

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: August 5, 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: McKnight Senior Village IV	COPIES TO: Southwest Hydrology & Hydraulics, LLC
Cross Streets:	Effinger St. & Harris Ave.	McKnight Senior Village IV Limited Partnership
File Number:	F:\Depot\DSMemos\DS5789A.doc	Bart Anderson, P.E., DevCo
Parcel Number:	139-25-410-046	
Zoning Action:	24-0042-VAR1; -SDR1	
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	7/17/2024	8/5/2024	See Comments Below	\$400	5850914: \$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.

- The LID BMP's of the project site are not meeting the criteria set by Clark County Regional Flood Control District Hydrologic Criteria and Drainage Design Manual (CCRFCD HCDDM). Section 1500 of the CCRFCD HCDDM states the area that needs to be treated, the minimum length of the swale, the slope of the swale, and the dimensions of the swale.
- Provide a low point at the entrances of the BMP swale to ensure the discharging water is being treated through the BMP swale.
- Figure 6:** Basin XN3 is not shown in the plan view of the exhibit. Show all basins analyzed in the plan view.
- Figure 6:** Subbasins C1 & C2 do not match the Q100 shown in the HEC-1 model. Review and revise accordingly.
- Figure 7:** The flow and discharge points of the onsite basins do not match the existing contours shown. Review and revise accordingly.

6. **Figure 6, 7, and 8:** Correct the nomenclature of each basin in plan view to match what is shown on the summary charts.
7. **Figure 8:** The basin lines should match the high points shown on the plans.
8. **Figure 8:** Show the proposed drainage facilities as a bold, red line as the legend calls for.
9. The section provided for Harris Ave, Section DH2, does not seem to match the section provided in the FlowMaster section. The slope of the FlowMaster section is 1.00% while the slope of the plan shows 0.7%, as well as a cross slope of the plan section. Review and revise accordingly.
10. Several FlowMaster sections show 0.0500 ft/ft when the plans show 0.5%, or 0.005 ft/ft. Review and revise accordingly.
11. **Sheet C2.01:** Provide a cross section for Effinger Street.
12. Provide a roof drain plan for the proposed building so that we may assess if the drainage basin lines are correct.
13. Show the proposed 2' valley gutter on the FlowMaster calculations.
14. The City recommends at least a 12" PVC pipe used for onsite drainage as we have seen issues with pipes of a smaller diameter.
15. The following finish floors do not meet the Regional Flood Control District minimum criteria of twice the Q_{100} depth of flow up to 18-inches above the water surface (CCRFCD Manual Section 304.4.E.1) or 6-inch minimum above the highest adjacent top of curb (CCRFCD Manual Section 1602 304.4.E.1). The following finish floors should be revised or alternate flood protection provided.

LOT	FF shown	Min FF
Proposed Building	1835.36	1835.86

As an alternate each lot must be discussed in the drainage study, shown to be flood protected, and any necessary flood improvements shown on the grading plan.

***** 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/TJK

T/R/S: T20S/R61E/S25
AREA M25