

# UPDATE#3 TO THE TECHNICAL DRAINAGE STUDY FOR GILMORE 2.14

## CITY OF LAS VEGAS

TCE# 273-2005

DS05544

Prepared for:

**Signature Homes**

**801 South Rancho Drive Suite E-4**

**Las Vegas, NV 89106**

Prepared by:

**TCE**

7080 La Cienega, Suite 200

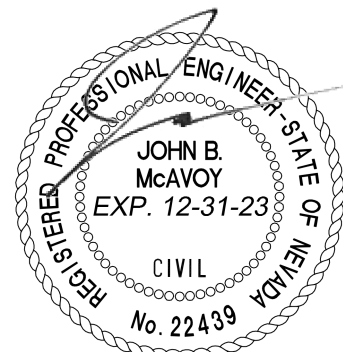
Las Vegas, Nevada 89119

(702) 932-6125

FAX (702) 932-6129

August 2023

T  THOMASON  
C   CONSULTING  
E    ENGINEERS



08/17/2023

**DRAINAGE STUDY INFORMATION FORM**

Name of Development: Gilmore 2.14 DATE: June 1, 2023

Location of development: a) Descriptive (Cross Streets) North/South Fort Apache Rd East/West Gilmore Ave

b) Sect. 8 Twn. 20S Rng 60E

Name of Owner: Signature Homes Assessors Parcel No.: 138-08-101-030

Telephone No.: (702) 671-6062 Facsimile No.: \_\_\_\_\_

Address: 801 South Rancho Drive Suite E-4  
Las Vegas, Nevada 89106

Contact Person-Name: John McAvoy Telephone No: 702-932-6125

Email: jmcavoy@tce-lv.com

Firm: TCE

Address: 7080 La Cienega Street, Suite 200 Las Vegas, Nevada 89119

Type of Land Development/Land Disturbance Process:

<input type="checkbox"/>	Rezoning	<input checked="" type="checkbox"/>	Subdivision Map	<input type="checkbox"/>	Clearing and Grading
<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: 2.14 Acres Being Developed/Disturbed 2.14 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

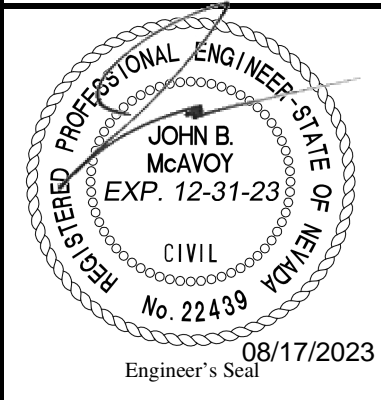
4. Proposed type of development (Residential, Commercial, Etc.)? Single Family Residential

5. Approximate upstream land area, which drains to the subject site? None

6. Has the site drainage been evaluated in the past? YES  NO  If yes, please documentation:  
Seton Academy (DS2677)

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site:  
Gilmore Ave and Garehime Heights park

8. Briefly describe your proposed schedule for the subject project: ASAP



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.

\* Review and concurrence of the Clark County Regional Flood Control District is Required.

Local Entity File No. _____	Revision	Date

REFERENCE:

STANDARD FORM 1



# CITY OF LAS VEGAS

## MINIMUM DRAINAGE STUDY CRITERIA STANDARD FORM 2 CHECKLIST SUPPLEMENT

(Revised 5/18/11)

The following checklist is intended as a supplemental guide for the engineer preparing a Technical Drainage Study submittal to the City of Las Vegas. This supplement focuses on requirements specific to the City of Las Vegas. The requirements presented are in addition to the Clark County Regional Flood Control District (CCRFCD) Manual Standard Form 2. The listed items are the minimum information required prior to the City performing a review. The engineer will remain responsible to ensure the Technical Drainage Study is prepared within the guidelines as set forth in the CCRFCD Hydrologic Criteria and Drainage Design Manual (Design Manual).

An appointment must be made to preview this checklist in conjunction with CCRFCD Standard Form 2 prior to the City accepting a new drainage study for review. The engineer must contact the Flood Control Section at (702) 229-6541 to schedule a submittal appointment.

