



Design Modification Request

File: LU2022-019 – Chinn Partition
2S133BC0; Tax Lot 600

To: Bob Galati, P.E. – City Engineer
Through: Craig Christensen, P.E. – City Project Manager
From: Pat Tortora, P.E.- Project Engineer

Driveway Spacing Along SW Murdock Rd.

Location of Requested Design Modification

The subject property has frontage along SW Murdock Rd. north of McKinley Dr. The proposed development will obtain public street access via an existing shared access easement within the property to the north of the subject property to SW Murdock Road for Lot 3, while Lots 1 and 2 will obtain public street access to SW Murdock Rd. via a proposed new shared driveway. SW Murdock Road is an Arterial Street posted for 35MPH. This requires that the new driveway be at least 180 feet from the SW McKinley Drive intersection and 300 feet away from the existing driveway to the north. The new proposed driveway satisfies the 180-foot spacing from SW McKinley Dr. However, the proposed driveway is approximately 260-feet away from the existing driveway to the north, which is less than the 300 feet as required by city design standards. Thus, a design modification request is being submitted for approval by the City Engineer prior to land use completeness. The aerial photo below shows the location of the subject property, as well as the location of the existing and proposed driveways.

Current Standard

Section 210.6.E of the City of Sherwood Engineering Design and Standard Details Manual states the following in table form:

Driveway Spacing (min) for a Minor Arterial Street is 300 feet.

Design Modification Being Requested

We request the driveway spacing be allowed to be ~260+/- feet.

Existing Conditions

Existing conditions – The subject property is currently vacant of any development. The property slopes roughly 70-feet from the southeast corner to the northwest corner.

Layout of this partition is constrained by several factors listed below:

- Significant topography challenges
- Solid Rock at the ground surface
- Steep drop off along the site's SW Murdock Rd. frontage, particularly from the middle of the property to the southwest corner of the property.



Result of Meeting Standards

If the standard of 300' is required there are limited options to satisfy this code section.

The main factor leading to the location of the proposed driveway is the significant grade difference along the site's SW Murdock Rd. frontage. Additionally, access to Lots 1 and 2 would be nearly impossible from the existing shared driveway to the north due to the extreme grade differences on the site.

The proposed location for the shared driveway is really the only viable option along SW Murdock Rd. due to the steep drop off along the rest of the site's SW Murdock Rd. frontage.

A second driveway along the existing shared driveway to the north for Lots 1 and 2 could possibly be located at the east end of Lot 2, but it would not be conducive for fire access to Lot



1 due to the steepness of the driveway. However, a significant wall would be necessary to support the driveway to Lot 1. It would likely not be physically feasible to construct, and it would likely have significant construction cost and adversely impact the existing easement and homes.

Proposed Design Modification

We propose allowing the new shared driveway for Lots 1 and 2 to be placed at ~260+/- feet away from the existing shared access easement within the property to the north of the subject property.

Reason Why Design Request Should be Approved

The site is constrained by its difficult topography and challenging frontage along SW Murdock Rd. Being a Minor Arterial street, the traffic volumes are fairly high along SW Murdock Rd., so limiting the driveways along SW Murdock Rd. is important, which is why a shared driveway is being proposed for Lots 1 and 2. Even though the subject property has access via the existing shared driveway to the north, adding three (3) new driveways would negatively impact the existing homes using the driveway. Allowing this design exception will offer a better use of the land for residential lots.

Pat Tortora - Design Engineer

Date

Craig Christensen, P.E. - City Project Manager

Date

- Approved
- Approved with Conditions (conditions below or on attached sheet)
- Denied

Bob Galati, P.E. - City Engineer

Date