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Update to the Technical Drainage Study for Jones and Elkhorn Phase 1 and 2

743-240

September 2022

Prepared for:
Toll Brothers
1140 N. Town Center Drive #250
Las Vegas, Nevada 89144

Prepared by GCW, Inc.

1555 South Rainbow Blvd
Las Vegas, NV 89146

P: 702.804.2000
F: 702.804.2298

info@gcwengineering.com
www.gcwengineering.com

HYDROLOGIC CRITERIA AND DRAINAGE MANUAL

DRAINAGE STUDY INFORMATION FORM

Name of Development: Jones and Elkhorn Phase 1 and 2 Date: September 2022

Location of Development: a) Descriptive (Cross Streets) North/South: Jones Boulevard

East/West: Elkhorn Road

b) Section: 24 Township: 19S Range: 60E

c) APN : 125-24-101-001, 125-24-201-001

Name of Owner: Owner: KLTOLL AIV LLC Developer: Toll Brothers

Telephone No.: 702.243.9800 Fax No.: E-Mail Address: jstone@tollbrothers.com

Address: 1140 N. Town Center Drive #250, Las Vegas, NV 89144

Contact Person-Name: Nelson Baggs, PE **Telephone No.:** 702.804.2000

* **E-Mail Address:** NBaggs@gcwengineering.com **Fax No.:** 702.804.2299

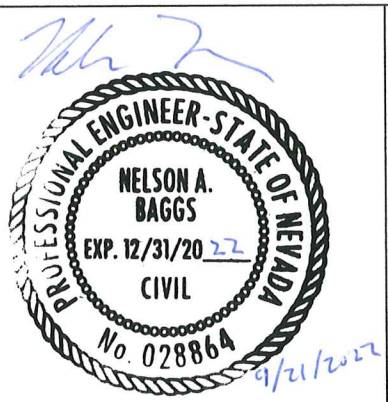
Firm: GCW, Inc

Address: 1555 South Rainbow Boulevard Las Vegas, Nevada 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	x	Building Permit		

1. Total Owned Land Area: At Site: +/- 55.52 acres Being Developed/Disturbed: +/- 55.52 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: +/- 0.00 acres
6. Has the site drainage been evaluated in the past? ☒ **YES** ☐ **NO** If yes, please identify documentation: Jones and Elkhorn DS5472
7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: The project site will discharge into Leon Ave
8. Briefly describe your proposed schedule for the subject project: The Client intends to start construction as soon as practical. Any expediting of this process is appreciated.



Engineer's Seal

Submit this form as part of the required drainage study to the local entity which has jurisdiction over the subject property. This form may provide sufficient information to serve as the Conceptual Drainage Study.

***New Required Field**

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

Local Entity File No.

Revision	Date

REFERENCE:

STANDARD FORM 1

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743-240

September 21, 2022

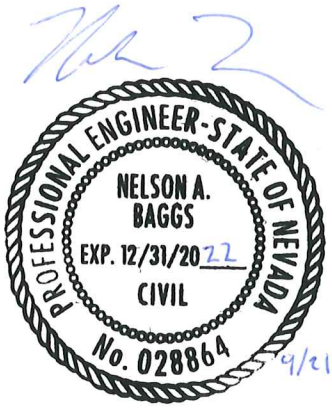
Albert Y. Sung, P.E.
City of Las Vegas
Department of Public Works
495 S. Main Street
Las Vegas, Nevada 89101

Re: Update to the Technical Drainage Study for Jones and Elkhorn Phase 1 and 2

Dear Mr. Sung,

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

Respectfully submitted,



9/21/2022

Nelson Baggs, P.E.
Flood Control Division

1555 South Rainbow Boulevard
Las Vegas, Nevada 89146

O 702.804.2000
F 702.804.2299

info@gcwengineering.com
gcwengineering.com

GCW
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743-240

September 21, 2022

Albert Sung, P.E.
City of Las Vegas Public Works
495 S. Main Street
Las Vegas, NV 89101

Subject: Update to the Technical Drainage Study for Jones and Elkhorn Phase 1 and 2 (DS5591A)

The purpose of this letter is to update the above referenced project by addressing changes to the finish floor elevations since the previous approval of the drainage study on July 27, 2022. Details regarding the revision are discussed below.

Since the previous approval all the buildings' finish floor elevations have been increased by approximately 0.09-ft due to structural changes to the pads. Note that an increase in finished floor elevation provides greater flood protection and therefore does not adversely impact the project. Note this drainage study covers the first phase of the Jones and Elkhorn Project as well as Phase 2, therefore pertinent grading and profile sheets where finished floors appear have been updated for both plan sets. The Phase 1 plans are clouded since the improvement plans have been approved. The Phase 2 plans are not clouded since these plans are still under review. The plans that were previously included with the drainage study are included in the Appendix for reference.

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

Respectfully,

GCW, INC.

Nelson Baggs, P.E.
Flood Control Division

1555 South Rainbow Boulevard
Las Vegas, Nevada 89146
O 702.804.2000
F 702.804.2299
info@gcwengineering.com
gcwengineering.com

APPENDIX

PREVIOUS APPROVAL LETTER

CITY OF LAS VEGAS **INTER-OFFICE MEMORANDUM**			**DATE:** **July 27, 2022**
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:		**COPIES TO:**
Jones & Elkhorn – Phase 2			KLTOLL AIV LLC / Toll Brothers
Cross Streets:	SEC of Jones Boulevard & Elkhorn Road		GCW Engineering
File Number:	F:\Depot\DSMemos\DS5591A.doc		Bart Anderson, P.E., DevCo
Parcel Number:	125-24-101-001; 125-24-201-001		CCRFCD
Zoning Action:	TMP-75888		
FEMA Flood Zone	YES	NO **X**	
Proposed Storm Drain	YES **X**	NO	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1st Submittal	7/19/2021	8/17/2021	Not Approved	$400.00	4379555: $400
2nd Submittal	10/19/2021	11/15/2021	Not Approved	$400.00	4499188: $400
3rd Submittal	12/1/2021	12/16/2021	Conditional Approval	N/C	N/C
CCRFCD	2/10/2022	2/17/2022	Concurrence Recv'd	N/C	N/C
4th Submittal	7/12/2022	7/26/2022	See Comments Below	$400.00	4862830: $400
			TOTAL FEES (LDDRS):	**$1,200.00**	**----**

REMARKS:

4th Submittal: Update for Phase 2 Developments

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.

1. **Sheet G3 and Sheet G4**: Revise all the description of drainage easement from "private" to "**Public**", ie, **PUBLIC** Drainage Easement to be Privately Maintained by the HOA.

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, 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.

END OF REMARKS
JKS/AYS

T/R/S: T19S/R60E/24
AREA: G-24

PLANS FOR JONES AND ELKHORN PHASE 1
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'

IMPROVEMENT PLANS FOR JONES & ELKHORN

ACREAGE/AREA OF LAND DISTURBANCE: 60.62 AC

A.P.N. 125-24-199-101 & 125-24-101-001

GROSS ACREAGE:	60.62
NO. OF LOTS:	199
DENSITY(UNIT/AC):	3.28

INDEX OF DRAWINGS

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	G5	GRADING PLAN 5
9	G6	GRADING PLAN 6
10	G7	GRADING PLAN 7
11	G8	GRADING PLAN 8
11A	G8A	GRADING PLAN 8A
12	G9	GRADING PLAN 9
12A	G9A	GRADING PLAN 9A
13	G10	GRADING PLAN 10
13A	G10A	GRADING PLAN 10A
14	G11	GRADING PLAN 11
14A	G11A	GRADING PLAN 11A
15	G12	GRADING PLAN 12
15A	G12A	GRADING PLAN 12A
16	G13	GRADING PLAN 13
16A	G13A	GRADING PLAN 13A
17	D1	GRADING SECTIONS & DETAILS 1
18	D2	GRADING SECTIONS & DETAILS 2
19	D3	GRADING SECTIONS & DETAILS 3
20	P1	ENTRY PLAN & PROFILE STA. 1+00.00 TO STA. 3+94.63
21	P2	STREET E PLAN & PROFILE STA. 3+59.50 TO STA. 5+58.50
22	P3	STREET F PLAN & PROFILE STA. 0+59.50 TO STA. 2+85.58
23	P4	STREET B PLAN & PROFILE STA. 8+67.44 TO STA. 13+50.00
24	P5	STREET B PLAN & PROFILE STA. 13+50.00 TO STA. 18+50.00
25	P6	STREET B PLAN & PROFILE STA. 18+50.00 TO STA. 23+50.00
26	P7	STREET B PLAN & PROFILE STA. 23+50.00 TO STA. 25+73.72
27	P8	STREET D PLAN & PROFILE STA. 0+00.00 TO STA. 4+00.00
28	P9	STREET D PLAN & PROFILE STA. 4+00.00 TO STA. 8+00.00
29	P10	LEON AVE PLAN & PROFILE STA. 11+00.00 TO STA. 16+00.00
30	P11	LEON AVE PLAN & PROFILE STA. 16+00.00 TO STA. 21+00.00
31	P12	LEON AVE PLAN & PROFILE STA. 21+00.00 TO STA. 26+00.00
32	P13	LEON AVE PLAN & PROFILE STA. 26+00.00 TO STA. 31+19.40
33	P14	STREET A PLAN & PROFILE STA. 0+00.00 TO STA. 4+50.00
34	P15	STREET A PLAN & PROFILE STA. 4+50.00 TO STA. 8+00.00
35	P16	STREET A PLAN & PROFILE STA. 8+00.00 TO STA. 10+20.37
36	P17	STREET H PLAN & PROFILE STA. 1+00.00 TO STA. 5+16.64
37	P18	STREET G PLAN & PROFILE STA. 5+58.57 TO STA. 10+37.98
38	P19	STREET J PLAN & PROFILE STA. 2+00.00 TO STA. 6+45.89
39	P20	STREET I PLAN & PROFILE STA. 6+61.36 TO STA. 11+41.01
40	P21	STREET K PLAN & PROFILE STA. 12+22.06 TO STA. 12+63.98
41	P22	STREET C PLAN & PROFILE STA. 11+47.29 TO STA. 13+79.20
42	P23	ELKHORN RD PLAN & PROFILE STA. 2+00.00 TO STA. 6+50.00
43	P24	ELKHORN RD PLAN & PROFILE STA. 6+50.00 TO STA. 11+00.00
44	P25	ELKHORN RD PLAN & PROFILE STA. 11+00.00 TO STA. 14+99.74
45	P26	DRAINAGE ESMT PLAN & PROFILE STA. 10+19.50 TO STA. 11+48.50
46	LAT1	STORM DRAIN LATERALS 1
47	LAT2	STORM DRAIN LATERALS 2
48	MU	MASTER UTILITY PLAN
49	U1	UTILITY PLAN 1
50	U2	UTILITY PLAN 2
51	U3	UTILITY PLAN 3
52	U4	UTILITY PLAN 4
53	U5	UTILITY PLAN 5
54	U6	UTILITY PLAN 6
55	U7	UTILITY PLAN 7
56	U8	UTILITY PLAN 8
57	U9	UTILITY PLAN 9
58	T1	TRAFFIC AND HORIZONTAL CONTROL PLAN 1
59	T2	TRAFFIC AND HORIZONTAL CONTROL PLAN 2
60	T3	TRAFFIC AND HORIZONTAL CONTROL PLAN 3
61	T4	TRAFFIC AND HORIZONTAL CONTROL PLAN 4
62	T5	TRAFFIC AND HORIZONTAL CONTROL PLAN 5
63	T6	TRAFFIC AND HORIZONTAL CONTROL PLAN 6
64	T7	TRAFFIC AND HORIZONTAL CONTROL PLAN 7
65	T8	TRAFFIC AND HORIZONTAL CONTROL PLAN 8
66	T9	TRAFFIC AND HORIZONTAL CONTROL PLAN 9
67	S1	PIPE PENETRATION INTO EXISTING RCB

PARCEL 1:
THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.B.&M., CLARK COUNTY, NEVADA.

EXCEPTING THEREFROM THE WESTERLY 50.00 FEET AS CONVEYED TO THE CITY OF LAS VEGAS, A MUNICIPAL CORPORATION OF THE COUNTY OF CLARK, STATE OF NEVADA BY DEED RECORDED JUNE 6, 1972 AS INSTRUMENT NO. 195505 IN BOOK 236 OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM THE EASTERLY 30.00 FEET AS CONVEYED TO THE CITY OF LAS VEGAS, A MUNICIPAL CORPORATION OF THE COUNTY OF CLARK, STATE OF NEVADA BY DEED RECORDED OCTOBER 19, 1973 AS INSTRUMENT NO. 333054 IN BOOK 374 OF OFFICIAL RECORDS.

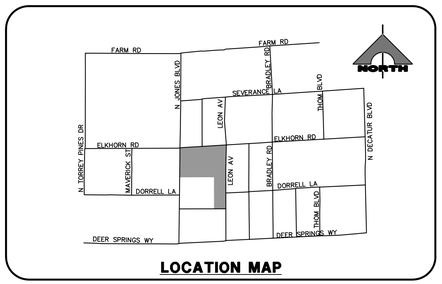
FURTHER EXCEPTING THEREFROM THE NORTHERLY 50.00 FEET AS CONVEYED TO THE CITY OF LAS VEGAS, A MUNICIPAL CORPORATION OF THE COUNTY OF CLARK, STATE OF NEVADA BY DEED RECORDED JANUARY 17, 1974 AS INSTRUMENT NO. 354079 IN BOOK 395 OF OFFICIAL RECORDS.

EXCEPTING THEREFROM THOSE PORTIONS AS CONVEYED TO THE CITY OF LAS VEGAS BY GRANT DEED RECORDED JULY 31, 2003 IN BOOK 20030731 AS INSTRUMENT NO. 03598 OF OFFICIAL RECORDS, CLARK COUNTY, NEVADA.

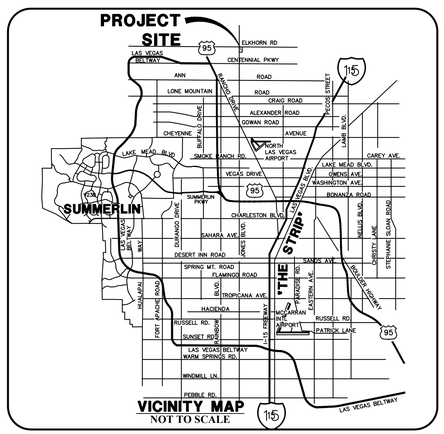
ALSO SHOWN AS LOT 94 OF THAT CERTAIN RECORD OF SURVEY OF THE DECATUR ALIGNMENT IN FILE 52 OF SURVEYS, PAGE 70 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA.

PARCEL 2:

LOT 95 OF THAT CERTAIN RECORD OF SURVEY OF THE DECATUR ALIGNMENT IN FILE 52 OF SURVEYS, PAGE 70 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA.



LOCATION MAP



VICINITY MAP
NOT TO SCALE

BASIS OF BEARING

NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

OWNER	DEVELOPER	ENGINEER
ELKHORN 56 LLC 500 S RANCHO DRIVE, SUITE 2 LAS VEGAS, NV 89106	TOLL BROTHERS 1140 N TOWN CENTER DR LAS VEGAS, NV 89144 (702) 243-9800	GCW, INC. 1555 SOUTH RAINBOW BLVD. LAS VEGAS, NEVADA 89146 (702) 804-2000 (702) 804-2299 (FAX)

DRY UTILITY APPROVALS

COX COMMUNICATIONS LAS VEGAS, INC. DATE

CENTRAL TELEPHONE CO., DBA CENTURYLINK DATE

THE AFFIXED CENTURYLINK APPROVAL DOES NOT ASSUME OR GUARANTEE LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH EXISTING OR 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.

SOUTHWEST GAS CORPORATION SWG UID DATE

APPROVALS

CITY OF LAS VEGAS ENGINEERING DATE

CLV PLANNING DEPARTMENT

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

PLANNING DEPARTMENT DATE

APPROVED FOR CONSTRUCTION

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

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE:
LVVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL
MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 30 GPM
SHEETS: C1, P1-P21, MU, U1-U9

L#: CLV#:

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call 811 or 1-800-642-2444

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

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY
CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

STATE OF NEVADA — PROFESSIONAL ENGINEER — No. 14918 — GIA D. NGUYEN — CIVIL
DATE: 11/30/2021

GCW, INC.
ENGINEERS & SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\PROJECTS\VOL\V43-240\DWG\PRODUCTION\TDS\V43-240C-PHI-C.DWG

KARIMAH LEE

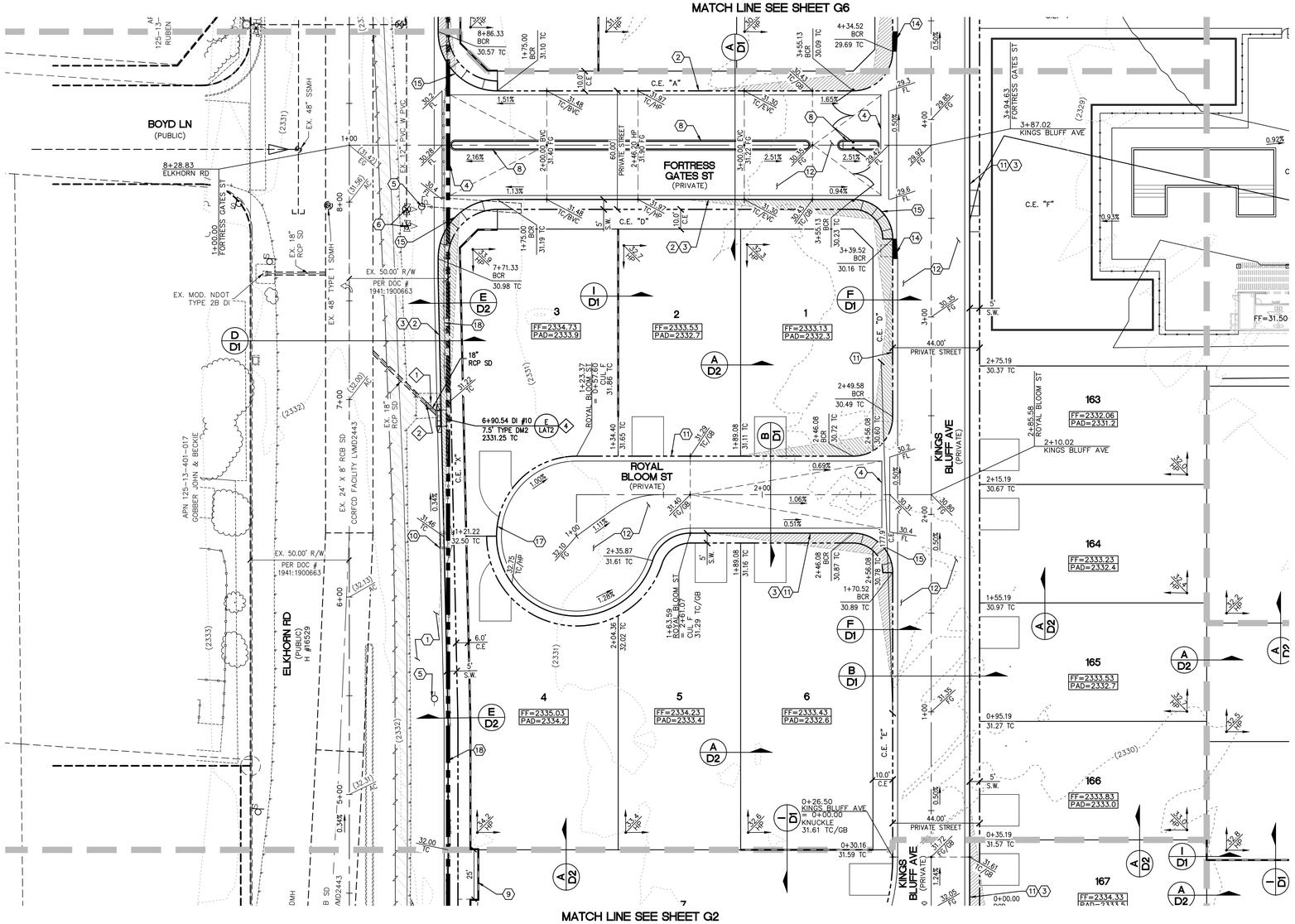
REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:12:25

TOLL BROTHERS
JONES & ELKHORN
COVER SHEET

DRAWING C1
1 OF 67 SHTS

PLANS FOR JONES AND ELKHORN PHASE 1
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



KEY MAP
NTS

CONSTRUCTION NOTES

1. CONSTRUCT 5" AC PAVEMENT WITH 17" TYPE II BASE PER GEOTECHNICAL REPORT BY ____ DATED ____
2. CONSTRUCT "L" CURB PER USDCCA NO. 216.
3. CONSTRUCT CONCRETE SIDEWALK PER USDCCA NO. 234.
4. CONSTRUCT 8' WIDE VALLEY GUTTER PER USDCCA NO. 228.
5. EX. POWER POLE TO BE REMOVED.
6. EX. STRUCTURE – ADJUST TO GRADE.
7. EX. SIGN, POST & CABLE TO BE REMOVED.
8. CONSTRUCT "A" MEDIAN CURB PER USDCCA NO. 219.
9. CONSTRUCT 10' X 25' BUS SHELTER PAD PER USDCCA NO. 234.5.
10. EX. STRUCTURE – TO BE RELOCATED.
11. CONSTRUCT 30" RESIDENTIAL ROLL CURB PER USDCCA NO. 217.2.S1
12. CONSTRUCT 2" AC OVER 4" TYPE II BASE
13. SAWCUT & MATCH TO EXISTING CURB & SIDEWALK. CONTRACTOR SHALL VERIFY EX. LOCATION & PAVEMENT PRIOR TO CONSTRUCTION.
14. CONSTRUCT 10' TRANSITION FROM "L" CURB TO RESIDENTIAL ROLL CURB PER DETAIL B SHEET D3.
15. CONSTRUCT SIDEWALK RAMP PER USDCCA NO. 235 CASE 1. SEE PLAN FOR "A" & "B" DIMENSION.
16. CONSTRUCT CURB OPENING WITH TRANSITION PER DETAIL D SHEET D3.
17. CONSTRUCT CUL-DE-SAC PER USDCCA NO. 212.
18. EXISTING FENCES & GATES TO BE REMOVED.
19. CONSTRUCT 2' SIDEWALK UNDERDRAIN PER USDCCA NO. 236.
20. CONSTRUCT 5' VALLEY GUTTER PER DETAIL E SHEET D3.
21. CONSTRUCT 5' TRANSITION FROM "L" CURB TO RESIDENTIAL ROLL CURB PER DETAIL C SHEET D3.
22. CONSTRUCT FENCE & SURFACE PER USDCCA NO. 425.S1.
23. CONSTRUCT REMOVEABLE BOLLARDS & SURFACE PER USDCCA NO. 425.S1.

NO DEEP ROOTED TREES SHALL BE PLACED WITHIN 10 FEET OF THE OUTSIDE EDGE OF THE STORM DRAIN PIPE.

STORM DRAIN CONSTRUCTION NOTES

1. EX. MOD. NDOT TYPE 2B INLET TO BE REMOVED.
2. CONNECT TO EXISTING 18" RCP STORM DRAIN PER DETAIL H SHEET D3.
3. CONSTRUCT 48" TYPE I STORM DRAIN MANHOLE PER STD. DWG 403.
4. CONSTRUCT 10' TYPE "DM2" INLET PER STD DWG 412.1 & 421.
5. PENETRATE INTO EXISTING STORM DRAIN PER DETAIL 1 SHEET S1.
6. CONSTRUCT 5' TYPE "DM2" INLET PER STD DWG 412.1 & 421 WITH (2) NEENAH R-4999 TYPE D SOLID LID OR APPROVED EQUAL.

NOTE

ALL ONSITE STORM DRAINS AND ASSOCIATED STORM FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOA.

ALL PRIVATE STREETS ARE P.U.E., PUBLIC DRAINAGE EASEMENT AND PUBLIC SEWER EASEMENTS TO BE PRIVATELY MAINTAINED BY HOA.

CAUTION TO CONTRACTOR

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

FLOOD ZONE NOTE

THIS SITE IS LOCATED ON PANEL **32003C1765F**, DATED **NOVEMBER 16, 2011**. THIS PANEL SHOWS THAT THE PROJECT IS LOCATED WITHIN A UNSHADED ZONE X. UNSHADED ZONE X AREAS ARE DESCRIBED AS AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.THE PROJECT IS NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR SPECIAL FLOOD HAZARD AREA.

DRAINAGE CERTIFICATION

I CERTIFY THAT THE GRADING PLANS ARE IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE (DS5472A) AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

GIA D NGUYEN, P.E. 14918 — 11/30/2021 (DATE)

L#: CLV#:

BASIS OF BEARING

NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET) 709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008) BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

NOTE

CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY.

EARTHWORKS

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GIA D. NGUYEN — No. 14918 — STATE OF NEVADA — PROFESSIONAL ENGINEER — CIVIL
11/30/2021

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:13:35

GCV ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcvengineering.com

F:\PROJECTS\700\743-240\DWG\PRODUCTION\TDS\743-240C-PH1-GDWG
KARIMAH LEE

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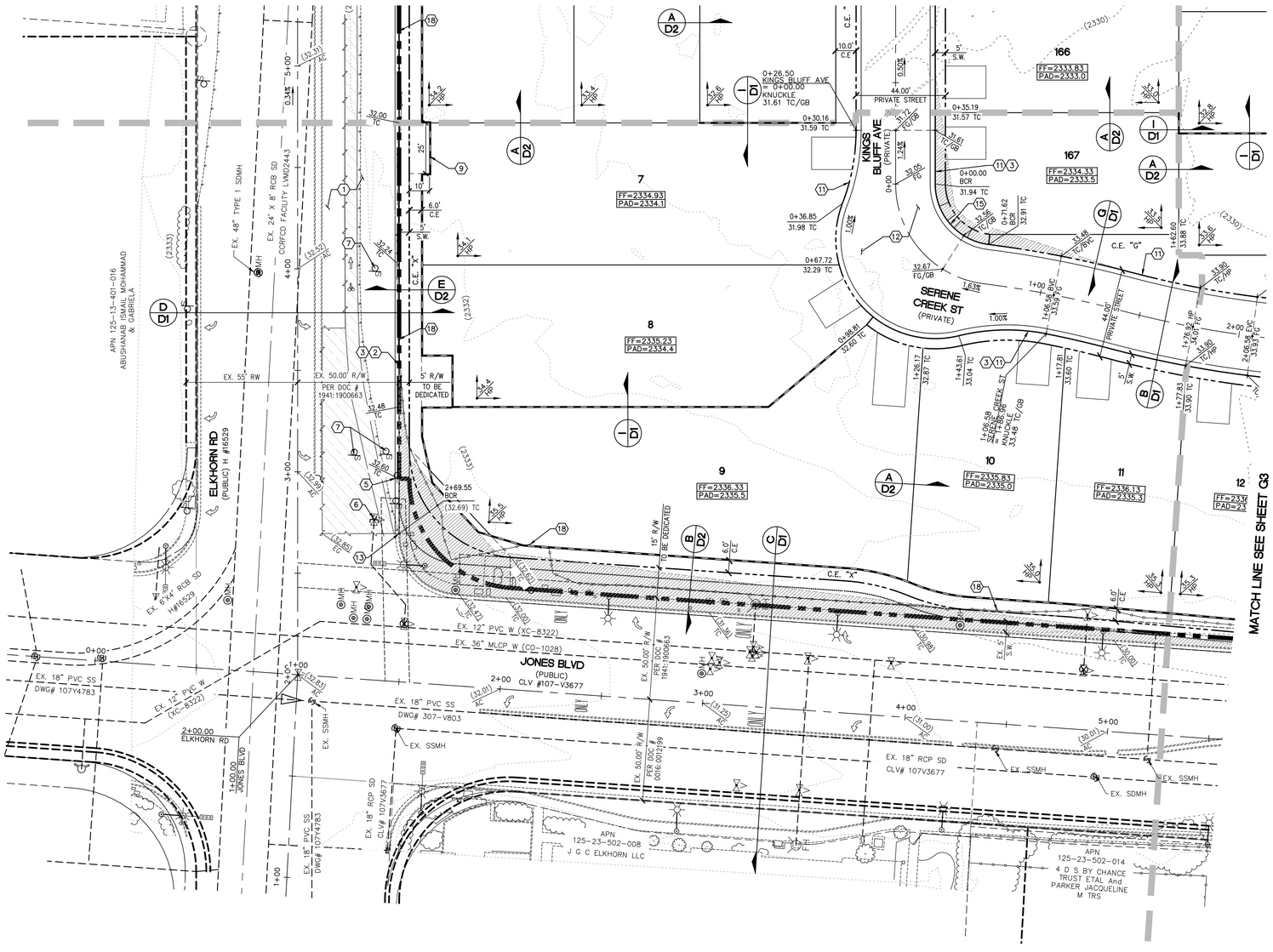
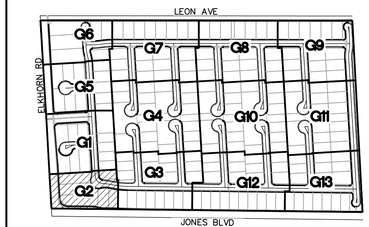
JONES & ELKHORN
GRADING PLAN 1

DRAWING
G1
4 OF 67 SHTS

PLANS FOR JONES AND ELKHORN PHASE 1
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'





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GIA D NGUYEN, P.E. 14918 — 11/30/2021 DATE

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NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

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ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
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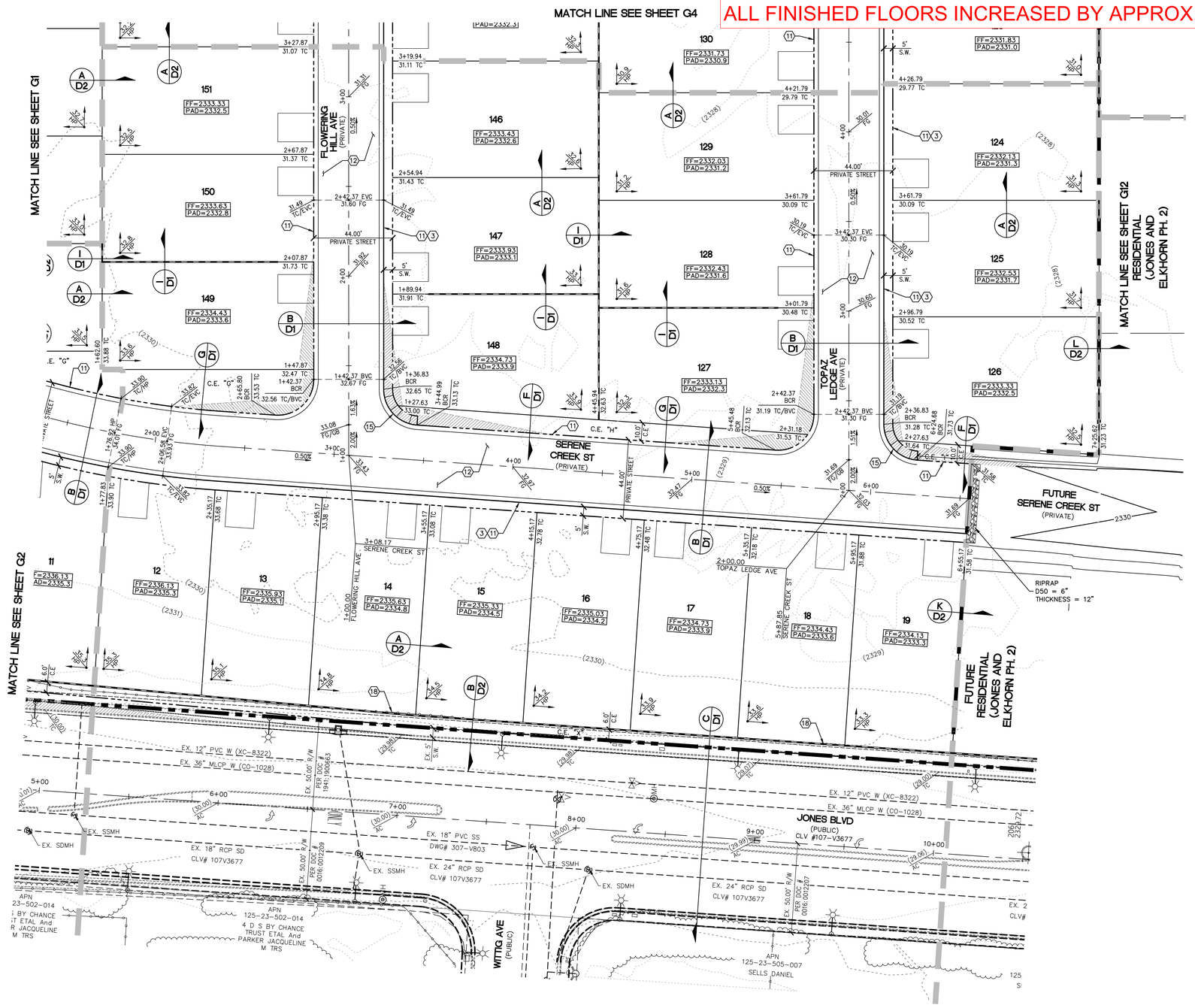

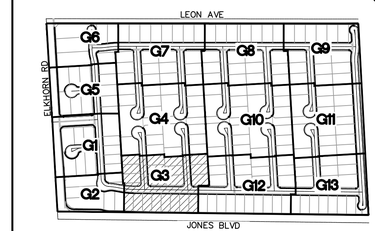

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F:\PROJECTS\700\743-240\GWG\PRODUCTION\TDS\743-240C-PH1-GDWG

KARIMAH LEE

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PLANS FOR JONES AND ELKHORN PHASE 1
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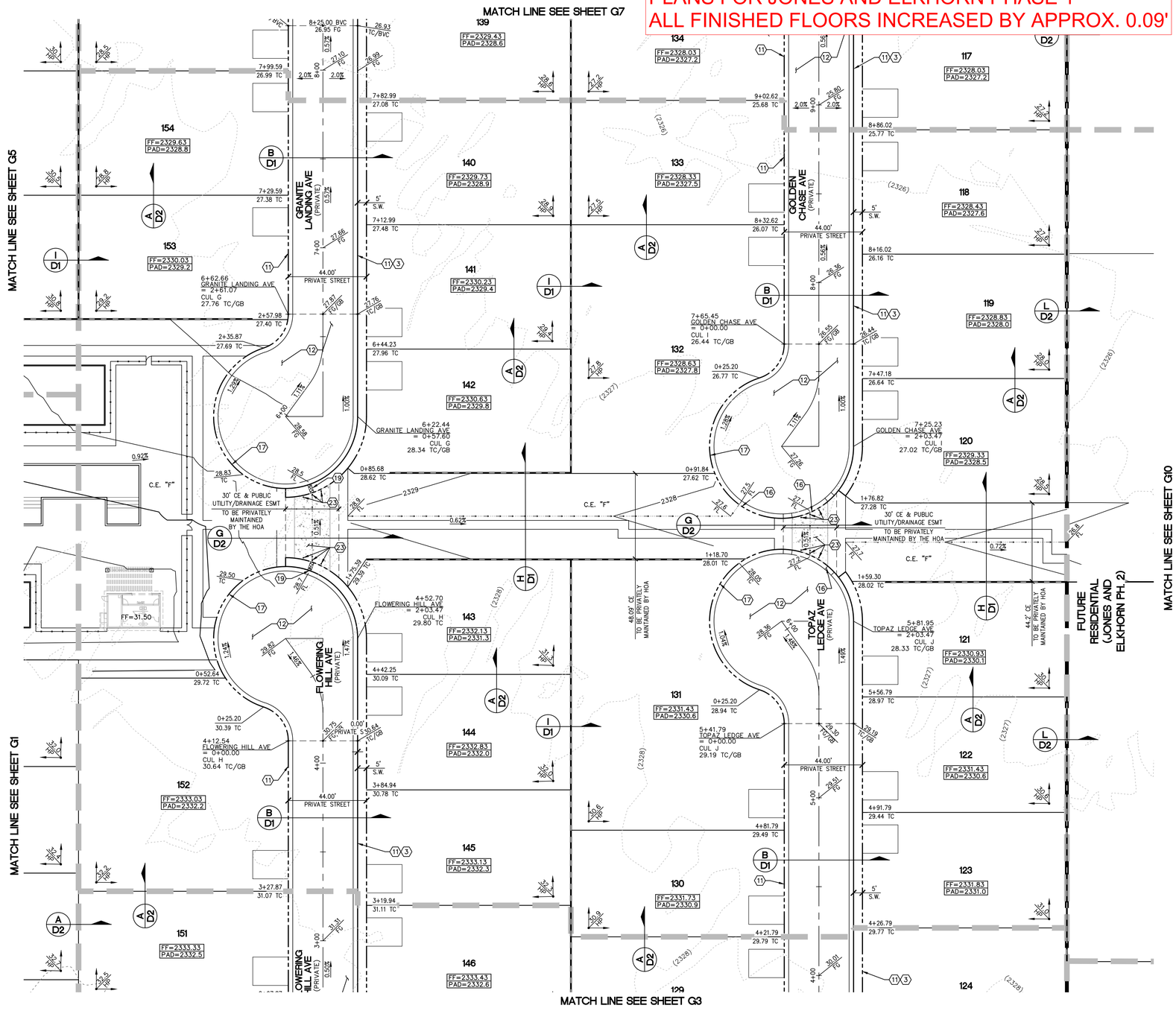

