

# Memorandum

Department of Public Works  
City Engineer Division  
Survey Section  
333 North Rancho Dr., 8<sup>th</sup> Floor  
Las Vegas, Nevada 89106

Phone (702) 229-6217

Fax (702) 804-8582

To: Michael Cunningham, Manager  
Building and Safety Department

From: Alan R. Riecki, PLS  
City Surveyor

C: Lance M. West, PLS  
Wallace Morris Kline Surveying

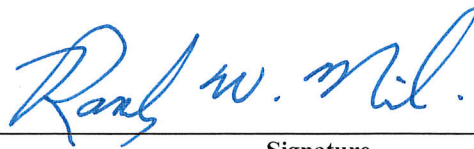
Oh-Sang Kwon, P.E., Engineering Project Manager  
Flood Control Section

Date: February 14, 2018

Re: Storm Drain Final Location Map  
VILLAGE 24 US WATERS COS-2 WASH IMPROVEMENTS  
(Drawing No. 107Y6769, L-Civil No. 68365)

The Survey Section has reviewed the Final Location Map and as far as our jurisdiction of this project is concerned, we find that the map is:

Acceptable: February 14, 2018



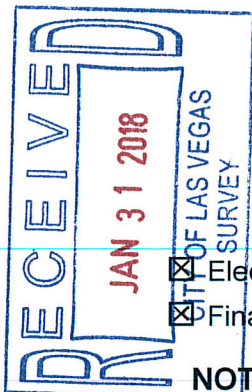
Signature

For: City Surveyor

Title

Public Works/Survey

Department/Division



# CITY OF LAS VEGAS

BUILDING AND SAFETY DEPARTMENT

OFFSITE INSPECTION & TESTING  
333 NORTH RANCHO DRIVE  
LAS VEGAS, NV 89106  
PHONE: (702) 229-6337  
FAX: (702) 363-1051

## DEVELOPER'S SUBMITTAL OF GPS COORDINATES

☐ Sewer

☒ Storm Drain

☒ Electronic Comma Delineated File

☒ Final Location Map (2)

**NOTE: THE TOP PART OF THIS FORM MUST BE FILLED OUT IN ITS ENTIRETY**

PROJECT NAME: VILLAGE 24 COS 2 WASH UNIT: N/A PHASE:       

PROJECT LOCATION: CROSSBRIDGE DRIVE AND SKY VISTA DRIVE

CLV PLAN #: 68365 CLV PROJECT # 107Y6769 SHEET NO. (S): 1

# OF MANHOLES 0 PUB. SEWER/STORM DRAIN LIN. FT. 210 # OF PRIVATE LATERALS 0

DEVELOPER: THE HOWARD HUGES COMPANY PHONE: 702-791-4300 FAX:       

SURVEY CO.: WALLACE MORRIS KLINE PHONE: 702-212-3967 FAX:       

CONTRACTOR: WESTERN STATES PHONE: 702-644-1117 FAX:       

CONTRACTOR'S SUPERVISOR NAME: FAUSTINO GUERRAS MOBILE: 702-204-9827

DATE OF REQUEST: 01/30/18

### THIS SEWER HAS BEEN SURVEYED BY NEVADA LICENSED LAND SURVEYOR:

Company Name WALLACE MORRIS KLINE Surveyor Name LANCE WEST

License # 18232 License exp. Date: 6/30/18

### CITY USE ONLY

DATE SR. INSPECTOR RECEIVED:        SR. INSPECTOR INITIALS:       

DATE RECEIVED FROM SR. INSPECTOR AND SENT TO CITY SURVEYOR:       

ACCEPTABLE BY CITY SURVEYOR DATE: 2/14/18 NOT ACCEPTABLE BY CITY SURVEYOR DATE       

CLV SURVEYOR'S SIGNATURE: *Ras W. M. L.* DATE: 2/14/18

THE CITY OF LAS VEGAS RECOMMENDS THAT ALL DEFICIENCIES NOTED ON THE ATTACHED SURVEY REPORT BE CORRECTED PRIOR TO THE FINAL ACCEPTANCE.

