



03/08/23

HYDROLOGIC CRITERIA AND DRAINAGE MANUAL
DRAINAGE STUDY INFORMATION FORM

Name of Development: Summerlin Village 26 Parcel L Date: March 2023

Location of Development: a) Descriptive (Cross Streets) North/South: Revernce Pkwy.
 East/West: Lake Mead Blvd.

b) Section: 14 Township: 20S Range: 59E

c) APN : 137-14-715-038

Name of Owner: Owner: P N II INC ; Developer: Pulte Homes

Telephone No.: (702) 914-4836 Fax No.: (702) 914-3100 E-Mail Address: brenin.anderson@pultegroup.com

Address: 7555 S. Tenaya Way #200, Las Vegas, NV 89113

Contact Person-Name: Lee Gong, P.E Telephone No.: (702) 804-2000

* E-Mail Address: LGong@gcwengineering.com Fax No.: (702) 804-2134

Firm: GCW, Inc.

Address: 1555 S. Rainbow Blvd. Las Vegas, NV 89146

Type of Land Development/Land Disturbance Process:

<input type="checkbox"/>	Rezoning	<input checked="" type="checkbox"/>	Subdivision Map	<input type="checkbox"/>	Clearing and Grading Only
<input type="checkbox"/>	Parcel Map	<input type="checkbox"/>	Planned Unit Development	<input type="checkbox"/>	Other (Please specify below)
<input type="checkbox"/>	Large Parcel Map	<input type="checkbox"/>	Building Permit	<input type="checkbox"/>	

1. Total Owned Land Area: At Site: +/- 15.69 acres Being Developed/Disturbed: +/- 15.69 acres

2. Is a portion or all of the subject property located in a designated FEMA Flood Hazard Area? Yes** No

3. Is the property bordered or crossed by an existing or proposed Clark County Regional Flood Control District Master Planned Facility? Yes** No

4. Proposed type of development (Residential, Commercial, Etc.): Residential.

5. Approximate upstream land area which drains to the subject site: +/- 0 acres

6. Has the site drainage been evaluated in the past? YES NO If yes, please identify documentation: MDS for Summerlin Village 26 Reverence, GCW, Inc 2015.

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: The project site will discharge notheast towards a 48" RCP and into a 20'X7.5' Concrete Channel.

8. Briefly describe your proposed schedule for the subject project: The client intends to start construction as soon as practical. Any expediting of this process is appreciated.



03/08/23

Engineer's Seal

Submit this form as part of the required drainage study to the local entity which has jurisdiction over the subject property. This form may provide sufficient information to serve as the Conceptual Drainage Study.

***New Required Field**

****Review and concurrence of the Clark County Regional Flood Control District is required.**

Revision	Date

Local Entity File No. _____

REFERENCE:

STANDARD FORM 1

764-204-023

March 8, 2023

Albert Sung, P.E.
City of Las Vegas, Public Works
333 N. Rancho Drive, 7th Floor
Las Vegas, NV 89106

Re: Addendum #1 to Update #2 to the Technical Drain age Study for Summerlin Village 26 Parcel L

Dear Mr. Sung,

This letter is to certify that all documents provided with the electronic submittal (CD) match the hard copy submittal of the study.

Cordially,

GCW, INC.

Lee Gong PhD, P.E, CFM
Flood Control Division



03/08/23





764-204-023

March 8, 2023

Re: 1st Response to City of Las Vegas Comments on Update #2 to the Technical Drainage Study for Summerlin Village 26 Parcel L (DS5533E)

This report addresses the City of Las Vegas review comments dated March 1, 2023 regarding the project in its entirety. Below are individual responses to each comment included in the review letter.

Comment 1:

Figure 5A (Interim Condition Drainage Map): Do not show Phase 2 features such as street alignments and the lot lines as they are mass graded only.

Response:

Figure 5A has been revised accordingly.

Comment 2:

The Phase 1 plans shall include only the improved Phase 1 development and the mass graded Phase 2 features. Do not show lot lines and street alignments in Phase 2 during the Phase 1 interim improvements.

Response:

The plans have been revised accordingly.

If you have any questions or require additional information, please do not hesitate to contact GCW at (702) 804-2000.

Respectfully,

GCW, INC.

