

DS #: 4520

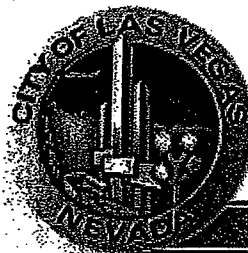
APN: 138-15-510-005

PROJECT: MOUNTAIN VIEW HOSPITAL —  
EMERGENCY & ICH ADDITIONS

SUBMITTAL: 1<sup>ST</sup>

SCANNED BY/DATE:

CHECKED BY/DATE:



|                                                                   |                                        |                                                                                            |
|-------------------------------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------|
| <b>CITY OF LAS VEGAS<br/>INTER-OFFICE MEMORANDUM</b>              |                                        | DATE: <b>AMS</b><br>February 24, 2011                                                      |
| TO:<br>Land Development Services<br>Department of Public Works    |                                        | FROM:<br>Albert Sung, P.E.<br>Flood Control Project Engineer<br>Department of Public Works |
| SUBJECT: Drainage Study for:<br>Mountain View Hospital - Addition |                                        | COPIES TO:<br>Littlejohn Engineering Associates                                            |
| Cross Streets:                                                    | SEC of Cheyenne Boulevard & Tenaya Way | Sunrise Mountain View Hospital                                                             |
| File Number:                                                      | F:\Depot\DSMemos\DS4520A.doc           | Bart Anderson, P.E., DevCo                                                                 |
| Parcel Number:                                                    | 138-15-510-005                         |                                                                                            |
| Zoning Action:                                                    | SDR-40551 & SUP-40552                  |                                                                                            |
| FEMA Flood Zone                                                   | YES NO <b>X</b>                        |                                                                                            |
| Proposed Storm Drain                                              | YES NO <b>X</b>                        |                                                                                            |

| HISTORY                   | DATE RECEIVED | DATE REVIEWED | COMMENTS                   | REVIEW FEES     | FEES PAID Transaction # |
|---------------------------|---------------|---------------|----------------------------|-----------------|-------------------------|
| 1 <sup>st</sup> Submittal | 2/9/2011      | 2/24/2011     | See Comments Below         | \$400.00        | 162325: \$400           |
|                           |               |               | <b>TOTAL FEES (LDDRS):</b> | <b>\$400.00</b> | <b>----</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 NDOT concurrence.                                         |

1. Provide a copy of the zoning/planning conditions associated with this site (**SDR-40551 & SUP-40552**) 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. *City of Las Vegas* does not allow HDPE pipe in public rights-of-way or public drainage easements. *City of Las Vegas* only allow the use of HDPE storm drain pipe for privately owned and privately maintained storm drain system, which serve and are located exclusively on private property. Any proposed HDPE storm drain pipe 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*.
3. Provide a note on all construction drawings: **"All onsite storm drain system and the associated facilities are privately owned and to be privately maintained"**.
4. Grading Plans and Drainage Plans are to be distinguished. Revise **Sheet C6.0** to title "Drainage Plan" while **Sheets 6.1 to 6.3** to title "Grading Plan". The drainage plan should clearly include drainage sub-basins delineation and provide a table for information such as sub-basin names and areas, 10-Year/100-Year peak flow values.

5. Provide specific manufacturer's name, type and size of all proposed onsite storm drain inlets (catch basins) and manhole information in the description column of the construction notes.
6. It is understood that the label of '15"ST' means 15" storm drain pipe. However, it is customary in the City of Las Vegas area to call out as '15"SD'. Review and revise accordingly.
7. **Sheets C6.1 and C6.2:** Provide proposed top of curb (TC) and finish grade (FG) elevations at all control points of curb & gutter such as BCR/ECR and angle points, grade breaks etc. Contractor cannot construct per contour lines only. Label the finish floor elevation of the existing hospital building and the proposed helipad.
8. **Sheet C6.3:** Clarify what are proposed in the southwest entrance in Tenaya Way. Provide the finish floor elevations of the existing and proposed powerhouse building. Provide TC and FG elevations as stated in Comment #7.

**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.

**NOTES:** This drainage study assumes that the project will be constructed in one phase. If improvement plans are submitted to break the project into separate phases, a drainage study update will be required for each phase addressing the interim condition.

**END OF REMARKS**  
ays

T/R/S: T20S/R60E/15  
AREA L-15

|                                  |                    |              |              |
|----------------------------------|--------------------|--------------|--------------|
| Post-it® Fax Note 7671           |                    | Date 2/24/11 | # of pages 2 |
| To James Littlejohn              | From Albert Siling |              |              |
| Co./Dept. Littlejohn Engineering | Co. CLV            |              |              |
| Phone #                          | Phone # 229-2001   |              |              |
| Fax # 615-385-4020               | Fax #              |              |              |

## TRANSACTION REPORT

F. 01

FEB-24-2011 THU 03:06 PM

FOR: CITY OF LAS VEGAS

7023828551

SEND

| DATE   | START    | RECEIVER    | TX TIME | PAGES | TYPE   | NOTE | M#  | DP |
|--------|----------|-------------|---------|-------|--------|------|-----|----|
| FEB-24 | 03:05 PM | 16153854020 | 1'03"   | 2     | FAX TX | OK   | 651 |    |

TOTAL : 1M 3S PAGES: 2

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**END OF REMARKS**

ays

T/R/S: T20S/R60E/15  
AREA L-15



Rec'd: 2/9/11

# LITTLEJOHN ENGINEERING ASSOCIATES

February 8, 2011

Mr. Albert Sung, P.E.  
City of Las Vegas  
333 N. Rancho Drive  
Las Vegas, Nevada 89106

DS 4520

L-15

\$400-

**RE: MountainView Hospital (DS 1374)  
Las Vegas, Nevada**

Dear Mr. Sung:

The original drainage study for the referenced site was approved on October 22, 1994, and prepared by G.C. Wallace, Inc. G.C. Wallace, Inc. also prepared an update to the study which was later approved on October 28<sup>th</sup>, 2003. It is now proposed to construct an expansion to the southern side of the hospital. This expansion will also include the reconfiguration of parking and drive aisles as well as an expansion to the stand-alone power house which is located along the western edge of the site.

