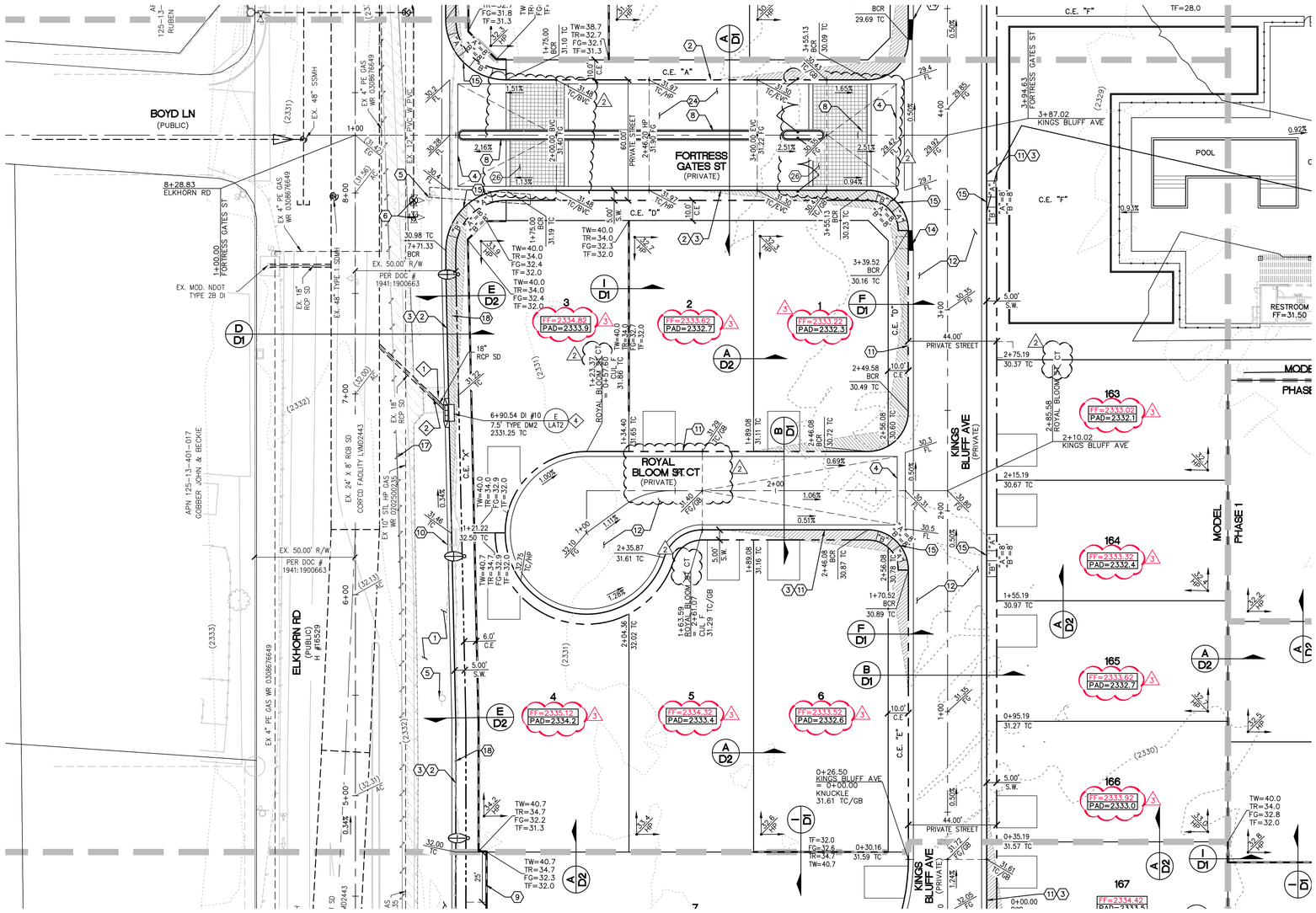

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09/20/2022
ROBERT A. MURNANE, P.E. 9680 — DATE

L#: 22-00068 CLV#: 107Y5206

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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).

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RAW CUT	13,832	C.Y.
RAW FILL	226,412	C.Y.
NET FILL	212,580	C.Y.

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

PROFESSIONAL ENGINEER - STATE OF NEVADA - ROBERT A. MURNANE - No. 9680 - Exp. 12/31/2023 - 09/20/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
A	07/14/22	REVISED 1ST SUBMITTAL COMMENTS. LEON SAWCUT, STREET NAMES, & LOT LOCATIONS.				
B	07/27/22	ADD MARKERS & LOT 7 PROPERTY LINE				

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:12:34

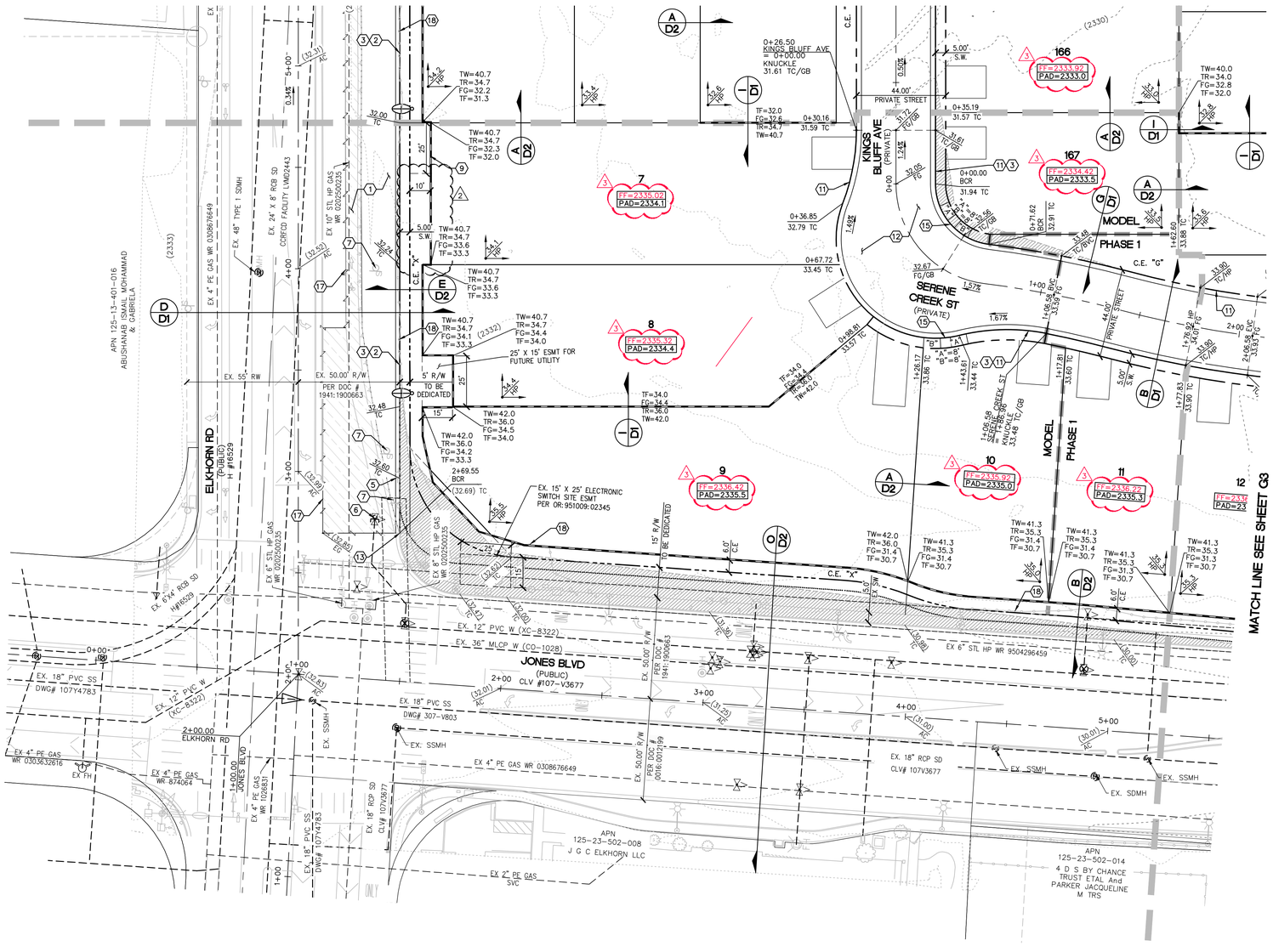
GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

SCOTT MARSHALL

F:\PROJECTS\7XX\743-240\DWG\PRODUCTION\PH1\743-240C-PH1-GDWG

TOLL BROTHERS
JONES & ELKHORN
PHASE 1
GRADING PLAN 1

DRAWING
G1
4 OF 64 SHTS


MATCH LINE SEE SHEET G1
MATCH LINE SEE SHEET G3
ELKHORN RD
(PUBLIC)
H #16529
KINGS BLUFF AVE
(PRIVATE)
SERENE CREEK ST
(PRIVATE)
JONES BLVD
(PUBLIC)
CLV #107-V3677
MODEL
PHASE 1
APN 125-13-401-016
ABUSHANAB ISMAIL MOHAMAD
& GABRIELA
APN 125-23-502-008
J G C ELKHORN LLC
APN 125-23-502-014
4 D S BY CHANCE
TRUST ETAL And
PARKER JACQUELINE
M TRS
EX. 48" TYPE 1 SDMH
EX. 24" X 8' RCB SD
CORFCD FACILITY LVM02443
EX. 10" STL HP GAS
WR 0202500235
EX. 4" PE GAS WR 0308676649
EX. 55' R/W
EX. 50.00' R/W
PER DOC # 1941:1900663
5' R/W TO BE DEDICATED
25' X 15' ESMT FOR FUTURE UTILITY
EX. 15' X 25' ELECTRONIC SWITCH SITE ESMT PER OR:951009:02345
15' R/W TO BE DEDICATED
EX. 12" PVC W (XC-8322)
EX. 36" MLCP W (CO-1028)
EX. 18" PVC SS
DWG# 107Y4783
DWG# 307-V803
EX. SSMH
EX. 18" RCP SD
CLV# 107V3677
EX. SDMH
EX. 6" STL HP WR 9504296459
EX. 6"X4" RCB SD
EX. 4" PE GAS WR 0308676649
EX. 4" PE GAS WR 0303632616
EX. 4" PE GAS WR 874064
EX. 4" PE GAS WR 1038671
EX. 2" PE GAS SVC
EX FH
0+26.50 KINGS BLUFF AVE = 0+00.00 KNUCKLE 31.61 TC/GB
0+30.16 31.59 TC
0+35.19 31.57 TC
0+00.00 BCR 31.94 TC
0+36.85 32.79 TC
0+67.72 33.45 TC
0+71.62 BCR 32.91 TC
1+06.58 = 2+69.55 BCR 33.48 TC/GB
1+62.60 33.88 TC
1+77.83 33.60 TC
2+06.58 33.93 TC
2+69.55 BCR (32.69) TC
44.00' PRIVATE STREET
166 FF=2333.92 PAD=2333.0
167 FF=2334.42 PAD=2333.5
7 FF=2335.02 PAD=2334.1
8 FF=2335.42 PAD=2334.4
9 FF=2336.42 PAD=2335.5
10 FF=2336.92 PAD=2335.0
11 FF=2336.42 PAD=2336.3
12 FF=2336 PAD=23
TW=40.7 TR=34.7 FG=32.2 TF=31.3
TW=40.7 TR=34.7 FG=32.3 TF=32.0
TW=40.7 TR=34.7 FG=33.6 TF=33.3
TW=40.7 TR=34.7 FG=34.1 TF=33.3
TW=40.7 TR=34.7 FG=34.4 TF=34.0
TW=42.0 TR=36.0 FG=34.5 TF=34.0
TW=42.0 TR=36.0 FG=34.2 TF=33.3
TW=42.0 TR=36.0 FG=31.4 TF=30.7
TW=41.3 TR=35.3 FG=31.4 TF=30.7
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TW=40.0 TR=34.0 FG=32.8 TF=32.0
TF=32.0 FG=32.6 TR=34.7 TW=40.7
TF=34.0 FG=34.4 TR=36.0 TW=42.0
(2333)
(2332)
(2330)
(32.59) AC
(32.31) AC
(32.01) AC
(31.45) AC
(31.00) AC
(30.83) AC
(30.61) AC
(30.60) AC
(32.80) AC
(32.88) AC
(32.84) AC
(32.80) AC
(32.80) AC
(32.80

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L#: 22-00068 CLV#: 107Y5206

PROFESSIONAL ENGINEER – STATE OF NEVADA – No. 9680 – ROBERT A. MURNANE – Exp. 12/31/2023 – CIVIL

REV	DATE	DESCRIPTION
1	09/16/22	REVISED P.E. AND P.O.B. ELEVATIONS
2	07/7/22	REVISED PARK AND LOT LOCATION. LEON SAWCUT, STREET NAMES, REVISED LOT 7 PROPERTY LINE

	DATE	APP
DESIGN: GCW		
DRAWN: GCW		
CHECK: GCW		
PLOT DATE: 09-20-22		
PLOT TIME: 16:12:39		

PROJECT NO. 743-240

GCW ENGINEERS \ SURVEYORS
1556 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

S:\GIT MARSHALL\PROJECTS\700\743-240\DWG\PRODUCTION\PHI\743-240C-PHI-G.DWG

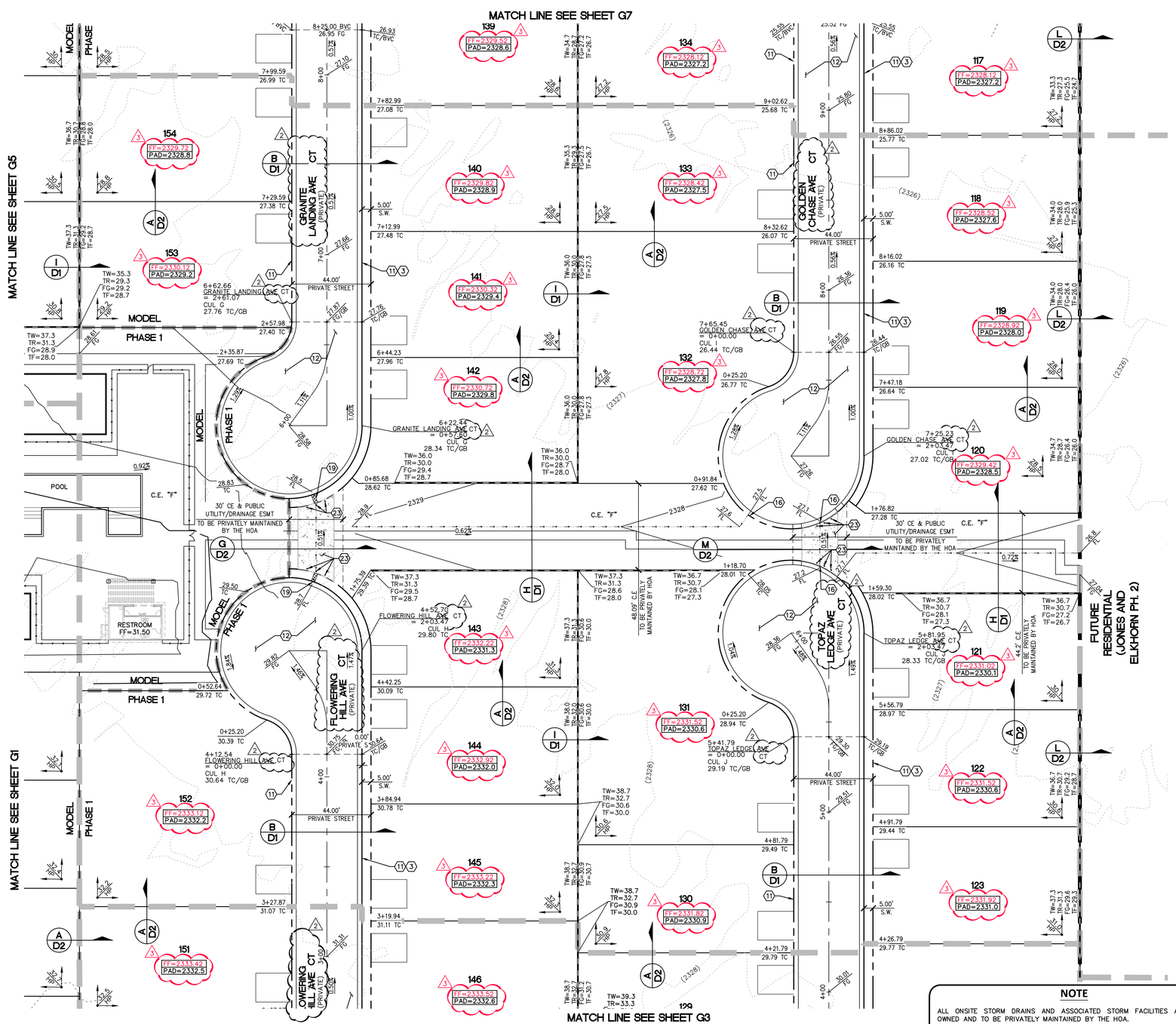
TOLL BROTHERS

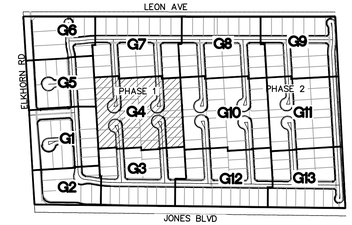
JONES & ELKHORN
PHASE 1

GRADING PLAN 3

DRAWING G3

6 OF 64 SHTS





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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.

