

Little Bennett Trail Connector

Shared Use Path Crossing Study for the Intersection of Comus Road and Frederick Road (MD Rte. 355)

Charles P. Johnson & Associates, Inc. (CPJ) performed a preliminary evaluation of the Comus Road and Frederick Road (MD 355) intersection for a future shared use path crossing MD 355 based on a master plan trail system. The existing signed speed limit of MD 355 is 40 mph. However, for the purposes of this study, a design speed of 50 mph was used to most accurately represent reported traffic conditions. Currently at the intersection with Comus Road, there is one through lane and one left turn lane going northbound on MD 355 and one through lane going southbound on MD 355. CPJ identified two potential locations where a shared use path crossing could be installed nearest Comus Road.

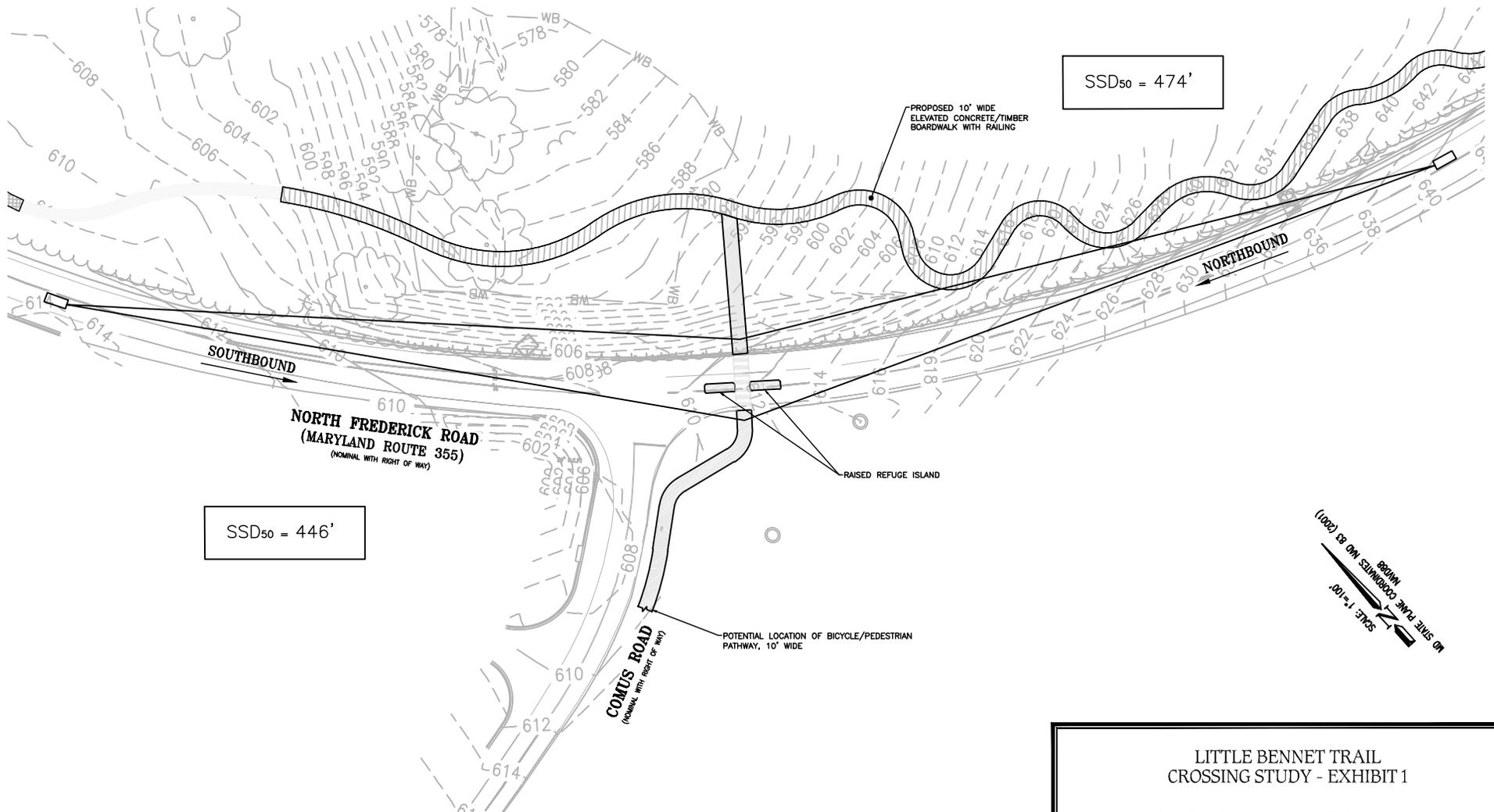
An evaluation of sight distance and stopping sight distance (SSD) at both potential locations indicated SSD is the controlling factor. Additionally, the SSD triangles are the same at both potential crossing locations. The SSD triangle is approximately 446 feet for a southbound vehicle on MD 355 approaching the proposed crossing, and approximately 474 feet for a northbound vehicle on MD 355. The north and south SSD triangles at both potential crossing locations are obstructed by trees along the northeast side (northbound lane) of MD 355. Likewise, if a pedestrian/bicyclist attempts to cross MD 355 going westbound, from the proposed Little Bennett Park path, the pedestrian/bicyclist will not be able to see vehicles approaching from the north or the south along MD 355 due to the forest cover. However, if a pedestrian/bicyclist attempts to cross MD 355 at the intersection with Comus Road going eastbound, the pedestrian/bicyclist will have an unobstructed view of vehicles approaching from the north and the south on MD 355.

