

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: April 9, 2024
TO: Land Development Services Department of Building & Safety		FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for:	COPIES TO:
Summerlin Village 29 Parcel GH		Westwood Professional Services
Cross Streets:	SEC of Grand Park Boulevard & Far Hills Drive	Tri Pointe Homes Nevada, Inc.
File Number:	F:\Depot\DSMemos\DS5756A.doc	Bart Anderson, P.E., DevCo
Parcel Number:	137-27-221-001, -002; 137-28-611-002, -003	CCRFCD
Zoning Action:	23-0665-TMP1	
FEMA Flood Zone	YES NO X	
Proposed Storm Drain	YES X NO	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	3/19/2024	4/9/2024	See Comments Below	\$400.00	5672069: \$400
TOTAL FEES (LDDRS):				\$400.00	----

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:
X	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 (**23-0665-TMP1**) 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. The proposed project is premised on the flood protection provided by the perimeter streets and the associated storm facilities (*Far Hills Avenue, Grand Park Boulevard, Spring Run Drive and Sky Vista Drive*). The subject drainage study will not be approved prior to the posting of construction bonds of the stated perimeter street improvements and the storm facilities.

4. Sites with a grade difference of 2 feet above or below existing grades are required to have approval from the City of Las Vegas Planning and Development Department. The engineer must submit copies of the grading plans and detail sheet with a letter justifying the grade difference to the City Planning Department (229-6301). The engineer must provide City Planning approval with the next submittal.
5. In all grading sheets, replace the “*Las Vegas Valley Construction Site BMP Guidelines*” notes with the current version.
6. **Exhibit D:** The flow at *Hydraulic Section 2-1* in the *Flowmaster* calculation does not reflect the true flow distribution on each side of the street (*Priscilla Pine Avenue*). The north half of the street and DI #1 has flow from Basin G5 ($Q_{100}=3\text{cfs}$) only while the south half has combined flows from Basins G2 and G3 ($Q_{100}=8\text{cfs}+18\text{cfs} = 26\text{cfs}$). Review and revise all other streets and DIs hydraulic calculations in the next submittal. Revise all the pertinent summary tables on the *Exhibit* accordingly.
7. **Exhibit D:** *Hydraulic Sections 2-1, 2-2, 3 and 4* callout L curb in the *Flow Summary Table* on the exhibit but show roll curb in the detail cross section (B/D-1). Provide better quality controlled plans for consistent features and matching callouts in the next submittal.
8. **Exhibit D:** The flows in *Hydraulic Sections 2-1, 2-2, 3, and 4* are above the back of sidewalk and is erosive (assuming they are roll-curb as indicated in *Detail Section B/D-1*). Provide erosion protection for the landscape area in the form of a stem wall, riprap, or approved alternate as required in the *Regional Flood Control District Manual* in Section 904.3. Revise the grading plan and sections accordingly.
9. The *Master Drainage Study* referenced considers that 50cfs will be collected by the lateral connected to *Far Hills Drive*, and 61cfs will be collected by the lateral connected in *Sky Vista Drive*. The proposed condition collects 88.5cfs within the *Sky Vista Drive* lateral. Extend the HGL computations to confirm that the additional flow does not negatively affect the HGL within the existing SD system.
10. Provide a cross section to verify that the common element between *Far Hills Avenue* and *Priscilla Pine Avenue* is draining away from the site.
11. Storm drains must be shown as a minimum of 3' from the edge of the pipe to the lip of the curb and gutter, show dimension callouts in all pertinent sheets to confirm this requirement is met.
12. **Sheets G-1, G-2 and G-3:** The topographic relationship between *Grand Park Boulevard* and the onsite street (*Pickett Grove St.*) is represented by *Detail Section 8/D-1*.
Extend the cross section to show the curb and gutter of *Grand Park Boulevard*.
The section shows that the drainage of the common element within the *Master HOA* is sloping towards the wall which is doubtful. Under normal circumstances, the drainage should be away and towards the public street. Address and clarify in the next submittal.
13. **Sheets G-1, G-4 and G-7:** Provide a cross section spanning from the curb and gutter of *Far Hills Avenue* through the onsite street (*Priscilla Pine Avenue*) to the onsite lot. This is to depict the vertical relationship between the offsite and onsite conditions.
Clearly show how the common element within the *Master HOA* drains.
14. Apply same comment to the other two perimeter streets: *Sky Vista Drive* and *Spring Run Drive*.
15. **Sheet G-7 and Sheet G-10:** Label the proposed drainage easement as “Public Drainage Easement to be Privately Maintained by the HOA”.
16. **Sheet G-7 and Sheet G-10:** In CE “L”, there is an elevation tag of “3434.83 FG/HP” which is seemingly a typo error when comparing to the adjacent grades.

Also explain whether a high point (ie, a hump) is to be proposed within the CE in the next submittal?

17. **Sheet G-11:** SDDI #10 is shown as a 10' inlet on plans and on Exhibit D, but the calculations provided for the inlet are for 7.5', revise to address the discrepancy.
18. **Sheet SD1:** Storm drain inlets that are more than 10'-deep require a special structural detail and calculations. Submit structural design and calculations to *City Building & Safety Department* for review and approval prior to the final approval of the drainage study.
19. 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.
20. 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".
21. 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.
22. Clearly specify all proposed wrought iron fence/gate to be constructed per Uniform Standard Drawing 425.S1.

***** The City of Las Vegas Flood Control is standardizing the file naming of drainage studies and plans during the digitizing process. When saving the project files in the CD or thumb drive, please follow the system below:**

If drainage study only contains one combined file, use the following naming convention in Document Title:

1st Submittal DS and Plans (for first and original submittal);

2nd Submittal DS and Plans (for second submittal (addendum #1)) etc.

If drainage study contains multiple files, use the following naming convention in Document Title:

1st Submittal DS (for the report of the drainage study)

1st Submittal Plan 1 (could be the drainage condition maps)

1st Submittal Plan 2 (could be the improvement plans) etc.

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.

NOTE: Any future changes to the proposed design (or design assumptions) as outlined in the approved drainage study and attached preliminary grading plan which affect drainage must be addressed in a Drainage Study Update and accepted by the *City of Las Vegas Flood Control Section*. Additionally, final approval of a drainage study is valid for a period of one (1) year. If the proposed construction has not been completed in that time period, the *City of Las Vegas* reserves the right to require additional conditions and/or submission and acceptance of a complete drainage study update prior to further construction of a project.

**END OF REMARKS
HDR/AYS**

**T/R/S: T20S/R59E/27
AREA K-27**