**If items are not applicable for the subject site, provide N/A.**

I. GENERAL REQUIREMENT		
Yes	No	
	N/A	A notarized letter from the adjacent property owner(s) allowing off-site grading. (A copy of the letter must be received prior to final acceptance of the drainage study.)
X		Copies of all conditions of approval for development related to this property. (e.g. zoning, use permit, tentative map, etc.) Verify compliance with conditions.
X		An electronic copy of the complete submittal is required to be submitted with one original hard copy of the study. Electronic documents should be on a universal computer-readable digital output device replicating your submittal. An Indexed Portable Document Format (PDF) or Print Ready CAD file formats with a minimum of 300dpi are the desired formats. If figures are in color, they must be scanned in color and saved as a separate file.  _____ by initial here, the engineer on record acknowledges that the electronic copy is an identical replicate of the original hard copy submitted to the City of Las Vegas.

II. GRADING PLAN INFORMATION		
Yes	No	
X		(1) 24" X 36" copy of the Grading Plan, (including all Detail Sheets) sealed by the engineer.
X		Proposed future and existing spot grades for top of curbs and street crowns at lot lines, grade breaks, and along curb returns on both sides of the street. Note: Proposed top of curb elevations must be provided for both sides of roadways even if only half street construction is required.
X		Label existing topography at a minimum 5 foot elevation interval including adjacent developments, finished floor elevations of existing buildings and top of existing curbs extending 100 feet around the perimeter of the site. (*Measured from the centerline of the adjacent roadway.)

**CITY OF LAS VEGAS MINIMUM DRAINAGE STUDY CRITERIA CHECKLIST**

II. GRADING PLAN INFORMATION		
Yes	No	
	N/A	Proposed on-site and off-site storm drains and other flood control facilities with plan and profile sheets for public storm drains showing the class of pipe, (Class III, IV, V, etc.), design hydraulic grade line, (HGL) and 100 year storm flow. A public drainage easement must be provided over on-site storm drains conveying off-site flows. An overflow path must be provided over all storm drains.
X		All existing and "to be constructed" walls with cross-sections showing wall type, (e.g. block wall, retaining wall, flood wall, etc.), with limits clearly defined, adjacent ground elevations. Wall heights must meet current ordinances and in no case exceed 14 feet above the adjacent property.
X		Street slopes for both interior and perimeter streets. Note: The minimum slope for a roadway is 0.4 percent, a minimum 18-inch storm drain must be provided where minimum slopes cannot be met.
X		Back of lot elevations and lot drainage pattern for all lots including common lots.
X		Sites with a grade difference two feet above or below existing ground are required to have approval from City of Las Vegas Current Planning. Current Planning approval is required prior to final approval of the drainage study.
	N/A	On-site facilities must perpetuate flows through or around the site without significantly impacting adjacent property owners. (The project must pass flows through the site every 600 feet where the project is blocking flow paths.)
X		This project uses a solid grouted stem wall (or approved alternate) at the back of sidewalk to provide erosion protection for landscaped areas where the depth of flow in the roadway exceeds the back of walk elevation. A corresponding cross-section detail is included.
X		Commercial and Common Lot Landscape areas are not allowed to drain over the sidewalk. The grading plans show flow lines with grades and sidewalk under drains for all landscape areas draining to the public ROW.

III. Local Entity Criteria - City of Las Vegas – Manual Section 1600		
Yes	No	
X		Concrete valley gutters are required in parking lots with slopes less than 1 percent. Slopes through cul-de-sac must be at a 1 percent minimum where flow is drained through the cul-de-sac.
X		Ten-foot wide public drainage easements to be privately maintained are allowed for flow less than 20 cfs. The depth of flow entering the easement must be checked using the submerged weir calculation.
	N/A	The limits of the flood zones and the base flood elevations (BFE) must be shown on all grading plans for all developments within a Special Flood Hazard Zone A, AO, AE, etc.
X		Minimum finish floor elevation is 6 inches above highest adjacent top of curb. Finish floor calculations must include allowances for super elevations on curves and velocity head for tee intersections.
X		Finished floor elevations for buildings adjacent to public drainage easements must be a minimum of 18 inches above the Q100 weir of submerged weir elevation, whichever is greater.

**CITY OF LAS VEGAS MINIMUM DRAINAGE STUDY CRITERIA CHECKLIST**

III. Local Entity Criteria - City of Las Vegas – Manual Section 1600		
Yes	No	
	N/A	Lots with “B and C Type Drainage” that drain from one lot to another through a drainage easement shall be required to install an underground nuisance drainage system or a 2-foot valley gutter. 16” x 24” minimum block wall openings are required for both options.
	N/A	Bubblers are required across 80 foot and greater ROW streets. When flows exceed 10 cfs, bubblers larger than 18 inches will be required up to a maximum of 36”. Inlets must be sized to match the pipe size provided.

