

<b>CITY OF LAS VEGAS</b>		<b>DATE:</b>
<b>INTER-OFFICE MEMORANDUM</b>		<b>August 23, 2022</b>
<b>TO:</b> Land Development Services Department of Building & Safety		<b>FROM:</b> Peter Jackson, CFM Senior Engineering Associate Department of Public Works
<b>SUBJECT:</b>	Drainage Study for:	<b>COPIES TO:</b>
<b>Skye Canyon North Arroyo Storm Drain</b>		Westwood Professional Services
<b>Cross Streets:</b>	Shaumber Rd & Skye Canyon Park Dr	Century Communities
<b>File Number:</b>	F:\Depot\DSMemos\DS05598A.doc	Bart Anderson, P.E., DevCo
<b>Parcel Number:</b>	126-12-515-101	
<b>Zoning Action:</b>		
<b>FEMA Flood Zone</b>	YES	NO <b>X</b>
<b>Proposed Storm Drain</b>	YES <b>X</b>	NO

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 <sup>st</sup> Submittal	7/27/2022	8/23/2022	See Comments Below	\$400.00	4882548: \$400
<b>TOTAL FEES (LDDRS):</b>				<b>\$400.00</b>	----

**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:
<b>X</b>	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 proposed construction of the 54" RCP storm drain mainline, east of Shaumber that is an extension of CLV#107V7512, shall be constructed in one phase with the North Arroyo Project. The construction of headwalls, access roads, and outlet structures shown as part of the Park Drainage Study (DS5595) is unnecessary and creates connection complications with construction for the North Arroyo. Construction of the park may occur concurrently the North Arroyo drainage improvements.
- Revise Exhibit E to reflect that the entire North Arroyo storm drain being constructed with this project.
- Revise PP-1 and PP-2 to reflect storm drain collection.
- No Building Permit will be issued for lots adjacent to the North Arroyo. The permits will be released upon substantial completion of the North Arroyo drainage facilities. Provide a drainage study update to incorporate the connection of the parcel improvements with the proposed North Arroyo drainage improvements.
- 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.

6. Coordinate with the Planning Department (Fred Solis) to determine the Common Element/Landscape/Trail improvements required with the project. These necessary plans need Planning Department approval prior to the Final Approval of the North Arroyo Storm Drain Improvement Plans.
7. 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.
8. Provide a 12-foot maintenance access road for access to each of the existing/proposed storm drain manholes.
9. **Exhibit E:** Provide the subbasin boundary lines for WARR3(a), WARR(b), WARR(c), and WARR(d).
10. Provide the referenced drainage easement computations and specific energy computations for Skye Canyon 2.08 & 2.09 Phase 2 to ensure containment of the flow.
11. Provide the referenced drainage easement computations and specific energy computations for Skye Canyon 5.01 & 5.03 to ensure containment of the flow.
12. Provide an extended lateral (SDDI#1, Facility 5.01L) that extends to the existing drainage easement and a specifically designed, modified CM2 drainage inlet or extend the concrete apron to the drainage easement and provide sufficient design information to confine the flow within the concrete section to collect the 100-year flow into the proposed inlet.
13. Provide an extended lateral (SDDI#2, Facility 2.08-L1) that extends to the existing drainage easement and a specifically designed, modified CM2 drainage inlet or extend the concrete apron to the drainage easement and provide sufficient design to confine the flow into the inlet.
14. SDDI 3 and SDDI 4 are 2.5' X 3.0' NDOT Type 2A's and the computations and exhibit say they are 2.5' X 2.0'. Review and revise accordingly.
15. Provide D-Load computations and justification for the class of the pipe proposed.
16. Revise WSPG table summaries to include a column showing the storm drain stationing following the improvement plans.
17. Provide a WSPG model for the lateral connecting Skye Canyon 2.10 and the mainline North Arroyo storm drain.
18. The Landscape Plan needs to show no trees within the 22' Maintenance Access (12-foot plus 5-foot shoulders on each side) cross-sections. Clearly show the 40-foot Public Drainage Easement on the Landscape Plans.
19. **Sheet PP-6:** Provide a transition structure between the proposed 66" RCP and the existing RCB structure.
20. **Sheet D-2:** Limit the use of NDOT Type 2A grates in areas with frequent walking. Instead use NDOT Type 2 grates to avoid potential impacts to development.
21. The existing 40-foot Public Drainage Easement to be Privately Maintained is shown per Recorded Final Map (File 160/Pg.72 of Plats). The mainline North Arroyo storm drain is in a Public Drainage Easement with the storm drain system to be publicly maintained. The surface Improvements within the North Arroyo are to be Privately Maintained and noted as such on the plans. Structures associated with the mainline, built in this study, and accepting offsite flow are also publicly maintained. However, laterals not collecting offsite flow (SDDI 3 & SDDI 4) are to be privately maintained and should be label as such on the improvement plans.

22. Indicate what is being removed and replaced within the improvements and provide structural details to indicate how it should be done. Structural plans for the storm drain improvements must be submitted for review. Provide a soils report, structural calculations and specifications, two wet stamped structural sets, and a grading plan to the Building Department for processing. The engineer must provide a copy of Building Department approval of the structures to Flood Control prior to final acceptance of the drainage study.

**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**  
PBJ/CAA

T/R/S: T19S/R59E/S12  
AREA F-12