

<b>CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM</b>		<b>DATE:</b> December 19, 2024
<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 25 Parcel O – Aberdeen</b>		Westwood Professional Services
<b>Cross Streets:</b>	Sunset Run Drive & Lake Mead Blvd	Tri-Pointe Homes Nevada, Inc.
<b>File Number:</b>	F:\Depot\DSMemos\DS05824A.doc	CCRFCD
<b>Parcel Number:</b>	137-22-210-001	
<b>Zoning Action:</b>	24-0466-TMP1	
<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	11/27/2024	12/19/2024	See Comments Below	\$400	6026387: \$400
<b>TOTAL FEES (LDDRS):</b>				<b>\$400</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.

- The proposed project is premised on the flood protection of the perimeter streets and the associated storm facilities (Highland Pride Lane & *Sunset Run 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.
- Per Conditions of Approval 24-0466-TMP1 Item #6: Grant a minimum 30-ft wide Public Sewer and Drainage Easement to be privately maintained for public sewer and drainage facilities within Comment Element “A”. Additionally. Grant a matching Public Sewer and Drainage Easement by separate document to be privately maintained for public sewer and drainage facilities adjacent to Comment Element “A” at the point of connection. The width of these easements may be modified based on the review of construction drawings.

Show these Public Drainage Easements on the grading plans.

- 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>

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. Verify the curve number 81.3 for basin O referenced from drainage study DS5104. It seem low for a developed condition.
6. The paper copy of Exhibit D is missing. Provide on the next submittal.
7. Exhibit D – Developed Conditions: Hydraulic cross section V2 is on the exhibit but there is no provided section computation nor a summary in the exhibit.
8. Exhibit D - Recommended Flood Control Facility Summary Table, the source flow for DI#06 and DI#08 is swapped.
9. Exhibit D - Recommended Flood Control Facility Summary Table, the source flow for DI#19 should be Section F109. Not (1/2 Section F109). Verify and revise flows to match Curb Inlet Sizing Computation Sheet.
10. Exhibit D – Drainage Easement Hydraulic Summary, the SDDI# on the Section ID and Description is wrong. It should be SDDI#10.
11. Exhibit D – 100-year Interior Street Flow Summary, verify the source flow for section ID G15. It should be Bypass DI#7 + (1/2)\*O(G2 + G1).
12. Exhibit D – 100-year Interior Street Flow Summary, Verify and revise the source flows for Section ID E29 and E31. Include DI number.
13. Exhibit D – 100-year Interior Street Flow Summary, Verify and revise the source flows for Section ID F84.
14. Exhibit D – 100-year Interior Street Flow Summary, Verify and revise the source flows for Section ID F109. The bypass inlet should be DI#18.
15. Exhibit D – 100-year Interior Street Flow Summary, Verify and revise the source flows for Section I18. This should also include bypass from inlets DI#11 and DI#12.
16. Exhibit D – 100-year Interior Street Flow Summary, Verify the street type for Sections E76, E79 and E83. The Flowmaster Calculations show a full street cross section.
17. Exhibit D – Revise street name Azule Stone and the entrance name to match the grading plans.
18. Flowmaster Calculations – Worksheet for C1, Verify and revise the discharge 7.0cfs. It does not match flow from Exhibit D.
19. Flowmaster Calculations – Worksheet for F111, Rename this to F110 to match Figure D.
20. Curb Inlet Sizing Computation Sheet SDDI#2, Verify and revise the inlet length. It does not match the plans.
21. Curb Inlet Sizing Computation Sheet SDDI#2, Verify the longitudinal slope. It does not match section D1.

22. Consistently name the storm drain models. According to the Exhibit D - Developed Condition Exhibit the models are named North, Middle, and South however there is no mention of the nomenclature when looking at the computations, which names them as Main, LatM, and LatS.
23. WSPG Mainline Model – MAIN.WSW, Verify the flow 12.5cfs on line 10.
24. WSPG LATS Lateral Model – LATS.WSW, Verify the flow 1.5cfs on line 20.
25. DI#GI in the plan view does not match the provided detail on Sheet D-4. According to the detail provided, circular not rectangular, yet the provided computations say there is a length and width to the inlet, suggesting that it is rectangular.
26. DI#GI has over 3-ft of ponding at its emergency overflow before it can escape to its planned escape route. The flow looks like it impacts Lot 84 before reaching its planned escape route.
27. Sheet D-1, Section 13: Label height of solid grouted wall.
28. The line type of white circles on the black line type is not the legend. If the line type is “Village Retaining Wall” make sure it is printed the right color when printing.
29. Sheet G-2: It seems unlikely that the slope in the southwestern quarter of Pineberry Place is 0.66%. Correct the slope or label all slopes that are applicable for Pineberry Place.
30. Verify the length of drop inlet SDD1#14. The grading plans shows 10’ and the study shows 7.5’.
31. Sheet G-1: Provide a section for the southern portion of the paseos.
32. Sheet G-3 and Sheet D-3 Detail 35, 6” Drain Pipe through wall: Provide hydraulic calculation to verify capacity. CLV requires 8” minimum pipe.
33. The study places an inlet at the end of Nova Sky. From site visits to the area, City of Las Vegas knows that the flow approaching the above drop inlets is prone to over-topping the curb instead of impacting the drop inlet. Place two extra inlets towards the end of the road or collect more flow before reaching the inlet at the end of the road.
34. Sheet G3: Verify TC elevation 3607.8 for drop inlet SDDI#10. It appears TC elevation 3607.57 at lot line 18 is lower than the TC for the inlet. Revise on the next submittal.
35. All storm drain manholes must have a 30” ring and cover. Revise all construction notes accordingly.
36. Grading Plan: Add to grading construction note #11 “CM2 drop inlet less than 10-ft in length, remove solid grate and replace it with regular grate”.
37. Plan & Profile Sheets: Label all onsite storm drain pipes as Private.
38. Sheet PP-10: Label SDMH #17B, provide stationing, RIM elevation and Inverts elevations. Also label the storm drain pipe.
39. Sheet SD-6, the profile views for DI#18 and DI#19 are incorrect and don’t match plan view. Revise on the next submittal.
40. Plan & Profile Sheets, Verify and label all Q100 flows for all storm drain pipes in the profile view.
41. Grading Plan and Detail Sheets: label all common elements / lots.

**\*\*\* 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:**

**1<sup>st</sup> Submittal DS and Plans (for first and original submittal);**

**2<sup>nd</sup> Submittal DS and Plans (for second submittal (addendum #1)) etc.**

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

**1<sup>st</sup> Submittal DS (for the report of the drainage study)**

**1<sup>st</sup> Submittal Plan 1 (could be the drainage condition maps)**

**1<sup>st</sup> 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/SF/JT

T/R/S: T20S/R59E/S22  
AREA K-22