*eastern*

The approved drainage study assumed the site was fully developed (a curve number (CN) of 93 was used for commercially developed sites). Due to this, in conjunction with the fact that the approved drainage patterns will remain the same, the runoff from the site will remain the same and the proposed improvements will not have any effect on these calculations.

One impact that has been addressed as a part of this project is the construction of the powerhouse addition. The proposed addition extends into an existing detention pond, reducing the volume by 1,084.7 cubic feet. In order to compensate for this, 1,096.1 cubic feet of storage has been added in other areas of the pond so as not to affect its function and performance. See sheet C6.3 of the plans as well as Table 1 and Table 2 for more information. The approved plan sheet 13A depicts the top of pond to be 2321.5'. Since it is apparent that a different survey datum was used, this elevation has been adjusted by the difference in Finished Floor Elevations (FFE) of the powerhouse (2324.00' per the approved plan versus 2326.42' per the latest survey). Based on this adjustment, the top of pond elevation is 2323.92'.

**Table 1 – Pond Volume Filled by Powerhouse Addition**

| Elevation | Area (sf) | Volume (cf) | Total Volume (cf) |
|-----------|-----------|-------------|-------------------|
| 23.92     | 837.8     |             |                   |
| 23        | 582.5     | 653.34      | 653.34            |
| 22        | 233.5     | 408.00      | 1061.34           |
| 21.8      | 0         | 23.35       | 1084.69           |

1935 21ST AVENUE SOUTH, NASHVILLE, TENNESSEE 37212  
T 615.385.4144 F 615.385.4020

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Health and Safety



**Table 2 – Pond Volume Added**

| Elevation | Area (sf) | Volume (cf) | Total Volume (cf) |
|-----------|-----------|-------------|-------------------|
| 23.92     | 438.9     |             |                   |
| 23        | 520.9     | 441.51      | 441.51            |
| 22        | 606.3     | 563.60      | 1005.11           |
| 21.7      | 0         | 90.95       | 1096.05           |

Since the approved drainage analysis has not been altered in terms of runoff, and since the proposed impact to the detention pond has been adequately mitigated on site, this submittal constitutes an update to the approved drainage study to address the proposed construction. Please refer to sheets C6.0-C6.3 of the plans for more details.

Sincerely,

**LITTLEJOHN ENGINEERING ASSOCIATES, INC.**

James H. Littlejohn, PE

**\*\* Duplicate Receipt \*\***

City of Las Vegas

Development Services Center

731 South Fourth Street

Las Vegas, NV 89101

02/09/2011 08:23 Trn 162325

Cashier 890381

PRJ Permit # 084320 \$400.00

Subtotal \$400.00

Tax \$0.00

**Total \$400.00**

Received CHECK \$400.00

Check # 400444

CH 1000000 \$0.00

For questions related to this receipt call

702-253-6251

HYDROLOGIC CRITERIA AND DRAINAGE MANUAL  
**DRAINAGE STUDY INFORMATION FORM**

Name of Development: MountainView Hospital Date: Feb 8, 2011

Location of Development: a) Descriptive (Cross Streets) North/South: Tenaya Way  
East/West: Cheyenne Avenue

b) Section: 15 Township: 20 S Range: 60 E  
c) APN : 138-15-510-005

Name of Owner: Sunrise MountainView Hospital (J.D. Melchiodi, COO)

Telephone No.: (702) 255-5065 Fax No.: (702) 255-5074 E-Mail Address: joseph.melchiodi@hcahealthcare.com

Address: 3100 N. Tenaya Way, Las Vegas, NV, 89128

Contact Person-Name: Brad Lipsey Telephone No.: (615) 385-4144

\* E-Mail Address: blipsey@leainc.com Fax No.: (615) 385-4020

Firm: Littlejohn Engineering Associates

Address: 1935 21st Avenue South, Nashville, TN, 37212

Type of Land Development/Land Disturbance Process:

|                                           |                                                     |                                                       |
|-------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <input type="checkbox"/> Rezoning         | <input 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: 30 acres Being Developed/Disturbed: 5.65 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

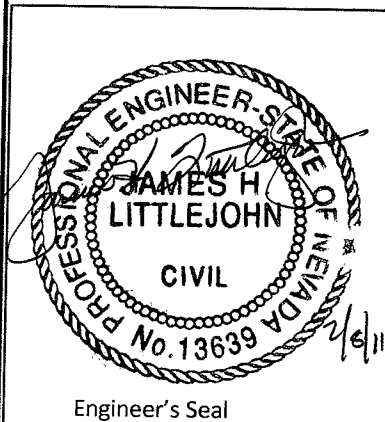
4. Proposed type of development (Residential, Commercial, Etc.): Commercial

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: GC Wallace, Inc. Drainage Study for Sunrise Mountain View Hospital and Office Building, September 1994

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: 6x3 RCB in NDOT right-of-way under US 95 approximately 900' south of the intersection with Cheyenne Avenue (from previous permit)

8. Briefly describe your proposed schedule for the subject project: ASAP - Planning Commission meeting on 2/8/11



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