

Analysis of North-South Alignment Terrain Impacts
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1. Which alignment will make it more difficult to mitigate impact on terrain?

Between the Wisconsin Avenue Tunnel (Tunnel) and the East-West Highway Bridge, the right of way (ROW) for the proposed Purple Line is located, in part, on what appears to be a ridge where the Trail is currently located. On the south side, nearest to residences in the Town, the ROW slopes toward the boundaries of the private property of the abutting residences. The degree of the slope varies, in some areas it is quite steep, while in others, particularly nearer to the Tunnel, the slope is less severe. As the ROW approaches the Tunnel, it becomes closer to the residences. Also, on the south side of the ROW there are a significant number of tall trees, stands of bamboo, and other vegetation that form a natural sound and visual barrier to activity on the Trail, as well as to adjacent buildings and to high rise apartment and office buildings located on Montgomery Avenue.

Current plans for the Purple Line would place the Trail on the north side on or near the ridge, but would locate the twin track bed and trains mostly along what is now the sloping portion of the ROW closest to the Town.

The alignment with the Trail on the north side 3-4 feet above the twin track bed on the south side appears likely to have more impact and require more mitigation than with the Trail on the south side.

2. Describe these impacts

- More potential impact during construction if transit way is built on the sloping portion nearest the town – possible need to use private property abutting transit way during construction (Assumption: construction of transit way will be more complicated than construction of Trail on either north or south side. Construction of transit way on sloped area likely presents different challenges than on north side and would result in more impacts on Town and abutting residences.)
- More loss of trees, bamboo, and other natural buffer in ROW and private property
- Possible damage to existing stream, storm water system (south of Trail)
- Impacts on wildlife in ROW and on private property
- More potential impacts from storm water runoff; erosion
- Greater potential aesthetic damage/ property values with proximity of train
- Damage to existing structures (fences, etc) on private property

3. What, if anything, should the Town ask for in regard to these impacts at this point in the planning process?

- It is not clear that 4 foot noise barriers will be sufficient, regardless of track/trail location; further noise studies are needed.
- Study to determine whether ROW or track bed could be lowered to limit impacts (particularly noise and visual) whether or not transit way on south side; lowering might reduce noise and visual “footprint” and could be considered as mitigation, maybe most effective if trains run on south side nearest to Town
- The north side of the current Trail suffers from runoff water from Bethesda. This problem should not be mitigated by allowing the trail or the tracks to flood as a buffer. Instead, runoff from Bethesda should be captured before it reaches the trail or the tracks, regardless of which alignment is chosen.
- Complete preliminary engineering on both a north and south trail alignment through Chevy Chase to allow a more thorough analysis of potential impacts and costs.