should be designed for motorists, pedestrians, bicyclists, and transit riders. The grid network provides more direct routes to destinations that will allow people to more easily walk, bike, or drive to locations within Rio29.



Streets shown in the Connectivity Plan that are dotted convey the approximate street locations. The Street network overall shows a conceptual plan that achieves the Plan's goals for connectivity. Redevelopment and new development in Rio29 will determine the exact placement of streets.

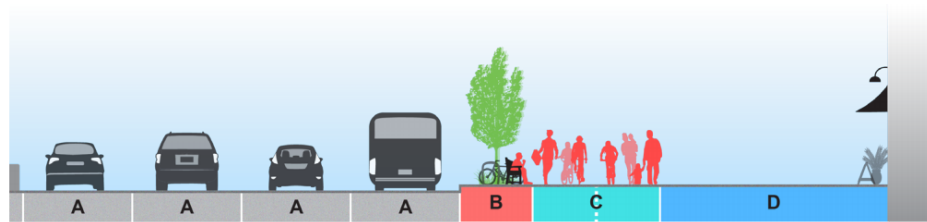
Context + Goals

The Rio29 Small Area Plan envisions the Rio29 as a “multimodal hub that has a connected network of complete streets, which are designed for all users.”

Anticipating build-out of an internal street network, staff is requesting guidance on how sites should relate to Route 29. If buildings are oriented towards an internal street network (in today’s existing “superblocks”), the rear of sites would face Route 29.

In advance of the July 6th work session, staff has gathered examples - local, regional and national - that demonstrate a variety of screenage, signage and access techniques.

Through Corridor Route 29



Through Corridors are high capacity streets designed to carry inter-neighborhood traffic at 40-55 mph. Route 29 is designated as a Corridor of Statewide Significance by VDOT and must continue to function as a high capacity Through Corridor. Additional signals, intersections, and at-grade crossings of Route 29 will not be feasible with this plan. Though significant changes to the travelway may not be feasible, the Plan recommends a shared-use path along Route 29 to allow for the road to serve as a corridor for commuting bicyclists and pedestrians. The path is contemplated on the east side of Route 29, though future planning efforts could identify the need for facilities on both sides. Two locations for bicycle/pedestrian crossings of Route 29 are identified in the Connectivity Plan.

The existing ramps bring traffic to and from Route 29 and Rio Road and act as connector street transitions by slowing speeds to more safely accommodate multi-modal traffic. The ramps can provide opportunities for future transit stops. They should also include shared-use paths or equivalent pedestrian and bicycle facilities to allow commuters to access Rio29 from points north and south.

		Dimensions
A	Lane Width	12'
B	Separation Zone	8'
C	Shared-Use Path	14'
D	Frontage Zone	5-25'



↔ This line demonstrates where the street design shown to the left can be applied.

Case Studies

Below are a series of case studies with images that demonstrate the site design techniques and treatments applied to the outer perimeter of inward facing suburban redevelopment projects. Views are provided from the vantage point of a nearby high-speed, car-dominant corridor as well as the orientation of buildings and sites towards an internal street network.

LOCAL + REGIONAL

The Shops at Stonefield | Charlottesville, VA



Buildings are oriented towards an internal street network with relegated parking and the following treatments along Route 29:

- Monument signage
- Screening walls for equipment & loading areas
- Varying wall treatments
- Street trees
- Groups of screening trees
- Trellised plants attached to walls
- Landscaping
- Individual wall-mounted signage
- Buffer / setback from Route 29
- Sidewalk