- Contact the Flood Control Section regarding the drainage study review fee. These fees are payable at the time of submittal.
- The Drainage Study must be conditionally approved prior to submitting improvement plans to the Civil and Planning Development of the Department of Building and Safety for review.

This document is intended as an **aid** in preparing Technical Drainage Studies for the City of Las Vegas. Each study submitted is reviewed for compliance with local and regional criteria. This form is not intended to be all-inclusive and does not limit the extent of the information, calculations or exhibits which may be necessary to properly evaluate the intended land use.

August 17, 2023

Albert Sung, P.E.  
City of Las Vegas  
333 North Rancho Drive  
Las Vegas, NV 89106

**Re: Update#3 to the Technical Drainage Study for Gilmore 2.14  
DS05544, TCE#273-21005**

Mr. Sung:

The developer has access to some dirt usable for processed fill and wishes to utilize it as soon as able for this project. This Update is to show that the proposed stockpile will not negatively impact the neighboring parcels and will maintain the existing flow patterns as the storm flow exits the property. Any flow from the site west or south of the stockpile will flow along the flowline created by the toe and drain to the existing north east corner as per the existing conditions.

### FIGURES

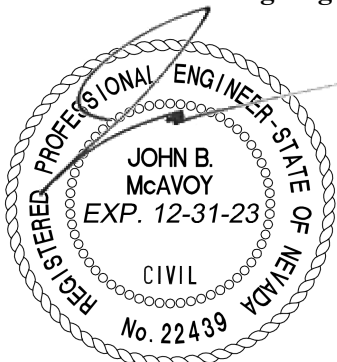
Figure 7 Updated Figure

### LIST OF APPENDICES

Appendix A: Reference from Approved Study

If you have any questions or concerns, please feel free to email or call our office.