09/20/2022

ROBERT A. MURNANE, P.E. 9680 — DATE

NOTE

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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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EARTHWORKS

RAW CUT	=	13,832	C.Y.
RAW FILL	=	226,412	C.Y.
NET FILL	=	212,580	C.Y.

Call before you Dig
AVOID cutting underground utility lines. It's costly.
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FAST Call before you UnderGround 1-702-432-5300
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

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1-702-227-2929

L#: 22-00068 CLV#: 107Y5206

PROFESSIONAL ENGINEER – STATE OF NEVADA – No. 9680 – ROBERT A. MURNANE – Exp. 12/31/2023 – CIVIL

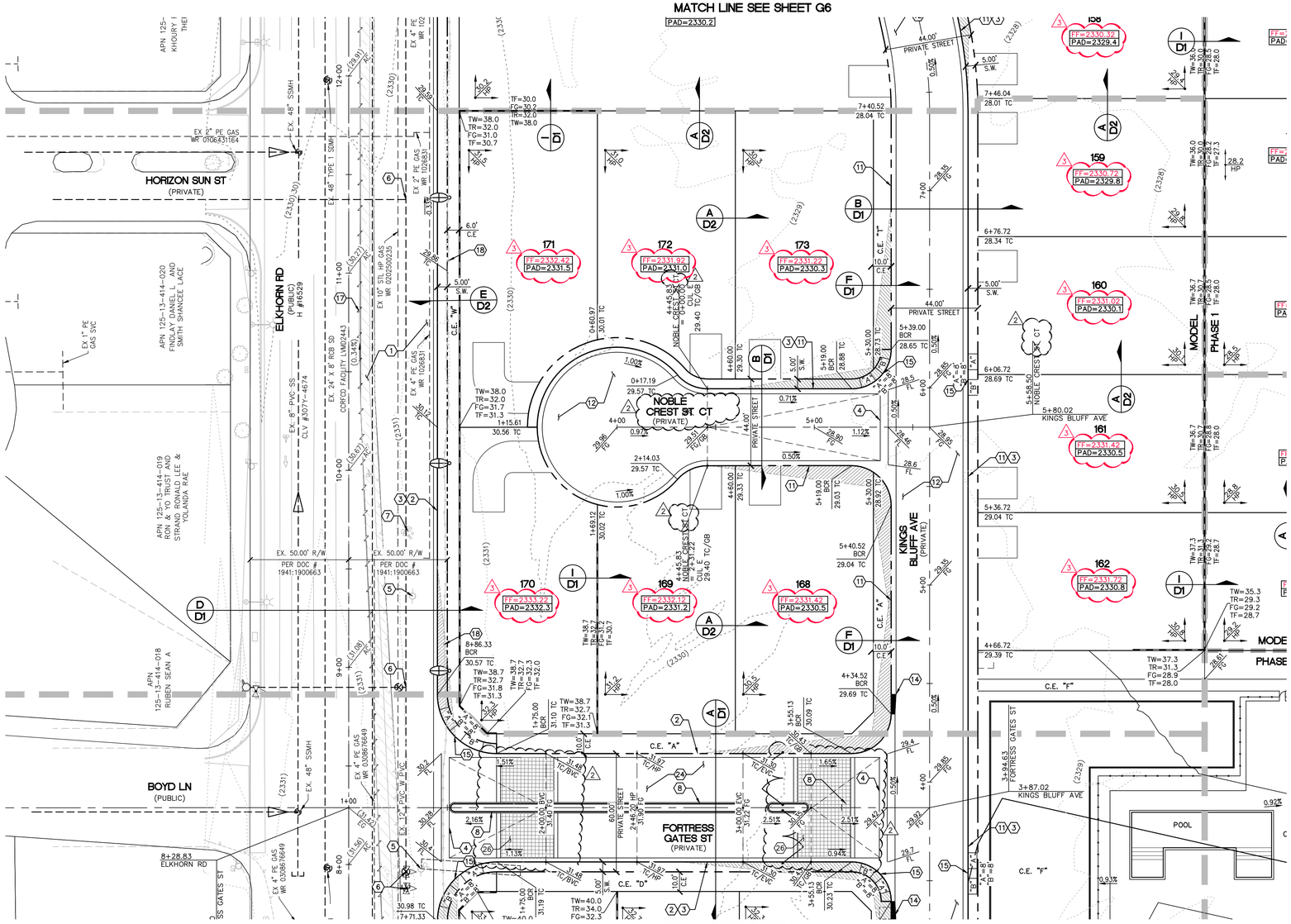
REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
A	05/16/22	REVISED F & MID PAD ELEVATIONS, LEON SAMOUT, STREET NAMES, REVISED LOT 7 PROPERTY LINE				
B	07/12/22	ENTRY, MINOR R & D REVISIONS				

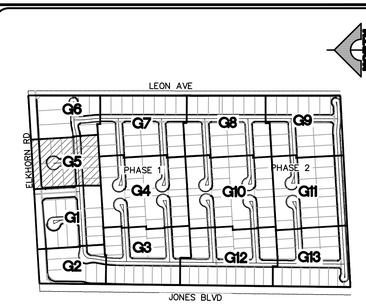
PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:12:42

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\GWE\PRODUCTION\PH1\743-240C-PH1-GDWG
SCOTT MARSHALL

TOLL BROTHERS
JONES & ELKHORN PHASE 1
GRADING PLAN 4

DRAWING G4
7 OF 64 SHTS





KEY MAP
NTS

NORTH

30' 0' 15' 30' 60'

SCALE: 1" = 30'

CONSTRUCTION NOTES

1. CONSTRUCT 5.5" AC PAVEMENT WITH 9" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
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 PAVEMENT WITH 4.5" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021. SAWCUT & MATCH TO EXISTING CURB & SIDEWALK. CONTRACTOR SHALL VERIFY EX. LOCATION & PAVEMENT PRIOR TO CONSTRUCTION.
13. CONSTRUCT 10' TRANSITION FROM "L" CURB TO RESIDENTIAL ROLL CURB PER DETAIL B SHEET D3.
14. CONSTRUCT SIDEWALK RAMP PER USDCCA NO. 235 CASE 1. SEE PLAN FOR "A" & "B" DIMENSION.
15. CONSTRUCT CURB OPENING WITH TRANSITION PER DETAIL D SHEET D3.
16. SAWCUT AND MATCH EXISTING PAVEMENT.
17. EXISTING FENCES & GATES TO BE REMOVED.
18. CONSTRUCT 2' SIDEWALK UNDERDRAIN PER USDCCA NO. 236.
19. CONSTRUCT 5' VALLEY GUTTER PER DETAIL E SHEET D3.
20. CONSTRUCT 5' TRANSITION FROM "L" CURB TO RESIDENTIAL ROLL CURB PER DETAIL C SHEET D3.
21. CONSTRUCT FENCE & SURFACE PER USDCCA NO. 425.S1.
22. CONSTRUCT COLLAPSIBLE BOLLARDS PER DETAIL K ON SHEET D3 & CONSTRUCT SURFACE PER USDCCA NO. 425.S1.
23. CONSTRUCT 3" AC PAVEMENT WITH 5" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
24. CONSTRUCT 5' WROUGHT IRON PEDESTRIAN ACCESS GATE PER DETAIL J ON SHEET D3.
25. INSTALL CONCRETE PAVERS AND BANDS PER DETAIL L ON SHEET D3

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.
7. CONSTRUCT 60" TYPE I STORM DRAIN MANHOLE PER STD. DWG 403.
8. CONSTRUCT 60" TYPE III STORM DRAIN MANHOLE PER STD. DWG 406.

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FLOOD ZONE NOTE

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ROBERT A. MURNANE, P.E. 9680 — DATE 09/20/2022

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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)
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gcwengineering.com

PROFESSIONAL ENGINEER – STATE OF NEVADA – No. 9680 – ROBERT A. MURNANE – Exp. 12/31/2023 – CIVIL

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
A	09/16/22	PER CITY & PW COMMENTS	LEON SAWCUT,			
B	07/12/22	PER CITY & PW COMMENTS	STREET NAMES, REVISED LOT / PROPERTY LINE			

DATE: 09/20/2022

PROJECT NO. 743-240

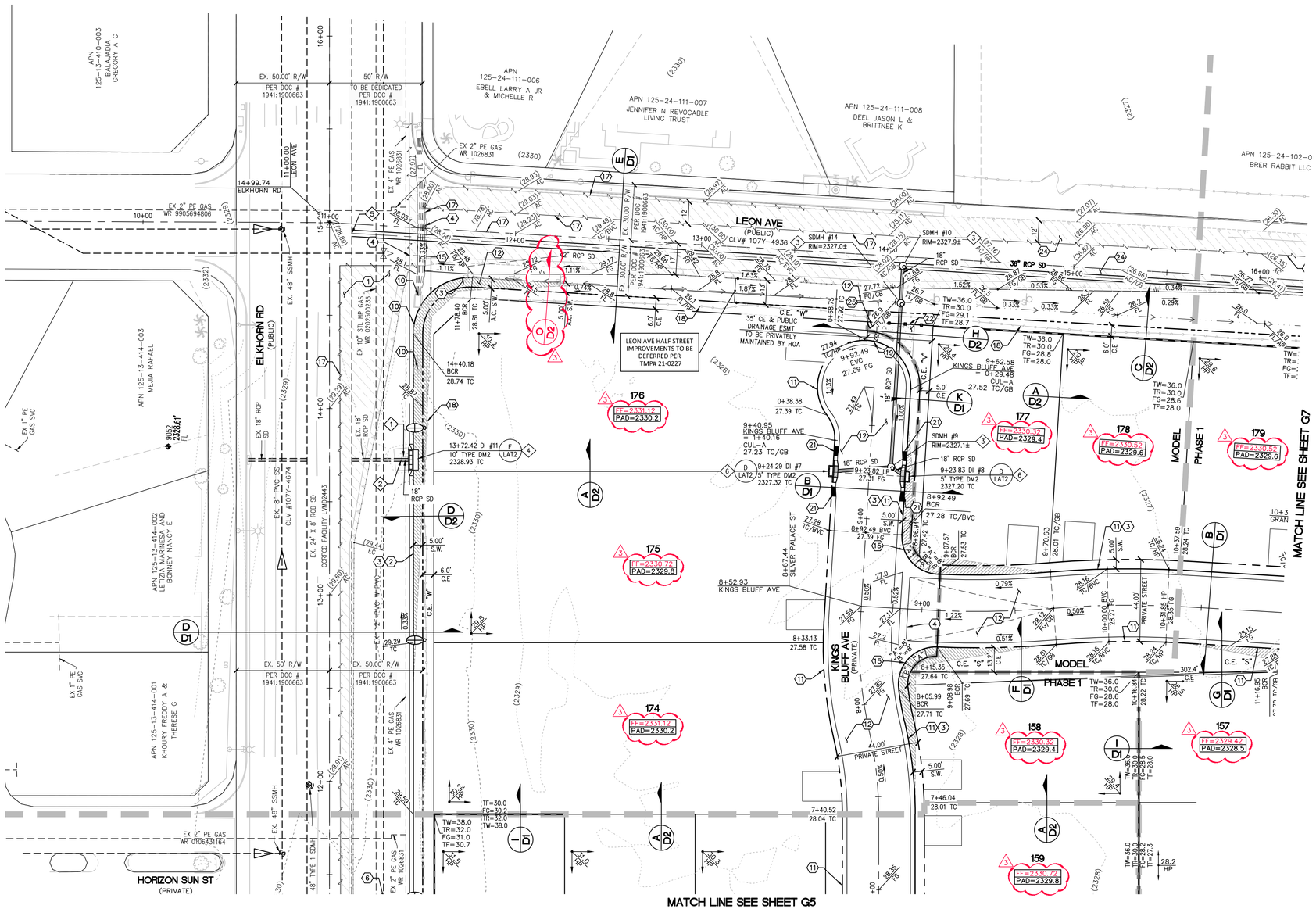
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:12:44

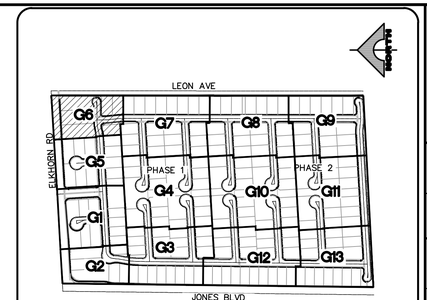
F:\PROJECTS\7XX\743-240\DWG\PRODUCTION\PH1\743-240C-PH1-G.DWG
SCOTT MARSHALL

TOLL BROTHERS
JONES & ELKHORN PHASE 1
GRADING PLAN 5

DRAWING G5
8 OF 64 SHTS

L#: 22-00068 CLV#: 107Y5206





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ROBERT A. MURNANE, P.E. 9680 — 09/20/2022 (DATE)

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L#: 22-00068 CLV#: 107Y5206

STATE OF NEVADA — PROFESSIONAL ENGINEER — ROBERT A. MURNANE No. 9680 — CIVIL — Exp. 12/31/2023 — DATE: 09/20/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
1	09/15/22	REVISED FF AND PAD ELEVATIONS, ADDED DETAIL FLAG "O"				

