

CITY OF LAS VEGAS		DATE:
INTER-OFFICE MEMORANDUM		February 27, 2020
TO: Land Development Services Department of Building & Safety		FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for:	
	Summerlin West Village 21 Parcel M	
Cross Streets:	NWC of Carriage Hill Dr. & Kindle Corner Av.	COPIES TO: GCW Engineering Howard Hughes Company, LLC; Woodside Homes of Nevada, LLC Bart Anderson, P.E., DevCo
File Number:	F:\Depot\DSMemos\DS5206C.doc	
Parcel Number:	137-23-410-002	
Zoning Action:	TMP-77769	
FEMA Flood Zone	YES NO X	
Proposed Storm Drain	YES X NO	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	10/21/2019	11/14/2019	Not Approved	\$400.00	3617825: \$400
2 nd Submittal & Supplement	12/11/2019 & 1/6/2020	1/23/2020	Not Approved	\$400.00	3673502: \$400
3 rd Submittal (Supplement)	2/18/2020	2/27/2020	See Comments Below	N/C	N/C
TOTAL FEES (LDDRS):				\$800.00	----

REMARKS:

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

X	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.

Note that the Clark County Regional Flood Control District (District) has begun efforts to update the Hydrologic Criteria and Drainage Design Manual (HCDDM) and is requesting participation from the engineering community. The District is collecting comments and suggestions on errors, clarifications, or changes needed to the current Manual and/or content and usability enhancements to be incorporated into the updated Manual. Additional information on procedures and deadline to provide feedback and comments are available online at (<http://www.ccrfcd.org/hcddmupdate.html>).

1. The subject development is under the premise of flood protection by the surrounding perimeter streets and the associated storm drain systems, ie, *Carriage Hill Drive, Kindle Corner Avenue, Clowder Spring Way and Red Pass Drive*. No occupancy permit of the houses will be issued prior to the substantial buildout of the perimeter streets.
2. All drainage easements must be public drainage easements to be privately maintained and common lots to be labeled on the grading plans and to be dedicated as such in the final map.

3. The engineer must provide a table on the grading plans that shows a quantity estimate of all drainage improvements within Public Drainage Easements. All drainage improvements within Public Drainage Easements must be bonded and inspected.

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, conditional acceptance 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.

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/AYS

T/R/S: T20S/R59E/23
AREA K-23

**2ND RESPONSE TO COMMENTS FOR THE
TECHNICAL DRAINAGE STUDY
FOR
SUMMERLIN VILLAGE 21 PARCEL M**

793-533

February 2020

Prepared for:

**Woodside Homes
4670 South Fort Apache
Las Vegas, Nevada 89147
Phone: (702) 889-7824**

HYDROLOGIC CRITERIA AND DRAINAGE MANUAL
DRAINAGE STUDY INFORMATION FORM

Name of Development: Summerlin Village 21 - Parcel M (Addendum #2) Date: February 2020

Location of Development: a) Descriptive (Cross Streets) North/South: I-215

East/West: Summerlin Parkway

b) Section: 23 Township: 20 Range: 59

c) APN : 137-23-410-002

Name of Owner: Howard Huges Company, LLC (Owner) / Woodside Homes of Nevada, LLC (Developer)

Telephone No.: (702) 889-7824 (Woodside) Fax No.: _____ E-Mail Address: sanderson@woodsidehomes.com

Address: 4670 S. Fort Apache Rd. #200, Las Vegas, NV 89147

Contact Person-Name: Cameron Bencini, PE Telephone No.: (702) 804-2126

* E-Mail Address: cbencini@gcwengineering.com Fax No.: _____

Firm: GCW Engineering

Address: 1555 South Rainbow Boulevard, Las Vegas, NV 89146

Type of Land Development/Land Disturbance Process:

☐	Rezoning	☐	Subdivision Map	☐	Clearing and Grading Only
☐	Parcel Map	☒	Planned Unit Development	☐	Other (Please specify below)
☐	Large Parcel Map	☐	Building Permit	☐	

1. Total Owned Land Area: At Site: 28.93 Acres Being Developed/Disturbed: 8.93 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: 0-acres

6. Has the site drainage been evaluated in the past? ☒ YES ☐ NO If yes, please identify documentation: FCMP UP to the Smrlin West Planning Area (DS4926F), Carriage Hill Drive and Smrlin Pkwy (DS5064C), Kindle Corner Ave. Improvements (DS5086D)

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: Runoff from the site drains to an existing 36" RCP stub at the east edge of the site.

8. Briefly describe your proposed schedule for the subject project: Single Phase - 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.

***New Required Field**

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

	Revision	Date
<u>Local Entity File No.</u>		

REFERENCE:

STANDARD FORM 1

793-533

February 17, 2020

Oh Sang Kwon, P.E.
City of Las Vegas, Public Works
333 N. Rancho Drive, 7th Floor
Las Vegas, NV 89106

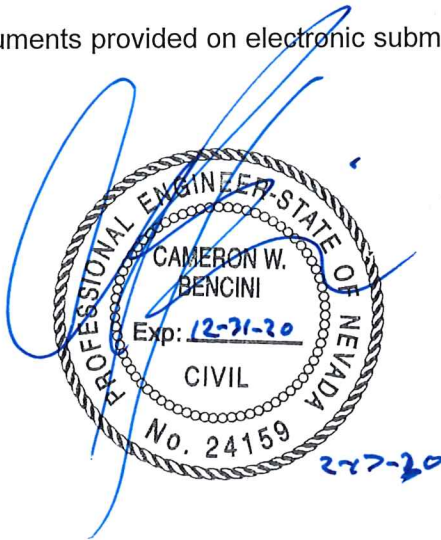
Re: Technical Drainage Study for Summerlin Village 21 Parcel M 2nd Response to Comments

Dear Mr. Kwon,

This letter is to certify that all documents provided on electronic submittal (CD) match the hardcopy version of the study.

Cordially,

Cameron Bencini, P.E.
GCW, INC.



**2ND RESPONSE TO COMMENTS FOR THE
TECHNICAL DRAINAGE STUDY
FOR
SUMMERLIN VILLAGE 21 PARCEL M**

793-533

February 2020

Authored By:

Cameron Bencini, PE

Prepared By:

**GCW, Inc.
1555 S. Rainbow Blvd.
Las Vegas, Nevada 89146
Phone: (702) 804-2000
Fax: (702) 804-2299**

793-533

February 18, 2019

Albert Y. Sung, PE
Flood Control Project Engineer
City of Las Vegas Land Development Services
Department of Public Works
333 N. Rancho Drive – 7th Floor
Las Vegas, NV 89106

**Subject: 2nd Response to City of Las Vegas Comments on the
Technical Drainage Study for Summerlin Village 21 Parcel M**

This report addresses City of Las Vegas (CLV) review comments dated November 14, 2018 included in Appendix A, regarding the project in its entirety.

Comment 1:

Provide a copy of the zoning/planning conditions associated with this site (TMP- 77769) 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.

Response:

The NOFA documents are provided in Appendix B.

Comment 2:

The subject development is under the premise of flood protection by the surrounding perimeter streets and the associated storm drain systems, ie, *Carriage Hill Drive, Kindle Corner Avenue, Clowder Spring Way and Red Pass Drive*. No occupancy permit of the houses will be issued prior to the substantial buildout of the perimeter streets.

Response:

Noted.

Comment 3:

The revised plans showed typical lot drainage detail with "Private" drainage easement in every single lot. Note that *City of Las Vegas* does not allow private drainage easements whatsoever. Revise all pertinent plans, details and construction notes to "PUBLIC" drainage easement to be PRIVATELY maintained by the HOA.

Provide an overall plan to show the locations of all drainage easements in the next submittal.

Response:

The grading has been revised to remove all cross-lot drainage. Flowlines have been implemented to each individual parcel that drains out onto the front roadways. Since the cross lot drainage has been removed, the drainage easements within the individual lots are no longer necessary and therefore have been removed. See typical lot drainage details within the grading plan for more information.

Comment 4:

All drainage easements must be public drainage easements to be privately maintained and common lots to be labeled on the grading plans and to be dedicated as such in the final map.

Response:

Note; however, see response to Comment 3.

Comment 5:

The engineer must provide a table on the grading plans that shows a quantity estimate of all drainage improvements within Public Drainage Easements. All drainage improvements within Public Drainage Easements must be bonded and inspected.

Response:

A table has not been provided. See response to Comment 3 for more information.

If you have any questions or require additional information, please do not hesitate to contact GCW at (702) 804-2000.

Respectfully,

GCW, INC.



Cameron Bencini, P.E.

APPENDIX A



CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: January 23, 2020
TO: Land Development Services Department of Building & Safety		FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
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File Number:	F:\Depot\DSMemos\DS5206B.doc	
Parcel Number:	137-23-410-002	
Zoning Action:	TMP-77769	
FEMA Flood Zone	YES	NO X
Proposed Storm Drain	YES X	NO
COPIES TO:		GCW Engineering Howard Hughes Company, LLC; Woodside Homes of Nevada, LLC Bart Anderson, P.E., DevCo

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- Second Request:** Provide a copy of the zoning/planning conditions associated with this site (TMP-77769) 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.
- The subject development is under the premise of flood protection by the surrounding perimeter streets and the associated storm drain systems, ie, Carriage Hill Drive, Kindle Corner Avenue, Clowder Spring Way and Red Pass Drive. No occupancy permit of the houses will be issued prior to the substantial buildout of the perimeter streets.

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Provide an overall plan to show the locations of all drainage easements in the next submittal.

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END OF REMARKS
HDR/AYS

T/R/S: T20S/R59E/23
AREA K-23

APPENDIX B





**LAS VEGAS
CITY COUNCIL**

CAROLYN G. GOODMAN
Mayor

MICHELE FIORE
Mayor Pro Tem

STAVROS S. ANTHONY
CEDRIC CREAR
BRIAN KNUDSEN
VICTORIA SEAMAN
OLIVIA DIAZ

SCOTT D. ADAMS
City Manager

DEPARTMENT OF PLANNING

ROBERT SUMMERFIELD
DIRECTOR

**DEVELOPMENT
SERVICES CENTER**

333 N. RANCHO DRIVE
3RD FLOOR
LAS VEGAS, NV 89106
702.229.6301 | VOICE
702.474.7463 | FAX
711 | TTY



cityoflasvegas
lasvegasnevada.gov

December 11, 2019

Howard Hughes Company, LLC
10845 Griffith Peak Drive, Ste. 160
Las Vegas, Nevada 89135

**RE: TMP-77769 [PRJ-77755] - TENTATIVE MAP
PLANNING COMMISSION MEETING OF DECEMBER 10, 2019**

Dear Applicant:

The Planning Commission at a regular meeting held on December 10, 2019 voted to **APPROVE** a request for a Tentative Map FOR A 94-UNIT SINGLE FAMILY RESIDENTIAL SUBDIVISION on 8.93 acres at the northwest corner of Kindle Corner Way and Carriage Hill Drive (APN 137-23-410-002), P-C (Planned Community) Zone [SFSD (Single Family Special Lot Development) Summerlin Special Land Use Designation], Ward 2 (Seaman) [PRJ-77755].

