



May 6, 2021

PCD File No. COM2116

El Paso County
Planning and Community Development Department
2880 International Circle, Suite 110
Colorado Springs, CO 80910

Re: Drainage Memo – Bunting Multi-Family, 1724-1728 Hampton South
Site Development Plan Amendment
MVE Project No. 61072

The owner of Lot 1 and Lot 2, Bunting Multifamily Filing No. 1 are proposing an amendment to the approved Site Development Plan for the property. The site is located within the Southeast Quarter of Section 5, Township 15 South, Range 66 West of the 6th P.M. The site is located west of Interstate 25, approximately one-half mile north of South Academy Boulevard and includes the existing street addresses of 1724 and 1728 Hampton South. The subject parcels have El Paso County Assessor Parcel Numbers 65054-08-036 and 65054-08-037. The property was replatted in 2018 to adjust the lot lines of the previously existing parcels.

The proposed amendment is to allow a change to the approved trash enclosure construction materials. The trash enclosures on the site are to remain the same size and in the same locations as previously shown on the Site Development Plan approved on September 26, 2018. The amendment is also to allow a 6' high non-opaque chain link fence around the perimeter of the subdivision for security and protection purposes. This Drainage Memo is provided to confirm that the proposed fence will not pose a storm drainage hazard to this property, the surrounding properties or downstream properties.

The only significant flows associated with the site is the contributing offsite basin to the south that produces peak discharges of $Q_5 = 39$ cf and $Q_{100} = 88$ cfs. These flows travel northward toward the site in the connecting roadways and are gathered and ponded at the low point in Hampton South adjacent to the site. A portion of these storm flows are collected in the 15 ft long grated inlet on the north side of the road, a 7' grated inlet and 3' grated inlet on the south side of the road. The inlets are in sump condition at the low point and collect a total of 7.8 cfs in the 5-year rainfall event and a total of 16.8 cfs in the 100-year event. The collected flows are conveyed in the existing 30" CMP pipeline along the west side of the site and are discharged into Fishers Canyon Drainageway. Any overflows drain through to the north in the grassed swale in a 25 ft wide Public Drainage Easement located along the west edge of Lot 1. The 30" CMP is also located within the easement. The swale is sized to convey the entire 100-year discharges from off-site basin to allow for the case in which the inlets are clogged and the entire storm must travel overland to the drainageway. The northwestern edge of the site, adjacent to the Fishers Canyon Drainageway has rip-rap bank protection.

The proposed chain link fence will cross the drainage easement and grassed drainage swale approximately 25 ft south of the site's northerly property line. The normal chain link fence will extend to within two (2) inches of the ground. However, at the swale crossing, the bottom of the chain link fence

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will be elevated eight (8) inches above the swale bottom s indicated on the amended Site Development Plan. The potential 100-year flow depth in swale, assuming upstream inlet and pipe clogging, is ten (10) inches. The elevated bottom of the fence, coupled with the porous nature of the chain link fence, will allow the flows to continue north in the swale without impedance.

M.V.E., Inc. examined the swale design, anticipated flow rates in the swale and proposed chain link fencing. The installation of the fence as described will not present a storm drainage hazard to this property, the surrounding properties or downstream properties.

M.V.E., Inc.