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:12:46

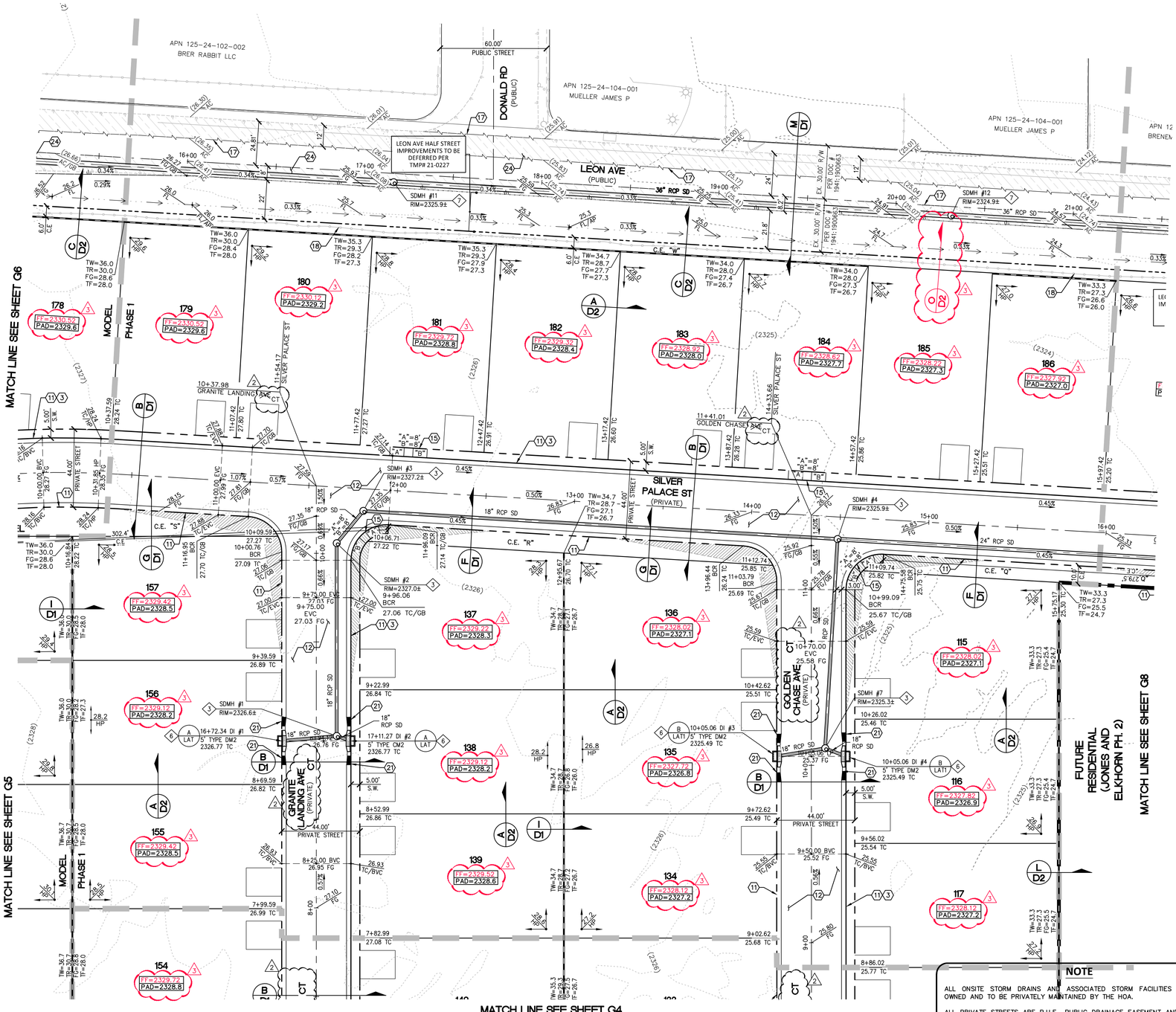
GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

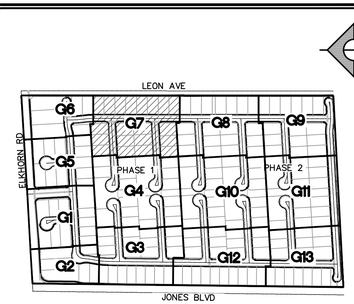
F:\PROJECTS\700\743-240\DWG\PRODUCTION\PHI\743-240C-PHI-GDWG

SCOTT MARSHALL

TOLL BROTHERS
JONES & ELKHORN
PHASE 1
GRADING PLAN 6

DRAWING
G6
9 OF 64 SHTS





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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.

09/20/2022

ROBERT A. MURNANE, P.E. 9680 — DATE

NOTE

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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).

SVZ NOTE

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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	=	13,832	C.Y.
RAW FILL	=	226,412	C.Y.
NET FILL	=	212,580	C.Y.

Call before you Dig
Avoid cutting underground utility lines. It's costly.
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1-702-227-2929

L#: 22-00068 CLV#: 107Y5206

PROFESSIONAL ENGINEER - STATE OF NEVADA - ROBERT A. MURNANE - No. 9680 - Exp. 12/31/2023 - CIVIL

DATE: 09/20/2022

REV	DATE	DESCRIPTION
A	07/11/22	REVISED E.F. AND FF ELEVATIONS, ADDED MORE 14.40' "D"
B	09/14/22	REVISED E.F. AND FF ELEVATIONS, LEON SHARED, STREET NAMES, REVISED LOT / PROPERTY LINE.

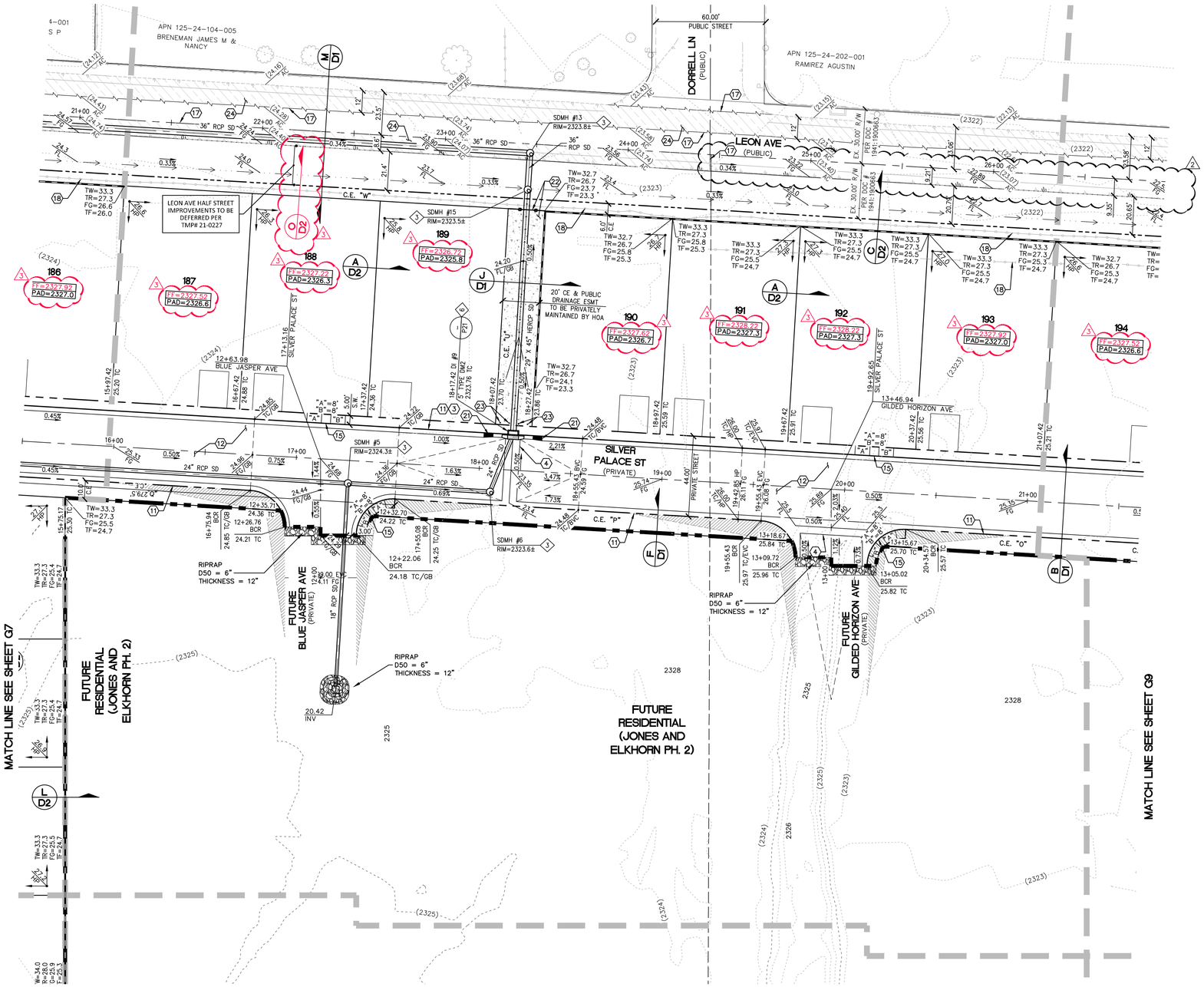
PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:12:48

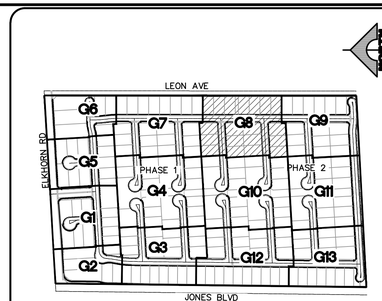
GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\PROJECTS\Y2021\Y43-240\DWG\PRODUCTION\Y43-240C-PHI-G2.DWG
SCOTT MARSHALL

TOLL BROTHERS
JONES & ELKHORN PHASE 1
GRADING PLAN 7

DRAWING G7
10 OF 64 SHTS





KEY MAP
NTS

NORTH

30' 0' 15' 30' 60'

SCALE: 1" = 30'

CONSTRUCTION NOTES

1. CONSTRUCT 5.5" AC PAVEMENT WITH 9" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
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 PAVEMENT WITH 4.5" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021. SAWCUT & MATCH TO EXISTING CURB & SIDEWALK. CONTRACTOR SHALL VERIFY EX. LOCATION & PAVEMENT PRIOR TO CONSTRUCTION.
13. CONSTRUCT 10' TRANSITION FROM "L" CURB TO RESIDENTIAL ROLL CURB PER DETAIL B SHEET D3.
14. CONSTRUCT SIDEWALK RAMP PER USDCCA NO. 235 CASE 1. SEE PLAN FOR "A" & "B" DIMENSION.
15. CONSTRUCT CURB OPENING WITH TRANSITION PER DETAIL D SHEET D3.
16. SAWCUT AND MATCH EXISTING PAVEMENT.
17. EXISTING FENCES & GATES TO BE REMOVED.
18. CONSTRUCT 2' SIDEWALK UNDERDRAIN PER USDCCA NO. 236.
19. CONSTRUCT 5' VALLEY GUTTER PER DETAIL E SHEET D3.
20. CONSTRUCT 5' TRANSITION FROM "L" CURB TO RESIDENTIAL ROLL CURB PER DETAIL C SHEET D3.
21. CONSTRUCT FENCE & SURFACE PER USDCCA NO. 425.S1.
22. CONSTRUCT COLLAPSIBLE BOLLARDS PER DETAIL K ON SHEET D3 & CONSTRUCT SURFACE PER USDCCA NO. 425.S1.
23. CONSTRUCT 3" AC PAVEMENT WITH 5" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
24. CONSTRUCT 5' WROUGHT IRON PEDESTRIAN ACCESS GATE PER DETAIL J ON SHEET D3.
25. INSTALL CONCRETE PAVERS AND BANDS PER DETAIL L ON SHEET D3

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.
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DRAINAGE CERTIFICATION

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09/20/2022

ROBERT A. MURNANE, P.E. 9680 — DATE

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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)

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L#: 22-00068 CLV#: 107Y5206

PROFESSIONAL ENGINEER - STATE OF NEVADA - No. 9680 - ROBERT A. MURNANE - Exp. 12/31/2023 - CIVIL
DATE: 09/20/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
A	07/14/22	REVISED PER 1ST PW REVIEW COMMENTS				
B	07/27/22	REVISED PER PW COMMENTS				
C	09/16/22	ADDED ELEVATIONS, KNOX BOX, ETC.				
D	09/19/22	REVISED PER PW COMMENTS				
E	09/20/22	STREET NAMES, REVISED LOT / PROPERTY LINE				

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:12:51
SCOTT MARSHALL

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

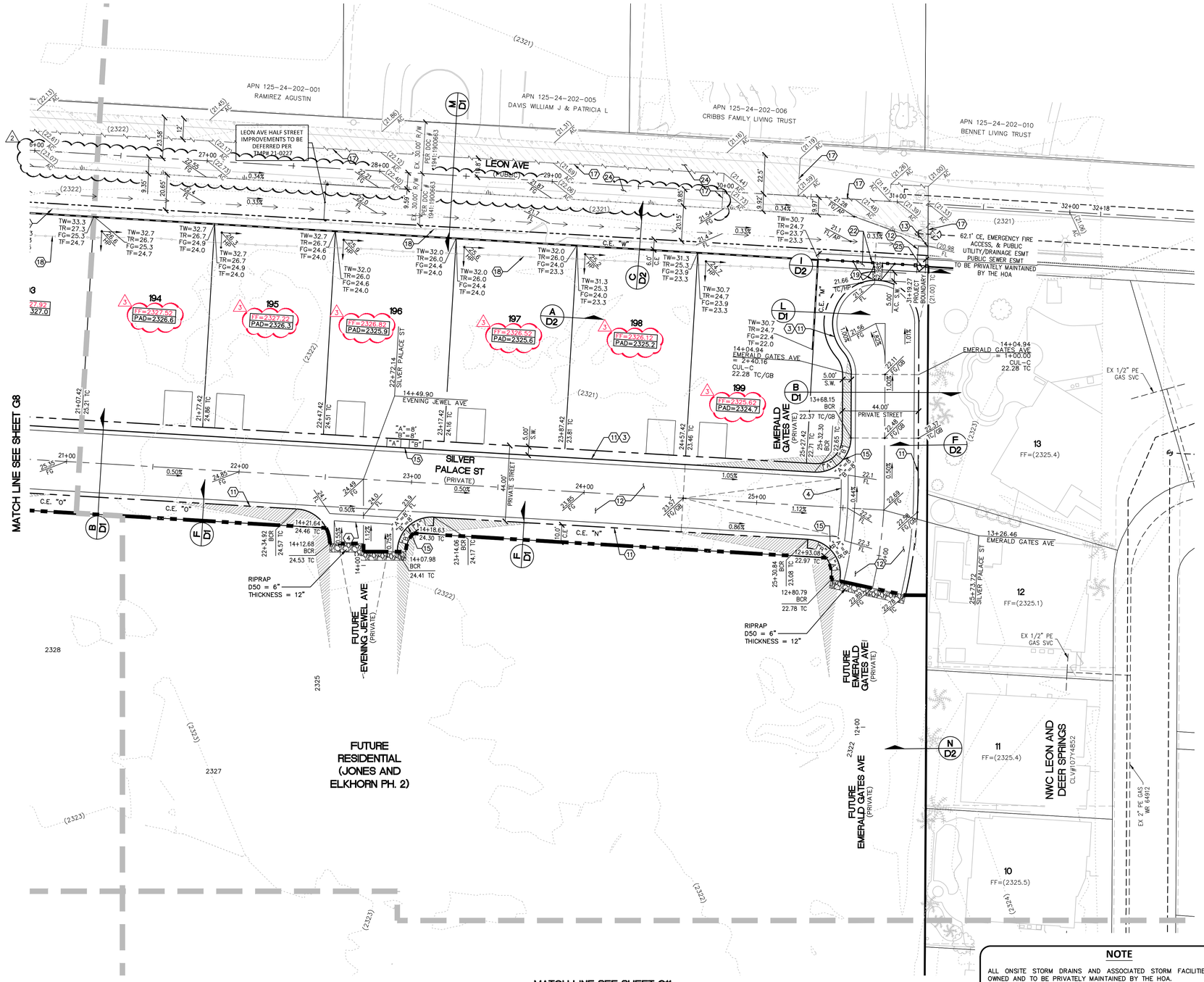
F:\PROJECTS\V700\743-240\DWG\PRODUCTION\PH1\743-240C-PH1-GLOWG

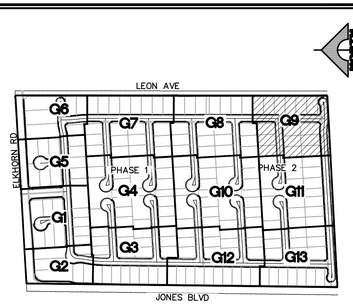
TOLL BROTHERS

JONES & ELKHORN
PHASE 1

GRADING PLAN 8

DRAWING
G8
11 OF 64 SHTS





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ROBERT A. MURNANE, P.E. 9680 — DATE

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PROFESSIONAL ENGINEER - STATE OF NEVADA - ROBERT A. MURNANE - No. 9680 - Exp. 12/31/2023 - CIVIL - DATE: 09/20/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
A	09/16/22	REVISED F.F. AND PAD ELEVATIONS, LEON SAWCUT, STREET NAMES, REVISED LOT / PROPERTY LINE				
B	07/12/22	REVISED 4 YEAR PLAN				

