

J & J Estates

Sight Distance Analysis

June 7th, 2022

The project as proposed is for 4 lots to take access to Mildred Lane, west of Woodside Drive.

Mildred Lane is an Arterial Roadway that curves to the left while traveling west.

The proposed access way will take its access on the inside of the curve

The City of Salem Design Standards set the minimum design speed for an Arterial Roadway at 45 MPH.

A roadway with a standard crown as Mildred requires a minimum centerline radius of 1,125 feet with a 45 MPH design speed.

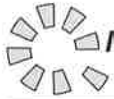
Mildred Lane along the frontage of this project has an existing centerline radius of 280 feet. For a standard crown with a 3% slope the true design speed is just over 25 MPH.

Using standard design analysis, the intersection sight distance for a 25 MPH roadway is 280 feet for a left turn, looking east from the access way and is 240 feet for a right turn, looking west from the access way.

We have shown on the attached drawing, the sight distance alignment shows the location of 280 feet looking to the east and 240 feet looking to the west. As such it is our interpretation of the information that a vehicle traveling east on Mildred will see a car exiting the access way while traveling a speed consistent with the existing street alignment, sufficient time to stop and avoid a collision.

We viewed alternate locations for the access way and could not find a situation where the east bound traveling sight distance is significantly better.



Project: J & J ESTATESJob No: 7025Subject: INTERSECTION SIGHT ANALYSISDate: 6-8-2022By: HASELTON, RYAN PSht. 1 of 1

$$ISD = 1.47 V_{maj} t_g \quad (\text{AASHTO Green book, Table 9-7 and 9-9})$$

• For $V_{maj} = 25$ mph, Passenger Car, Left Turn

$$1.47(25)(7.5) = 275.63 \text{ ft} \quad \text{From Table: } \boxed{280 \text{ ft}}$$

• For $V_{maj} = 35$ mph, Passenger Car, Left Turn

$$1.47(35)(7.5) = 385.88 \text{ ft} \quad \text{From Table: } \boxed{390 \text{ ft}}$$

• For $V_{maj} = 45$ mph, Passenger Car, Left Turn

$$1.47(45)(7.5) = 496.13 \text{ ft} \quad \text{From Table: } \boxed{500 \text{ ft}}$$

• For $V_{maj} = 25$ mph, Passenger Car, Right Turn

$$1.47(25)(6.5) = 238.88 \text{ ft} \quad \text{From Table: } \boxed{240 \text{ ft}}$$

• For $V_{maj} = 35$ mph, Passenger Car, Right Turn

$$1.47(35)(6.5) = 334.43 \text{ ft} \quad \text{From Table: } \boxed{335 \text{ ft}}$$

• For $V_{maj} = 45$ mph, Passenger Car, Right Turn

$$1.47(45)(6.5) = 429.98 \text{ ft} \quad \text{From Table: } \boxed{430 \text{ ft}}$$