Lee Gong PhD, P.E, CFM
Flood Control Division

APPENDIX A

Issued Comment Letter

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: March 1, 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:
Summerlin Village 26 - Parcel L – Update #2		GCW
Cross Streets:	Reverence Pkwy and Lake Mead Blvd.	PN II INC and Pulte Homes
File Number:	F:\Depot\DSMemos\DS5533E.doc	Bart Anderson, P.E., DevCo
Parcel Number:	137-14-715-038	CCRFCD
Zoning Action:	21-0615-TMP1; 21-0615-MOD1 & 21-0615-SCD1 to 21-0615-SCD3	
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	12/16/2021	1/5/2022	Not Approved	\$400.00	4575513: \$400
2 nd Submittal	3/8/2022	3/29/2022	Not Approved	\$400.00	4680454: \$400
3 rd Submittal	4/5/2022	4/20/2022	Conditional Approval	\$400.00	4711380: \$400
4 th Submittal & CCRFCD	6/2/2022 & 5/26/2022	6/16/2022	Concurrence Recv'd	\$100.00	4814357: \$100
5 th Submittal	2/14/2023	3/1/2023	See Comments Below	\$100.00	5144519: \$100
TOTAL FEES (LDDRS):				\$1,400.00	----

REMARKS:

5th Submittal: Update #2 to address an interim Phase 1 Development

4th Submittal: Update #1

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. Figure 5A (Interim Condition Drainage Map): Do not show Phase 2 features such as street alignments and the lot lines as they are mass graded only.
2. The Phase 1 plans shall include only the improved Phase 1 development and the mass graded Phase 2 features. Do not show lot lines and street alignments in Phase 2 during the Phase 1 interim improvements.

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, conditional acceptance 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.

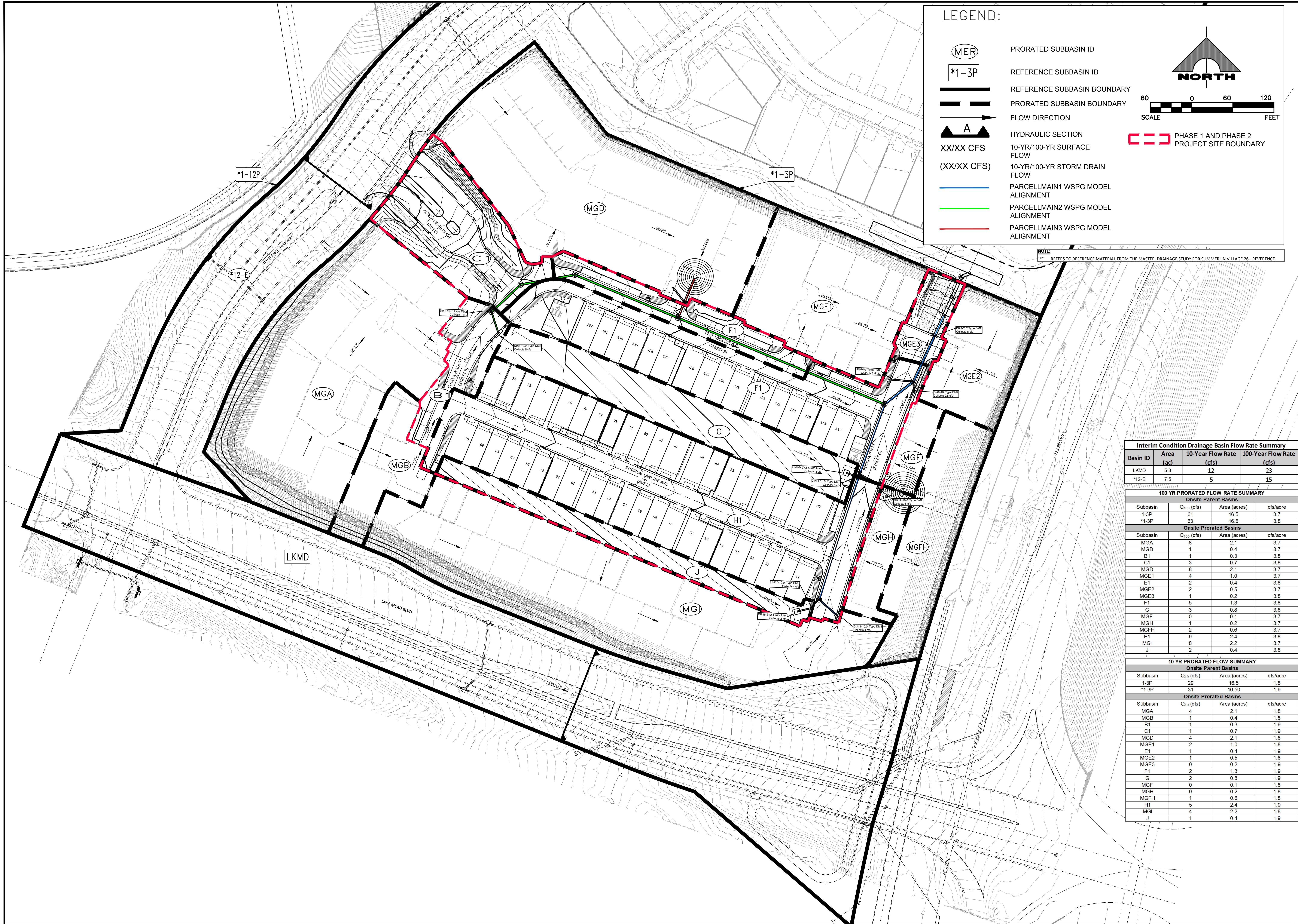
NOTE: Please be advised that all land surface area disturbances over 1 acre or any area adjacent to a water way must submit to the Nevada Division of Environmental Protection a "Notice of Intent" to discharge that certifies a stormwater pollution prevention plan has been developed and is maintained on 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: T20S/R59E/14
AREA K-14

