

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM			DATE: August 29, 2023
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:
	Doris Hancock Elementary School Replacement		Lochsa Engineering
Cross Streets:	NEC of Oakey Boulevard & Lindell Road		School Board of Trustees - CCSD
File Number:	F:\Depot\DSMemos\DS5697A.doc		Bart Anderson, P.E., DevCo
Parcel Number:	163-01-601-001		CCRFCD
Zoning Action:	23-0395-SDR1; 23-0395-VAR1; 23-0395-VAR2 & 23-0395-VAR3		CCPW
FEMA Flood Zone	YES	NO	X
Proposed Storm Drain	YES	NO	X

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	8/21/2023	8/29/2023	See Comments Below	\$400.00	5409888: \$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 (**23-0395-SDR1 and from 23-0395-VAR1 to 23-0395-VAR3**) 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. The site is also adjacent to the jurisdiction of *Clark County* to the west. The engineer must coordinate with *Clark County Public Works Department* (CCPW) and incorporate any concerns for boundary conditions along the west border. CCPW concurrence is required prior to final approval of the study.

4. The drainage study stated that there is an onsite existing 8"-storm drain tying to the 54"-RCP in *Oakey Boulevard*. Identify this onsite storm drain in the *Existing Drainage Map*. Show the onsite pipe in the grading plans and denote whether to remove or to be capped in the next submittal.
5. **DR2:** The flows of CPD1 (10/20cfs) as shown in *Doe Avenue* do not match what is stated in Page 8 of the study which shows CPD1 at 6/12cfs. Clarify in the next submittal.
6. **Sheet C4.02 & Sheet C6.02:** The plan shows a 0"-curb (Construction Note #6) around a proposed turf area, however, *Detail Section C* shows schematically a 6"-curb rather than a 0"-curb.
7. In *Detail Section C*, show the property line between the school and the adjacent residential community.
8. It appears that there are two walls between the school and the residential community which will become an enclosed area causing difficulty in maintenance. Address and resolve in the next submittal.
9. It appears that the proposed 2'-concrete valley gutter along the east property line will not contain the 100-year flow and therefore the screen wall will be inundated which is not acceptable. The engineer may consider expanding the width of the valley gutter, a U-channel or an L-curb to protect the screen wall. Provide hydraulic calculations to justify the choice of conveyance.
10. **Sheet C4.03 & Sheet C6.02:** At the location where *Detail Section A/C6.02* is shown on the plan, it is implied that the proposed A-curb (Construction Note #3) is a 6"-curb above the adjacent sidewalk. However, per *Detail Section A* on Sheet C6.02, the A-curb behind the sidewalk is a 0"-curb. The engineer may need to provide a new construction note to distinguish between 0"-curb and 6"-curb. Review and revise accordingly.
11. **Sheet C4.03 & Sheet C6.02:** *Detail Section B/C6.02* shows an A-curb behind the right-of-way line, however, the plan shows a *Construction Note #4* which states for an L-curb. Review and revise *Detail Section B/C6.02* in the next submittal.
12. **Sheet C4.04:** A proposed sidewalk underdrain at the southeast corner of the site is indicated by a wrong construction note. Review and revise accordingly.
13. Per *Section 1500* of the *Clark County Regional Flood Control District's Hydrologic Criteria & Drainage Design Manual*, BMP must be provided for large parking lot category (>1 acre). Besides landscape swale, stormceptor is an acceptable alternative. Provide as such in the next submittal.
14. Provide a connection detail from the proposed 24"-RCP to an existing 54"-RCP in *Oakey Boulevard*.
15. 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*).
16. Replace Note #6 in the **Storm Water Management Notes** block in all pertinent grading plans with the following as *Standard Note #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.

***** 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
AYS

T/R/S: T21S/R60E/01
AREA Q-01