

CITY OF LAS VEGAS		DATE:	
INTER-OFFICE MEMORANDUM		December 28, 2022	
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:	
Stonebridge Stake Center		Civil Solutions Group, Inc.	
Cross Streets:	NWQ of Sky Vista Drive & Crossbridge Drive	Church of Jesus Christ of Latter Day Saints c/o Trio Design	
File Number:	F:\Depot\DSMemos\DS5633A.doc	Bart Anderson, P.E., DevCo	
Parcel Number:	164-03-115-001		
Zoning Action:	22-0612-CRG1		
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	12/5/2022 (Paid on 12/14/2022)	12/28/2022	See Comments Below	\$400.00	5073984: \$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.

- Provide a copy of the zoning/planning conditions associated with this site (**22-0612-CRG1**) 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.
- Standard Form 1:** The subject study and the improvement plans all show that the name of the project is **Stonebridge Stake Center**, not Stonebridge Meetinghouse. Revise the “*Name of Development*” in Standard Form 1 to **Stonebridge Stake Center**.
- Standard Form 1:** Revise the assessor parcel number (APN) to 164-03-115-**001**.
- Technical Drainage Study Sections 4.2 to 4.5** refer to the Proposed Conditions map as *Exhibit G* when it appears to be *Exhibit E*. Provide a quality check on cross reference stated in the report.
- Exhibit D – Existing Conditions Map:** Provide proper drainage basin delineation.
- Exhibit D – Existing Conditions Map:** Properly label existing flood control facilities. For example, identify and label the size of the existing storm drain exiting flow from the site to *Crossbridge Drive* and existing drop inlet on *Crossbridge Drive*.

7. **Exhibit D – Existing Conditions Map:** Clarify what are the two dashed lines going across the site from west to east as well as the box in the middle of site.
8. **Exhibits D & E:** The texts are too small and illegible. The engineer should use full size sheets (24"x36") in the next submittal.
9. **Exhibits D & E:** Provide a complete drainage basins summary table that includes basin acreage.
10. **Exhibit E – Proposed Conditions Map:** Provide an overall quality check on the drainage map. For example, there are two cross sections labeled **1.1** and area flow for Area 5 is labeled Area 3 when it should be Area 5.
11. **Exhibit E – Proposed Conditions Map:** Provide a summary table of hydraulic parameters for cross sections been analyzed.
12. **Exhibit E – Proposed Conditions Map:** *Cross Sections 2 and 6.3* are analyzed on StormCAD but do not appear on the exhibit. Provide a thorough check on the quality of the maps.
13. *Update No. 4 to the Conceptual Drainage Study for Summerlin Village 24* is listed in the study but not found in the appendices.
14. **Storm CAD model:** Cross section SB4 is analyzed for 6.48 cfs, should be 0.43 cfs.
15. **Sheet CG-01:** Storm drain connecting DI#2 to SDMH#2 has 20.42ft length however the StormCAD profile shows 24.12ft. Revise accordingly.
16. **Sheet CG-02:** Storm drain connecting DI#3 to DI#4 has 10.08ft length and 20.3% slope however the StormCAD profile shows 13.44 ft and 19.90%. Revise accordingly.
17. **Sheet CG-02:** There is a callout for SDMH#4 however the StormCAD only lists three manholes. Address and resolve in the next submittal.
18. **Sheet CG-02:** DI#5 appears to be in a local sump condition. Address during a worst case scenario when the inlet is totally clogged, is there any emergency overflow path for the drainage to discharge safely. Note that the maximum ponding depth cannot exceed 12".
19. In the next submittal, provide a description of all proposed drop inlets in sump condition (if there are any other than DI#5) on whether emergency overflow path and maximum ponding depth are provided.
20. **Sheet CG-01 and Sheet CG-02:** In the two driveway entrances, provide flow line elevation (FL xxxx.xx) at both sides of the cross valley gutter of the site entrance to verify the hump is appropriately elevated 6 inches above the 100-YR water surface elevation.
21. In the grading plans, a "SUMP" elevation is shown along with "RIM" and "INV" elevations at all the DIs and SDMHs. It is not understood what this "SUMP" elevation is about. Eliminate the "SUMP" callouts in the next submittal.
22. In the grading plans, some detail sections referenced Sheet CD-09. However, Sheet CD-09 was not provided in the last submittal.
23. In Las Vegas Valley area, the conventional callout for Top of Curb elevation is TC. Change all the TBC callouts to TC in the next submittal.
24. On the grading plans, show and identify an existing storm drain system in *Crossbridge Drive* and label with pipe size and *City of Las Vegas* recorded plan number. Identify all pertinent existing drop inlets and with size information.
25. Provide a note on all grading plans: All onsite storm drain systems and the associated facilities are privately owned and to be privately maintain by the property owner.

26. Provide BMP design calculations and BMP facilities such as landscape swales or sand/oil interceptors for the proposed site parking lot and LIDs per *Section 1500* from the *Clark County Regional Flood Control District's Hydrologic Criteria and Drainage Design Manual*.
27. Grading Plans: Provide BMP locations, types and sizes for parking lot and LIDs.
28. Provide a note on all grading plans: 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.

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.

END OF REMARKS
HDR/AYS

T/R/S: T21S/R59E/03
AREA P-03