Mosaic District | Fairfax, VA

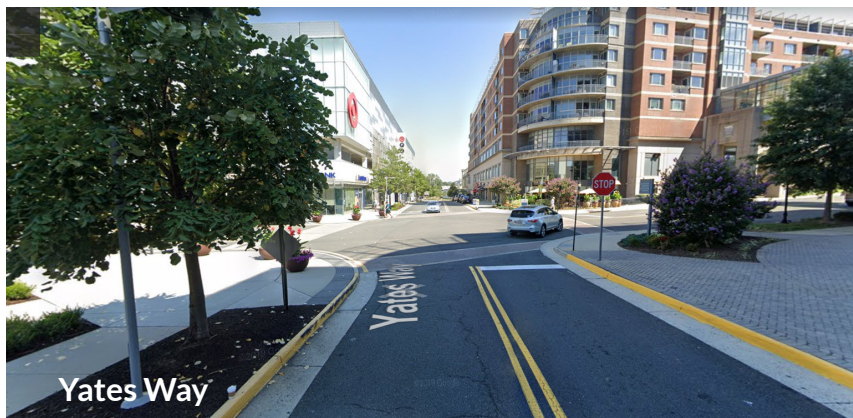
Mosaic District is a town center in Merrifield, Virginia, bounded by Gallows Road to the east, Route 50 to the south, Lee Highway to the north and Eskridge Road to the west. Shops began opening here in 2012 and housing opened in 2013.



(left) Structured and on-street parking is predominant in the Mosaic District. Buildings shown here have minimal setbacks and designs that don't look like rear elevations. Most surface parking lots existed prior to redevelopment.

Treatments along Route 29 and Gallows Road include:

- Building walls with windows, articulated facades and architectural treatments
- Wall-mounted signage
- Monument signage
- Street trees
- Sidewalks



(left) For context, this is a street-level view of internal streets in the Mosaic District.

On-street parking and structured parking is available, with street furniture and trees along the sidewalks.

Pike & Rose | White Flint, MD

Former strip malls along Rockville Pike in Montgomery County, MD were redeveloped into the Pike & Rose development. Montgomery County allocated approximately \$150 million for infrastructure improvements in the area. Rockville Pike, Old Georgetown Road, Montrose Parkway and Towne Road form the boundaries of the new development. The White Flint Metro stop with Red Line service is within walking distance.



Rockville Pike

(left) This is a rear view of the Pike & Rose development from Rockville Pike with parking lots adjacent to the street. Treatments include:

- Building elevations facing the street are designed with windows and articulated facades
- Wall-mounted signage
- Monument signage
- Street trees
- Fencing
- Landscaping
- Sidewalks



Interior Street Network | Pike & Rose

(left) For context, this is a street-level view of internal streets at the Pike & Rose development. On-street, structured and relegated parking is used.

NATIONAL EXAMPLE

Crocker Park | Westlake, Ohio

Crocker Park is a mixed-use development located outside of Cleveland that first opened in 2004. It is bounded by County Rd 118/Crocker Road and County Rd 254/Detroit Road. County staff shared this example with the Board of Supervisors during the Rio29 Small Area Plan process. County staff have found it to be a valuable example given its similarity in context to Rio29.



(left) This is a view of the Crocker Park development from County Rd 118. Structured and surface shared parking lots are used, with a mixture of buildings and parking along County Rd 118. Treatments include:

- Fully designed building elevations
- Wall-mounted signage
- Monument signage
- Street trees
- Landscaping / vegetative screening
- Sidewalks



(left) For context, this is a street-level view of internal streets in Crocker Park. Retail stores, offices and other commercial uses are located on the ground story with residential above.

On-street parking and structured parking is available, with street furniture and trees along the sidewalks.

Work Session Questions

Reflecting on local, regional, and national examples of suburban redevelopment, County staff plan to facilitate a discussion with the ARB on July 6th about site orientation and screening and street frontage techniques along Route 29.

Below is a list of key questions for your consideration:

- Based on the Small Area Plan's connectivity goals, staff recommends orienting buildings towards internal street networks, with parking relegated and screened from those streets.
 - Balancing this recommendation with the intent of the EC overlay district, are fully designed fronts required for building elevations facing the EC?
 - Are there site design methods and/or architectural treatments that can be applied to mitigate the lack of a fully designed elevation?
- What treatments would you like to see along the Route 29 corridor to help address developments oriented towards internal streets?
 - Some examples include: landscaped buffer/setbacks; vegetative screening; street trees
- How should business visibility and access be addressed along the Route 29 corridor? Both monument signage and wall-mounted signage are used in several of the case studies presented.
- How should utilities and equipment be screened from the Route 29 corridor?
- How should auto-oriented features, such as drive-thrus, gas station canopies, and loading docks be screened from the Route 29 corridor?