

<b>CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM</b>			<b>DATE:</b> January 6, 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>Summerlin Village 26 - Parcel L</b>		GCW
<b>Cross Streets:</b>	Reverence Pkwy and Lake Mead Blvd.		PN II INC and Pulte Homes
<b>File Number:</b>	F:\Depot\DSMemos\DS5533A.doc		Bart Anderson, P.E., DevCo
<b>Parcel Number:</b>	137-14-715-038		CCRFCD
<b>Zoning Action:</b>	21-0615-TMP1; 21-0615-MOD1 & 21-0615-SCD1 to 21-0615-SCD3		
<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	12/16/2021	1/5/2022	See Comments Below	\$400.00	4575513: \$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 a copy of the zoning/planning conditions associated with this site (**21-0615-TMP1; 21-0615-MOD1 & 21-0615-SCD1 to 21-0615-SCD3**) with the next submittal to verify compliance with conditions. *Flood Control* will not issue conditional approval of the drainage study without the associated zoning/planning conditions (issued by the *City Council*). Any associated conditions of approval that revise the site drainage parameters will require that the drainage study be revised and resubmitted.
2. The site is adjacent to or crosses an existing or proposed *Clark County Regional Flood Control District* (CCRFCD) master planned facility. Therefore, CCRFCD concurrence is required prior to final approval of the drainage study.

Please note that effective March 15, 2019, the CCRFCD adopted new requirements for drainage study concurrence submittal. Follow the link below for specific guidance.

<http://gustfront.ccrfcd.org/LandDev/LandDev.aspx>

3. **Figure 5:** The calculations for *Section F1* are 3.66 fps but is shown as 2.23 in the 100-Year Street Flow Table.

4. Discuss the flow shown to be collected at the south east corner of the site through the lateral structure shown. Address the grading shown to collect flow at this location.
5. **Sheet GD2** and **Sheet GD4**: An AC pavement access road adjacent to the Regional flood channel currently ends at the northeast corner of the subject site. Identify the existing access road limit in the next submittal. Extend the pavement access south to *Lake Mead Boulevard*.
6. In an overall view of the grading plans, it left an impression to the reviewer that the engineer/developer rushed out the plans without finishing a lot of detail grading designs:
  - Common areas between buildings have no grading at all, ie, how the common areas drain without impacting the buildings?
  - Along the eastern and northern side of the site, provide grading to show how the areas between the buildings and the rockery wall drains. Sheet flow through the proposed fence over the rockery wall and into the existing channel is not allowed. Provide swale in the common areas and drain into the onsite roadways.
  - Show the common areas/parks features and grading design.
  - It is not clear whether the products are individual lot with typical Type A drainage or it is a block building with four to six residences grouped into one?
  - Provide typical lot drainage in the next submittal.
  - Show driveways and the building layouts of each lot.
7. Label roadway names on the grading plans.
8. Label "Public" or "Private" street on the grading plans.
9. Identify all *Clark County Regional Flood Control Facilities* on Exhibits and Grading Plans and label with *City of Las Vegas* recorded drawing numbers accordingly.
10. The grading plans call out existing RCBs along the Eastern edge of the site, but they are shown as channels in the referenced Master Drainage Study for Summerlin Village 26 - Reverence.
11. Section C/DT2 shows an existing 14' x 14' culvert, but the plans show a 10' x 14' RCB. Address and resolve in the next submittal.
12. Section E/DT1 cannot be found on the grading plans. Do a QA/QC of the plans in the future submittals.
13. Provide cross sections and street flow depth for adjacent major roadways.
14. The entrance driveway at the west entrance along *Reverence Parkway* does not appear to have a hump for onsite flood protection and label high points on grading plans. Provide a hump of 6"-minimum freeboard in the next submittal.
15. Describe the difference between the circled lot numbers and those that are not.
16. Grading plans need to show the existing development on the North side of the property and their finished floors. Identify an existing trail in the pertinent grading plans.
17. **Sheet GD1**: Near Lot 165, cross section is labeled XX/XX. Show correct numbering and grading detail.
18. **Sheet GD2**: Label the drainage easement shown in Section M/DT1 as a Public Drainage Easement to be Privately Maintained by the HOA.
19. **Sheet GD2**: Provide connection detail or manhole where the 48" SD is connecting to the existing SD.

20. **Sheet GD4:** Identify a future pedestrian bridge at the southeast corner of the site. Provide grading design in the vicinity of that corner.
21. In all plan & profile sheets, revise the call out of "Public" storm drains to "PRIVATE".
22. **Sheet DT2:** The proposed wall adjacent to the swale shown in Section B should be 3 course solid grouted.
23. Private streets must be public drainage easements. Provide a note on the grading plans: Note: All private streets are P.U.E., Public Sewer Easements and Public Drainage Easements to be privately maintained by HOA.
24. The engineer must provide a table on the grading plans that shows a quantity estimate of all drainage improvements within Public Drainage Easements. All drainage improvements within Public Drainage Easements must be bonded and inspected.
25. All drainage easements must be public drainage easements to be privately maintained and common lots to be labeled on the grading plans and to be dedicated as such in the final map.

**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/R59E/14  
AREA K-14