Installation of a manually operated traffic light to stop vehicular traffic is a potential solution to the tree obstruction concern. The State Highway Administration (SHA) has indicated that this option is not preferred due to the heavy traffic volumes on MD 355. SHA suggested the final design should involve stop sign control methods for the pedestrians/bicyclists and advance warning signs for vehicular traffic placed at the required SSD. In addition, a raised refuge island would be required between the northbound and southbound lanes on MD 355. This will provide a safety area in the middle of the roadway for the pedestrian/bicyclist, facilitate a broader view of approaching motor vehicles, and establish eye contact with motorists.

Based on site conditions, the first potential crossing location is at the south side of the intersection with Comus Road (see Exhibit # 1). The north side of the intersection was eliminated as a potential crossing location due to the presence of an existing stormwater facility and guardrail which present grading challenges, due to steep slopes, and would require easements. At the south side of the intersection, a raised refuge island would be installed between the northbound left turn lane and the southbound lane on MD 355. Installation of a six foot minimum width refuge island will require road widening. The required SSD will need to be established by removing the existing tree obstructions along the northeast side of MD-355 and the SSD will need to be maintained by providing periodic mowing to prevent tree growth.

Another potential crossing location is approximately 300 feet south of Comus Road. At this location there is a painted median area at the beginning of the northbound turn lane on MD 355 for vehicles turning left onto Comus Road (see Exhibit # 2). A raised refuge island would be installed in the existing painted median area without requiring widening of MD 355. Additionally, impacts to the shared use path crossing resulting from the queue of left-turning vehicles would be reduced at this location. The road shoulder on the south west side (southbound lane) of MD 355 would need to be widened to serve as the shared use path connection between the MD 355 crossing and the intersection with Comus Road. The required SSD will need to be established by removing the existing tree obstructions along the northeast side of MD-355 and the SSD will need to be maintained by providing periodic mowing to prevent tree growth.

CPJ recommends the shared use path crossing MD 355 be located at the intersection of Comus Road as shown in Exhibit # 1 as this location does not require a shared use path to be located on the road shoulder of MD 355.