Sincerely,  
**Thomason Consulting Engineers**



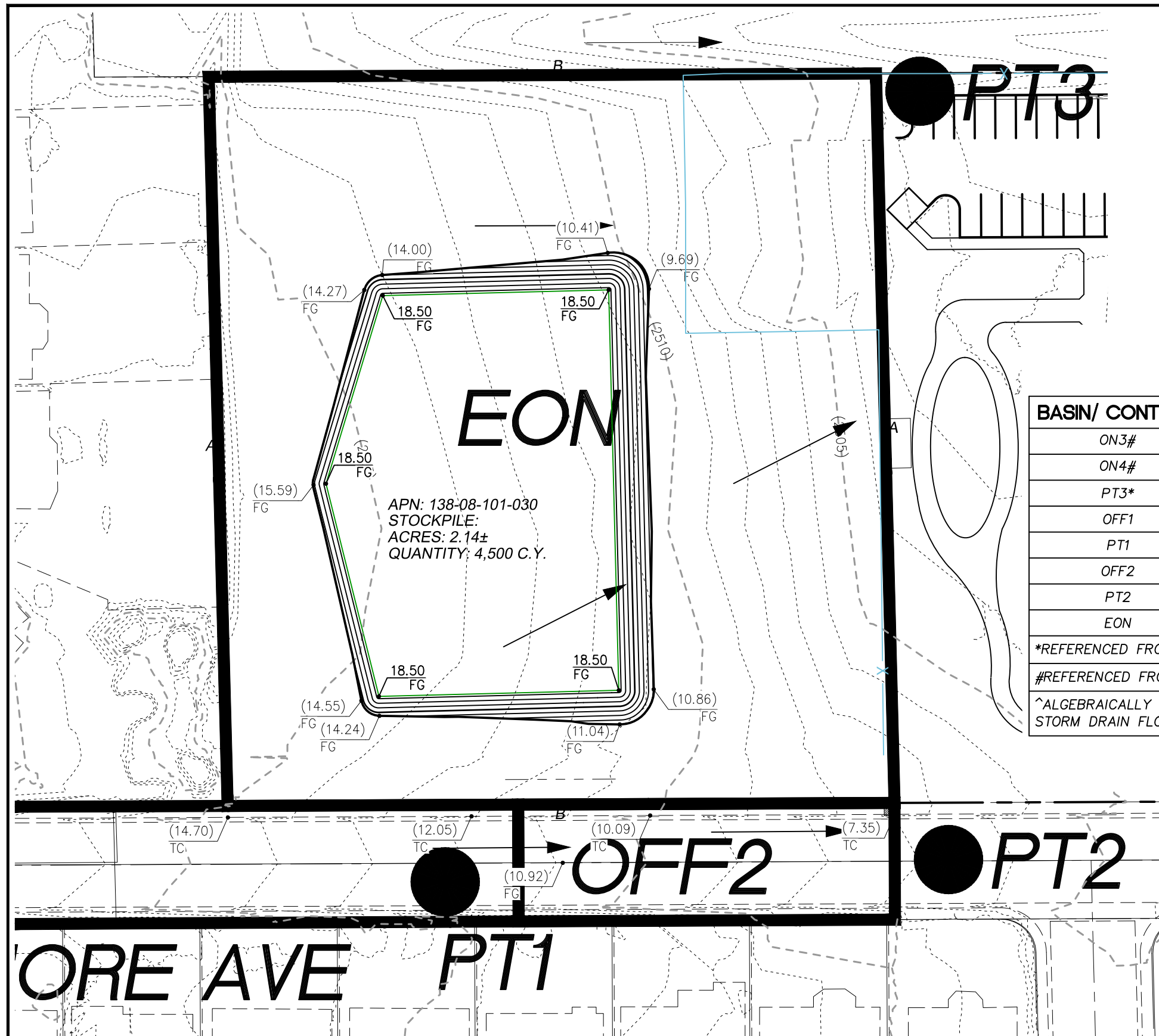
08/17/2023

John McAvoy, P.E.

**T**  **THOMASON**  
**C**  **CONSULTING**  
**E**  **ENGINEERS**

7080 La Cienega Street #200  
Las Vegas, Nevada 89119

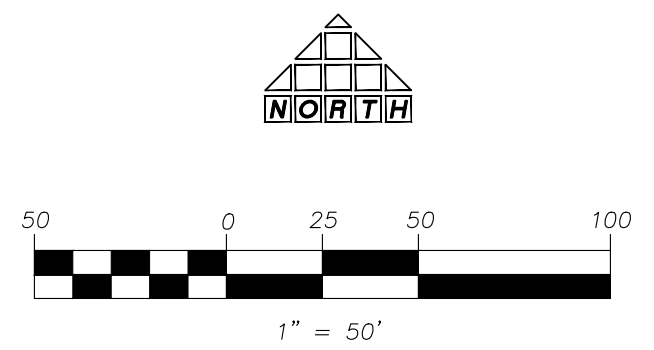
# FIGURES



APN: 138-08-101-030  
 STOCKPILE:  
 ACRES: 2.14±  
 QUANTITY: 4,500 C.Y.

BASIN/ CONTROL	AREA (ACRES)	Q10 (CFS)	Q100 (CFS)
ON3#	0.84	1	2
ON4#	0.38	<1	1
PT3*	-	51^	201^
OFF1	1.31	3	5
PT1	-	54	206
OFF2	0.19	<1	1
PT2	-	54	207
EON	2.13	<1	1

\*REFERENCED FROM GILMORE AND FORT APACHE (DS4635)  
 #REFERENCED FROM FIRE STATION NO. 45 STUDY (DS2976)  
 ^ALGEBRAICALLY ADDING REFERENCED FLOWS TOGETHER AND REMOVING STORM DRAIN FLOWS (55 CFS, 10 AND 100 YEAR)



(502) SOILS UNIT  
 ——— BASIN BOUNDARY

**T** THOMASON  
**C** CONSULTING  
**E** ENGINEERS  
 7080 LA CIENEGA STREET, SUITE 200  
 LAS VEGAS, NEVADA 89119  
 702-932-6125 FAX: 702-932-6129

SIGNATURE HOMES  
 GIMORE 2.14

EX. BASINS STOCKPILE  
 REVISED FIGURE 7

7

# **APPENDIX A**

Reference from Approved Study

<b>CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM</b>		<b>DATE:</b> August 23, 2022
<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>COPIES TO:</b>
Gilmore 2.14		TCE
<b>Cross Streets:</b>	NW Gilmore Ave & Campbell Road	Signature Homes
<b>File Number:</b>	F:\Depot\DSMemos\DS5544C.doc	Bart Anderson, P.E., DevCo
<b>Parcel Number:</b>	138-08-101-030	
<b>Zoning Action:</b>	SDR-21-0671	
<b>FEMA Flood Zone</b>	YES	NO <b>X</b>
<b>Proposed Storm Drain</b>	YES <b>X</b>	NO