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:12:54

GCW ENGINEERS \ SURVEYORS
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LAS VEGAS, NV 89146
T: 702.804.2000
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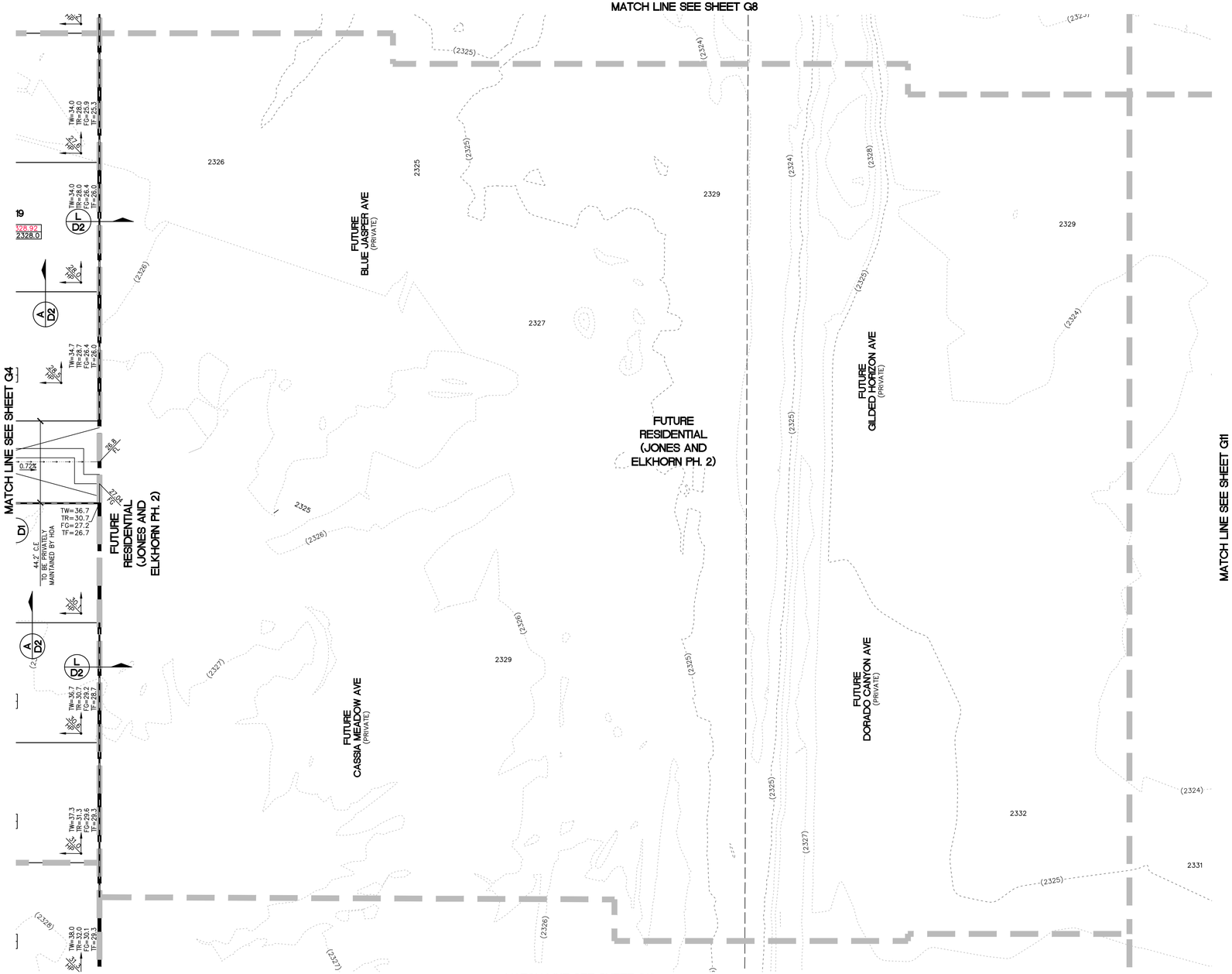
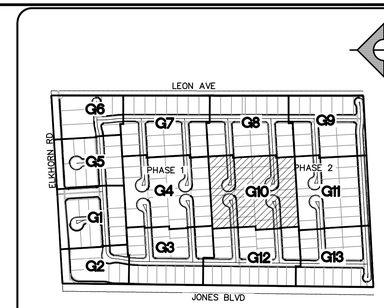
F:\PROJECTS\720\V43-240\DWG\PRODUCTION\PH1\V43-2400-PH1-GDWG

SCOTT MARSHALL

TOLL BROTHERS
JONES & ELKHORN PHASE 1
GRADING PLAN 9

DRAWING G9
12 OF 64 SHTS





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26. INSTALL CONCRETE PAVERS AND BANDS PER DETAIL L ON SHEET D3

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.
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FLOOD ZONE NOTE

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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.

09/20/2022

ROBERT A. MURNANE, P.E. 9680 — DATE

NOTE

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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).

SVZ NOTE

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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	= 13,832	C.Y.
RAW FILL	= 226,412	C.Y.
NET FILL	= 212,580	C.Y.

Call before you Dig
Avoid cutting underground utility lines. It's costly.
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1-702-227-2929

L#: 22-00068 CLV#: 107Y5206

ENGINEER - STATE OF NEVADA - PROFESSIONAL - ROBERT A. MURNANE - No. 9680 - Exp. 12/31/2023 - DATE: 09/20/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE

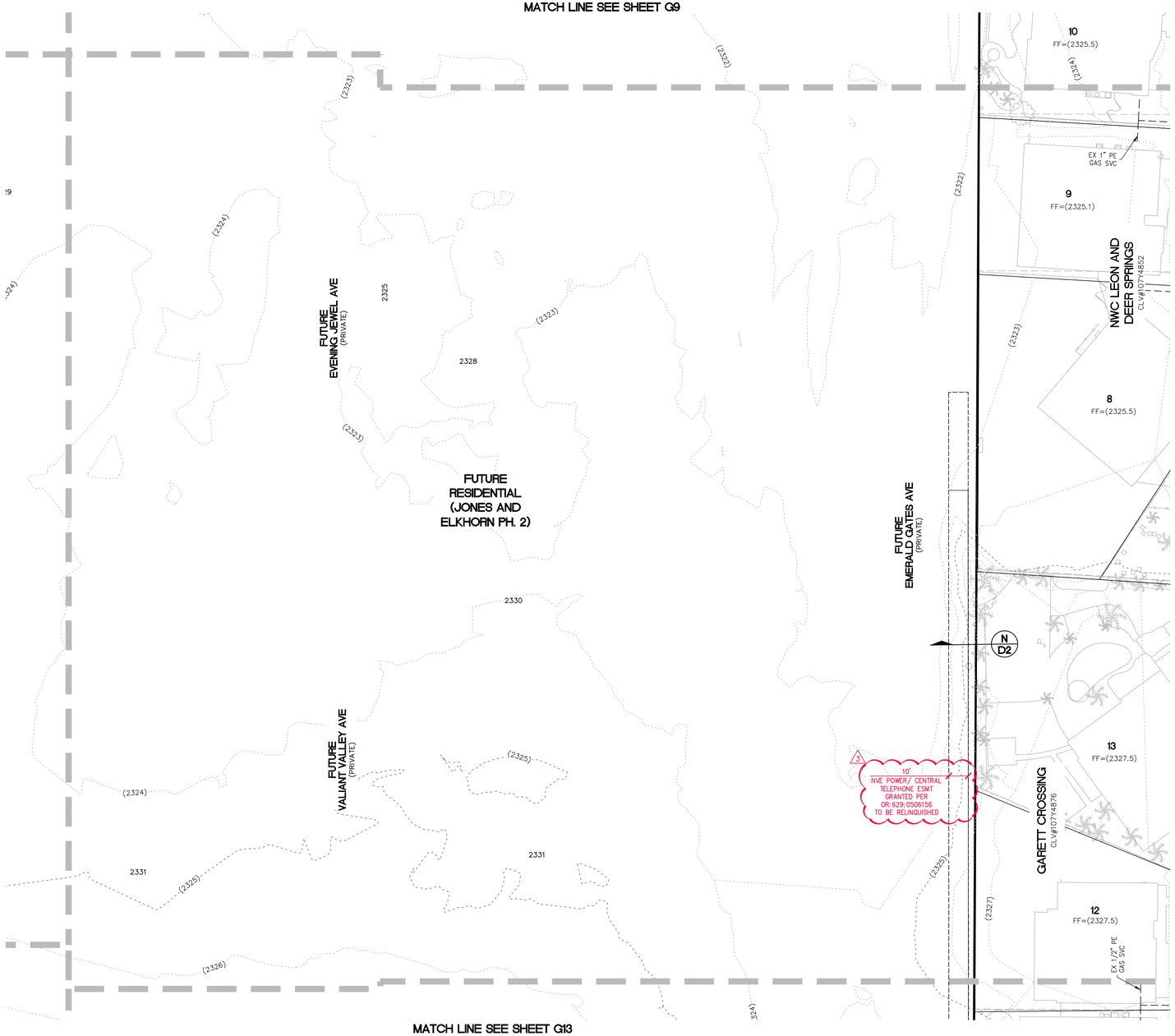
PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:12:56

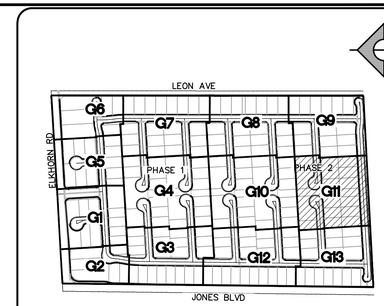
GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

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

TOLL BROTHERS
JONES & ELKHORN PHASE 1
GRADING PLAN 10

DRAWING G10
13 OF 64 SHTS





KEY MAP
NTS

NORTH

30' 0' 15' 30' 60'

SCALE: 1" = 30'

CONSTRUCTION NOTES

1. CONSTRUCT 5.5" AC PAVEMENT WITH 9" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
2. CONSTRUCT "L" CURB PER USDCCA NO. 216.
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10. EX. STRUCTURE – TO BE RELOCATED.
11. CONSTRUCT 30" RESIDENTIAL ROLL CURB PER USDCCA NO. 217.2.S1
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17. SAWCUT AND MATCH EXISTING PAVEMENT.
18. EXISTING FENCES & GATES TO BE REMOVED.
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20. CONSTRUCT 5' VALLEY GUTTER PER DETAIL E SHEET D3.
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09/20/2022

ROBERT A. MURNANE, P.E. 9680 — DATE

L#: 22-00068 CLV#: 107Y5206

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ELEVATION: 2328.96 (FEET)
709.87 (METERS)

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PROFESSIONAL ENGINEER – STATE OF NEVADA – ROBERT A. MURNANE – No. 9680 – Exp. 11/01/2023 – CIVIL

DATE: 09/20/2022

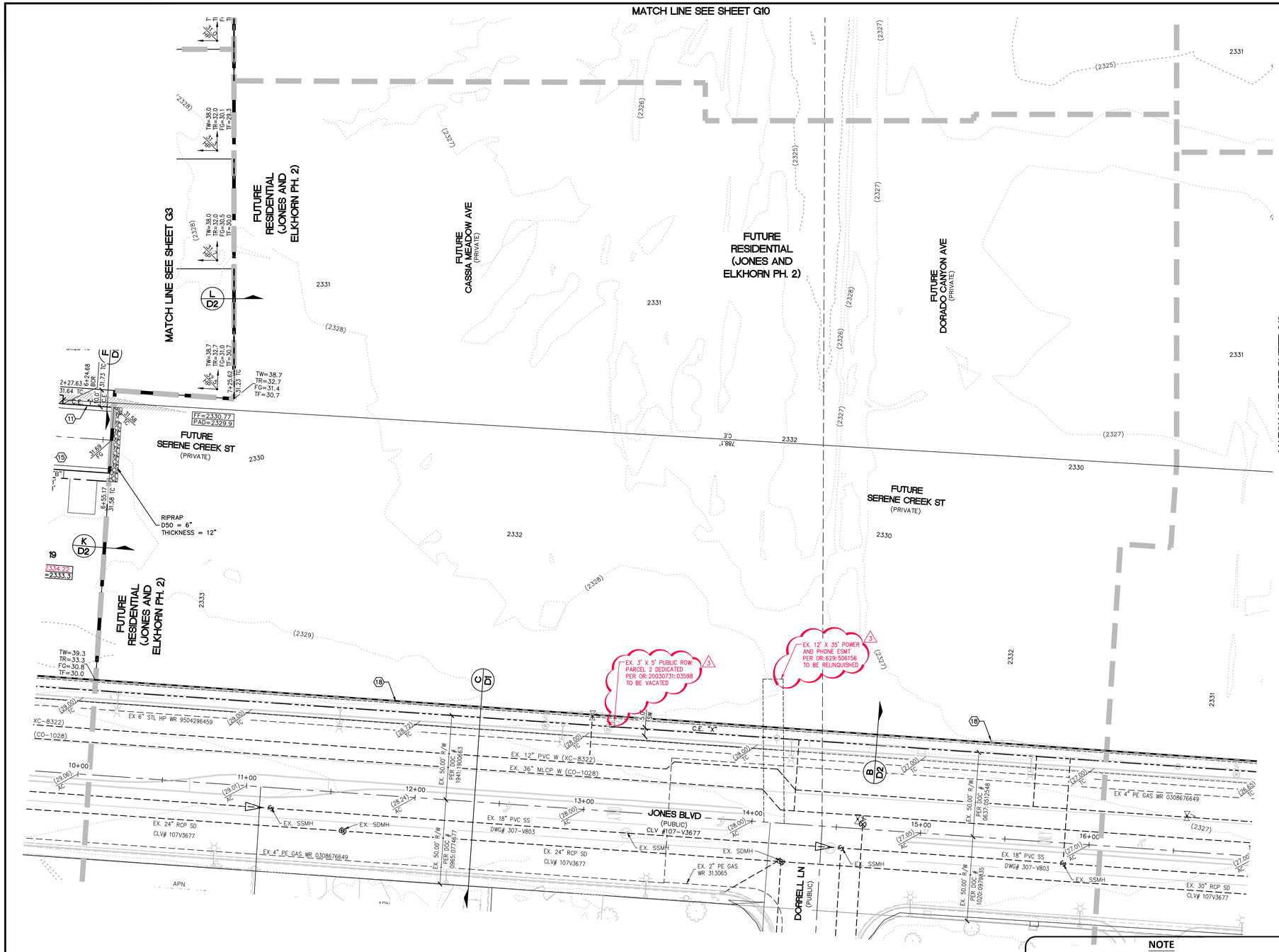
REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP
A	09/16/22	10' AVE EASEMENT TO BE RELINQUISHED			

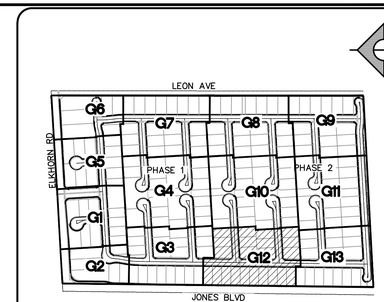
PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:12:58

GCW ENGINEERS \ SURVEYORS
1556 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
SCOTT MARSHALL
F:\PROJECTS\700\743-240\DWG\PRODUCTION\PH1\743-240C-PH1-GDWG

TOLL BROTHERS
JONES & ELKHORN PHASE 1
GRADING PLAN 11

DRAWING G11
14 OF 64 SHTS





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ROBERT A. MURNANE, P.E. 9680 — 09/20/2022 DATE

L#: 22-00068 CLV#: 107Y5206

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CAUTION: HIGH PRESSURE GAS!!

CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING (INCLUDING SAW CUTTING AND PAVEMENT REMOVAL) OVER OR NEAR HIGH PRESSURE GAS LINES 48 HOURS PRIOR TO CONSTRUCTION.

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NET FILL	=	212,580 C.Y.