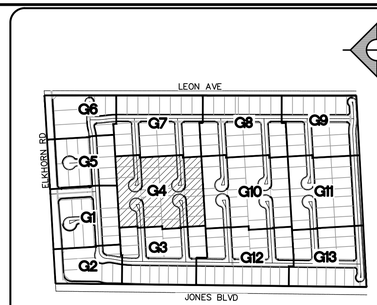

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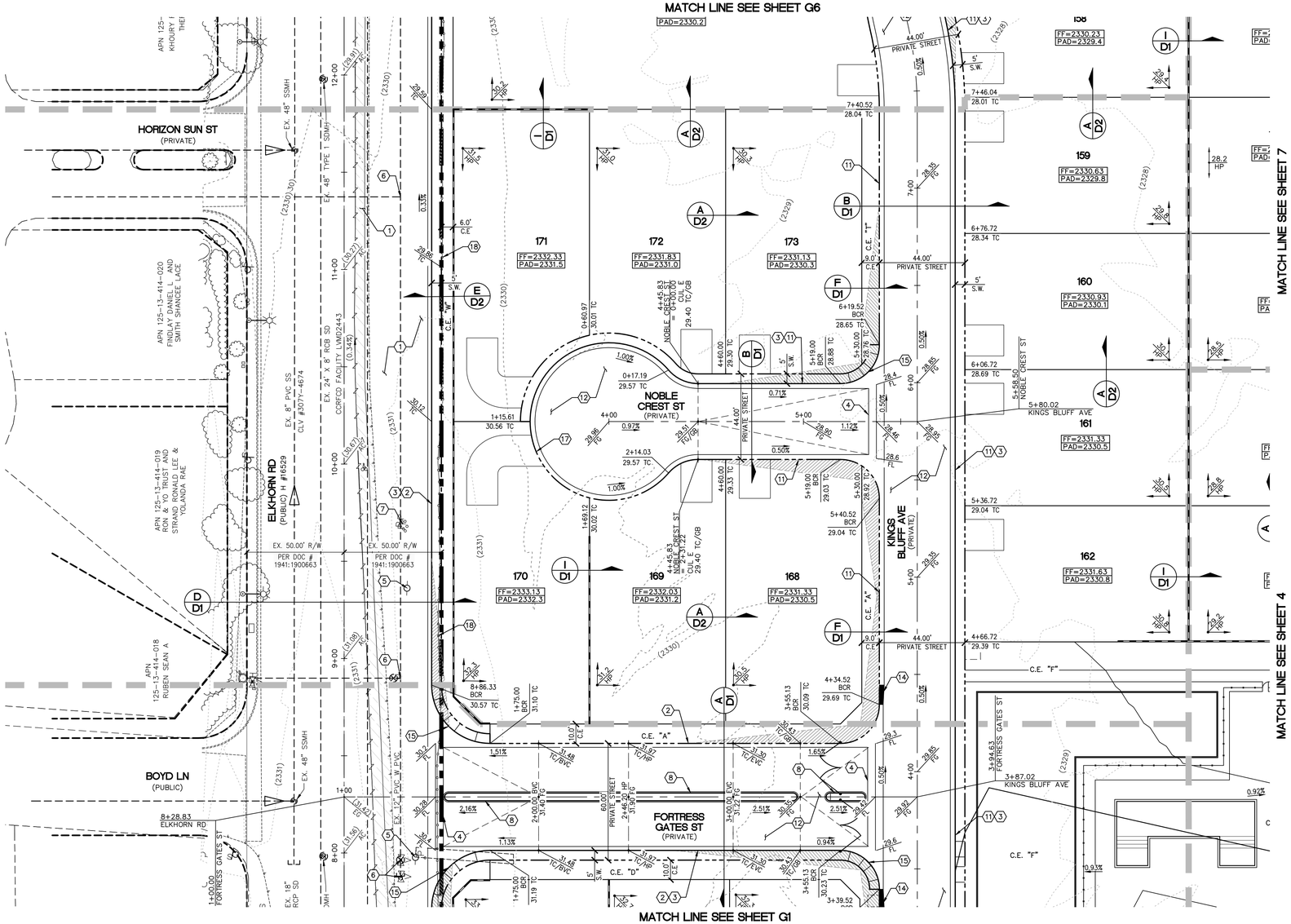

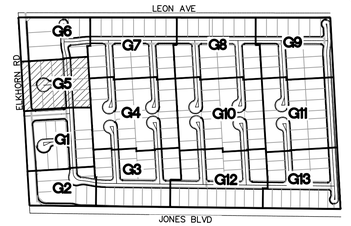

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NOTE

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FLOOD ZONE NOTE

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DRAINAGE CERTIFICATION

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GIA D NGUYEN, P.E. 14918 — 11/30/2021 DATE

BASIS OF BEARING

NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

NOTE

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EARTHWORKS

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STATE OF NEVADA — PROFESSIONAL ENGINEER — GIA D. NGUYEN — No. 14918 — CIVIL — 11/30/2021

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:14:03

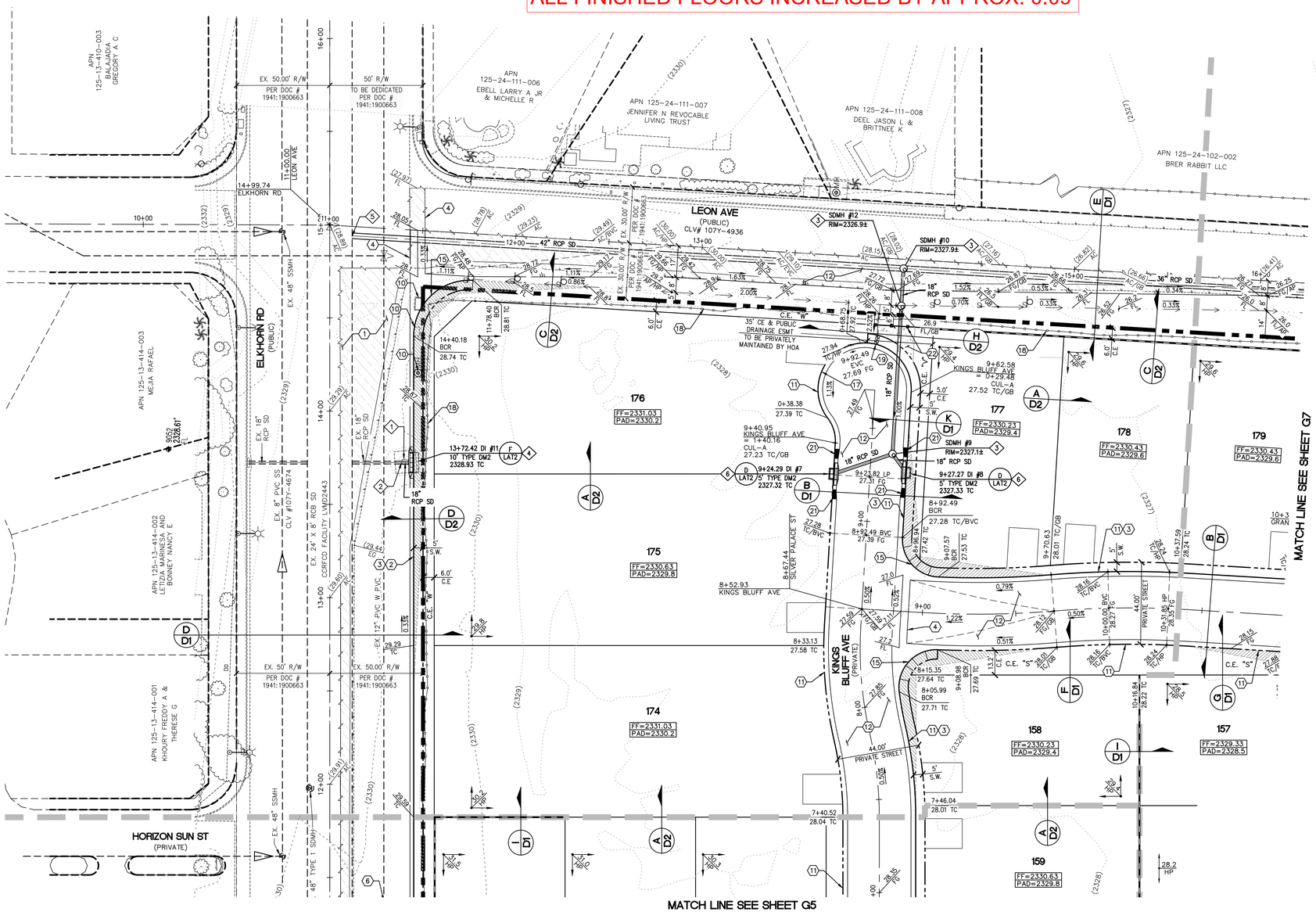
GCW
ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
F:\PROJECTS\2021\743-240\DWG\PRODUCTION\DES\743-240C-PHI-GDWG
KARIMAH LEE

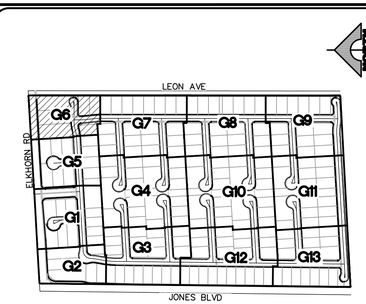
TOLL BROTHERS
JONES & ELKHORN
GRADING PLAN 5

DRAWING
G5
8 OF 67 SHTS

L#: CLV#:

PLANS FOR JONES AND ELKHORN PHASE 1
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'





KEY MAP
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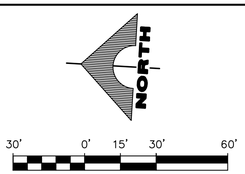

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KARIMAH LEE
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GCW
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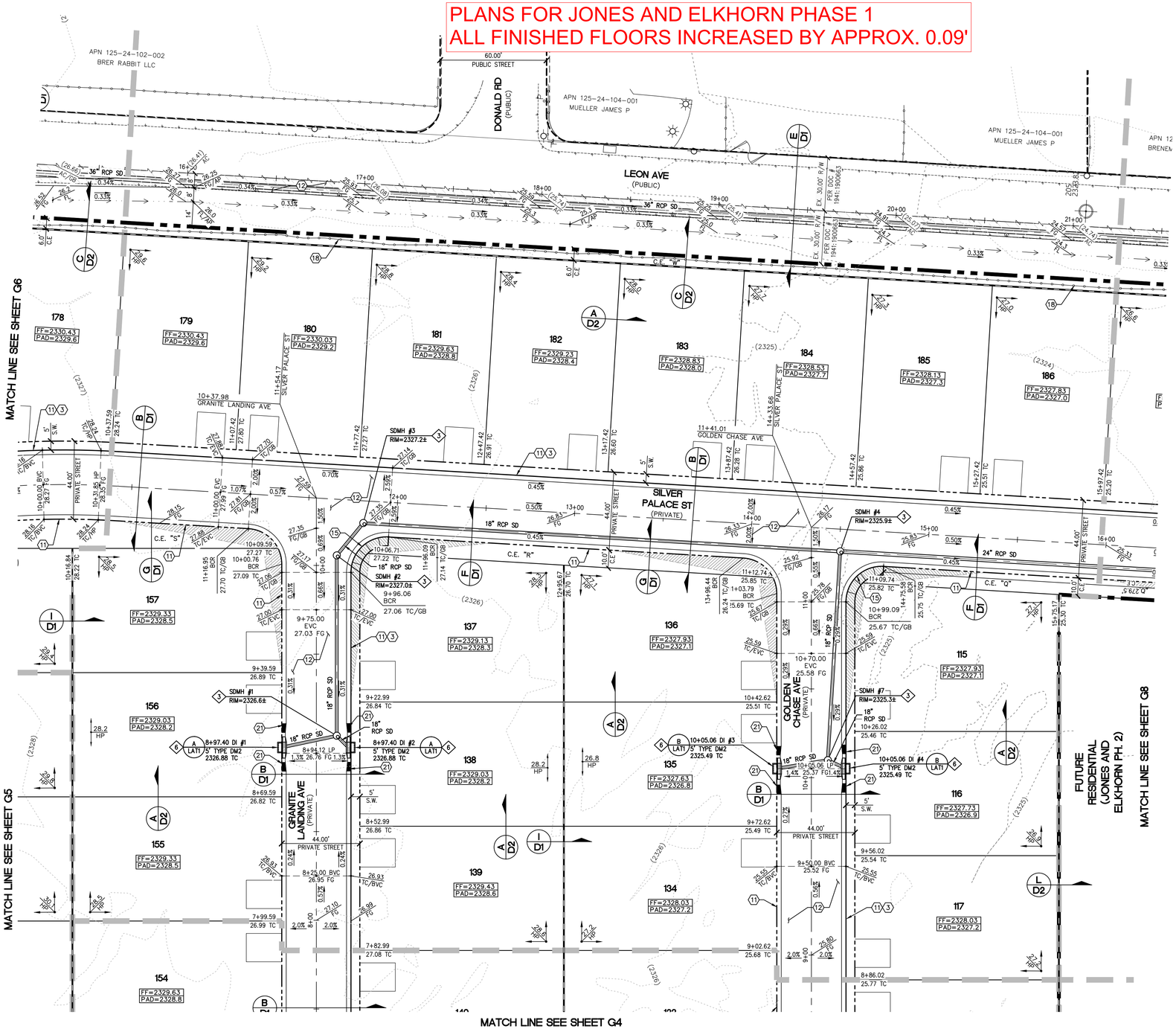

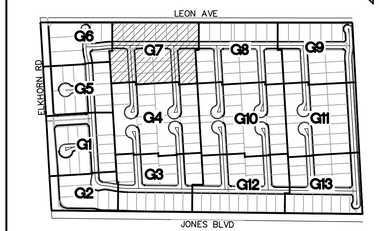

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L#: CLV#:

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TOLL BROTHERS
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GRADING PLAN 7

DRAWING
G7
10 OF 67 SHTS

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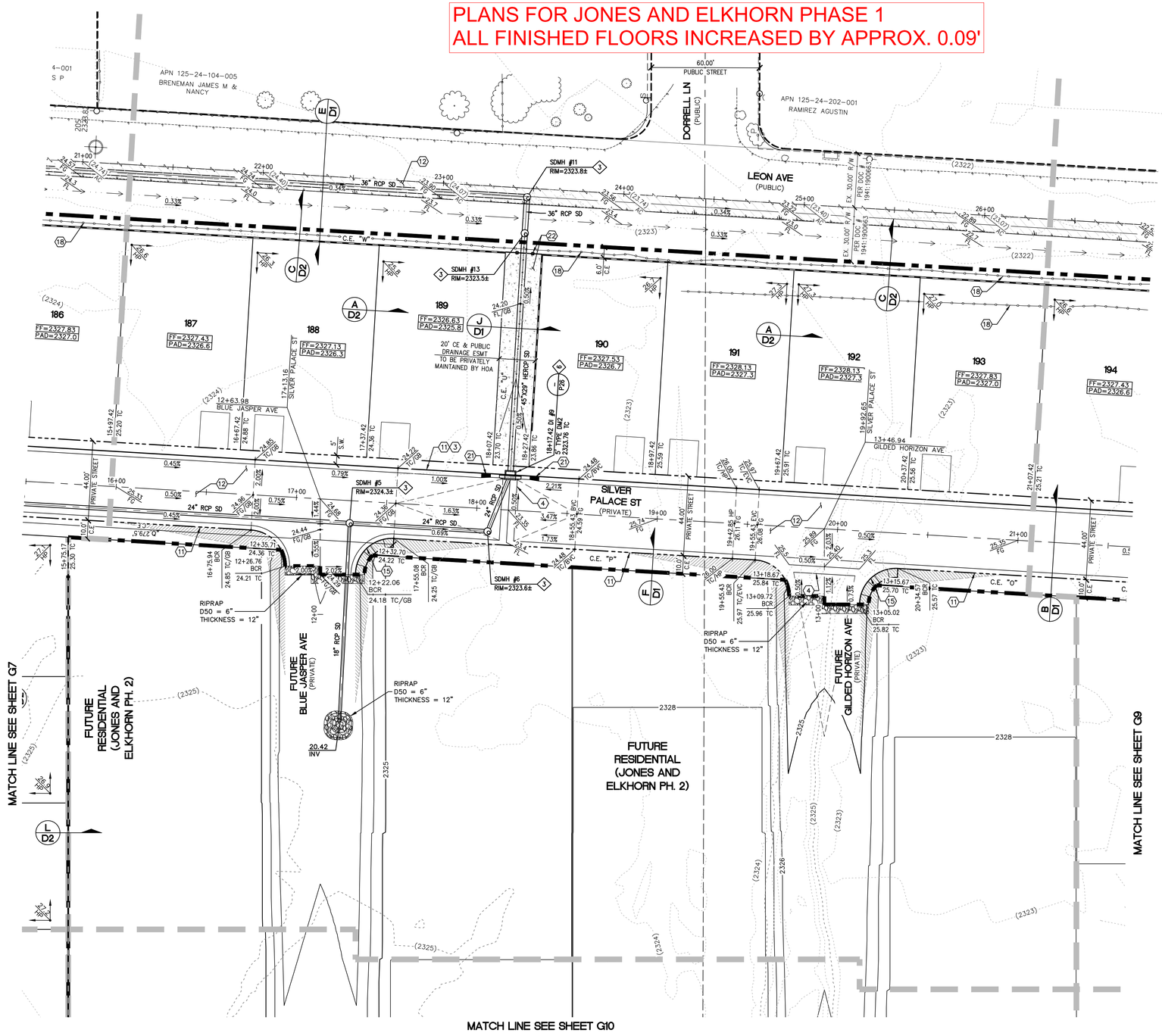

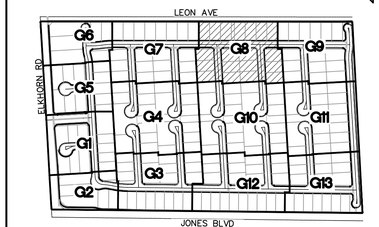

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709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008) BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

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GIA D. NGUYEN — No. 14918 — PROFESSIONAL ENGINEER — STATE OF NEVADA — CIVIL
11/30/2021
DATE: 11/30/2021

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:14:26

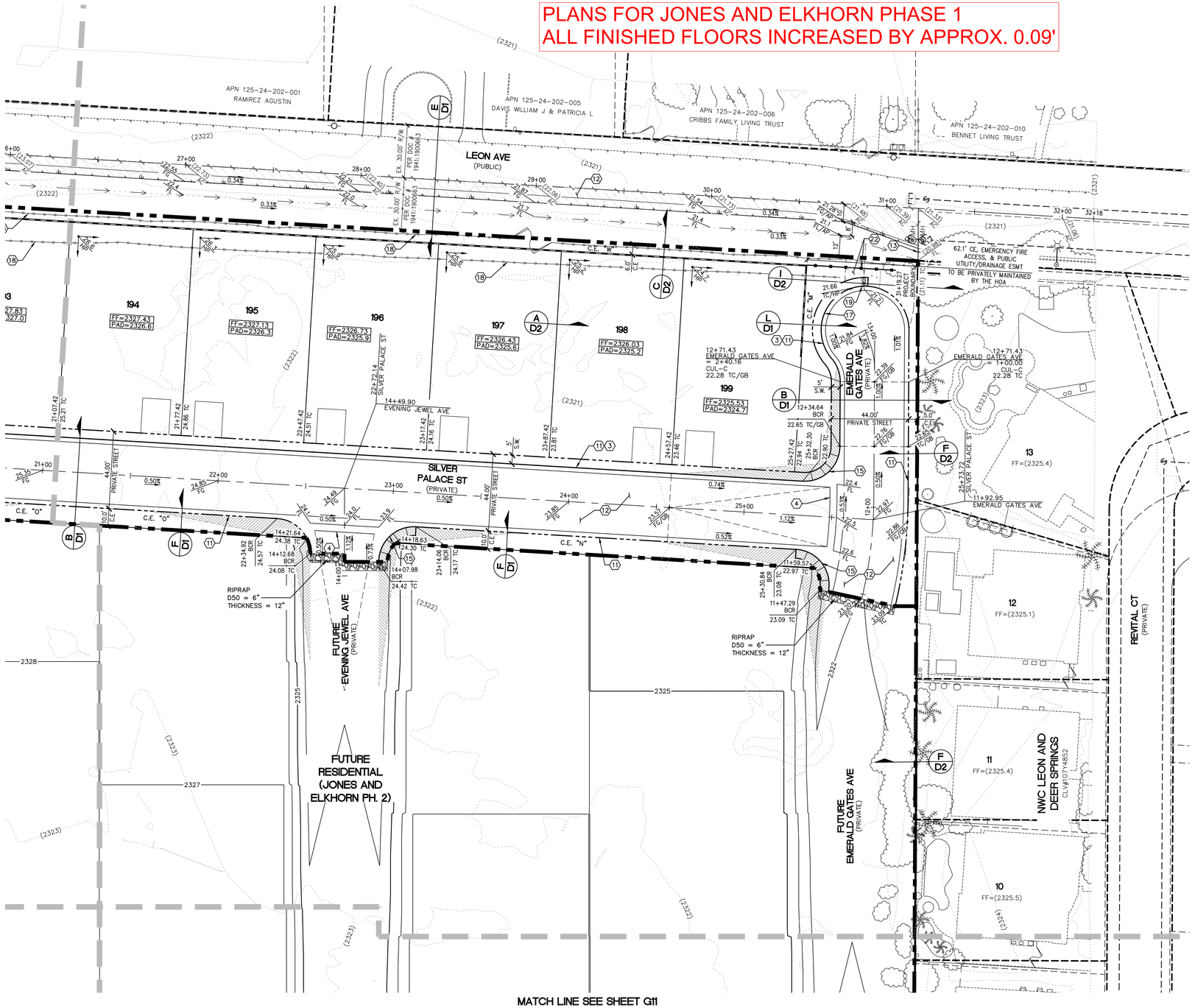
GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
F:\PROJECTS\700\743-240\DWG\PRODUCTION\DS\743-240C-PH1-G.DWG
KARIMAH LEE

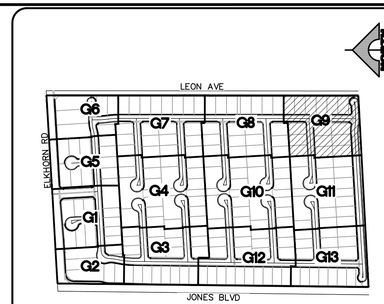
TOLL BROTHERS
JONES & ELKHORN
GRADING PLAN 8

DRAWING
G8
11 OF 67 SHTS

L#: CLV#:

PLANS FOR JONES AND ELKHORN PHASE 1
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'





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GIA D NGUYEN, P.E. 14918 — 11/30/2021 DATE

L#: CLV#:

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F:\PROJECTS\720\Y43-240\DWG\PRODUCTION\TDS\Y43-240C-PHI-GDWG

TOLL BROTHERS
JONES & ELKHORN
GRADING PLAN 9

DRAWING
G9
12 OF 67 SHTS

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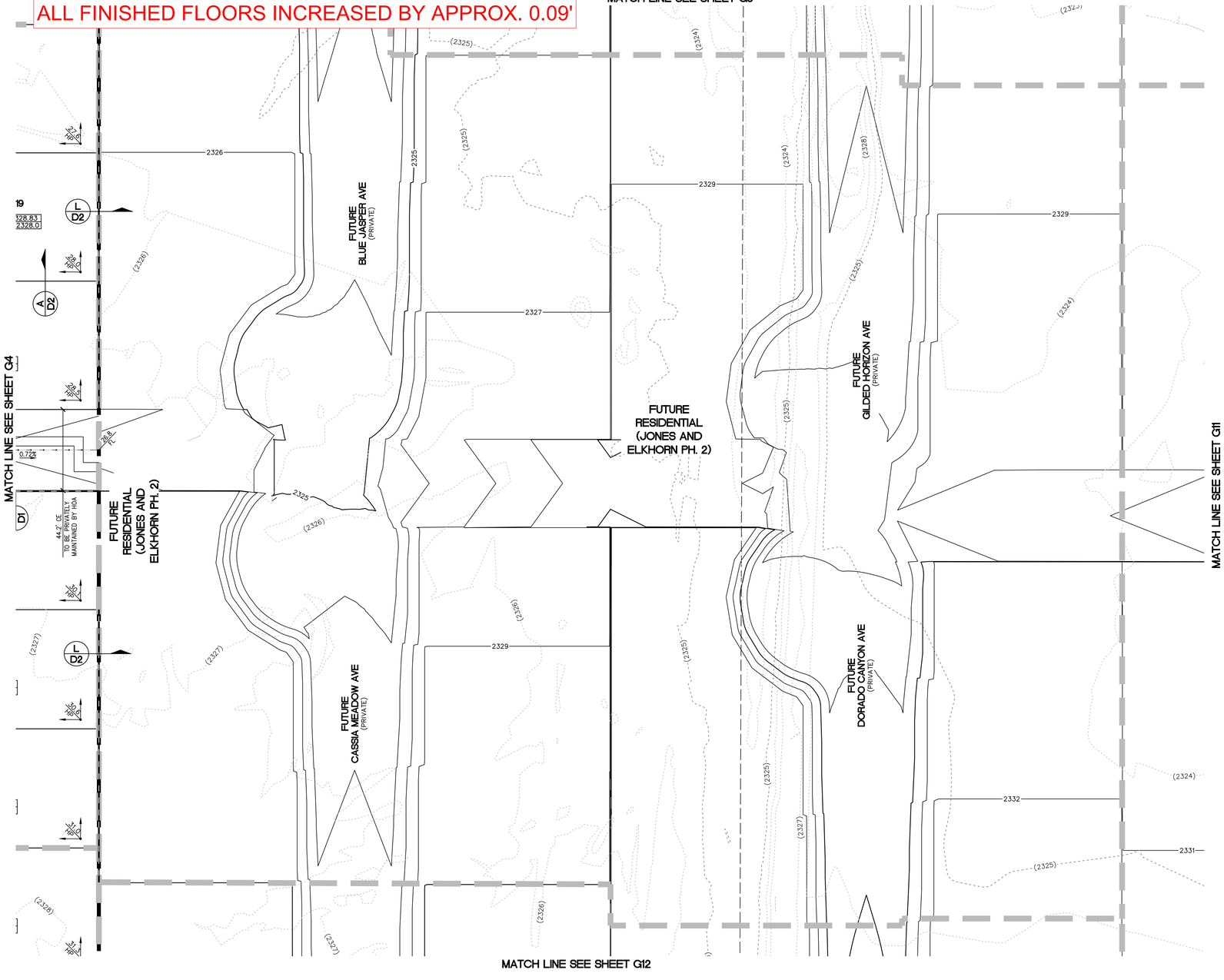

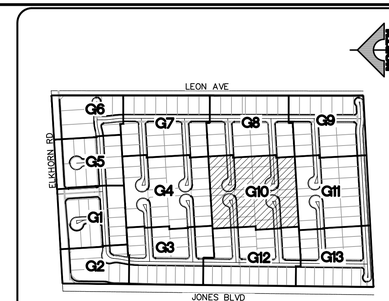

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F:\PROJECTS\700\743-240\DWG\PRODUCTION\TDS\743-240C-PH1-GDWG
KARIMAH LEE

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REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE

TOLL BROTHERS
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GRADING PLAN 13

DRAWING
G10
13 OF 67 SHTS

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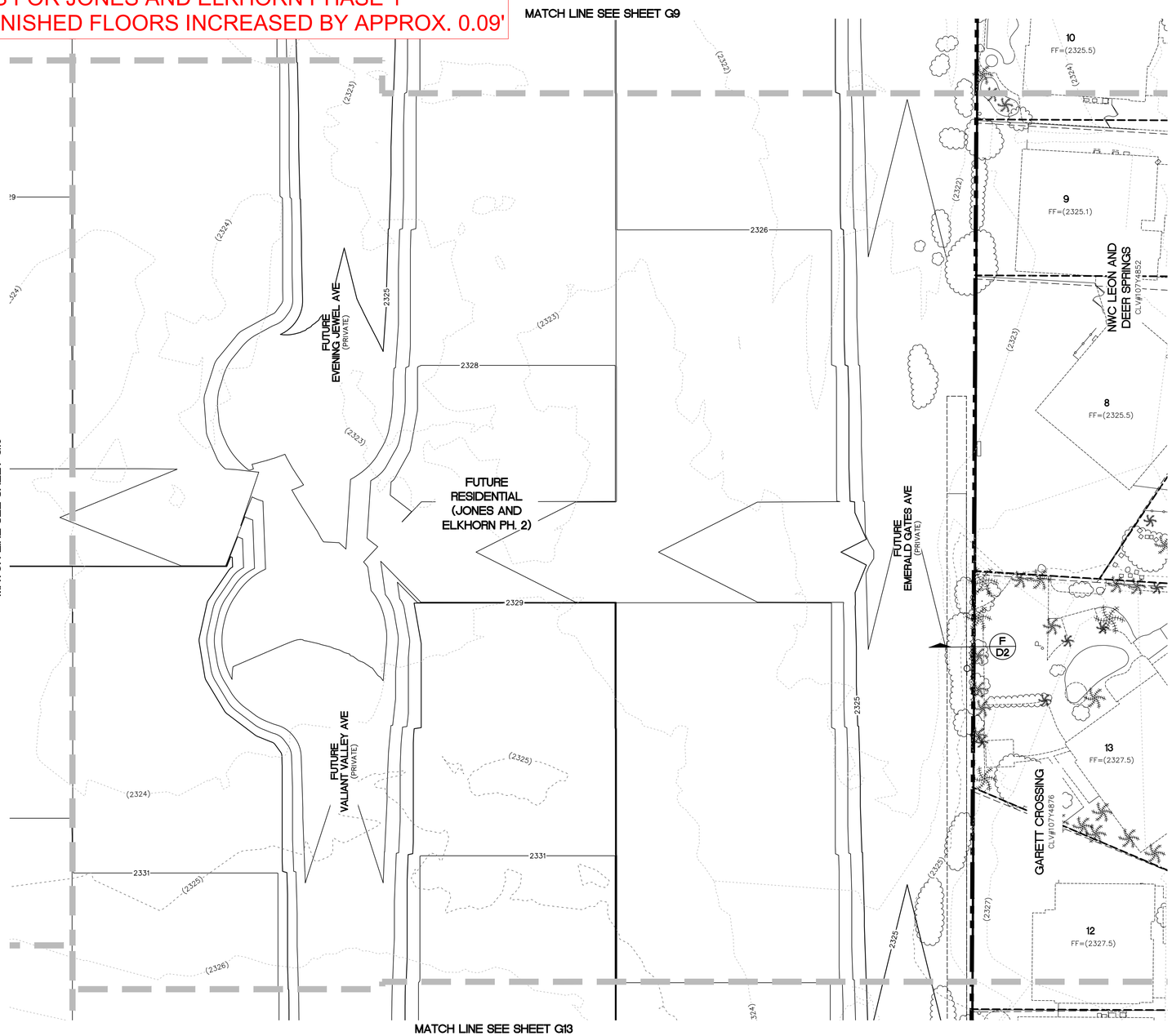

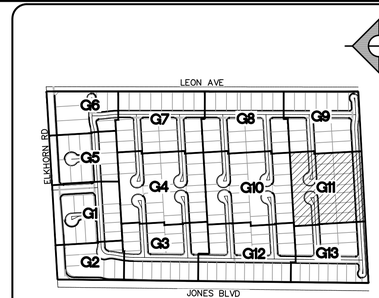

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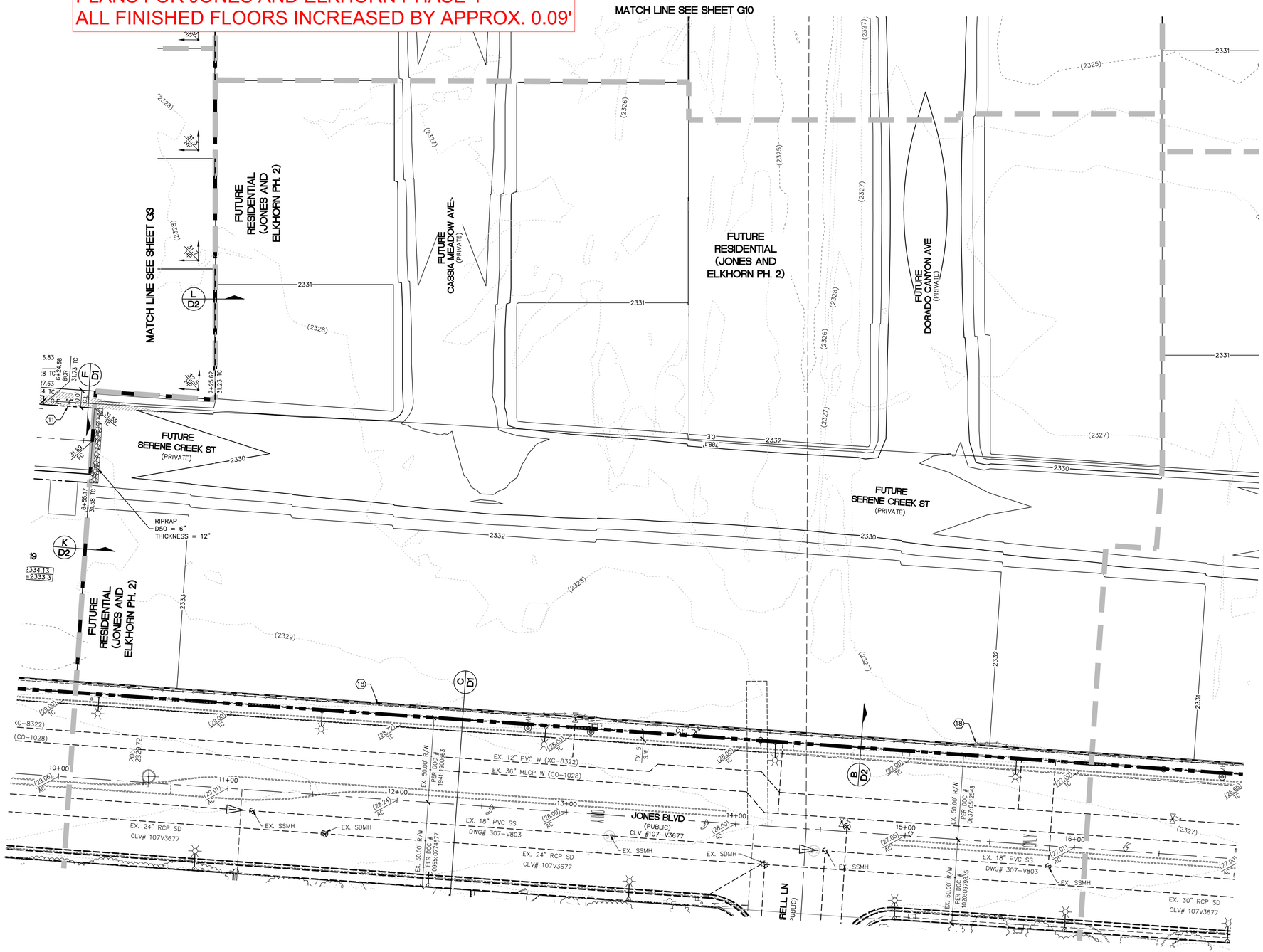

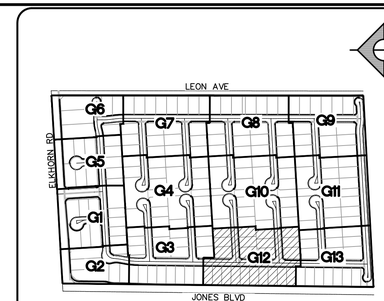

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FLOOD ZONE NOTE

THIS SITE IS LOCATED ON PANEL **32003C1765F**, DATED **NOVEMBER 16, 2011**. THIS PANEL SHOWS THAT THE PROJECT IS LOCATED WITHIN A UNSHADED ZONE X. UNSHADED ZONE X AREAS ARE DESCRIBED AS AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.THE PROJECT IS NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR SPECIAL FLOOD HAZARD AREA.