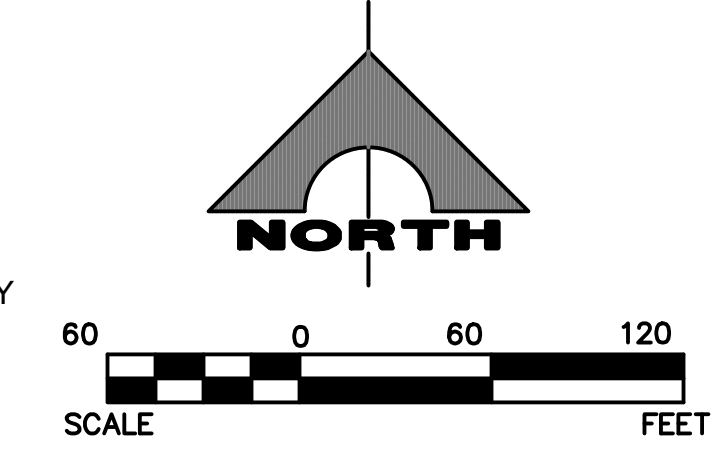
APPENDIX B

Drainage Figures



LEGEND:

- MER PRORATED SUBBASIN ID
- *1-3P REFERENCE SUBBASIN ID
- REFERENCE SUBBASIN BOUNDARY
- PRORATED SUBBASIN BOUNDARY
- FLOW DIRECTION
- HYDRAULIC SECTION
- XX/XX CFS 10-YR/100-YR SURFACE FLOW
- (XX/XX CFS) 10-YR/100-YR STORM DRAIN FLOW
- PARCELLMAIN1 WSPG MODEL ALIGNMENT
- PARCELLMAIN2 WSPG MODEL ALIGNMENT
- PARCELLMAIN3 WSPG MODEL ALIGNMENT



 PHASE 1 AND PHASE 2 PROJECT SITE BOUNDARY

NOTE: *** REFERS TO REFERENCE MATERIAL FROM THE MASTER DRAINAGE STUDY FOR SUMMERLIN VILLAGE 26 - REVERENCE

Interim Condition Drainage Basin Flow Rate Summary			
Basin ID	Area (ac)	10-Year Flow Rate (cfs)	100-Year Flow Rate (cfs)
LKMD	5.3	12	23
*12-E	7.5	5	15

100 YR PRORATED FLOW RATE SUMMARY			
Onsite Parent Basins			
Subbasin	Q ₁₀₀ (cfs)	Area (acres)	cfs/acre
1-3P	81	16.5	3.7
*1-3P	63	16.5	3.8

Onsite Prorated Basins			
Subbasin	Q ₁₀₀ (cfs)	Area (acres)	cfs/acre
MGA	8	2.1	3.7
MGB	1	0.4	3.7
B1	1	0.3	3.8
C1	3	0.7	3.8
MGD	8	2.1	3.7
MGE1	4	1.0	3.7
E1	2	0.4	3.8
MGE2	2	0.5	3.7
MGE3	1	0.2	3.8
F1	5	1.3	3.8
G	3	0.8	3.8
MGF	0	0.1	3.7
MGH	1	0.2	3.7
MGFH	2	0.6	3.7
H1	9	2.4	3.8
MGI	8	2.2	3.7
J	2	0.4	3.8

10 YR PRORATED FLOW SUMMARY			
Onsite Parent Basins			
Subbasin	Q ₁₀ (cfs)	Area (acres)	cfs/acre
1-3P	29	16.5	1.8
*1-3P	31	16.50	1.9

Onsite Prorated Basins			
Subbasin	Q ₁₀ (cfs)	Area (acres)	cfs/acre
MGA	4	2.1	1.8
MGB	1	0.4	1.8
B1	1	0.3	1.9
C1	1	0.7	1.9
MGD	4	2.1	1.8
MGE1	2	1.0	1.8
E1	1	0.4	1.9
MGE2	1	0.5	1.8
MGE3	0	0.2	1.9
F1	2	1.3	1.9
G	2	0.8	1.9
MGF	0	0.1	1.8
MGH	0	0.2	1.8
MGFH	1	0.6	1.8
H1	5	2.4	1.9
MGI	4	2.2	1.8
J	1	0.4	1.9

PROJECT NO.
764-204-023

DESIGN:
DRAWN:
CHECK:
PLOT DATE: 03-08-23
PLOT TIME: 12:00:46

1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gowngengineering.com

PULTE HOMES
SUMMERLIN-VILLAGE 26-PARCEL L PHASE 1
INTERIM CONDITION DRAINAGE MAP

DRAWING
FIGURE 5A
1 OF 1 SHTS