

<b>CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM</b>		<b>DATE:</b> May 19, 2025	
<b>TO:</b> Land Development Services Department of Community Development – Building & Safety Division		<b>FROM:</b> Tyler Key Flood Control Engr. Associate Department of Public Works	
<b>SUBJECT:</b> Drainage Study for: <b>Badlands</b>		<b>COPIES TO:</b> Lennar	
<b>Cross Streets:</b>	Charleston Blvd and Rampart Blvd	Westwood	
<b>File Number:</b>	F:\Depot\DSMemos\DS5858A.ZNA.doc	CCRFCFCD	
<b>Parcel Number:</b>	138-31-201-005, 138-31-601-008, 138-31-702-003, -004, 138-31-801-002, -003, 138-32-301-005, -007, 138-32-202-001, 138-32-210-007, -008		
<b>Zoning Action:</b>			
<b>FEMA Flood Zone</b>	YES	<b>X</b>	NO
<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	4/29/25	5/19/25	See Comments Below	\$400.00	6206573: \$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. The Badlands Master Drainage Study is proposing to revise the hydrology and facility sizes identified in the Clark County Regional Flood Control District's (CCRFCFCD) 2023 Las Vegas Valley Flood Control Master Plan Update. A Master Plan Amendment (MPA) or Master Plan Change (MPC) must be submitted to the City of Las Vegas for approval and City of Las Vegas will coordinate the submittal to CCRFCFCD for approval.
2. The site is adjacent to or crosses an existing or proposed Clark County Regional Flood Control District (CCRFCFCD) master planned facility. Therefore, CCRFCFCD concurrence is required prior to final approval of the Master Drainage Study.
3. Please note that the traffic study must be approved prior to final approval of the Master Drainage Study. If the street layout does not match the Master Drainage study, an update to the Master Drainage Study must be submitted to address the changes.
4. Please note that any future technical drainage study submittals that differ from the Master Drainage Study (ie. Changes in pods, infrastructure, flows etc.) will require an update to the Master Drainage Study and this update must be approved by the City of Las Vegas Flood Control Section prior to final approval of technical drainage study.
5. Technical drainage studies are required for each of the POD's. The technical drainage studies for the POD's may not be submitted until the conditional approval of the pertinent infrastructure drainage

study is obtained. Final approval for the infrastructure drainage study must be obtained prior to conditional approval of the impacted POD drainage studies.

6. Building permits for the homes within the individual POD's will not be issued until construction of the street and flood control infrastructure around the POD is substantially complete.
7. Please note that the proposed 100-year flood protection facilities identified on Exhibit G must be constructed by the Master Developer as a part of the master planned infrastructure. Technical drainage studies are required for each phase of the master planned infrastructure improvements. The technical drainage studies for the infrastructure improvements may be submitted with conditional approval of this Master Drainage Study. However, final approval for the Master Drainage Study must be obtained prior to conditional approval of the infrastructure drainage studies.
8. Please note that all proposed drainage facilities must meet the City of Las Vegas Municipal Code.
9. **The engineer must submit the drainage study to FEMA for a Conditional Letter of Map Revision (CLOMR). A favorable CLOMR must be obtained prior to the issuance of any permits.** This site is located in a **FEMA Zone A**. Clark County Regional Flood Control District (CCRFCD) review and approval is required prior to recordation of final map or issuance of building/grading permits. The Engineer must send a copy of the report to the CCRFCD for review. **The developer/engineer must also obtain a Letter of Map Revision (LOMR) using the approved drainage study as technical support to inform FEMA of the modifications within the flood zone. The approved LOMR must be submitted to the City of Las Vegas prior to the release of the bond.** FEMA Elevation Certificates, showing as-built finish floor elevations, must be completed for each building in the FEMA A Zone. The certificate must be submitted to the City of Las Vegas Flood Control Section prior to scheduling a framing inspection.
10. A **Letter of Map Revision (LOMR/LOMR-F)** must be obtained from FEMA after the completion of any project within a FEMA Special Flood Hazard Area (SFHA), Flood Zone "A". The bonded improvements shall include a line item of **\$50,000.00** for the **LOMR**. The bonded improvements will not be released until the **LOMR/LOMR-F** is obtained from FEMA and filed with the **City of Las Vegas**.
11. Please note that all proposed interim drainage facilities must be bonded and maintained by the Master Developer. Prior to final plan approval the developer must complete a maintenance and liability agreement for the interim drainage improvements (off-site berms or channels) and post a minimum maintenance bond of \$50,000 or 50-percent of the construction cost for the improvements, whichever is greater. If the interim drainage improvements are bonded per phase, each phase must post a minimum maintenance bond of \$50,000 or 50-percent of the construction cost, whichever is greater, for each phase. The engineer must submit an estimate of the quantities for constructing the facility and an exhibit that adequately shows the location and limits of the drainage facility to City of Las Vegas Flood Control for approval. Once the drainage study is conditionally approved, the engineer should contact the City's Land Development Section (229-6371) to begin the agreement process.

