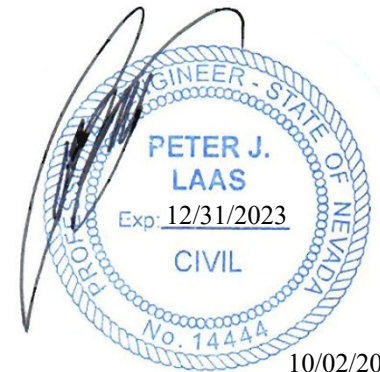


ADDENDUM #1 TO THE  
TECHNICAL DRAINAGE STUDY  
FOR  
CHARLESTON – MOHAWK

DS-5704  
W.O. # JG-2302  
October 2, 2023

Prepared for:

Charmo LLC  
3 Mohansic Road  
Henderson, NV 89052  
Phone : (702) 294-1037  
Fax : (702) 294-1038  
Email : Jason@marbleexpresslv.com



10/02/2023

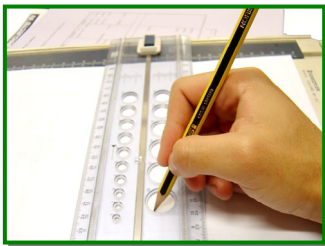
Prepared by:

***Impulse***

*Civil Engineering & Planning*

7485 West Azure Avenue, Suite 226  
Las Vegas, NV 89130  
Phone: 702-815-0720 · Fax: 702-478-8535

$$I = \int F \cdot dt$$



Civil Engineering



Land Planning



Flood Control



Utilities

October 2, 2023


City Las Vegas  
Public Works – Flood Control  
495 S Main Street  
Las Vegas, NV 89101

**Re: Addendum #1 to the  
CHARLESTON - MOHAWK  
Technical Drainage Study DS-5704**

Submitted for your approval are two copies of the **Addendum #1 to the Technical Drainage Study for Charleston - Mohawk** a proposed 1.59 acre commercial development, being parcel APNs: 138-36-803-001, 138-36-803-002, 138-36-803-015, and 138-36-803-016. The site is completely within a FEMA Special Flood Hazard Area Zone X as shown on Community Panel Number 32003C2165D, and is adjacent to a proposed Clark County Regional Flood Control District (CCRFCD) Master Planned Facilities, according to the CCRFCD Master Plan Update, Figure F-29. CCRFCD concurrence should be required.

If you have any questions, please call me at (702) 308-7115.

Sincerely,  
IMPULSE CIVIL ENGINEERING



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Peter J. Laas, P.E.  
Principal

$$I = \int F \cdot dt$$

## HYDROLOGIC CRITERIA AND DRAINAGE MANUAL

# DRAINAGE STUDY INFORMATION FORM

Name of Development: Charleston - Mohawk Date: 10/02/2023

Location of Development: a) Descriptive (Cross Streets) North/South: Mohawk Street  
 East/West: Charleston Boulevard

b) Section: 36 Township: 20 S Range: 60 E

c) APN : 138-36-803-001, 138-36-803-002, 138-36-803-015, & 138-36-803-016

Name of Owner: Charmo LLC

Telephone No.: (702) 294-1037 Fax No.: (702) 294-1038 E-Mail Address: Jason@marbleexpresslv.com

Address: 4133 West Patrick Lane, Las Vegas, NV 89118

Contact Person-Name: Peter Laas Telephone No.: 702-815-0720

\* E-Mail Address: plaas@ImpulseCivil.net Fax No.: 702-478-8535

Firm: Impulse Civil Engineering

Address: 7485 West Azure Avenue, Suite 226, Las Vegas NV 89130

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 checked="" type="checkbox"/>	Building Permit		

1. Total Owned Land Area: At Site: 1.84 AC+- Being Developed/Disturbed: 1.84 AC+-

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

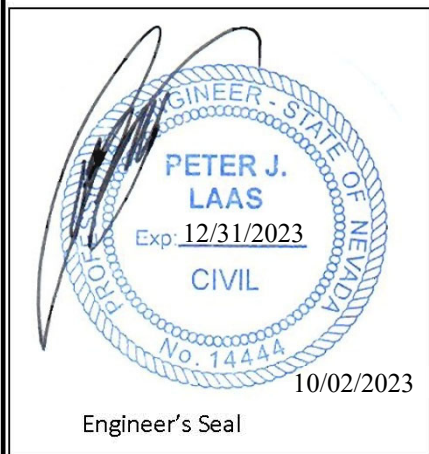
4. Proposed type of development (Residential, Commercial, Etc.): Commercial

5. Approximate upstream land area which drains to the subject site: 171 ACRES

6. Has the site drainage been evaluated in the past?  YES  NO If yes, please identify documentation: Yes, this was part of the Charleston-Mohawk Medical study DS-5015

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: A portion of the site will drain to Charleston Boulevard and a portion will drain to Alpine Place

8. Briefly describe your proposed schedule for the subject project: As soon as possible



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.**

DS-5704 _____ Local Entity File No.	Revision	Date

REFERENCE: 
$$I = \int F \cdot dt$$

STANDARD FORM 1

The format for this Addendum is as follows – the City of Las Vegas comment is listed first in bold and then followed by the response. A copy of the City of Las Vegas Comment letter is included at the rear of this study.

