

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM			DATE: February 25, 2022
TO: Land Development Services Department of Building & Safety			FROM: Jennifer Shinn, P.E. Flood Control, Engr. Associate Department of Public Works
SUBJECT:	Drainage Study for: Axel at Sunstone		COPIES TO: Northland LLC and Lennar Homes
Cross Streets:	US 95 and Kyle Canyon Road		GCW Inc.
File Number:	F:\Depot\DSMemos\DS5499A.doc		Bart Anderson, P.E., DevCo
Parcel Number:	125-06-810-002		
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	9/23/2021	10/18/2021	Not Approved	\$400.00	4461754: \$400
2 nd Submittal	12/22/2021	12/30/2021	Not Approved	\$400.00	4579887: \$400
3 rd Submittal	2/8/2022	2/25/2022	See Comment Below	\$400.00	4640935: \$400
TOTAL FEES (LDDRS):				\$1200.00	----

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.

The following are comments pertaining to the subject site specific drainage study and grading plans:

1. The subject study assumes that O'Hare Road and the two entry roads (Trailblazer Falls Street and Aurora Fields Lane), including all drainage infrastructure, are constructed and in place. In addition, the subject study assumes the offsite flows from the US95 are being collected in an existing storm drain system per the Iron Mountain Update Study. Substantial completion of the drainage facilities associated with the above-mentioned projects is required prior to issuance of occupancy permits.
2. Address the following comments on Figure 5 Proposed Interim Condition with Section:
 - a. Re-verify the 100-Year Prorated Flow Rate Summary and reflect changes accordingly. For example, Subbasin 11 should be 7-cfs based on 3.98-acres times 1.74 cfs/acre. Also, recommend expanding flow rate to tenth to match prorated cfs.
 - b. Add concentration points. For example, CP1 should be added at downstream end of Subbasin 2 and shown it on the table as CP1 = Subbasin 1 + Subbasin 2. Add additional concentration points throughout the proposed project site.

- c. Check Subbasin boundary limit. For example, portion of Subbasin 5 should be included in Subbasin 7 because half street for Subbasin 5 drains to Subbasin 7. Check Subbasin 8, 9, and 10 and reflect changes accordingly.
 - d. Add corresponding Subbasin or concentration points to 100-Year Street Flow Summary. For example, add a note to Section 2 to states that flows are from CP1 or Subbasin 1 + Subbasin 2. Also, re-verify the Section flows used in the FlowMaster Calculation. Section 2 should be 8-cfs, not 4-cfs. Section 6 should be 20-cfs, not 4-cfs. Check finish floor elevations based on the new flow depth calculation.
 - e. Recommend using Subbasins for each drop inlet calculation to match street flow calculation instead of total acreage for each drop inlet. Also, consider half street capacity when calculating total flow draining to each drop inlet. Re-verify the drop inlet calculation basin on half street capacity. Provide an explanation on how flow impacting DI 3 and DI 2 are determined. For example, total acreage for DI 2 and DI 3 is 26.72-acres which is equal to 46.5-cfs, but he summary table shows 12-cfs + 33-cfs = 45-cfs. Please re-verify and reflect changes accordingly.
3. Add Public Drainage Easements to "Private Street Note".
 4. Improvement plan for Phase II is not included in the drainage study. Please submit Phase II improvement plan.
 5. The proposed 30-inch RCP connecting to the side of "DM2" drop inlet doesn't fit. The inter diameter of "DM2" drop inlet is 30-inch which doesn't accommodate thickness of 30-inch RCP. Are you using "CM2" or "DM2"? Please address comment from 2nd Submittal.
 6. Delete construction notes 17 and 18 from P sheets.
 7. Delete construction notes 20. It should note as "Public Drainage Easement to be privately maintained".
 8. For SDDI #2, what's TMH elevation? Is this grate elevation? TMH elevation is higher than TC elevations around the drop inlet. Please verify and reflect changes accordingly. Also, SDDI #1 has RIM elevation and others have TC elevations, please be consistent and use TC elevations.
 9. For Sections G/D3, A/D4 and B/D4, use generic numbers and delete lot numbers. Please note that Finish Floor elevation must be minimum of 8-inch above the upstream Flow line elevation. Also, the Lot 47 shows FG elevation of 59.11 at toward the rear gate and FG elevation of 58.43 at the Pad line which drains back to the house. Re-verify the lot grading.

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/JKS

T/R/S: T19/R60E/S6
AREA G-06