DRAINAGE CERTIFICATION

I CERTIFY THAT THE GRADING PLANS ARE IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE (DS5472A) AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

GIA D NGUYEN, P.E. 14918 — 11/30/2021 DATE

L#: CLV#:

BASIS OF BEARING

NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008) BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

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STATE OF NEVADA — PROFESSIONAL ENGINEER — GIA D. NGUYEN — No. 14918 — DATE: 11/30/2021

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:23:34

GCW ENGINEERS\SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

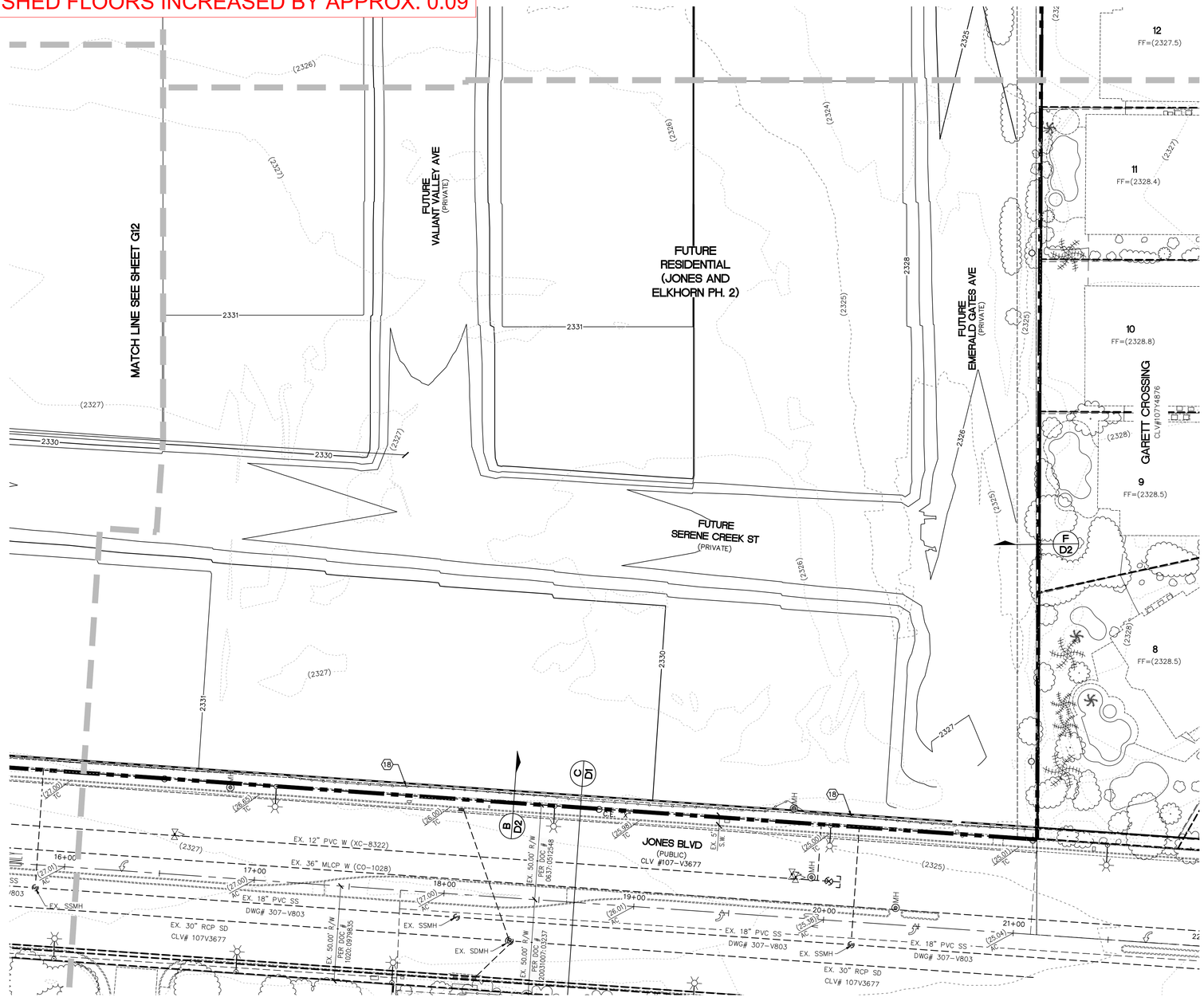
F:\PROJECTS\700\743-240\DWG\PRODUCTION\TDS\743-240C-PH1-G.DWG

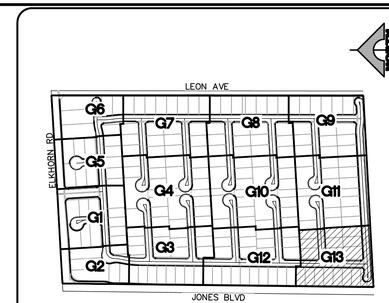
KARIMAH LEE

TOLL BROTHERS
JONES & ELKHORN
GRADING PLAN 12

DRAWING
G12
15 OF 67 SHTS

PLANS FOR JONES AND ELKHORN PHASE 1
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'





KEY MAP
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30' 0' 15' 30' 60'

SCALE: 1" = 30'

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STATE OF NEVADA — PROFESSIONAL ENGINEER — GIA D. NGUYEN — No. 14918 — CIVIL — 11/30/2021

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PROJECT NO. 743-240
DESIGN: GCW
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PLOT TIME: 16:25:57

GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\PROJECTS\743-240\DWG\PRODUCTION\TDS\743-240C-PH1-G.DWG
KARIMAH LEE

TOLL BROTHERS
JONES & ELKHORN
GRADING PLAN 13

DRAWING
G13
16 OF 67 SHTS

PLANS FOR JONES AND ELKHORN PHASE 1
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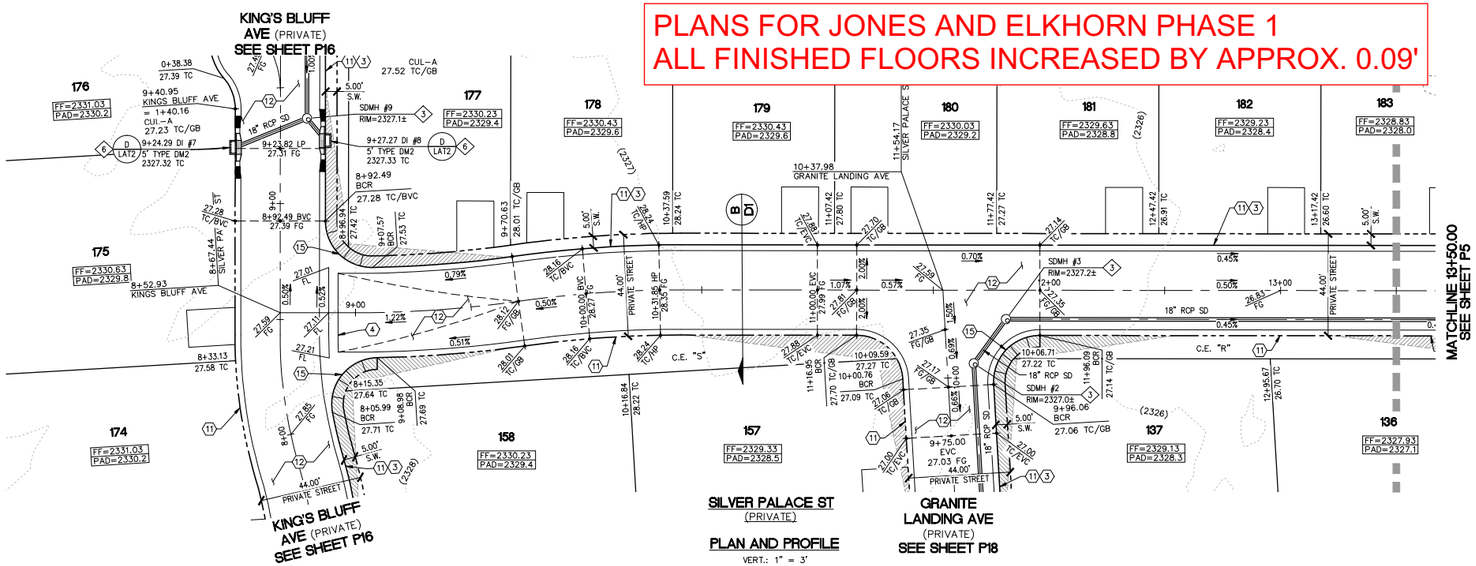

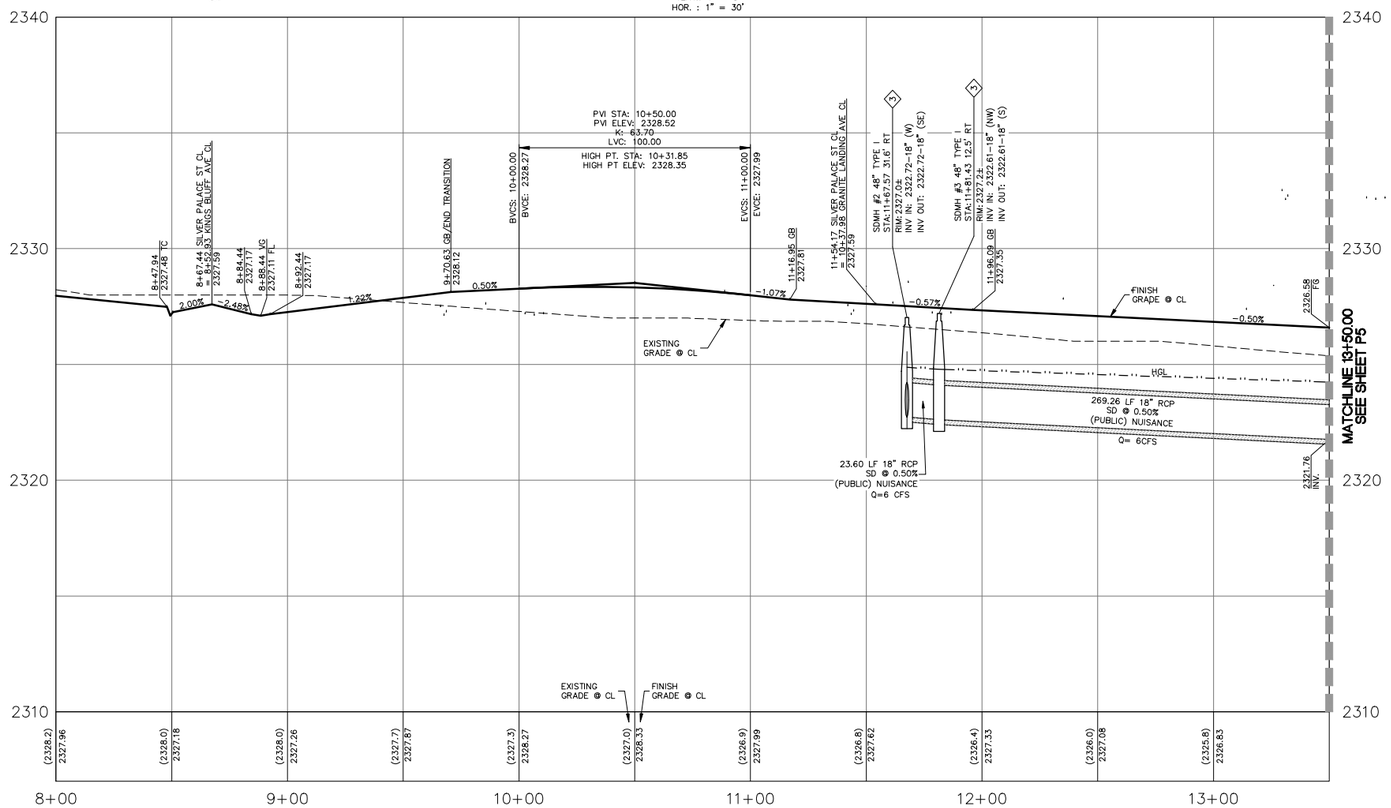

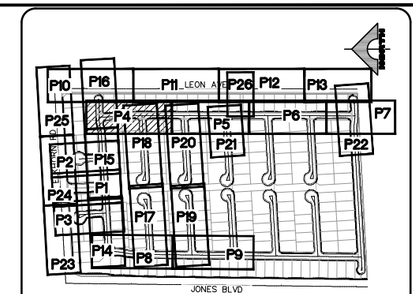

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MINIMUM DEPTH DURING CONSTRUCTION

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATIONS.

BASIS OF BEARING

NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. 139687 FIRST APPROVAL DATE: ____

L#: CLV#:

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY
CALL BEFORE YOU DO OVERHEAD
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FAST
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FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

Call before you Dig
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Call 811
OR
1-800-442-2444

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

PROTECT WATERLINES IN PLACE. WHEREVER A WATERLINE IS ABOVE A STORM DRAIN OR SEWER WHERE COMPACTION REQUIREMENTS UNDER A WATERLINE CANNOT BE MET, BACKFILL TRENCH WITH CLASS II CONTROLLED LOW STRENGTH MATERIAL (CLSM) TO THE SPRINGLINE OF THE WATERLINE. THIS REQUIREMENT IS FOR STRUCTURAL SUPPORT ONLY. ADDITIONAL HEALTH REGULATIONS MAY APPLY PER UDACS 2.22.

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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

ALL SEWER/SD CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22, UDACS PLATE 22 AND 23.

ANNULAR SPACE BETWEEN PIPE AND CASING SHALL BE FILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM I) PER UDACS 2.10.05.

LVVWD NOTES

1. TO ENSURE LVVWD ACCESS WITHIN EASEMENT, ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPING BOULDERS, FENCES/WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED FROM EASEMENT.
2. FIRE SPRINKLER SYSTEM SHALL BE PLUMBED TO MASTER TOILET. NO EXCEPTIONS ALLOWED.
3. INSTALL PIPELINE MARKER BALLS PER UDACS PLATE NO. 15.
4. PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
5. LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.
   CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.
6. ALL LOTS HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE), PRESSURE-REDUCING VALVES (PRV) BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES.

STATE OF NEVADA — REGISTERED PROFESSIONAL ENGINEER — No. 13431 — GIA D. NGUYEN — CIVIL — DATE: 12/31/2021

DATE: 11/30/2021

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:28:15

GCW ENGINEERS\SURVEYORS
1555 S. RAINBOW BLVD.
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T: 702.804.2000
F: 702.804.2299
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P:\PROJECTS\7XX\743-240\DWG\PRODUCTION\7XX\743-240C-PRH-PF-P13.DWG

TOLL BROTHERS

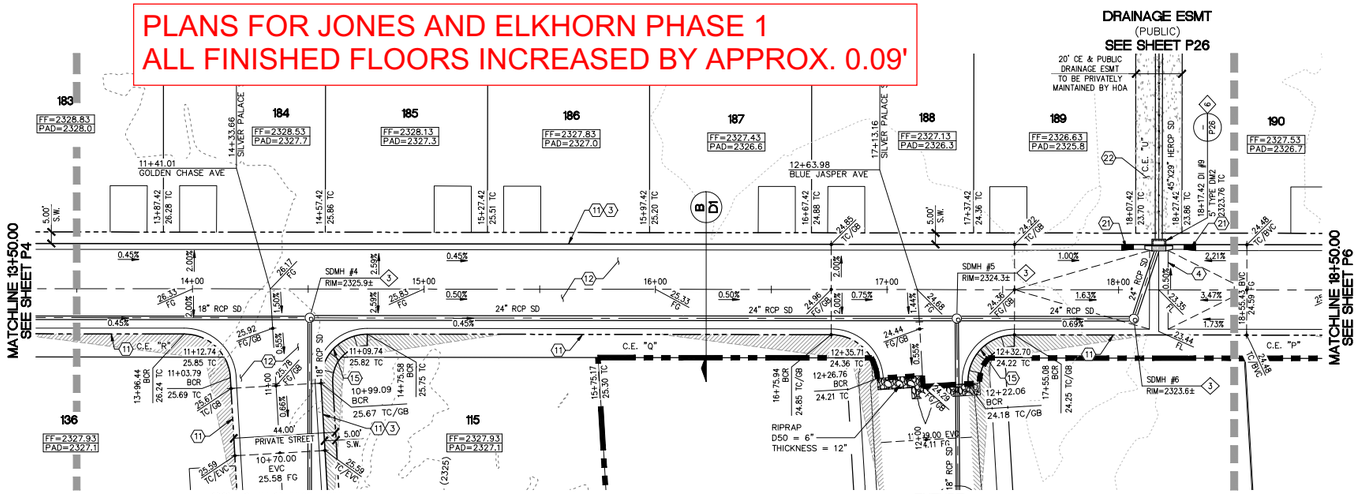
JONES & ELKHORN

SILVER PALACE ST PLAN & PROFILE
STA. 8+67.44 TO STA. 13+50.00

KARMAN LEE

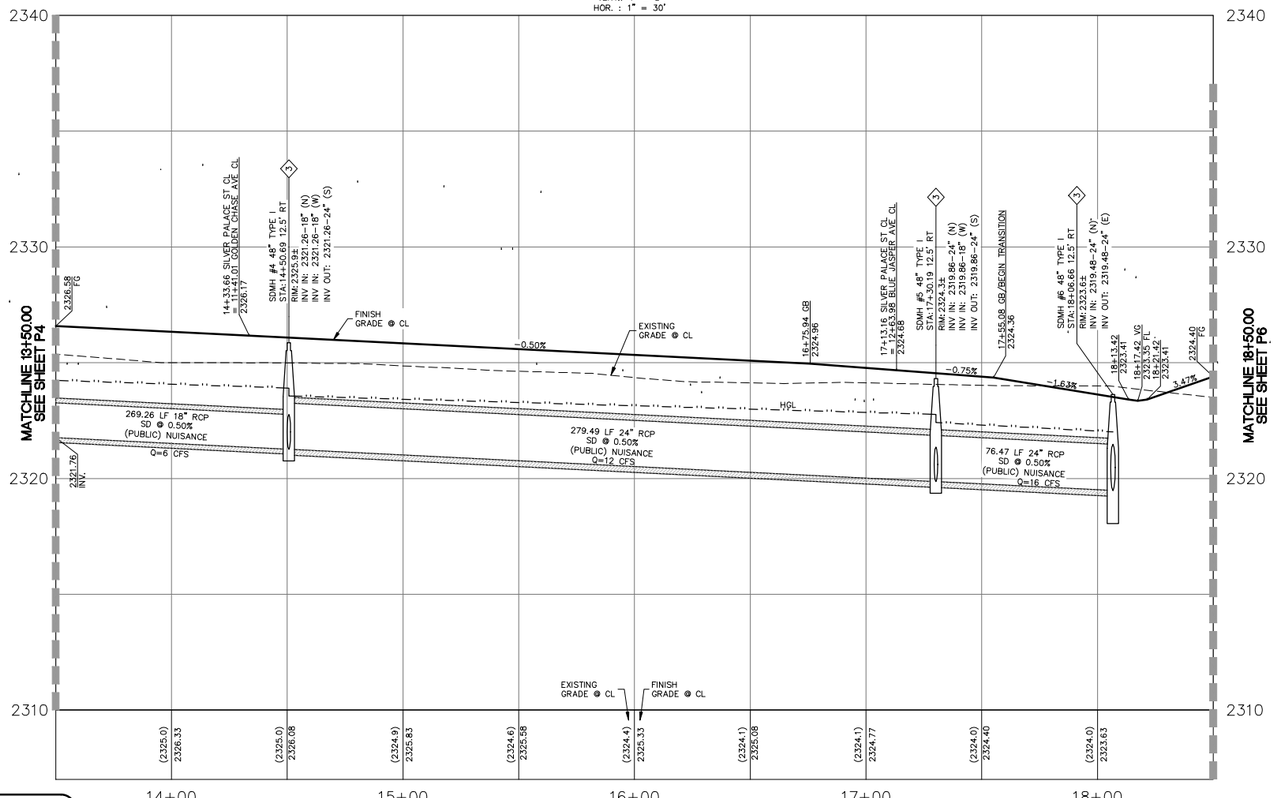
DRAWING
P4
23 OF 67 SHTS

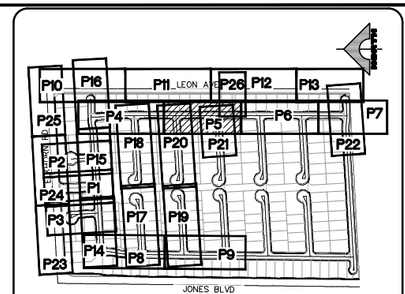
PLANS FOR JONES AND ELKHORN PHASE 1
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



PLAN AND PROFILE

VERT.: 1" = 3'
HOR. : 1" = 30'





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BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV90135SW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. 139687 FIRST APPROVAL DATE: ____

L#: CLV#:

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ENGINEER – STATE OF NEVADA
GIA D. NGUYEN
No. 13437
PROFESSIONAL
CIVIL
DATE: 12/21/2020
DATE: 11/30/2021

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:26:26

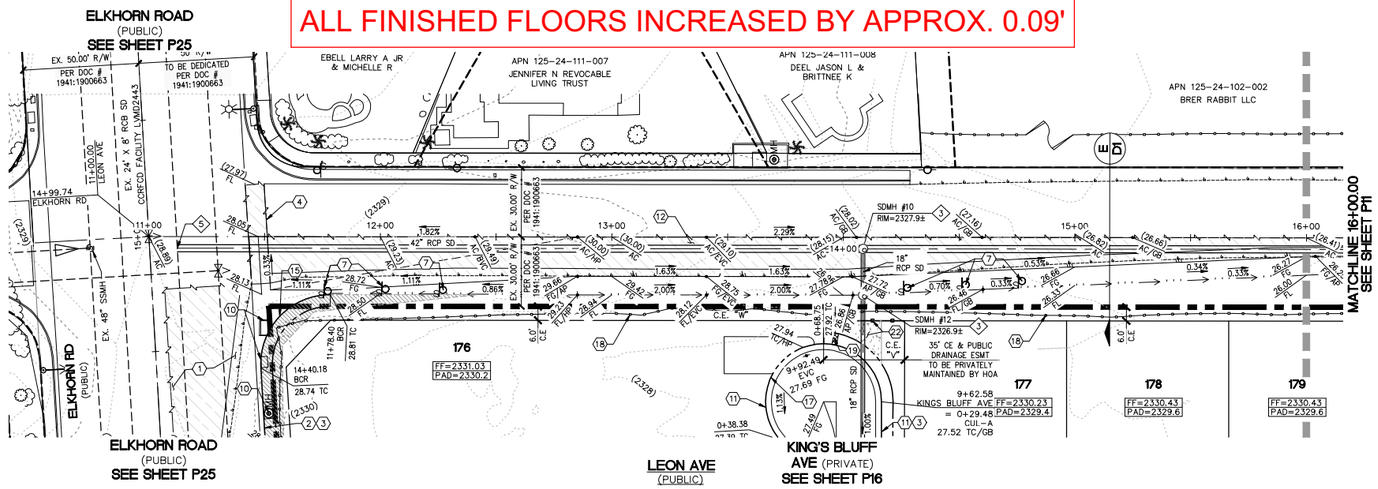
GCW
ENGINEERS & SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

KARMAN LEE
F:\PROJECTS\700\743-240\GWD\PRODUCTION\700_743-240C-PH1-PLT.DWG

TOLL BROTHERS
JONES & ELKHORN
SILVER PALACE ST PLAN & PROFILE
STA. 13+50.00 TO STA. 18+50.00

DRAWING
P5
24 OF 67 SHTS

PLANS FOR JONES AND ELKHORN PHASE 1
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



PLAN AND PROFILE

VERT.: 1" = 3'
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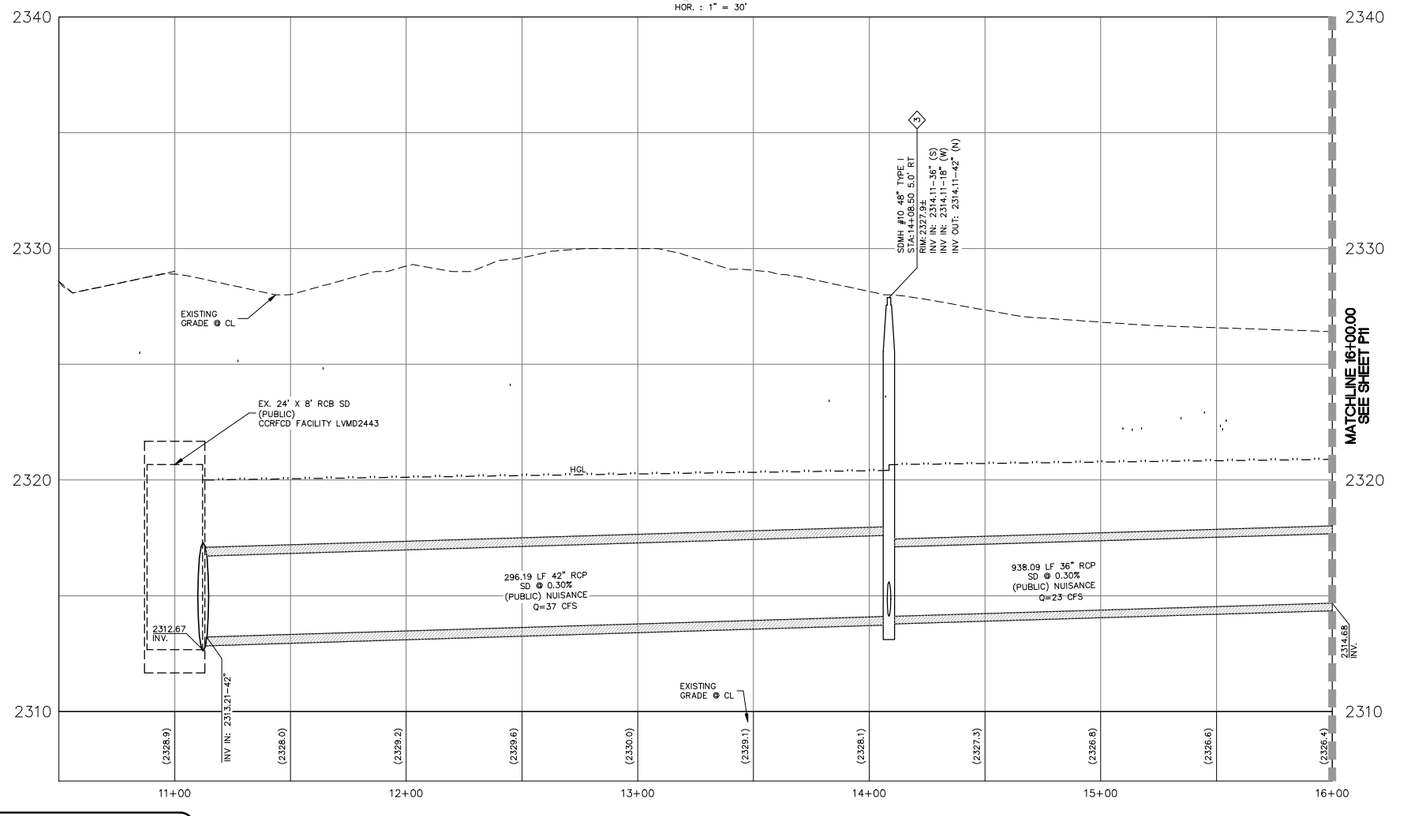

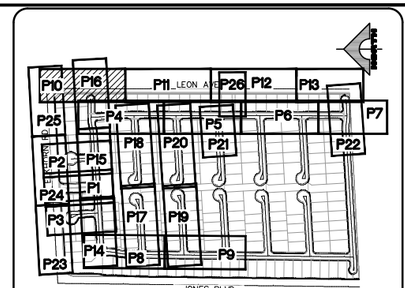

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PROFESSIONAL ENGINEER – STATE OF NEVADA – No. 14437 – GIA D. NGUYEN – CIVIL – Date: 12/31/2022
DATE: 11/30/2021

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:28:37

GCW ENGINEERS & SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
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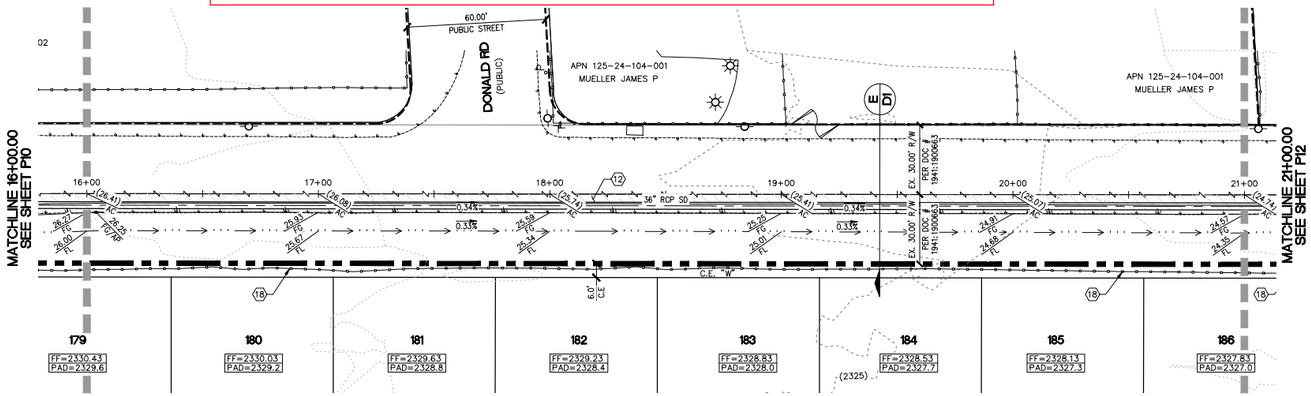
F:\PROJECTS\100\743-240\GWO\PRODUCTION\100\743-240C-PH1-P11.DWG
KARMAN LEE

TOLL BROTHERS
JONES & ELKHORN
LEON AVE PLAN & PROFILE
STA. 11+00.00 TO STA. 16+00.00

DRAWING
P10
29 OF 67 SHTS

PLANS FOR JONES AND ELKHORN PHASE 1
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



LEON AVE
(PUBLIC)

PLAN AND PROFILE

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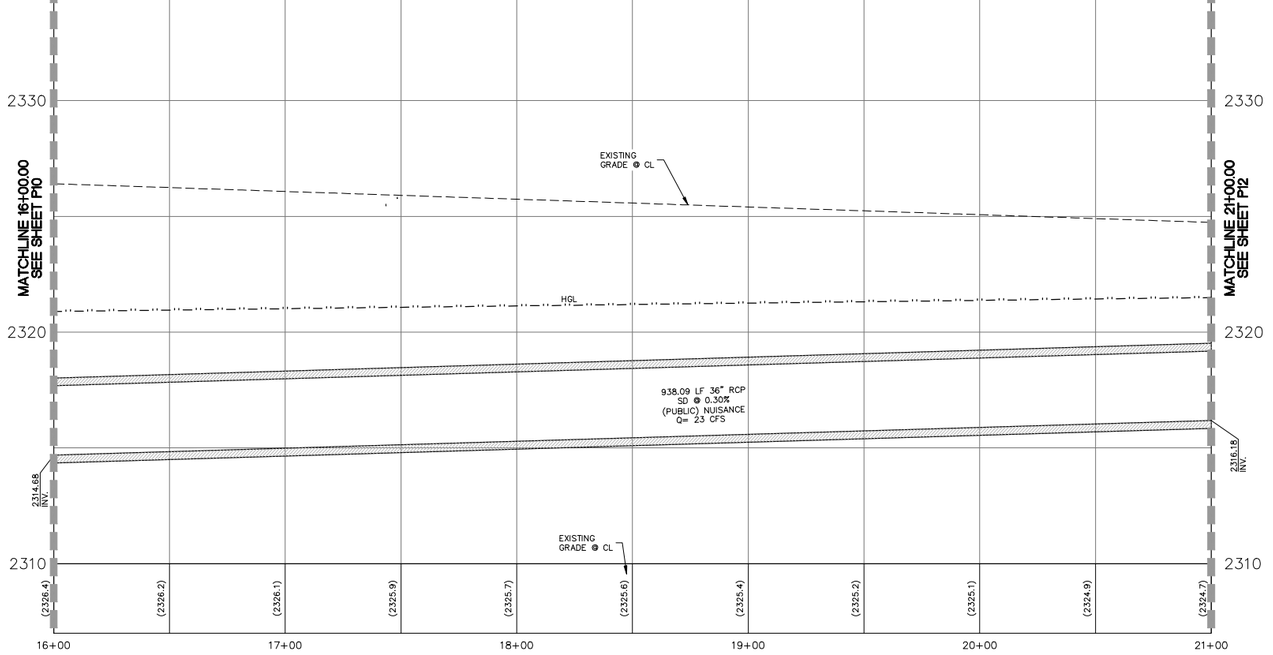

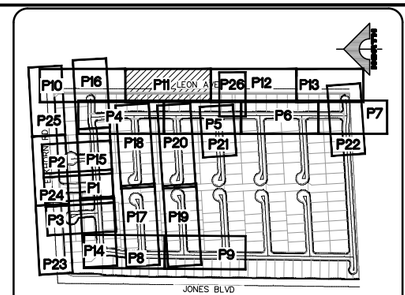

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PROJECT NO. 743-240
DESIGN: GCW
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GCW ENGINEERS\SURVEYORS
1555 S. RAINBOW BLVD.
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T: 702.804.2000
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P:\PROJECTS\2021\743-240\DWG\PRODUCTION\2021\743-240C-PH1-PP-P11.DWG
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30 OF 67 SHTS

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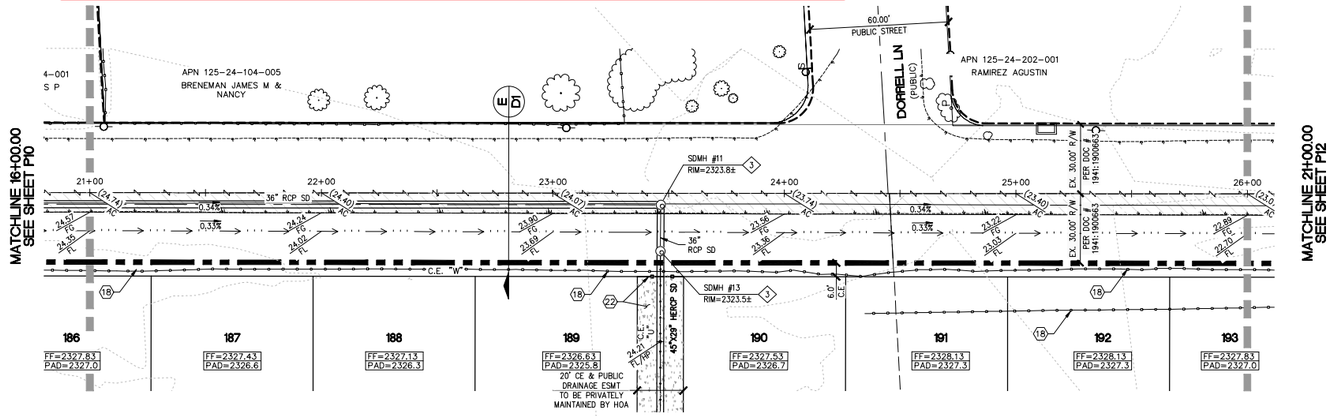
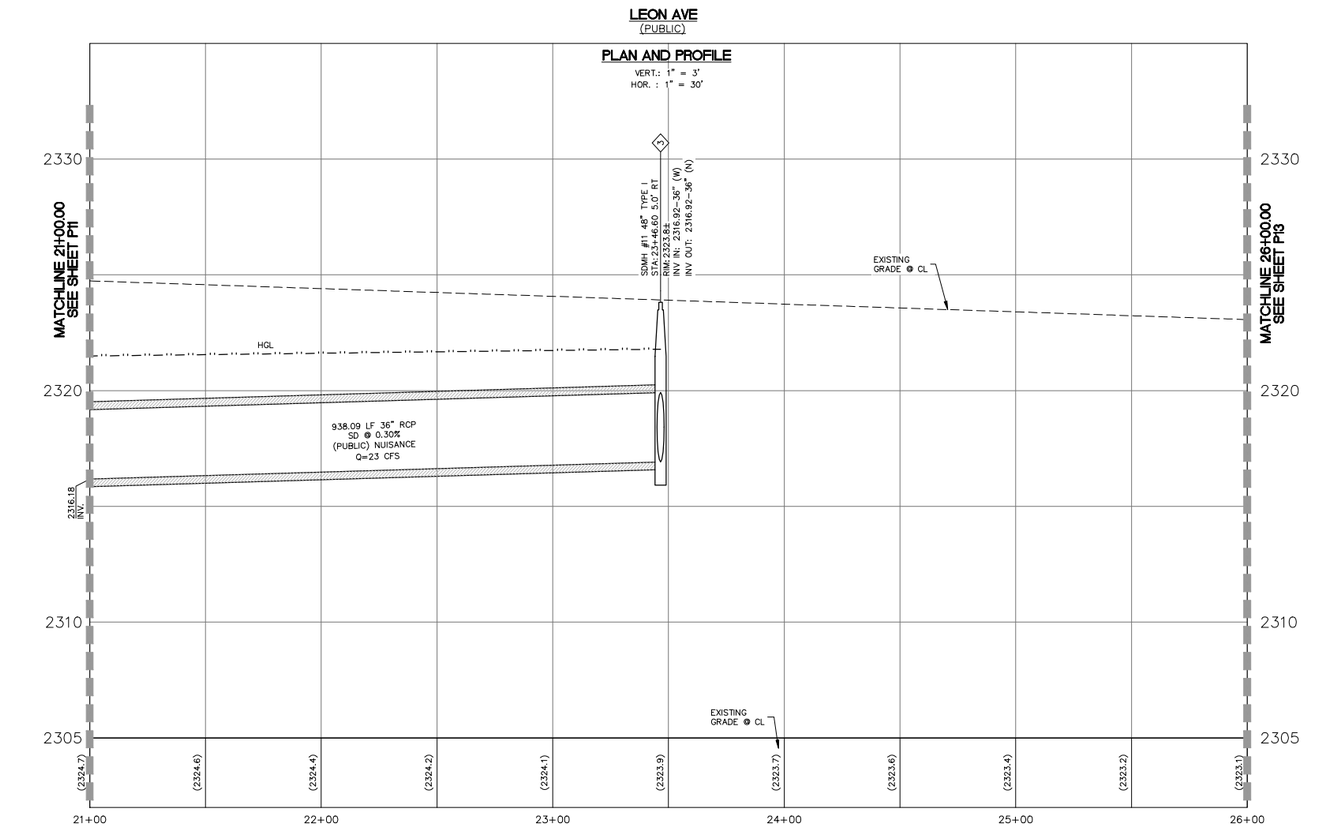
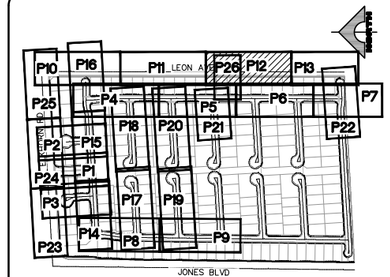
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'







KEY MAP
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NORTH

30' 0' 15' 30' 60'

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BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. 139687 FIRST APPROVAL DATE: ____

L#: CLV#:

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CONTROLLED LOW STRENGTH MATERIAL (CLSM)

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ENGINEER – STATE OF NEVADA – No. 13439 – PROFESSIONAL – GIA D. NGUYEN – Exp. 12/31/2022 – CIVIL
DATE: 11/30/2021

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:28:58
PLOT: KAREN LEE

GCW ENGINEERS & SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\PROJECTS\700\743-240\GCW\PRODUCTION\700_743-240C-PH1-P13.DWG

