



---

To: Planning Commission  
From: Urban Design Committee  
Date: June 16, 2014  
RE: **Final Location, Character and Extent review of Commerce Road Improvements between Bells Road and Bellemeade Road; UDC No. 2014-19**

---

**I. APPLICANTS**

Kevin Newcomb, Department of Public Works

**II. LOCATION**

Commerce Road Improvements between Bells Road and Bellemeade Road

**Property Owner:**

City of Richmond

**III. PURPOSE**

The application is for final location, character, and extent review of improvements along Commerce Road.

**IV. SUMMARY & RECOMMENDATION**

The proposed improvements to Commerce Road from Bells Road the Bellemeade Road include adding turn lanes, improving property access, installing a curbed and landscaped median, installing a sidewalk, street lighting and landscaping along the western side of Commerce Road, installing curb and gutter along the entire subject length, and installing a bike lane along the Bells Road access road to Deepwater Terminal Road. The Urban Design Committee finds that this corridor, which in large part presents a neglected and worn appearance, will be greatly enhanced by the proposed improvements, which will help to provide a much more formalized appearance to this important industrial area.

The Committee finds that the improvements are consistent with the recommendations of the Urban Design Guidelines and the citywide Master Plan. The Committee also finds that the proposal is consistent with the plans approved by the Urban Design Committee and Planning Commission for a portion of Commerce Road south of the subject area in 2005. Lastly, the Committee finds the final plans to be consistent with the recommendations made by the UDC and Planning Commission during conceptual review. Therefore, the Urban Design Committee recommends that the Planning Commission grant final approval as submitted.

**Staff Contact:**

Jeff Eastman, (804) 646-6348

**V. FINDINGS OF FACT**

**a. Site Description and Surrounding Context**

The affected right-of-way is along Commerce Road from Bells Road to Bellemeade Road and falls within the M-1 (Light Industrial) and M-2 (Heavy Industrial) zoning districts. This section of Commerce Road parallels Interstate

95, often separated by mere feet, and offers two access points to Deepwater Terminal Road and the industrial properties along the James River, including the Port of Richmond. Due to the industrial nature of the businesses located along the corridor, including Philip Morris, and as an access point to the City's Deepwater Terminal, it is heavily traveled by tractor trailers and other heavy vehicles.

**b. Scope of Review**

The project is for improvements to a long section of Commerce Road and is subject to location, character, and extent review under Section 17.07 of the Richmond City Charter as a "widening of streets".

**c. UDC Review History**

The UDC reviewed and Planning Commission approved the conceptual plans for this project in September 2012 with the following conditions:

- That the northern crosswalk across Commerce Road at the Bells Road connector (just south of Station 104) is retained, and that a handicap accessible ramp be provided at the end of the crosswalk on the eastern side of Commerce Road.
- That the bike lanes on the Bells Road connector road be extended under the Interstate 95 on-ramp overpass all the way to the project limits.
- That full details on the proposed bridge, including materials, renderings, and a typical section, are shown as part of the final application.
- That all pedestrian crosswalks be striped, and that there be painted crosswalks across each driveway.
- That the applicants discuss the proposed trees with the Department of Public Works Urban Forestry Division.
- That some aesthetic plantings be added along the eastern edge of the road.
- That the sidewalk be continued across Bellemeade Road and over to the Royall Avenue area.

The UDC reviewed and Planning Commission approved a previous proposal for improvements to Commerce Road from south of Walmsley Boulevard to the south of Ruffin Road in May 2005.

**d. Project Description**

This proposal is for improvements to a nearly 2-mile long portion of Commerce Road between Bells Road and Bellemeade Road. Generally, alterations to the current roadway include installing turn lanes, improving property access, installing a curbed and landscaped median, installing a sidewalk, street lighting and landscaping along the western side of Commerce Road, installing curb and gutter along the entire subject length, and installing a bike lane along the Bells Road access road to Deepwater Terminal Road.

The existing typical section on Commerce Road contains an 8' (plus/minus) wide flush median or turn lane with two 14' wide travel lanes. With the exception of the southern portion of the site adjacent to the Phillip Morris campus, there is no curb or gutter along Commerce Road; the edge of the road instead leads to a roadside ditch. There are no sidewalks, street trees or lights on Commerce Road with the exception of a small section of sidewalk in front of the Hampton Inn at

the intersection of Bells Road and Commerce Road and lights in front of the Phillip Morris campus.

There are two typical sections that will be employed on Commerce Road. The first contains a 14' wide raised median with curb, a 1' wide shy lane, two 11' wide travel lanes, and a 2' wide gutter pan. This section will also contain a 5' wide planting strip on the western side of the road in which street trees and lights will be located. On the western side of the planting strip is a 5' wide concrete sidewalk that will run the entire length of Commerce Road. The second typical section for Commerce Road contains a 14' wide flush median turn lane, a 1' wide shy lane, two 11' wide travel lanes and a 2' wide gutter pan. This section will also contain the 5' wide planting strip and 5' wide concrete sidewalk as with the previous section.