## **RESPONSE TO COMMENTS**

**Comment 1. Per Item #18 of 23-0088-SDR1, quote: “Coordinate with the Environmental Compliance & Enforcement staff of the Department of Public Works to locate any required grease interceptor and sand/oil interceptors in acceptable locations prior to submittal of sewer-related plans. Comply with the recommendations and requirements of the Environmental Compliance & Enforcement staff prior to issuance of permits. The team may be contacted at 702-229-6594 or emailed at ece@lasvegasnevada.gov.” – end quote.**

Response 1. We will coordinate with Environmental Compliance and Enforcement staff once we know the locations of the sand/oil interceptors. This typically occurs once the plans are submitted to the City.

**Comment 2. Per Item #20 of 23-0088-SDR1, quote: “Contact the City Engineer’s Office at 702-229-6272 to coordinate the development of this project with the <Meadows-Charleston Storm Drain> project and any other public improvement projects adjacent to this site. Comply with the recommendations of the City Engineer.” – end quote.**

Response 2. We are coordinating with City Engineer on the Meadows-Charleston Storm Drain project. We spoke with Randy McConnell (229-2186) and he provided the latest set of plans.

**Comment 3. Per Item #21 of 23-0088-SDR1, quote: “Construct a median in Charleston Boulevard to limit the driveway on Charleston Boulevard to rights-in / rights-out and limit the Mohawk Street access to rights-in / rights-out and lefts-in, unless otherwise allowed by the City Traffic Engineer. Driveway geometry may change based on these access requirements. Compliance with this condition may be modified through coordination with the <Meadows-Charleston Storm Drain> project.” – end quote.**

Response 3. The island provided with the Meadows-Charleston Storm Drain project will accomplish this requirement.

**Comment 4. The site is adjacent to or crosses an existing or proposed Clark County Regional Flood Control District (CCRFCD) master planned facility. Therefore, CCRFCD concurrence is required prior to final approval of the drainage study.**

Response 4. We understand this comment and will submit a copy of the study and all addenda to CCRFCD for concurrence once the City of Las Vegas conditionally accept the study.

**Comment 5. The project site consists of four parcels. Is there going to be a reversionary map combining the parcels to one lot? Address in the next submittal.**

Response 5. We will submit a merger-resubdivision commercial final map concurrently with the improvement plans review.

**Comment 6. Existing Condition Basin Map (Figure 3) and Interim Condition Basin Map (Figure 4): There are blank boxes within the onsite basins in both basin maps. Label the boxes with pertinent names and information in the next submittal.**

Response 6. We have corrected the figures.

**Comment 7. Sheet 3 of 8: Detail Section M/3 shows an existing retaining wall at the back of sidewalk in Charleston Boulevard. However, the wall is not reflected on the grading plan. Review and revise accordingly.**

Response 7. We have added the wall to the grading plan.

**Comment 8. Sheet 3 of 8: Detail Section N/3 shows a berm at the back of sidewalk in Mohawk Street for onsite flood protection. However, the berm is not shown on the grading plan. Revise the plan to match the detail sheet.**

Response 8. There is no discussion in the report about the need for the berm along Mohawk Street and a proposed berm becomes problematic with ADA access and proposed LVVWD facilities in Mohawk Street so we have corrected the detail to remove the berm.

**Comment 9. Identify an existing storm drain in Charleston Boulevard and label with size and City of Las Vegas recorded drawing number on the grading plan.**

Response 9. We have added the existing storm drain in Charleston Boulevard and labeled the pipe as 18" RCP per 107-V853.

**Comment 10. Provide preliminary plan and profile sheets for all proposed perimeter streets. Plan and profile sheets must show existing and proposed grade at centerline and the adjacent top of curbs. These plans are necessary to determine the effect of the proposed development on the adjacent properties.**

Response 10. Plan and profiles are not required because the surrounding streets are existing and we are only proposing water hot taps and a single sewer connection.

**Comment 11. Provide a note on all grading plans: Property Owner is responsible to maintain the best management practices such as but not limited to the removal of accumulated sediment and debris and care of the vegetation.**

Response 11. We have added the note to the grading plan as General Note #11 located below the Stormwater Management Notes and above the construction notes.

**Comment 12. Sheet 5 of 8 (Grading Plan): Replace the “Stormwater Management Notes” block with the City of Las Vegas adopted version.**

Response 12. We have replaced the Stormwater Management Notes with the current version.

We feel that we have completely addressed all of the concerns expressed in the comment letter generated from the review of the initial study. If you have any questions or require additional information, please do not hesitate to call me at (702) 308-7115.