TOLL BROTHERS
JONES & ELKHORN
LEON AVE PLAN & PROFILE
STA. 21+00.00 TO STA. 26+00.00

DRAWING
P12
31 OF 67 SHTS

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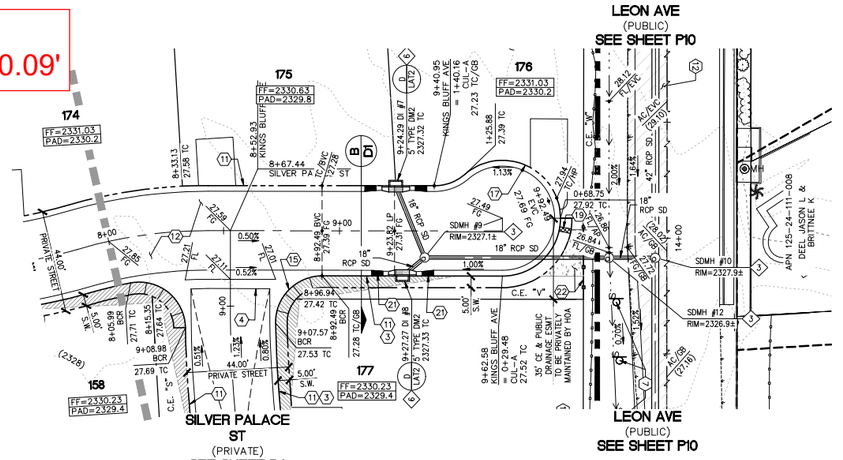
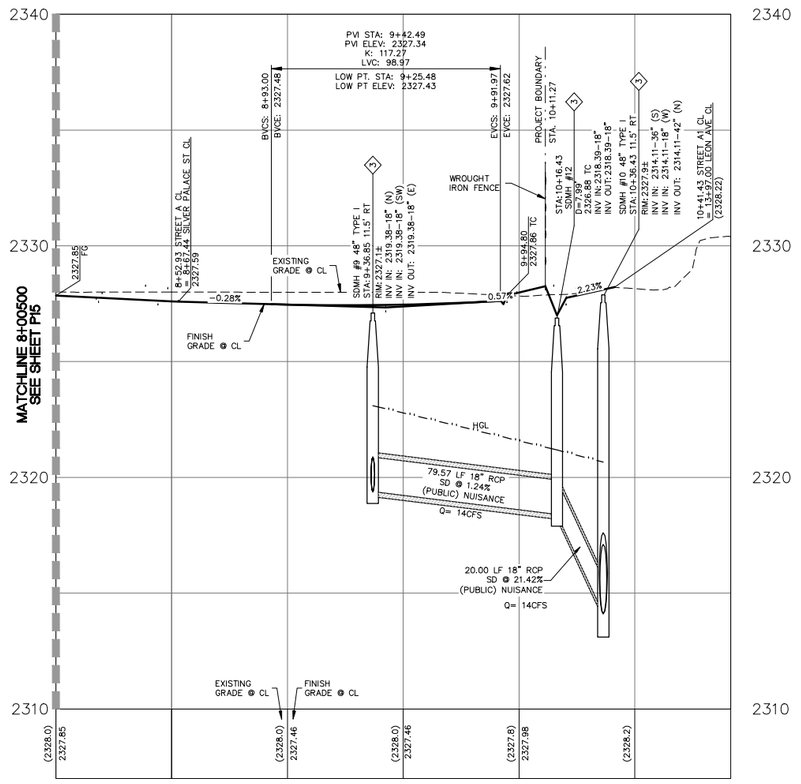
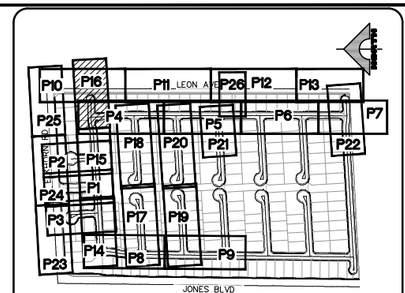


KING'S BLUFF AVE
(PRIVATE)

PLAN AND PROFILE
VERT.: 1" = 3'
HOR. : 1" = 30'





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P:\PROJECTS\7XX\743-240\DWG\PRODUCTION\7XX\743-240C-PH1-PF4-2&3.DWG

KARMAN LEE

PROJECT NO. 743-240

DESIGN:	GCW
DRAWN:	GCW
CHECK:	GCW
PLOT DATE:	11-30-21
PLOT TIME:	16:30:11

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

TOLL BROTHERS

JONES & ELKHORN

KING'S BLUFF AVE PLAN & PROFILE
STA. 8+00.00 TO STA. 10+20.37

DRAWING
P16
35 OF 67 SHTS

NEVADA
ENGINEER – STATE OF NEVADA – PROFESSIONAL
GIA D. NGUYEN
No. 21431
CIVIL
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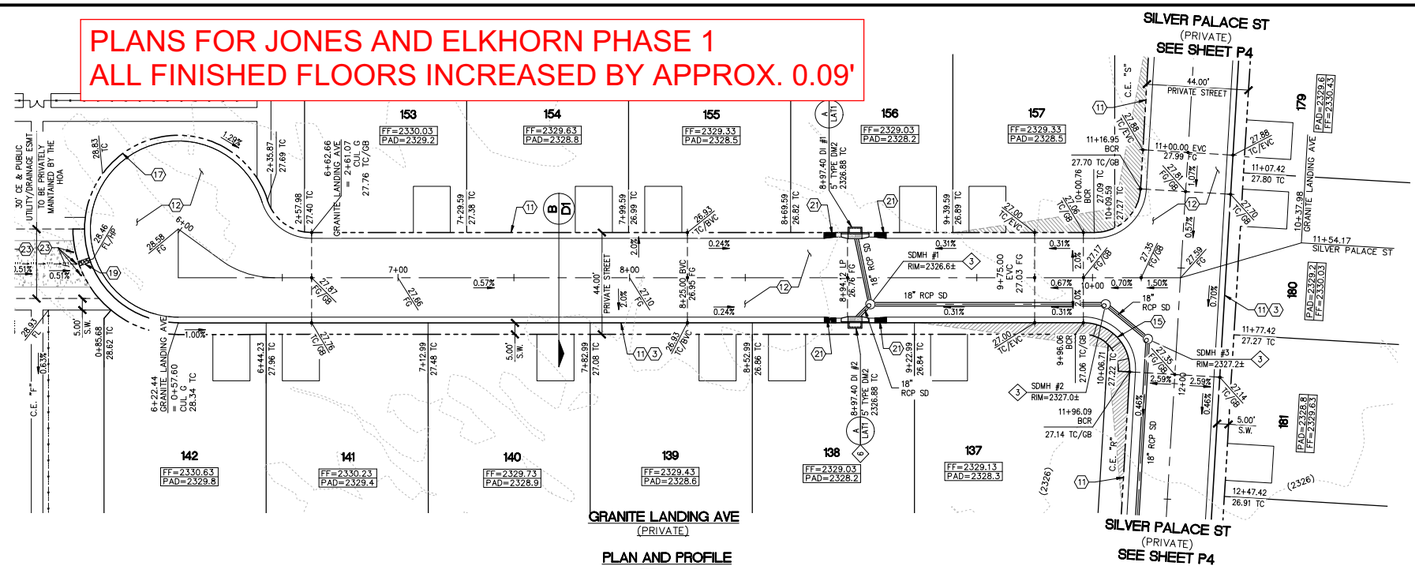

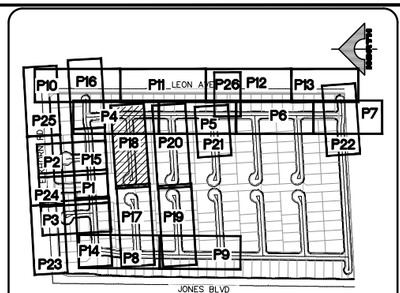

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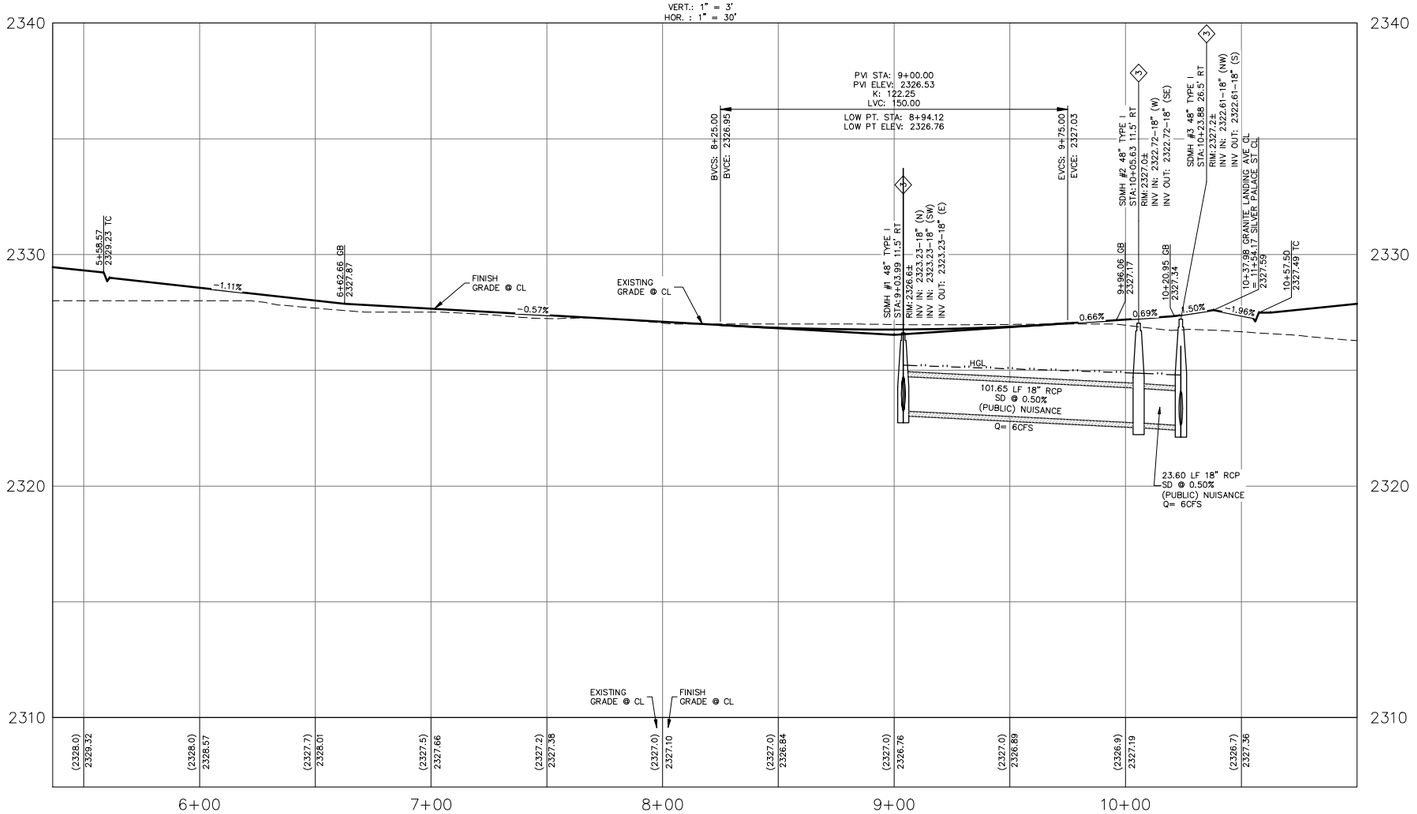

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GIA D. NGUYEN — No. 21431 — CIVIL — PROFESSIONAL ENGINEER — STATE OF NEVADA
DATE: 11/30/2021

DESCRIPTION	DATE	REV
AGEN APP	DATE	
GCW APP	DATE	

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:30:19

GCV
ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcvengineering.com

F:\PROJECTS\100\743-240\GWO\PRODUCTION\100\743-240C-PH1-P18.DWG
KARMAN LEE

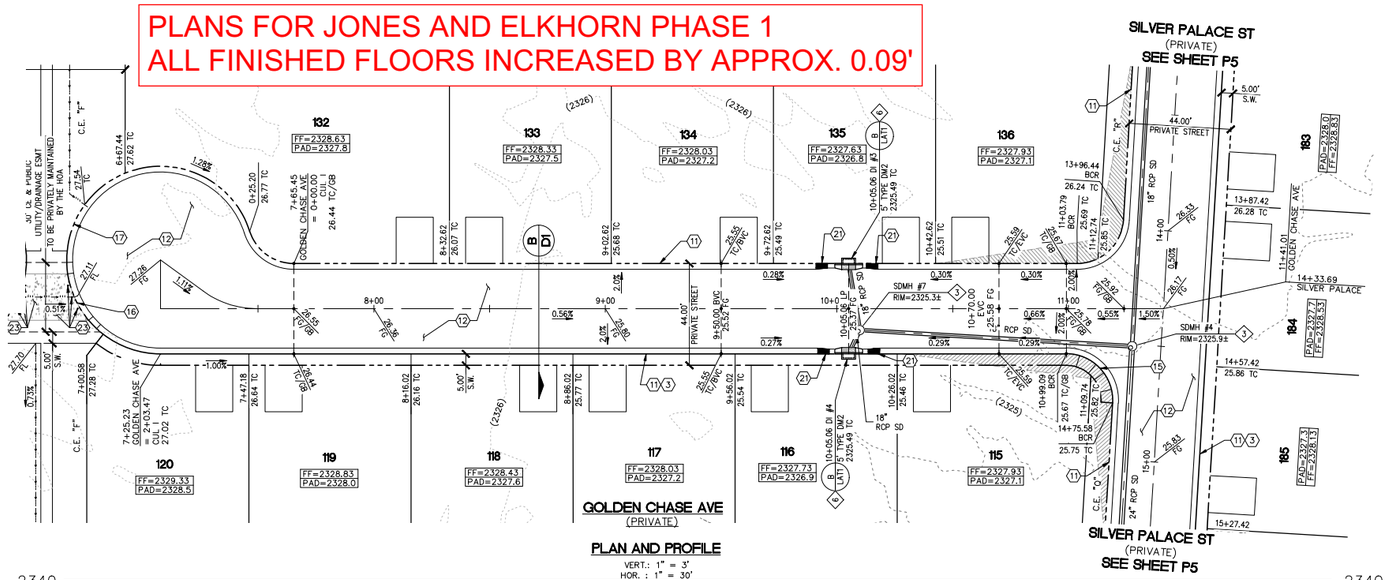
TOLL BROTHERS

JONES & ELKHORN

GRANITE LANDING AVE PLAN & PROFILE
STA. 5+58.57 TO STA. 10+37.98

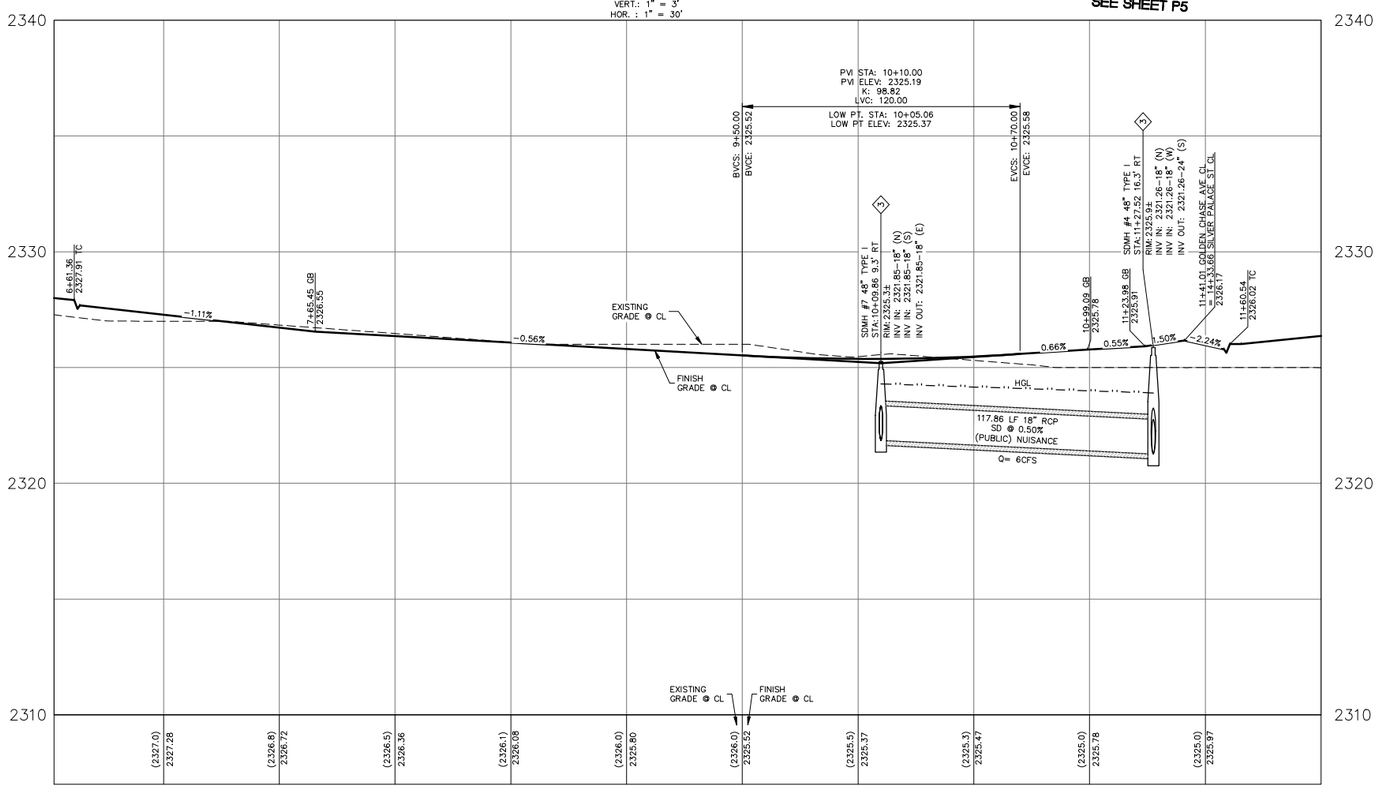
DRAWING
P18
37 OF 67 SHTS

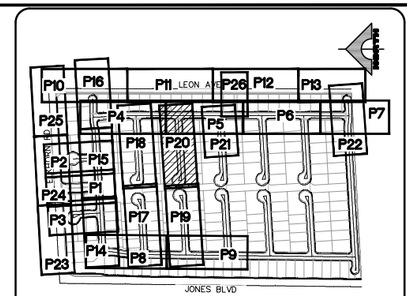
PLANS FOR JONES AND ELKHORN PHASE 1
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



PLAN AND PROFILE

VERT.: 1" = 3'
HOR. : 1" = 30'





KEY MAP
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NORTH

30' 0' 15' 30' 60'

SCALE: 1" = 30'

CONSTRUCTION NOTES

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BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008) BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

APPROVED FOR CONSTRUCTION

_____
LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. 139687 FIRST APPROVAL DATE: _____

L#: CLV#:

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY
CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

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gcwengineering.com

PROFESSIONAL ENGINEER – STATE OF NEVADA – No. 19437 – GIA D. NGUYEN – CIVIL – 12/31/2021

DATE: 11/30/2021

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:30:29

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KARIMAH LEE

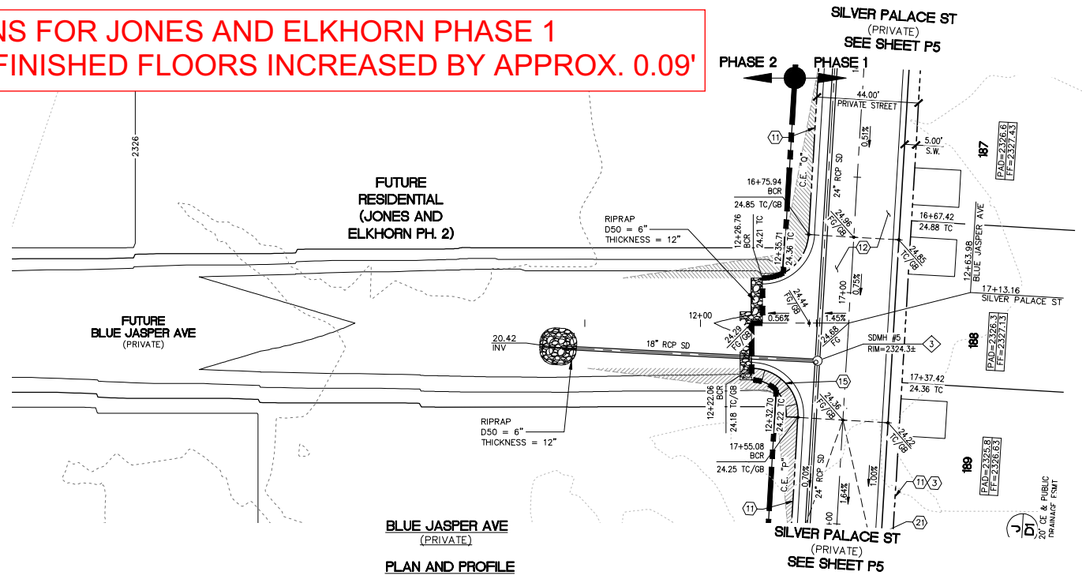
TOLL BROTHERS

JONES & ELKHORN

GOLDEN CHASE AVE PLAN & PROFILE
STA. 6+61.36 TO STA. 11+41.01

DRAWING
P20
39 OF 67 SHTS

PLANS FOR JONES AND ELKHORN PHASE 1
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



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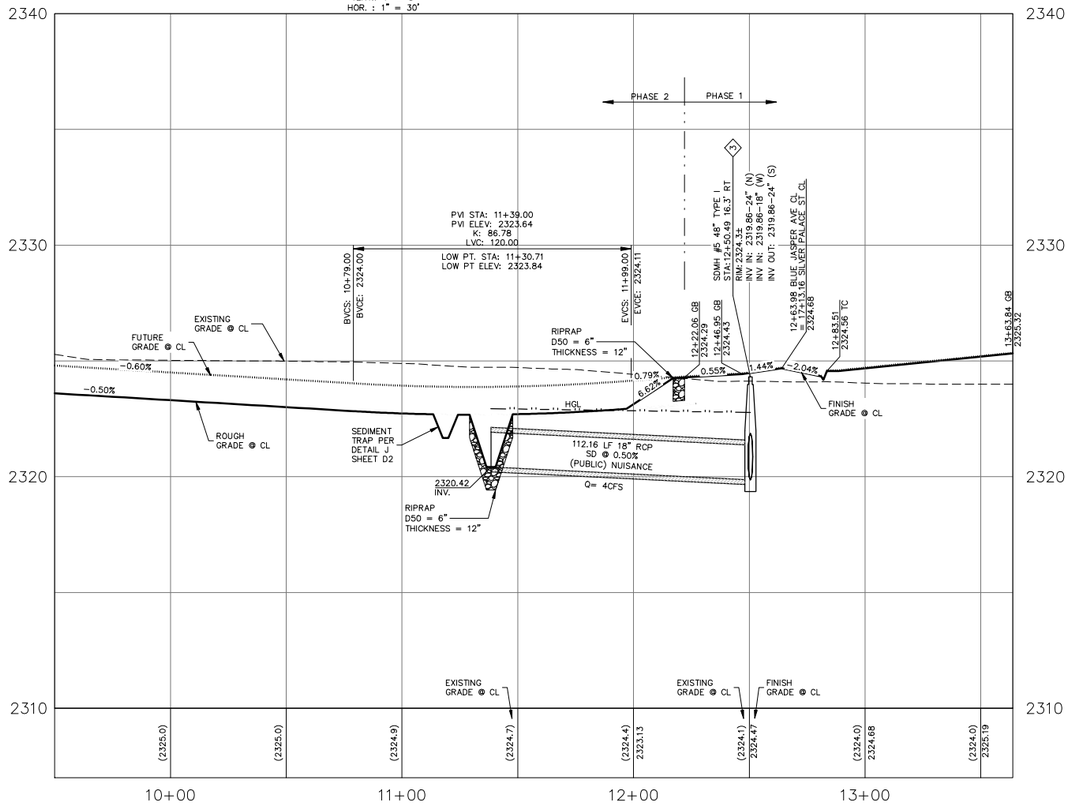

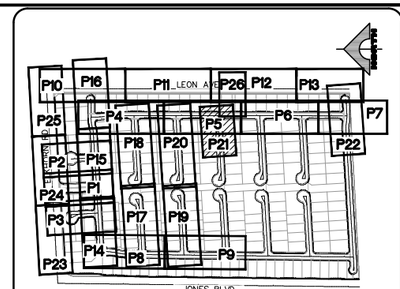

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. 139687 FIRST APPROVAL DATE: ____

L#: CLV#:

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ENGINEER – STATE OF NEVADA – PROFESSIONAL
GIA D. NGUYEN
No. 13439
CIVIL
DATE: 12/01/2021

DATE: 11/30/2021

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:30:39
KARMAN LEE

GCW ENGINEERS & SURVEYORS
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LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\PROJECTS\700\743-240\GWD\PRODUCTION\700_743-240C-PH1-P21.DWG

TOLL BROTHERS

JONES & ELKHORN

BLUE JASPER AVE PLAN & PROFILE
STA. 12+22.06 TO STA. 12+63.98

DRAWING
P21
40 OF 67 SHTS

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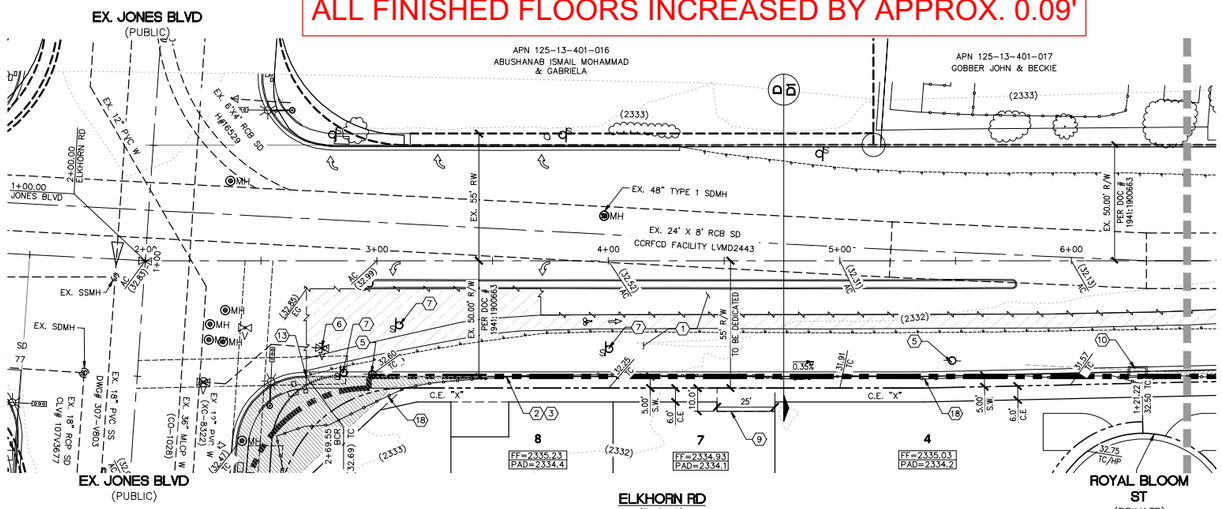
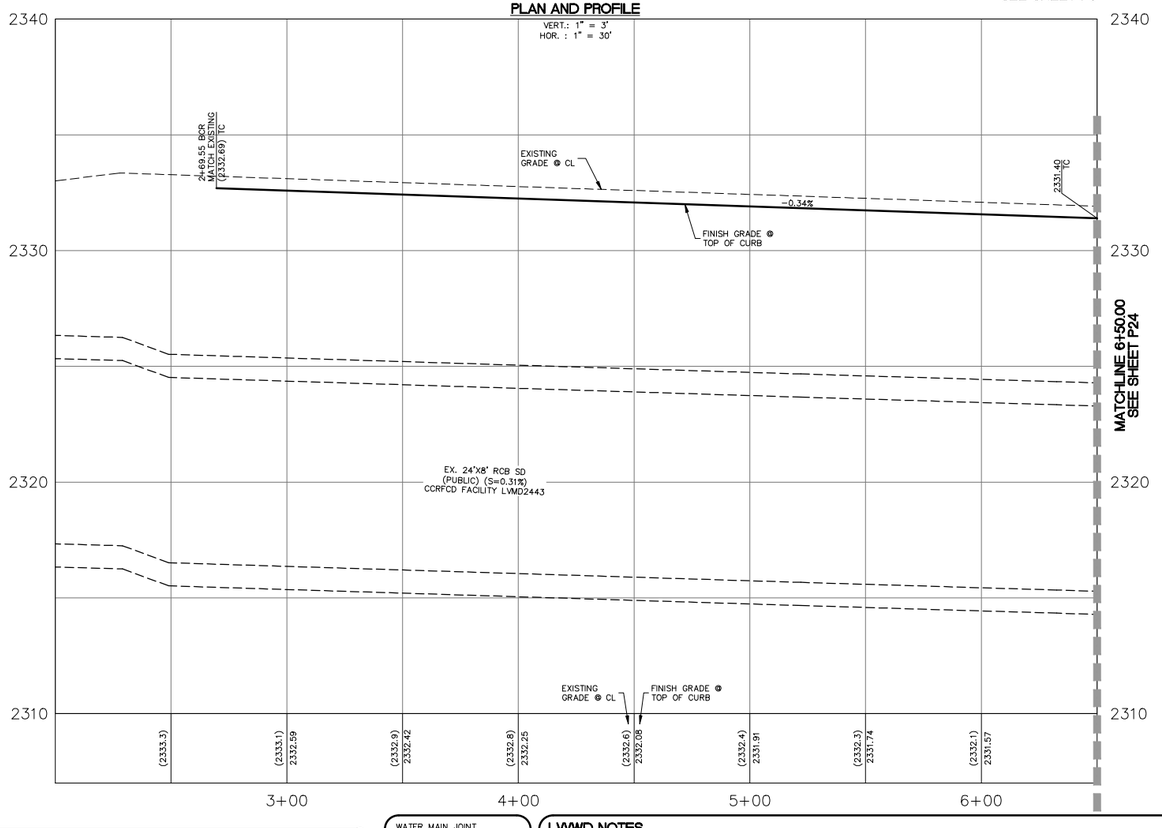
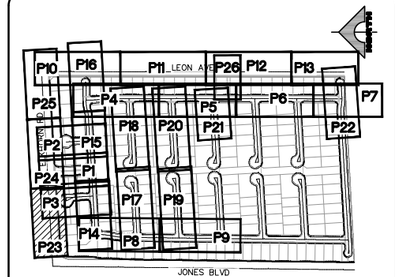


PLAN AND PROFILE





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CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008) BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. 139687 FIRST APPROVAL DATE: ____

L#: CLV#:

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STATE OF NEVADA — REGISTERED PROFESSIONAL ENGINEER — GIA D. NGUYEN — No. 14439 — CIVIL — DATE: 12/21/2020

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE: 11/30/2021

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:30:48
KARMAN LEE

GCW ENGINEERS & SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\PROJECTS\100\743-240\GWD\PRODUCTION\DGN\743-240C-PH1-P1-28.DWG

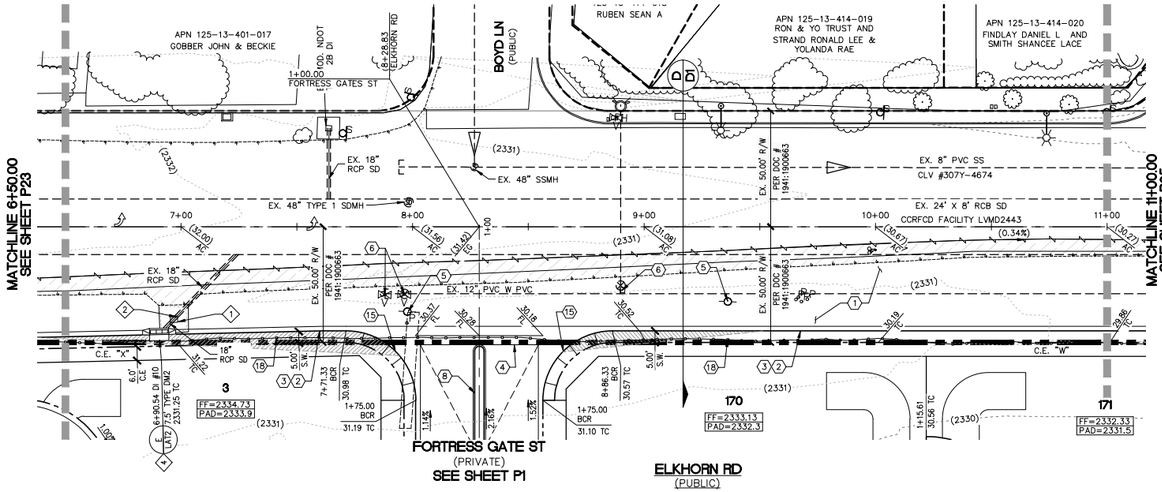
TOLL BROTHERS

JONES & ELKHORN

ELKHORN RD PLAN & PROFILE
STA. 2+00.00 TO STA. 6+50.00

DRAWING
P23
42 OF 67 SHTS

PLANS FOR JONES AND ELKHORN PHASE 1
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



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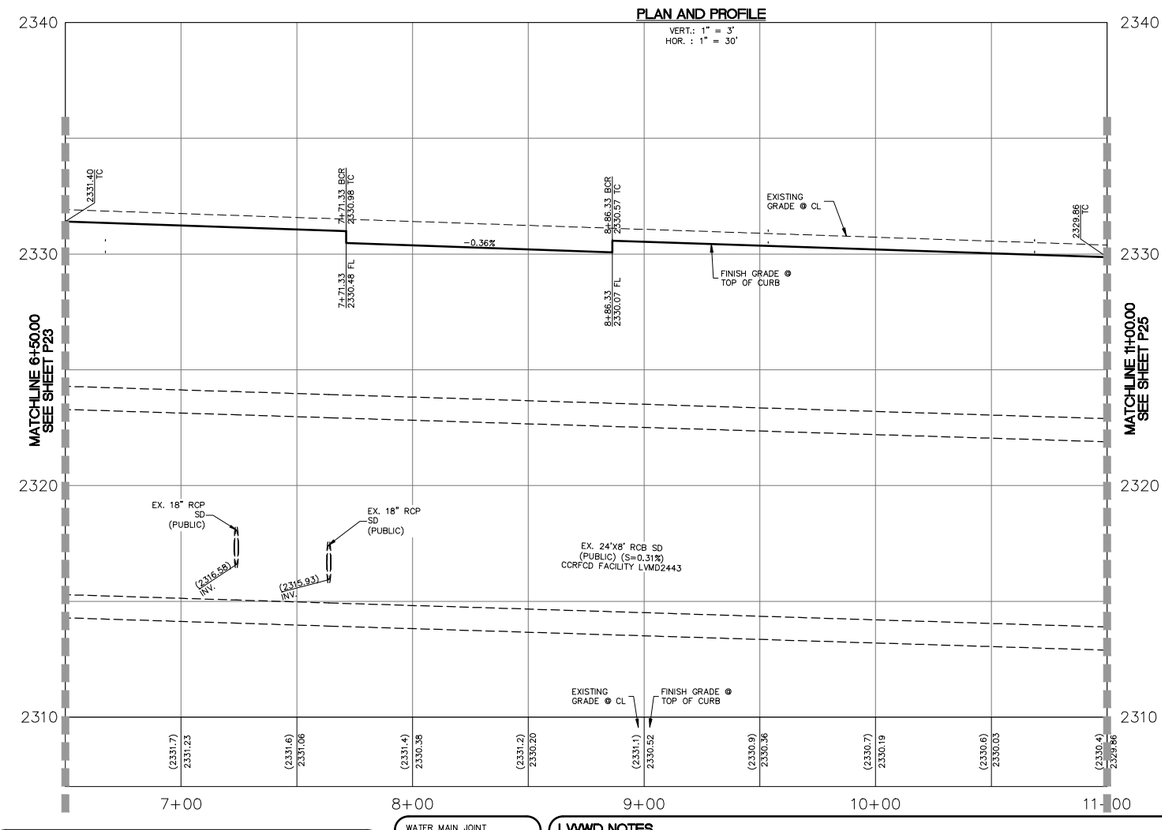
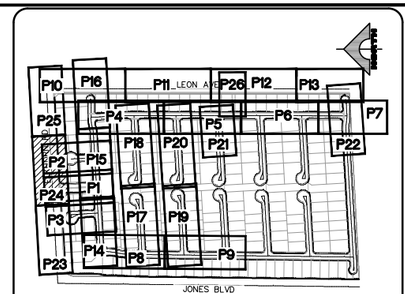
VERT.: 1" = 3'
HOR. : 1" = 30'





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PROFESSIONAL ENGINEER – STATE OF NEVADA – GIA D. NGUYEN – No. 19437 – CIVIL – DATE: 12/21/2021

DATE: 11/30/2021

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:30:58

GCW ENGINEERS & SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\PROJECTS\100\Y43-240\JWKO\PRODUCTION\100\Y43-240C-PH1-P14-28.DWG
KARMAN LEE

TOLL BROTHERS
JONES & ELKHORN
ELKHORN RD PLAN & PROFILE
STA. 6+50.00 TO STA. 11+00.00

DRAWING
P24
43 OF 67 SHTS

L#: CLV#:

PLANS FOR JONES AND ELKHORN PHASE 1
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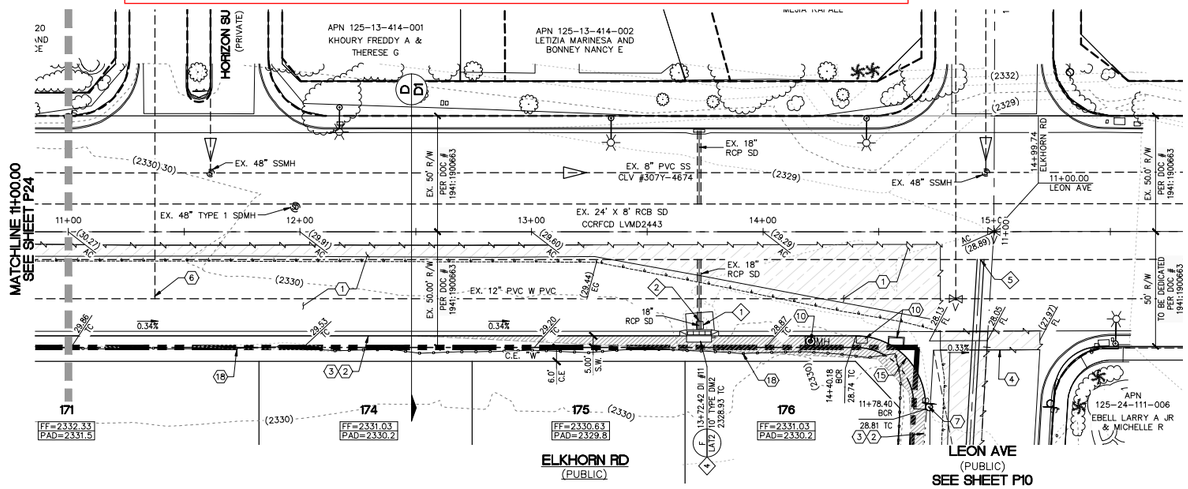