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 <sup>st</sup> Submittal	2/03/2022	2/22/2022	Not Approved	\$400	4637329: \$400
2 <sup>nd</sup> Submittal	5/31/2022	6/27/2022	Not Approved	\$400	4809776: \$400
3 <sup>rd</sup> Submittal	8/10/2022	8/23/2022	Conditionally Approved	\$400	4905523: \$400
<b>TOTAL FEES (LDDRS):</b>				<b>\$1200</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:
	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.
<b>X</b>	is conditionally approved subject to the following conditions:

1. The grading plan indicates offsite grading onto CLV land, Garehime Heights Park. Secure a letter of permission from the City of Las Vegas Parks & Recreation allowing the grading and access. This letter is required prior to final acceptance of the improvement plans.
2. The grading plan indicates offsite grading onto Seton Academy. Secure a notarized letter of permission from the property owner allowing the construction. This letter is required prior to final acceptance of the improvement plans.

**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) 687-942

**END OF REMARKS**  
HDR/OSK/CAA

T/R/S: T20S/R60E/S08  
AREA L-08

<b>CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM</b>		<b>DATE:</b> February 2, 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>COPIES TO:</b>
Gilmore 2.14 – Update #1		Thomason Consulting Engineers
<b>Cross Streets:</b>	NWC of Gilmore Avenue & Campbell Road	Signature Homes
<b>File Number:</b>	F:\Depot\DSMemos\DS5544D.doc	Bart Anderson, P.E., DevCo
<b>Parcel Number:</b>	138-08-101-030	
<b>Zoning Action:</b>	SDR-21-0671	
<b>FEMA Flood Zone</b>	YES	NO <b>X</b>
<b>Proposed Storm Drain</b>	YES <b>X</b>	NO

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 <sup>st</sup> Submittal	2/03/2022	2/22/2022	Not Approved	\$400.00	4637329: \$400
2 <sup>nd</sup> Submittal	5/31/2022	6/27/2022	Not Approved	\$400.00	4809776: \$400
3 <sup>rd</sup> Submittal	8/10/2022	8/23/2022	Conditionally Approved	\$400.00	4905523: \$400
4 <sup>th</sup> Submittal	1/17/2023	1/30/2023	See Comments Below	\$100.00	5109967: \$100
<b>TOTAL FEES (LDDRS):</b>				<b>\$1,300.00</b>	----

**REMARKS:**

**4<sup>th</sup> Submittal: Update #1 to revise the discharge location of the onsite storm drain system at the northeast corner of the development**

The Drainage Study for the subject project has been reviewed and:

	is approved subject to conformance to all City standards and the following conditions:
	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.
<b>X</b>	is conditionally approved subject to the following conditions:

1. The grading plan indicates offsite grading onto CLV land, Garehime Heights Park. Secure a letter of permission from the City of Las Vegas Parks & Recreation allowing the grading and access. This letter is required prior to final acceptance of the improvement plans.
2. The grading plan indicates offsite grading onto Seton Academy. Secure a notarized letter of permission from the property owner allowing the construction. This letter is required prior to final acceptance of the improvement plans.

**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.

**END OF REMARKS**  
HDR/OSK/CAA

T/R/S: T20S/R60E/08  
AREA L-08

<b>CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM</b>		<b>DATE:</b> July 26, 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>COPIES TO:</b>
Gilmore 2.14 – Update #2		Thomason Consulting Engineers
<b>Cross Streets:</b>	NWC of Gilmore Avenue & Campbell Road	Signature Homes
<b>File Number:</b>	F:\Depot\DSMemos\DS5544F.doc	Bart Anderson, P.E., DevCo
<b>Parcel Number:</b>	138-08-101-030	
<b>Zoning Action:</b>	SDR-21-0671	
<b>FEMA Flood Zone</b>	YES	NO <b>X</b>
<b>Proposed Storm Drain</b>	YES <b>X</b>	NO