At the signalized intersection with Bells Road at the southern end of the project area, the northbound and southbound portions of Commerce Road each contain two traffic lanes. On the southbound side, the left lane is a through lane only, while the right lane is a through lane or turn lane onto westbound Bells Road. Heading north on Commerce Road, there is another signalized intersection at the Bells Road connector, which travels under Interstate 95 and connects to Deepwater Terminal Road. At this intersection, the left lane of Commerce Road acts as a through lane, while the right lane is a through lane or turn lane onto the Bells Road connector. The connector road itself has one lane in each direction.

This section of Commerce Road is already improved with curb, gutter and sidewalk, including pedestrian crossings at Bells Road and at the Bells Road connector. One of the alterations being proposed to the roadway is that the right lane on the northbound side of Commerce Road will act as a turn-only lane onto the Bells Road connector, and the turn radius onto the connector is being increased to ease the movement of tractor-trailers. The plans also show the 5' wide bike lane beginning at the southern end of the study area at the intersection of Commerce and Bells Roads, extending northward along the eastern side of Commerce and then turning onto the connector road, terminating at the project's eastern boundary. A bike lane is also proposed for the northern side of the connector road, from the project boundary to Commerce Road.

The Bells Road connector, currently only two lanes, will be widened to include a 14' center turn lane for vehicles turning on southbound Commerce Road from the connector in addition to two 12' lanes for east and westbound movement and the aforementioned 5' wide bike lanes. The right lane of the connector road will be a right-turn only lane onto northbound Commerce Road.

North of the Bells Road connector, the southbound side of Commerce Road will remain as is, with two through lanes and one left turn lane onto the connector road. For most of the length of the study area, the southbound side of Commerce is only one lane, but another lane is added adjacent to the Phillip Morris parking lot. The northbound side of Commerce Road north of the connector is currently two lanes for approximately 800 feet, until the lanes merge. From that point northward, the northbound side of Commerce Road is one lane in width. Since only the left lane of northbound Commerce Road is proposed to act as a through lane at the intersection with the connector road, the roadway will narrow only 100' or so from the intersection, removing almost 700' of asphalt while allowing

vehicles turning north onto Commerce Road from the connector to merge effectively.

Continuing north on Commerce Road there is currently an approximately 500' long turning lane in front of the main entrance to Phillip Morris. After researching the current use of the lane, the proposal is to reduce the length of the lane by half, creating an additional 250' of median. The southern tip of the median to the north of the entrance will be lengthened approximately 20' and the median going north will be widened approximately 6' to a total of 14'. The northern entrance to the Phillip Morris campus has a similar situation, where an existing 450' turn lane will be reduced to 250', adding more median.

From this point northward, the plans call for additional median where it is feasible, and center turn lanes where necessary. There are many industrial properties along the corridor with varying amounts of traffic. The plans provide for formalization of the roadway through curb and gutter, curbed and raised medians, and curbed entrances that are formalized back to the property line. Along the southbound side of Commerce Road at the Phillip Morris entrances and at Ruffin Road, a dedicated turn lane is provided into the entrances of the properties due to a higher volume of vehicular turns.

Currently, at the unsignalized intersection of Commerce Road and the Deepwater Terminal Connector road, there is an informal right-turn lane onto the connector and a through lane going north. On the southbound side, there is an informal left turn lane onto the connector, with a through lane on the right. The plans propose a dedicated right turn lane onto the connector from northbound Commerce Road as well as a dedicated left turn lane from southbound Commerce Road. In addition, the intersection will become signalized, and an existing entrance into a large industrial property on the west side of the road which is currently offset from the intersection, will be brought south to line up with the connector road. There will be a dedicated left turn lane from northbound Commerce Road into this property at the traffic light.

The connector road, currently two lanes in width, will be widened to include a 14' center turn lane for vehicles turning on southbound Commerce Road from the connector in addition to two 12' lanes for east and westbound movement.

North of this intersection, the roadway and sidewalk cross at-grade railroad tracks. Beyond the tracks on the western side of the road and on City-owned property is the proposed location for a stormwater management pond. Just north of this property, the roadway crosses Goodes Creek. During conceptual review, it was unclear whether the bridge would be replaced or relocated. The applicant determined that the best course of action would be to replace the bridge in its current location. The new, 181' long bridge will contain two 11' travel lanes, a 14' center turn lane, and a 6' sidewalk along the western edge. It will be constructed of concrete with a steel railing atop the western side. The top of the railing will be 4'6" above the sidewalk.

The applicant also considered full or partial road closure during bridge construction. Partial closure would have only allowed northbound traffic, would have doubled the construction time and added a million dollars to the cost of the bridge construction, so it has been determined that the road will be fully closed.

During bridge construction, through traffic will be routed onto either Bells Road or Ruffin Road, along Jefferson Davis Highway, and connecting to Bellemeade Road, which merges back with Commerce Road.