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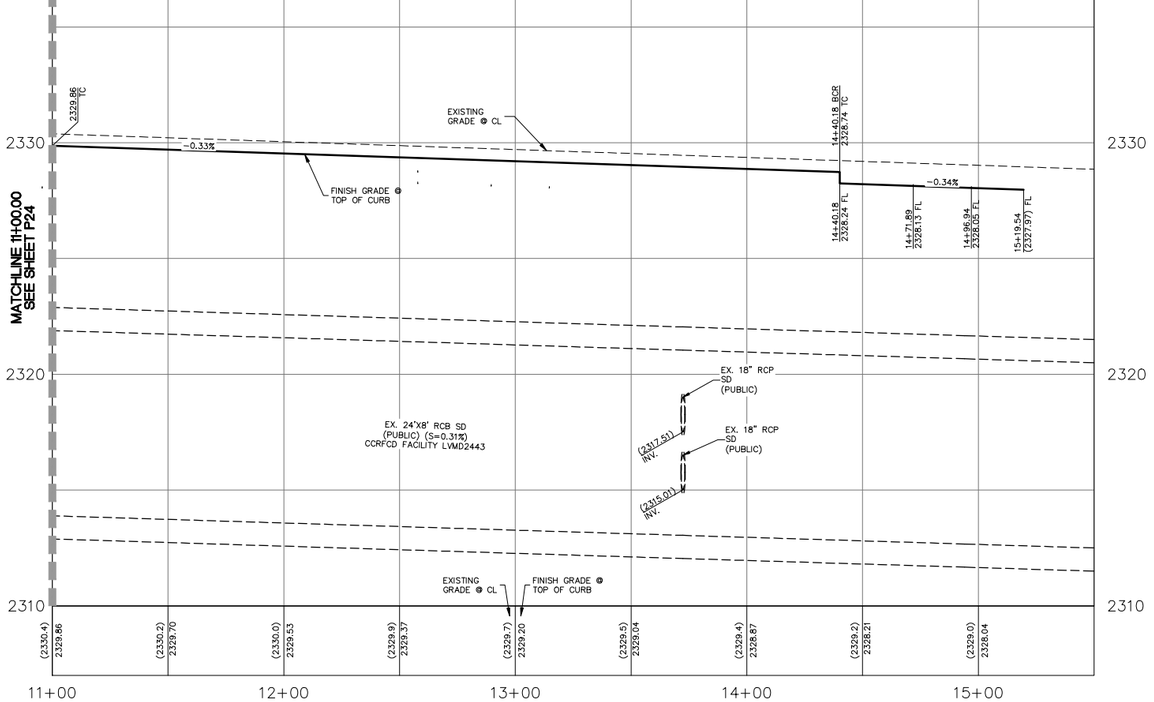

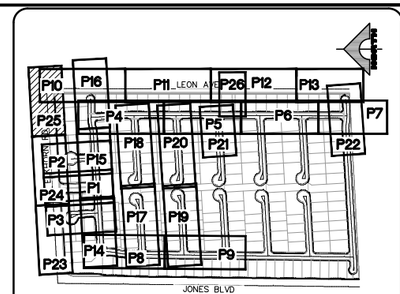

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ENGINEER – STATE OF NEVADA – No. 14439 – PROFESSIONAL – GIA D. NGUYEN – CIVIL – Date: 12/31/2020

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE: 11/30/2021

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:31:06
KARMAN LEE

GCW ENGINEERS & SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\PROJECTS\700\743-240\GWD\PRODUCTION\DDS\743-240C-PH1-25.DWG

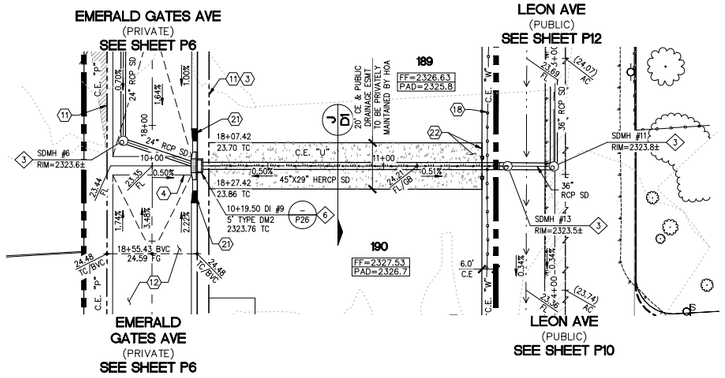
TOLL BROTHERS

JONES & ELKHORN

ELKHORN RD PLAN & PROFILE
STA. 11+00.00 TO STA. 14+99.74

DRAWING
P25
44 OF 67 SHTS

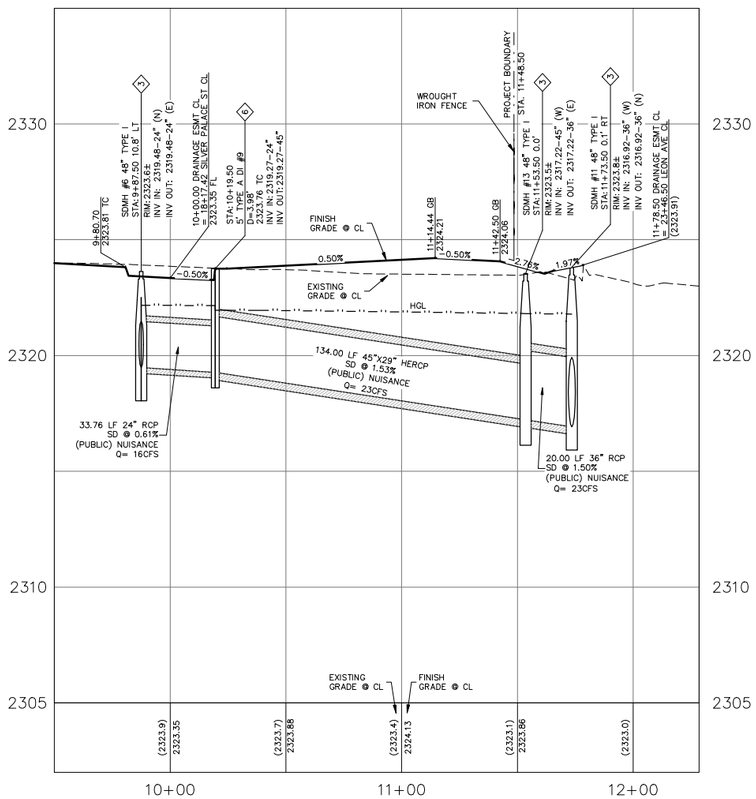
PLANS FOR JONES AND ELKHORN PHASE 1
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'

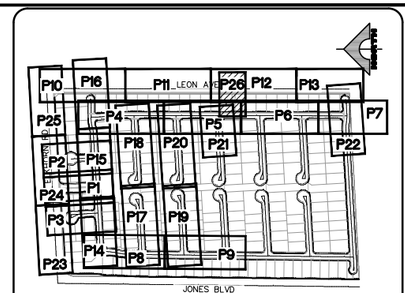


DRAINAGE ESMT
(PUBLIC)

PLAN AND PROFILE

VERT.: 1" = 3'
HOR. : 1" = 30'





KEY MAP
NTS

NORTH

30' 0' 15' 30' 60'

SCALE: 1" = 30'

CONSTRUCTION NOTES

1. CONSTRUCT 5" AC PAVEMENT WITH 17" TYPE II BASE PER GEOTECHNICAL REPORT BY ____ DATED
2. CONSTRUCT "L" CURB PER USDCCA NO. 216.
3. CONSTRUCT CONCRETE SIDEWALK PER USDCCA NO. 234.
4. CONSTRUCT 8' WIDE VALLEY GUTTER PER USDCCA NO. 228.
5. EX. POWER POLE TO BE REMOVED.
6. EX. STRUCTURE – ADJUST TO GRADE.
7. EX. SIGN, POST & CABLE TO BE REMOVED.
8. CONSTRUCT "A" MEDIAN CURB PER USDCCA NO. 219.
9. CONSTRUCT 10' X 25' BUS SHELTER PAD PER USDCCA NO. 234.5.
10. EX. STRUCTURE – TO BE RELOCATED.
11. CONSTRUCT 30" RESIDENTIAL ROLL CURB PER USDCCA NO. 217.2.S1
12. CONSTRUCT 2" AC OVER 4" TYPE II BASE
13. SAWCUT & MATCH TO EXISTING CURB & SIDEWALK. CONTRACTOR SHALL VERIFY EX. LOCATION & PAVEMENT PRIOR TO CONSTRUCTION.
14. CONSTRUCT 10' TRANSITION FROM "L" CURB TO RESIDENTIAL ROLL CURB PER DETAIL B SHEET D3.
15. CONSTRUCT SIDEWALK RAMP PER USDCCA NO. 235 CASE 1. SEE PLAN FOR "A" & "B" DIMENSION.
16. CONSTRUCT CURB OPENING WITH TRANSITION PER DETAIL D SHEET D3.
17. CONSTRUCT CUL-DE-SAC PER USDCCA NO. 212.
18. EXISTING FENCES & GATES TO BE REMOVED.
19. CONSTRUCT 2' SIDEWALK UNDERDRAIN PER USDCCA NO. 236.
20. CONSTRUCT 5' VALLEY GUTTER PER DETAIL E SHEET D3.
21. CONSTRUCT 5' TRANSITION FROM "L" CURB TO RESIDENTIAL ROLL CURB PER DETAIL C SHEET D3.
22. CONSTRUCT FENCE & SURFACE PER USDCCA NO. 425.S1.
23. CONSTRUCT REMOVEABLE BOLLARDS & SURFACE PER USDCCA NO. 425.S1.

NO DEEP ROOTED TREES SHALL BE PLACED WITHIN 10 FEET OF THE OUTSIDE EDGE OF THE STORM DRAIN PIPE.

STORM DRAIN CONSTRUCTION NOTES

1. EX. MOD. NDOT TYPE 2B INLET TO BE REMOVED.
2. CONNECT TO EXISTING 18" RCP STORM DRAIN PER DETAIL H SHEET D3.
3. CONSTRUCT 48" TYPE I STORM DRAIN MANHOLE PER STD. DWG 403.
4. CONSTRUCT 10' TYPE "DM2" INLET PER STD DWG 412.1 & 421.
5. PENETRATE INTO EXISTING STORM DRAIN PER DETAIL G SHEET D3.
6. CONSTRUCT 5' TYPE "DM2" INLET PER STD DWG 412.1 & 421 WITH (2) NEENAH R-4999 TYPE D SOLID LID OR APPROVED EQUAL.

MINIMUM DEPTH DURING CONSTRUCTION

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATIONS.

BASIS OF BEARING

NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. 139687 FIRST APPROVAL DATE: ____

L#: CLV#:

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY
CALL BEFORE YOU DIG OVERHEAD
1-702-227-2929

FAST
Call before you UnderGround
1-702-433-6300
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call 811
or
1-800-442-2444

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

PROTECT WATERLINES IN PLACE. WHEREVER A WATERLINE IS ABOVE A STORM DRAIN OR SEWER WHERE COMPACTION REQUIREMENTS UNDER A WATERLINE CANNOT BE MET, BACKFILL TRENCH WITH CLASS II CONTROLLED LOW STRENGTH MATERIAL (CLSM) TO THE SPRINGLINE OF THE WATERLINE. THIS REQUIREMENT IS FOR STRUCTURAL SUPPORT ONLY. ADDITIONAL HEALTH REGULATIONS MAY APPLY PER UDACS 2.22.

NOTE TO CONTRACTOR

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

NOTE

CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY.

NOTE

ALL ONSITE STORM DRAINS AND ASSOCIATED STORM FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOA.

ALL PRIVATE STREETS ARE P.U.E., PUBLIC DRAINAGE EASEMENT AND PUBLIC SEWER EASEMENTS TO BE PRIVATELY MAINTAINED BY HOA.

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

ALL SEWER/SD CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22, UDACS PLATE 22 AND 23.

ANNULAR SPACE BETWEEN PIPE AND CASING SHALL BE FILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM !) PER UDACS 2.10.05.

LVWD NOTES

1. TO ENSURE LVVWD ACCESS WITHIN EASEMENT, ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPING BOULDERS, FENCES/WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED FROM EASEMENT.
2. FIRE SPRINKLER SYSTEM SHALL BE PLUMBED TO MASTER TOILET. NO EXCEPTIONS ALLOWED.
3. INSTALL PIPELINE MARKER BALLS PER UDACS PLATE NO. 15.
4. PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
5. LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.
   CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.
6. ALL LOTS HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE), PRESSURE-REDUCING VALVES (PRV) BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES.

PROFESSIONAL ENGINEER – STATE OF NEVADA – No. 14431 – GIA D. NGUYEN – CIVIL – DATE: 12/31/2021

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 11-30-21
PLOT TIME: 16:31:16

GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

I:\PROJECTS\700\743-240\GRAD\PRODUCTION\700_743-240C-PH1-P1+2&3.DWG KARMAN LEE

TOLL BROTHERS

JONES & ELKHORN

DRAINAGE ESMT PLAN & PROFILE
STA. 10+19.50 TO STA. 11+48.50

DRAWING
P26
45 OF 67 SHTS

NET ACREAGE:	55.52
GROSS ACREAGE:	60.62
TOTAL NO. OF LOTS:	199
DENSITY (UNIT/AC):	3.28

PHASE 1:	104 LOTS 30.4 AC
PHASE 2:	95 LOTS 25.1 AC

INDEX OR DRAWINGS

NO.	DWG.	DESCRIPTION
1	C1	COVER SHEET
2	C2	GENERAL NOTES
3	C3	LEGEND, ABBREVIATIONS, QUANTITIES
4	G1	GRADING PLAN 1
5	G2	GRADING PLAN 2
6	G3	GRADING PLAN 3
7	G4	GRADING PLAN 4
8	G5	GRADING PLAN 5
9	G6	GRADING PLAN 6
10	D1	GRADING SECTIONS & DETAILS 1
11	D2	GRADING SECTIONS & DETAILS 2
12	P1	SILVER PALACE ST PLAN AND PROFILE BEGIN TO STA 21+50
13	P2	SILVER PALACE ST PLAN AND PROFILE STA 21+50 TO END
14	P3	SERENE CREEK ST PLAN AND PROFILE BEGIN TO STA 21+50
15	P4	SERENE CREEK ST PLAN AND PROFILE STA 12+00 TO END
16	P5	CASSIE MEADOWS AVE PLAN AND PROFILE BEGIN TO END
17	P6	BLUE JASPER AVE PLAN AND PROFILE BEGIN TO END
18	P7	DORADO CANYON AVE PLAN AND PROFILE BEGIN TO END
19	P8	GILDED HORIZON AVE PLAN AND PROFILE BEGIN TO END
20	P9	VALIANT VALLEY AVE PLAN AND PROFILE BEGIN TO END
21	P10	EVENING JEWEL AVE PLAN AND PROFILE BEGIN TO END
22	P11	EMERALD GATES AVE PLAN AND PROFILE BEGIN TO STA 8+50
23	P12	EMERALD GATES AVE PLAN AND PROFILE STA 8+50 TO END
24	P13	STORM DRAIN LATERAL 1
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	U5	UTILITY PLAN 5
31	U6	UTILITY PLAN 6
32	T1	TRAFFIC AND HORIZONTAL CONTROL PLAN 1
33	T2	TRAFFIC AND HORIZONTAL CONTROL PLAN 2
34	T3	TRAFFIC AND HORIZONTAL CONTROL PLAN 3
35	T4	TRAFFIC AND HORIZONTAL CONTROL PLAN 4
36	T5	TRAFFIC AND HORIZONTAL CONTROL PLAN 5
37	T6	TRAFFIC AND HORIZONTAL CONTROL PLAN 6

PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'

IMPROVEMENT PLANS FOR JONES & ELKHORN PHASE 2

ACREAGE/AREA OF LAND DISTURBANCE:

25.10 AC

A.P.N. 125-24-101-001 & 125-24-201-001

PARCEL 1:
THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.B.&M., CLARK COUNTY, NEVADA.

EXCEPTING THEREFROM THE WESTERLY 50.00 FEET AS CONVEYED TO THE CITY OF LAS VEGAS, A MUNICIPAL CORPORATION OF THE COUNTY OF CLARK, STATE OF NEVADA BY DEED RECORDED JUNE 6, 1972 AS INSTRUMENT NO. 195505 IN BOOK 236 OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM THE EASTERLY 30.00 FEET AS CONVEYED TO THE CITY OF LAS VEGAS, A MUNICIPAL CORPORATION OF THE COUNTY OF CLARK, STATE OF NEVADA BY DEED RECORDED OCTOBER 19, 1973 AS INSTRUMENT NO. 333054 IN BOOK 374 OF OFFICIAL RECORDS.

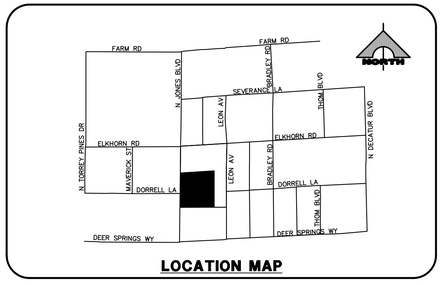
FURTHER EXCEPTING THEREFROM THE NORTHERLY 50.00 FEET AS CONVEYED TO THE CITY OF LAS VEGAS, A MUNICIPAL CORPORATION OF THE COUNTY OF CLARK, STATE OF NEVADA BY DEED RECORDED JANUARY 17, 1974 AS INSTRUMENT NO. 354079 IN BOOK 395 OF OFFICIAL RECORDS.

EXCEPTING THEREFROM THOSE PORTIONS AS CONVEYED TO THE CITY OF LAS VEGAS BY GRANT DEED RECORDED JULY 31, 2003 IN BOOK 20030731 AS INSTRUMENT NO. 03598 OF OFFICIAL RECORDS, CLARK COUNTY, NEVADA.

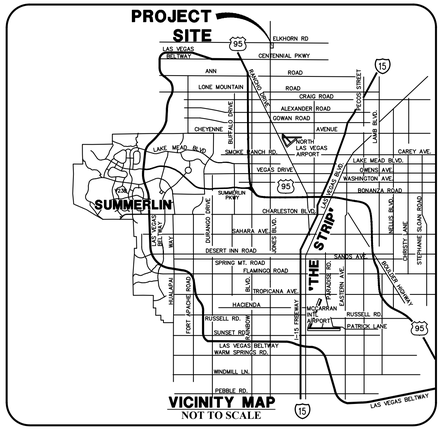
ALSO SHOWN AS LOT 94 OF THAT CERTAIN RECORD OF SURVEY OF THE DECATUR ALIGNMENT IN FILE 52 OF SURVEYS, PAGE 70 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA.

PARCEL 2:

LOT 95 OF THAT CERTAIN RECORD OF SURVEY OF THE DECATUR ALIGNMENT IN FILE 52 OF SURVEYS, PAGE 70 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA.



LOCATION MAP



VICINITY MAP
NOT TO SCALE

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call
811
OR
1-800-642-2444

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

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

TMP-75888
NOTE: NO MOU'S WERE UTILIZED ON SITE.

BASIS OF BEARING:
NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK:
CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6"

BEING A RIVET & PLATE NW COR. LEON AVE & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88)

OWNER
KLTOLL AIV LLC
C/O KENNEDY LEWIS
INVESTMENT MANAGEMENT
111 WEST 33RD STREET
SUITE 1910
NEW YORK, NY 10120

DEVELOPER
TOLL BROTHERS
1140 N TOWN CENTER DR
LAS VEGAS, NV 89144
(702) 243-9800

ENGINEER
GCW, INC.
1555 SOUTH RAINBOW BLVD.
LAS VEGAS, NEVADA 89146
(702) 804-2000 (702) 804-2299 (FAX)

UTILITY/AGENCY APPROVALS

COX COMMUNICATIONS LAS VEGAS, INC. DATE

CENTRAL TELEPHONE COMPANY, DBA CENTURY LINK DATE

THE AFFIXED CENTRAL TELEPHONE COMPANY, DBA CENTURY LINK APPROVAL DOES NOT ASSUME OR GUARANTEE LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH EXISTING OR 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.

SOUTHWEST GAS CORPORATION SWG UID DATE

CITY OF LAS VEGAS ENGINEERING DATE

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

CITY OF LAS VEGAS DEPARTMENT OF PLANNING DATE

APPROVED FOR CONSTRUCTION

CITY OF LAS VEGAS FIRE & RESCUE, FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL DATE

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANING AND 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, D1, D2, P1-P21, LAT1, LAT2, MU, U1-U9

L#: XX-XXXXX CLV#: XXXXXXXX

STATE OF NEVADA — PROFESSIONAL ENGINEER — ROBERT A. MURNANE — No. 9680 — 07/07/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

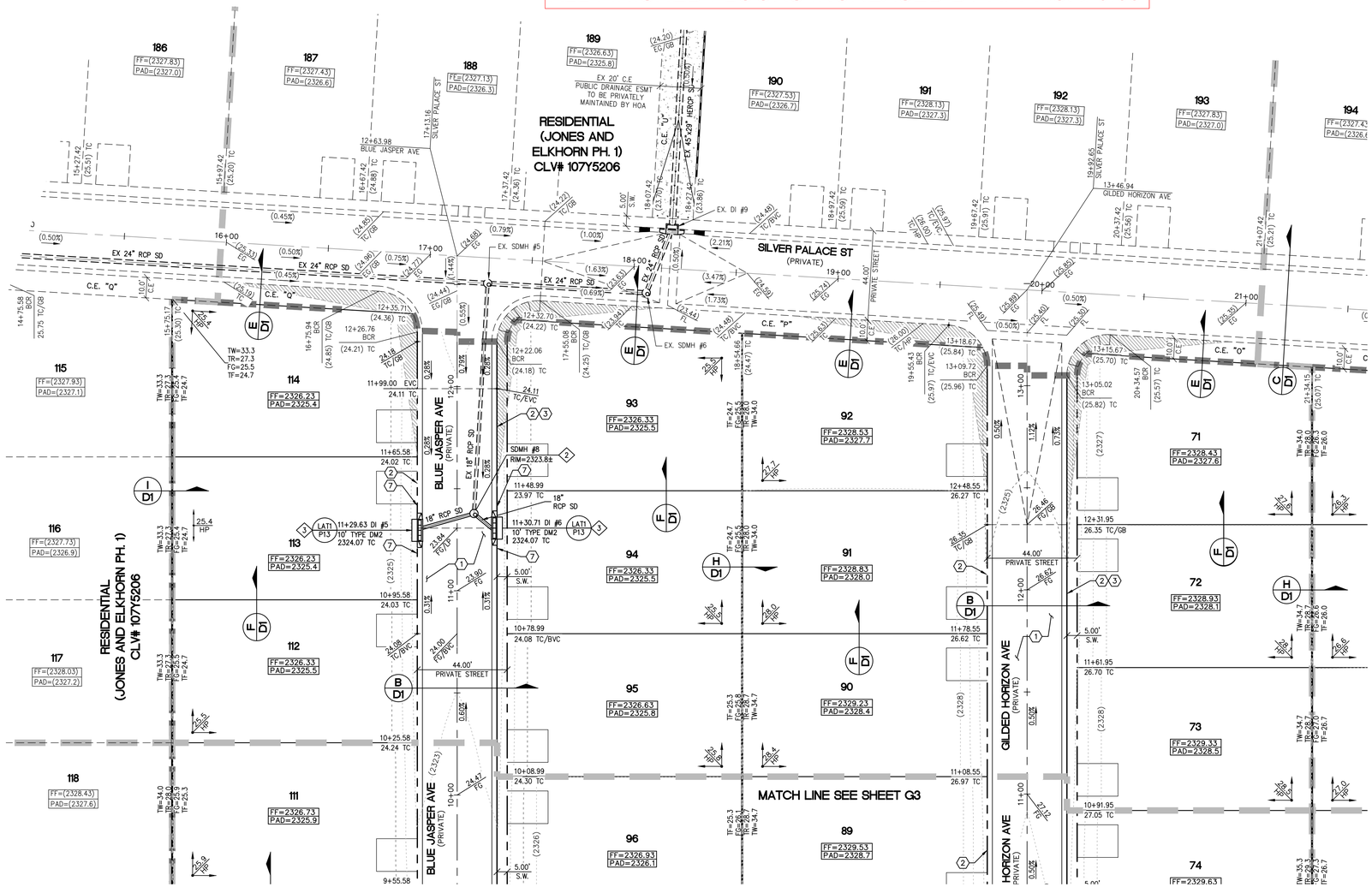
PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 07-07-22
PLOT TIME: 11:20:24

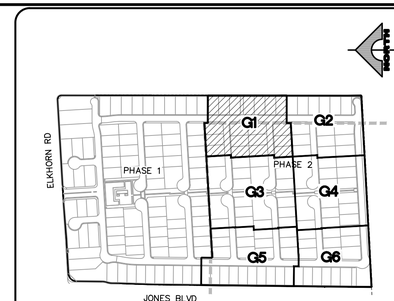
GCW
ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
COREY ELLIS
F:\PROJECTS\V20\743-240\GWD\PRODUCTION\PH2\743-240C-PH2-CLOWG

TOLL BROTHERS
JONES & ELKHORN PHASE 2
COVER SHEET

DRAWING
C1
1 OF 37 SHTS

PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'





KEY MAP
NTS

NORTH

30' 0' 15' 30' 60'

SCALE: 1" = 30'

CONSTRUCTION NOTES

1. CONSTRUCT 2" AC PAVEMENT WITH 4.5" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
2. CONSTRUCT 30" RESIDENTIAL ROLL CURB PER USDCCA NO. 217.2.S1
3. CONSTRUCT CONCRETE SIDEWALK PER USDCCA NO. 234.
4. CONSTRUCT SIDEWALK RAMP PER USDCCA NO. 235 CASE 1. SEE PLAN FOR "A" & "B" DIMENSION.
5. CONSTRUCT 8' WIDE VALLEY GUTTER PER USDCCA NO. 228.
6. CONSTRUCT CURB OPENING WITH TRANSITION PER DETAIL C SHEET D2.
7. CONSTRUCT 5' TRANSITION FROM "L" CURB TO RESIDENTIAL ROLL CURB PER DETAIL B SHEET D2.
8. CONSTRUCT COLLAPSIBLE BOLLARDS PER DETAIL D ON SHEET D2 & CONSTRUCT SURFACE PER USDCCA NO. 425.S1.
9. EXISTING FENCES & GATES TO BE REMOVED.
10. CONSTRUCT 2' SIDEWALK UNDERDRAIN PER USDCCA NO 236.

NO DEEP ROOTED TREES SHALL BE PLACED WITHIN 10 FEET OF THE OUTSIDE EDGE OF THE STORM DRAIN PIPE.

STORM DRAIN CONSTRUCTION NOTES

1. CONNECT TO EXISTING 18" RCP STORM DRAIN PER DETAIL H SHEET D3.
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3. CONSTRUCT 5' TYPE "DM2" INLET PER STD DWG 412.1 & 421 WITH (2) SOLID GRATES.

CAUTION TO CONTRACTOR

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

FLOOD ZONE NOTE

THIS SITE IS LOCATED ON PANEL **32003C1765F**, DATED **NOVEMBER 16, 2011**. THIS PANEL SHOWS THAT THE PROJECT IS LOCATED WITHIN A UNSHADED ZONE X. UNSHADED ZONE X AREAS ARE DESCRIBED AS AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. THE PROJECT IS NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR SPECIAL FLOOD HAZARD AREA.

DRAINAGE CERTIFICATION

I CERTIFY THAT THE GRADING PLANS ARE IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE (DS5472A) AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

07/07/2022
ROBERT A. MURNANE, P.E. 9680 — DATE

L#: XX-XXXXX CLV#: XXXXXXXX

NOTE

ALL ONSITE STORM DRAINS AND ASSOCIATED STORM FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOA.

ALL PRIVATE STREETS ARE PUBLIC UTILITY EASEMENTS, PUBLIC DRAINAGE EASEMENTS AND PUBLIC SEWER EASEMENTS TO BE PRIVATELY MAINTAINED BY HOA.

BASIS OF BEARING

NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK

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ELEVATION: 2328.96 (FEET)
709.87 (METERS)

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SVZ NOTE

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RAW CUT	=	0	C.Y.
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STATE OF NEVADA — PROFESSIONAL ENGINEER — ROBERT A. MURNANE — No. 9680 — 07/07/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 07-07-22
PLOT TIME: 11:21:19

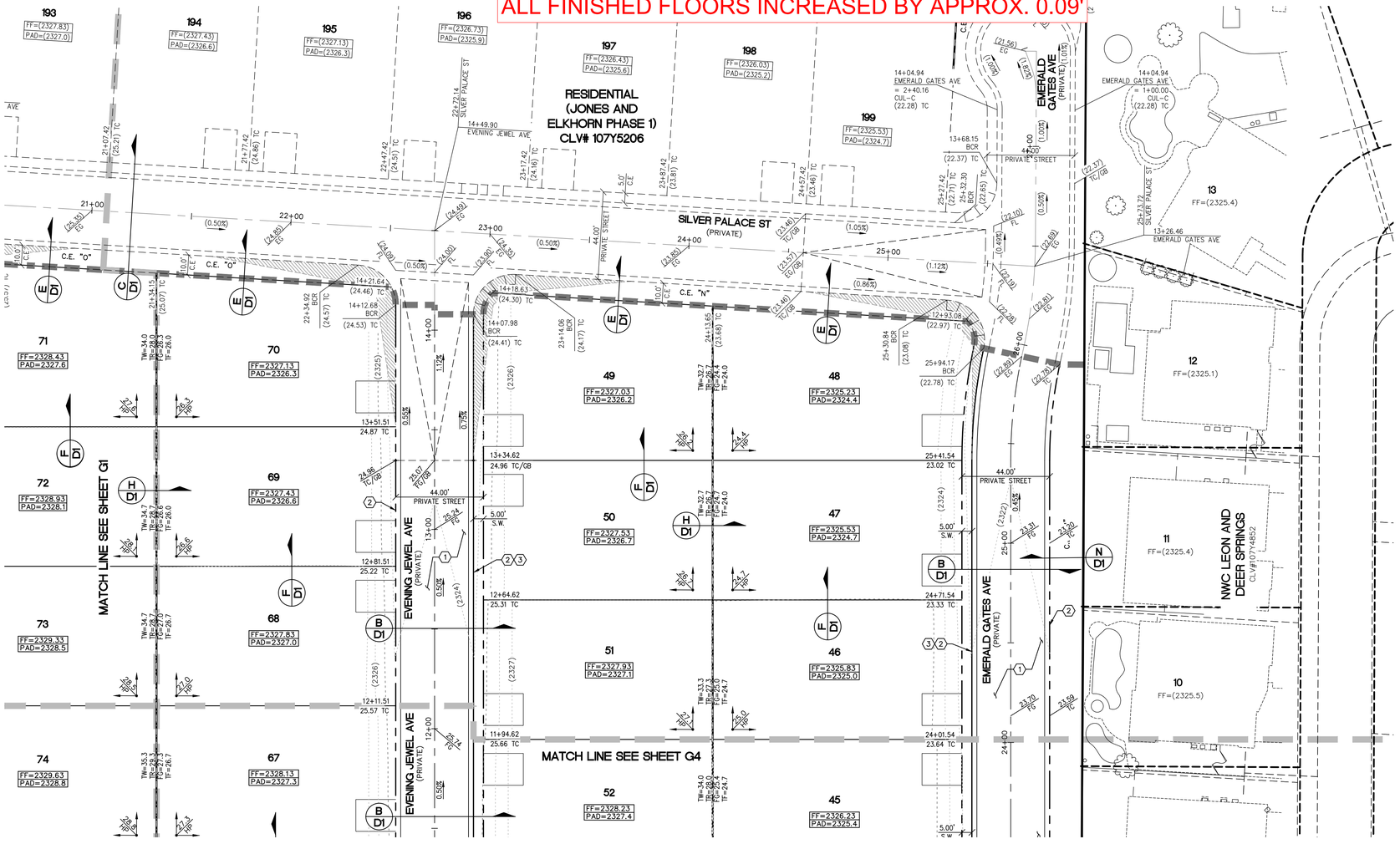
GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

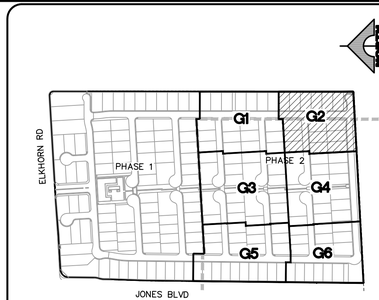
F:\PROJECTS\700\743-240\DWG\PRODUCTION\PH2\743-240C-PH2-GDWG
COREY ELLIS

TOLL BROTHERS
JONES & ELKHORN PHASE 2
GRADING PLAN 1

DRAWING G1
4 OF 37 SHTS

PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'





KEY MAP
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SCALE: 1" = 30'

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ELEVATION: 2328.96 (FEET)
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07/07/2022
ROBERT A. MURNANE, P.E. 9680 — DATE

L#: XX-XXXXX CLV#: XXXXXXXX

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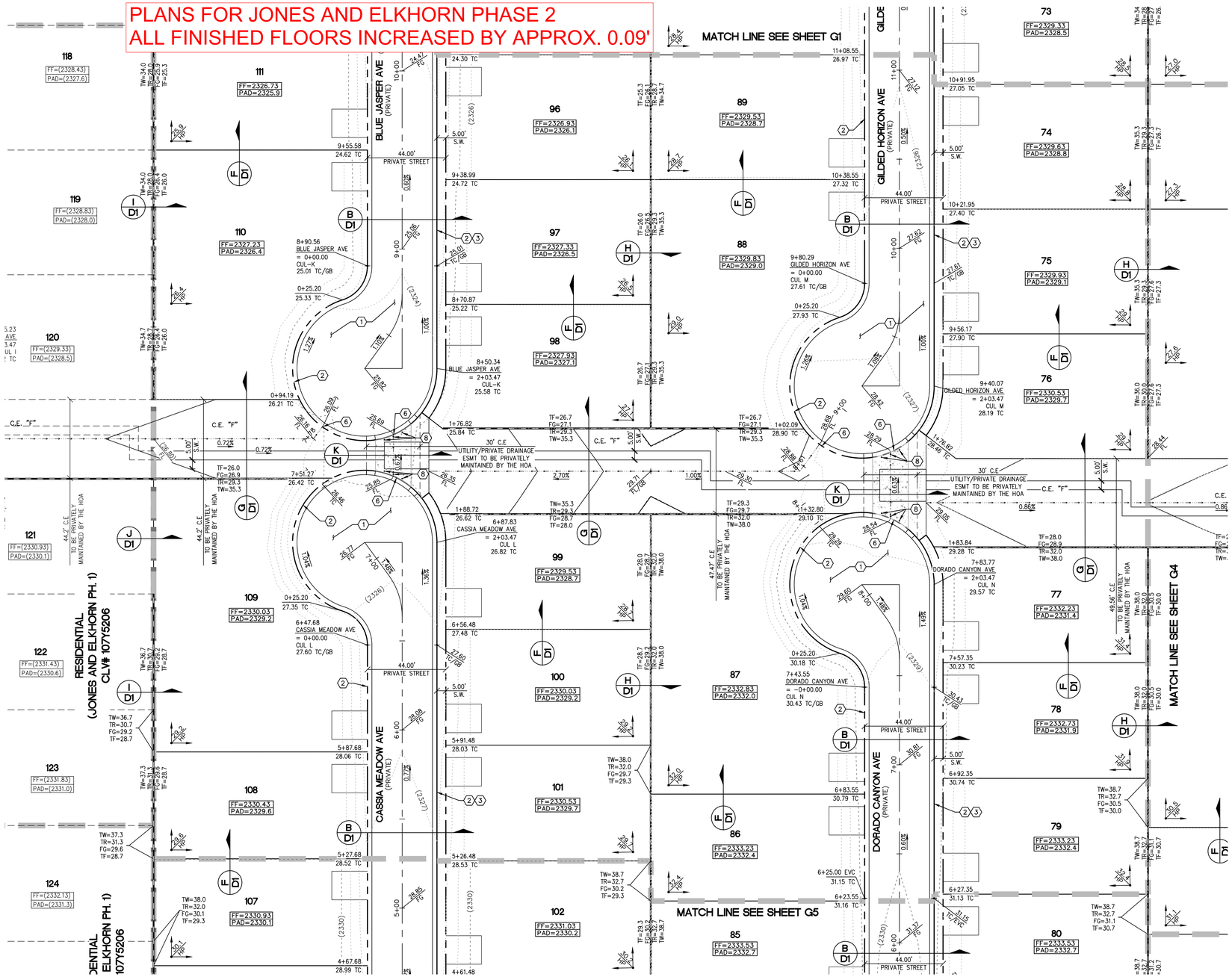
TOLL BROTHERS
JONES & ELKHORN PHASE 2
GRADING PLAN 2

DRAWING G2
5 OF 37 SHTS

PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'