This approval is subject to the following conditions:

Planning

1. Approval of the Tentative Map shall be for no more than four (4) years. If a Final Map is not recorded on all or a portion of the area embraced by the Tentative Map within four (4) years of the approval of the Tentative Map, this action is void.
2. Street names must be provided in accordance with the City's Street Naming Regulations.
3. A fully operational fire protection system, including fire apparatus roads, fire hydrants and water supply, shall be installed and shall be functioning prior to construction of any combustible structures.
4. In conjunction with creation, declaration and recordation of the subject common-interest community, and prior to recordation of the Covenants, Codes and Restrictions ("CC&R"), or conveyance of any unit within the community, the Developer is required to record a Declaration of Private Maintenance Requirements ("DPMR") as a covenant on all associated properties, and on behalf of all current and future property owners. The DPMR is to include a listing of all privately

owned and/or maintained infrastructure improvements, along with assignment of maintenance responsibility for each to the common interest community or the respective individual property owners, and is to provide a brief description of the required level of maintenance for privately maintained components. The DPMR must be reviewed and approved by the City of Las Vegas Department of Field Operations prior to recordation, and must include a statement that all properties within the community are subject to assessment for all associated costs should private maintenance obligations not be met, and the City of Las Vegas be required to provide for said maintenance. Also, the CC&R are to include a statement of obligation of compliance with the DPMR. Following recordation, the Developer is to submit copies of the recorded DPMR and CC&R documents to the City of Las Vegas Department of Field Operations.

5. All development is subject to the conditions of City Departments and State Subdivision Statutes.

Public Works

6. Private streets must be granted and labeled on the Final Map for this site as Public Utility Easements (P.U.E.), Public Sewer Easements, and Public Drainage Easements with private surface maintenance by the Homeowner's Association.
7. On the Final Map, grant a minimum 40-foot Public Sewer and Drainage Easement between Lots 7 and 8. Additionally, grant this same easement across Common Element Lot 25 (Book 159, Page 50) to Carriage Hill Drive by separate document prior to or concurrent with the Final Map for this site.
8. Prior to the recordation of a Final Map for this site, submit a pedestrian circulation plan to identify nearby pedestrian attractors and recommend measures to accommodate pedestrians, such as but not limited to pedestrian access, crosswalk, pedestrian activated flashers and temporary sidewalks.
9. A Drainage Plan and Technical Drainage Study must be submitted to and approved by the Department of Public Works prior to the issuance of any building, grading permits or the recordation of a Final Map, whichever may occur first. Provide and improve all drainageways recommended in the approved drainage plan/study. The developer of this site shall be responsible to construct such neighborhood or local drainage facility improvements as are recommended by the City of Las Vegas Neighborhood Drainage Studies and approved Drainage Plan/Study concurrent with development of this site.

10. The approval of all Public Works related improvements shown on this Tentative Map is in concept only. Specific design and construction details relating to size, type and/or alignment of improvements, including but not limited to street, sewer and drainage improvements, shall be resolved prior to approval of the construction plans by the City. No deviations from adopted City Standards shall be allowed unless specific written approval for such is received from the City Engineer prior to the recordation of a Final Map or the approval of subdivision-related construction plans, whichever may occur first. Approval of this Tentative Map does not constitute approval of any deviations. If such approval cannot be obtained, a revised Tentative Map must be submitted showing elimination of such deviations. Roadway locations and parcel entries are schematic and final studies and engineering improvements designs. Geometric design of Parcel entry points must be approved through the development review of each parcel.
11. Site development to comply with all applicable conditions of approval for Summerlin Village 21 (TMP-73332), Summerlin Village 21 Unit 1 (FMP-74490) and Summerlin Village 21 - Unit 3 (FMP-76313) and all other applicable site-related actions.

This action by the Planning Commission on **December 10, 2019** is final unless a written appeal is filed with the City Clerk within seven days of the date of the Planning Commission's decision as allowed by code or there is a review action filed by the City Council within the same time period. For additional information on appeals or review requests submitted please access <http://www.lasvegasnevada.gov/CheckStatus/DevelopmentApp.htm>, or contact the Department of Planning and Development at 702.229.6301 after **December 17, 2019**. No building permits or business licenses related to these items shall be issued prior to the expiration of the required seven day waiting period, or until any filed appeal is resolved pursuant to LVMC Title 19.18.

Sincerely,



Eric McCammond
Sr. Management Analyst
Case Planning Division

EM:nl

cc:

Mr. Brandi Reid
GCW, Inc.
1555 S. Rainbow Blvd.
Las Vegas, Nevada 89146

IMPROVEMENT PLAN
FOR
OBSIDIAN
SUMMERLIN VILLAGE 21 – PARCEL M
APN # 137-23-410-002

PARCEL M OF "SUMMERLIN VILLAGE 21 - UNIT 3" AS SHOWN IN BOOK 159, PAGE 50 OF PLATS, ON FILE AT THE CLARK COUNTY, NEVADA RECORDER'S OFFICE, LYING WITHIN THE SOUTHWEST QUARTER (SE ¼) OF SECTION 23, THE NORTHWEST QUARTER (NW ¼) OF SECTION 26, TOWNSHIP 21 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.

VICINITY MAP
NOT TO SCALE

SHEET NUMBER	SHEET NAME	SHEET TITLE
1	C1	COVER SHEET
2	C2	GENERAL NOTES
3	C3	LEGEND, ABBREVIATIONS, AND QUANTITIES
4	G1	GRADING PLAN 1
5	G2	GRADING PLAN 2
6	G3	GRADING PLAN 3
7	G4	GRADING PLAN 4
8	D1	GRADING SECTIONS AND DETAILS 1
9	D2	GRADING SECTIONS AND DETAILS 2
10	D3	GRADING SECTIONS AND DETAILS 3
11	P1	WARRIOR STONE ST STA: 9+84.00 TO STA: 11+83.00 PLAN AND PROFILE
12	P2	EARTH STONE ST STA: 9+84.50 TO STA: 12+50.00 PLAN AND PROFILE
13	P3	EARTH STONE ST STA: 12+50.00 TO STA: 15+38.53 PLAN AND PROFILE
14	P4	AMETHYST POINT WAY STA: 10+00.00 TO STA: 14+25.00 PLAN AND PROFILE
15	P5	AMETHYST POINT WAY STA: 14+25.00 TO STA: 17+78.40 PLAN AND PROFILE
16	P6	ALLEY "B" STA: 10+00.00 TO STA: 12+72.44 PLAN AND PROFILE
17	P7	ALLEY "A" STA: 9+99.67 TO STA: 14+50.00 PLAN AND PROFILE
18	P8	ALLEY "A" STA: 14+50.00 TO STA: 17+17.22 PLAN AND PROFILE
19	P9	PYRITE WILL ST STA: 10+00.00 TO STA: 14+30.53 PLAN AND PROFILE
20	P10	SOLAR CITRINE ST STA: 10+00.00 TO STA: 13+77.82 PLAN AND PROFILE
21	P11	TRANQUIL JADE ST STA: 10+00.00 TO STA: 13+33.78 PLAN AND PROFILE
22	P12	ANGEL AURA ST STA: 10+00.00 TO STA: 12+82.08 PLAN AND PROFILE
23	P13	LYVWD ESMT STA: 1+81.00 TO STA: 2+28.19 PLAN AND PROFILE
24	LAT	LATERAL A STORM DRAIN ESMT STA: 1+00.00 TO STA: 2+23.00
25	MU	MASTER UTILITY PLAN
26	U1	UTILITY PLAN 1
27	U2	UTILITY PLAN 2
28	U3	UTILITY PLAN 3
29	U4	UTILITY PLAN 4
30	T1	TRAFFIC AND HORIZONTAL CONTROL PLAN 1
31	T2	TRAFFIC AND HORIZONTAL CONTROL PLAN 2
32	T3	TRAFFIC AND HORIZONTAL CONTROL PLAN 3
33	T4	TRAFFIC AND HORIZONTAL CONTROL PLAN 4

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

NOTES:

1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.
2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

CITY OF LAS VEGAS BENCHMARK NO. 7LV0934SW6, FOUND RIVET AND PLATE IN THE TOP OF CURB AT THE SOUTHEAST CORNER OF DESERT MOON ROAD AND SKY VISTA DRIVE.
ELEVATION: 3318.31 (FEET)
1,011.422 (METERS)

OWNER	DEVELOPER	ENGINEER
HUGHES HOWARD COMPANY LLC 10801 W.CHARLESTON BLVD 3RD FLOOR LAS VEGAS, NV 89135 (702) 791-4000	WOODSIDE HOMES OF NEVADA, LLC 7895 W. SUNSET RD. #2110 LAS VEGAS, NV 89113 (702) 889-7824	GCW, INC. 1555 SOUTH RAINBOW BLVD. LAS VEGAS, NEVADA 89146 (702) 804-2000 (702) 804-2299 (FAX)

COX COMMUNICATIONS LAS VEGAS, INC.	DATE
------------------------------------	------

COX COMMUNICATIONS LAS VEGAS, INC.	DATE
------------------------------------	------

CENTRAL TELEPHONE COMPANY, DBA CENTURY LINK	DATE
---	------

PROPOSED IMPROVEMENTS. RESOLUTION OF ANY CONFLICT WILL BE ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES AND/OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.

NV ENERGY	DATE
NEVADA POWER COMPANY ACKNOWLEDGES THAT WE HAVE RECEIVED YOUR PLANS AND WILL PROVIDE SERVICE TO ALL ELECTRICAL NEEDS ASSOCIATED WITH THIS PROJECT. NEVADA POWER COMPANY RESERVES THE RIGHT TO ADDRESS ANY EXISTING OR FUTURE CONFLICTS ONCE THE FINAL DESIGN IS COMPLETED. THE NEW SERVICE AND THE RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO THE NEVADA PUBLIC UTILITY COMMISSION'S RULES AND REGULATIONS.	

NV ENERGY – TRANSMISSION ENGINEERING	DATE
--------------------------------------	------

SOUTHWEST GAS CORP. _____ DATE _____

ACTING CITY ENGINEER – ROSA CORTEZ, PE# 17505

APPROVAL OF THESE PLANS IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE DEDICATED RIGHTS-OF-WAY AND/OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE THE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEViate FROM ADOPTED STANDARDS AND/OR SPECIFICATIONS, EXCEPT THOSE SPECIFICALLY LISTED UNDER "DEVIATIONS FROM STANDARDS". THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE LISTED IN "DEVIATIONS FROM STANDARDS" IN FAVOR OF THE UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS CLARK COUNTY AREA NEVADA.