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 <sup>st</sup> Submittal	2/03/2022	2/22/2022	Not Approved	\$400.00	4637329: \$400
2 <sup>nd</sup> Submittal	5/31/2022	6/27/2022	Not Approved	\$400.00	4809776: \$400
3 <sup>rd</sup> Submittal	8/10/2022	8/23/2022	Conditionally Approved	\$400.00	4905523: \$400
4 <sup>th</sup> Submittal	1/17/2023	1/30/2023	Conditionally Approved	\$100.00	5109967: \$100
5 <sup>th</sup> Submittal	6/6/2023	6/22/2023	Not Approved	\$100.00	5305921: \$100
6 <sup>th</sup> Submittal	7/12/2023	7/26/2023	See Comments Below	\$400.00	5350725: \$400
<b>TOTAL FEES (LDDRS):</b>				<b>\$1,800.00</b>	----

**REMARKS:**

**5<sup>th</sup> & 6<sup>th</sup> Submittals: Update #2 & Addendum to revise the site grading to totally drain out to Gilmore Avenue**

**4<sup>th</sup> Submittal: Update #1 to revise the discharge location of the onsite storm drain system at the northeast corner of the development**

The Drainage Study for the subject project has been reviewed and:

<b>X</b>	is approved subject to conformance to all City standards and the following conditions:
	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.
	is conditionally approved subject to the following conditions:

1. The grading plan indicates offsite grading onto CLV land, *Garehime Heights Park*. Secure a letter of permission from the *City of Las Vegas Parks & Recreation* allowing the grading and access. This letter is required prior to final acceptance of the improvement plans.
2. Record the proposed 10'-public drainage easement (privately maintained by HOA) with *Landscape Easement* component as well. Add the "*Landscape Easement*" text on the grading plan and record in the Final Map as such.
3. The wrought iron fence proposed on the south end of the drainage easement must utilize Uniform Standard Drawing 425.S1.

**\*\*\* 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)**

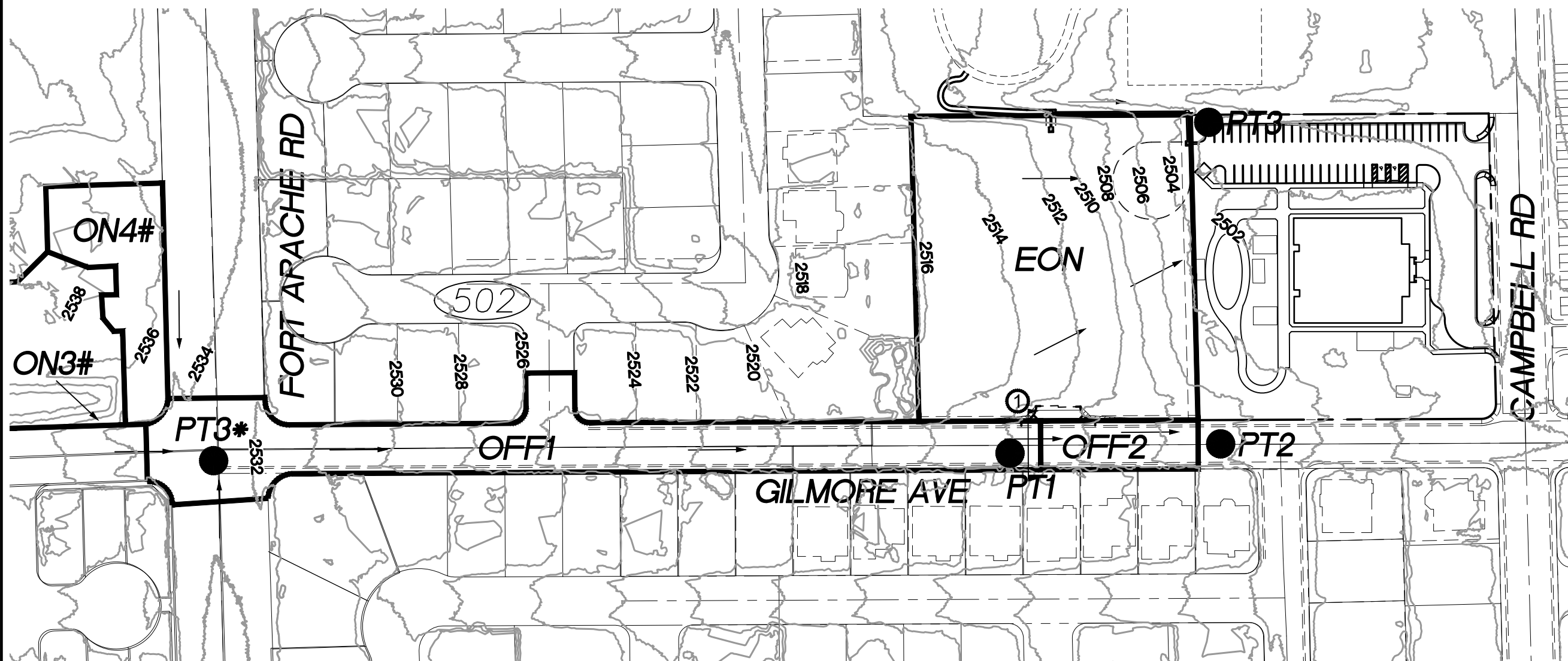
**1<sup>st</sup> Submittal Plan 2 (could be the improvement plans) etc.**

