

TECHNICAL DRAINAGE STUDY

FOR

JENSEN & HELENA AREA 6

SINGLE FAMILY RESIDENTIAL

LMT-18-001

CITY OF LAS VEGAS

September 2021

Prepared for:

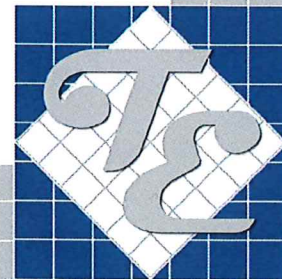
Kris Templeton
Lone Mountain Estates LLC
3311 S. Rainbow Blvd, Ste 205
Las Vegas, NV 89146
(702) 873-6700 Ext 123



Engineer's Seal

9-7-2021

TANEY & ENGINEERING



6030 S. Jones Blvd.
Las Vegas, NV 89118
Phone (702) 362-8844
Fax (702) 362-5233

HYDROLOGIC CRITERIA AND DRAINAGE MANUAL

DRAINAGE STUDY INFORMATION FORM

Name of Development: Jensen & Helena Area 6 Date: September 7, 2021

Location of Development: a) Descriptive (Cross Streets) North/South: N Grand Canyon St

East/West: Helena Ave

b) Section: 6 Township: 20S Range: 60E

c) APN: 138-06-701-022

Name of Owner: Lone Mountain Estates LLC

Telephone No.: (702) 873-6700 Ext. 123 Fax No.: N/A E-Mail Address: kt@ktri.biz

Address: 3311 S. Rainbow Blvd. Ste 205, Las Vegas, NV 89146

Contact Person-Name: Lee Gong, Ph.D, P.E., CFM Telephone No.: (702) 362-8844

* E-Mail Address: LeeG@taneycorp.com Fax No.: (702) 362-5233

Firm: Taney Engineering

Address: 6030 S. Jones, Suite 100, Las Vegas NV. 89118

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	

1. Total Owned Land Area: At Site: 4.97 +/- acres Being Developed/Disturbed: 4.97 +/- 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

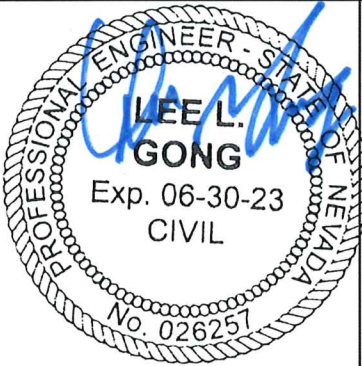
4. Proposed type of development (Residential, Commercial, Etc.): Residential

5. Approximate upstream land area which drains to the subject site: 133.01 +/- acres

6. Has the site drainage been evaluated in the past? YES NO If yes, please identify documentation: _____

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: The site will discharge to an adjacent undeveloped parcel to the east matching the existing drainage pattern.

8. Briefly describe your proposed schedule for the subject project: A.S.A.P



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



Job No. LMT-18-001

Date: September 7, 2021

JURISDICTION:

Layne Weber, P.E., CFM
Principal Engineer
Department of Public Works
Clark County

CCPW Concurrence Comments to the Technical Drainage Study for Jensen and Helena – Area 6

Dear Mr. Weber:

Taney Engineering is submitting CCPW Concurrence in response to comments and questions on the Technical Drainage Study for **Jensen and Helena Area 6**. A response to each comment from CCPW review memorandum dated on July 22, 2021 is provided below.

Comment 1: Previously approved drainage studies for APN 138-06-701-005 just east of the subject parcel show flows in excess of 300 cfs being diverted to Helena. As the anticipated flow along the west boundary of the downstream site exceeds the calculated outlet flow from the subject site by more than 70 cfs, adding 4 cfs to the calculated flow due to Reasonable Use can be considered acceptable under Nevada Drainage Law. Approved flows can be found under PW03-23355 and PW 05-12135.

Acknowledged. The proposed storm drain system has been re-designed. The bleeder pipe has been removed and the offsite runoff is directed to the adjacent parcel per the issued comment.

Comment 2: The proposed bleeder line should be removed due to the approved information from comment #1. Any proposed facilities within Clark County jurisdiction would require typical notes and signature blocks. If the bleeder line is removed, there will be no work within Clark County jurisdiction, and those notes and signature blocks would not be required.