THIS PLAN MEETS THE APPLICABLE STANDARDS OF THE CITY OF LAS VEGAS PLANNING DEPARTMENT

PLANNING DEPARTMENT DATE

LAS VEGAS FIRE AND RESCUE, FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL DATE

SUMMERLIN DESIGN REVIEW COMMITTEE _____ DATE _____

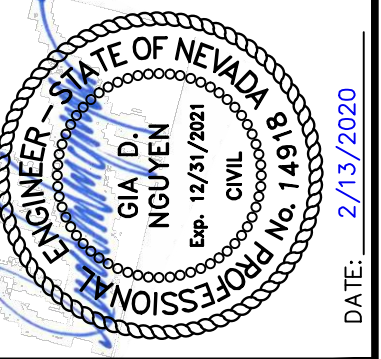
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVED DATE: _____

LVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 30 GPM

SHEETS: _____

[illegible]

PROJECT NO. 793-533

DESIGN: _____

DRAWN: _____

CHECK: _____

PLOT DATE: 02-13-20

PLOT TIME: 10:26:43

GCV
ENGINEERS \ SURVEYORS

1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gowengineering.com

Projects \ 700 \ 793 - 523.DWG \ production \ 793 - 523 - c.dwg
Jangyong Nguyen

WOODSIDE HOMES
OBSIDIAN
SUMMERLIN VILLAGE Z1 PARCEL M

DRAWING
C1
1 OF 33 SHTS

Call before you Dig
Avoid cutting underground utility lines. It's costly.

Call
811

OR

1-800-227-2600

AVOID HITTING OVERHEAD
POWER LINES. IT'S COSTLY

**CALL BEFORE
YOU DO
OVERHEAD**

1-702-227-2929

FAST

 **Call**
before you
UnderGround
1-702-432-5300
FREEWAY AND ARTERIAL
SYSTEM OF TRANSPORTATION

CITY OF LAS VEGAS GRADING NOTES

- IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
- CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION, ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
- THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
- THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.
- CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED:

	HORIZONTAL	VERTICAL	COMPACTION
A. PAVEMENT AREA SUBGRADE	0.1"±	+0.0' TO -0.1'	SEE SOILS REPORT
B. ENGINEERED FILL	0.5"±	+0.1' TO -0.1'	SEE SOILS REPORT

COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE. COMPACTION SHALL COMPLY WITH THE REQUIREMENTS OF THE ENGINEER.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
- THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING PROTECTION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
- THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
- IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, SUCH ITEM SHALL BE PROVIDED, AS DIRECTED BY THE CITY ENGINEER, AT NO EXPENSE TO THE CITY OF LAS VEGAS. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMES, ROAD SIGNS AND BARRICADES, ETC.

REVISED 4/15/10

STORMWATER RUNOFF MANAGEMENT

- THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATE IN, THE PUBLIC RIGHTS OF WAYS OF THE CITY OF LAS VEGAS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
- ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED IF THE OWNER AND/OR CONTRACTOR ARE NOT PROVIDING TEMPORARY EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE CITY OF LAS VEGAS AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL.
- TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.5.
- AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENDED DISTURBANCE ACTIVITIES. REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.12.
- ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

CITY OF LAS VEGAS SEWER NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CITY ENGINEER.
- CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE.
- ALL MANHOLES PAVED IN STREETS EIGHTY (80') FOOT R/W AND LARGER SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80') FOOT R/W WILL REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.
- TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER. CONNECTIONS TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. IN LINE "Y" S SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
- WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVVWD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.
- ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA CLASS "A" CONTRACTORS.
- THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS AT ANY LOCATION. ANY DEFLECTION IN EXCESS OF THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED OR REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.
- INSTALLATION OF CURVED SEWER REQUIRES THE USE OF C-900 PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

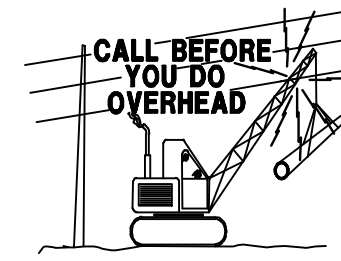
REVISED 04/15/10

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SYSTEM OF TRANSPORTATION

CITY OF LAS VEGAS FIRE AND RESCUE GENERAL NOTES FOR HYDRANTS AND ACCESS

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND RESCUE ADOPTED FIRE CODE ORDINANCE #6631 FOR HYDRANT SPECIFICATIONS AND HYDRANT INSTALLATION SPECIFICATIONS.
- ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALLEY WATER DISTRICT'S - APPROVED PRODUCTS LIST ARE ALLOWED TO BE INSTALLED.
- A PERMIT IS REQUIRED FROM LAS VEGAS FIRE AND RESCUE FOR THE INSTALLATION OF ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTORS MATERIAL TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK. [IFC SECTION 105.6.15]
- ON ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS, FIRE HYDRANTS SHALL BE INSTALLED AND FIRE APPARATUS ACCESS ROADS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY COMBUSTIBLE CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW. [IFC SECTION 3310, SECTION 3312]
- TO IDENTIFY FIRE HYDRANT LOCATIONS, THE CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF THE STREET ADJACENT TO THE FIRE HYDRANTS. [IFC SECTION 507.5.7.3]
- ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES, SHALL BE CONDUCTED BEFORE COVERING THE LINES. CENTER LOADING IS ACCEPTABLE FOR THE HYDRO TESTS WITH PRIOR FIRE PREVENTION APPROVAL. [IFC SECTION 106.3]
- ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS SHALL BE U.L. LISTED, A.W.W.A. APPROVED AND SHALL BE RATED FOR THE APPROPRIATE WORKING PRESSURE. [IFC SECTION 507.2.1, NFPA 24]
- PAINTING OF CURBS, FIRE HYDRANTS, PADS, PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE AND ALL OTHER WORKER PROTECTION PLANS SHALL BE COMPLETED BEFORE APPROVAL BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION. [IFC SECTION 507]
- PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED. [IFC SECTION 507.5.7.1]
- PRIOR TO THE FINAL OCCUPANCY, A FIRE FLOW TEST SHALL BE WITNESSED BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW. [IFC SECTION 507]
- FIRE HYDRANTS SPACING SHALL BE AS FOLLOWS: [IFC SECTION C102]

RESIDENTIAL	COMMERCIAL
500 FT UNSPRINKLERED; 600 FT SPRINKLERED	300 FT UNSPRINKLERED; 400 FT SPRINKLERED
- WHERE THE WATER MAINS ARE EXTENDED ALONG STREETS OR NEW STREETS ARE INSTALLED WHERE FIRE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF THE STRUCTURES, FIRE HYDRANTS SHALL BE INSTALLED AT A MAXIMUM OF 1,000 FT SPACING. TO PROVIDE FOR PROTECTION HAZARDS, WHERE NEW STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR (4) OR MORE TRAFFIC LANES AND HAVE A TRAFFIC COUNT OF MORE THAN 30,000 PER DAY, HYDRANTS ARE REQUIRED ON EACH SIDE OF THE STREET SPACED AT 500 FT ON AN ALTERNATING BASIS. [IFC SECTION C102.6]
- NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE RADIUS OF A CUL-DE-SAC OR WITHIN 20 FT OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
- NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FT OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION. [IFC SECTION C102.10]
- A MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FT, AS MEASURED BY AN APPROVED ROUTE. [IFC SECTION C102.4]
- THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FT, AS MEASURED BY AN APPROVED ROUTE. [IFC SECTION C102.7]
- THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FT. [IFC SECTION C102.6]
- TWO (2) SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE IS 4 OR MORE FIRE HYDRANTS/SPRINKLER LEAD-INS ARE INSTALLED ON A SINGLE SYSTEM. FOR SYSTEMS REQUIRED TO HAVE TWO (2) SOURCES OF WATER SUPPLY, SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS AND/OR SPRINKLER LEAD-INS CAN BE OUT OF SERVICE DUE TO A SERVICE INTERRUPTION. FOR SYSTEMS PERMITTED TO HAVE ONE SOURCE OF WATER SUPPLY, SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 3 FIRE HYDRANTS AND/OR FIRE SPRINKLER LEAD-INS CAN BE OF SERVICE DUE TO A SERVICE INTERRUPTION. [IFC SECTION C104]
- ALL FIRE APPARATUS ACCESS ROADS SHALL BE PAVED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES. THEY SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF THE FIRE APPARATUS. [IFC SECTION 503.2.3]
- THE GRADIENT FOR THE FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 12% ANGLES OF APPROACH AND ANGLES OF DEPARTURE SHALL NOT EXCEED 6% FOR 25 FT PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%. [IFC SECTION 503.2.7, 503.2.8]
- THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FT OUTSIDE AND 28 FT INSIDE TURNING RADIUS. [IFC 503.2.4]
- VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13 FT 6 IN. [IFC SECTION 503.2.1]
- FIRE DEPARTMENT ACCESS ROADS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 33 FT WITH PARKING ON BOTH SIDES MEASURED TO EDGE OF CURB. NO LESS THAN 10 FT WITH PARKING ON ONE SIDE OF THE ROAD MEASURED TO FACE OF CURB. NO LESS THAN 24 FT WIDE WITH NO PARKING ON EITHER SIDE MEASURED TO FACE OF CURB. FIRE LINES THROUGH PARKING LOTS SHALL NOT BE LESS THAN 24 FT. [IFC SECTION 503.2.1.1]
- A FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FT FROM A FIRE DEPARTMENT VEHICLE ACCESS. [IFC SECTION 503.1.1]
- APPROVED SECONDARY FIRE APPARATUS ACCESS SHALL BE PROVIDED FOR 200 OR MORE DWELLING UNITS, ROAD(S) WITH DEAD-ENDS OR SINGLE POINT OF ACCESS IN EXCESS OF 600 FT, CLV REGULATION AND MOUNT.
- ALL DEAD-END FIRE APPARATUS ROADS AND/OR FIRE LINES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FT IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND HAVING A MINIMUM DIAMETER OF 81 FT.
- ALL FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS OF 100 FT ALONG THE DESIGNATED FIRE LANE. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED NO HIGHER THAN 10 FT OR LESS THAN 6 FT FROM THE ROADWAY LEVEL. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT (IF NO CURB IS PROVIDED) SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS. [IFC SECTION 503.3]
- ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. [IFC SECTION 503.6]
- WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS, OR HAVING FOUR OR MORE TRAVEL LANES AND A TRAFFIC COUNT OF MORE THAN 30,000 VEHICLES PER DAY, ALL HYDRANTS BEING UTILIZED TO DELIVER FIRE FLOW TO PROPOSED LOCATION SHALL BE LOCATED ON THE SAME SIDE OF THE STREET AS THE PROPOSED DEVELOPMENT. CLV REGULATION.

REVISED FEBRUARY 4, 2019

FLOOD ZONE NOTE

FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, COMMUNITY PANEL 32003C2150E, MAP REVISED SEPTEMBER 27, 2002 INDICATED THAT THE SUBJECT PROPERTY LIES IN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN)

DEVIATION FROM STANDARDS

- NONE

LAS VEGAS VALLEY WATER DISTRICT (LVVWD) STANDARD NOTES

LVVWD PROJECT # XXXXXX

REVISED 08/01/17

- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD FOLLOWING WATER PLAN APPROVAL. NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
- ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS). THE LATEST EDITION OF UDACS SHALL SUPERSEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.
- ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
- A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
- ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
- ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS
- THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
- ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE LISTED ON THE LVVWD APPROVED PRODUCTS' LIST FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS BY SUBMITTING SHOP DRAWINGS.
- TELEPHONE "CALL BEFORE YOU DIG" AT 811 OR 1-800-227-2600
- THE INSTALLATION OF LVVWD MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVVWD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDE THE PLACEMENT OF AN APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.
- ANY DECORATIVE PAVING SURFACE WITHIN THE STREET IS THE RESPONSIBILITY OF THE OWNER'S ASSOCIATION, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ABUTTING A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVWD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.
- NO LEAD COMPLIANCE NOTE:

TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, ALL WATER WORKS BRASS PRODUCTS PROPOSED TO BE RELOCATED, OR INSTALLED AS NEW MUST BE INSTALLED WITH THE LEAD FREE APPROVED PRODUCT. THE OLD LEADED PRODUCT MAY NOT BE REUSED.

