

London Bridge Road to Norfolk Avenue

From London Bridge Road to the Norfolk Avenue Trail, the former NSRR right-of-way generally runs a straight, east/west path. The corridor consists of residential and commercial development, open space, and some industrial development. Although there is a possibility that the transit alignment will turn north toward the Hilltop area instead of proceeding along the former NSRR right-of-way, it was determined that the desire of this study was to only address the alignment along the former NSRR right-of-way. The City expressed the desire to determine the feasibility of a pathway to fit within the former NSRR right-of-way with transit. For this reason, the path does not meander, and instead continues relatively straight in the east/west direction. *See Sheets 26 through 34 for a detailed layout of this area.*

Strategic Growth Areas

This section, from London Bridge Road to Norfolk Avenue, begins in the Lynnhaven SGA (see Figure 23). Before reaching Air Station Drive, the Lynnhaven SGA limit is crossed and the corridor enters the Hilltop SGA (see Figure 24). The vision, as defined by the plan for the Hilltop SGA, is to create a convenient, regional retail destination that is within close proximity to the beach. In order to achieve this, the key recommendations include building upon the existing natural resources to expand access to public open space through an interconnected system of parks and trails, and encouraging redevelopment of obsolete commercial structures with new buildings placed according to new urban planning standards for the district. By incorporating a shared-use path in this area, open spaces will be connected and a major trail will be added to the area. This will in turn encourage new development to spur in the surrounding area; the shared-use path system will supplement the vision for the Hilltop SGA.

Table 4

	At-Grade	At-Grade Mid-Block	At-Grade Signalized
Air Station Drive	X		
First Colonial Road		X	
Oceana Boulevard		X	
Sykes Avenue	X		
Birdneck Road			X

All at-grade crossings will be handled on a case-by-case basis. Typically, an at-grade crossing will be stop controlled and cross perpendicular to the vehicular travel way. Safety measures including but not limited to signage, flashing beacons, bollards, channelization, and gates will be employed as necessary. Signalized at-grade crossings include intersections with existing signals as well as those with proposed future signal installations. Pedestrian movements will be incorporated into the signal designs.

Street Crossings

The North Oceana Transit Station is proposed north of Potters Road just west of Air Station Drive. The sidewalk and path will connect to

the station circulation pattern. There will be a crossing of the path at Air Station Drive and it will be stop sign-controlled.

A major crossing in this section is across First Colonial Road. At this location, there is no existing infrastructure for a controlled intersection. This crossing is recommended to be an at-grade mid-block crossing, incorporating the appropriate signage to allow shared-use path traffic to safely cross the two-lane facility. The current HRT plans show that gates are to be installed to control vehicular traffic when trains approach. The pedestrians and bicyclists can cross when the gates are down and the trains are crossing the road.

The Oceana Boulevard crossing is challenging. The sidewalk and pathway cross Oceana Boulevard not only at a skew, but also in the curvature of the roadway. This causes the crossing to be longer than a perpendicular crossing. There are gates planned if light rail is constructed in this corridor. If that is the case, there will be opportunities for path and sidewalk users to cross when the trains cross. At other times, there will be stop signs on the sidewalk and path to control the pedestrians and bicyclists through this mid-block crossing.

Another option for crossing First Colonial Road and Oceana Boulevard is to develop a two-phased approach. The first phase would turn the path north at First Colonial Road and parallel the road to its signalized intersection with Oceana Boulevard. The bicyclists and pedestrians would then cross Oceana Boulevard at the traffic signal and continue southeast on the northern side of Oceana Boulevard. The path then could utilize Southern Boulevard right-of-way on the north side of the LRT tracks to Sykes Avenue. The path would cross the LRT tracks at Sykes Avenue and continue eastward south of the LRT tracks. The second phase of this option would be to provide a grade-separated crossing of Oceana Boulevard.

The Sykes Avenue at-grade crossing will be similar to other smaller-street treatments. The sidewalk and shared-use path will continue across the roadway parallel to the tracks and the users will be controlled by stop signs on the sidewalk and path.

The next major road along the corridor is Birdneck Road. There is an existing traffic signal at this location; this will act as the terminus for the proposed shared-use path. Users can access the existing street crossings to cross Birdneck Road and will be able to continue to the Norfolk Trail system along Norfolk Avenue.

Transit Stops

The only proposed transit station is the North Oceana Station, located west of Air Station Drive. The next proposed transit station is outside the limits of this study. The North Oceana Station proposes a designated park-and-ride area.