Acknowledged. The proposed storm drain system has been re-designed. The bleeder pipe has been removed and the offsite runoff is directed to the adjacent parcel per the issued comment.

Comment 3: Grading proposed outside of the project boundary and on private property will require notarized, written permission from the offsite owner and must be included with the next submittal. Note private



property owner's including Clark County Aviation, School District, Parks and Recreation, Public Works, BLM, Water District, etc. may not grant permission and this should be resolved without delay as the site design may change. If the bleeder line is removed per comment #2, permission to grade would not be required.

Acknowledged. The proposed storm drain system has been re-designed per the issued comment. With removal of the bleeder pipe, permission to grade will not be required.

Comment 4: If for some reason the bleeder line remains, the minimum accepted RCP size accepted within Clark County right-of-way is 18"; otherwise, a License and Maintenance Agreement would need to be submitted and approved. Additionally, a structural design would need to be submitted for the proposed custom flared end section.

The proposed storm drain system has been re-designed per the issued comment. With removal of the bleeder pipe, structural details will not be required for the proposed custom flared end section.

Comment 5: The grading plan has been redlined. Provide highlighter marks and responses on plans to show the issues were addressed.

We have highlighted and written the responses, per your request.

A copy of the issued comments has been provided directly following this letter. If you need any additional information, please do not hesitate to call our office.

Sincerely,

Gaurang Mistry
TANEY ENGINEERING



Email Coordination

Gaurang Mistry

From: Gaurang Mistry
Sent: Wednesday, August 25, 2021 8:04 AM
To: Jennifer Shinn
Subject: RE: Jensen and Helena Area 6 (DS5412B) - Clark County Concurrence

Good morning Ms. Shinn!

Thanks for getting back. We'll have the plans and study updated and sent along with the county concurrence for the records. Have a wonderful rest of your week!!

Best,



Gaurang Mistry, Hydrologist I

Taney Engineering | 6030 S. Jones Blvd | Las Vegas, NV 89118 | USA

T 702-362-8844 | GaurangM@taneycorp.com | TaneyCorp.com | [Get to Know Us!](#)



Please consider the environment before printing this e-mail.

From: Jennifer Shinn <jshinn@LasVegasNevada.GOV>

Sent: Wednesday, August 25, 2021 7:55 AM

To: Gaurang Mistry <gaurangm@taneycorp.com>

Subject: RE: Jensen and Helena Area 6 (DS5412B) - Clark County Concurrence

[EXTERNAL E-MAIL]

Good morning Gaurang,

The omission of the bleeder line is acceptable to CLV. Please submit a copy of your Clark County submittal (along with County concurrence) to us so we may update our records.

Thank you,

Jennifer Shinn

Engineering Associate

Department of Public Works | City Engineering Division

Phone: (702) 229-6131

495 S. Main Street, 1st Floor | Las Vegas, NV 89101



lasvegasnevada.gov



Your opinion is important! Click [here](#) to take a short survey.

From: Gaurang Mistry <gaurangm@taneycorp.com>
Sent: Wednesday, August 18, 2021 9:12 AM
To: Jennifer Shinn <jshinn@LasVegasNevada.GOV>
Subject: RE: Jensen and Helena Area 6 (DS5412B) - Clark County Concurrence

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Thank you very much for getting back! I will forward along the information to the clients. Have a wonderful rest of your week!

Best,



Gaurang Mistry, Hydrologist I
Taney Engineering | 6030 S. Jones Blvd | Las Vegas, NV 89118 | USA
T 702-362-8844 | GaurangM@taneycorp.com | TaneyCorp.com | [Get to Know Us!](#)

Please consider the environment before printing this e-mail.

From: Jennifer Shinn <jshinn@LasVegasNevada.GOV>

Sent: Wednesday, August 18, 2021 9:04 AM
To: Gaurang Mistry <gaurangm@taneycorp.com>
Subject: RE: Jensen and Helena Area 6 (DS5412B) - Clark County Concurrence

[EXTERNAL E-MAIL]

Hi Gaurang,

I will be reviewing the info you sent me next week Monday, 8/23 and will let you know our determination.