EXHIBIT 1

SOUTHWEST GAS CONSTRUCTION NOTES

ALL CIVIL IMPROVEMENT PLANS MUST INCLUDE SOUTHWEST GAS CORPORATION GENERAL NOTES ON THE NOTES SHEET AS INDICATED BELOW:

SOUTHERN NEVADA - SOUTHWEST GAS CORPORATION GENERAL NOTES

- IN THE EVENT OF NATURAL GAS EMERGENCIES CALL 911 AND 1-877-860-6020
 - THERE SHALL BE A MINIMUM HORIZONTAL AND VERTICAL CLEARANCE OF 12-INCHES BETWEEN NATURAL GAS FACILITIES AND AN Y UNDERGROUND FACILITIES AND/OR STRUCTURES, INCLUDING BUT NOT LIMITED TO WATER, SEWER, STORM DRAIN, COMMUNICATIONS, AND ELECTRIC
 - FOR VALVE ADJUSTMENT CONTACT 702-668-6107 48 HOURS PRIOR TO CONSTRUCTION
 - IN THE EVENT OF A NATURAL GAS CONFLICT WITH PROPOSED UTILITIES AND/OR STRUCTURES CONTACT 702-365-2099
- ALL CIVIL IMPROVEMENT PLANS MUST INCLUDE SOUTHWEST GAS CORPORATION HIGH PRESSURE NOTES ON THE NOTES SHEET AND ALL SHEETS DEPICTING HIGH PRESSURE NATURAL GAS MAINS AS INDICATED BELOW:
- CAUTION: HIGH PRESSURE GAS!
CALL SOUTHWEST GAS AT 702-400-1789 FOR STANDBY WHEN EXCAVATION OVER OR NEAR HIGH PRESSURE GAS LINES 48 HOURS PRIOR TO CONSTRUCTION

BASIS OF BEARING:

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

LINEAR UNIT: US SURVEY FOOT (FT/US)
DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00
SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)
ZONE: LAS VEGAS HIGH ELEVATION ZONE

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: 400,000.00 M (1,312,333.3333 FT/US)
EASTING AT CENTRAL MERIDIAN: 300,000.00 M (984,250.0000 FT/US)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:

- LOCAL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.
- GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

BENCHMARK:

CITY OF LAS VEGAS BENCHMARK NO. 7LV09345W6, FOUND RIVET AND PLATE IN THE TOP OF CURB AT THE SOUTHEAST CORNER OF DESERT MOON ROAD AND SKY VISTA DRIVE.
ELEVATION: 3318.31 (FEET)
1,011.422 (METERS)

BASED ON NORTH AMERICAN VERTICAL DATUM OF 2018 (NAVD'88).

CITY OF LAS VEGAS TRAFFIC NOTES

- ALL CONSTRUCTION SIGNING, BARRICADEING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
- THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
- BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCED WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENDS FOLLOWING THE EXISTING CITY STREETS WHEN WARRANTED IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
- WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCLOSED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THAT WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.
- IF THE IMPROVEMENTS NECESSITATE THE OBSTRUCTION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. ALL NEW SIGNS SHALL BE FABRICATED WITH DIAMOND GRADE VIR CLASS 6 REFLECTIVE SHEETING OR APPROVED EQUIVALENT. ALL NEW TRAFFIC SIGNS, EXCEPT STREET NAME AND SCHOOL SPEED LIMIT SIGNS, SHALL HAVE 3M SERIES 1160 OR APPROVED EQUIVALENT ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. SCHOOL ZONE SIGNS SHALL HAVE 3M SERIES 1150 ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.
- WHEN A PROPOSED STREET LIGHT STANDARD IS LOCATED WITHIN FIVE (5') FEET OF ANY PROPOSED SIGN SHOWN ON THE PLANS TO BE MOUNTED ON A SIGNPOST, THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGNPOST SHALL BE ELIMINATED.
- ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HERE UNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
- STREET SIGNS AND STOP SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF STREET NAME SIGNS.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLAGGERS TO INSURE THE SAFETY OF THE PUBLIC IN OR AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR IMSA WORK ZONE SAFETY SPECIALIST SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT-OF-WAY.
- WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE EXPEDITED TO COMPLETION SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING CITIZENS AREA TRANSIT (C.A.T.) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
- GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE # 828-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.
- ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.
- CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECT'S OFFSITE INSPECTOR PRIOR TO INITIATING PAVING TO RECEIVE DRAWINGS FOR ANY PERMANENT OR TEMPORARY MODIFICATIONS TO THE APPROVED DRAWINGS REGARDING FINAL PAVEMENT TRANSITIONS, MARKINGS AND SIGNALS. THE CONTRACTOR IS REQUIRED TO MATCH ADJACENT ROADWAY SEGMENTS. THE CONTRACTOR SHALL PROVIDE A DRAWING FOR APPROVAL BY THE TRAFFIC ENGINEERING DIVISION DEPICTING ANY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNALS, WHICH MAY INCLUDE OMITTING, ADDING OR MODIFYING PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SUCH THAT ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.

REVISED 4/15/10

CITY OF LAS VEGAS STREETLIGHT NOTES

- ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE STREET LIGHTING PLANS, THE "UNIFORM STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION (USS), AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA" (USD), LATEST REVISION.
- NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS, ETC., LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE TRAFFIC AND CITY ENGINEER. ANY DEVIATION FROM THE PLAN LOCATION WILL REQUIRE COMPLIANCE WITH SECTION 623 OF THE USS.
- ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION IN ACCORDANCE WITH SECTION 623 G.03.01 OF THE USS.
- ALL EMPLY CONDUIT SHALL HAVE AT LEAST ONE GREEN NO. #8 AWG WIRE INSTALLED AS TRACER WIRE IN ACCORDANCE WITH SECTION 623 G.02.01 OF THE USS PRIOR TO BACKFILLING AND FINAL INSPECTION.
- ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE IN COMPLIANCE WITH USD NO. 320A. WHEN POLE IS INSTALLED BEHIND SIDEWALK, AND SHALL AT NO TIME COMPLETELY ENCLOSE THE STREET LIGHTING POLE.
- AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE TRAFFIC ENGINEERING DIVISION PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
- SERVICE POINTS SHALL BE COORDINATED WITH NV ENERGY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICEPOINTS SHALL BE SHOWN ON THE PLANS.
- WHEREVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION OF STREETLIGHTING CIRCUITS AND/OR POLES, THESE CONFLICTS MUST BE RESOLVED BETWEEN THE DEVELOPER AND THE UTILITIES INVOLVED BEFORE STREETLIGHT BASES ARE INSTALLED. AT NO EXPENSE TO THE CITY OF LAS VEGAS.
- THE CONTRACTOR SHALL FURNISH COMPLETE CONDUIT, WIRE, ETC. FROM SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON THE PLANS.

REVISED JUNE 28, 2016 (LD VERSION)

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. XXXXXX

FIRST APPROVED DATE: _____

LVVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 30 GPM

SHEETS: C1-C3, D13, MU, U1-U6, P1-P11, LAT

CITY OF LAS VEGAS GENERAL NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST ISSUE; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST REVISED EDITION; THE "SUMMERLIN IMPROVEMENT STANDARDS" FOR WORK IN THE SUMMERLIN AREA; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS "DEVIATIONS FROM STANDARDS".
- THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCE'S WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES, SO AS TO SAFELY PROTECT ALL PERSONNEL, AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS. ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
- TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGNS TO BE APPROVED BY THE CITY, PRIOR TO THE USE ON THE PROJECT.
- PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
- EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.
- AC PAVEMENT TO BE ONE-HALF INCH (½") ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
- CURB AND GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
- SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND PROGRESS AND FOR PROGRESS AND PROGRESS TO NEW CONSTRUCTION. THE EXTENT OF THE TRANSITIONS TO BE AS SHOWN ON PLANS.
- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE GEOTEK, INC., PROJECT NUMBER 14880-LV, DATED JULY 2, 2019, APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
- EXACT LOCATION OF ALL SAWHOUT LINES MAY BE ADJUSTED OR DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS ENGINEER IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATIONS.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 625.380 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.
- UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE PROTECTED OUTSIDE OF DRIVEWAYS, DRIVEWAYS, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.
- WALL NOTES:
 - ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF RECORDATION AND NOT FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INTERSECTIONS. NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
 - ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.
 - CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
 - MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
 - WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC., THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO THE OFFSITE INSPECTION AND TESTING CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.
 - AFTER HAUNCHING AND PRIOR TO BACKFILL OPERATIONS WHICH WOULD COVER SANITARY SEWER AND STORM DRAIN FACILITIES, CONTRACTOR IS REQUIRED TO SCHEDULE CLV OPEN-TRENCH UTILITY SURVEY INSPECTION FOR DETERMINATION OF FINAL LOCATION COORDINATES. FACILITIES TO BE LOCATED BY CLV SHALL INCLUDE AT A MINIMUM THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET. THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS.
- OR
(MAY BE USED ONLY ON PROJECTS ASSOCIATED WITH A TENTATIVE MAP CONTAINING 5 LOTS OR MORE)
- SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S) SHALL BE PROVIDED TO THE CITY AND APPROVED PRIOR TO ACCEPTANCE OF FACILITY LOCATION INSPECTION. THE MAP(S) SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET. THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS. THE LOCATION SHALL BE DESCRIBED BY COORDINATES WHICH SHALL BE BASED ON THE OFFICIAL HORIZONTAL AND VERTICAL CONTROL NETWORKS OF THE CITY OF LAS VEGAS. FINAL LOCATION MAPS MUST BE SEALED AND CERTIFIED BY A NEVADA PROFESSIONAL LAND SURVEYOR TO HAVE POSITIONAL CERTAINIES OF ± 0.09 METERS (± 0.3 FEET) HORIZONTALLY AND VERTICALLY. A SEPARATE ELECTRONIC COMMA DELIMITED FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S).
- CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTION SHALL BE PERFORMED PRIOR TO THE DESIGN AND CON