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STATE OF NEVADA — PROFESSIONAL ENGINEER — ROBERT A. MURNANE — No. 9680 — Exp. 12/31/2023 — CIVIL

09/20/2022 DATE:

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
A	09/16/22	3'x5' ROW TO BE VACATED AND 12'x35' AVE. EASMENT TO BE RELINQUISHED				

PROJECT NO. 743-240

DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:13:01

GCW ENGINEERS \ SURVEYORS
1556 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

SCOTT MARSHALL

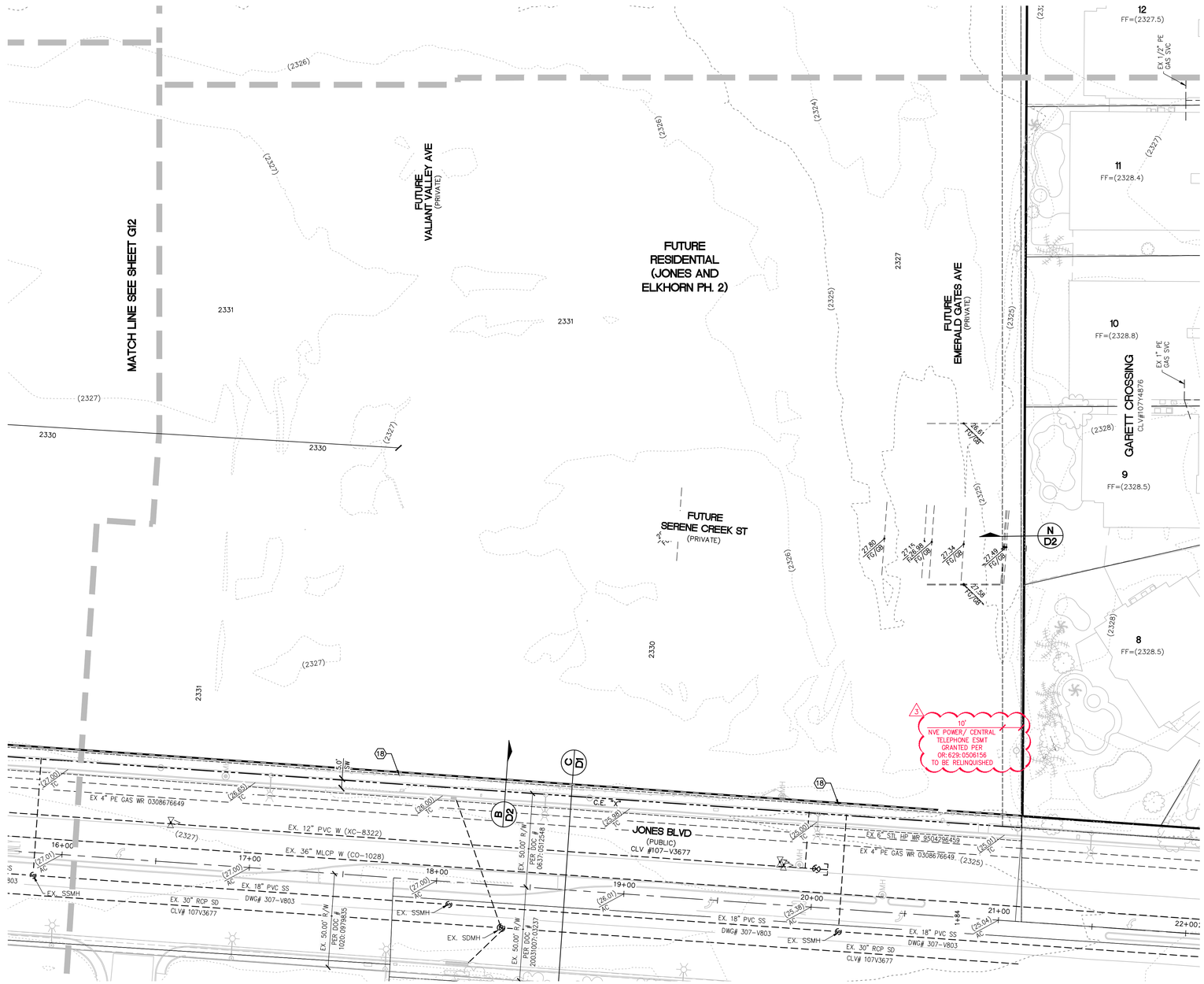
F:\PROJECTS\700\743-240\DWG\PRODUCTION\PH1\743-240C-PH1-GDWG

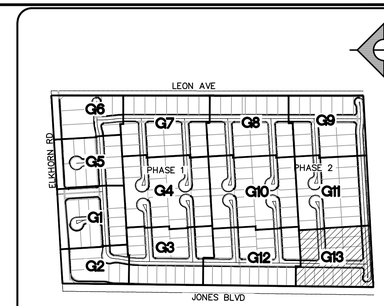
TOLL BROTHERS

JONES & ELKHORN
PHASE 1

GRADING PLAN 12

DRAWING
G12
15 OF 64 SHTS





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22. CONSTRUCT FENCE & SURFACE PER USDCCA NO. 425.S1.
23. CONSTRUCT COLLAPSIBLE BOLLARDS PER DETAIL K ON SHEET D3 & CONSTRUCT SURFACE PER USDCCA NO. 425.S1.
24. CONSTRUCT 3" AC PAVEMENT WITH 5" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
25. CONSTRUCT 5' WROUGHT IRON PEDESTRIAN ACCESS GATE PER DETAIL J ON SHEET D3.
26. INSTALL CONCRETE PAVERS AND BANDS PER DETAIL L ON SHEET D3

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.
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8. CONSTRUCT 60" TYPE III STORM DRAIN MANHOLE PER STD. DWG 406.

CAUTION TO CONTRACTOR

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FLOOD ZONE NOTE

THIS SITE IS LOCATED ON PANEL 32003C1785F, 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.

ROBERT A. MURNANE, P.E. 9680 — 09/20/2022 — DATE

NOTE

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

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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).

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.

CAUTION: HIGH PRESSURE GAS!!

CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING (INCLUDING SAW CUTTING AND PAVEMENT REMOVAL) OVER OR NEAR HIGH PRESSURE GAS LINES 48 HOURS PRIOR TO CONSTRUCTION.

EARTHWORKS

RAW CUT	= 13,832	C.Y.
RAW FILL	= 226,412	C.Y.
NET FILL	= 212,580	C.Y.

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

L#: 22-00068 CLV#: 107Y5206

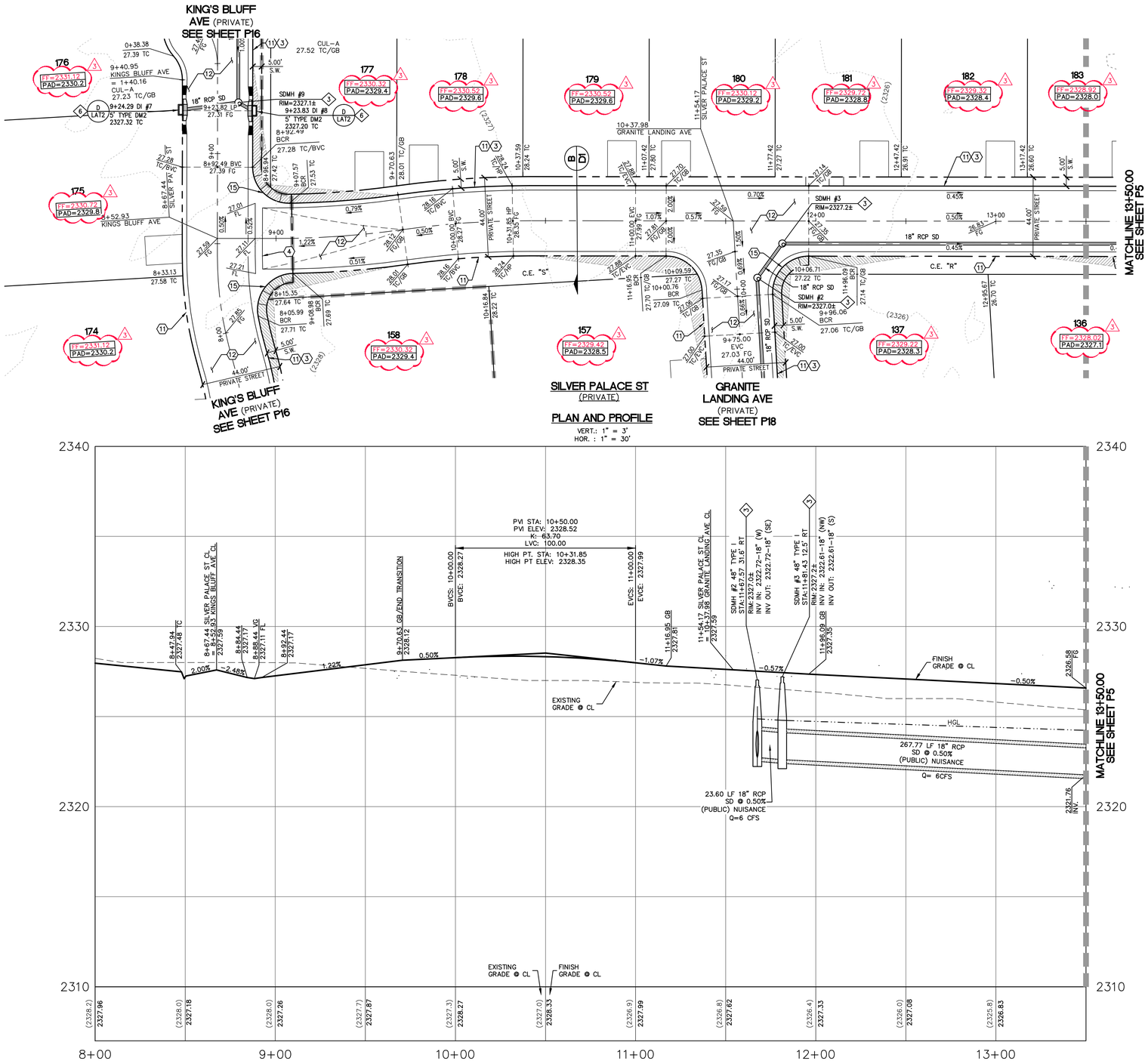
REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
1	09/15/22	10' NVE EASEMENT TO BE RELINQUISHED				

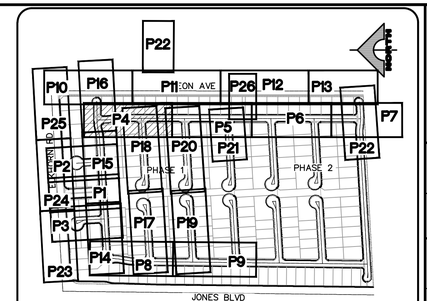
PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:13:03
SCOTT MARSHALL
F:\PROJECTS\720\743-240\DWG\PRODUCTION\PH1\743-240C-PH1-G13.dwg

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

TOLL BROTHERS
JONES & ELKHORN
PHASE 1
GRADING PLAN 13

DRAWING
G13
16 OF 64 SHTS





KEY MAP
NTS

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

CONSTRUCTION NOTES

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10. EX. STRUCTURE – TO BE RELOCATED.
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. 139687 FIRST APPROVAL DATE: _____

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

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

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

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

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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.
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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 — PROFESSIONAL ENGINEER — ROBERT A. MURNANE — No. 9680 — Exp. 6/1/2023 — DATE: 9/20/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
1	09/16/22	REVISED FF AND PAD ELEVATIONS				

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 15:59:51

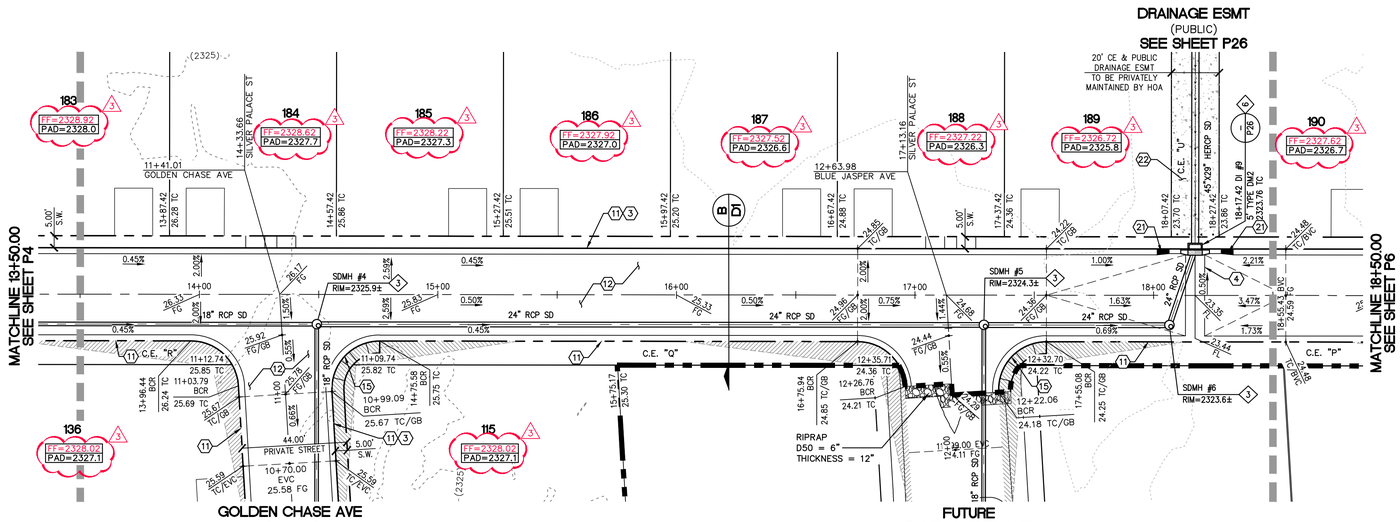
GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

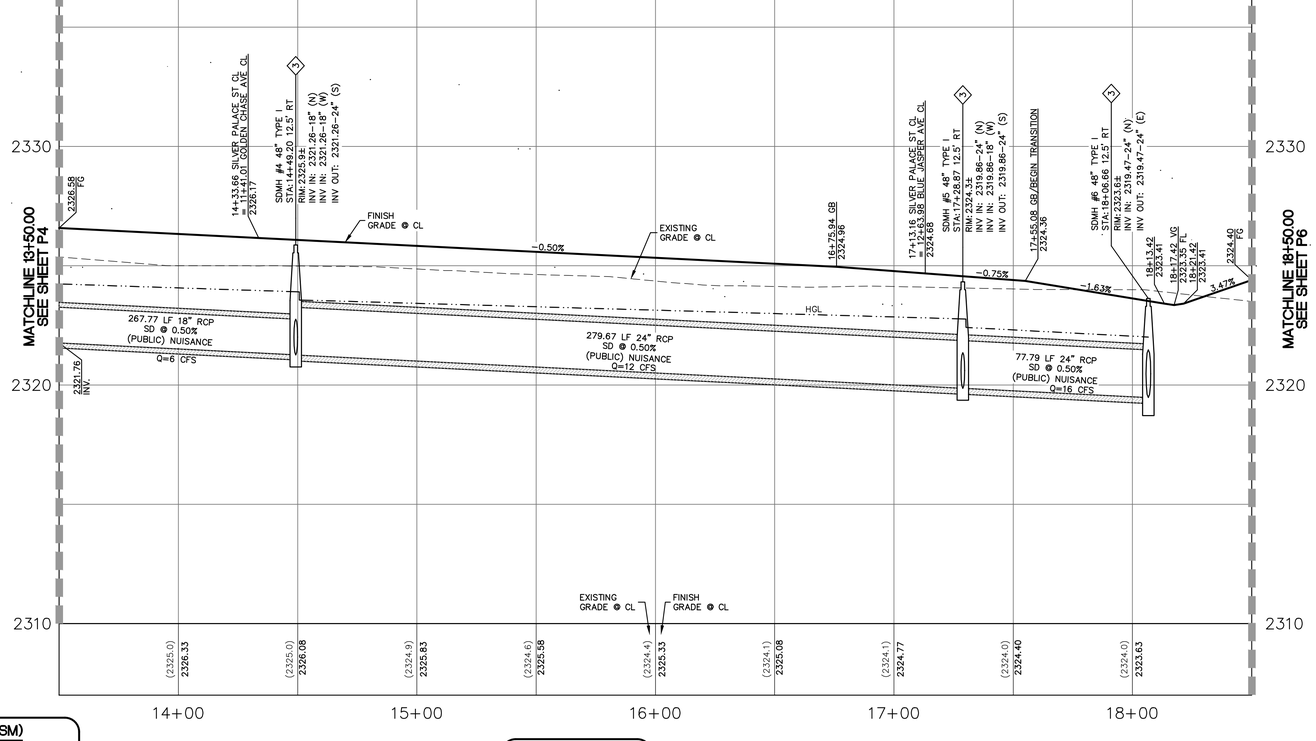
F:\PROJECTS\2021\743-240\DWG\PRODUCTION\TOS\743-240C-PH1-P13.DWG
SCOTT MARSHALL

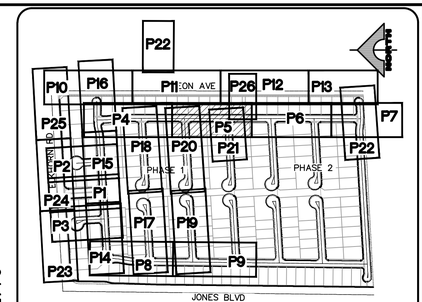
TOLL BROTHERS
JONES & ELKHORN
SILVER PALACE ST PLAN & PROFILE
STA. 8+67.44 TO STA. 13+50.00