MATCH LINE SEE SHEET G1
BLUE JASPER AVE (PRIVATE)
GILDED HORIZON AVE (PRIVATE)
CASSIA MEADOW AVE (PRIVATE)
DORADO CANYON AVE (PRIVATE)
44.00' PRIVATE STREET
5.00' S.W.
30' C.E. UTILITY/PRIVATE DRAINAGE ESMT TO BE PRIVATELY MAINTAINED BY THE HOA
44.2' C.E. TO BE PRIVATELY MAINTAINED BY THE HOA
47.47' C.E. TO BE PRIVATELY MAINTAINED BY THE HOA
49.56' C.E. TO BE PRIVATELY MAINTAINED BY THE HOA
C.E. "F"
MATCH LINE SEE SHEET G4
MATCH LINE SEE SHEET G5
118 FF=(2328.43) PAD=(2327.6)
119 FF=(2328.83) PAD=(2328.0)
120 FF=(2329.33) PAD=(2328.5)
121 FF=(2330.93) PAD=(2330.1)
122 FF=(2331.43) PAD=(2330.6)
123 FF=(2331.83) PAD=(2331.0)
124 FF=(2332.13) PAD=(2331.3)
111 FF=2326.73 PAD=2325.9
110 FF=2327.23 PAD=2326.4
109 FF=2330.03 PAD=2329.2
108 FF=2330.43 PAD=2329.6
107 FF=2330.93 PAD=2330.1
96 FF=2326.93 PAD=2326.1
97 FF=2327.33 PAD=2326.5
98 FF=2327.93 PAD=2327.1
99 FF=2329.53 PAD=2328.7
100 FF=2330.03 PAD=2329.2
101 FF=2330.53 PAD=2329.7
102 FF=2331.03 PAD=2330.2
89 FF=2329.53 PAD=2328.7
88 FF=2329.83 PAD=2329.0
87 FF=2332.83 PAD=2332.0
86 FF=2333.23 PAD=2332.4
85 FF=2333.53 PAD=2332.7
73 FF=2329.33 PAD=2328.5
74 FF=2329.63 PAD=2328.8
75 FF=2329.93 PAD=2329.1
76 FF=2330.53 PAD=2329.7
77 FF=2332.23 PAD=2331.4
78 FF=2332.73 PAD=2331.9
79 FF=2333.23 PAD=2332.4
80 FF=2333.53 PAD=2332.7
8+90.56 BLUE JASPER AVE = 0+00.00 CUL-K 25.01 TC/GB
0+25.20 25.33 TC
8+70.87 25.22 TC
8+50.34 BLUE JASPER AVE = 2+03.47 CUL-K 25.58 TC
0+94.19 26.21 TC
1+76.82 25.84 TC
7+51.27 26.42 TC
1+88.72 26.62 TC
6+87.83 CASSIA MEADOW AVE = 2+03.47 CUL L 26.82 TC
0+25.20 27.35 TC
6+47.68 CASSIA MEADOW AVE = 0+00.00 CUL I 27.60 TC/GB
6+56.48 27.48 TC
5+87.68 28.06 TC
5+91.48 28.03 TC
5+27.68 28.52 TC
5+26.48 28.53 TC
4+67.68 28.99 TC
4+61.48
9+80.29 GILDED HORIZON AVE = 0+00.00 CUL M 27.61 TC/GB
0+25.20 27.93 TC
9+56.17 27.90 TC
9+40.07 GILDED HORIZON AVE = 2+03.47 CUL M 28.19 TC
1+76.82 28.46 TC
1+02.09 28.90 TC
1+32.80 29.10 TC
1+83.84 29.28 TC
7+83.77 DORADO CANYON AVE = 2+03.47 CUL N 29.57 TC
0+25.20 30.18 TC
7+43.55 DORADO CANYON AVE = −0+00.00 CUL N 30.43 TC/GB
7+57.35 30.23 TC
6+92.35 30.74 TC
6+83.55 30.79 TC
6+25.00 EVC 31.15 TC
6+27.35 31.13 TC
6+23.55 31.16 TC
9+55.58 24.62 TC
9+38.99 24.72 TC
10+38.55 27.32 TC
10+21.95 27.40 TC
10+91.95 27.05 TC
11+08.55 26.97 TC
TF=26.0 FG=26.9 TW=35.3
TF=26.7 FG=27.1 TW=35.3
TF=29.3 FG=29.7 TW=35.3
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TF=28.0 FG=28.7 TW=38.0
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TF=35.7 FG=28.1 TW=29.7
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TF=36.0 FG=29.1 TW=30.0
TF=36.7 FG=29.8 TW=30.7
TF=37.3 FG=30.1 TW=31.3
TF=38.0 FG=30.5 TW=32.0
TF=38.7 FG=30.7 TW=32.7
0.72%
0.86%
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1.48%
2.70%
7.00%
8.00%
9.00%
10.00%
11.00%
11.15% EVC
1.36%
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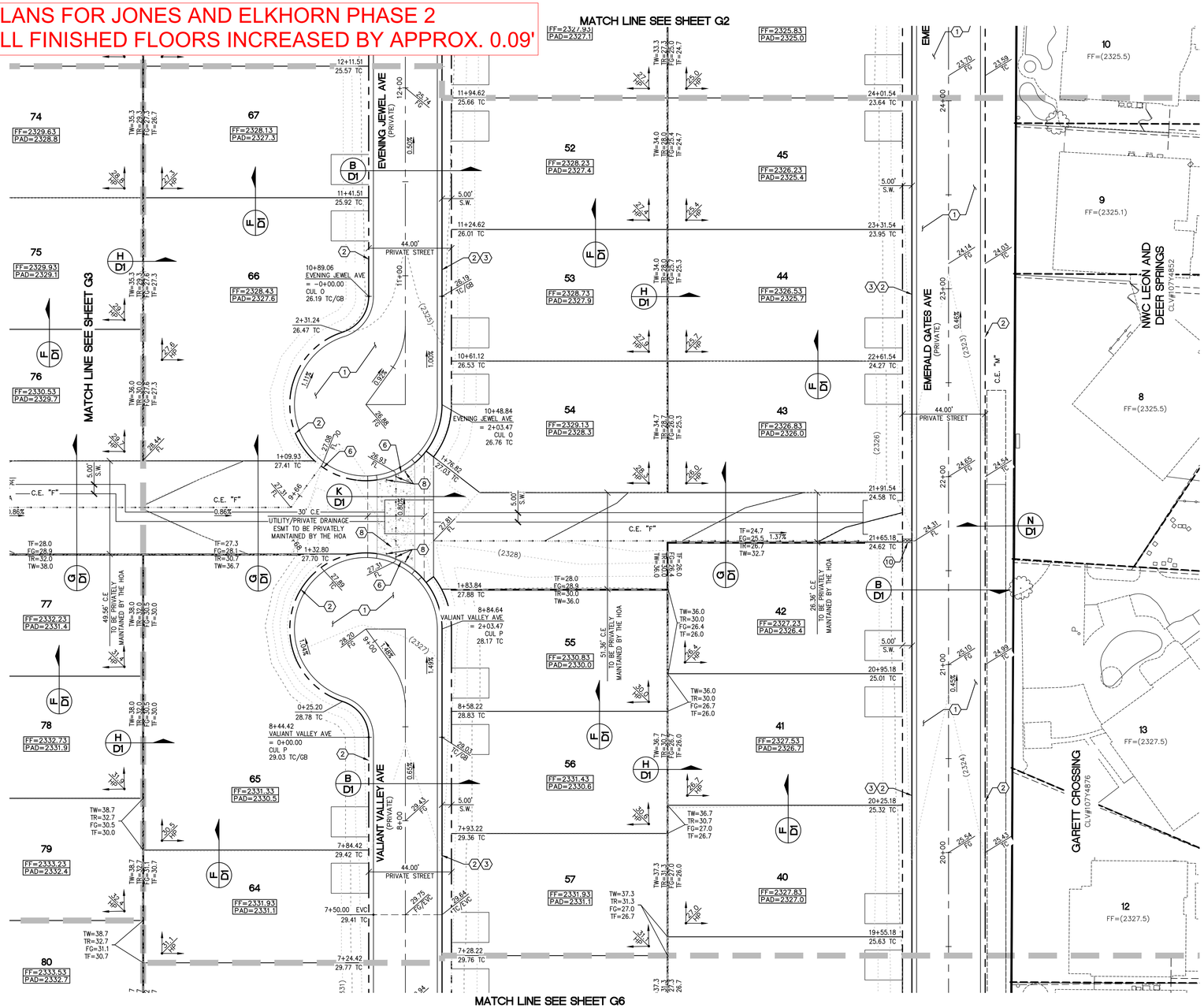

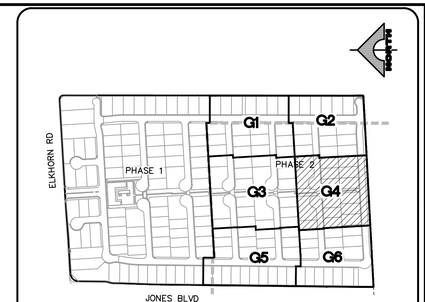

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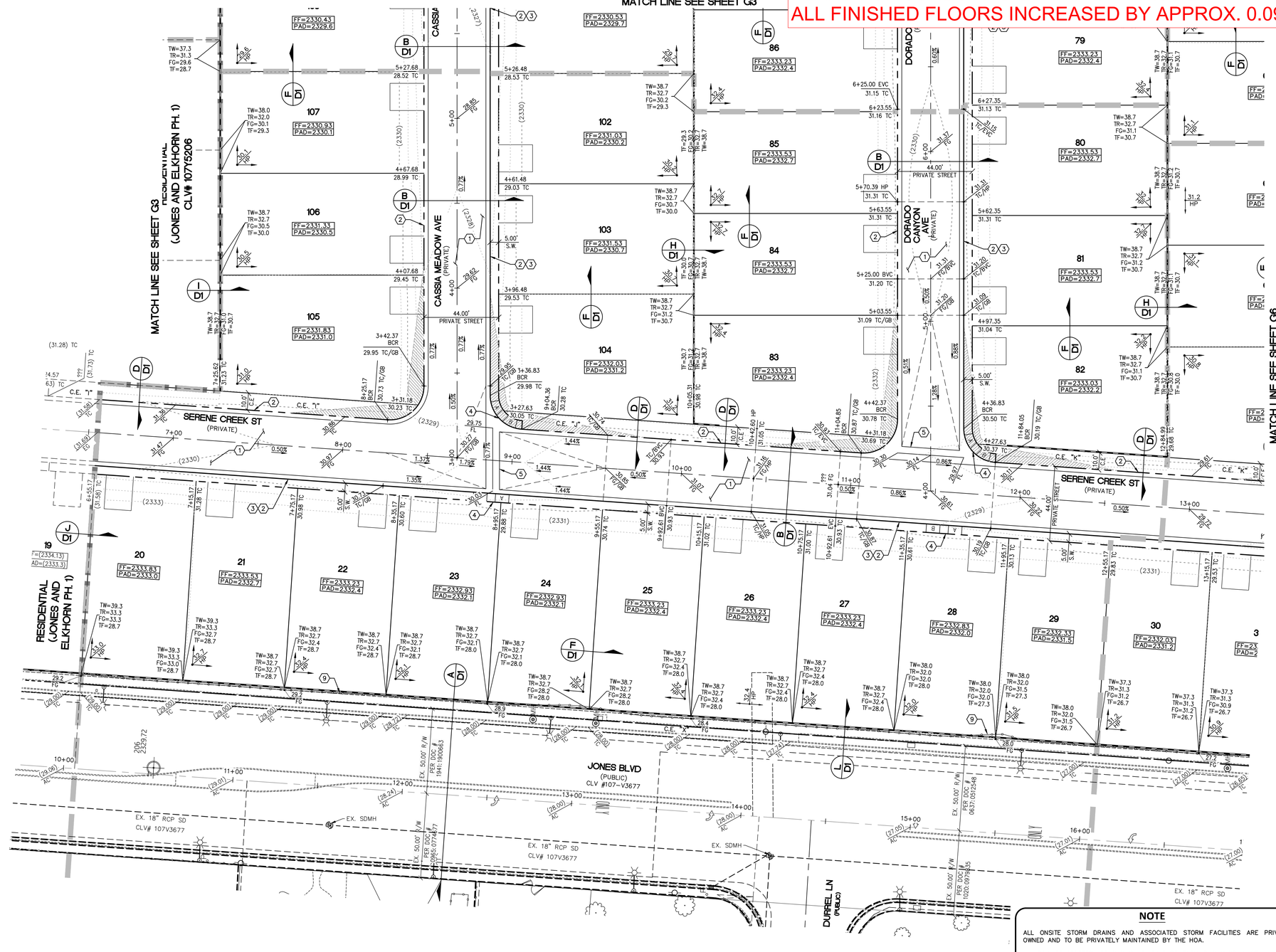

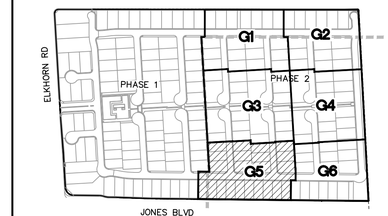

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6. CONSTRUCT CURB OPENING WITH TRANSITION PER DETAIL C SHEET D2.
7. CONSTRUCT 5' TRANSITION FROM "L" CURB TO RESIDENTIAL ROLL CURB PER DETAIL B SHEET D2.
8. CONSTRUCT COLLAPSIBLE BOLLARDS PER DETAIL D ON SHEET D2 & CONSTRUCT SURFACE PER USDCCA NO. 425.31.
9. EXISTING FENCES & GATES TO BE REMOVED.
10. CONSTRUCT 2' SIDEWALK UNDERDRAIN PER USDCCA NO 236.

NO DEEP ROOTED TREES SHALL BE PLACED WITHIN 10 FEET OF THE OUTSIDE EDGE OF THE STORM DRAIN PIPE.

STORM DRAIN CONSTRUCTION NOTES

1. CONNECT TO EXISTING 18" RCP STORM DRAIN PER DETAIL H SHEET D3.
2. CONSTRUCT 48" TYPE I STORM DRAIN MANHOLE PER STD. DWG 403.
3. CONSTRUCT 5' TYPE "DM2" INLET PER STD DWG 412.1 & 421 WITH (2) SOLID GRATES.

CAUTION TO CONTRACTOR

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FLOOD ZONE NOTE

THIS SITE IS LOCATED ON PANEL **32003C1765F**, DATED **NOVEMBER 16, 2011**. THIS PANEL SHOWS THAT THE PROJECT IS LOCATED WITHIN A UNSHADED ZONE X. UNSHADED ZONE X AREAS ARE DESCRIBED AS AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. THE PROJECT IS NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR SPECIAL FLOOD HAZARD AREA.

DRAINAGE CERTIFICATION

I CERTIFY THAT THE GRADING PLANS ARE IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE (DS5472A) AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

07/07/2022
DATE

ROBERT A. MURNANE, P.E. 9680

NOTE

ALL ONSITE STORM DRAINS AND ASSOCIATED STORM FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOA.

ALL PRIVATE STREETS ARE PUBLIC UTILITY EASEMENTS, PUBLIC DRAINAGE EASEMENTS AND PUBLIC SEWER EASEMENTS TO BE PRIVATELY MAINTAINED BY HOA.

BASIS OF BEARING

NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008) BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

L#: XX-XXXXX CLV#: XXXXXXXX

SVZ NOTE

NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES, OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, AND STREETLIGHT POLES MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL, OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

NOTE

CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY.

EARTHWORKS

RAW CUT	=	0	C.Y.
RAW FILL	=	0	C.Y.
NET FILL	=	0	C.Y.

Call before you Dig
Avoid cutting underground utility lines. It's costly.
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GCW ENGINEERS\SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
F:\PROJECTS\700\743-240\GWC\PRODUCTION\PH2\743-240C-PH2-GDWG

PROFESSIONAL ENGINEER - STATE OF NEVADA - ROBERT A. MURNANE - No. 9680 - CIVIL - No. A-0171223 - DATE: 07/07/2022

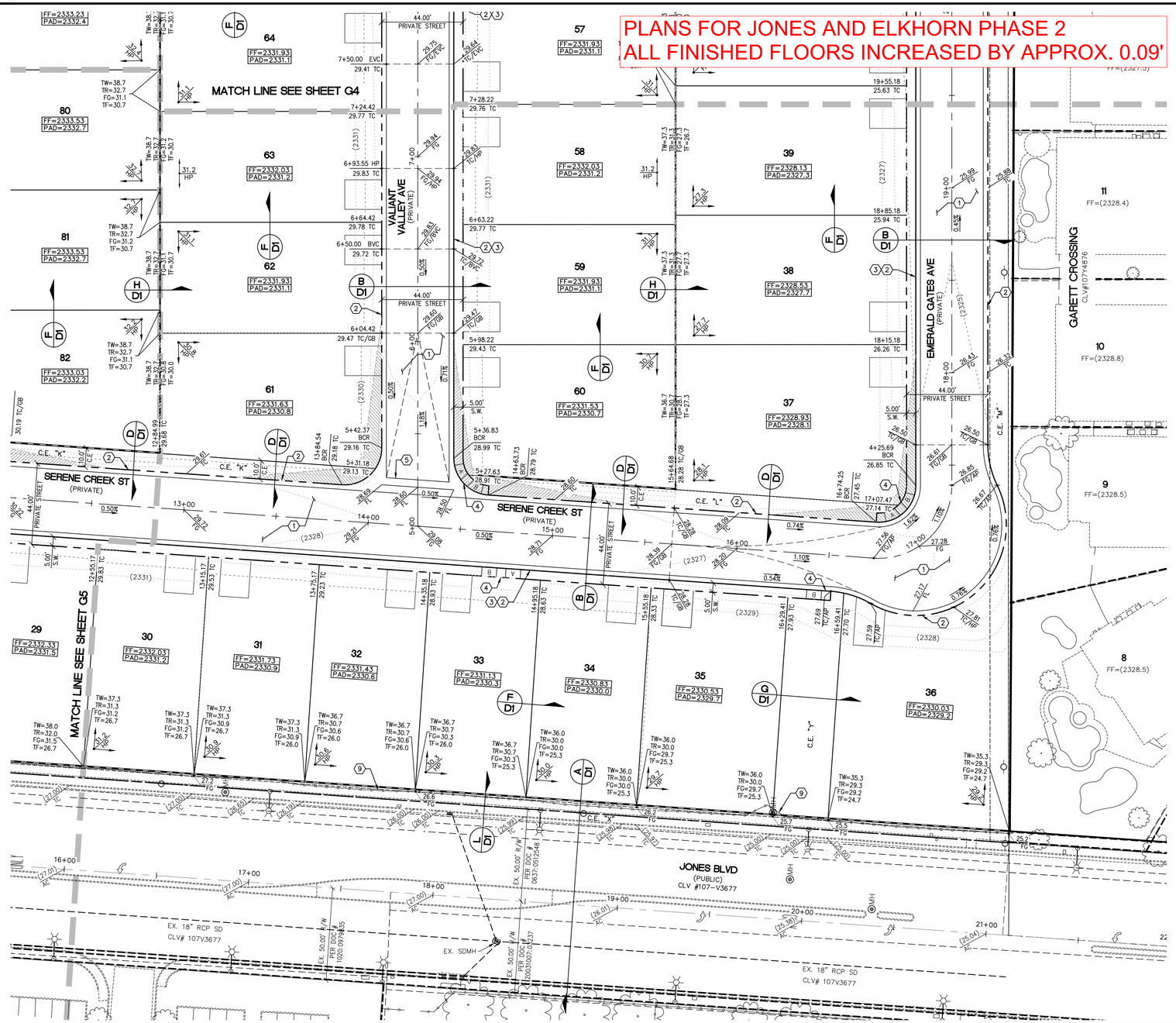
REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

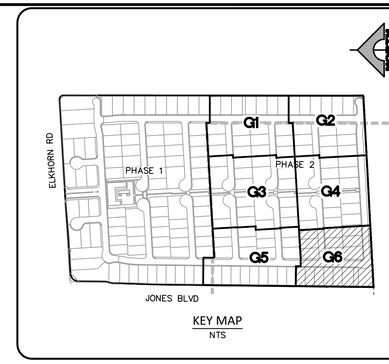
PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 07-07-22
PLOT TIME: 11:21:44
COREY ELLIS

TOLL BROTHERS
JONES & ELKHORN PHASE 2
GRADING PLAN 5

DRAWING G5
8 OF 37 SHTS

PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'





KEY MAP
NTS

NORTH

30' 0' 15' 30' 60'

SCALE: 1" = 30'

CONSTRUCTION NOTES

1. CONSTRUCT 2" AC PAVEMENT WITH 4.5" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
2. CONSTRUCT 30" RESIDENTIAL ROLL CURB PER USDCCA NO. 217.2.S1
3. CONSTRUCT CONCRETE SIDEWALK PER USDCCA NO. 234.
4. CONSTRUCT SIDEWALK RAMP PER USDCCA NO. 235 CASE 1. SEE PLAN FOR "A" & "B" DIMENSION.
5. CONSTRUCT 8' WIDE VALLEY GUTTER PER USDCCA NO. 228.
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1. CONNECT TO EXISTING 18" RCP STORM DRAIN PER DETAIL H SHEET D3.
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FLOOD ZONE NOTE

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07/07/2022

ROBERT A. MURNANE, P.E. 9680 — DATE

L#: XX-XXXXX CLV#: XXXXXXXX

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BASIS OF BEARING

NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

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PROFESSIONAL ENGINEER - STATE OF NEVADA
ROBERT A. MURNANE
No. 9680
Exp. 6/30/2023
07/07/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

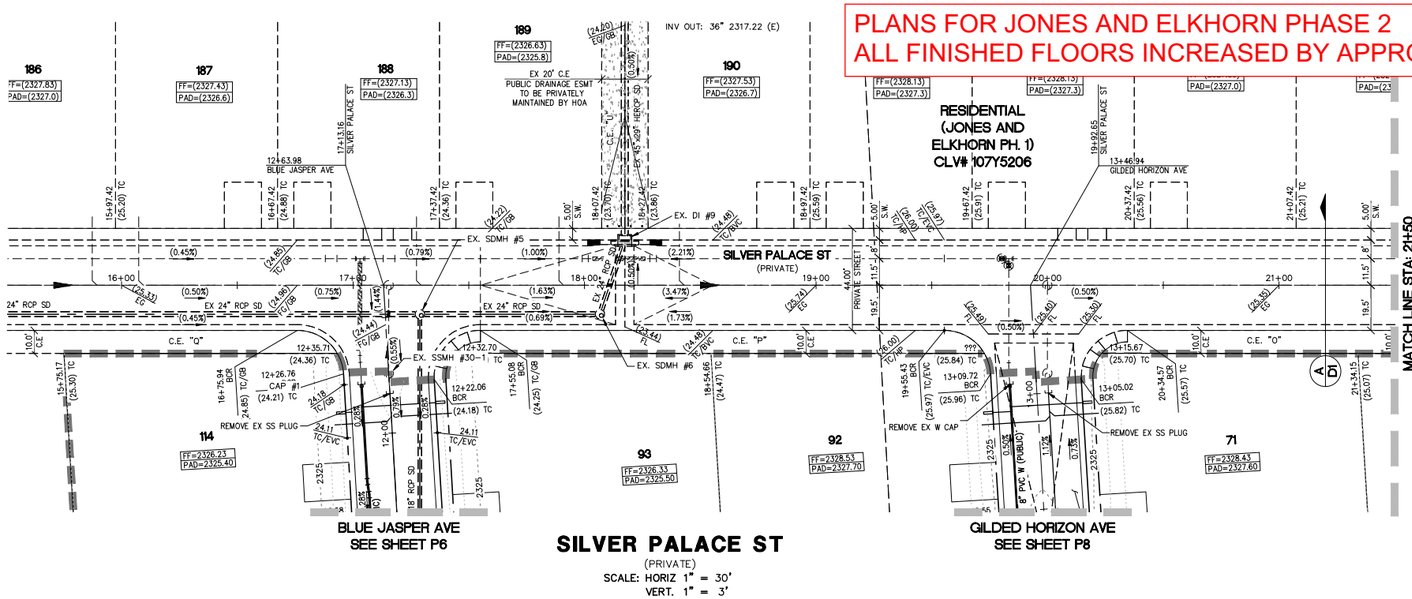
PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 07-07-22
PLOT TIME: 11:21:51

GCW
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
ENGINEERS \ SURVEYORS
COREY ELLIS
F:\PROJECTS\V20\743-240\DWG\PRODUCTION\PH2\743-240C-PH2-G.DWG

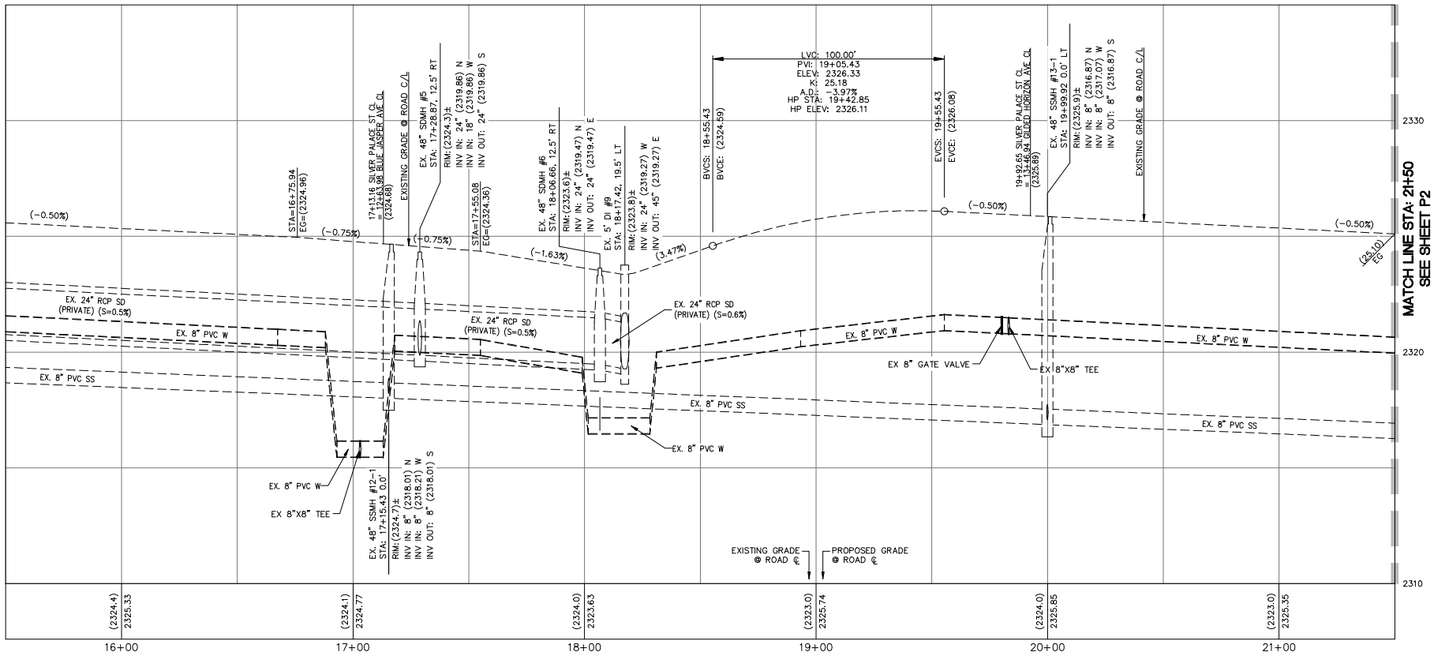
TOLL BROTHERS
JONES & ELKHORN
PHASE 2
GRADING PLAN 6

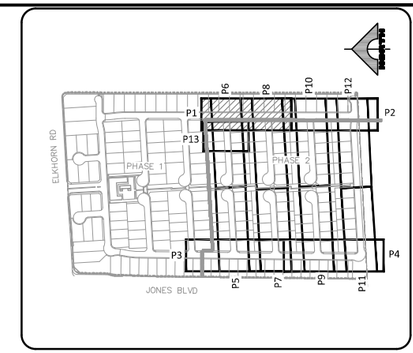
DRAWING
G6
9 OF 37 SHTS

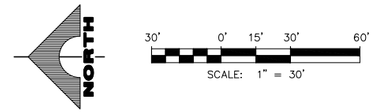
PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



SILVER PALACE ST
(PRIVATE)
SCALE: HORIZ 1" = 30'
VERT. 1" = 3'







CONSTRUCTION NOTES

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2. CONSTRUCT 30" RESIDENTIAL ROLL CURB PER USDCCA NO. 217.2.S1
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NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE: _____

L#: XX-XXXXX CLV#: XXXXXXXX

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

PROTECT WATERLINES IN PLACE. WHEREVER A WATERLINE IS ABOVE A STORM DRAIN OR SEWER WHERE COMPACTION REQUIREMENTS UNDER A WATERLINE CANNOT BE MET, BACKFILL TRENCH WITH CLASS II CONTROLLED LOW STRENGTH MATERIAL (CLSM) TO THE SPRINGLINE OF THE WATERLINE. THIS REQUIREMENT IS FOR STRUCTURAL SUPPORT ONLY. ADDITIONAL HEALTH REGULATIONS MAY APPLY PER UDACS 2.22.

NOTE TO CONTRACTOR

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1-702-432-8300
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

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NOTE

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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

ALL SEWER/SD CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22, UDACS PLATE 22 AND 23.

ANNULAR SPACE BETWEEN PIPE AND CASING SHALL BE FILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM I) PER UDACS 2.10.05.

NOTE

CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY.

MINIMUM DEPTH DURING CONSTRUCTION

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATIONS.

LVWD NOTES

1. TO ENSURE LVVWD ACCESS WITHIN EASEMENT, ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPING BOULDERS, FENCES/WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED FROM EASEMENT.
2. FIRE SPRINKLER SYSTEM SHALL BE PLUMBED TO MASTER TOILET. NO EXCEPTIONS ALLOWED.
3. INSTALL PIPELINE MARKER BALLS PER UDACS PLATE NO. 15.
4. PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
5. LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.
   CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.
6. ALL LOTS HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL ON-SITE (PRIVATE) PRESSURE-REDUCING VALVES (PRV) BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES.

ENGINEER - STATE OF NEVADA - PROFESSIONAL
ROBERT A. MURYANE
No. 13550
CIVIL
Exp. 12/31/2023
DATE: 07/07/2022

REV	DATE	DESCRIPTION	DRAWN	CHECK	APP	DATE
					GCW	APP
					GCW	APP
					GCW	APP

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 07-07-22
PLOT TIME: 11:29:06

GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\PROJECTS\700\743-240\GWG\PRODUCTION\PHD\743-240C-PH2-P.DWG
CDBEY

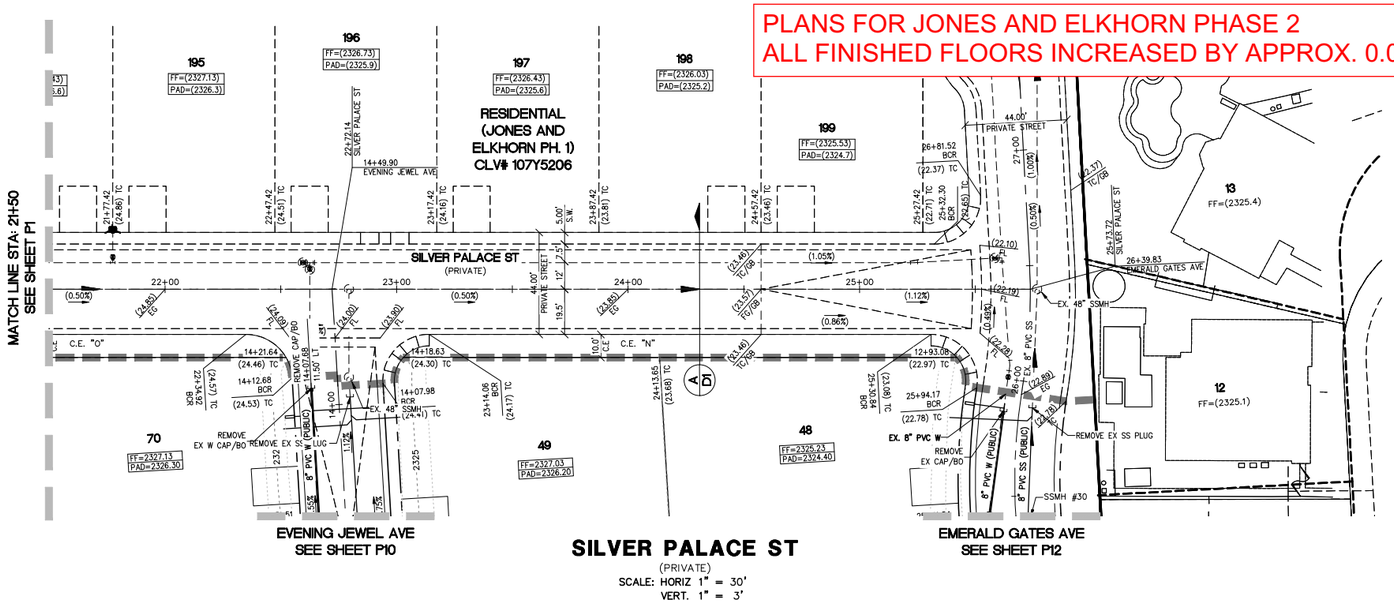
TOLL BROTHERS

JONES & ELKHORN
PHASE 2

SILVER PALACE ST PLAN AND PROFILE
BEGIN TO STA 21+50

DRAWING
P1
12 OF 37 SHTS

PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



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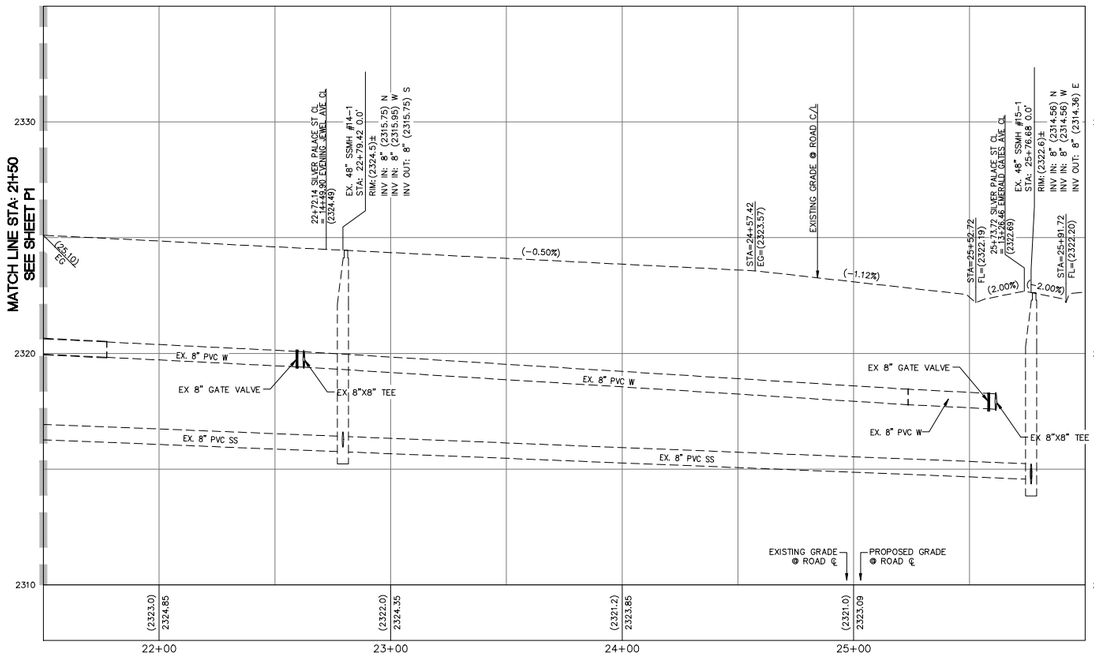

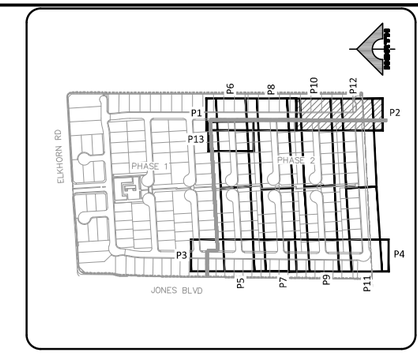

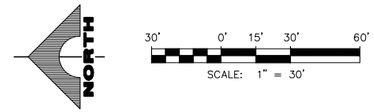

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709.87 (METERS)

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE:

L#: XX-XXXXX CLV#: XXXXXXXX

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

PROTECT WATERLINES IN PLACE. WHEREVER A WATERLINE IS ABOVE A STORM DRAIN OR SEWER WHERE COMPACTION REQUIREMENTS UNDER A WATERLINE CANNOT BE MET, BACKFILL TRENCH WITH CLASS II CONTROLLED LOW STRENGTH MATERIAL (CLSM) TO THE SPRINGLINE OF THE WATERLINE. THIS REQUIREMENT IS FOR STRUCTURAL SUPPORT ONLY. ADDITIONAL HEALTH REGULATIONS MAY APPLY PER UDACS 2.22.

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Call 811 OR 1-800-642-2444

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

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

NOTE

ALL ONSITE STORM DRAINS AND ASSOCIATED STORM FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOA.

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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

ALL SEWER/SD CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22, UDACS PLATE 22 AND 23.

ANNULAR SPACE BETWEEN PIPE AND CASING SHALL BE FILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM I) PER UDACS 2.10.05.

NOTE

CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY.

MINIMUM DEPTH DURING CONSTRUCTION

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATIONS.