AB	AIR	AGGREGATE BASE	DR	DRIVE	P.A.E.	PEDESTRIAN ACCESS EASEMENT	STRUCT	STRUCTURE
AC	ASPHALT CONCRETE, ACRE	DS	DOWNSPOUT	PB	PULL BOX	SVZ	SIGHT VISIBILITY ZONE	
ACP	ASBESTOS CEMENT PIPE	DET	DETAIL	PC	POINT OF CURVE, PRESSURE	SW	SEWALW	
ADD	ADDITIONAL	DW	DRIVEWAY	CC	CLASS	SWG	SOUTHWEST GAS	
ADP	ADDITIONAL ACCESS	DWG	DRAWING	PC	POINT OF COMPOUND CURVE	T	TELEPHONE OR TOP	
AE	ANGLE POINT	E	EAST	P.D.E.	PUBLIC DRAINAGE EASEMENT	TAN	TANGENT	
AF	ASSESSOR'S PARCEL NUMBER	E.A.E.	EMERGENCY ACCESS EASEMENT	PE	PROJECT ENGINEER OR	TB	TOP OF BERM	
AFN	APPROXIMATELY	ECR	END CURB RETURN	PE	POLYETHYLENE	TC	TOP OF CURB	
APPROX	APPROXIMATELY	ELE,ELEC	ELECTRICAL ELEVATION	FED	FEED	TCE	TEMPORARY CONSTRUCTION ESMT	
AASHO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	ELEV	ELEVATION	FEL	PROFILE GRADE LINE	TELE	TELEPHONE	
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	EP, EOP	EDGE OF PAVEMENT EASEMENT	PH	POTHOLE	TEMP	TEMPORARY	
AVE	AVENUE	ESMT	EXISTING	P/I	POINT OF INTERSECTION	TF	TOP OF FOOTING	
AVAR	AIR VALVE, AIR RELEASE	EVC	EXISTING VALVE	PI	POST INDICATOR VALVE	TG	TOP OF GRATE	
AWWA	AMERICAN WATER WORKS ASSOCIATION	EXP	EXPANSION JOINT	PLCP	PROPERTY LINE	TMH	TOP OF MANHOLE	
BC	BACK OF CURB	EXP	EXPANSION JOINT	PLCP	POLYURETHANE LINED AND COATED STEEL PIPE	TP	TOP OF PIPE	
BLR	BEGIN CURB RETURN	FF, FFE	FINISH FLOOR ELEVATION	PMF	PAVEMENT MARKING FILL	TRANS	TRANSITION	
BCM	BUREAU OF LAND MANAGEMENT	FG	FINISH GRADE	POB	POINT OF BEGINNING	TS	TRAFFIC SIGNAL	
BM	BENCHMARK	FH	FIRE HYDRANT	POC	POINT ON CURVE	TR	TOP OF RETAINING WALL	
BN	BLOW-OFF	FL	FLOW LINE	P.O.C.	POINT OF CONNECTION	TW	TYPICAL	
BO	BEGIN VERTICAL CURVE ELEVATION	FO	FIBER OPTIC	PT	POINT ON TANGENT	UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (LATEST EDITION)	
BW	BEGIN VERTICAL CURVE STATION	FRP	FIBERGLASS REINFORCED PLASTIC	PP	POWER POLE	UG	UNDERGROUND	
BVC	BACK OF SIDEWALK	FT	FINISH SURFACE	PROPOSED	PROPOSED	UL	ULTIMATE	
BWG	BACK WATER VALVE	FTG	FOOTING	PRC	POINT OF REVERSE CURVE	USDOCA	UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS CLARK COUNTY AREA, NEVADA (LATEST EDITION)	
C	CENTERLINE	FUTURE	FUTURE	P.S.E.	PUBLIC SEWER EASEMENT TO BE PRIVATELY MAINTAINED BY HOA	UT	UNDERGROUND TELEPHONE	
C&G	CURB AND GUTTER	G	GAS	PSI	POUNDS PER SQUARE INCH	VAR	VARIABLE/VARIES	
CCATV	UNDERGROUND CABLE TV	GA	GAS, GUY ANCHOR	PT	POINT OF TANGENCY	VC	VERTICAL CURVE	
CCB	CLARK COUNTY BENCH MARK	GB	GRADE BREAK	P.U.E.	PUBLIC UTILITY EASEMENT	VCP	VITRIFIED CLAY PIPE	
CCFW	CLARK COUNTY PUBLIC WORKS CLOUSED-CIRCUIT TELEVISION	GRD	GRADE, GROUND	PVI	POINT OF VERTICAL INTERSECTION	VERT	VERTICAL	
CCNV	CLOSED-CIRCUIT TELEVISION	H	HEIGHT	PVMT	PAVEMENT	VOL	VOLUME	
CCNY	CLOSED-CIRCUIT TELEVISION	HGL	HEADWALL	PVT	PRIVATE	W	WITH	
CCE	COMMON ELEMENT	HP	HYDRAULIC GRADE LINE	PZ	PRESSURE ZONE	W.I.	WROUGHT IRON	
CFS	CUBIC FEET PER SECOND	HO	HOME OWNERS ASSOCIATION	R, RAD	RADIAL, RADIIUS	WS	WATER SUPPLY	
CFB	CAPITAL IMPROVEMENTS PROJECT, CORRUGATED IRON PIPE	HP	HIGH POINT, HIGH PRESSURE	R, RGT	RIGHT	WT	WEIGHT	
CIP	CURED-IN-PLACE MANHOLE	HPS	HIGH PRESSURE SODIUM	RCB	REINFORCED CONCRETE BOX	WTR	WATER	
CIR	CIRCLE	IBC	INTERNATIONAL BUILDING CODE	RCP	REINFORCED CONCRETE PIPE	XING	CROSSING	
CLR	CLEAR OR CLEARANCE	INV	INVERT	RDWY	ROADWAY	YARD	YARD DRAIN	
CLM	CONTROLLED LOW STRENGTH MATERIAL	INT	INTERIM	REC	RECTANGULAR	Z	PRESSURE ZONE	
CLV	CITY OF LAS VEGAS	JT	JOINT	REF	REFERENCE			
CNC	CORRUGATED METAL PIPE	LT	LEFT	REINFC	REINFORCED			
CNU	CONCRETE MASONRY UNIT	LFT	LINEAR FEET	REQD	REQUIRED			
CNV	CITY OF NORTH LAS VEGAS	LIP	LIP OF GUTTER	REQD	REQUIRED			
CO	CLEANOUT	LN	LANE	ROW/R	RIGHT OF WAY			
CONC	CONCRETE	LPG	LIGHT POLE	R	RADIUS POINT			
CONC	CONCRETE	LSGP	LANDSCAPE	RPM	RAISED PAVEMENT MARKERS			
CONC	CONCRETE	LSVWD	LAS VEGAS VALLEY WATER DISTRICT	RPPA	REDUCED PRESSURE PRINCIPAL ASSEMBLY			
CONC	CONCRETE	LX	LAS VEGAS VALLEY WATER DISTRICT	RSOV	RESILIENT SEAT GATE VALVE			
CONC	CONCRETE	MAX	MAXIMUM	SCH	SCHEDULE			
CONC	CONCRETE	MCH	MANHOLE	SD	STORM DRAIN			
CONC	CONCRETE	MIN	MINIMUM	SDMH	STORM DRAIN MANHOLE			
CONC	CONCRETE	MLP	MORTAR LINED AND COATED PIPE	SECT	SECTION			
CONC	CONCRETE	MOD	MODIFY/MODIFIED	SECT	SECTION			
CONC	CONCRETE	MON	MONUMENT	SECT	SECTION			
CONC	CONCRETE	MPH	MILES PER HOUR	SECT	SECTION			
CONC	CONCRETE	N	NORTH	SECT	SECTION			
CONC	CONCRETE	NDOT	NEVADA DEPARTMENT OF TRANSPORTATION	SECT	SECTION			
CONC	CONCRETE	NO	NUMBER	SECT	SECTION			
CONC	CONCRETE	NOSHA	NUMBER STATE, NEVADA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION	SECT	SECTION			
CONC	CONCRETE	NPC	NEVADA POWER COMPANY	SECT	SECTION			
CONC	CONCRETE	NTS	NOT TO SCALE	SECT	SECTION			
CONC	CONCRETE	OC	ON CENTER	SECT	SECTION			
CONC	CONCRETE	OCH	OVERHEAD COX COMMUNICATION	SECT	SECTION			
CONC	CONCRETE							

	LOT NUMBER		FUTURE ELEVATION
	BLOCK NUMBER		GRADE BREAK ELEVATION
	PAD ELEVATION FINISH FLOOR ELEVATION		PROPOSED ELEVATION
	EXISTING PAD ELEVATION EXIST. FINISH FLOOR ELEV.		EXISTING ELEVATION
	SCARP		RIGHT-OF-WAY
	EXISTING CONTOUR (5' INTERVAL)		PROPERTY LINE
	EXISTING CONTOUR (1' INTERVAL)		CENTER LINE
	CONCRETE DRIVEWAY		KNEE WALL
	TOP OF FOOTING		PERIMETER WALL
	TOP OF RETAINING WALL		STORM DRAIN LINE
	STORM DRAIN MANHOLE		SIDEWALK
	SVZ – SIGHT VISIBILITY ZONE, NO STRUCTURES/ LANDSCAPING TALLER THAN 24"		DITCH OR SWALE
			CURB TRANSITION AT SIDEWALK RAMP (ROLL CURB TO "L" CURB)



DESCRIPTION	UNIT	PUBLIC	PRIVATE
4" SEWER	LF	-	-
8" SEWER	LF	-	-
SEWER MANHOLE 6 TO 18 FEET	EA	-	-
BACKWATER VALVES	EA	-	-

DESCRIPTION	UNIT	PUBLIC	PRIVATE
6" WATER MAIN	LF	110	—
12" WATER MAIN	LF	6,976	—
12" DIP WATER MAIN	LF	155	—
LANDSCAPE WATER SERVICE	EA	1	—
WATER LATERAL	LF	1,190	—
IRRIGATION SLEEVES	LF	—	1,670
WATER SERVICE TO LOTS	EA	94	—
FIRE HYDRANT	EA	6	—

DESCRIPTION	UNIT	PUBLIC	PRIVATE
CURB & GUTTER (TYPE "L" & "A")	LF	—	—
CURB & GUTTER (30" ROLL TYPE)	LF	—	—
CROSS GUTTER	SF	—	—
SIDEWALK 4"	SF	—	—
SIDEWALK RAMP	EA	—	—
TYPE II GRAVEL BASE	CY	—	—
2" ASPHALTIC CONCRETE PAVING	SY	—	—
PWMT BUTTON (REFLECTIVE)	EA	—	—
SURVEY MONUMENTS	EA	—	—

DESCRIPTION	UNIT	PUBLIC	PRIVATE
18" STORM DRAIN	LF	447	—
24" STORM DRAIN	LF	15	—
5' DM2 DROP INLET	EA	2	—
10' DM2 DROP INLET	EA	1	—
17.5' DM2 DROP INLET	EA	1	—
48" SD MANHOLE	EA	2	—

DESCRIPTION	UNIT	PUBLIC	PRIVATE
EXCAVATION & EMBANKMENT	CY	-	-
CABLE TO LOTS (RES SUBDIV ONLY)	EA	-	-
GAS TO LOTS (RES SUBDIV ONLY)	EA	-	-
PHONE TO LOTS (RES SUBDIV ONLY)	EA	-	-
POWER TO LOTS (RES SUBDIV ONLY)	EA	-	-

SOUTHWEST GAS CORP. DATE:

