

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM			DATE: October 24, 2024		
TO: Land Development Services Department of Community Development – Building & Safety Division			FROM: Tyler Key Flood Control Engineering Associate Department of Public Works		
SUBJECT:		Drainage Study for: Rosa 2.0		COPIES TO: Beazer Homes	
Cross Streets:		Rancho Dr. & Coran Ln.		Actus	
File Number:		F:\Depot\DSMemos\DS5808A.doc		Bart Anderson, P.E., DevCo	
Parcel Number:		139-19-705-003		CCPW CNLV NDOT	
Zoning Action:		24-0374-ZON1; -VAR1; -TMP1			
FEMA Flood Zone		YES	NO	X	
Proposed Storm Drain		YES	NO	X	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	10/3/2024	10/24/2024	See Comments Below	\$400	5958225: \$400
TOTAL FEES (LDDRS):				\$400	----

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. The engineer must coordinate with *Clark County Public Works Department* (CCPW) and incorporate any concerns for boundary conditions along the southern border. CCPW concurrence is required prior to final approval of the study.
2. The engineer must coordinate with *City of North Las Vegas Public Works Department* (CNLV) and incorporate any concerns for boundary conditions along the northern border. CNLV concurrence is required prior to final approval of the study.
3. The project proposes to construct facilities and/or increase flows within *Nevada Department of Transportation* (NDOT) right-of-way. The engineer must contact NDOT for encroachment permit for the proposed project.

4. A review of the grading plan shows an elevation difference of approximately 5-feet of cut/fill adjacent to (un)developed properties. 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. Contact the City Engineer's Office at 702-229-6272 to coordinate the development of this project with the Rancho Complete Street NEPA project (MWA863) project and any other public improvement projects adjacent to this site. Comply with the recommendations of the City Engineer.
6. The introduction of the report states that this project will consist of five 3-story apartment buildings, but the plans show townhomes and are more than five buildings. Provide a description of what is being proposed.
7. The introduction states that the existing onsite drainage discharges to the Northeast. Figure 7 shows that the onsite drainage discharges to the Southeast. Review and revise accordingly.
8. The flow within Holly Avenue is shown to decrease from 329 cfs to 88.7 cfs without any proposed infrastructure. If this is due to the Rancho Drive improvements, an interim condition needs to be provided and analyzed due to the uncertainty in the timeline for completion of the Rancho Drive improvements.
9. Label all drainage easements as "Public Drainage Easement to be Privately Maintained" on the grading plans.
10. Provide submerged weir computations for drainage easements.
11. Provide discussion and calculations for containing the flow discharging from the existing storm drain outlet along Rancho Drive. Provide necessary erosion protection at the culvert outlet and provide erosion protection and concrete lined low flow channel from culvert outlet to Holly Avenue.
12. Clearly show how the flow coming from Common Element "B" will be contained between the block wall opening and the sidewalk underdrain.
13. Add the garage finish floor to the Finish Floor Analysis and ensure that they meet the minimum finish floor criteria.
14. Extend the cross section used in FlowMaster to the flood walls on either side of Section 11.
15. **Figure 8:** Show the Lot numbers on the Interim/Ultimate Condition Basin Map.
16. **Figure 8:** Correct the description of the Swale Flow Analysis. Section 7 represents the flow within Rancho Drive, but the description is "Exterior Swale."
17. **Figure 7 & 8:** Provide flow calculations, with depth and velocity, for all adjacent streets.
18. **Figure 8:** Provide flow calculations using the maximum slope for Section 5, where flow is overtopping the curb.
19. **Sheet C7:** The Regional Flood Control District Manual requires 1% minimum slope around the bulb of a cul-de-sac where storm water is drained through per Section 1602. Revise grading to provide the required slope in Daisy Duke Court.
20. On the grading plans, clearly show the block wall that is shown on Detail 5/13.
21. **Sheet C7:** The call out for Section 12 shows Sheet C14. Revise to Sheet C13.

22. Provide a description for what is being constructed on Lots 103 and 104.

23. **Ultimate Condition Basin Map:** The DROSA1 through DROSA0 are shown to be referenced from the HEC-1 model, but they are not shown in the HEC-1 model provided. Revise the reference or add them to the HEC-1 model.

***** 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

TJK

T/R/S: T20S/R61E/S19

AREA M19