

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: June 12, 2025	
TO: Land Development Services Department of Community Development – Building & Safety Division		FROM: Tyler Key Flood Control Engr. Associate Department of Public Works	
SUBJECT: Drainage Study for: Kyle Canyon and SMP		COPIES TO: Tri-Pointe	
Cross Streets:	Kyle Canyon and SMP	Westwood	
File Number:	F:\Depot\DSMemos\DS5867A.doc	CCRFCFCD	
Parcel Number:	126-01-201-011, 126-01-201-012, 126-01-301-005, 126-01-301-006, 126-01-301-007, 126-01-301-014, and 126-01-301-015		
Zoning Action:			
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	5/22/2025	6/12/2025	See Comments Below	\$400	6245381: \$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 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.
2. 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.
3. A Notice of Construction must be filed with the Nevada Division of Water Resources for the proposed detention basin.
4. The “Temporary Catchment” proposed west of Sheep Mountain Parkway is on property owned by the Bureau of Land Management (APN 126-01-201-018). A right-of-Way Application must be submitted and approved by the BLM prior to approval of this drainage study.
5. Per the City Council Meeting on March 19, 2025:
 - a. The drainage study may be used to address the area to be vacated on Ruston Road; including a plan of how vacated area will be incorporated into abutting properties. Address and include on improvement plans

- b. Appropriate drainage easements shall be identified in the Technical Drainage Study and reserved from vacation of Ruston Road, delineate on plan sheets
 - c. Dedicate 60-feet of right of way, shown as 55-feet on sheet G-4 of the improvement plans, increase to 60-feet and delineate on improvement plans
 - d. Label private streets as public drainage easements on improvement plans
 - e. On-site detention basins shall be dedicated Drainage Right-of-Way, label on improvement plans
 - f. Delineate and label areas to be dedicated to City of Las Vegas on the improvement plans
6. Provide top of curb elevations and verify that 6" humps are provided above 100-year Water Surface Elevation where approaches into the developments are provided to exterior streets per HCDDM Standard Form 2.
 7. Provide the slopes of the Cut and Fill Scarps on plans per HCDDM Standard Form 2, such as in the proposed detention basin, collection basin, and on graded slopes fronting Sheep Mountain Parkway.
 8. Provide notarized letter from downstream property owner allowing offsite grading (APN 126-01-301-008), see sheet G-3 of Kyle Canyon and SMP – South improvement plans. And from upstream properties for the collection basin grading (APN 126-01-301-004) on sheet G-7.
 9. A review of the grading plan shows an elevation difference of approximately 8-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.
 10. The WSPG model for the stormdrain system into the detention basin shows velocities exceeding 35 ft/s; sacrificial concrete is recommended, which is an adequate mitigation when other options are not available, but has a limited service life. In this instance, it appears feasible to decrease the slope on this section of pipe to reduce velocities and extend the pipe service life. See sheet PP-1.
 11. Flood Control recommends adding a column to the Lateral Sizing Calculations (Standard Form 6) providing the grate/rim elevations for the connecting drop inlets for ease of review for the 1-ft below finished grade criteria for the HGL.
 12. The proposed development is adversely impacting the parcel to the north of the project site (APN 126-01-201-001) with the proposed ditch along Sheep Mountain Parkway. The proposed ditch is re-directing and concentrating flow to the parcel to the north. Please re-establish the historic flow pattern using public Right-of-Way or obtain a written permission from the property owner.
 13. Correct D/S HGL Elevation for the lateral from R1; the WSPG model shows the WSE as 2905.43 for SDMH#13.
 14. Reconcile the detention basin grading plan on sheet G-8 with the spillway crest calculations, crest elevations do not match.
 15. Increase the width of the low flow channel in the detention basin to 6-feet.
 16. Add sediment and depth gauges to the detention basin.
 17. Provide a 12-foot minimum width around the detention basin for maintenance access.