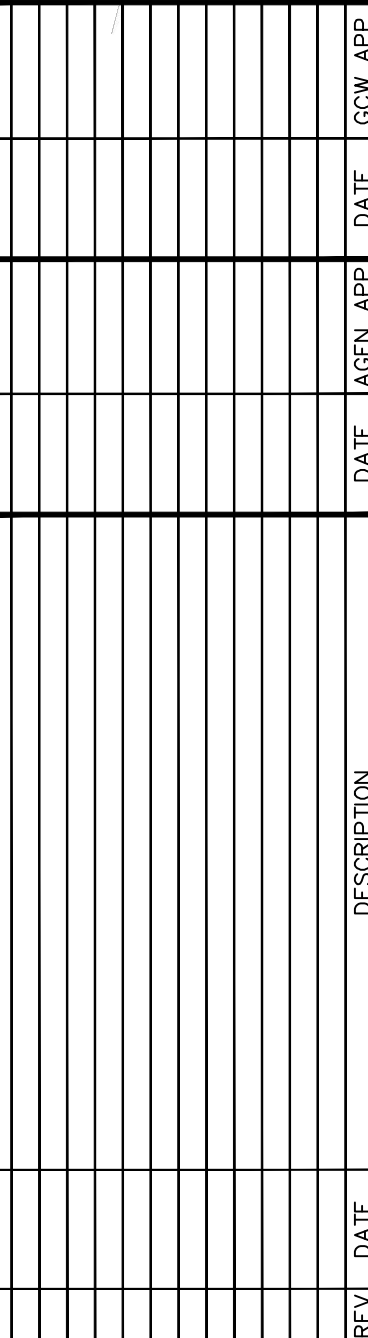
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVED DATE: _____

LVVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL
MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 30 GPM

SHEETS: C1-C3, DT3, MU, U1-U6, P1-P11, LAT

L#	CLV DWG#
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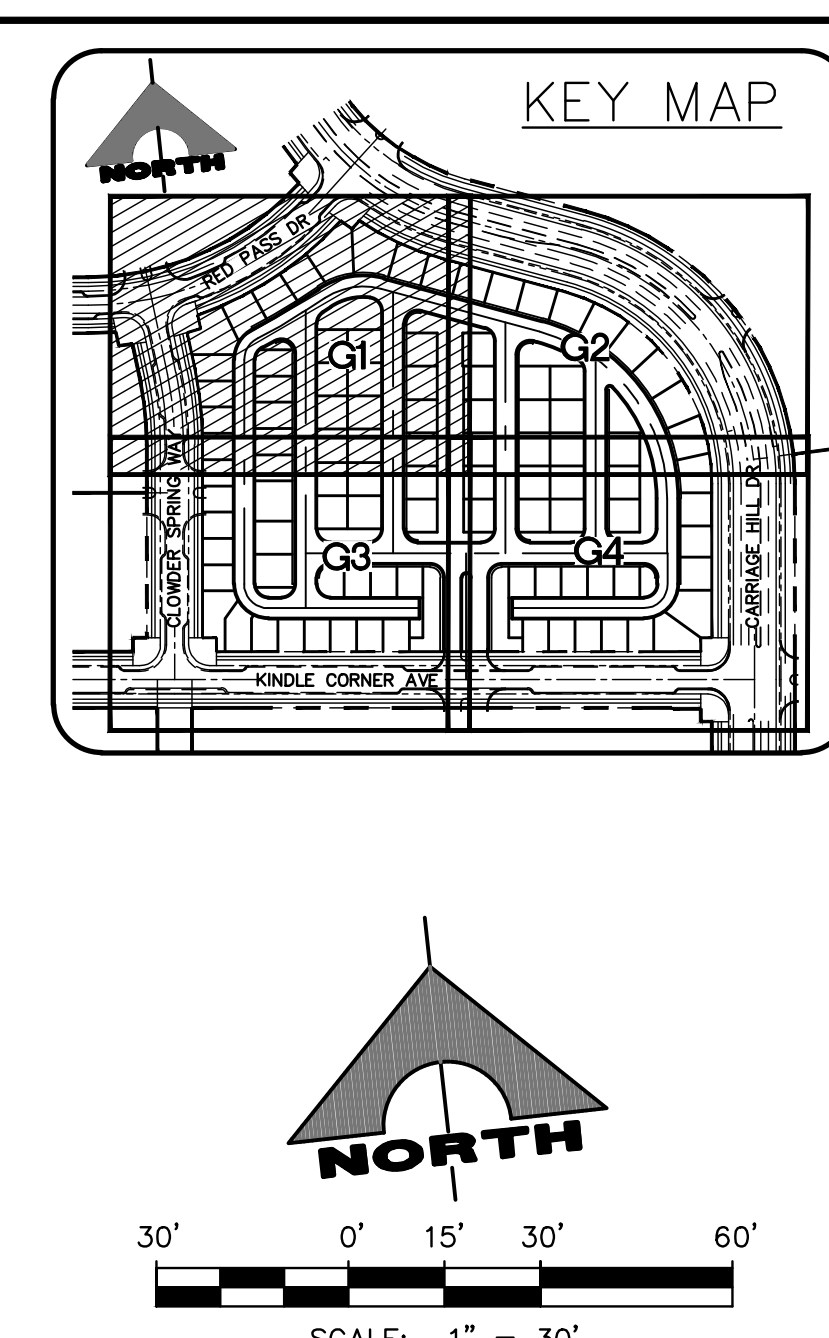
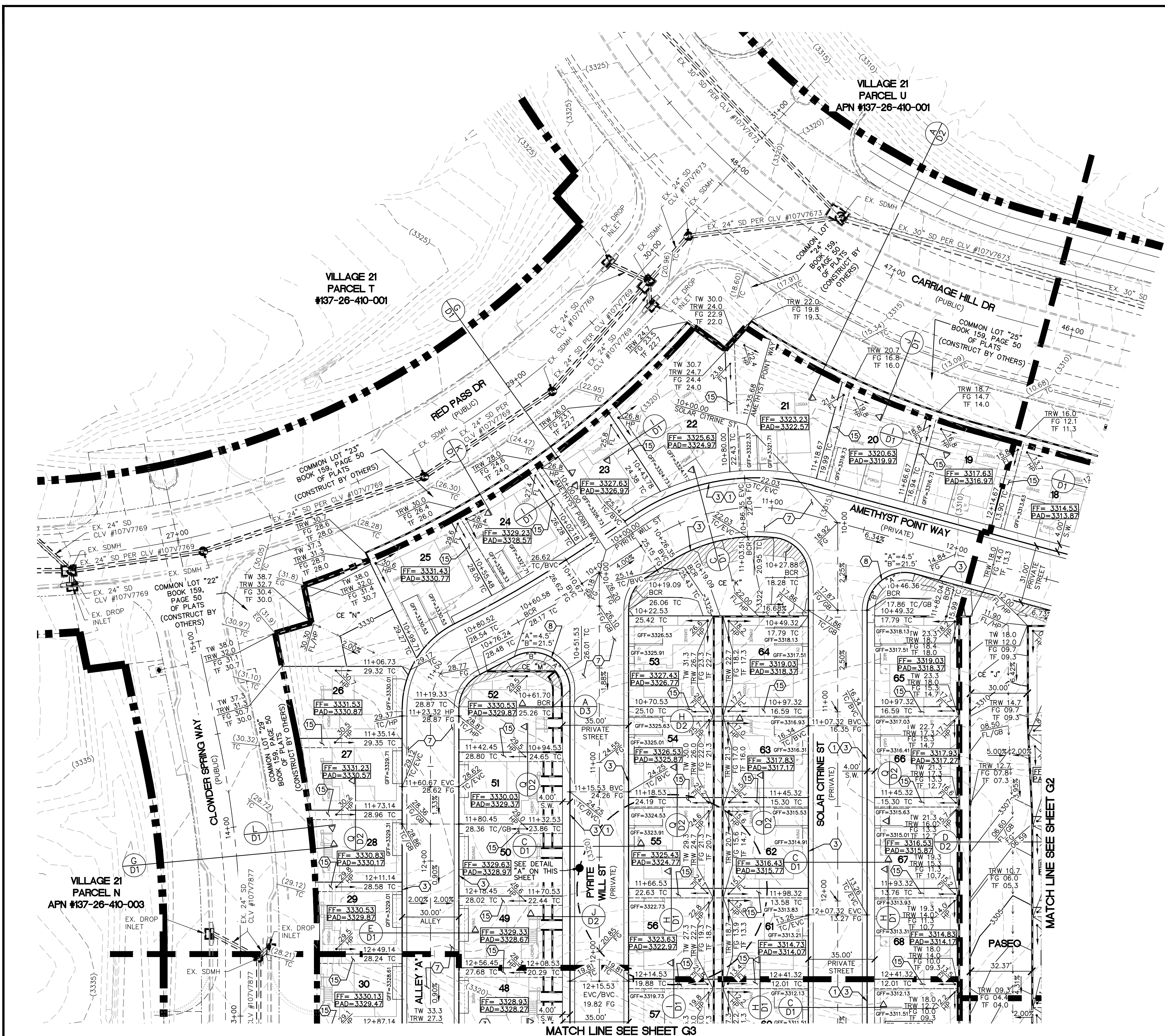
PLOT DATE: 02-13-20

\\Projects\700\793-533\DWG\production\793-533-C.dwg
uangvinh Nguyen

LEGEND, ABBREVIATIONS, AND QUANTITIES

C3

3 OF 33 SHTS



- ### CONSTRUCTION NOTES
1. CONSTRUCT CONCRETE SIDEWALK PER SUMMERLIN STD DWG NO. S-72 & S-48.
 2. CONSTRUCT 8" WIDE VALLEY GUTTER PER SUMMERLIN STD DWG NO. S-64.
 3. CONSTRUCT ROLL CURB PER SUMMERLIN STD DWG NO. S-48.
 4. CONSTRUCT MEDIAN "A" TYPE PER SUMMERLIN STD DWG NO. S-50.
 5. CONSTRUCT "L" CURB PER SUMMERLIN STD DWG NO. S-47.
 6. CONSTRUCT 6" CONCRETE CURB PER DETAIL "M" SHEET D2.
 7. CONSTRUCT 2" AC OVER 4" TYPE II BASE-SEE SOIL REPORT PREPARED BY GEOTEK PROJ. #14880-LV FOR MORE DETAIL.
 8. CONSTRUCT HANDICAP RAMP PER USDOCA NO. 235 CASE 1. SEE PLAN FOR "A" & "B" DIMENSION.
 9. SAWCUT & MATCH TO EXISTING CURB & SIDEWALK. CONTRACTOR SHALL VERIFY EX. LOCATION & PAVEMENT PRIOR TO CONSTRUCTION.
 10. EXISTING CURB TO BE REMOVED.
 11. CONSTRUCT 5" TRANSITION FROM "L" CURB TO ROLL CURB PER DETAIL "O" SHEET D2.
 12. CONSTRUCT 10" TRANSITION FROM 6" RIBBON CURB TO 30" ROLL CURB PER DETAIL "P" SHEET D2.
 13. CONSTRUCT REMOVABLE WROUGHT IRON FENCE PER USDOCA NO. 425.51.
 14. CONSTRUCT HANDICAP RAMP PER USDOCA NO. 235 CASE 2. SEE PLAN FOR "A" & "B" DIMENSION.
 15. PRIVATE ACCESS EASEMENT TO BE PRIVATELY MAINTAINED BY THE PROPERTY OWNER.

