

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: November 5, 2024
TO: Land Development Services Department of Community Development – Building & Safety Division		FROM: Jefferson Torrecampo, P.E. Flood Control Engineering Associate Department of Public Works
SUBJECT:	Drainage Study for: Ann & Shaumber Commercial	COPIES TO: Performance Engineering
Cross Streets:	Ann Road And Shaumber Road	Umer Malik & ZSKSMAZ Township Family Trust
File Number:	F:\Depot\DSMemos\DS5810A.doc	Bart Anderson, P.E., DevCo
Parcel Number:	126-36-101-032	
Zoning Action:	24-0167-ZON1; 24-0167-VAR1; 24-0167-VAR3; 24-0167-SUP1; 24-0167-SUP6; 24-0167-VAC1; 24-0167-SDR1; 24-0167-SDR2	
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	10/16/2024	10/30/2024	See Comments Below	\$400.00	5977320 : \$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. A review of the grading plan shows an elevation difference of approximately 5-feet of cut/fill adjacent to 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.
2. Show contour line and elevations on the basin maps.
3. Sheet EX-BM: Show all existing storm drain facilities on the basin map.
4. Sheet EX-BM: The existing basin map do not match in referenced DS5197. It appears that Basin ON.1E drains to CP10 whereas in referenced DS5197 it drains toward north of Shaumber Rd/Ann Road. Review and revise in the next submittal.
5. Sheet EX-BM: The Basin ST.ANN is missing in the drainage Area Summary Table. Revise in the next submittal.

6. Sheet EX-BM: Basin EX0F6 has 11 cfs (Q100) while in HEC-1 analysis the output value is 12 cfs. Review and revise in the next submittal.
7. Sheet INT-BM: Basin ST.SHE flow direction shows toward south. This do not support what is shown on the grading plan.
8. Appendix D, Hydraulic Calculations: Rename all street hydraulic cross section identifier same as what shown on the basin map. Clearly show the location of section D on the basin map.
9. Appendix D, Hydraulic Calculations: Onsite Hydraulic Section E, the 100-year flow rate must be the total of DOFF6 and ON.4D. Revise flow rate and provide updated depth calculations and exhibits. Verify that the building Finish Floor meets the flow depth criteria.
10. Appendix D, Curb Inlet Sizing Calculations: The street flow on SDDI #3 does not include bypass flow from SDDI #7. Revise flow rate and provide updated calculations.
11. The finished floor elevation of the proposed building C-Store is lower than of Shaumber Road. Provide a flood wall or berm along the back of sidewalk on Shaumber Road to flood protect the building. Provide cross section showing the wall or berm with regular interval elevations on the grading plan.
12. Sheet GP-1 & GP-2: Label CLV drawing number for all existing storm drain on the grading plan.
13. Sheet GP-1 & GP-2: Label Document Number or Book and Page Number for all existing easements on the grading plan.
14. Sheet GP-1 & GP-2: The proposed 30-in RCP along Ann Road must be tied into the existing storm drain at northeast corner of the site, provide connection details. Provide manhole on all connections where SDDI#5 & SDDI#6 are tied into existing storm drain on west boundary, provide connection details and permission from the adjacent property owner.
15. Sheet GP-1 & GP-2: Show drop inlet sizes on the grading plan. Label what type of drop inlet is SDDI#7.
16. Sheet GP-2: A pond forms on the east of Drive-thru building parking lot. Verify low point and revise grading plan accordingly.
17. Sheet GP-2: Verify TC/HP at thru lane west of Drive-thru building.
18. Sheet GP-2 & E/DT-1: Provide elevation of the second retaining wall at west boundary of proposed site. Show the swale with regular interval elevation along west boundary of the site.
19. Sheet GP-2, DI #8: Provide normal depth calculations and verify EGL does not over top the proposed area inlet. Adjust retaining wall height and show ponding limit. Provide cross section detail and show apron side slope, top and bottom elevation of the retaining wall.
20. Sheet GP-2: The storm drain manhole appears to be on cross gutter at the east and west entrance driveway on Shaumber Road. Move the location of SDMH #2 away from cross gutter and make adjustment on the proposed east driveway on Shaumber Road.
21. Sheet GP-2: The proposed SD pipe between SDMH #2 and SDDI #7 and the existing SD pipe east of Shaumber Road appears to be below the adjacent curb. Provide and label a minimum of 3' horizontal clearance between the lip of curb and the edge of the storm drain pipe in the next submittal.
22. Sheet GP-1 & GP-2: It appears the existing storm drain from existing manhole to proposed SDMH #3 on west side of Shaumber Road is outside of ROW. Provide an Easement for the storm drain and label it as "Public Drainage Easement". 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.
23. Provide drainage easement and concrete lined channel to for any offsite flow drain through the proposed site. Verify all finished floor elevations adjacent to the drainage easement based on flow depth requirement.

24. Sheet PP-1, PP-6 & PP-7: Provide connection detail where the proposed pipe is connected to existing and label existing SD with CLV drawing number.
25. Sheet PP-2 & PP-3: Rotate North arrow per the viewport orientation.
26. Sheet PP-5 & PP-6: Differentiate the proposed storm drain from the existing, label the existing dual 24" RCP.
27. Grading Plan: Revise the Grading Construction Note #19 per detail 4, sheet DT-1.
28. Grading Plan: Replace "Clark County" with City of Las Vegas in the Grading Notes.
29. This site accepts an offsite flows from west and south boundaries 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.
30. 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.
31. Provide sizing calculations on all proposed riprap.
32. The overall parking lot improvement area is larger than 1 acre. Per **Section 1500** of the *Clark County Regional Flood Control District's Hydrologic Criteria and Drainage Design Manual*, the subject improvements must provide for Low Impact Development (LID) measures. Review and address the issue in the next submittal.
33. Update the Stormwater Management Notes to the current version with the Improvement Plan submittal to Building Department Land Development.
34. 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 (DS5810)*".

***** 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
OK/JT

T/R/S: T19S/R59E/S36
AREA F-36