**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**  
HDR/OSK/CAA

T/R/S: T20S/R60E/08  
AREA L-08

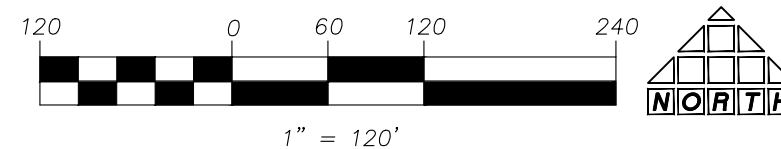


BASIN/ CONTROL	AREA (ACRES)	Q10 (CFS)	Q100 (CFS)
ON3#	0.84	1	2
ON4#	0.38	<1	1
PT3*	-	51^	201^
OFF1	1.31	3	5
PT1	-	54	206
OFF2	0.19	<1	1
PT2	-	54	207
EON	2.13	<1	1

\*REFERENCED FROM GILMORE AND FORT APACHE (DS4635)  
 #REFERENCED FROM FIRE STATION NO. 45 STUDY (DS2976)  
 ^ALGEBRAICALLY ADDING REFERENCED FLOWS TOGETHER AND REMOVING STORM DRAIN FLOWS (55 CFS, 10 AND 100 YEAR)

SECTION	Q (CFS)	DEPTH (FT)	VELOCITY (FT/S)	V X D
1-GILMORE - 10 yr	54	0.58	5.31	3.08
1-GILMORE - 100 yr	206	0.83	8.93	7.41