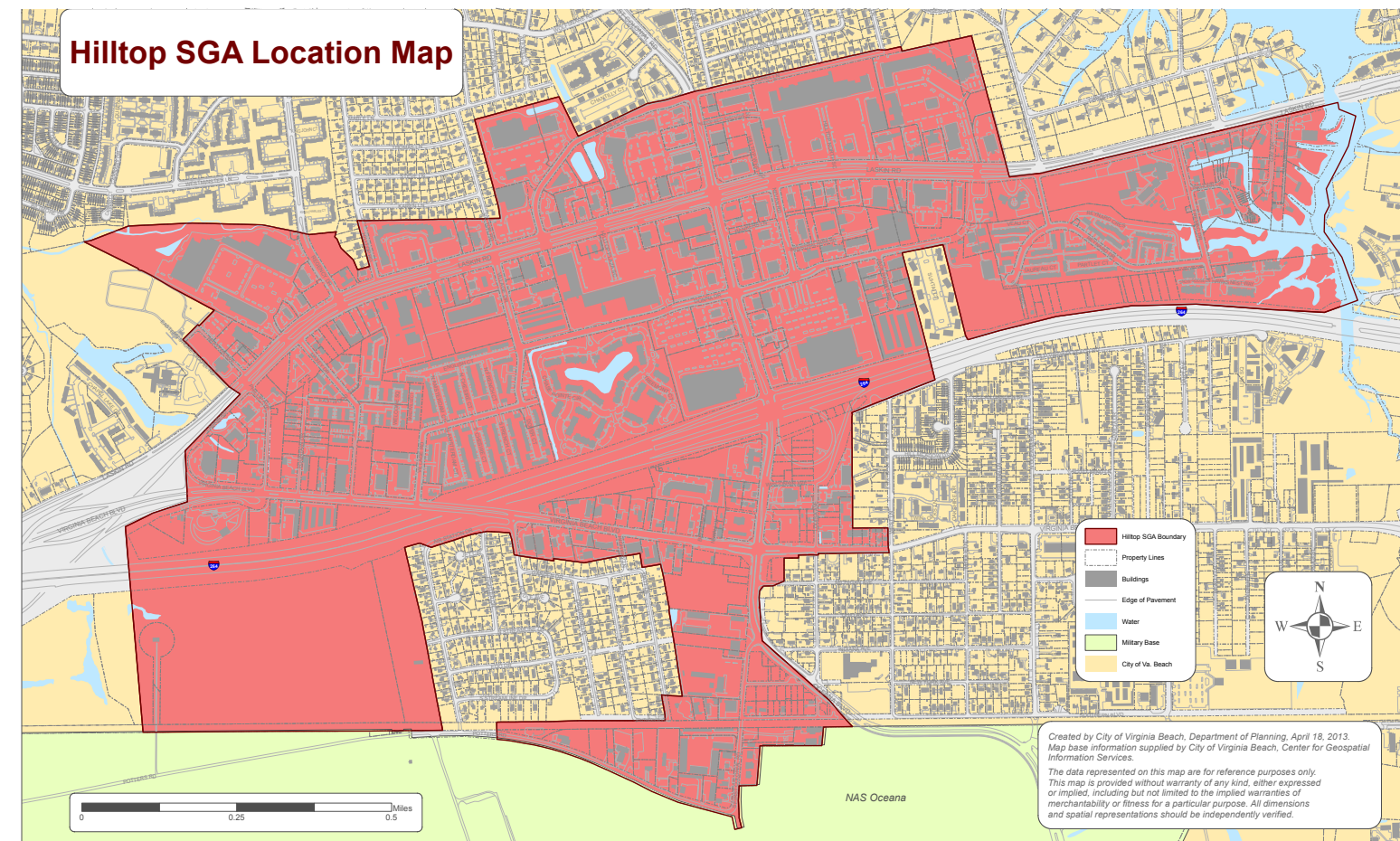


Figure 24: Hilltop SGA Location Map

Drainage

From London Bridge Road to Norfolk Avenue Trail, the existing corridor uses an open ditch drainage system. Generally, there is a minimum of 7 feet of separation between the proposed edge of path and right-of-way line. As mentioned in other sections, the proposed path will pave over the existing ditch, requiring the drainage strategy to be revisited.

The potential main outfalls identified between London Bridge Road and Norfolk Avenue Trail are Wolfsnare Creek and Great Neck Creek. There are various existing ponds upstream of Wolfsnare Creek; taking advantage of these existing BMPs could be useful in treatment of stormwater runoff from the path. Currently, the City owns a parcel to the east of Wolfsnare Creek, GPIN 24073469160000, which could be used for connectivity to existing BMPs or placement of supplemental BMPs. If this parcel were used, no cost would be associated with purchasing additional right-of-way. Great Neck Creek could likely also be used as a main outfall. If additional space for BMPs is required, it would be advantageous to have space on either side of the creek. The City owns a parcel on the southeast side of the creek, GPIN 2417-33-9682-0000. The City also owns a parcel on the southwest side, GPIN 2417-24-1080-

0000. Use of these parcels would again avoid purchase of additional right-of-way.

Using these outfalls, the same recommendation is proposed: the use of shallow wet or dry swales with an underground piped drainage system as needed. Wet or dry swales will help to account for water quality and quantity. Rock check dams may also need to be used to meet quantity requirements. If this BMP is not sufficient, using permeable pavement for the sidewalk and shared-use path is an option as a supplemental BMP. However, for a portion of this section, the edged of the proposed path and the right-of-way line have only 2 feet of separation. In this area, underground drainage will likely need to be considered. There is an existing storm sewer system along Southern Boulevard that may be able to take on the additional flow from the path.

Preliminary Opinion of Probable Cost

Based on the conceptual level of the study, this section of the project is estimated to cost \$7.2 million. There are no elevated crossings or water crossings along this 2.8-mile section. This yields a cost per mile of about \$2.6 million. This is the lowest cost per mile of the three proposed sections.