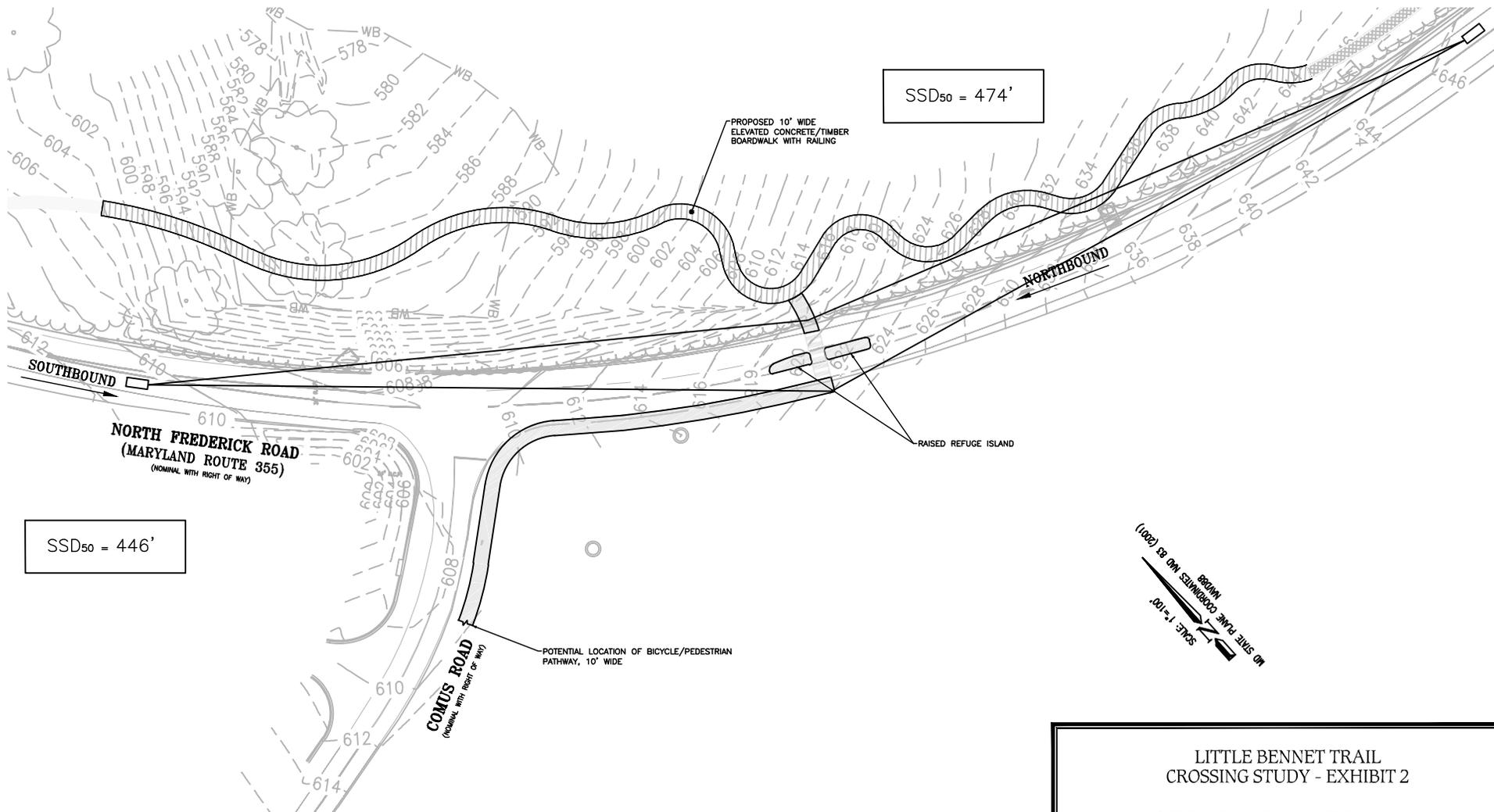
NO STATE PLANE COORDINATES MD 83 (2004)
 SCALE: 1"=100'

LITTLE BENNET TRAIL
 CROSSING STUDY - EXHIBIT 1

LITTLE BENNET PARK
 (17th) DISTRICT
 CLARKSBURG, MARYLAND

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CLIENT: Owner (s)	PRELIMINARY PLAN NO. N/A	SITE PLAN NO. N/A
	DESIGN BKD	SHEET 1 OF 2
	DRAFT JMV	
	DATE AUGUST, 2014	FILE NO: 42-520-94.03
	SCALE 1"=100'	



LITTLE BENNET TRAIL
CROSSING STUDY - EXHIBIT 2

LITTLE BENNET PARK
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CLARKSBURG, MARYLAND

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CLIENT: Owner (s)	PRELIMINARY PLAN NO. N/A	SITE PLAN NO. N/A
DESIGN BKD	DESIGN	SHEET 2 OF 2
	DRAFT JMV	
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