(502) SOILS UNIT  
 ——— BASIN BOUNDARY

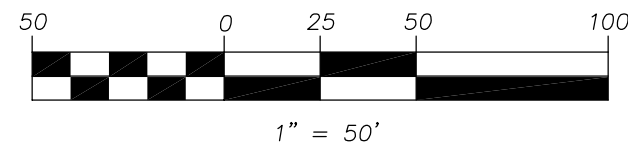
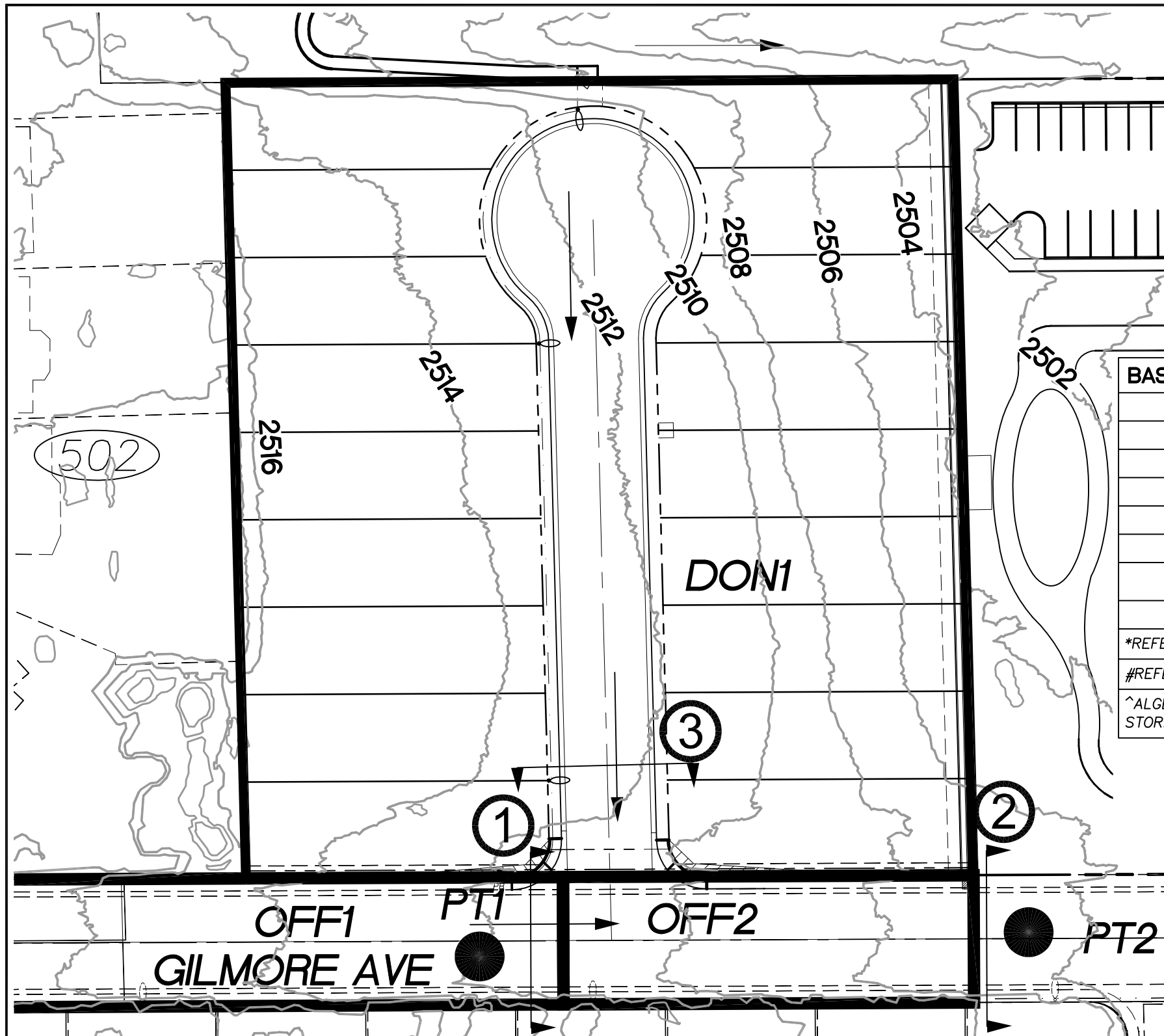


**T**  **THOMASON**  
**C**  **CONSULTING**  
**E**  **ENGINEERS**

7080 LA CIENEGA STREET, SUITE 200  
 LAS VEGAS, NEVADA 89119  
 702-932-6125 FAX: 702-932-6129

SIGNATURE HOMES  
 LEBARON EDMOND

EXISTING BASINS  
 FIGURE 5



BASIN/ CONTROL	AREA (ACRES)	Q10 (CFS)	Q100 (CFS)
ON3#	0.84	1	2
ON4#	0.38	<1	1
PT3*	-	51^	201^
OFF1	1.31	3	5
PT1	-	54	206
OFF2	0.19	<1	1
DON1	2.13	3	7
PT2	-	57	214

\*REFERENCED FROM GILMORE AND FORT APACHE (DS4635)  
 #REFERENCED FROM FIRE STATION NO. 45 STUDY (DS2976)  
 ^ALGEBRAICALLY ADDING REFERENCED FLOWS TOGETHER AND REMOVING STORM DRAIN FLOWS (55 CFS, 10 AND 100 YEAR)

SECTION	Q (CFS)	DEPTH (FT)	VELOCITY (FT/S)	V X D
1-GILMORE - 10 yr	54	0.58	5.31	3.08
1-GILMORE - 100 yr	206	0.83	8.93	7.41
2-GILMORE - 10 yr	57	0.59	5.41	3.19
2-GILMORE - 100 yr	214	0.84	9.07	7.62

SECTION	Q (CFS)	DEPTH (FT)	VELOCITY (FT/S)	V X D
3 - CLIFF MEADOW - 10 yr	3	0.31	1.69	0.52
3 - CLIFF MEADOW - 100 yr	7	0.39	2.01	0.78

(502) SOILS UNIT  
 ——— BASIN BOUNDARY

**THOMASON  
 CONSULTING  
 ENGINEERS**  
 7080 LA CIENEGA STREET, SUITE 200  
 LAS VEGAS, NEVADA 89119  
 702-932-6125 FAX: 702-932-6129

SIGNATURE HOMES  
 LEBARON EDMOND

DEVELOPED BASINS  
 FIGURE 6