

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: May 31, 2022
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:
	Iron Mountain	Westwood Professional Services
Cross Streets:	NEC Iron Mountain Rd. & Alpine Ridge Way	Tri Pointe Homes Nevada, Inc.
File Number:	F:\Depot\DSMemos\DS5508C.doc	Bart Anderson, P.E., DevCo
Parcel Number:	126-01-801-010, 011, 012, 013, 014, 015, 016	CCRFCD
Zoning Action:	21-0315-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	10/14/2021	11/22/2021	Not Approved	\$400.00	4492234: \$400
2 nd Submittal & Supplement	12/28/2021 & 2/23/2022	3/18/2022	Not Approved	\$400.00	4586659: \$400
3 rd Submittal	5/9/2022	5/26/2022	See Comments Below	\$400.00	4778909: \$400
TOTAL FEES (LDDRS):				\$1,200.00	----

REMARKS:

2nd Submittal with Supplemental drainage.

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. This Drainage Study shows that the site will be developed in two Phases/Units. The off-site improvements may be phased, however the requirements of Title 19.02.130.2 & 19.02.130.3 shall be met. Paraphrasing – *“All building permits beyond 50% will be withheld until all required off-site improvements are guaranteed (bonded). When 75% of the development is complete, 100% of the off-sites shall be complete.”* Coordinate the proposed Unit Boundaries and off-site Improvements with Devco for compliance with the Title 19 requirements prior to final approval of the Drainage Study and/or final approval of any Final Map.
2. Coordinate the required improvements within the west half of Alpine Ridge with City of Las Vegas Right-of-Way (Nancy Logan 229-6545) and submit appropriate information to support BLM reservation on the Future Officer Soldo Memorial Park. No improvements may be constructed prior to BLM Grant.

3. The site is adjacent to or crosses an existing or proposed *Clark County Regional Flood Control District* (CCRFCD) Master Planned Facility. The existing storm drain system within Iron Mountain Rd is a MPU 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. The project proposes to build a temporary drainage facilities. 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. 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.

The following are comments pertaining to the subject site specific drainage study and grading plans:

5. This Study has addressed the Existing, Proposed, and Potential Conditions needed for this development to be adequately protected and therefore meet the intent of the MPU. It is understood that the flows are conveyed within the wash system north of the site (between Radley St. and Kyle Canyon Rd). The recognized flow conditions from the Supplemental HEC-1 submittal at Concentration CP8 are:

Existing – 889 cfs, Proposed – 894 cfs, and Potential – 906 cfs

6. **Comment Repeated:** *Revise the on-site storm drain plans to reflect that the on-site storm drain system is to be "Privately Maintained". Where the proposed storm drain enters the Public Right-of-way, provide a nuisance inlet or Manhole to transition to a Public system. Show the "Privately Maintained" designation on the storm drain profiles. Include a note on the Grading Plans that "All onsite storm drain facilities within this development shall be Privately Maintained by the HOA". Revise the plans and quantities accordingly.*

This comment has not been addressed satisfactorily. For example: Unit 1 Sheet G-4: Construction Note #21 for a 36"-RCP at SDDI #1 is a PRIVATELY owned and to be PRIVATELY MAINTAINED by the HOA facility. However, Construction Note #21 stated that it is public! Same situation for Construction Notes #20, 22 and 23. Perform an overall check on all the labeling of the storm drains to match the grading plans, plan & profile sheets with the pertinent construction notes in the next submittal.

Same comment for Unit 2, for example, Sheet G-1: Construction Note #20 for an 18"-RCP at SDDI #3 is a PRIVATELY owned and to be PRIVATELY MAINTAINED by the HOA facility. However, Construction Note #20 stated that it is public! Same situation for Construction Notes #21, 22 and 23. Perform an overall check of all the labeling of the storm drains to match the grading plans, plan & profile sheets with the pertinent construction notes in the next submittal.

7. **Comment Repeated:** Provide rip-rap Details that include cross sections. Provide adequate bedding for the rip-rap channel as outlined in Section 705.4.3 of the CCRFCD's Hydrologic Criteria and Drainage Design Manual.

Per the hydraulic calculations and *Hydraulic Sections T1 and T2*, the 100-year flow velocity in the interim channel is erosive. Provide riprap for erosion protection accordingly.

8. **Unit 1 Sheet G-4:** Provide railing fence around the interim sump in *Radley Avenue* for safety issue.
9. **Unit 1 Sheet G-5 to Sheet G-8:** The plans showed that *Iron Mountain Road* is to be improved during Unit 1 construction. Provide a plan & profile sheet for the street improvement of *Iron Mountain Road* in the next submittal.
10. **Unit 2 Sheet G-1:** SDDI #3 at the north end of *Harworth Street* is in a sump condition. Address whether an emergency overflow path has been provided in case of the inlet being totally clogged. Note that the maximum emergency ponding depth cannot be more than 1'.
11. Continue to coordinate offsite efforts with the proposed commercial development to the east by Lochsa Engineers.
12. Continue to coordinate offsite efforts with the proposed development to the north "Alpine Ridge" by Westwood.

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.

END OF REMARKS
HDR/JKS

T/R/S: T19S/R59E/01
AREA F-01