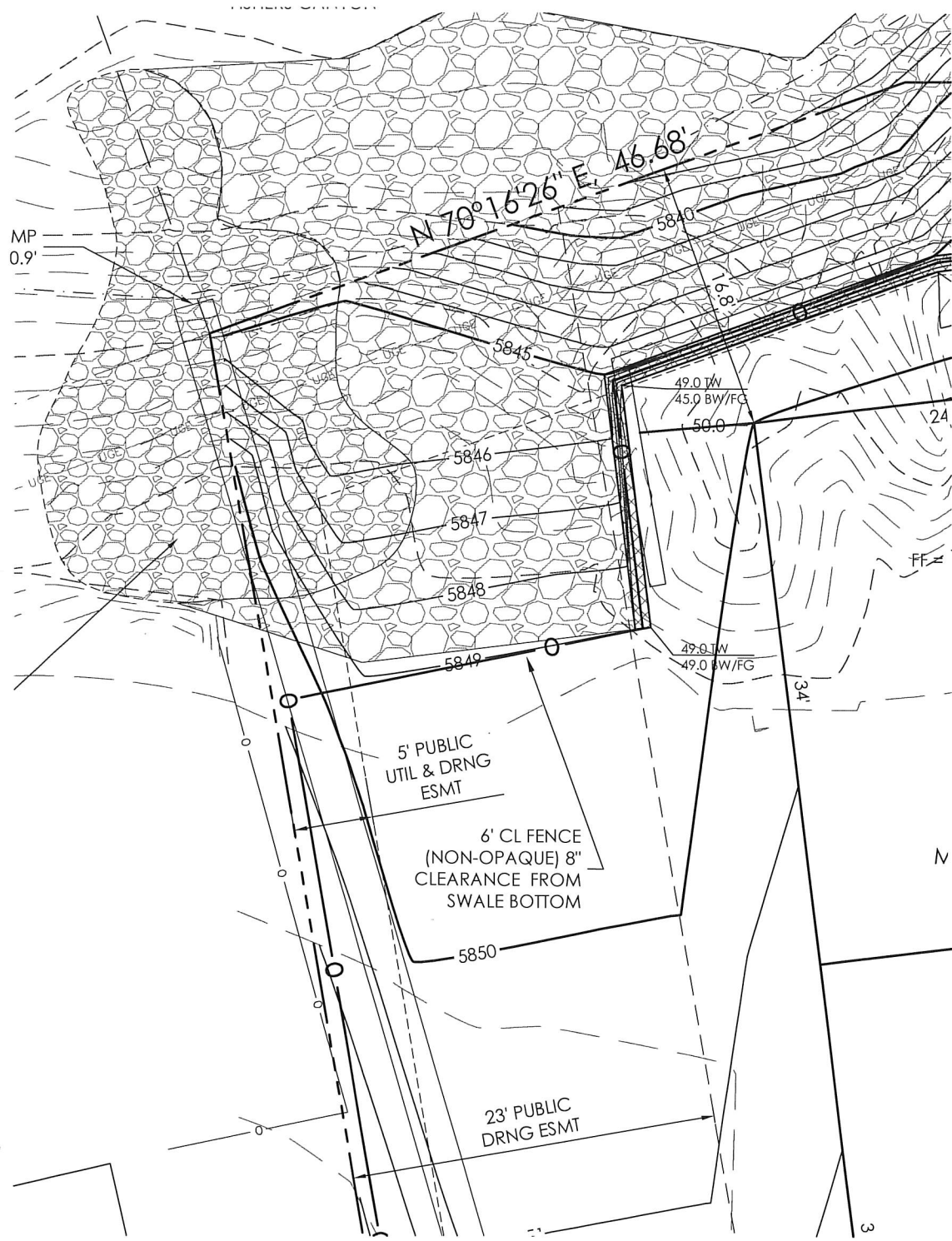


David R. Gorman, P.E.

DRG:cwg

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Enc.



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

Friday, May 7 2021

Hampton South Swale at Fence Crossing - 100-yr

Trapezoidal

Bottom Width (ft) = 17.00
Side Slopes (z:1) = 3.00, 5.00
Total Depth (ft) = 1.10
Invert Elev (ft) = 100.00
Slope (%) = 5.50
N-Value = 0.035

Calculations

Compute by: Known Q
Known Q (cfs) = 89.00

Highlighted

Depth (ft) = 0.66
Q (cfs) = 89.00
Area (sqft) = 12.96
Velocity (ft/s) = 6.87
Wetted Perim (ft) = 22.45
Crit Depth, Yc (ft) = 0.89
Top Width (ft) = 22.28
EGL (ft) = 1.39

