

<b>CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM</b>		<b>DATE:</b> January 25, 2022
<b>TO:</b> Land Development Services Department of Building & Safety		<b>FROM:</b> Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
<b>SUBJECT:</b>	Drainage Study for:	<b>COPIES TO:</b>
<b>Morningstar Las Vegas</b>		DRC Surveying Nevada, Inc
<b>Cross Streets:</b>	SEQ of Hualapai Way and Alta Drive	Confluent Development
<b>File Number:</b>	F:\Depot\DSMemos\DS5536A.doc	Bart Anderson, P.E., DevCo
<b>Parcel Number:</b>	138-31-210-008	
<b>Zoning Action:</b>	21-0511-GPA1 & 21-0511-SDR1	
<b>FEMA Flood Zone</b>	YES NO <b>X</b>	
<b>Proposed Storm Drain</b>	YES <b>X</b> NO	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 <sup>st</sup> Submittal	12/23/2021	1/25/2022	See Comments Below	\$400.00	4583806: \$400
<b>TOTAL FEES (LDDRS):</b>				<b>\$400.00</b>	----

**REMARKS:**

The Drainage Study for the subject project has been reviewed and:

	is approved subject to conformance to all City standards and the following conditions:
<b>X</b>	must be resubmitted or supplemented including the following:
	is conditionally approved subject to Clark County Regional Flood Control District concurrence.
	is conditionally approved subject to Clark County Public Works Department concurrence.

1. Provide documentation that shows the right to discharge flow at the northeast corner of the site. If there is existing public drainage easement downstream of the subject site, label with recorded plat and page number or document number on the grading plan in the next submittal.
2. **Figure 6: Developed Basin Map** cross section summary table for *Hydraulic Sections 1 Hualapai Way* (10-YR & 100-YR) do not match the provided *Flowmaster* section calculations. For example, 10 year shows 0.25' flow depth and velocity of 1.94 ft/s however the *Flowmaster* worksheet shows 0.35' flow depth and 2.01 ft/s velocity. Clarify discrepancies.
3. The southern driveway in *Hualapai Way* does not meet the criteria. Note that the hump in a driveway must provide a minimum of 6" freeboard against the 100-year water depth. Review and revise accordingly.
4. It appears that the southern half of the proposed building finished floor elevation is lower than the corresponding street elevation in *Hualapai Way*. Either raise the building elevation to meet criteria or provide a flood stem wall at the back of sidewalk solid grouted to 3-course to provide in-lieu flood protection for the onsite.
5. The BMP at the northeast corner of the site should not also be a 100 year flood conveyance channel. Separate these functions. It'll be a dilemma because we'll allow riprap if it is a BMP but we'll require concrete lined if it is a 100-year channel. Review and revise to separate the two functions in the next submittal.

6. Per *Detail HH/DT2* the 5' wide channel is not the interior flow width as the flowmaster hydraulic section indicates. Clarify the flow width of this channel.
7. There are two *HH/DT2* on *Sheet DT2*. Differentiate with two nomenclature in the next submittal.
8. Label an existing storm drain system in *Hualapai Way* with City of Las Vegas recorded drawing number on the grading plan.
9. Provide a note on the grading plan: All onsite storm drains are privately owned and to be privately maintained by the property owner.
10. Provide a note on the grading plan: Post-Construction BMPs (PCBMPs) / Control Measures noted on the Grading Plans are mandatory permanent regulatory stormwater pollution controls. These PCBMPs must be installed per the approved plans and must be permanently maintained.

**NOTE:** Please be advised that all land surface area disturbances over 1 acre or any area adjacent to a water way must submit to the Nevada Division of Environmental Protection a "Notice of Intent" to discharge that certifies a stormwater pollution prevention plan has been developed and is maintained on site; for inclusion in the Stormwater General Permit No. NVR100000. A phased construction unit in a contiguous subdivision is considered under construction until all stripped or disturbed surface areas have been covered by paving, building construction or planting. For more information, including forms and applications see <http://ndep.nv.gov/bwpc/storm01.htm> or call (775) 687-9429.

**END OF REMARKS**  
HDR/AYS

T/R/S: T20S/R60E/31  
AREA L-31