- ### STORM DRAIN CONSTRUCTION NOTES
1. CONNECT TO EXISTING STORM DRAIN.
 2. CONSTRUCT MODIFIED TYPE "DM2" PER STD DWG 412.1 & 421. SEE PLAN PER SIZE.
 3. CONSTRUCT 48" TYPE I STORM DRAIN MANHOLE PER STD. DWG 403.
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EARTHWORKS

CUT-RAW	FILL-RAW
9,808 CY	40,406 CY

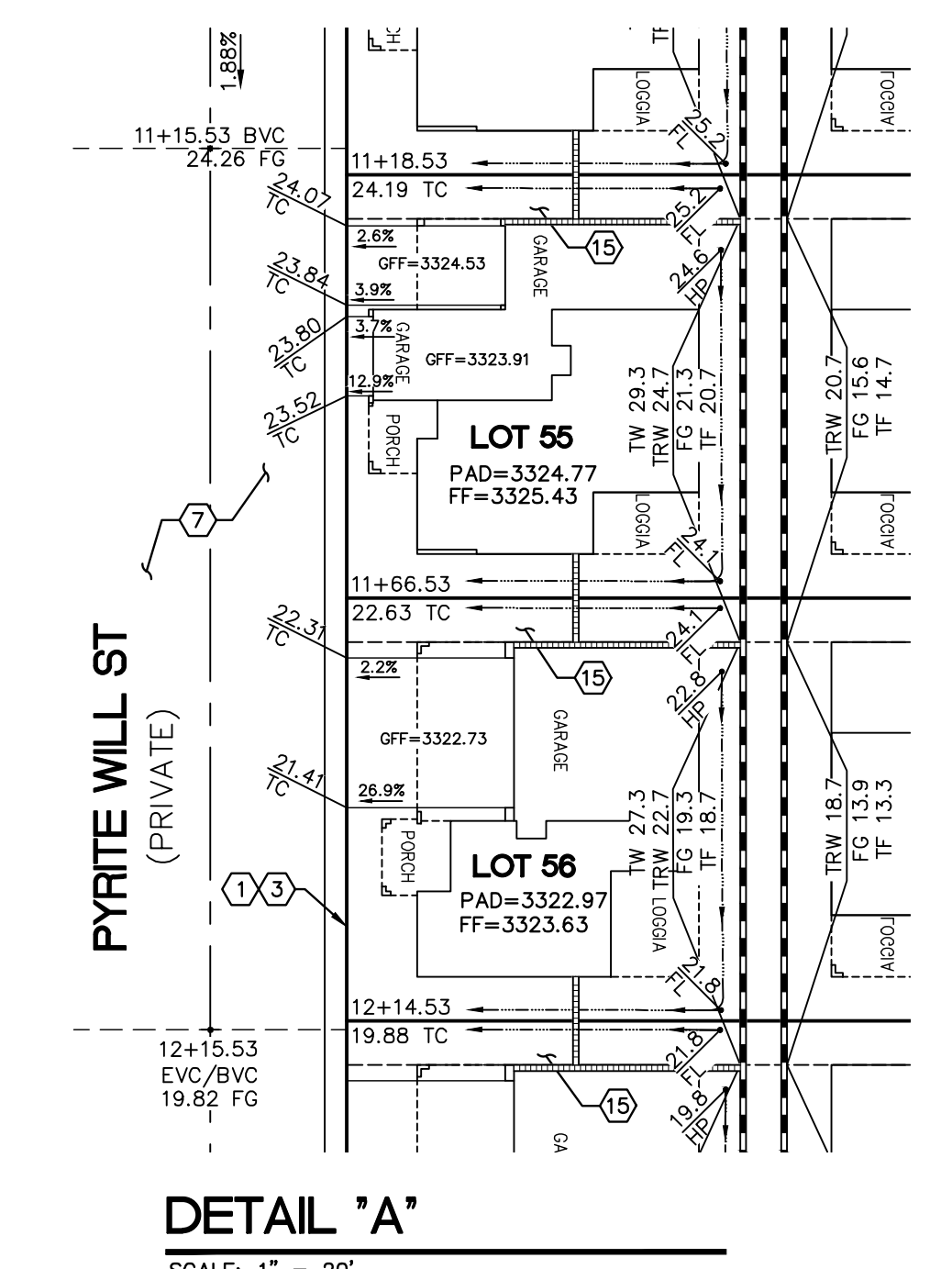
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DRAINAGE STUDY COMPLIANCE

I CERTIFY THAT THIS GRADING PLAN ARE CONFORMANCE WITH THE APPROVED DRAINAGE STUDY DS5206A ON THE FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT

GIA D. NGUYEN, P.E.
NEVADA PE #14918



BENCHMARK:

CITY OF LAS VEGAS BENCHMARK NO. 7LV0934SW6, FOUND RIVET AND PLATE IN THE TOP OF CURB AT THE SOUTHEAST CORNER OF DESERT MOON ROAD AND SKY VISTA DRIVE.
ELEVATION: 3318.31 (FEET)
1,011.422 (METERS)

BASED ON NORTH AMERICAN VERTICAL DATUM OF 2018 (NAVD'88).

BASIS OF BEARING:

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

LINEAR UNIT: US SURVEY FOOT (FTUS)
DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00
SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)
ZONE: LAS VEGAS HIGH ELEVATION ZONE

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: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000.00 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:

1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.
2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

- ### STORMWATER MANAGEMENT NOTES
1. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF THE CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
 2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN CLARK COUNTY TITLE 24.40 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
 3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY, REFER TO THE NEVADA STORM WATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR 100000, SECTION III.A.5.
 4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORM WATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO NEVADA STORM WATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR 100000, SECTION III.A.12.
 5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORM WATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

- ### NOTE
1. THE GEOTECHNICAL EXPLORATION PROPOSED RESIDENTIAL DEVELOPMENT SUMMERLIN VILLAGE 21 WEST OF CLARK COUNTY 215 BETWEEN CHARLESTON BOULEVARD AND SUMMERLIN PKWY LAS VEGAS, NEVADA AS PREPARED BY GEOTEK, INC., PROJECT NUMBER 14880-LV, DATED JULY 2, 2019
 2. CONSTRUCTION FOR BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE BUILDING SAFETY AND MAINTENANCE DEPARTMENT
 3. WALLS CONSTRUCTED OTHER THAN THOSE AS DETAILED ON THIS SHEET ARE TO BE CONSTRUCTED BY WALL SUB-CONTRACTOR, DETAILS AND STRUCTURAL CALCULATIONS AS PREPARED BY WALLS.
 4. NO OBJECT OVER 24" OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES CAN BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE.
 5. ALL PRIVATE STREETS & COMMON ELEMENTS ARE PUBLIC UTILITY EASEMENT, PUBLIC SEWER EASEMENTS, AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY THE HOA.

Call before you Dig
1-702-432-5300

Call before you Dig
1-800-227-2929

Call before you Dig
1-800-227-2929

PROJECT NO. 793-533
DESIGN: G.D.N.
DRAWN: G.D.N.
CHECK: G.D.N.
DATE: 02-13-20
PLOT TIME: 10:27:23

WOODSIDE HOMES
OBSIDIAN
SUMMERLIN VILLAGE 21 PARCEL M
GRADING PLAN 1

1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gowngineering.com

ENGINEERS & SURVEYORS

DRAWING
G1
4 OF 33 SHTS

FAST

Call before you Dig

1-702-432-5300

UNDERGROUND SYSTEM OF TRANSPORTATION

Call before you Dig

Avoid cutting underground utility lines. It's costly.

