

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: March 11, 2025
TO: Land Development Services Department of Community Development – Building & Safety Division		FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for:	COPIES TO:
	Metro Substation & Park	Advantage Civil Design Group, LLP
Cross Streets:	SWC of Hualapai Way and Grand Teton Dr	USA and City of Las Vegas Lease
File Number:	F:\Depot\DSMemos\DS5845A.doc	Lucien Paet, P.E., DevCo
Parcel Number:	126-13-501-020	CCRFCD
Zoning Action:	24-0593-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	2/24/2025	3/11/2025	See Comments Below	\$400.00	6129345: \$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. The site is adjacent to or crosses an existing or proposed Clark County Regional Flood Control District (CCRFCD) master planned 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>

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. On Figure 4, Ultimate Drainage Basin Map:
 - a. Adjust D-ON3 and D-ON4 to match the grading plan at east end of the joining subbasins.
 - b. Adjust D-ON1 and D-ON2 to match the grading plans around the northeast corner of the field and at the southwest corner of the parking lot.

- c. Show roof drains of the substation building on the grading plans or provide the architectural roof plan to verify it will match subbasins D-ON3 and D-ON4
 - d. Provide additional cross section and calculations for the curb in front of the park restroom structure and verify that the finished floor is adequately protected per HCDDM 304.4.
 - e. On Table 1, CP2 of 30 cfs does not match the HEC-1. Update the HEC-1 to add the Hualapai and RW-3 flows and divert out the inlet flows.
 - f. In Table 3, sections 1 and 2 for Grand Teton Drive and Hualapai Way do not demonstrate that 10-year criteria is met. Provide necessary calculation to demonstrate that this criteria will be met.
 - g. Add finished floor elevations to all existing buildings on adjacent parcels.
4. For LID Area figure, differentiate areas being conveyed to each BMP. Verify contributing area to each BMP is less than 1 ac per HCDDM 1500. Note this 1 ac does not include landscape area. Provide table that includes the following: total parking lot area, total area conveyed through the BMP swales, and the percentage of area through the BMP swales.
5. On all grading plans,
- a. Provide APN numbers and finished floor elevations to all existing buildings on adjacent parcels.
 - b. Provide a standard elevation note stating “Add 2800 to all spot grades where the hundreds and thousands places are omitted for actual elevation (I.E. 60.76 represents 2860.76)
 - c. Provide the standard drainage compliance note on the grading plan: *“I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT (DSXXXX)”*.
6. On Sheet C4.1, Grading Plan 1:
- a. Provide cross section to west side of building and add the section view to sheet C6.
 - b. It appears that a manhole is proposed in the cross gutter and a SD pipe is proposed under the sidewalk at the relocation of the existing drop inlet. Revise plan so the manhole is away from the cross gutter and the pipe is not under the sidewalk. Provide connection details and profile view. Label pipe size and inlet type and size.
 - c. Provide swales in the landscape area between the existing sidewalk and direct flows to sidewalk underdrains to prevent runoff from this area overtopping the sidewalk within the public right-of-way.
 - d. Provide slope tags for the existing cross slope of Hualapai Way at both driveways to verify that fire access requirements are met.
 - e. Add grade tags at the high point in the AC and sidewalk at east side of the building.
 - f. Adjust TC grade tag 60.91 from being in the AC to the curb at south side of the east parking area.
 - g. Add note 25 to curb opening at south east edge of parking area.
 - h. Label existing storm drain with CLV drawing number on Hualapai Way.
7. On Sheet C4.2, Grading Plan 2:
- a. Extend the curb along north end of the parking lot to the end of the crowned drive aisle.
 - b. Consider adding “L” curb to the north side of the three northeast most median island that will likely see flow due to the crowned north drive aisle.

- c. Consider adding "L" curb to the west side of the two east most median islands that will likely see flow due to the entire parking lot being sloped to the east.

8. On Sheet C4.3, Grading Plan 3:

- a. Add "L" curb along the east side of the driveway entrance from the driveway to the first parking space as the AC is sloped to this curb.
- b. Add note 25 to curb at downstream end of swale.
- c. Add A and B length tags to ramps at the driveway.
- d. What material is along the north and south side of the restroom structure? If landscape, the slope will need to be 5% minimum per IBC 1804.4 as noted in comment 4b.
- e. The 2' tall wall noted with note 24 does not appear to have a foundation per the cross sections on sheet C6. Provide foundation for wall.
- f. Add construction notes for saw cutting, removing and modifying the median island on Grand Teton Drive.

9. On Sheet C6, Details & Sections:

- a. For 2' U-Gutter Detail, make width between curb faces 2'.
- b. For Water Quality Swale Detail, add note that D50 is 3".
- c. Cross section J: Slope on 18' Parking is pointing at the opposite direction.
- d. Cross section L: Provide slope on the sidewalk.
- e. Add construction note for proposed 1' curb around field perimeter.

10. Landscape Flow Over Sidewalk

- a. Landscape areas are not allowed to drain over the sidewalk. Provide flow lines with grades and sidewalk under drains for all landscape areas draining to the street. Revise all pertinent details accordingly.

11. Best Management Practices

- a. Provide a note on all grading plans (Standard Note No. 6): Post-Construction BMPs (PCBMPs) / Control Measures noted on the Grading Plans are mandatory permanent regulatory stormwater pollution controls. These PCBMPs must be installed per the approved plans and must be permanently maintained.

12. Add a note in all pertinent sheets for the construction of all storm drain drop inlets per a newly adopted USDCCA Drawing No. 421 (*Stormwater Quality Management Stamp and Sign Detail*).

13. 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.

***** 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/AYS/SF/JT

T/R/S: T19S/R59E/S13
AREA F-13