Thank you,

Jennifer Shinn

Engineering Associate
Department of Public Works | City Engineering Division

Phone: (702) 229-6131

495 S. Main Street, 1st Floor | Las Vegas, NV 89101



lasvegasnevada.gov



Your opinion is important! Click [here](#) to take a short survey.

From: Gaurang Mistry <gaurangm@taneycorp.com>
Sent: Tuesday, August 17, 2021 3:23 PM

To: Jennifer Shinn <jshinn@LasVegasNevada.GOV>

Subject: RE: Jensen and Helena Area 6 (DS5412B) - Clark County Concurrence

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I hope you are doing well! I wanted to follow up regarding the TDS concurrence for Jensen and Helena Area 6. The client wanted to know if you did get a chance to review the comments issued by Clark County for the onsite storm drain system. Please let me know if any additional information would be required or would like to discuss this further. Thanks again!

Best,



Gaurang Mistry, Hydrologist I

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Please consider the environment before printing this e-mail.

From: Gaurang Mistry

Sent: Wednesday, August 4, 2021 2:22 PM

To: Jennifer Shinn <jshinn@LasVegasNevada.GOV>

Subject: RE: Jensen and Helena Area 6 (DS5412B) - Clark County Concurrence

Good afternoon Ms. Shinn,

Attached are the relevant reference materials for the development east of the project site per your request. Please let me know if you would require any additional information or would like to discuss this further. Thanks for your time and all the help.

Best,



Gaurang Mistry, Hydrologist I

Taney Engineering | 6030 S. Jones Blvd | Las Vegas, NV 89118 | USA

T 702-362-8844 | GaurangM@taneycorp.com | TaneyCorp.com | [Get to Know Us!](#)



Please consider the environment before printing this e-mail.

From: Jennifer Shinn <jshinn@LasVegasNevada.GOV>

Sent: Wednesday, August 4, 2021 6:33 AM

To: Gaurang Mistry <gaurangm@taneycorp.com>

Subject: RE: Jensen and Helena Area 6 (DS5412B) - Clark County Concurrence

[EXTERNAL E-MAIL]

Hi Gaurang,

Would you be able to get a copy of the study that the County references? I'd at least like to see the approved basin maps and HEC-1 models from that study.

Thank you,

Jennifer Shinn

Engineering Associate

Department of Public Works | City Engineering Division

Phone: (702) 229-6131

495 S. Main Street, 1st Floor | Las Vegas, NV 89101



lasvegasnevada.gov



Your opinion is important! Click [here](#) to take a short survey.

From: Gaurang Mistry <gaurangm@taneycorp.com>

Sent: Wednesday, July 28, 2021 2:06 PM

To: Jennifer Shinn <jshinn@LasVegasNevada.GOV>

Subject: Jensen and Helena Area 6 (DS5412B) - Clark County Concurrence

CAUTION: This email originated from an **External Source**. Please **use caution** before opening attachments, clicking links, or responding to this email. **Do not sign-in with your City of Las Vegas account credentials.**

I hope you are doing well! I am currently working on addressing the drainage comments received by Clark County for Jensen and Helena Area 6 Concurrence (DS5412B). I wanted to reach out regarding the comments issued for the onsite storm drain system as shown;

1. Previously approved drainage studies for APN 138-06-701-005 just east of the subject parcel show flows in excess of 300 cfs being diverted to Helena. As the anticipated flow along the west boundary of the downstream site exceeds the calculated outlet flow from the subject site by more than 70 cfs, adding 4 cfs to the calculated flow due to Reasonable Use can be considered acceptable under Nevada Drainage Law. Approved flows can be found under PW03-23355 and PW 05-12135.
2. The proposed bleeder line should be removed due to the approved information from comment #1. Any proposed facilities within Clark County jurisdiction would require typical notes and signature blocks. If the bleeder line is removed, there will be no work within Clark County jurisdiction, and those notes and signature blocks would not be required.

I wanted to check if removing the bleeder pipe would be acceptable by CLV as per suggestion from CCPW? I have attached the issued comment letter by CCPW with this email. Please let me know if you would require any additional information or would like to discuss any of it further. Thank you very much for your time and I hope you and your family remain healthy!

