

Ridge Road Fire Gate Removal: Frequently Asked Questions

Q1. Why are you removing the gate?

In recent years, we received requests to remove the fire gate to better distribute traffic between Blackhawk Drive and Ridge Road.

The Ridge Road gate was initially a requirement of development. The gate was installed for temporary emergency-access only because sight distance on Ridge Road, looking north on McDaniel Road, was insufficient. Washington County always planned to have Ridge Road connect to McDaniel Road, providing full access.

The sight distance issue was corrected when properties on the north side of the intersection developed. We delayed the gate removal, pending a full evaluation conducted in 2021. County engineering staff determined the intersection has adequate stopping sight distance and can operate safely without the gate. [See question 5](#)

Q2. How will removing the gate benefit the neighborhoods?

Removing the gate will improve emergency response times to residences in the area, as responders will not have to get out of vehicles to unlock and open the gate or drive out of direction to bypass the gate. In addition, Ridge Road will provide a timely, second access to the neighborhood in the event Blackhawk Drive is inaccessible.

Removal of the gate will also improve local access to McDaniel Road for adjacent residential neighborhoods. Ridge Road was required and planned to provide local connectivity to NW McDaniel Road for the adjacent residential neighborhoods. Given traffic and the number of homes near the intersection of Ridge and McDaniel roads, drivers from about 60 homes could use NW Ridge Road to access NW McDaniel Road.

With the gate in place, some travelers must drive up to three-fourths of a mile out of direction to use NW Blackhawk Drive. The lack of connectivity caused by the fire gate leads to additional traffic through neighborhoods along NW 112th Place and NW Blackhawk Drive.

Q3. Will removing the gate increase traffic on my street?

Ridge Road was designed to include full access at McDaniel Road. The temporary fire gate created artificial traffic patterns by forcing out-of-direction travel, increasing travel times, and increasing traffic on other roads.

Removal of the gate will more evenly distribute traffic flows, creating more equitable access to this neighborhood, in conformance with the county, state and Metro's transportation system plans requiring street connectivity. This means some streets may see more traffic while others may see less.

Q4. Will the bus stop at Ridge and McDaniel roads be removed once the gate is gone?

No. Removal of the gate will not impact bus access. On two-lane roads, transit and school busses often stop in travel lanes pick up and drop off passengers. The impact on traffic is expected to be minor.

Q5. What resources are available to help curb potential speeding on Ridge Road?

Residential streets, such as Ridge Road, serve all travelers: bicyclists, pedestrians and drivers. They are designed for, and intended to, accommodate traffic speeds of 25 mph and provide connectivity.

The Washington County [Neighborhood Streets Program](#) assists residential neighborhoods with speeding and other livability concerns related to traffic. The program begins with lawn signs and radar equipment which provide driver feedback on speed. In areas where appropriate, the program can include other tools such as speed cushions or post-mounted speed feedback signs.

In support of this program, Washington County will conduct a speed and traffic volume study within six months of the gate removal. This study will establish a baseline to help us determine if participation in the Neighborhood Streets Program is warranted.

Q6. How did the County determine that sight distance is sufficient?

On Ridge Road looking onto McDaniel Road	Community Development Code Section 501-8.5 F (4)		AASHTO (Per CDC 501-8.1 B (2) (d) and 8.2 B (3))	
	Required	Actual	Required	Actual
Looking north at southbound traffic	350 ft	385 ft		
Looking south at northbound traffic	380 ft	320 ft	263 ft	320-334 ft

Sight distance looking south at northbound traffic does not meet the criteria in [Community Development Code Section 501-8.5 F \(4\)](#). However, stopping sight distance is met using the American Association of State Highway and Transportation Officials (AASHTO) 2018 “A Policy on Geometric Design of Highways and Streets” formula, which includes the distance for an approaching driver to perceive and react to a condition plus the distance for the oncoming vehicle to come to a complete stop. The AASHTO formula takes into account the site-specific conditions; the criteria in CDC 501-8.5 F (4) are more generic in its application.

The standard formula for stopping sight distance (SSD) = $1.47Vt + V^2 / \{30[(a/32.2) + /-G]\}$

- SSD = required stopping sight distance (ft)
- V = speed (mph)
- t = perception-reaction time (sec); AASHTO recommends 2.5 second
- a = deceleration rate (ft/sec²); AASHTO recommends 11.2 ft/sec²
- G = street grade as a decimal; uphill at 4.35% or (0.0435) per McDaniel Road as-built drawings

Based on the above equation, the recommended stopping sight distance for a vehicle traveling northbound along NW McDaniel Road at 38 mph is 263 feet, based on 85th percentile speed. The visibility of 320 feet for an eye position at 15 feet back and 334 feet at an eye position at 10 feet back exceeds this required minimum stopping sight distance for the 85th percentile speed.

The actual field-measured sight distance is 30% greater than the minimum required stopping sight distance per AASHTO. As a result, CDC Sections 501-8.1 B (2) (d) and 8.2 B (3) criteria are met. Public safety is preserved at the intersection without the fire gate.