### For Sanitary Sewer To Complete and Return to Offsite Inspection & Testing:

RECEIVED BY:         
(PLEASE PRINT)

SIGNATURE:        DATE:       

### For Flood Control To Complete and Return to Offsite Inspection & Testing:

RECEIVED BY:         
(PLEASE PRINT)

SIGNATURE:        DATE:



**City of Las Vegas**  
**Department of Public Works**  
**Survey Section**

**REVIEW CHECKLIST**  
**STORM DRAIN**  
**FINAL LOCATION MAP**

JOB NUMBER 68365 SD1  
PROJECT NAME VILLAGE 24 US WATERS COS-2 WASH IMPROVEMENTS  
WORK AUTH. NO. P28000  
SUBMITTED BY Wallace Morris Kline(Lance M. West)  
PROJECT TYPE CIP ☐ Land Dev ☒ Street Rehab ☐  
DATE 2/13/18  
REVIEWED BY D. SANTANA

**REVIEW DETERMINATION**

- ☒ Approved  
☐ Not Acceptable

**TO BE RE-SUBMITTED**

- ☐ Two bond copies (no mylar)  
☐ Electronic media with comma-separated coordinate file

| REVIEW ITEM                                                        | OK                                  | SEE R/L                  | N/A                      | COMMENTS |
|--------------------------------------------------------------------|-------------------------------------|--------------------------|--------------------------|----------|
| <b>Submittal Contents</b>                                          |                                     |                          |                          |          |
| Two bond copies (no mylar)                                         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Electronic media containing comma-separated coordinate file        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| <b>General Map Contents</b>                                        |                                     |                          |                          |          |
| Sheet size 24" x 36"                                               | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Sheet number and number of sheets                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| North arrow (pointing up, left or right)                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Scale (written & graphic, correctly shown, appropriate scale used) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Lettering legibility (minimum text size 0.08")                     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Map title shown ("Storm Drain Final Location Map")                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| CLV project name shown                                             | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| CLV Hansen No. shown                                               | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| CLV Drawing No. shown                                              | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Preparer's company name and contact information shown              | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Legend (all linetypes and symbols defined)                         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Non-standard abbreviations defined                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Distances, coordinates and elevations labeled using decimal feet   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Approximate limits of streets shown (improvements or right-of-way) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Street names labeled (identified as public or private)             | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |

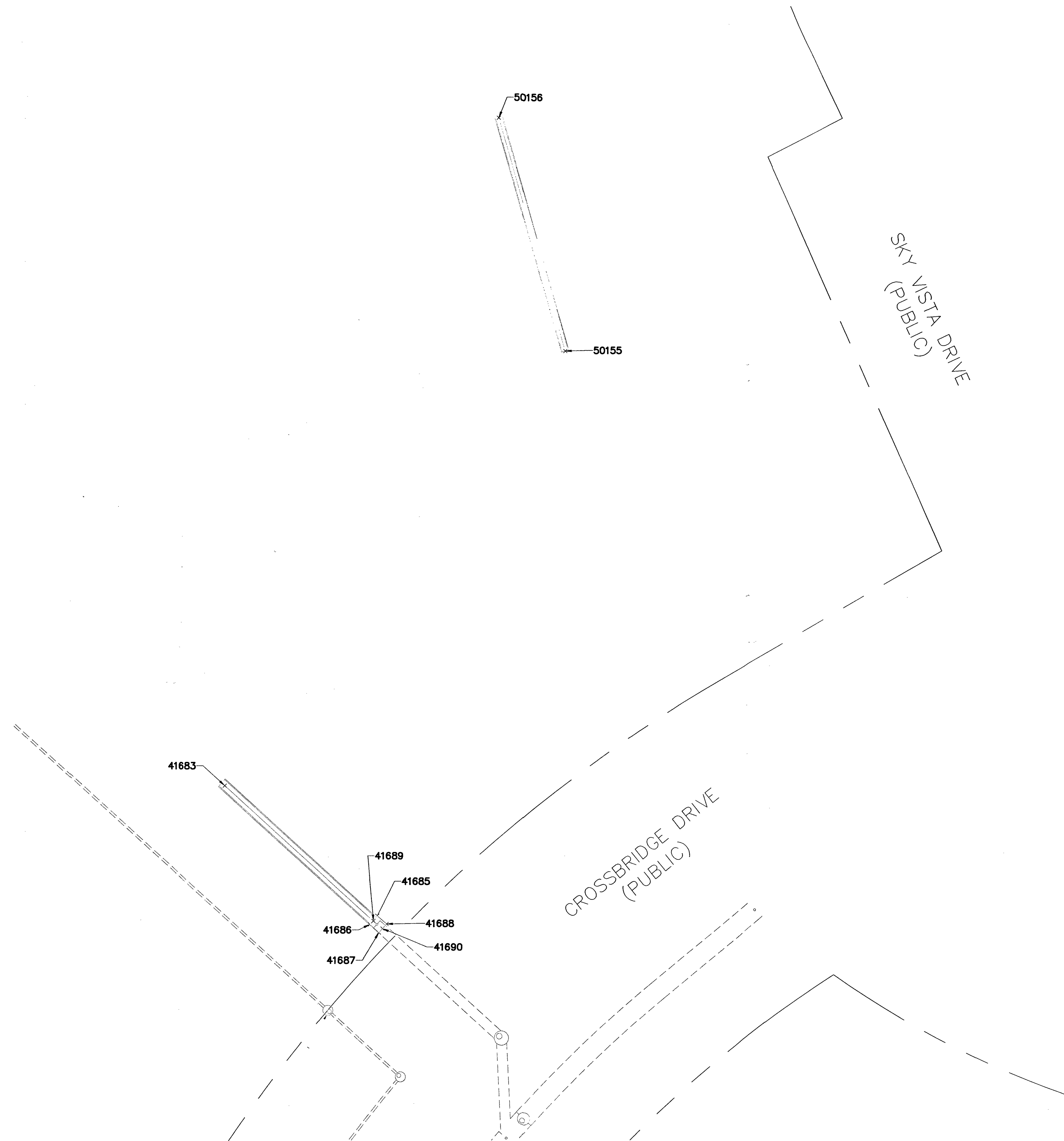
## REVIEW CHECKLIST – STORM DRAIN FINAL LOCATION MAP

| REVIEW ITEM                                                                                                                                                                                                                                                                                                                                          | OK                                  | SEE<br>R/L               | N/A                                 | COMMENTS |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|-------------------------------------|----------|
| <b>Storm Drain Improvements Data</b>                                                                                                                                                                                                                                                                                                                 |                                     |                          |                                     |          |
| <b>*NOTE</b><br>As of December 1, 2015 <b>manhole cover locations are no longer required.</b>                                                                                                                                                                                                                                                        |                                     |                          |                                     |          |
| Manhole Barrel/Base: (measured horizontally at centerline of barrel/base structure, vertical location does not apply)                                                                                                                                                                                                                                | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |          |
| Drop Inlets (measured horizontally at back of curb at each outer extent of box, vertically at top of curb)                                                                                                                                                                                                                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |          |
| Vaults and Junction Structures (measured horizontally at all outer extents of structure, vertically at top of structure)                                                                                                                                                                                                                             | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |          |
| Pipes and RCB's: locate at all connections to other pipes and structures, all horizontal and vertical deflections, points of termination (stubs), point at which pipe/RCB exits the public right-of-way or easement (measured horizontally at centerline of pipe/RCB, vertically at top of pipe/RCB)                                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |          |
| <b>*NOTE</b><br>All pipe connections to manholes and other structures should be located at outside face of structure before backfilling due to accuracy limitations of pipe measurements from the structure's surface access point.                                                                                                                  |                                     |                          |                                     |          |
| <b>Coordinate Information</b>                                                                                                                                                                                                                                                                                                                        |                                     |                          |                                     |          |
| Data acquisition completion date indicated                                                                                                                                                                                                                                                                                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |          |
| Coordinate system indicated (only CLV approved coordinate systems are to be used)                                                                                                                                                                                                                                                                    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |          |
| Horizontal datum, datum adjustment, and epoch date indicated (only CLV approved datums are to be used)                                                                                                                                                                                                                                               | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |          |
| Benchmark ID, description, elevation indicated                                                                                                                                                                                                                                                                                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |          |
| Statement of positional accuracy per the tolerances indicated below                                                                                                                                                                                                                                                                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |          |
| <b>*NOTE</b><br>For all projects with improvement plans approved prior to March 1, 2015 coordinates provided must be accurate to within $\pm 0.5$ feet horizontally and vertically. For all projects with improvement plans approved after March 1, 2015 coordinates provided must be accurate to within $\pm 0.3$ feet horizontally and vertically. |                                     |                          |                                     |          |
| Coordinate accuracy QA/QC (when available)                                                                                                                                                                                                                                                                                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |          |

| ADDITIONAL COMMENTS |
|---------------------|
|                     |
|                     |
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|                     |
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# STORM DRAIN FINAL LOCATION MAP FOR VILLAGE 24 COS 2 WASH IMPROVEMENT PLANS

