

**SUPPLEMENT #2 TO
ADDENDUM #1 TO THE
TECHNICAL DRAINAGE STUDY**

**FOR
Bracken Elementary School
School Development**

KNC-22-006

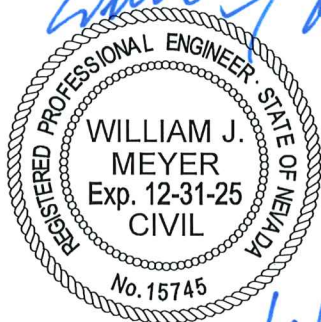
DS5700

City of Las Vegas

March 2024

Prepared for:

Clark County School District
1180 Military Tribute Place
Henderson, NV 89074
(702) 799-8710
IMPERAB@NV.CCSD.NET



3/5/24

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: Bracken Elementary School Date: March 6, 2024
 Location of Development: a) Descriptive (Cross Streets) North/South: North 27th Street
 East/West: Searles Avenue
 b) Section: 25 Township: 20 South Range: 61 East
 c) APN: 139-25-202-001

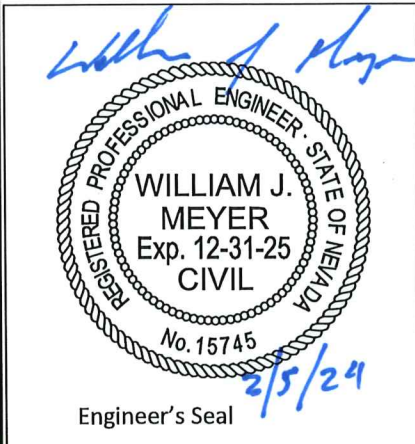
Name of Owner: Clark County School District
 Telephone No.: 702-799-8710 Fax No.: _____ E-Mail Address: imperab@nv.ccsd.net
 Address: 1180 Military Tribute Place Henderson, NV 89074

Contact Person-Name: William J. Meyer, P.E. Telephone No.: (702) 362-8844
 * E-Mail Address: BillM@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		

- Total Owned Land Area: At Site: 7.32 Being Developed/Disturbed: 7.32
- Is a portion or all of the subject property located in a designated FEMA Flood Hazard Area? Yes** No
- Is the property bordered or crossed by an existing or proposed Clark County Regional Flood Control District Master Planned Facility? Yes** No
- Proposed type of development (Residential, Commercial, Etc.): School
- Approximate upstream land area which drains to the subject site: 31+/- acres
- Has the site drainage been evaluated in the past? YES NO If yes, please identify documentation: _____
- If known, please briefly identify the proposed discharge point(s) of runoff from the site: The site will discharge to Searles Avenue and N 27th Street.
- Briefly describe your proposed schedule for the subject project: A.S.A.P



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.**

Local Entity File No.	Revision	Date
	DS5700	

REFERENCE: _____ STANDARD FORM 1



TANEY ENGINEERING

6030 S. JONES BLVD. LAS VEGAS, NV 89118
PHONE: (702) 362-8844 | FAX: (702) 362-5233
TANEYCORP.COM

March 5, 2024
Job No. KNC-22-006

Mr. Tyler Key
Flood Control Engineering Associate
City of Las Vegas
495 S. Main Street
Las Vegas, NV 89101

**RE: Technical Drainage Study for Bracken Elementary School Replacement
DS5700A**

Dear Mr. Key:

This written response addresses the comments from the City of Las Vegas dated February 20, 2024. The comments have been reproduced and addressed as follows:

City of Las Vegas Review Comments:

Comment 1: Swales that have a slope of less than 1% must be concrete lined. Review and revise all landscape swales under 1% slope.

Response 1: Grading constraints in the playground area to not allow for swales at 1.0-percent or greater. Additionally, the concrete would provide a slippery surface within the playground area that would pose a dangerous condition.

Comment 2: There is a 4% and 1.2% cross slope through a basketball court, reroute the flowline around the playing field/basketball court.

Response 2: The flowlines through the basketball courts have been removed.

Comment 3: Explain why a drywell is proposed, rather than draining the landscape area further north or west.

Response 3: The dry well has been removed from the site, and the site drains as previously shown in Addendum 1. No additional calculations have been provided with this submittal.

Comment 4: Provide a flowline, with spot elevations, for the landscape area draining to the dry well. Add a grate elevation for the dry well.

Response 4: The dry well has been removed from the site. No additional calculations have been provided with this submittal.

Comment 5: Provide a geotechnical report, for the dry well, to obtain the percolation rate of soil and perform calculations to demonstrate that the drainage in the dry well will empty out in no more than 24-hours.

Response 5: The dry well has been removed from the site. No additional calculations have been provided with this submittal.

Comment 6: Provide a note on the grading plans stating, "All onsite storm drains are to be privately owned and maintained by the school."

Response 6: A note that states all onsite storm drains are to be privately owned and maintained has been added to the plan set.

A copy of the City of Las Vegas comments has been provided directly following this letter. If you need any additional information, please do not hesitate to call our office (702) 362-8844.

Sincerely,



William J. Meyer, P.E.
Engineering Project Manager, Hydrologist
TANEY ENGINEERING

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: February 20, 2024
TO: Land Development Services Department of Community Development – Building & Safety Division		FROM: Tyler Key Flood Control Engineering Associate Department of Public Works
SUBJECT: Drainage Study for: Bracken Elementary School		COPIES TO: Taney Engineering
Cross Streets:	NEC of 27 TH Street and Jansen Avenue	Clark County School District
File Number:	F:\Depot\DSMemos\DS5700C.doc	Bart Anderson, P.E., DevCo
Parcel Number:	139-25-202-001	
Zoning Action:	23-0485-SDR; 23-0485-VAR; 23-0485-MSP	
FEMA Flood Zone	YES	NO X
Proposed Storm Drain	YES	NO X

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	8/30/2023	9/13/2023	Not Approved	\$400.00	5418530: \$400
2 nd Submittal	10/23/2023	11/8/2023	Not Approved	\$400.00	5496534: \$400
3 rd Submittal	2/7/2024	2/20/2024	See Comments Below	\$400.00	5623935: \$400
TOTAL FEES (LDDRS):				\$1,200.00	----

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.

- Swales that have a slope of less than 1% must be concrete lined. Review and revise all landscape swales under 1% slope.
- There is a 4% and 1.2% cross slope through a basketball court, reroute the flowline around the playing field/basketball court.
- Explain why a drywell is proposed, rather than draining the landscape area further north or west.
- Provide a flowline, with spot elevations, for the landscape area draining to the dry well. Add a grate elevation for the dry well.
- Provide a geotechnical report, for the dry well, to obtain the percolation rate of soil and perform calculations to demonstrate that the drainage in the dry well will empty out in no more than 24-hours.
- Provide a note on the grading plans stating, "All onsite storm drains are to be privately owned and maintained by the school."

***** 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:

1st Submittal DS and Plans (for first and original submittal);

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

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

1st Submittal DS (for the report of the drainage study)

1st Submittal Plan 1 (could be the drainage condition maps)

1st 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
JRT/TJK

T/R/S: T20S/R61E/S25
AREA M-25