In order for the maintenance bond to be released in the future, a drainage update / letter will be required to justify that the offsite berms / channels are no longer necessary and can be removed.
12. Flood Control requires a phasing plan for the overall development and include an interim condition drainage analysis in support of the phasing plan that clearly shows the impacts to each phase, existing washes, upstream concentration points and the downstream concentration points. Flood Control needs to make sure that each phase of development is protected during the interim and full build-out of this overall project.
13. Please obtain necessary 401 & 404 permits from US Army Corps of Engineers and provide a copy of the permit to City of Las Vegas Flood Control Section.
14. Please note that with a technical drainage study for the proposed CCRFCD MPU facility, provide complete Plans and Project Specifications for approval by the City of Las Vegas. The Structural

Plans and Details shall be a part of the Civil Improvement Plan set. This project is considered as a Capital Improvement Project (CIP) with developer funding.

15. Please note that with a technical drainage study for the proposed CCRFCD MPU facility, structural plans for the proposed storm drain improvements and pertinent flood control facilities must be submitted for review. Provide a soils report, structural calculations and specifications, two wet stamped structural sets, and a grading plan to the Building Department for processing. The engineer must provide a copy of Building Department approval of the structures to Regional Flood prior to their concurrence and to Flood Control prior to final acceptance of the drainage study.
16. Please note that with a technical drainage study for the proposed CCRFCD MPU facility, all proposed improvements associated with the Storm Drain facilities shall be bonded and inspected. This project shall require Special Inspection. Coordinate the requirements of and the Agreements needed for Special Inspection with the Building Department.
17. The proposed improvement plans show drainage facilities of a size that must be reviewed for Maintenance and Access concerns. The engineer must submit a separate set of improvement plans to CLV Streets & Sanitation Department for their review. Streets & Sanitation approval must be secured prior to drainage study approval.
18. This site accepts offsite flows and conveys them through the site. Provide a "Public Drainage Easement to be Privately Maintained" and show the easement on the grading plan. Public drainage easements must be recorded by separate document prior to the final acceptance of the improvement plans unless they are to be recorded by parcel or final map.
19. On Exhibit G, COM14A looks like it should include part of the flow generated in DON-14B.
20. Show all basins used in the HEC-1 models on the existing and proposed drainage maps.
21. The 100-year flow shown for the concentration points do not match the 100-year flows for the contributing basins.
22. In the Standard Form 4, the many of the lengths measured in Exhibits E and F, don't appear to match the SF4 input. Please double check lengths and slopes. Listed below are a couple examples.
  - a. For 57B-1, the initial Length appears be larger than 250' and the total length appears to be larger than 3270'. We measured over 500' and 3600', respectively.
  - b. For DON-14A, we measured the travel length closer to 1800' where the SF4 uses 1530'.

**\*\*\* 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**  
CAG/TJK/OSK

T/R/S: T20S/R60E/S31&32  
AREA F-28