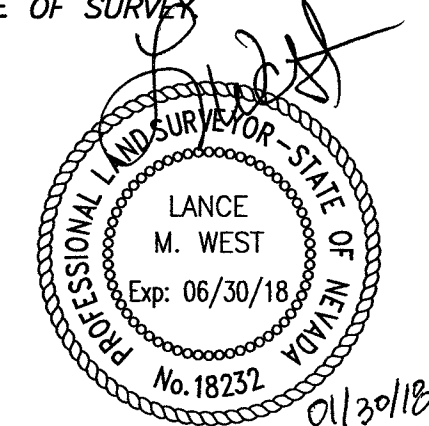
BEING A SUBDIVISION OF PARCEL 4, LYING WITHIN SECTIONS 14 THRU 17, 20 THRU 23, 26 THRU 29, AND 32 THRU 34,  
TOWNSHIP 20 SOUTH, RANGE 59 EAST, AND SECTIONS 3 AND 4, TOWNSHIP 21 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA



## SURVEYOR'S STATEMENT

- 1) SURVEY WAS COMPLETED ON JANUARY 25, 2018.
- 2) THE POSITIONAL CERTAINTY FOR THIS SURVEY IS 0.3' HORIZONTAL AND 0.3' VERTICAL BASED ON NAD83(2011), EPOCH 2010.00
- 3) THE POSITIONAL CERTAINTY STATED DOES NOT TAKE INTO ACCOUNT ANY MODIFICATIONS TO THE PIPE, MANHOLES OR LATERALS COMPLETED AFTER THE DATE OF SURVEY.

LANCE M. WEST  
PROFESSIONAL LAND SURVEYOR  
NEVADA LICENSE NO. 18232



## BASIS OF BEARINGS

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS AND LAS VEGAS HIGH ELEVATION ZONES, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

ZONE: LAS VEGAS ZONE

DATUM (REFERENCE FRAME): NAD 1983(2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

PROJECTION: TRANSVERSE MERCATOR

STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN): 36°15'00"N

LONGITUDE OF CENTRAL MERIDIAN: 114°58'00"W

NORTHING AT GRID ORIGIN: 200,000.00 M (656,166.6667 FEET US)

EASTING AT CENTRAL MERIDIAN: 100,000.00 M (328,083.3333 FEET US)

SCALE FACTOR ON CENTRAL MERIDIAN: 1.0001 (EXACT)

## NOTES:

1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION.
2. GRID BEARING SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARING DUE TO MERIDIAN CONVERGENCE.

## BENCHMARK

D368 -- BEING A U.S.C. & G.S. DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.

3246.63 US SURVEY FEET

989.574 METERS

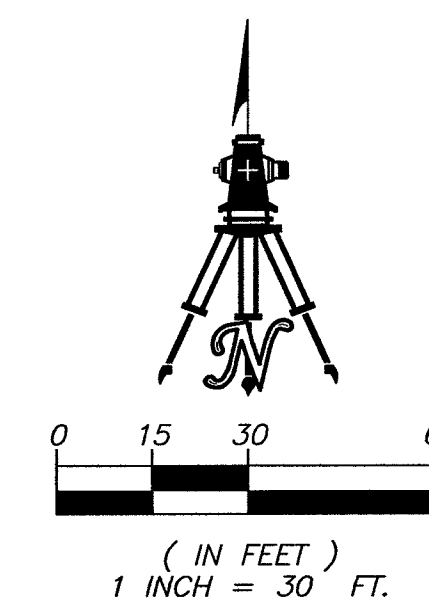
N.A.V.D. 88 DATUM

## NOTES

- 1) SEE ELECTRONIC FILE "COS 2-SD-PNTS-NCRS.TXT" FOR COORDINATES.

## LEGEND

|       |                   |           |                           |
|-------|-------------------|-----------|---------------------------|
| ----- | RIGHT-OF-WAY LINE | CL BARREL | CENTER OF MANHOLE BARREL  |
| ----- | STREET CENTERLINE |           |                           |
| ----- | STORM DRAIN       | PIPE-TOP  | SHOT TAKEN ON TOP OF PIPE |
| x     | POINT LOCATION    |           |                           |
| 23118 | POINT NUMBER      |           |                           |



SHEET 1 OF 1

H# 68365  
CLV DWG 107Y6769

STORM DRAIN FINAL LOCATION MAP  
VILLAGE 24 COS 2 WASH IMPROVEMENT PLANS  
BEING A SUBDIVISION OF PARCEL 4, LYING WITHIN SECTIONS 14 THRU 17, 20 THRU 23, 26 THRU 29, AND 32 THRU 34,  
TOWNSHIP 20 SOUTH, RANGE 59 EAST, AND SECTIONS 3 AND 4, TOWNSHIP 21 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA



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