CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM				DATE: June 7, 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: **Durango & Grand Montecito Multi-Family Residential**			**COPIES TO:** Taney Engineering
Cross Streets:	North side of the intersection of Grand Montecito Parkway & Durango Drive			LTRD Corporation / Green Tindall Design Group
File Number:	F:\Depot\DSMemos\DS5570A.doc			Bart Anderson, P.E., DevCo
Parcel Number:	125-29-512-015			
Zoning Action:	21-0764-SDR1; 21-0764-SUP1; 21-0764-SUP2; 21-0764-VAR1 & 21-0764-MOD1			
FEMA Flood Zone	YES	NO	**X**	
Proposed Storm Drain	YES	NO	**X**	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1st Submittal	5/18/2022	6/6/2022	See Comments Below	$400.00	4791956: $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 (**21-0764-SDR1; 21-0764-SUP1; 21-0764-SUP2; 21-0764-VAR1 & 21-0764-MOD1**) 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. Sites with a grade difference of 2 feet above or below existing are required to have approval from the *City 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 Planning approval with the next submittal.

3. **Figure 6 (Existing Condition)**: The flows at CP2 are less than CP1 which implies that some inlets are located between the two inlets for some flow interception. However, no inlets are shown on the basin map. Identify all the pertinent drop inlets on the map in the next submittal.

4. **Sheet MG (Master Grading Plan)**: The description of the site in *Chapter 4.2 (Interim Condition)* of the *Study* about *F Drive* did not make sense. The study stated that *F Drive* is a north-south street but in fact it is an east-west driveway entrance.

5. **Figure 7 (Interim Condition)**: *Chapter 4.2 (Interim Condition)* of the *Study* proposed new inlets and the removal of some drop inlets. However, no storm facilities have been shown on the last submittal.

   The engineer shall consider using full size sheet to clearly show and identify all existing and proposed drainage facilities instead of the small size map as submitted which were missing all the most relevant features.

6. In all drainage condition maps, cross section summary for *Durango Drive* was missing. Provide the summary such as Q_{10}/Q_{100}, flow depths and flow velocities for *Durango Drive* in the next submittal.

7. The flows used in the subject drainage condition maps, for example, CP1 (43.6cfs/99cfs) in **Figure 6** and **Figure 7** do not match the referenced FIG. 7 in the *Centennial Hills Professional Center*'s CP3 at 46.9cfs/111.3cfs. Address and resolve in the next submittal.

8. The project proposed to replace a 40'-long drop inlet and a couple 20'-long drop inlets in *Grand Montecito Parkway* and replace with a 5'x58' trench drain at the entrance of a new driveway. The trench drain is unacceptable to the **City** for it'll cause maintenance and repair issue down the road.

9. The reviewer saw that the inlets in question can be replaced on both sides of the proposed driveway. As long as the number of inlets and their total length matches the existing one to be removed, the whole storm drain system remains intact. Review and revise in the next submittal.

10. It appears that *Grand Montecito Parkway* at the new driveway (A-Drive) is a vertical curve, ie, a low point at the middle of the entrance. Provide a NDOT Type 2 inlet at the low point to perpetuate nuisance flow.

11. **Sheet MG** and pertinent Grading Plans: Explain what those rectangular blocks are along the west and north boundary of the proposed development in the next submittal. Are they storage buildings or covered parking stalls?

12. Address whether any overflow paths have been provided in the courtyard areas in case the onsite drop inlets are totally clogged.

13. **Sheet G1**: Per the entrance F-Drive grading, it appears that there is no hump in the driveway, ie, the subject development accepts the offsite flow from the west. Is this the proposed drainage design? Why not provide a hump to flood protect the onsite development?

14. **Sheet G2**: Provide connection detail for a proposed 12"-onsite storm drain tying to the back of an existing drop inlet in *Grand Montecito Parkway*.

15. **Sheet G4** and **Sheet G5**: The proposed finished floor is lower than the adjacent *Durango Drive*. Revise *Detail Section L/GD1* to provide a minimum of 2 courses of solid grouted wall above the adjacent finished grade.

16. **Sheet G5:** Provide an additional storm drain manhole upstream of SDMH #2 so as to clearly distinguish between public and private storm drain.

17. **Sheet GD1**: **Detail Section R**: Since the proposed finished floor is lower than the adjacent sidewalk, solid grout two courses minimum above the adjacent sidewalk.

18. *City of Las Vegas* does not allow HDPE pipe in public right-of-ways or public drainage easements. Note that *City of Las Vegas* only allows the use of HDPE storm drain pipes for privately owned and privately maintained storm drain systems which serve and are located exclusively on private properties. Any proposed HDPE storm drain pipes must also meet all design criteria established by the *Clark County Regional Flood Control District* and must be installed per *Clark County Regional Transportation Commission Uniform Standard Drawings and Specifications*.

19. The overall parking lot improvement area is larger than 1 acre. Per ***Section 1500*** of the *Clark County Regional Flood Control District's Hydrologic Criteria and Drainage Design Manual*, the subject improvements must provide for Low Impact Development (LID) measures. Review and address the issue in the next submittal.

20. Provide a note on the grading plan: All Onsite Storm Drains and the associated storm facilities are Privately Owned and to be Privately Maintained by the property owner".

21. Provide a note on all grading plans (Standard Note No. 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.

22. 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*).

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
AYS

T/R/S: T19S/R60E/29
AREA G-29