

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: December 12, 2024
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: Gibson Middle School		COPIES TO: Wood Rodgers, Inc.
Cross Streets:	Decatur Blvd. & Washington Ave.	Clark County School District
File Number:	F:\Depot\DSMemos\DS5822A.doc	Bart Anderson, P.E., DevCo
Parcel Number:	139-30-601-001	CCRFCD
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	11/20/2024	12/12/2024	See Comments Below	\$400	6020631: \$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. Provide a copy of the zoning/planning conditions associated with this site 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. 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>

3. A review of the grading plan shows an elevation difference of approximately XX-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.
4. **Figure 7:** The existing storm drain to the west of the project site is a 24" RCP, but is currently called out as a 30" RCP. Review and revise accordingly.
5. **Figure 7:** Provide a flow summary of the basin, WA09-C, to the south of the project site.
6. **Figure 8:** The calculated 10-year flow depth for WD1 is 0.91 ft with a velocity of 4.23 fps, but is shown as 0.92 ft and a velocity of 4.14 fps on the exhibit.
7. **Figure 8:** The slope used to calculate the 100-year flow depth and velocity of WD3 is 0.92%, but is shown as 1.01% on the exhibit.
8. **Figure 8:** Provide a flow depth analysis on Section ON4.
9. The 100-year flow depth along Washington Ave. is above the back of sidewalk and is inundating the adjacent landscaping at an erosive velocity. Provide flood protection along Washington Ave.
10. Storm drain construction note 2 states that the headwall details are provided on the structural sheets. Provide the structural sheets that contain the headwall details in the submittal.
11. Provide an explanation or detail showing how flow is entering the concrete channel from the sidewalk under drains. Is it discharging over the top of the concrete or will you be drilling through the concrete channel to discharge?
12. Provide a profile of the proposed 12' X 4' storm drain.
13. **Sheet G-1:** Call out size and drawing number of the existing storm drain.
14. Storm drain construction note 3 states that the length of the existing storm drain that is being removed will be provided in the plan. Provide the plan or clearly show the length on the grading plan.
15. Extend the call out for cross section B/D-1 to the bottom of the plan and add a note to "extend on Sheet XX" to clearly show that it extends across the whole site.
16. **Sheet G-2:** Align the 2' wide concrete valley gutter to the L-curb to the north of it to contain the flow within the drainage path.
17. **Sheet G-2:** Provide the elevation of the flow line at the northern BMP swale.
18. **Sheet G-3:** Call out the finish floors of all existing structures shown on the grading plan.
19. **Sheet G-5:** The proposed BMP swales on the east side of the project site requires the flow to take multiple sharp turns. Provide a low point at the entrances of the BMP swales to promote flow through the swales.
20. **Sheet G-6:** Move the sidewalk underdrain on the west side of the project site to align with the adjacent curb opening to contain the flow through the underdrain.

21. **Sheet G-7:** Construction note 8 represents a riprap BMP swale and is currently being shown along Washington Ave. Review and revise accordingly.
22. **Sheet G-8:** On the west side of the driveway, the sidewalk underdrain is currently being called out as a curb opening. Review and revise accordingly.
23. **Sheet G-9:** If the existing culvert is being removed, it needs to be replaced to contain and direct the flow from the concrete channel into the existing storm drain.

***** 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
TJK

T/R/S: T20S/R61E/S30
AREA M30