LVVWD NOTES

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2. FIRE SPRINKLER SYSTEM SHALL BE PLUMBED TO MASTER TOILET. NO EXCEPTIONS ALLOWED.
3. INSTALL PIPELINE MARKER BALLS PER UDACS PLATE NO. 15.
4. PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
5. LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.
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REGISTERED PROFESSIONAL ENGINEER – STATE OF NEVADA
ROBERT A. MURYANE
No. 9889
CIVIL
Exp. 12/31/2023
DATE: 07/07/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 07-07-22
PLOT TIME: 11:22:16

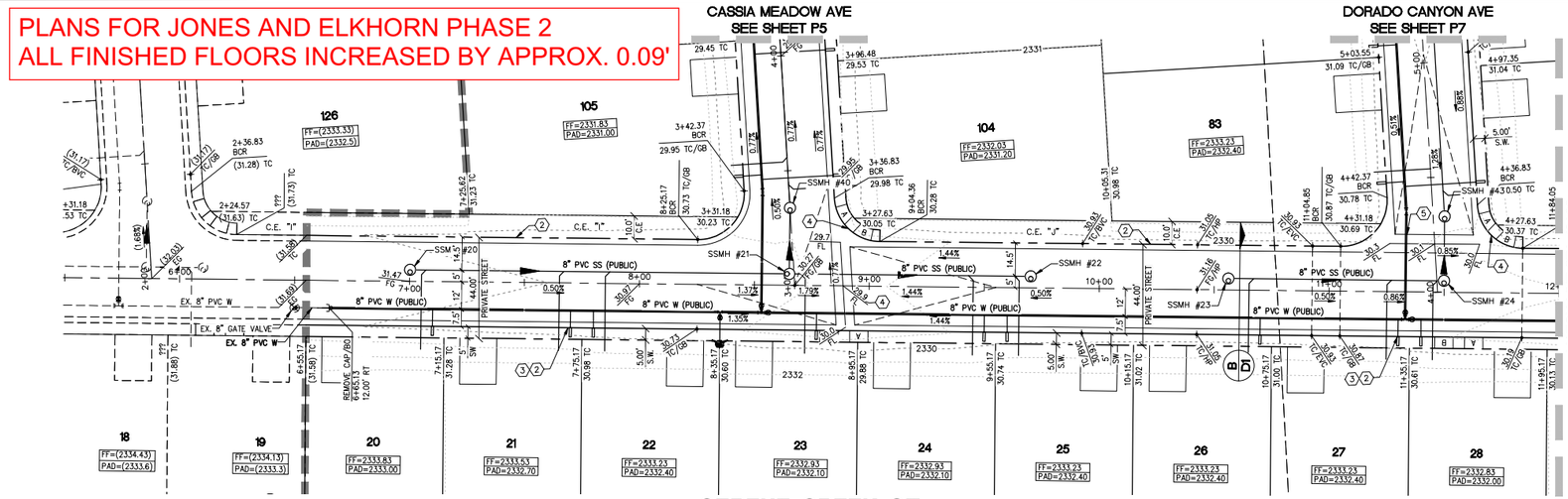
GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
COREY ELLIS

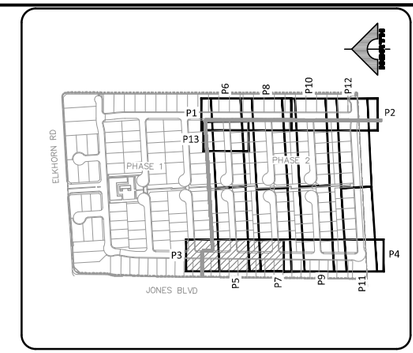
F:\PROJECTS\100\Y43-240\DWG\PRODUCTION\PH2\Y43-240-PH2-P.DWG

TOLL BROTHERS
JONES & ELKHORN
PHASE 2
SILVER PALACE ST PLAN AND PROFILE
STA 21+50 TO END

DRAWING
P2
13 OF 37 SHTS

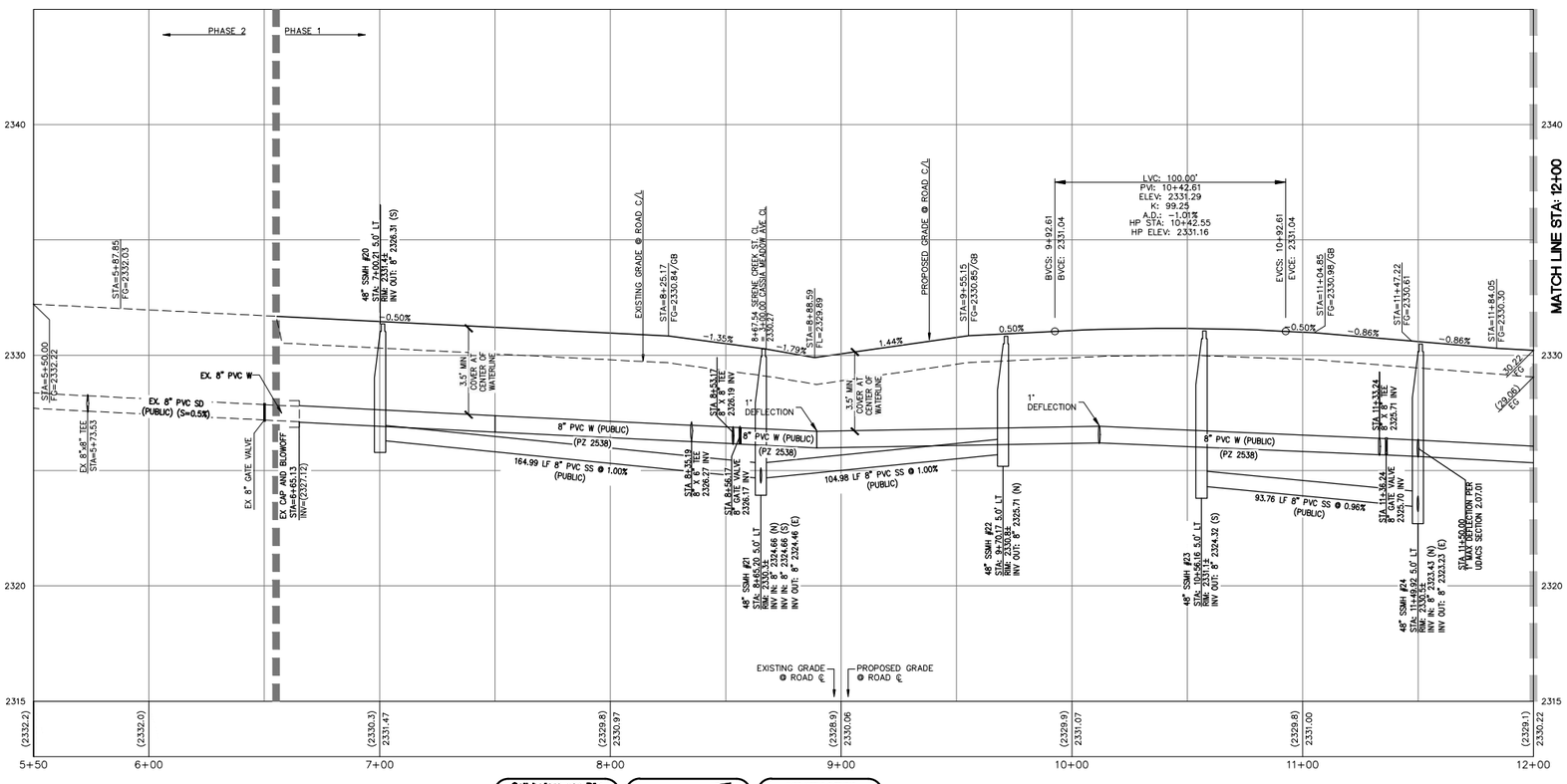
PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'





NORTH

30' 0' 15' 30' 60'
SCALE: 1" = 30'



CONSTRUCTION NOTES

1. CONSTRUCT 2" AC PAVEMENT WITH 4.5" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
2. CONSTRUCT 30" RESIDENTIAL ROLL CURB PER USDCCA NO. 217.2.S1
3. CONSTRUCT CONCRETE SIDEWALK PER USDCCA NO. 234.
4. CONSTRUCT SIDEWALK RAMP PER USDCCA NO. 235 CASE 1. SEE PLAN FOR "A" & "B" DIMENSION.
5. CONSTRUCT 8' WIDE VALLEY GUTTER PER USDCCA NO. 228.
6. CONSTRUCT CURB OPENING WITH TRANSITION PER DETAIL C SHEET D2.
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9. EXISTING FENCES & GATES TO BE REMOVED.
10. CONSTRUCT 2' SIDEWALK UNDERDRAIN PER USDCCA NO 236.

NO DEEP ROOTED TREES SHALL BE PLACED WITHIN 10 FEET OF THE OUTSIDE EDGE OF THE STORM DRAIN PIPE.

STORM DRAIN CONSTRUCTION NOTES

1. CONNECT TO EXISTING 18" RCP STORM DRAIN PER DETAIL H SHEET D3.
2. CONSTRUCT 48" TYPE I STORM DRAIN MANHOLE PER STD. DWG 403.
3. CONSTRUCT 5' TYPE "DM2" INLET PER STD DWG 412.1 & 421 WITH (2) SOLID GRATES.

BASIS OF BEARING

NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE:

L#: XX-XXXXX CLV#: XXXXXXXX

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PLOT TIME: 11:23:23

GCW ENGINEERS & SURVEYORS
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F: 702.804.2299
gcwengineering.com

ORIG: ELLIS
F:\PROJECTS\100\V43-240\DWG\PRODUCTION\PNT\V43-240C-PRO-P.DWG

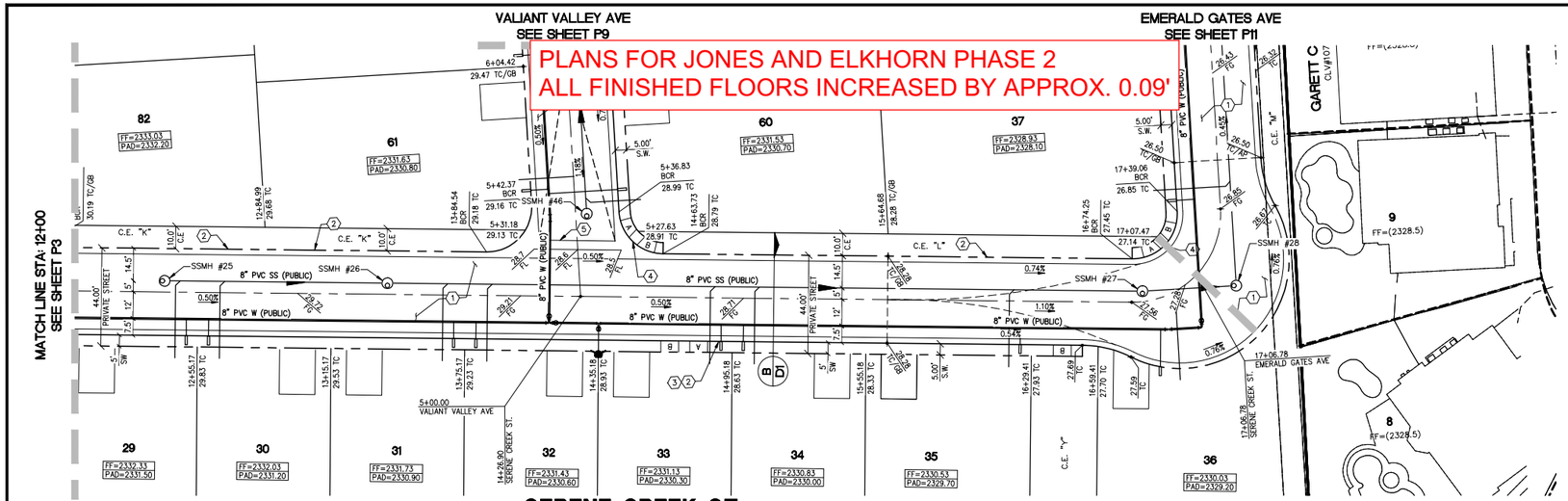
TOLL BROTHERS

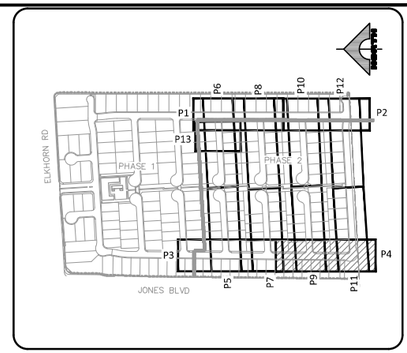
JONES & ELKHORN
PHASE 2

SERENE CREEK ST PLAN AND PROFILE
BEGIN TO STA 21+50

DRAWING
P3
14 OF 37 SHTS

PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'





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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE:

L#: XX-XXXXX CLV#: XXXXXXXX

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ROBERT A. MURYANE — CIVIL — No. 9350 — Exp. 12/31/2023 — PROFESSIONAL ENGINEER — STATE OF NEVADA

DATE: 07/07/2022

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PROJECT NO. 743-240
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GCW ENGINEERS & SURVEYORS
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OREY ELLIS

F:\PROJECTS\100\V43-240\DWG\PRODUCTION\PNT\V43-240C-PNT-P.DWG

TOLL BROTHERS

JONES & ELKHORN
PHASE 2

SERENE CREEK ST PLAN AND PROFILE
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15 OF 37 SHTS

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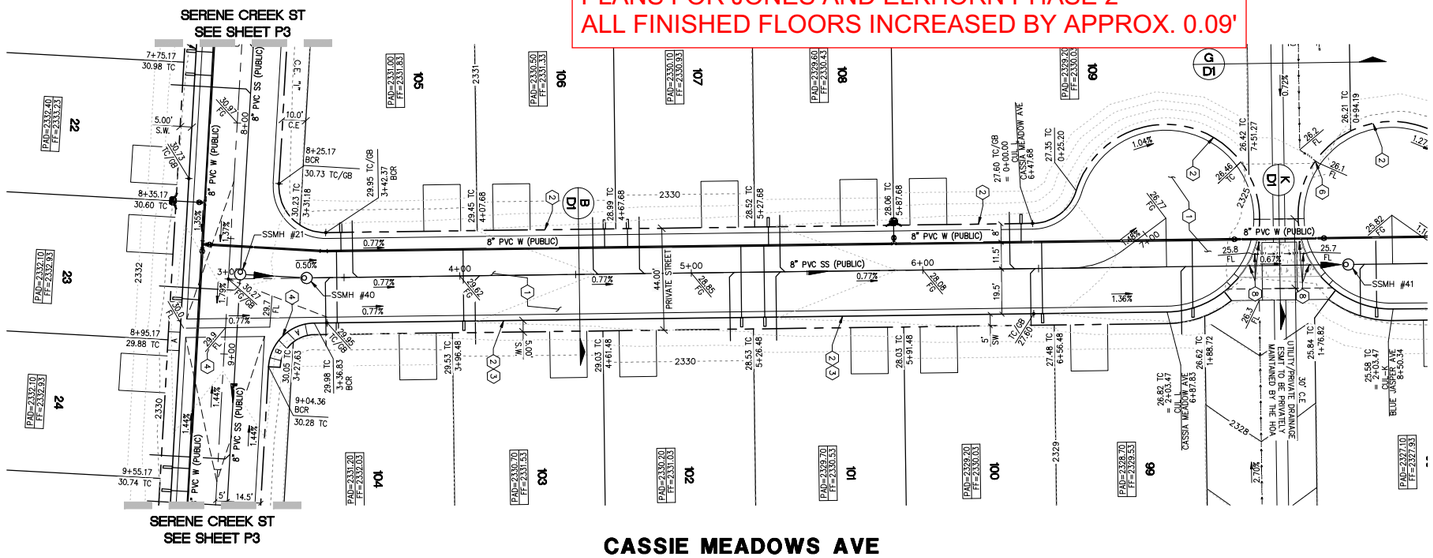
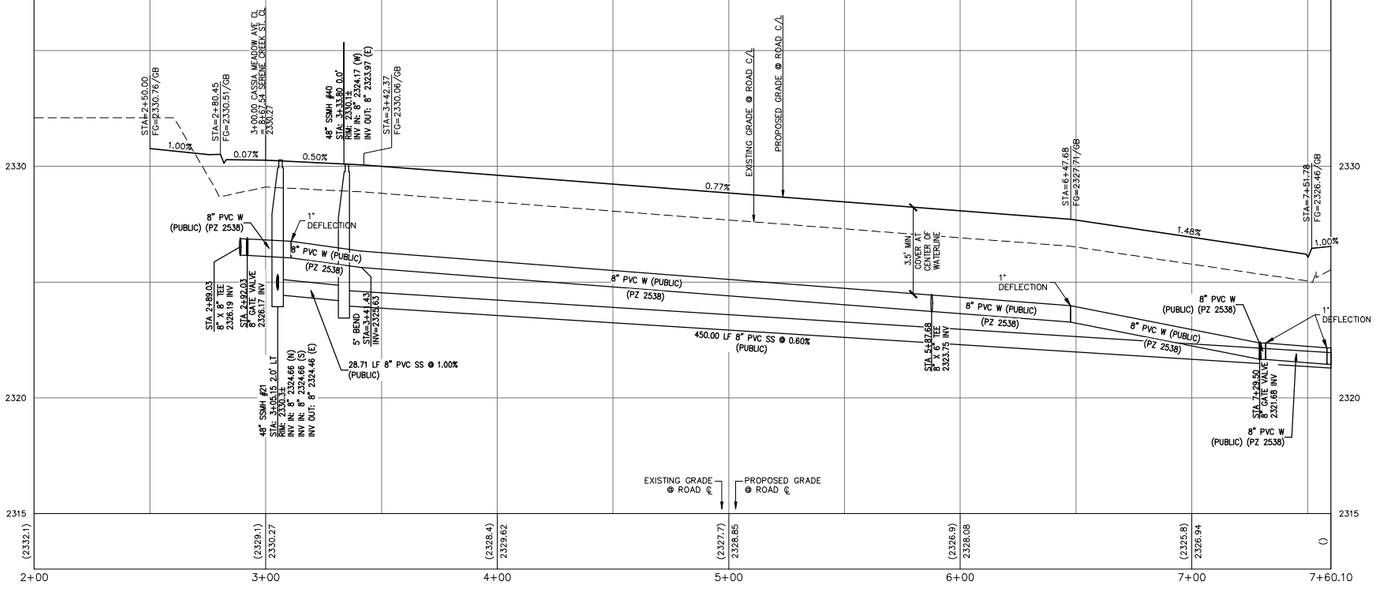
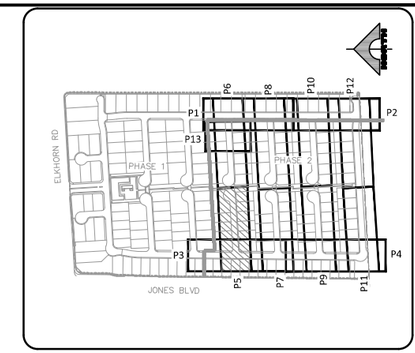
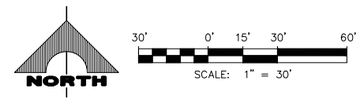


CASSIE MEADOWS AVE

(PRIVATE)
SCALE: HORIZ 1" = 30'
VERT. 1" = 3'







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1-702-432-5300
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

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CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

NOTE

ALL ONSITE STORM DRAINS AND ASSOCIATED STORM FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOA.

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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

ALL SEWER/SD CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22, UDACS PLATE 22 AND 23.

ANNULAR SPACE BETWEEN PIPE AND CASING SHALL BE FILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM I) PER UDACS 2.10.05.

NOTE

CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY.

MINIMUM DEPTH DURING CONSTRUCTION

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATIONS.

LVVWD NOTES

1. TO ENSURE LVVWD ACCESS WITHIN EASEMENT, ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPING BOULDERS, FENCES/WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED FROM EASEMENT.
2. FIRE SPRINKLER SYSTEM SHALL BE PLUMBED TO MASTER TOILET. NO EXCEPTIONS ALLOWED.
3. INSTALL PIPELINE MARKER BALLS PER UDACS PLATE NO. 15.
4. PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
5. LVVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.
   CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.
6. ALL LOTS HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE), PRESSURE-REDUCING VALVES (PRV) BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES.

PROFESSIONAL ENGINEER – STATE OF NEVADA
ROBERT A. MURYANE
Exp. 12/31/2023
CIVIL
No. 9889
DATE: 07/07/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 07-07-22
PLOT TIME: 11:22:41

GCW ENGINEERS & SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

OBREY ELLIS

F:\PROJECTS\700\743-240\DWG\PRODUCTION\PNT\743-240C-PHS-P.DWG

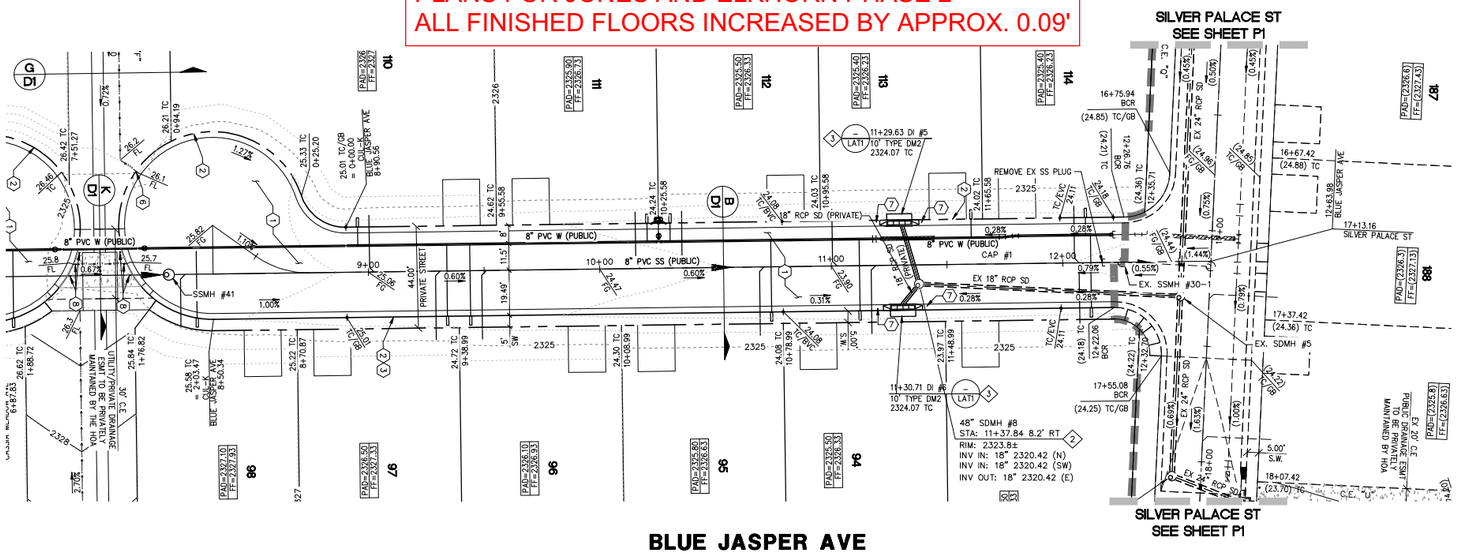
TOLL BROTHERS

JONES & ELKHORN
PHASE 2

CASSIE MEADOWS AVE PLAN AND PROFILE
BEGIN TO END

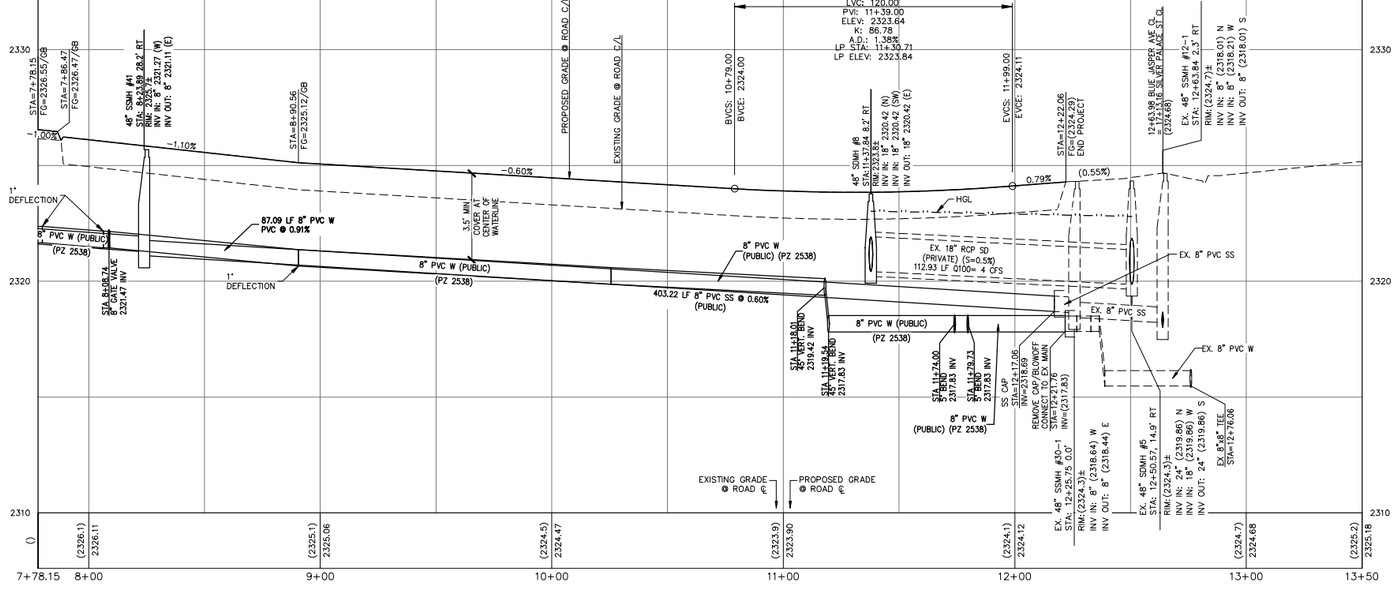
DRAWING
P5
16 OF 37 SHTS

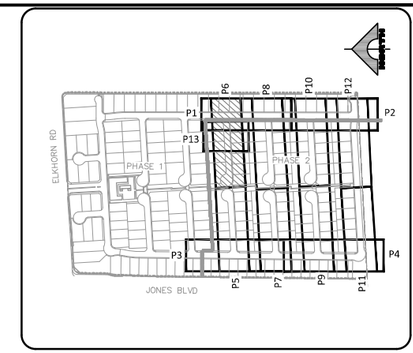
PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



BLUE JASPER AVE

(PRIVATE)
SCALE: HORIZ 1" = 30'
VERT. 1" = 3'





NORTH
30' 0' 15' 30' 60'
SCALE: 1" = 30'

CONSTRUCTION NOTES

1. CONSTRUCT 2" AC PAVEMENT WITH 4.5" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
2. CONSTRUCT 30" RESIDENTIAL ROLL CURB PER USDCCA NO. 217.2.S1
3. CONSTRUCT CONCRETE SIDEWALK PER USDCCA NO. 234.
4. CONSTRUCT SIDEWALK RAMP PER USDCCA NO. 235 CASE 1. SEE PLAN FOR "A" & "B" DIMENSION.
5. CONSTRUCT 8' WIDE VALLEY GUTTER PER USDCCA NO. 228.
6. CONSTRUCT CURB OPENING WITH TRANSITION PER DETAIL C SHEET D2.
7. CONSTRUCT 5' TRANSITION FROM "L" CURB TO RESIDENTIAL ROLL CURB PER DETAIL B SHEET D2.
8. CONSTRUCT COLLAPSIBLE BOLLARDS PER DETAIL D ON SHEET D2 & CONSTRUCT SURFACE PER USDCCA NO. 425.S1.
9. EXISTING FENCES & GATES TO BE REMOVED.
10. CONSTRUCT 2' SIDEWALK UNDERDRAIN PER USDCCA NO 236.

NO DEEP ROOTED TREES SHALL BE PLACED WITHIN 10 FEET OF THE OUTSIDE EDGE OF THE STORM DRAIN PIPE.

STORM DRAIN CONSTRUCTION NOTES

1. CONNECT TO EXISTING 18" RCP STORM DRAIN PER DETAIL H SHEET D3.
2. CONSTRUCT 48" TYPE I STORM DRAIN MANHOLE PER STD. DWG 403.
3. CONSTRUCT 5' TYPE "DM2" INLET PER STD DWG 412.1 & 421 WITH (2) SOLID GRATES.

BASIS OF BEARING

NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV901.3SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE:

L#: XX-XXXXX CLV#: XXXXXXXX

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

PROTECT WATERLINES IN PLACE. WHEREVER A WATERLINE IS ABOVE A STORM DRAIN OR SEWER WHERE COMPACTION REQUIREMENTS UNDER A WATERLINE CANNOT BE MET, BACKFILL TRENCH WITH CLASS II CONTROLLED LOW STRENGTH MATERIAL (CLSM) TO THE SPRINGLINE OF THE WATERLINE. THIS REQUIREMENT IS FOR STRUCTURAL SUPPORT ONLY. ADDITIONAL HEALTH REGULATIONS MAY APPLY PER UDACS 2.22.

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WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

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ANNULAR SPACE BETWEEN PIPE AND CASING SHALL BE FILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM I) PER UDACS 2.10.05.

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MINIMUM DEPTH DURING CONSTRUCTION

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LVVWD NOTES

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ENGINEER - STATE OF NEVADA - PROFESSIONAL
ROBERT A. MURYANE
No. 9858
CIVIL
Exp. 12/31/2023
DATE: 07/07/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 07-07-22
PLOT TIME: 11:22:49

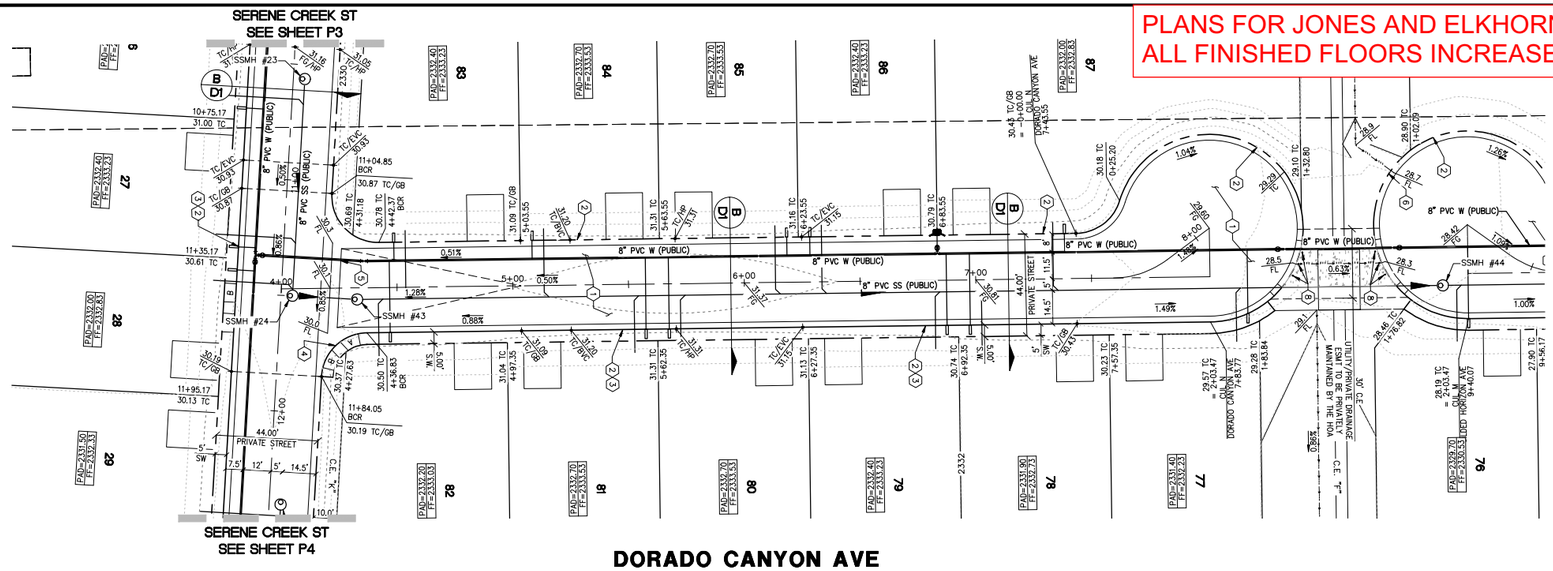
GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
COREY ELLIS

F:\PROJECTS\1700\743-240\DWG\PRODUCTION\PH2\743-240C-PH2-P.DWG

TOLL BROTHERS
JONES & ELKHORN
PHASE 2
BLUE JASPER AVE PLAN AND PROFILE
BEGIN TO END

DRAWING
P6
17 OF 37 SHTS

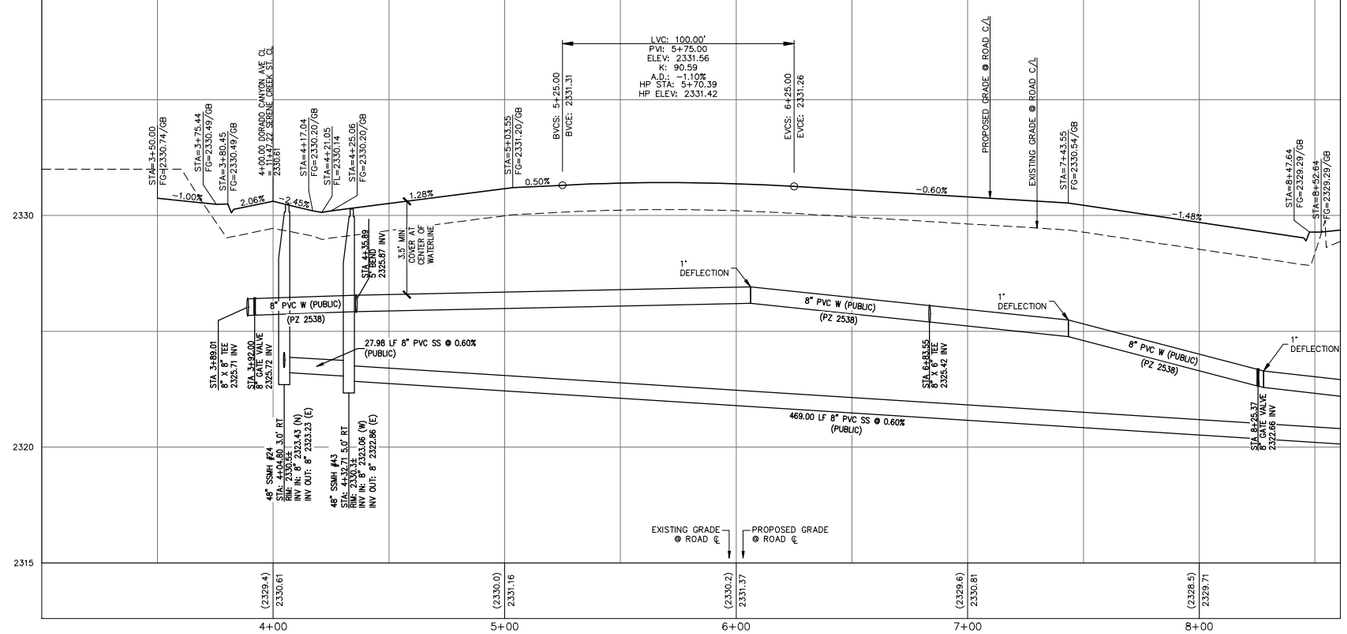
PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'

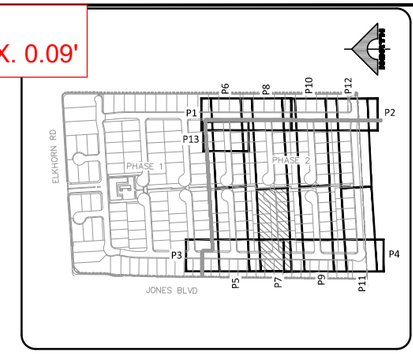


DORADO CANYON AVE

(PRIVATE)

SCALE: HORIZ 1" = 30'
VERT. 1" = 3'





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30' 0' 15' 30' 60'

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STORM DRAIN CONSTRUCTION NOTES

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BASIS OF BEARING

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BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE: _____

L#: XX-XXXXX CLV#: XXXXXXXX

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ENGINEER - STATE OF NEVADA
ROBERT A. MURYANE
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PROFESSIONAL
DATE: 07/07/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 07-07-22
PLOT TIME: 11:22:59

GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

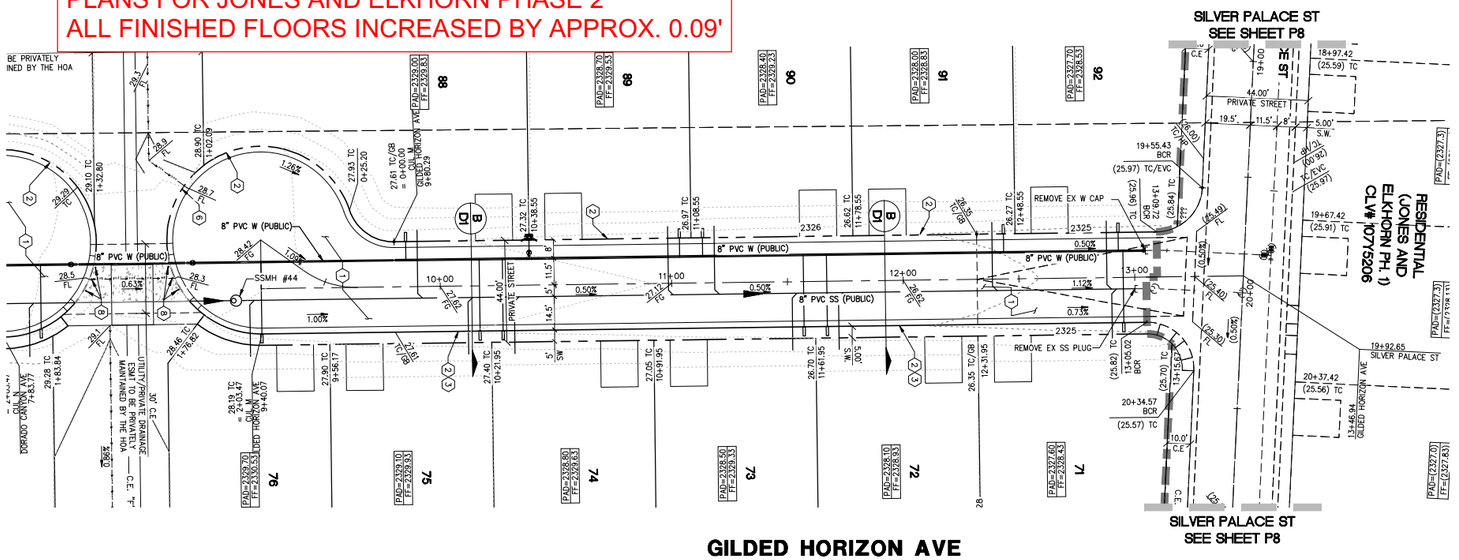
CHRIS ELLIS

F:\PROJECTS\100\743-240\DWG\PRODUCTION\PH2\743-240C-PH2-P.DWG

TOLL BROTHERS
JONES & ELKHORN
PHASE 2
DORADO CANYON AVE PLAN AND PROFILE
BEGIN TO END

DRAWING
P7
18 OF 37 SHTS

PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



GILDED HORIZON AVE

(PRIVATE)

SCALE: HORIZ 1" = 30'
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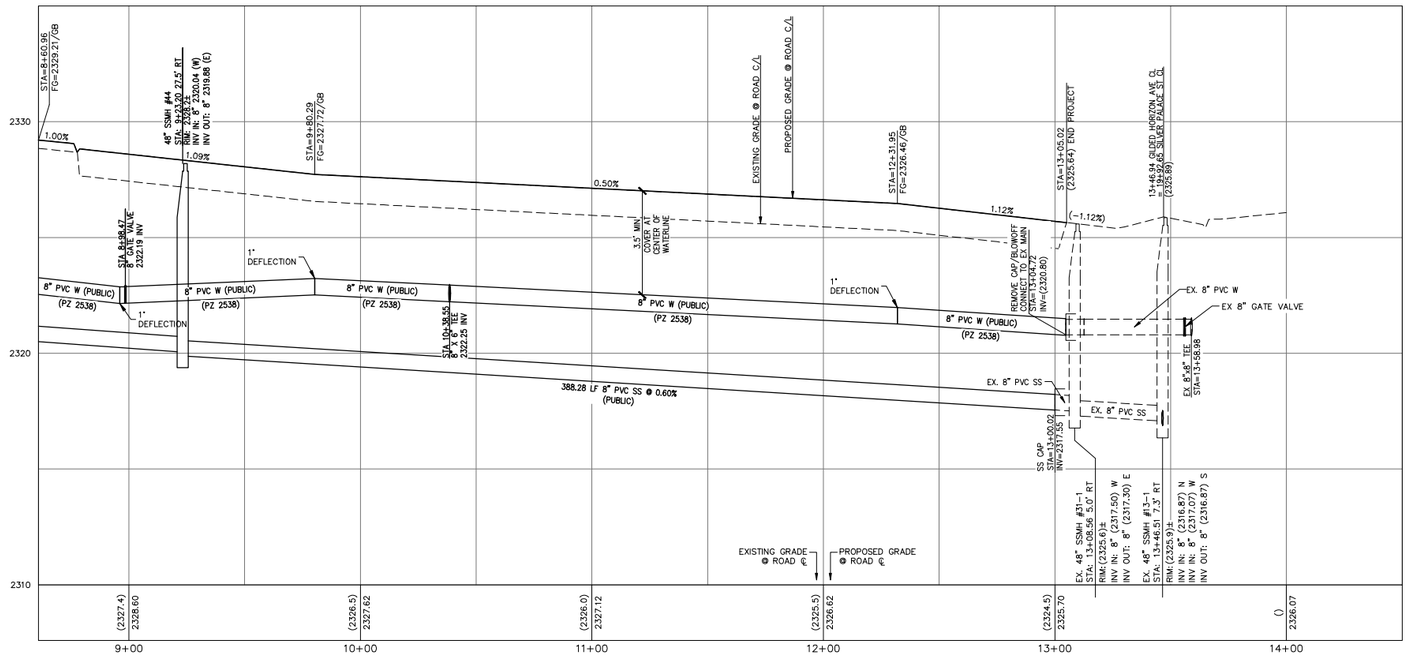

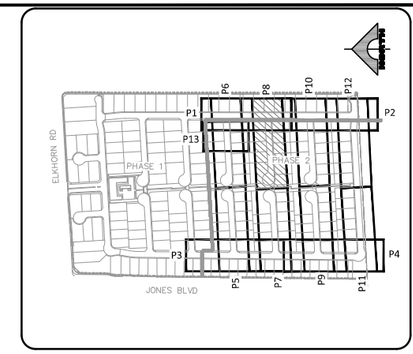

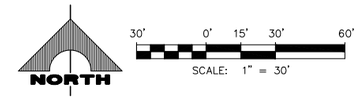

CONSTRUCTION NOTES

1. CONSTRUCT 2" AC PAVEMENT WITH 4.5" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
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BENCHMARK

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ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE:

L#: XX-XXXXX CLV#: XXXXXXXX

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

PROTECT WATERLINES IN PLACE. WHEREVER A WATERLINE IS ABOVE A STORM DRAIN OR SEWER WHERE COMPACTION REQUIREMENTS UNDER A WATERLINE CANNOT BE MET, BACKFILL TRENCH WITH CLASS II CONTROLLED LOW STRENGTH MATERIAL (CLSM) TO THE SPRINGLINE OF THE WATERLINE. THIS REQUIREMENT IS FOR STRUCTURAL SUPPORT ONLY. ADDITIONAL HEALTH REGULATIONS MAY APPLY PER UDACS 2.22.