At the intersection with Bellemeade Road, there is currently a long segregated merge lane heading east off of Commerce Road that meets up with eastbound Bellemeade Road as well as dedicated left and right turn lanes at the perpendicular intersection at Bellemeade Road. The merge lane is proposed to be extended beyond its existing length in order to eliminate the ability to turn onto Royall Avenue. Vehicles wishing to turn from Commerce Road onto Royall Avenue would now turn onto Bellemeade Road at the perpendicular intersection, and then turn onto Royall Avenue from the proposed dedicated turn lane. The plans also include a striped pedestrian crosswalk across Bellemeade Road and sidewalk on the north side of Bellemeade, connecting to the existing sidewalk and providing access to the Bellemeade neighborhood.

The landscaping plans include the provision of trees in the median and along the edges of the road, with the tree types varying from ornamental to canopy depending on the location. There are also several areas on the eastern side of the road, opposite of intersections or major property entrances that will be landscaped with evergreens intended to shield the glare of headlights onto Interstate 95. There are also some sections proposed to receive a mulched perennial planting bed. All remaining raised median areas will be planted with turf grass.

In addition to the aforementioned stormwater management pond, there will be three underground water storage tanks: one at the intersection of Commerce Road with the Bells Road connector and two adjacent to the northern entrance to the Philip Morris facility. The latter two tanks will be located in the right-of-way, while the first tank is to be located in right-of-way that is proposed to be acquired from the hotel at the north side of the intersection of Bells and Commerce Roads.

The proposal also includes the provision of street lights in the planting strip along the entire length of the western side of Commerce Road except in front of Philip Morris, where there are already lights. The lights will be spaced approximately 200' apart and will be served by underground electricity. The selected fixture is the Kim Archetype, with a pulse-start, 400 watt metal halide lamp. The poles and fixtures will be painted black and the height will vary between 30'-35' along the corridor.

The estimated total cost for this project is \$14,000,000, which is fully financed with federal transportation funds. The designers anticipate beginning construction in spring of 2015.

**e. Master Plan**

The subject right-of-way is located in the Broad Rock District as defined by the citywide Master Plan. The Plan places the entire area in the Industrial land use category, with primary uses including a wide variety of manufacturing, processing, research and development, warehousing, distribution, office-warehouse and service uses. The Plan goes on to state that "Industrial uses in the Broad Rock District play an important part in the economic and employment base in the City of Richmond" (page 153).

The Plan also contains a section reflecting the elements of the transportation plan as they relate to land use, with one of the proposals being to improve the underpass of I-95 at Bells Road to support truck movements (page 154). The Broad Rock District's Transportation and Roadway Improvements Map shows the continuation of the Warwick Road/Bells Road bike route under I-95.

The Plan also contains a general chapter on Transportation, which notes that "currently, much of the roadway system in the City is conducive to neither bicycle nor pedestrian travel. Many of the City's major transportation corridors lack streetscape elements to encourage pedestrian use" (page 37) and further, that "all transportation projects should have adequate provisions to address the needs of the pedestrian in a safe and efficient manner" (page 38).

**f. Urban Design Guidelines**

The Transportation section of the Urban Design Guidelines note that "new development should provide sidewalks along streets where there are currently no sidewalks or sidewalks in disrepair" and that the "number, size and location of curb cuts should be examined for potential conflicts with pedestrian and vehicular circulation. The material of new curb cuts should match the adjacent sidewalk material, except for tactile warning surfaces as required by the Americans with Disabilities Act (ADA)" (page 4).

In a section on Multimodal Transportation, the Guidelines state that "all transportation projects should have adequate provisions to address the needs of the pedestrian in a safe and efficient manner. Streetscape elements, such as street trees and street lighting, should be used to encourage pedestrian activity. Striped crosswalks, pedestrian crosswalk signals, and other improvements that enhance safety should be installed as a standard amenity at all signalized intersections" (page 6).

In a section on Street Design, and in regards to lane width, the guidelines state that "the width of a street should respond to the volume of traffic it carries. An 11 foot travel lane should only be utilized along corridors designed for speeds in excess of 40mph" (page 6). In this section the guidelines also note that "medians can provide both aesthetic benefits and operational utility within the street network". Later in this section, it is stated that "raised medians with curbs are the standard in urban areas, but depressed medians that provide water infiltration should be considered where appropriate" (page 7).

In regards to landscaping/street trees, the guidelines offer that "plant materials should be adaptable to existing soils, climatic and lighting conditions, and be disease resistant. Native plant species are encouraged, but not required" (page 10). Further, the Guidelines note that "landscaping should provide a sense of scale and seasonal interest" and that "shade trees for pedestrian comfort should be the predominant plant material in an urban setting" (page 10).

**VII. ATTACHMENTS**

- a. Vicinity Map**
- b. Application**
- c. Plans**