



Advanced Engineering & Surveying, Inc.

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December 3, 2009

City of Rapid City – Growth Management
300 6th Street
Rapid City, SD 57701

Attn: Vicki Fisher

Re: Partial Easement Vacation – 6515 Seminole Lane, Rapid City, SD

Vicki,

On November 20, 2009, I conducted a site visit and completed a topographic survey of the easement for which a partial vacation is being requested. A site plan is included.

The yard is currently rough graded to within three (3) inches - six (6) inches of finished grade to allow the homeowner to complete desired landscaping. The finished landscaping will maintain the same contours and flow directions.

There are two (2) downspouts on the west end of the home. One in the northwest front garage corner which outlets toward the street. This downspout outlets just north of the proposed easement vacation, the front yard slopes are approximately 11% to the street. If the eave was to over top, flows would run to the street at the existing grades. Site elevations do not allow these flows to reach the side yard in the area of the easement reduction. This easement reduction will not be impacted by this downspout.

The second downspout is located on the southwest rear corner of the garage. This downspout outlets towards the rear yard. The slope away from the downspout is approximately 1.1% toward the rear yard. 100 year calculations are provided showing flows to be 0.09 cfs which is easily handled by the existing grading. Section B shows the elevations through this area and provide channel depth of 0.25 which is required for 1.07 cfs.

No other downspouts are located on the west end of the home.

The adjacent home (6509) has two (2) downspouts exiting to the east side yard. The site plan indicates that the front downspout of 6509 clearly flows to the street. The 100 year calculation indicate flows of 0.04 cfs from the contributing roof area which is shown in attached roof plans. Section A provides elevations through this area and indicates a depth

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of 0.25' which handles 1.07 cfs at 1% slope. Existing slope in this area is 11%. With existing slopes, this downspout will not have any impacts due to reduced easement.

The rear downspout of 6509 flows towards the retaining wall, then to the rear yard. This downspout is located south of the purposed easement reduction and should not have any impact due to reduced easement. The 100 year calculations indicate flows of 0.08 cfs from the contributing roof area which is shown on the attached roof plans. Section C provides elevations through the flow line on the rear of the lot. A depth of 0.25' is achieved through this area which will handle 1.07 cfs at 1% slope.

Slopes are much steeper than this from the corner of 6509 and off the end of the retaining wall.

K-1 Construction has schedule to relocate the retaining wall on 6509 to the property line. This will benefit runoff from 6509 as it creates more distance from the downspout to the property line. At the time of relocation of retaining wall a drain tile will be located behind the wall and will day light to the front and rear.

Photos of these conditions have been included to help clarify existing conditions.

The partial easement vacation per Exhibit A is not expected to have any impact to either property.

Please contact me if you require any additional information.

Thank you for your assistance.

Sincerely,

Advanced Engineering & Surveying, Inc.


Ronald A. Bengs, P.E.
President

CC: K-1 Construction

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