



LAND USE & TRANSPORTATION MEMORANDUM

Engineering, Traffic and Survey

To: Holders of Washington County Uniform Road Improvement Design Standards (WCURIDS)
From: Stacy Shetler, P.E., County Engineer
Date: April 8, 2021
Subject: Sight Distance Guidelines – Rev 2

Sight Distance requirements for Washington County roads are included in the WCURIDS, referred in this document as the Road Standards, but lack direction for common sight distance situations that are encountered during design, review and construction.

The following table gives guidance for determining required sight distance with the goal of reducing the number of requests for exception. For situations not covered in the table or where County Staff determine that the guidance isn't applicable, the County Engineer will, through the current design modification process, make a determination. This is guidance for sight distance only and does not apply to other Community Development Code (CDC) or Road Standards requirements.

| Situation | Guidance |
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| A: Street trees are present in the sight line 1. All Road Classifications | Trees with a caliper (diameter at driver sight line) of 4" or less (at maturity) are not considered a sight distance obstruction as long as the branches are trimmed up so that they do not block sight distance. Trees should not block traffic control devices. Trees placed within 5' of the back of sidewalk still count toward the required number of street trees and all street trees shall have a minimum branch height of 6' (WCURIDS 340.130.3, CDC 407-7). |
| B: Distance between intersection and adjacent intersection is less than the required sight distance standard. 1. Stop Controlled adjacent intersection approach | 1. It is sufficient to see to the adjacent intersection approach, even if it doesn't meet Washington County sight distance standard. Traffic will be starting from a stopped position |

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| <p>a. Public or Private Roads, All Road Classifications</p> <p>2. Non-stop controlled adjacent intersection approach</p> <p>a. Turning from local or neighborhood route onto local or neighborhood route</p> <p>b. Turning from Collector or Arterial onto local or neighborhood route</p> | <p>2. Uncontrolled movements from the cross street of the adjacent intersection must make a right- or left-turn approaching the intersection in question. Stopping Sight distance per AASHTO shall be met at a minimum.</p> <p>a. The approach speed of a vehicle that has turned at the adjacent intersection can be assumed to be 17 mph based on a speed study conducted by Kittelson and Associates in 2017.</p> <p>b. The approach speed of a vehicle that has turned at the adjacent intersection can be assumed to be 20 mph based on research by TRB, AASHTO, ITE and Washington County.</p> |
| <p>C. Sight distance from a public road, private road or commercial driveway cannot be met using the Washington County required 15' setback.</p> <p>1. onto Local Street or</p> <p>2. onto Neighborhood Route</p> | <p>A 12' setback may be used to measure sight distance, but it must meet intersectional sight distance per 501-8.5. Stopping sight distance cannot be used with a 12' setback without an approved modification request.</p> <p>1. Any local road</p> <p>2. Low volume (less than 1000 ADT) and low speed (posted or statutory 25 mph or less)</p> |
| <p>D. Using Stopping Sight distance rather than Intersectional Sight distance (Posted Speed x 10)</p> <p>1. Local Roads or</p> <p>2. Neighborhood Routes</p> | <p>AASHTO stopping sight distance is adequate with a 15' setback. Use AASHTO intersection sight distance object and eye height for this measurement (3.5' for both).</p> <p>1. Any local road</p> <p>2. Low volume (less than 1000 ADT) and low speed (posted or statutory 25 mph or less)</p> |
| <p>E. Eye position for a half-street improvement is measured from edge of</p> | <p>The engineer shall submit plan and profile of ultimate sight lines (consistent with</p> |

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| <p>traveled way rather than ultimate configuration</p> <ol style="list-style-type: none"> 1. Public or Private Roads, All Road Classifications <ol style="list-style-type: none"> a. Unimproved adjacent properties may block ultimate sight distance or b. Sight distance is available from edge of traveled way, which may be significantly closer than ultimate edge of traveled way. | <p>Washington County Preliminary Sight Distance requirements) that show that in the future, as adjacent properties develop, adequate sight distance is available for the fully developed road configuration. This may assume that improvements are made the adjacent properties, consistent with half-street improvements for development.</p> |
| <p>F: Edge of traveled way is not clearly defined</p> <ol style="list-style-type: none"> 1. For all classifications | <p>Use engineering judgement based on field conditions. Edge of traveled way may be:</p> <ul style="list-style-type: none"> • Bike lane striping • Edge line striping • Curb extension line • Outside edge of parked car (for dedicated/striped on street parking) • 3' from wheel path of vehicles on an unimproved, unstriped road |
| <p>G. Using posted speed for Sight Distance Calculation</p> <ol style="list-style-type: none"> 1. All Classifications <ol style="list-style-type: none"> a. Gravel Roads | <ol style="list-style-type: none"> a. Check with Washington County Operations Division to see if it is on gravel road improvement list. If not on the list, use 85th percentile speed, other method approved by the County Engineer, or speed as determined by the County Engineer. If the road is on the gravel road improvement list, use the speed or speed method as specified by the County Engineer. |
| <p>H. AASHTO object and driver eye height does not match County object and driver eye height.</p> | <p>In cases where sight distance will use County distance measurement (10x speed), measure sight distance using county object and eye heights (4.25' and 3.5', respectively). In cases where AASHTO stopping sight distance is used, measure sight distance using AASHTO intersectional sight distance object and eye heights (3.5' for both).</p> |

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| <p>I: On-street parking is allowed and blocks clear sight lines</p> <ol style="list-style-type: none">1. Residential, single-family driveway accessing a local or neighborhood route posted 25 mph or less | <p>Sight distance should still be evaluated, but the county does not consider the presence of parked vehicles as a sight distance obstruction.</p> |
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