Abridged Drainage Report

Sent Via Hand Delivery
Date: 8-8-13

To:

Mr. Sean Madden
Review Engineer
Jefferson County
Planning & Zoning Division
100 Jefferson County Parkway Suite 3550
Golden, Colorado 80419

Re: 27618 - 27620 Fireweed Dr. Existing Drainage Letter

Mr. Madden –

EVstudio Civil Engineering has recently completed existing drainage calculations for 27618 - 27620 Fireweed Dr. preliminary and final platting. EVCE is proposing no grading or new construction along with this platting process. For this reason, this letter will only focus on analysis of existing conditions.

The site currently exists at roughly 10% and slopes to the southeast. All historic flows are conveyed to Bear Creek and ultimately Evergreen Lake. There is a large rocky cliff located along the south property line creating roughly 150 feet of fall over 120 horizontal feet. Within the areas sloping towards the existing cliff, existing slopes are as steep as 2 to 1. There is an existing FEMA 100-year floodplain which clips the southwest corner of the site. This is, however, located roughly 145 feet below the buildable area located on site. For this reason, EVCE does not view the floodplain as a serious concern on this property during development.

All flows on-site are within one drainage basin. This drainage basin shall be known as "Existing Basin 1" throughout the rest of this drainage analysis. The existing impervious coverage per on-site is 42%. Based off the attached "Composite C-factors", the existing C5 and C100 are 0.45 and 0.62, respectively. As mentioned above, there will be no changes to impervious or the existing C-factors associated with this platting process. The goal of platting 27620 Fireweed Dr, is merely to create new property boundaries and dedicate right of way to Jefferson County. No developed drainage calculations have been provided for this reason. At the time of development, developed drainage calculations and a Phase III Drainage Report must be prepared.

Supporting calculations are attached to this letter.

Please contact us with any questions, comments or concerns.

Best Regards,

Eric Burtzlaff, EI
Project Engineer
EVstudio Civil Engineering
703-973-8792

COMPOSITE RUNOFF COEFFICIENTS

27620 Fireweed Drive

CALCULATED BY: *ETB* DATE: 6/19/2013

"C" Factors for Composite Aanalysis

	Roof	Walk	Drive	Landscape	Gravel Drive
C5	0.85	0.87	0.88	0.20	0.30
C100	0.90	0.92	0.93	0.44	0.50
I (%)	90	96	100	10	40

Basin Desig.	Basin Area (sf)	Roof Area (sf)	Walk Area (sf)	Drive Area (sf)	Landscape Area (sf)	Gravel Drive Area (sf)	C5	C100	I (%)
Existing Basin 1	158558	13051	4215	40668	100624	0	0.446	0.616	41.955