DRAWING
P4
23 OF 62 SHTS

L#: 22-00068 CLV#: 107Y5206







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PROJECT NO. 139687 FIRST APPROVAL DATE: _____

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PROFESSIONAL ENGINEER – STATE OF NEVADA – No. 9689 – ROBERT A. MURNANE – Exp. 11/01/2023 – CIVIL

REV	DATE	DESCRIPTION
1	09/16/22	REVISED FF AND PAD ELEVATIONS

DATE: 9/20/2022
GCW APP
DATE
AGEN APP
DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09–20–22
PLOT TIME: 15:59:56

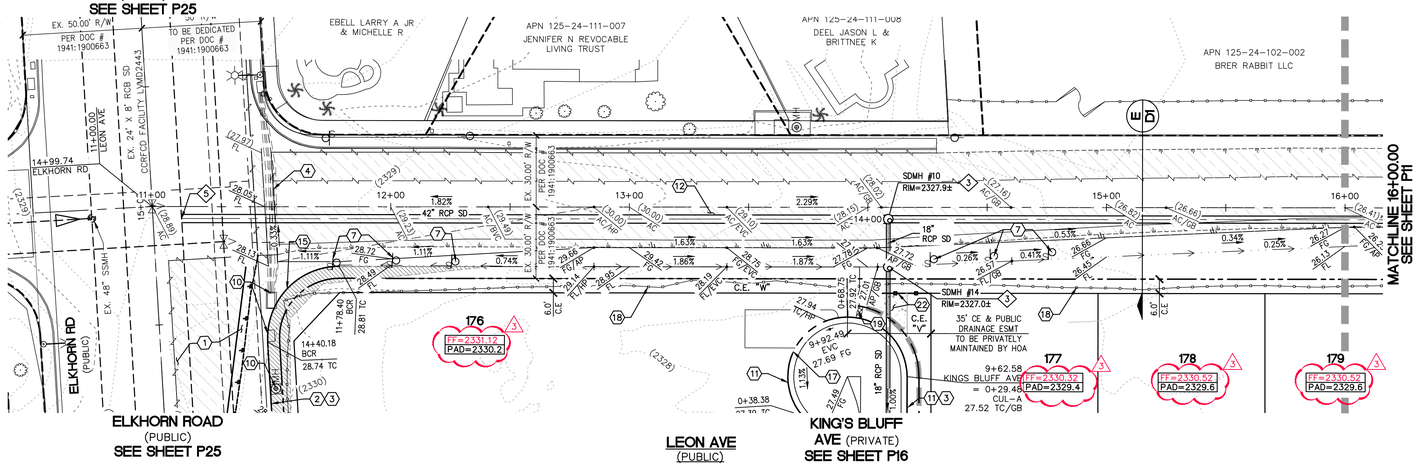
GCW ENGINEERS\SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\PROJECTS\700\743–240\DWG\PRODUCTION\700-743-240C-PHI-P1-P13.DWG
SCOTT MARSHALL

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

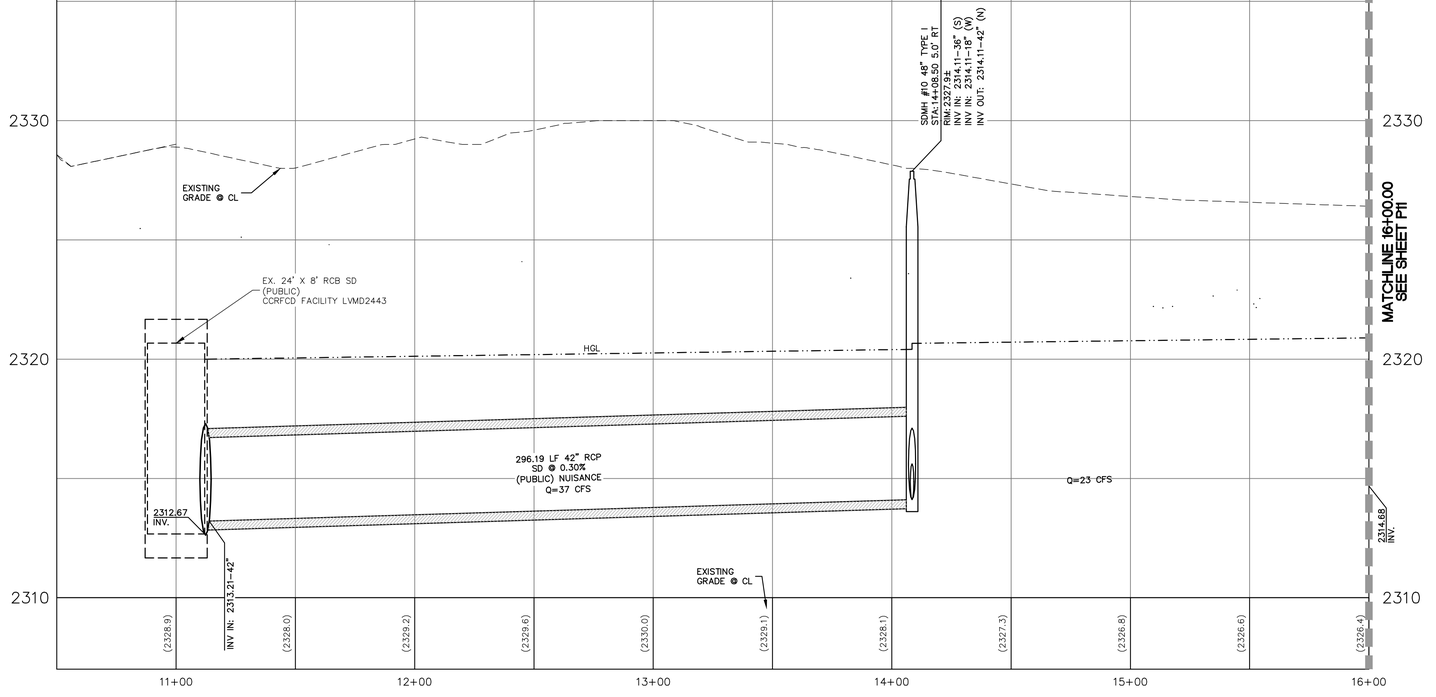
DRAWING
P5
24 OF 62 SHTS

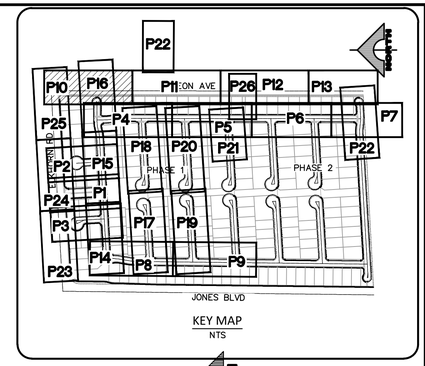
L#: 22–00068 CLV#: 107Y5206



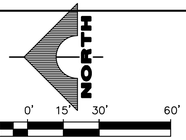
PLAN AND PROFILE

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





KEY MAP
NTS



SCALE: 1" = 30'

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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.
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6. EX. STRUCTURE – ADJUST TO GRADE.
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23. CONSTRUCT COLLAPSIBLE BOLLARDS PER DETAIL K ON SHEET D3 & CONSTRUCT SURFACE PER USDCCA NO. 425.S1.
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26. INSTALL CONCRETE PAVERS AND BANDS PER DETAIL L ON SHEET D3

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

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4. CONSTRUCT 10' TYPE "DM2" INLET PER STD DWG 412.1 & 421.
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6. CONSTRUCT 5' TYPE "DM2" INLET PER STD DWG 412.1 & 421 WITH (2) NEENAH R-4999 TYPE D SOLID L/D OR APPROVED EQUAL.
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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.

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: _____

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

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

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

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.

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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.

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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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.

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

PROFESSIONAL ENGINEER – STATE OF NEVADA – No. 9680 – ROBERT J. MURNANE – Exp. 12/31/2023 – CIVIL – DATE: 9/20/2022

REV	DATE	DESCRIPTION	APEN APP	DATE	GCW APP	DATE
1	09/15/22	REVISED FF AND PAD ELEVATIONS				

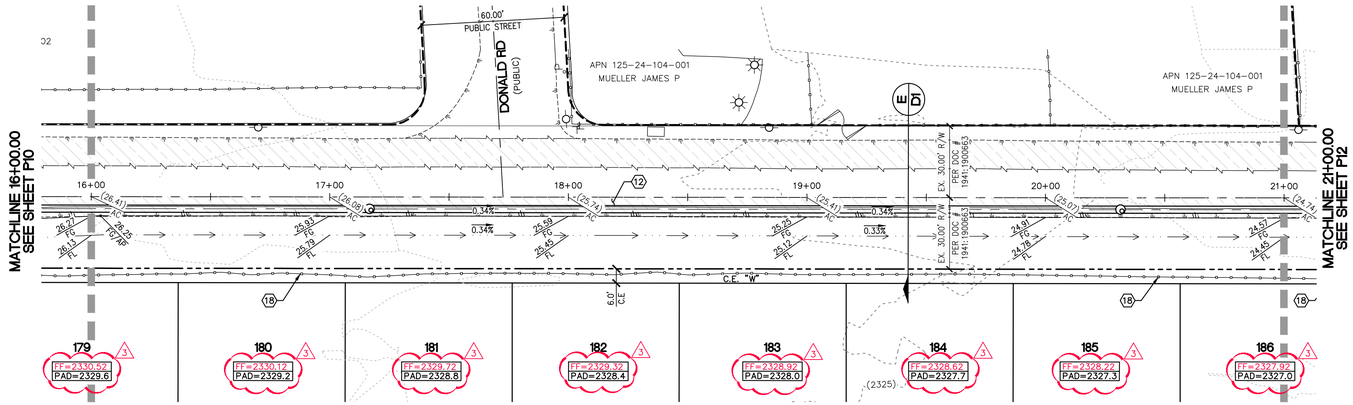
PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:00:00

F:\PROJECTS\2021\743-240\DWG\PRODUCTION\TOS\743-240C-PH1-PF1-P13.DWG
SCOTT MARSHALL

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

DRAWING
P10
29 OF 62 SHTS

L#: 22-00068 CLV#: 107Y5206



LEON AVE
(PUBLIC)

PLAN AND PROFILE

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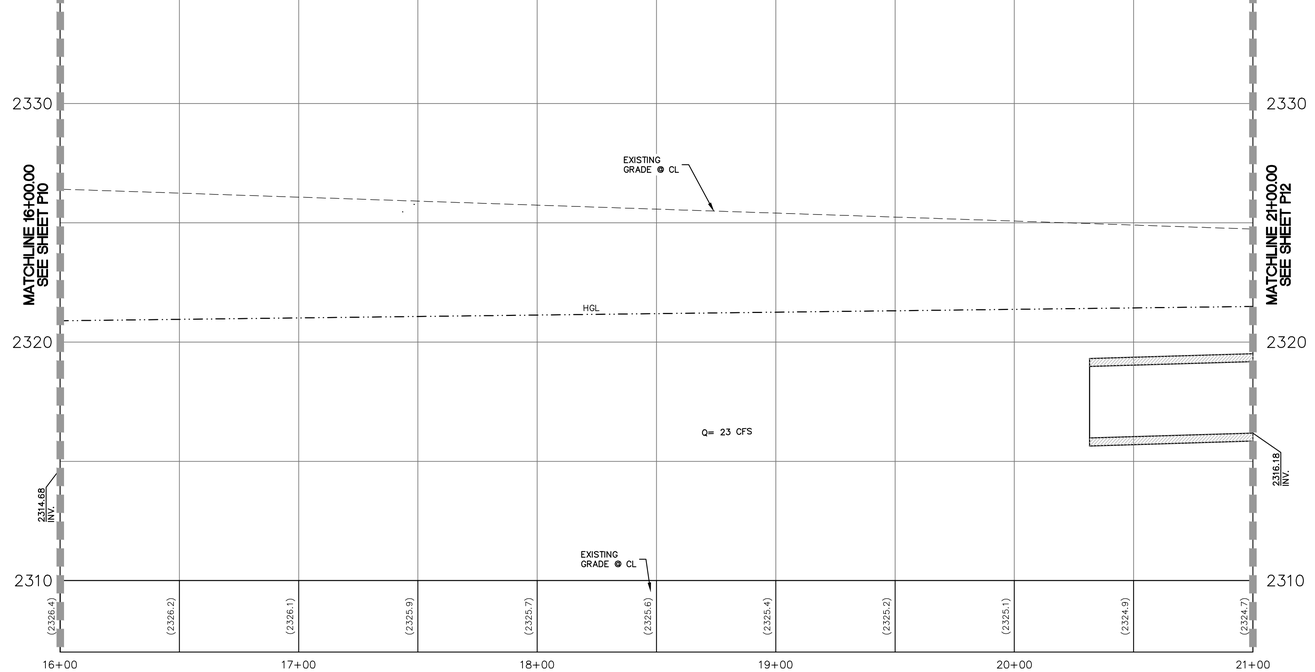
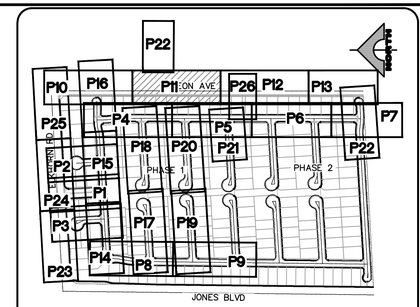
HOR. : 1" = 30'





KEY MAP
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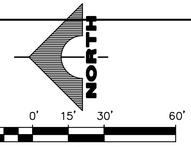

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PROJECT NO. 139687 FIRST APPROVAL DATE: _____

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STATE OF NEVADA
PROFESSIONAL ENGINEER
ROBERT A. MURNANE
No. 9680
Exp. 11/01/2023
CIVIL
DATE: 9/20/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
1	09/16/22	REVISED FF AND PAD ELEVATIONS				