Sincerely,  
IMPULSE CIVIL ENGINEERING



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Peter J. Laas, P.E.  
Principal

<b>CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM</b>			<b>DATE:</b> September 28, 2023
<b>TO:</b> Land Development Services Department of Building & Safety			<b>FROM:</b> Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
<b>SUBJECT:</b>	Drainage Study for: <b>Charleston - Mohawk</b>		<b>COPIES TO:</b> Impulse Civil Engineering
<b>Cross Streets:</b>	NEC of Charleston Blvd. & Mohawk Street		Charmo LLC
<b>File Number:</b>	F:\Depot\DSMemos\DS5704A.doc		Bart Anderson, P.E., DevCo
<b>Parcel Number:</b>	138-36-803-001; 138-36-803-002; 138-36-803-015 & 138-36-803-016		CCRFCD
<b>Zoning Action:</b>	23-0088-SDR1; 23-0088-SUP1 to -SUP4; 23-0088-VAR1 & 23-0088-VAR2		
<b>FEMA Flood Zone</b>	YES	NO <b>X</b>	
<b>Proposed Storm Drain</b>	YES	NO <b>X</b>	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 <sup>st</sup> Submittal	9/21/2023	9/28/2023	See Comments Below	\$400.00	5443882: \$400
<b>TOTAL FEES (LDDRS):</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.

- Per Item #18 of **23-0088-SDR1**, quote: "Coordinate with the *Environmental Compliance & Enforcement* staff of the Department of Public Works to locate any required grease interceptor and sand/oil interceptors in acceptable locations prior to submittal of sewer-related plans. Comply with the recommendations and requirements of the Environmental Compliance & Enforcement staff prior to issuance of permits. The team may be contacted at 702-229-6594 or emailed at [ece@lasvegasnevada.gov](mailto:ece@lasvegasnevada.gov)." – end quote.
- Per Item #20 of **23-0088-SDR1**, quote: "Contact the *City Engineer's Office* at 702-229-6272 to coordinate the development of this project with the <Meadows-Charleston Storm Drain> project and any other public improvement projects adjacent to this site. Comply with the recommendations of the *City Engineer*." – end quote.
- Per Item #21 of **23-0088-SDR1**, quote: "Construct a median in Charleston Boulevard to limit the driveway on Charleston Boulevard to rights-in / rights-out and limit the Mohawk Street access to rights-in / rights-out and lefts-in, unless otherwise allowed by the City Traffic Engineer. Driveway geometry may change based on these access requirements. Compliance with this condition may be modified through coordination with the <Meadows-Charleston Storm Drain> project." – end quote.

4. The site is adjacent to or crosses an existing or proposed *Clark County Regional Flood Control District* (CCRFCD) master planned facility. Therefore, CCRFCD concurrence is required prior to final approval of the drainage study.

Please note that effective March 15, 2019, the CCRFCD adopted new requirements for drainage study concurrence submittal. Follow the link below for specific guidance.

<http://gustfront.ccrfcd.org/LandDev/LandDev.aspx>

5. The project site consists of four parcels. Is there going to be a reversionary map combining the parcels to one lot? Address in the next submittal.
6. **Existing Condition Basin Map (Figure 3)** and **Interim Condition Basin Map (Figure 4)**: There are blank boxes within the onsite basins in both basin maps. Label the boxes with pertinent names and information in the next submittal.
7. **Sheet 3 of 8: Detail Section M/3** shows an existing retaining wall at the back of sidewalk in *Charleston Boulevard*. However, the wall is not reflected on the grading plan. Review and revise accordingly.
8. **Sheet 3 of 8: Detail Section N/3** shows a berm at the back of sidewalk in *Mohawk Street* for onsite flood protection. However, the berm is not shown on the grading plan. Revise the plan to match the detail sheet.
9. Identify an existing storm drain in *Charleston Boulevard* and label with size and *City of Las Vegas* recorded drawing number on the grading plan.
10. Provide preliminary plan and profile sheets for all proposed perimeter streets. Plan and profile sheets must show existing and proposed grade at centerline and the adjacent top of curbs. These plans are necessary to determine the effect of the proposed development on the adjacent properties.
11. Provide a note on all grading plans: Property Owner is responsible to maintain the best management practices such as but not limited to the removal of accumulated sediment and debris and care of the vegetation.
12. **Sheet 5 of 8 (Grading Plan)**: Replace the “Stormwater Management Notes” block with the *City of Las Vegas* adopted version.

**\*\*\* The City of Las Vegas Flood Control is standardizing the file naming of drainage studies and plans during the digitizing process. When saving the project files in the CD or thumb drive, please follow the system below:**

**If drainage study only contains one combined file, use the following naming convention in Document Title:**

1<sup>st</sup> Submittal DS and Plans (for first and original submittal);

2<sup>nd</sup> Submittal DS and Plans (for second submittal (addendum #1)) etc.

**If drainage study contains multiple files, use the following naming convention in Document Title:**

1<sup>st</sup> Submittal DS (for the report of the drainage study)

1<sup>st</sup> Submittal Plan 1 (could be the drainage condition maps)

1<sup>st</sup> Submittal Plan 2 (could be the improvement plans) etc.

**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.

**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, final approval 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.

**END OF REMARKS**

AYS

T/R/S: T20S/R60E/36

AREA L-36