Best,



Gaurang Mistry, Hydrologist I

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Please consider the environment before printing this e-mail.



APPENDIX

APPENDIX A

Comment Letter

APPENDIX B

Improvement Plans



APPENDIX A

Comment Letter



Department of Public Works

500 S Grand Central Pky • Box 554000 • Las Vegas NV 89155-4000
(702) 455-6000 • Fax (702) 455-6040

Denis Cederburg, P.E., Director • E-Mail: dlc@ClarkCountyNV.gov



Drainage Study Comment Letter

Date: July 22, 2021
Firm: Taney Engineering
Engineer: Lee Gong, Ph.D, P.E., CFM
Address: 2270 Corporate Circle, Suite 200, Henderson, NV 89074
Phone: (702) 362-8844
Fax: (702) 362-5233
E-mail: LeeG@taneycorp.com

Subject: Technical Drainage Study for Jensen & Helena Area 6
Location: SEC Helena Avenue and North Grand Canyon Drive
APN: 138-06-701-022
Sec, Township, Range: S6, T20S, R60E
Flood Zone & Panel: Zone X, 2135F, Revised November 16, 2011
Application Number: PW21-15387 (CLV # DS5412B)

Submittals	Date Received	Date Returned	Reviewer	Miscellaneous
Concurrence	06/29/2021	07/22/2021	PR	
Addendum #1	06/29/2021	07/22/2021	PR	
Supplement	06/29/2021	07/22/2021	PR	

The above-referenced project is located within the **City of Las Vegas** adjacent to Clark County unincorporated areas. The drainage study was submitted to Clark County for concurrence on June 29, 2021.

Clark County Public Works Development Review **does not concur** with the Drainage Study due to, but not limited to, the following reasons;

The following comments must be fully addressed and response provided with the next submittal. Incomplete responses may result in further review and time delays to the drainage study approval. Any revisions/modifications to the original site design must have supporting hydrologic and/or hydraulic calculations. CCPW Development Review will not be held responsible for project delays due to incomplete responses.

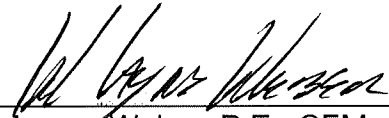
1. Previously approved drainage studies for APN 138-06-701-005 just east of the subject parcel show flows in excess of 300 cfs being diverted to Helena. As the anticipated flow along the west boundary of the downstream site exceeds the calculated outlet flow from the subject site by more than 70 cfs, adding 4 cfs to the calculated flow due to Reasonable Use can be considered acceptable under Nevada Drainage Law. Approved flows can be found under PW03-23355 and PW 05-12135.
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3. Grading proposed outside of the project boundary and on private property will require notarized, written permission from the offsite owner and must be **included with the next submittal**. Note private property owner's including Clark County Aviation, School District, Parks and Recreation, Public Works, BLM, Water District, etc. may not grant permission and this should be resolved without delay as the site design may change. If the bleeder line is removed per comment #2, permission to grade would not be required.
4. If for some reason the bleeder line remains, the minimum accepted RCP size accepted within Clark County right-of-way is 18"; otherwise, a License and Maintenance Agreement would need to be submitted and approved. Additionally, a structural design would need to be submitted for the proposed custom flared end section.
5. The grading plan has been redlined. Provide highlighter marks and responses on plans to show the issues were addressed.

Please note that the County's review of this development is limited to drainage issues significant to Clark County unincorporated areas.

The County's review is solely based on the information submitted by the Engineer of Record. The County's review is strictly limited to compliance with minimum County Codes and Standards. The Engineer of Record is responsible for researching and addressing situations that may require designs above and beyond the minimum codes for issues of public safety and impacts to upstream, downstream and adjacent properties. The County assumes no liability for information data, designs or conclusions of the Engineer of Record.



Patrick Robinson, P.E., CFM
Senior Civil Engineer
Development Review
Patrick.Robinson@ClarkCountyNV.gov



W. Layne Weber, P.E., CFM
Principal Engineer
Development Review
wlweber@ClarkCountyNV.gov



APPENDIX B

Improvement Plans