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:00:04

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

F:\PROJECTS\720\V43-240\DWG\PRODUCTION\TDS\V43-240C-PH1-PF-P13.DWG

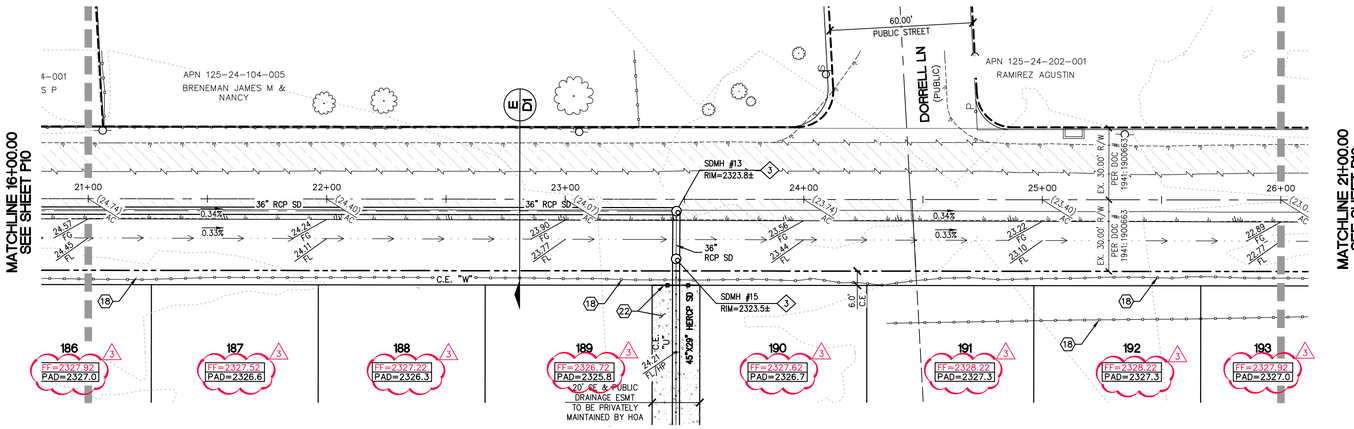
TOLL BROTHERS

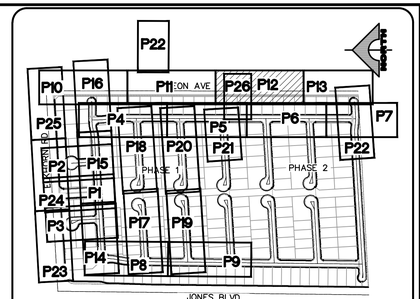
JONES & ELKHORN

LEON AVE PLAN & PROFILE
STA. 16+00.00 TO STA. 21+00.00

DRAWING
P11
30 OF 62 SHTS

L#: 22-00068 CLV#: 107Y5206





KEY MAP
NTS

NORTH

30' 0' 15' 30' 60'

SCALE: 1" = 30'

LEON AVE
(PUBLIC)

PLAN AND PROFILE
VERT.: 1" = 3'
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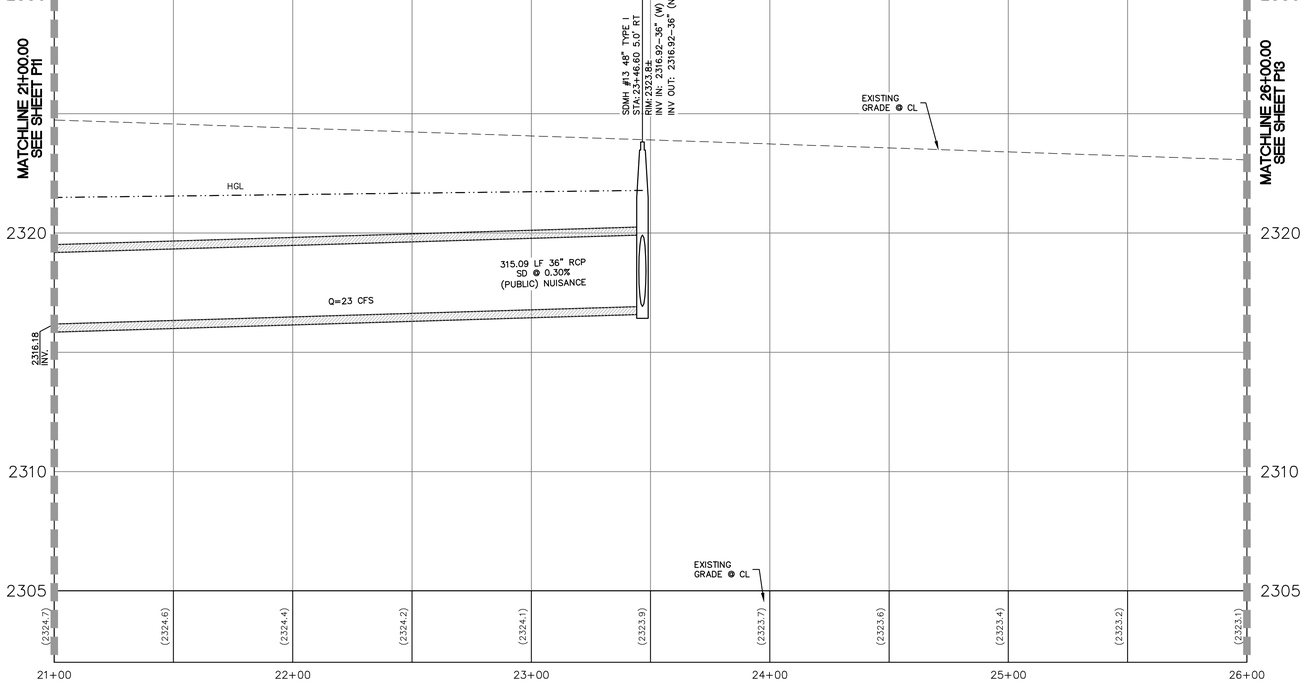

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CITY OF LAS VEGAS VERTICAL CONTROL POINT "6LV9013SSW6", BEING A RIVET & PLATE NW COR. LEON AV. & ELKHORN RD.

ELEVATION: 2328.96 (FEET)
709.87 (METERS)

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PROJECT NO. 139687 FIRST APPROVAL DATE: _____

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L#: 22-00068 CLV#: 107Y5206

PROFESSIONAL ENGINEER – STATE OF NEVADA – ROBERT A. MURNANE – No. 9686 – Exp. 12/31/2023 – CIVIL – DATE: 9/20/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
1	09/16/22	REVISED FF AND PAD ELEVATIONS				

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:00:07

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

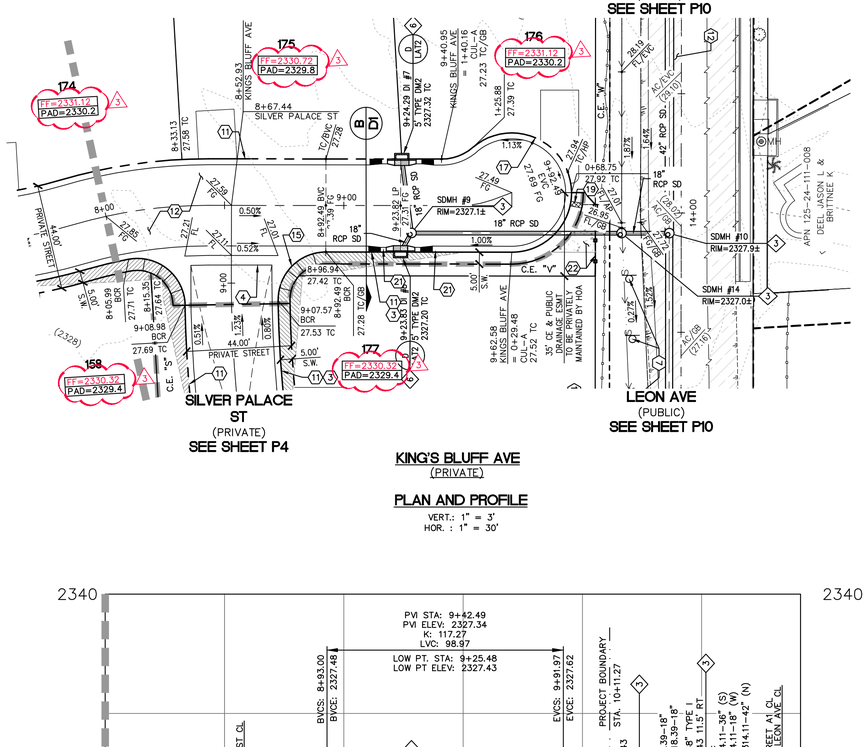
F:\PROJECTS\VOL\V43-240\DWG\PRODUCTION\TDS\V43-240C-P11-P13.DWG SCOTT MARSHALL

TOLL BROTHERS

JONES & ELKHORN

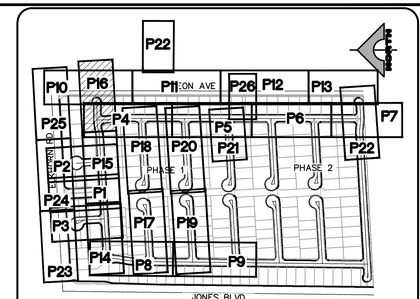
LEON AVE PLAN & PROFILE
STA. 21+00.00 TO STA. 26+00.00

DRAWING
P12
31 OF 62 SHTS



KING'S BLUFF AVE
(PRIVATE)

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 5.5" AC PAVEMENT WITH 9" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
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L#: 22-00068 CLV#: 107Y5206

STATE OF NEVADA — PROFESSIONAL ENGINEER — ROBERT A. MURNANE — No. 9680 — CIVIL — Exp. 12/31/2023

DATE	DESCRIPTION	REV
9/20/2022		
	GCW APP	
	DATE	
	AGEN APP	
	DATE	
09/16/22	REVISED FF AND PAD ELEVATIONS	A

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:06:59

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

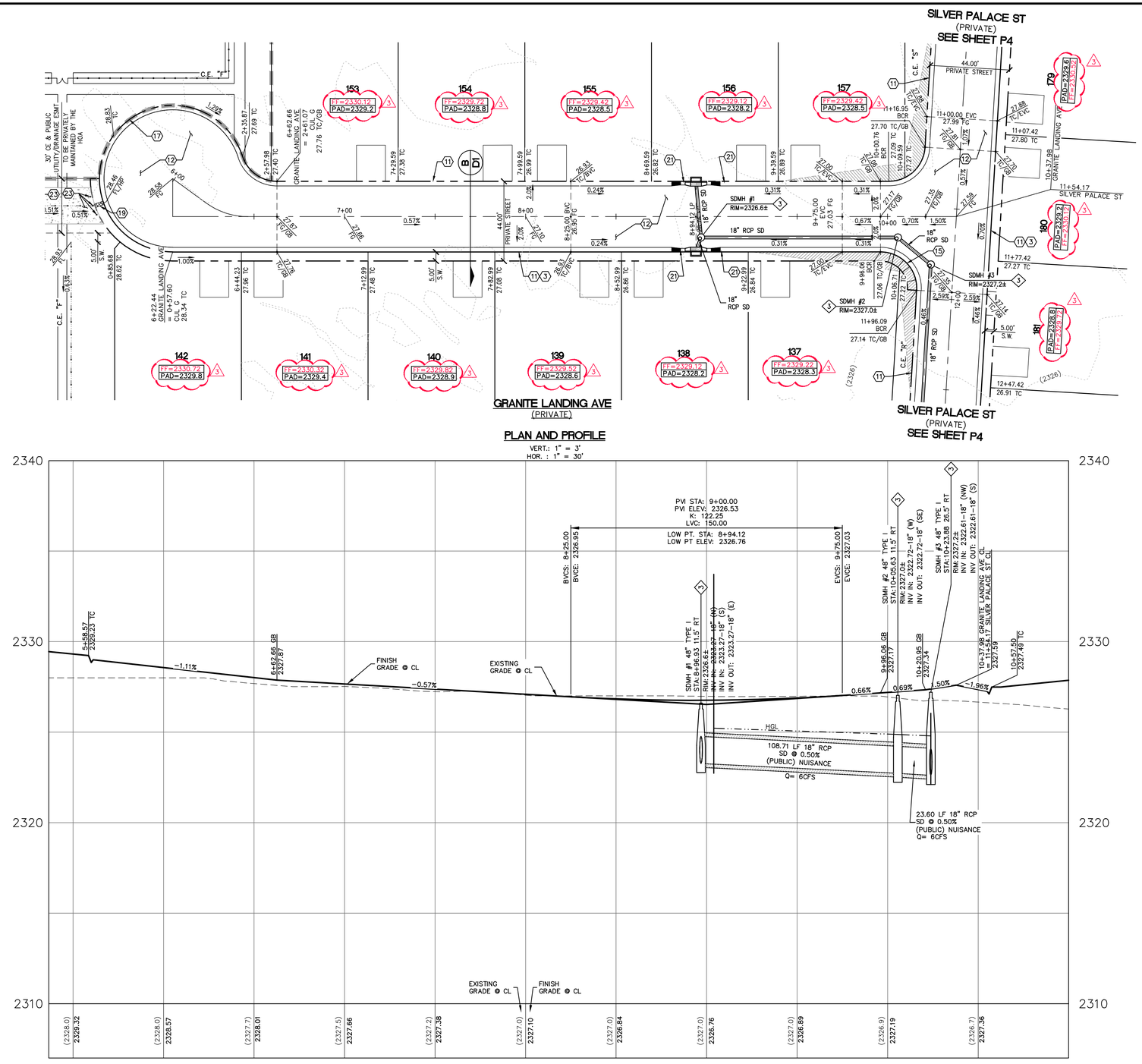
F:\PROJECTS\Y05\Y43-240\DWG\PRODUCTION\TOS\Y43-240C-PH1-P14-26.DWG SCOTT MARSHALL

TOLL BROTHERS

JONES & ELKHORN

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

DRAWING
P16
35 OF 62 SHTS



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SCOTT MARSHALL
F:\PROJECTS\700\743-240\DWG\PRODUCTION\TDS\743-240C-PH1-PH4-26.DWG

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:07:04

REV	DATE	DESCRIPTION
1	09/16/22	REVISED FF AND PAD ELEVATIONS

DATE: 9/20/2022
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TOLL BROTHERS
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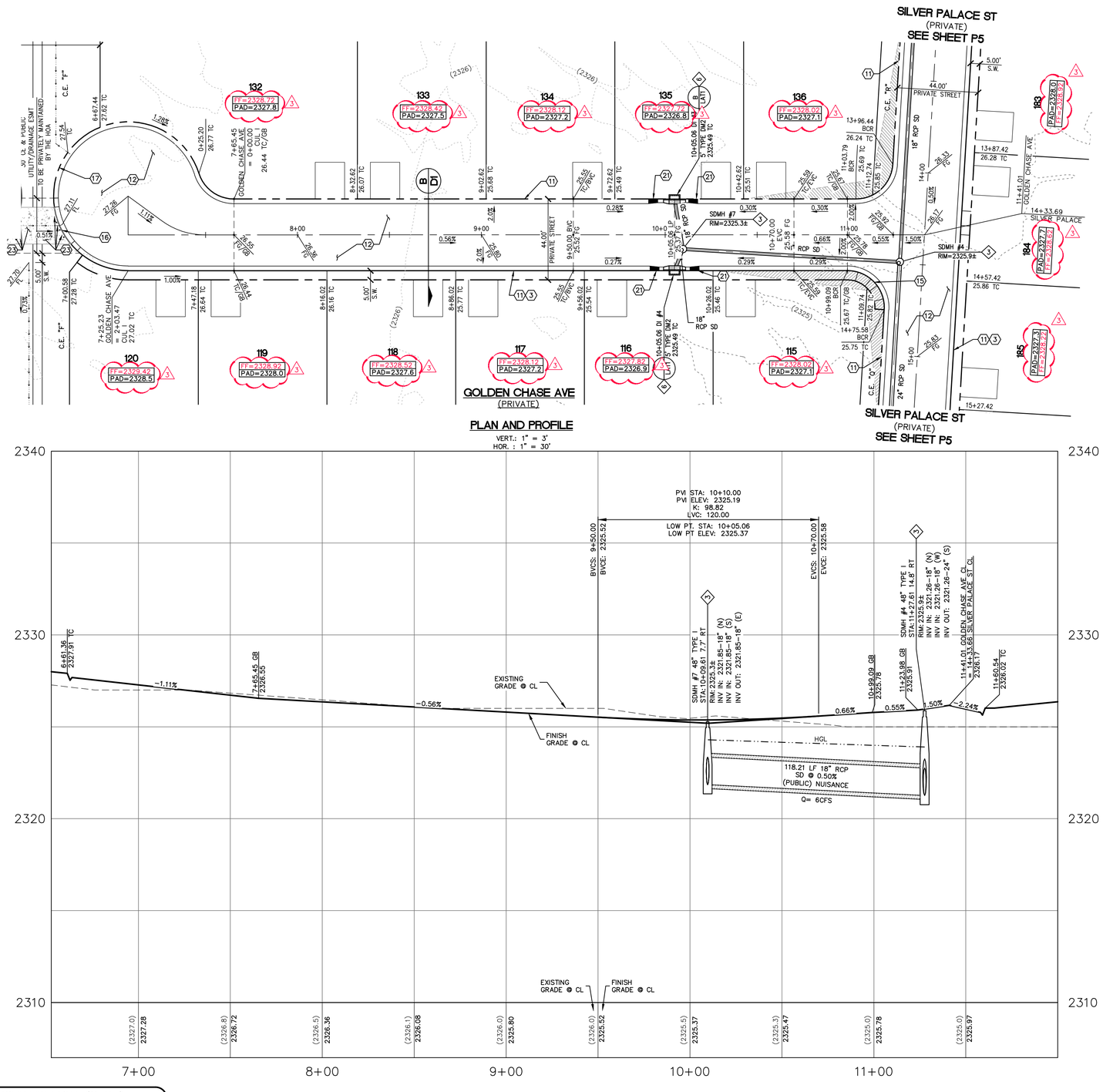
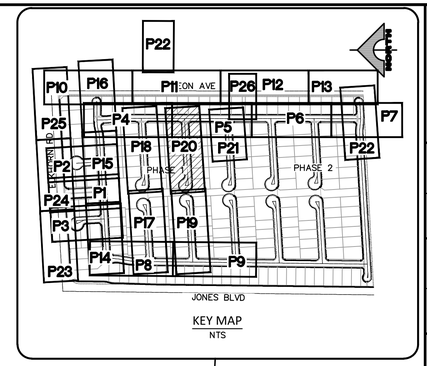
STA. 5+58.57 TO STA. 10+37.98

DRAWING
P18
37 OF 62 SHTS

L#: 22-00068 CLV#: 107Y5206





CONSTRUCTION NOTES

1. CONSTRUCT 5.5" AC PAVEMENT WITH 9" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
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.
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26. INSTALL CONCRETE PAVERS AND BANDS PER DETAIL L ON SHEET D3

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

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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 "6LV9013SSW8", 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: _____

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

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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.
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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.

