

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: April 26, 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:
	Rancho Holly	Actus
Cross Streets:	SEC of Rancho Drive & Coran Lane	Beazer Homes
File Number:	F:\Depot\DSMemos\DS5559A.doc	Bart Anderson, P.E., DevCo
Parcel Number:	139-19-705-002	CCPW
Zoning Action:	21-0813-TMP1	CNLV
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	3/31/2022	4/26/2022	See Comments Below	\$400.00	4714128: \$400
TOTAL FEES (LDDRS):				\$400.00	----

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. Provide a copy of the zoning/planning conditions associated with this site (**21-0813-TMP1**) with the next submittal to verify compliance with conditions. *Flood Control* will not issue conditional approval of the drainage study without the associated zoning/planning conditions (issued by the *City Council*). Any associated conditions of approval that revise the site drainage parameters will require that the drainage study be revised and resubmitted.
2. 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.
3. The site is adjacent to the jurisdiction of *Clark County* to the south. The engineer must coordinate with *Clark County Public Works Department* (CCPW) and incorporate any concerns for boundary conditions along the south border. CCPW concurrence is required prior to final acceptance of the study.
4. The site is also adjacent to the jurisdiction of the *City of North Las Vegas* (CNLV) to the north. The engineer must obtain concurrence of the subject drainage study from *City of North Las Vegas Public Works Department* prior to the final approval of the drainage study.

5. The reviewer believes that the stockpile activities will be constructed prior to the onsite developments in two distinctive time frames. The stockpile permit issued by the *City of Las Vegas* should be applied and obtained prior to the drainage study and improvement plans approval. Submit a separate Stockpile Permit Drainage Study separately. The package of the Stockpile Permit Drainage Study shall include a Standard Form 1, a Clark County Dust Control Operating Permit with the BMP's, a Stockpile Plan and a letter explaining the stockpile work, drainage flow patterns and the time limit etc.
6. It appears that there is no "*Figure 1 (Vicinity Map)*" included in the last submittal. Provide as such in the next submittal.
7. **Report Table 1 and Figure 7 (Existing Condition Basin Map):** Basin ID E2 drainage area (7.83 acres) does not match Standard Form 4 drainage area (13.35 acres). Revise discrepancy.
8. **Report Table 1:** Basin ID CP2E Q₁₀₀ lists 31 cfs however E2+ALN3 (29+3= 32 cfs). Revise discrepancy.
9. **Report Table 1:** Basin ID ALN3 Q₁₀ lists 1 cfs however the HEC-1 reports Q₁₀ as 2 cfs. Revise discrepancy.
10. **Figures 8, 9 and 10 Basin Maps:** Combination Point CP-COR-I per the flow summary table includes NH-COR & COR. However, per the exhibit this combination point should also include sub basin DON3 flows. Address and resolve in the next submittal.
11. 14'-overpaving is normally required for half-street improvements. Provide as such or contact *City Land Development Section* for direction of whether overpaving will be required in *Coran Lane* and *Allen Lane*. Revise all pertinent detail sections accordingly.

The following comments pertain to Unit 1 Developments:

12. Grading Plan Sheet C3:

- At the center line of *Allen Lane*, between Station 10+85 (30.42 AC/HP) and Station 12+43 (28.46 AC/GB), there appears to have a local low point at Station 12+00 (27.67 AC). Review and revise accordingly.
- Label the finished floor elevation of existing houses adjacent to the east of *Allen Lane*.
- Dedicate the area at the east end of *Coleus Avenue* as Public Drainage Easement (privately maintained by the HOA) and record as such in the Final Map.
- Is there any curb cut for the discharge of the 100-year flow at the end of *Coleus Avenue*? Q₁₀₀=6cfs, the proposed 2'-wide channel and sidewalk underdrain appear to be inadequate. Review and revise accordingly.

13. Grading Plan Sheet C5:

- The west end of the cross valley gutter in *Allen Lane* appears to be a low point and cause a small pond there.
- Label the finished floor elevation of existing houses adjacent to the east of *Allen Lane* in the next submittal.

14. Grading Plan Sheet C6:

- The south end of the site, adjacent to Lot 23, provide zero curb so that the Q₁₀₀=23cfs will be conveyed smoothly from the street to the proposed drainage easement. The current design will have a turbulent flow at the proposed flow point (26.80 FL/LP) which is too close to the driveway of Lot 23 and can cause damage to the front yard. Address and resolve in the next submittal.

- Provide wrought iron gate or bollards at the entrance of the drainage easement to prevent vehicles parking in the easement.
 - Per *City of Las Vegas* policy, 20'-wide drainage easement is required if the 100-year flow is greater than 20cfs. The proposed 15' *Private Drainage Easement* must be expanded to be 20'-wide *Public Drainage Easement (Privately Maintained by HOA)*.
 - The proposed concrete valley gutter in the drainage easement will not contain the 100-year flow. Use U-concrete channel to contain the flow.
15. **Sheet C10 Detail 2** shows that *Allen Lane* has curb and gutter on the east side of the roadway when it does not. Additionally, provide a cross section for the north half of *Allen Lane* that shows the proposed swale on the east side.
16. Interim Phase 1 Grading Plans need to provide riprap at locations where the rough graded interim grading meets the proposed roadway.

The following comments pertain to Unit 2 Developments:

17. **Grading Plan Sheet C4:** Label the slope at the bulb of the cul-de-sac in *Pascali Place*. The minimum slope in curvature is 1%.

The following are general comments:

18. Provide preliminary plan and profile sheets for all proposed perimeter streets. Plan and profile sheets must show existing and proposed grade at centerline, but may be preliminary in all other respects. These plans are necessary to determine the effect of the proposed development on the adjacent properties.
19. All proposed wrought iron fence/gate must utilize CCAUSD standard drawing 425.S1 including the placement of bollards.
20. The engineer must provide a table on the grading plans that shows a quantity estimate of all drainage improvements within Public Drainage Easements. All drainage improvements within Public Drainage Easements must be bonded and inspected.
21. All drainage easements must be public drainage easements to be privately maintained and common lots to be labeled on the grading plans and to be dedicated as such in the final map.
22. Private streets must be public drainage easements. Provide a note on the grading plans: "Note: All private streets are P.U.E., Public Sewer Easements and Public Drainage Easements to be privately maintained by the HOA".

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/AYS

T/R/S: T20S/R61E/19
AREA M-19