NOTE TO CONTRACTOR

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

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FAST
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1-702-432-5300
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

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NOTE

ALL ONSITE STORM DRAINS AND ASSOCIATED STORM FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOA.

ALL PRIVATE STREETS ARE P.U.E., PUBLIC DRAINAGE EASEMENT AND PUBLIC SEWER EASEMENTS TO BE PRIVATELY MAINTAINED BY HOA.

WATER MAIN JOINT DEFLECTION, PER UDACS 2.07.01 AND 2.07.03

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ANNULAR SPACE BETWEEN PIPE AND CASING SHALL BE FILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM I) PER UDACS 2.10.05.

NOTE

CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY.

MINIMUM DEPTH DURING CONSTRUCTION

MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATIONS.

LVVWD NOTES

1. TO ENSURE LVVWD ACCESS WITHIN EASEMENT, ALL ABOVE GROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO, LANDSCAPING BOULDERS, FENCES/WALLS (TO INCLUDE NO FOOTINGS), AND SIGNS ARE STRICTLY PROHIBITED FROM EASEMENT.
2. FIRE SPRINKLER SYSTEM SHALL BE PLUMBED TO MASTER TOILET. NO EXCEPTIONS ALLOWED.
3. INSTALL PIPELINE MARKER BALLS PER UDACS PLATE NO. 15.
4. PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
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ENGINEER - STATE OF NEVADA - PROFESSIONAL
ROBERT A. MURYANE
Exp. 12/31/2023
CIVIL
No. 9889
DATE: 07/07/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 07-07-22
PLOT TIME: 11:23:07

GCW
ENGINEERS & SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

COREY ELLIS

F:\PROJECTS\100\V43-240\DWG\PRODUCTION\PHC\V43-240C-PH2-P.DWG

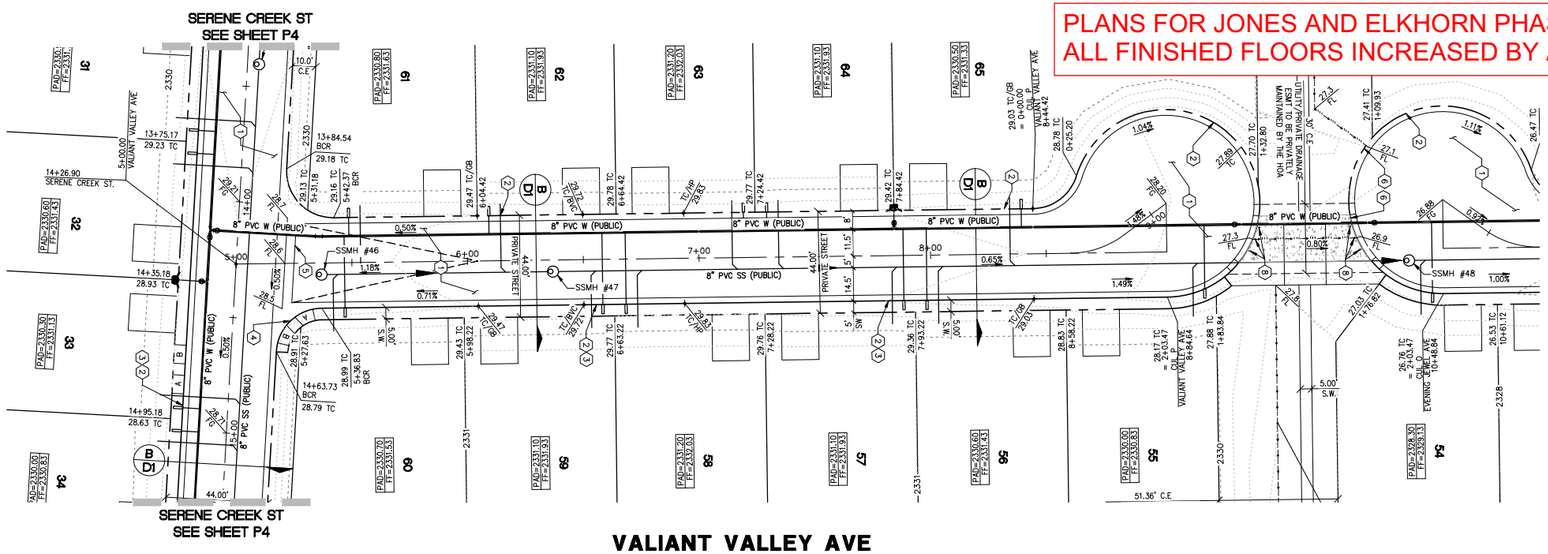
TOLL BROTHERS

JONES & ELKHORN
PHASE 2

GILDED HORIZON AVE PLAN AND PROFILE
BEGIN TO END

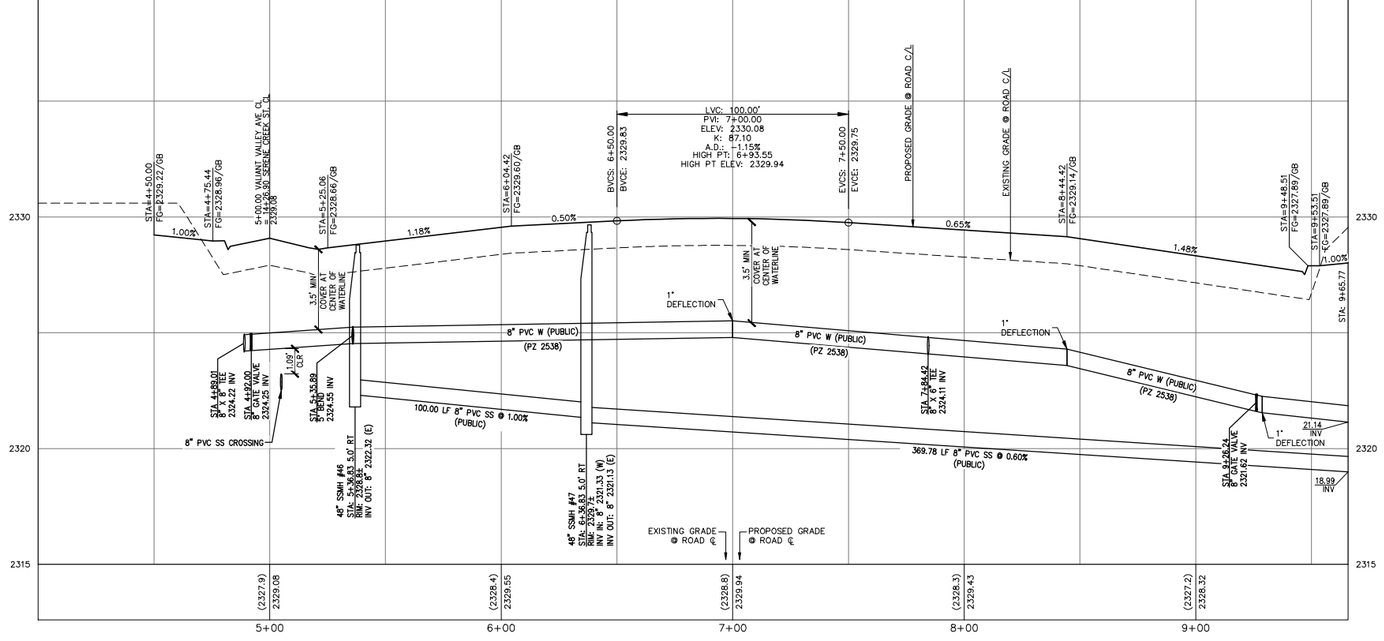
DRAWING
P8
19 OF 37 SHTS

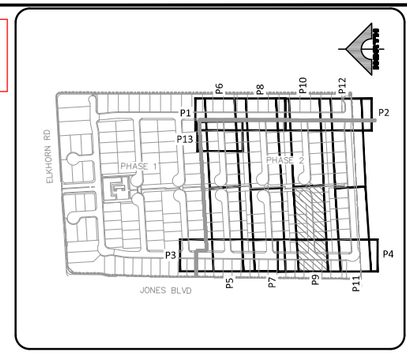
PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



VALIANT VALLEY AVE

(PRIVATE)
SCALE: HORIZ 1" = 30'
VERT. 1" = 3'





NORTH

30' 0' 15' 30' 60'
SCALE: 1" = 30'

CONSTRUCTION NOTES

1. CONSTRUCT 2" AC PAVEMENT WITH 4.5" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
2. CONSTRUCT 30" RESIDENTIAL ROLL CURB PER USDCCA NO. 217.2.S1
3. CONSTRUCT CONCRETE SIDEWALK PER USDCCA NO. 234.
4. CONSTRUCT SIDEWALK RAMP PER USDCCA NO. 235 CASE 1. SEE PLAN FOR "A" & "B" DIMENSION.
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7. CONSTRUCT 5' TRANSITION FROM "L" CURB TO RESIDENTIAL ROLL CURB PER DETAIL B SHEET D2.
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9. EXISTING FENCES & GATES TO BE REMOVED.
10. CONSTRUCT 2' SIDEWALK UNDERDRAIN PER USDCCA NO 236.

NO DEEP ROOTED TREES SHALL BE PLACED WITHIN 10 FEET OF THE OUTSIDE EDGE OF THE STORM DRAIN PIPE.

STORM DRAIN CONSTRUCTION NOTES

1. CONNECT TO EXISTING 18" RCP STORM DRAIN PER DETAIL H SHEET D3.
2. CONSTRUCT 48" TYPE I STORM DRAIN MANHOLE PER STD. DWG 403.
3. CONSTRUCT 5' TYPE "DM2" INLET PER STD DWG 412.1 & 421 WITH (2) SOLID GRATES.

BASIS OF BEARING

NORTH 00°40'04" EAST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 52, PAGE 70 OF SURVEYS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE:

L#: XX-XXXXX CLV#: XXXXXXXX

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REGISTERED PROFESSIONAL ENGINEER – STATE OF NEVADA
ROBERT A. MURYANE
Exp. 12/31/2023
CIVIL
No. 9889
DATE: 07/07/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 07-07-22
PLOT TIME: 11:23:14

GCW ENGINEERS & SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

CHECK: GCW PLOT DATE: 07-07-22 PLOT TIME: 11:23:14 DRAWN: GCW DESIGN: GCW PROJECT NO. 743-240

F:\PROJECTS\100\V43-240\CIVIL\PRODUCTION\PHASE\V43-240C-PH2-P.DWG

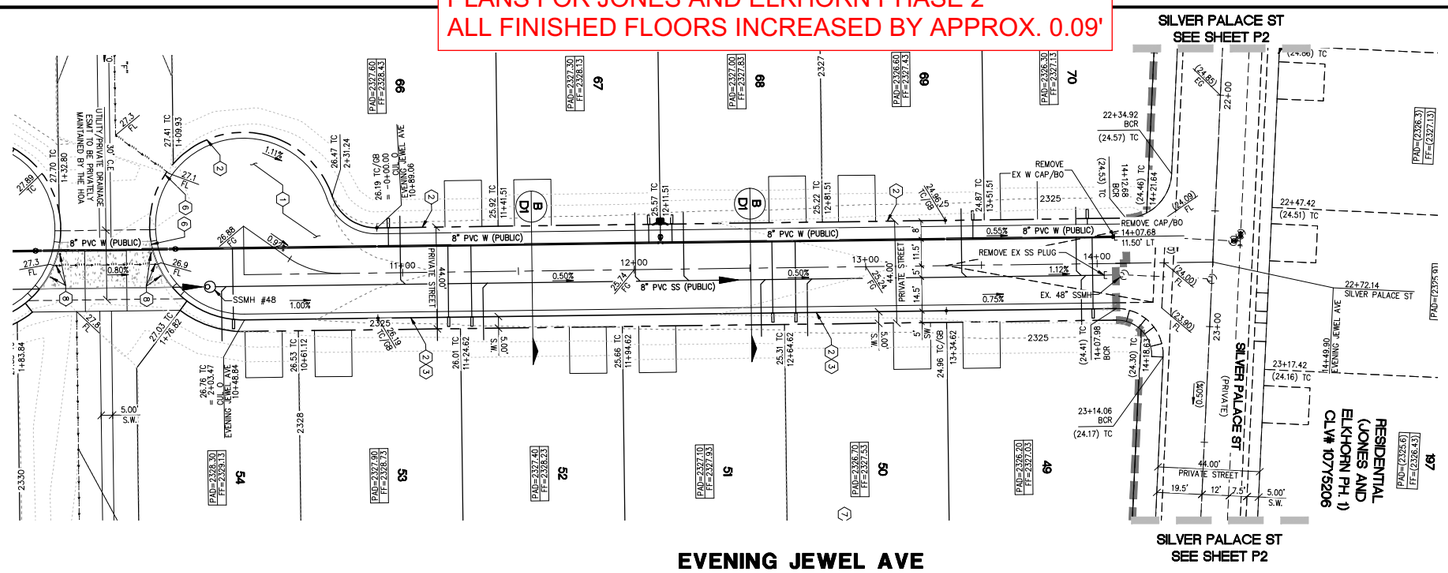
TOLL BROTHERS

JONES & ELKHORN
PHASE 2

VALIANT VALLEY AVE PLAN AND PROFILE
BEGIN TO END

DRAWING
P9
20 OF 37 SHTS

PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



EVENING JEWEL AVE

(PRIVATE)

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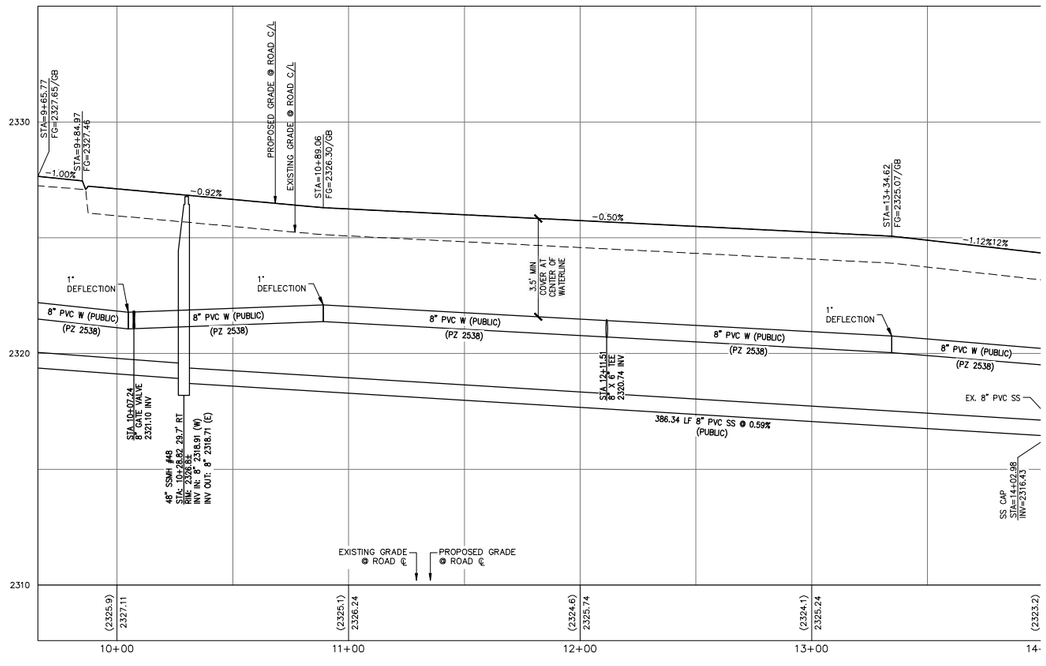

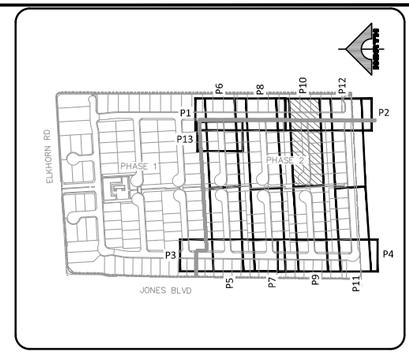

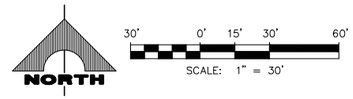

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DESIGN: GCW
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PLOT DATE: 07-07-22
PLOT TIME: 11:23:22

F:\PROJECTS\100\743-240\DWG\PRODUCTION\PHO\743-240C-PH2-P.DWG

TOLL BROTHERS

JONES & ELKHORN
PHASE 2

EVENING JEWEL AVE PLAN AND PROFILE
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P10
21 OF 37 SHTS

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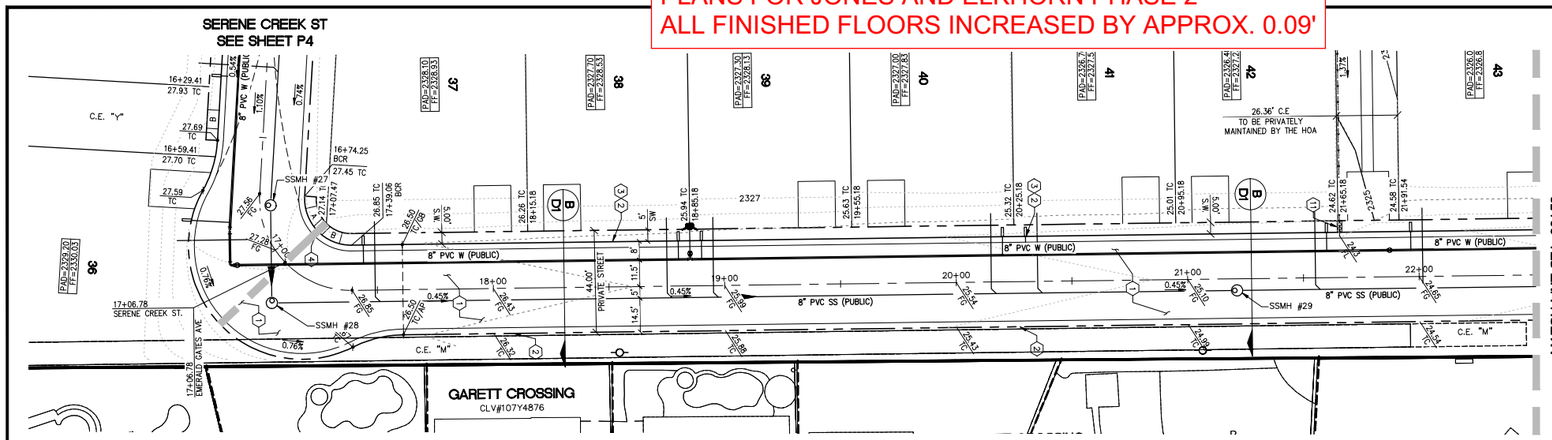

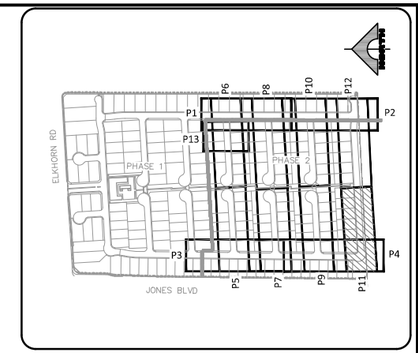

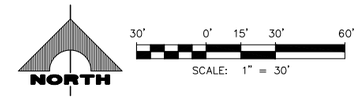

EMERALD GATES AVE

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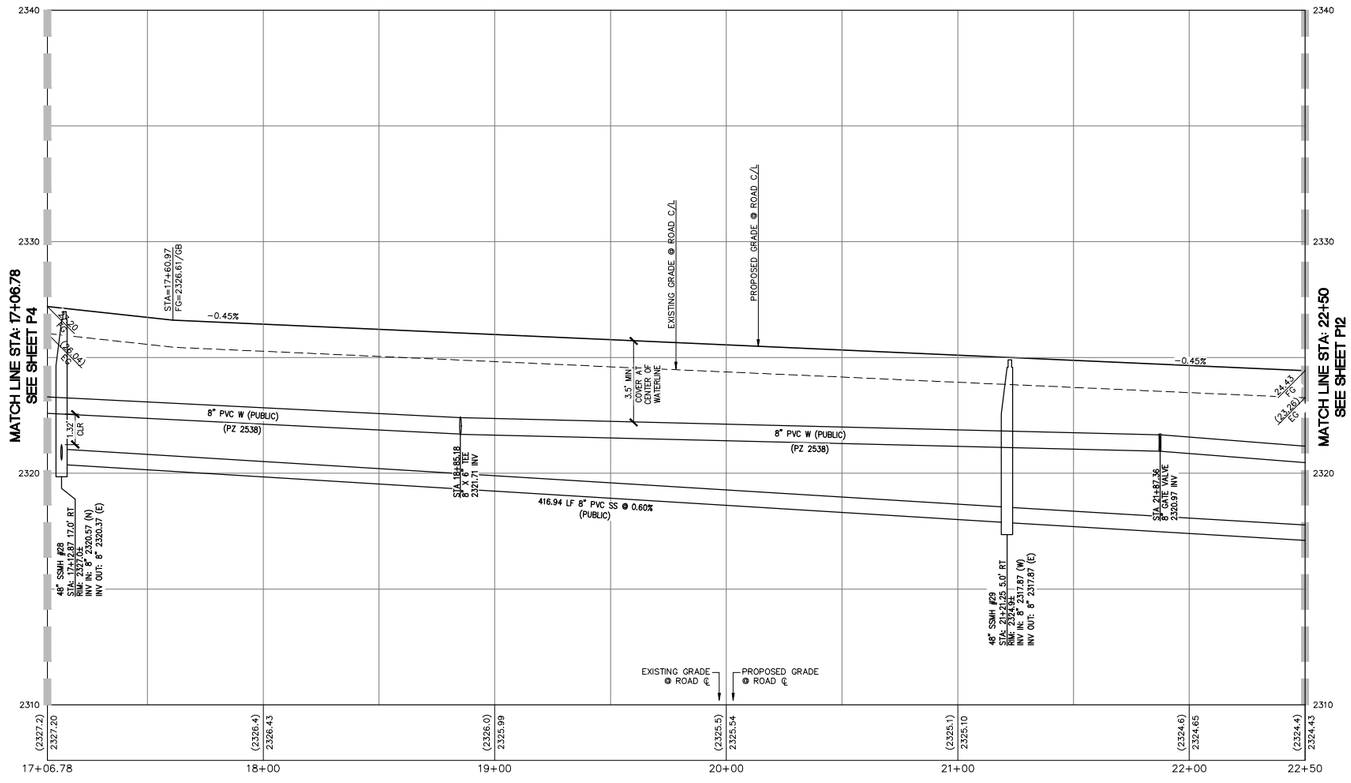

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BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE:

L#: XX-XXXXX CLV#: XXXXXXXX

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

PROTECT WATERLINES IN PLACE. WHEREVER A WATERLINE IS ABOVE A STORM DRAIN OR SEWER WHERE COMPACTION REQUIREMENTS UNDER A WATERLINE CANNOT BE MET, BACKFILL TRENCH WITH CLASS II CONTROLLED LOW STRENGTH MATERIAL (CLSM) TO THE SPRINGLINE OF THE WATERLINE. THIS REQUIREMENT IS FOR STRUCTURAL SUPPORT ONLY. ADDITIONAL HEALTH REGULATIONS MAY APPLY PER UDACS 2.22.

NOTE TO CONTRACTOR

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4. PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
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ENGINEER - STATE OF NEVADA
ROBERT A. MURYANE
Exp. 12/31/2023
CIVIL
No. 9889
PROFESSIONAL
DATE: 07/07/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 07-07-22
PLOT TIME: 11:23:32

GCW ENGINEERS & SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
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F: 702.804.2299
gcwengineering.com

OBREY ELLIS

F:\PROJECTS\100\V43-240\DWG\PRODUCTION\PHI\V43-240C-PH2-P.DWG

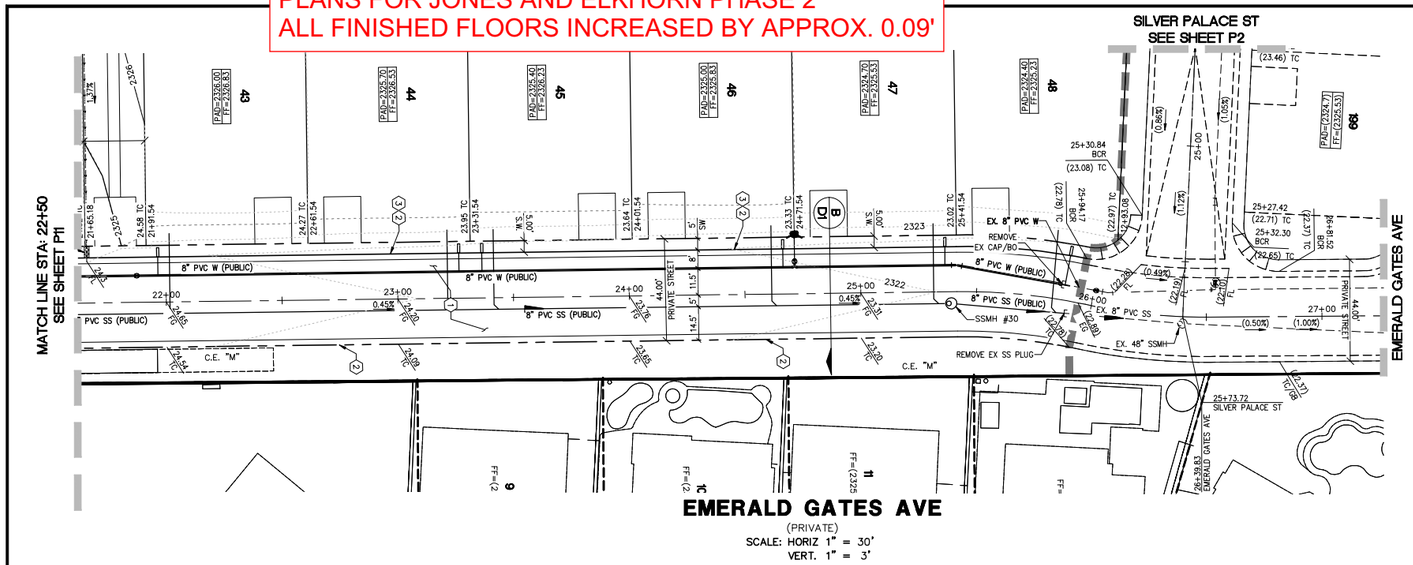
TOLL BROTHERS

JONES & ELKHORN
PHASE 2

EMERALD GATES AVE PLAN AND PROFILE
BEGIN TO STA 8+50

DRAWING
P11
22 OF 37 SHTS

PLANS FOR JONES AND ELKHORN PHASE 2
ALL FINISHED FLOORS INCREASED BY APPROX. 0.09'



EMERALD GATES AVE

(PRIVATE)
SCALE: HORIZ 1" = 30'
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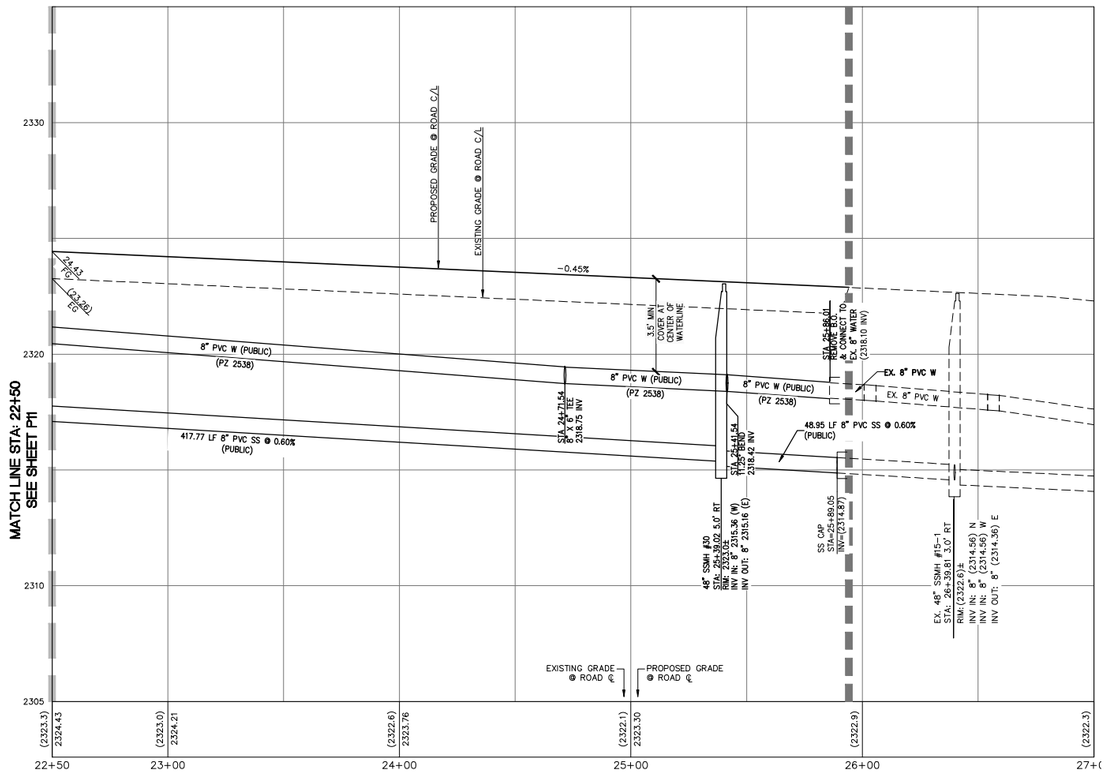

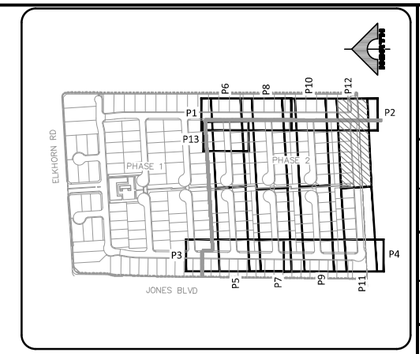

NORTH

30' 0' 15' 30' 60'
SCALE: 1" = 30'

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PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 07-07-22
PLOT TIME: 11:23:42

GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

CHECKED: CHRIS ELLIS
P:\PROJECTS\700\743-240\DWG\PRODUCTION\PHS\743-240C-PH2-P.DWG

TOLL BROTHERS
JONES & ELKHORN
PHASE 2
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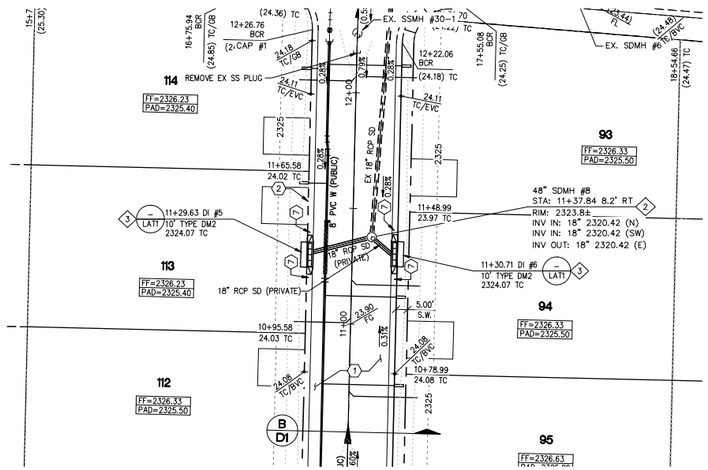

STORM DRAIN LATERAL 1

(PUBLIC)
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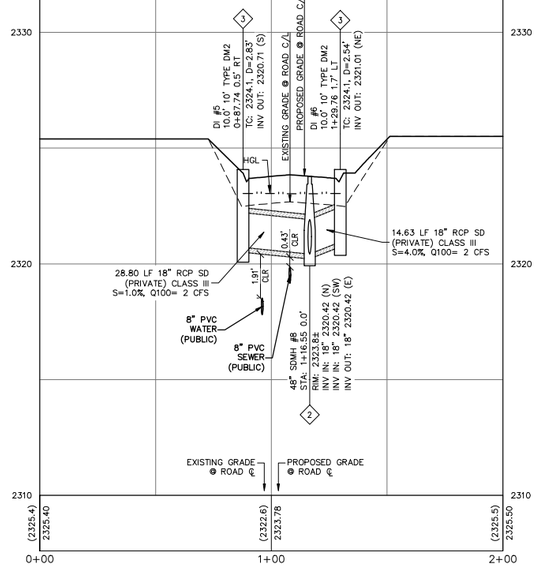

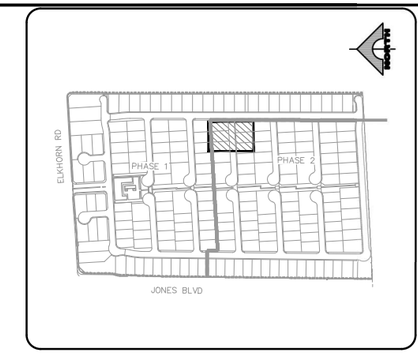

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PROJECT NO. XXXXXX FIRST APPROVAL DATE:

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PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
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PLOT TIME: 11:23:46

GCW
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OBREY ELLIS

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DRAWING
P13
24 OF 37 SHTS