Call 811

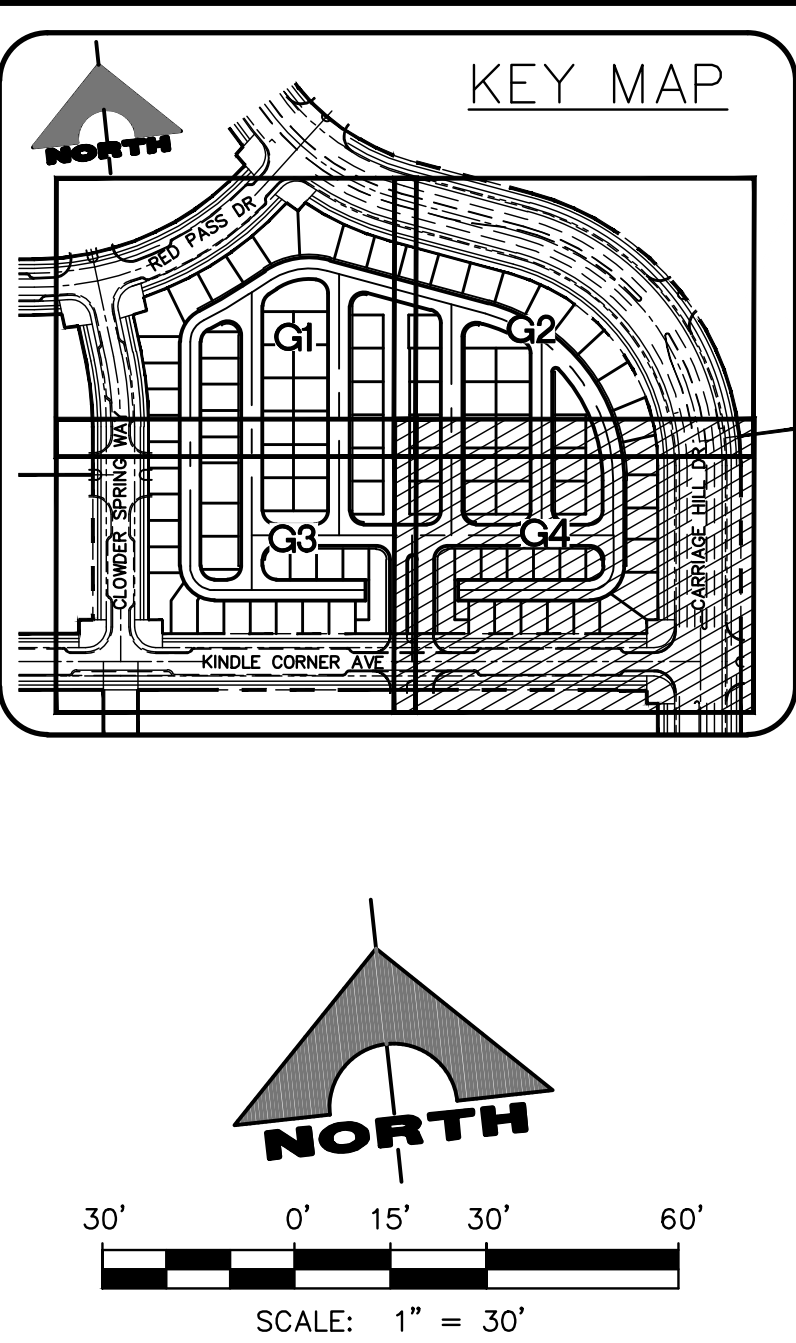
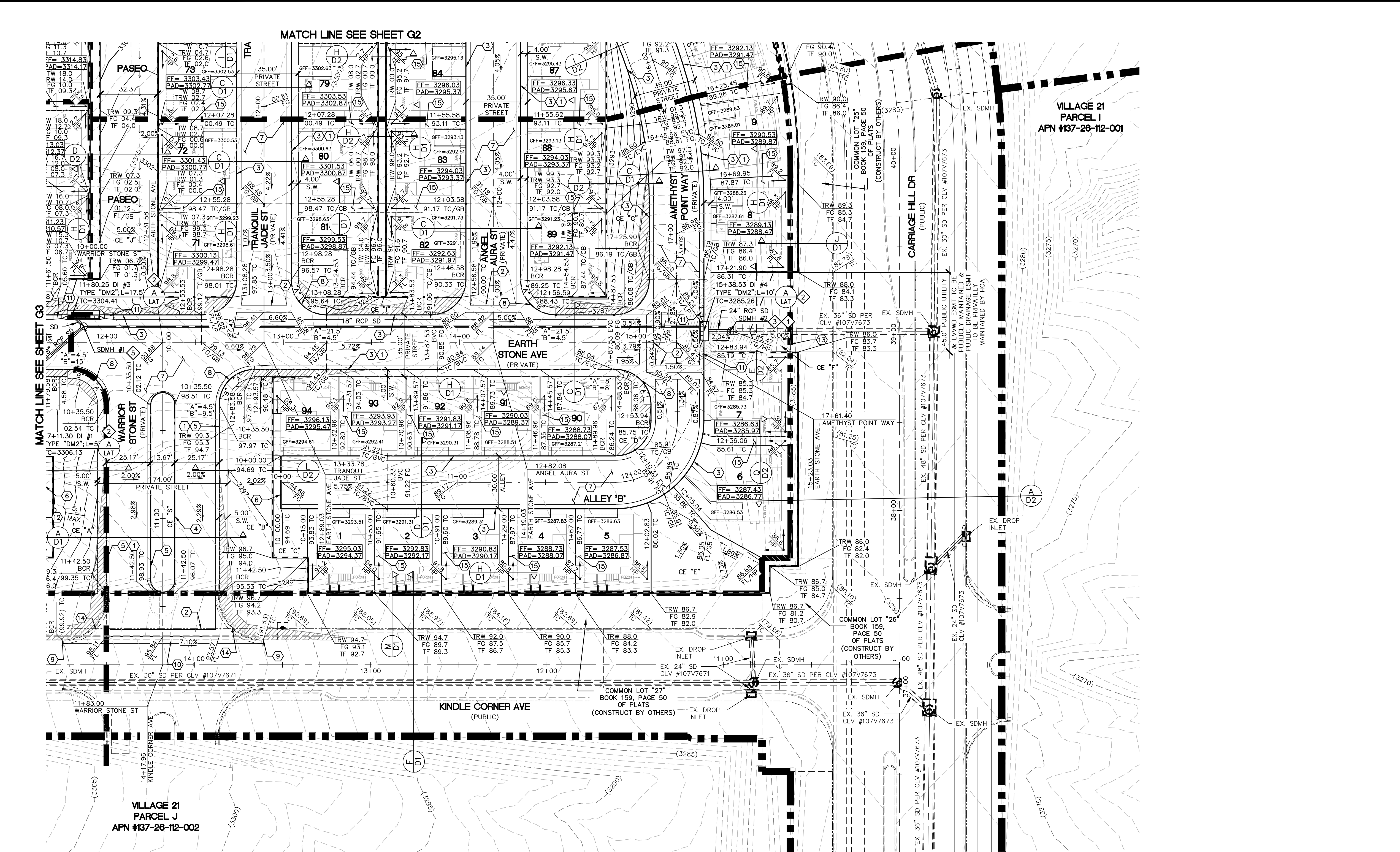
OR

1-800-227-2600

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

CALL BEFORE YOU DO OVERHEAD

1-702-227-2929



- ### CONSTRUCTION NOTES
- CONSTRUCT CONCRETE SIDEWALK PER SUMMERLIN STD DWG NO. S-72 & S-48.
 - CONSTRUCT 8" WIDE VALLEY GUTTER PER SUMMERLIN STD DWG NO. S-64.
 - CONSTRUCT ROLL CURB PER SUMMERLIN STD DWG NO. S-48.
 - CONSTRUCT MEDIAN "A" TYPE PER SUMMERLIN STD DWG NO. S-50.
 - CONSTRUCT "L" CURB PER SUMMERLIN STD DWG NO. S-47.
 - CONSTRUCT 6" CONCRETE CURB PER DETAIL "M" SHEET D2.
 - CONSTRUCT 2" AC OVER 4" TYPE II BASE SEE SOIL REPORT PREPARED BY GEOTEK PROJ. #14880-LV FOR MORE DETAIL.
 - CONSTRUCT HANDICAP RAMP PER USDOCA NO. 235 CASE 1. SEE PLAN FOR "A" & "B" DIMENSION.
 - SAWCUT & MATCH TO EXISTING CURB & SIDEWALK. CONTRACTOR SHALL VERIFY EX. LOCATION & PAVEMENT PRIOR TO CONSTRUCTION.
 - EXISTING CURB TO BE REMOVED
 - CONSTRUCT S" TRANSITION FROM "L" CURB TO ROLL CURB PER DETAIL "O" SHEET D2.
 - CONSTRUCT 10" TRANSITION FROM 6" RIBBON CURB TO 30" ROLL CURB PER DETAIL "P" SHEET D2.
 - CONSTRUCT REMOVABLE WROUGHT IRON FENCE PER USDOCA NO. 425.51
 - CONSTRUCT HANDICAP RAMP PER USDOCA NO. 235 CASE 2. SEE PLAN FOR "A" & "B" DIMENSION.
 - PRIVATE ACCESS EASEMENT TO BE PRIVATELY MAINTAINED BY THE PROPERTY OWNER.

- ### STORM DRAIN CONSTRUCTION NOTES
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NEVADA PE #14918

DATE

PROJECT NO. 793-533

DESIGN: 793-533

DRAWN: 793-533

CHECK: 793-533

PLOT DATE: 02-13-20

PLOT TIME: 10:27:44

WOODSIDE HOMES

OBSDIAN

SUMMERLIN VILLAGE 21 PARCEL M

GRADING PLAN 4

DRAWING

G4

7 OF 33 SHTS

L# CLV DWG#



30.0' P.U.E. & P.S.E.

PUBLIC DRAINAGE & PUBLIC SEWER EASEMENT

15' 12.5' 15' 12.5' 2.5' 2.5'

PRIME COAT 2" A.C.

2.0% 2.0%

ROLL CURB & GUTTER PER SUMMERLIN STD DWG NO. S-48 BOTH SIDES

6' MIN. TYPE I OR TYPE II AGG. BASE UNDER CURB & GUTTER

4' MIN. TYPE II AGG. BASE

30' ALLEY

SCALE: NTS

(SHEETS G3 & G4)

D



30' ALLEY

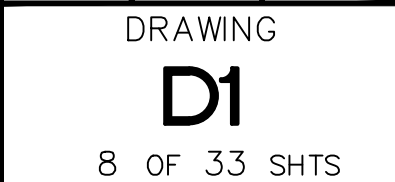
SCALE: NTS (SHEETS G1 & G3)

E

74' PRIVATE ENTRY

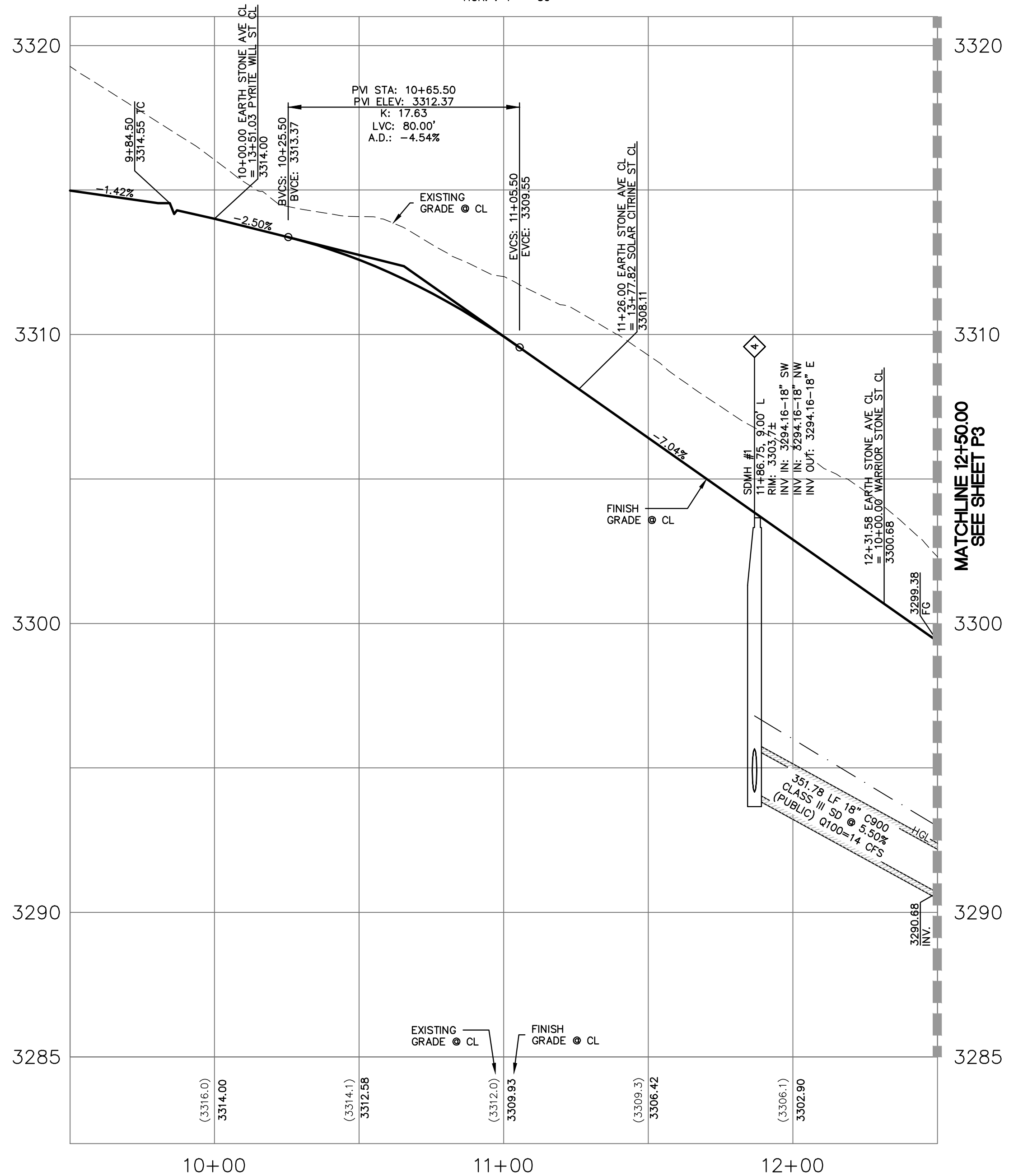
SCALE: NTS (SHEETS G3 & G4)

A



CLV DWG#





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FREEWAY AND ARTERIAL
SYSTEM OF TRANSPORTATION