18. The detention basin outlet design must be finalized prior to approval of this drainage study, structural details are required as this is a non-standard design. Special inspection of the detention basin outlet and detention basin is required during construction.
19. Correct the minimum slope for the normal depth street calculation for section NS1, minimum slope from sheet G-2 of Plan 2 is 0.6%
20. Delineate, dimension, and label the drainage easement in the northeast quadrant of Kyle Canyon Road and Sheep Mountain Road on improvement plans, sheet G-4.
21. Correct elevations on finished floor table to 29XX-feet instead of 39XX-feet. Corrected minimum slope for section NS1 on Exhibit E and in normal depth calculations will increase flow depth for portions of the finished floor tables.
22. Provide flow calculations for the ditch along the west side of Sheep Mountain Parkway.
23. Provide flow calculations for the ditch along the north side of Ruston Rd.
24. Provide reasoning for using the HERCP rather than the typical RCP. HERCP is more expensive maintain and replace.
25. Discuss how the air quality and NDEP permits will be released for the ditch along Sheep Mountain Parkway and any other disturbed areas.
26. Address the following comments on the improvement plans for Kyle Canyon and SMP - North:
 - a. Label property lines on plan sheets (typ)
 - b. Add top of wall and top of footing elevations for all wall locations (typ)
 - c. Add dimension showing offset of path from retaining/screen wall and width of V-ditch in section 2/D-1
 - d. Add minimum bench width and slope between retaining wall and slope into detention basin on section 10 of sheet D-1
 - e. Clarify end of improvements at east end on Log Cabin Road, Sheet G-4, Section F indicates new construction, dashed lines on sheet G-4 indicates existing grading
 - f. Provide additional top of curb elevations on sheet G-2 to define emergency overflow section for drop inlet in sump at corner of Glacier Wind Ave and Summit Hollows St
 - g. Add slope for landscape sections (typ), see section 8 on sheet D-1 for example
 - h. Revise grading of common area "C" on sheet G-3 to show V-ditch from section 8 on sheet D-1, provide curb cut with sediment trap to provide positive drainage to Cascade Rock Ave.
 - i. Provide V-ditch for common area "A", offset from retaining wall to keep flow from concentrating at face of wall, grade v-ditch to east at end of wall
 - j. Provide top of curb elevations for approaches into Summit Hollow Street.
 - k. Provide a Public Drainage Easement for the north end of Summit Hollow St. where the proposed storm drain exists.
 - l. Structural approval will be required for the complete CM2 drop inlet.
27. Address the following comments on the improvement plans for Kyle Canyon and SMP - South:

- a. Label cross slopes on all interior and exterior streets
- b. Provide top of curb elevations for approaches into Thunder Point Street.
- c. Add adjacent ground elevation tags along perimeter walls, provide top of wall and top of footing elevation tags to all walls, add wall height and type to sections with walls in detail sheets
- d. Add property line labels to all improvement plan sheets
- e. Label Ruston Road right-of-way on improvement plans and provide dimensions; include proposed patent easement and quarter-knuckle at the south-west quadrant of Larry McBryde Street and Ruston Road as shown on tentative map in Appendix J.
- f. Provide documentation of placement of the 1" sacrificial concrete layer in the 68" X 43" HERCP on sheet PP-1; if spiral cast is to be used, stormdrain analysis will be necessary to verify capacity is still sufficient.
- g. Due to the Specific Energy of the flow at the north end of Lodgepeak St., Section DE1, being over the top of curb, extend the public drainage easement to match the width of the R.O.W of Lodgepeak St.
- h. On Sheet G-2, provide at least 20' of L-curb on either side of the depressed curb flowing into the proposed U-channel.
- i. On Sheet G-2, revise the grade of the cross gutter on the north end of Thunder Point St. to remove the low point.
- j. Provide connection detail for proposed 54" RCP into existing 6' x 5' RCB shown on sheet PP-5
- k. Add pavement structural section (pavement and base) depths to cross sections
- l. Extend concrete up the western slope at concentrated flow locations to U-Channel in the drainage easement adjacent to lot 37 on sheet G-4 and as shown in section 9 on sheet D-1
- m. Add section to show path between the cul-de-sac's between Boulder Crest Court and Cloudcrest Pass Court on sheet G-4, or add to section 11 on sheet D-2
- n. Specify depth of cut-off wall on detail sheet D-3, section 26 or 29
- o. Provide final design and structural details for the detention basin outflow, detail 33 on sheet D-3
- p. Correct pipe size on detail 26 of sheet D-3
- q. Sheet D-1, There are two detail labeled number 5. Review and revise accordingly.
- r. Add section D/D-1 to sheet G-2, extend section to show retaining and screen walls
- s. Add section 19/D-2 to sheet G-3
- t. Add section 22/D-2 to sheet G-6

***** 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

CA/TJK

T/R/S: T20S/R60E/S31&32

AREA F-28