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REGISTERED PROFESSIONAL ENGINEER – STATE OF NEVADA – ROBERT A. MURNANE – No. 9680 – CIVIL – Exp. 12/31/2023

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE: 9/20/2022
2	09/16/22	REVISED FF AND PAD ELEVATIONS					

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:07:09

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

F:\PROJECTS\700\V43-240\DWG\PRODUCTION\TDS\V43-2400-PH1-PH4-26.DWG SCOTT MARSHALL

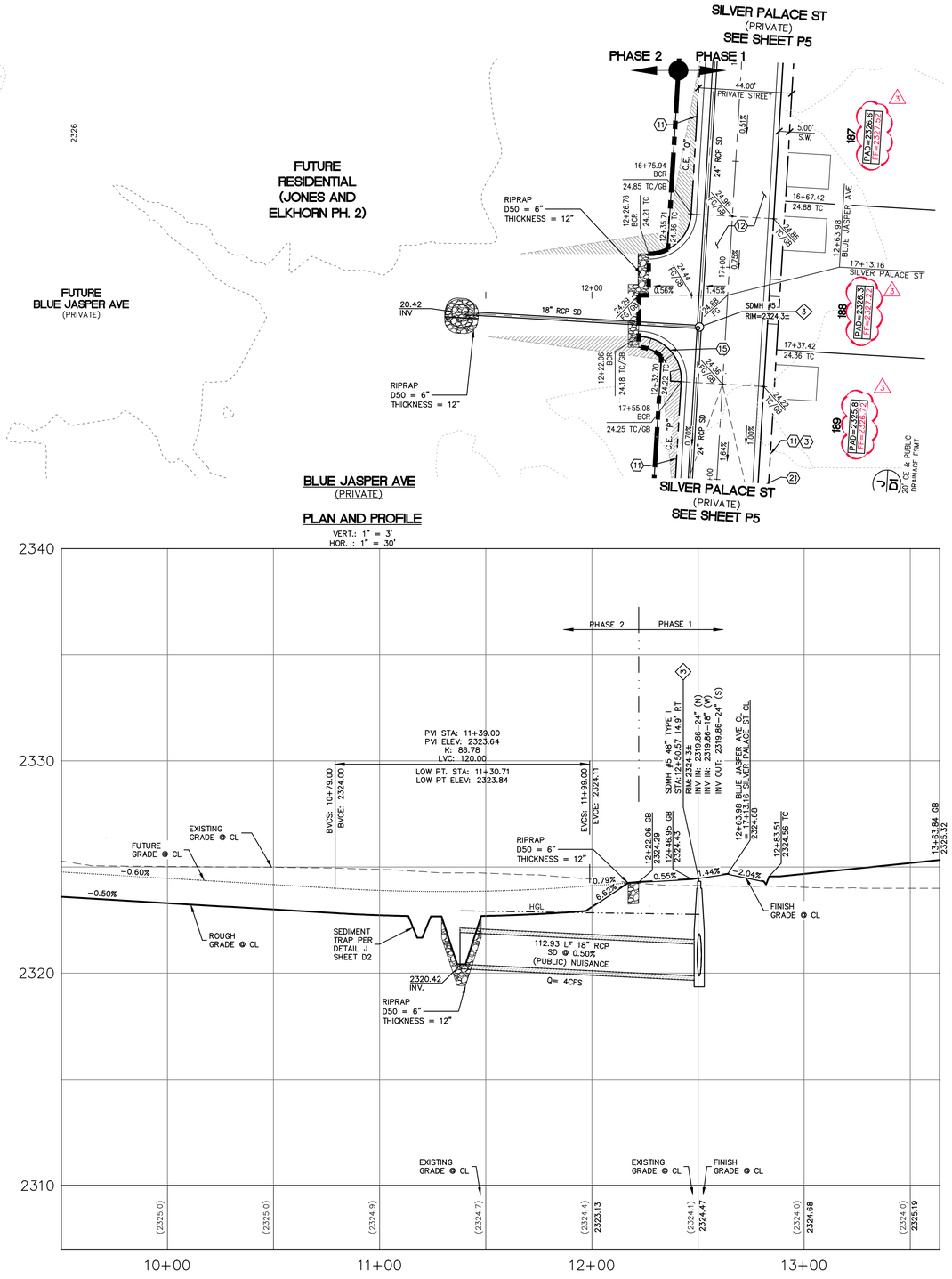
TOLL BROTHERS

JONES & ELKHORN

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

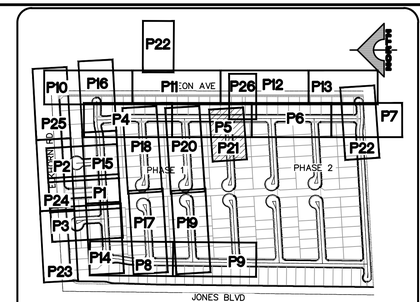
DRAWING
P20
39 OF 62 SHTS

L#: 22-00068 CLV#: 107Y5206



PLAN AND PROFILE

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



KEY MAP
NTS

NORTH

30' 0' 15' 30' 60'

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BENCHMARK

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LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. 139687 FIRST APPROVAL DATE: _____

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ROBERT A. MURNANE — PROFESSIONAL ENGINEER — STATE OF NEVADA — No. 9680 — Exp. 11/01/2023 — CIVIL

DATE: 9/20/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
2	09/16/22	REVISED FF AND PAD ELEVATIONS				

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:07:14

GCW ENGINEERS\SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
SCOTT MARSHALL
F:\PROJECTS\700\743-240\DWG\PRODUCTION\700\743-240C-PH1-26.DWG

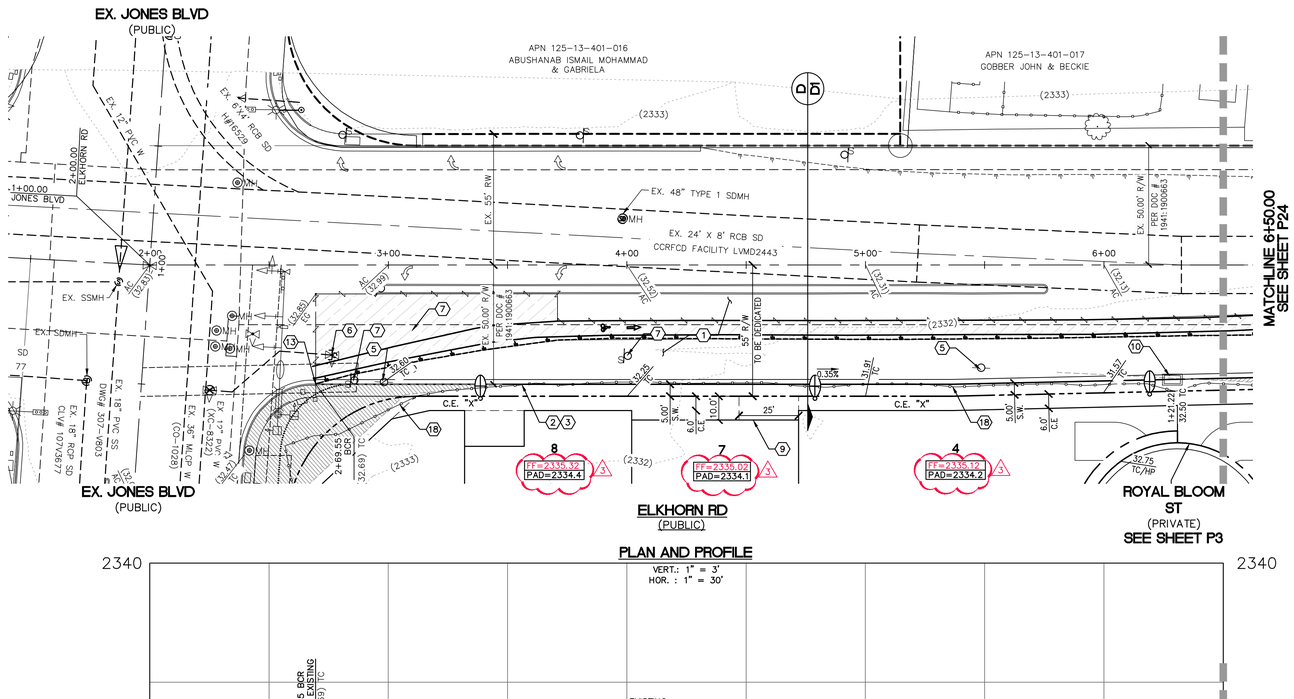
TOLL BROTHERS

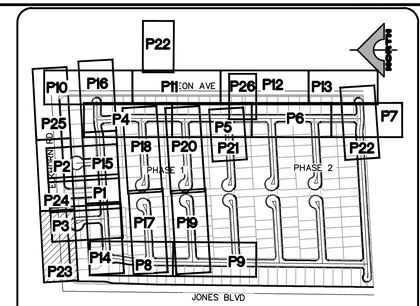
JONES & ELKHORN

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

DRAWING
P21
40 OF 62 SHTS

L#: 22-00068 CLV#: 107Y5206





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PROFESSIONAL ENGINEER – STATE OF NEVADA – ROBERT A. MURNANE – No. 9680 – CIVIL – Exp. 11/01/2023

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
2	09/16/22	REVISED FF AND PAD ELEVATIONS				

DATE: 9/20/2022

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:07:18

GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
SCOTT MARSHALL
F:\PROJECTS\7001\743-240\DWG\PRODUCTION\TDS\743-240C-PHI-PH4-26.DWG

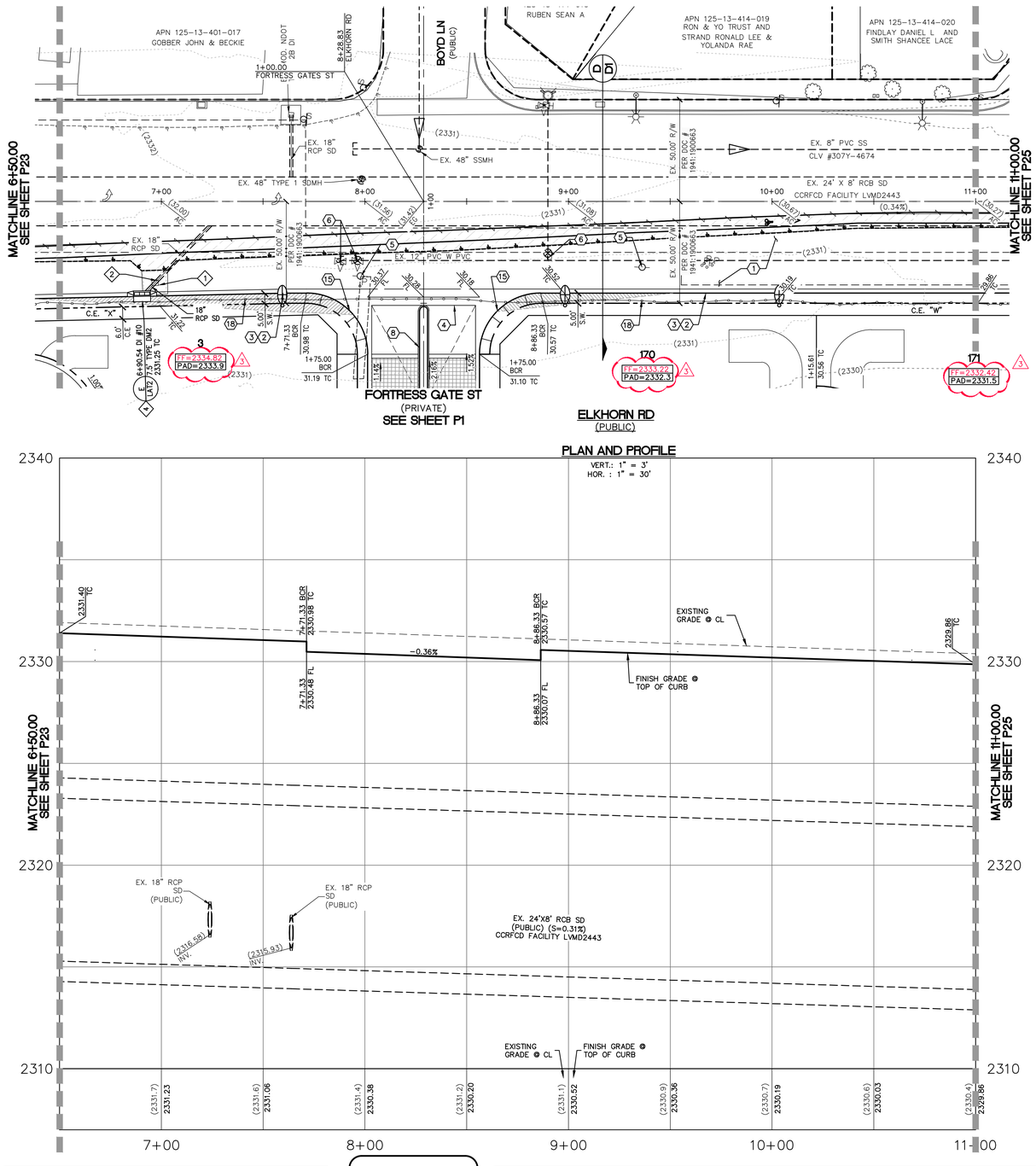
TOLL BROTHERS

JONES & ELKHORN

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

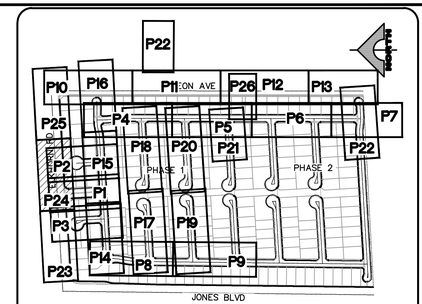
DRAWING
P23
42 OF 62 SHTS

L#: 22-00068 CLV#: 107Y5206



PLAN AND PROFILE

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



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

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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

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PROJECT NO. 139687 FIRST APPROVAL DATE: _____

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FAST
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1-702-432-5300
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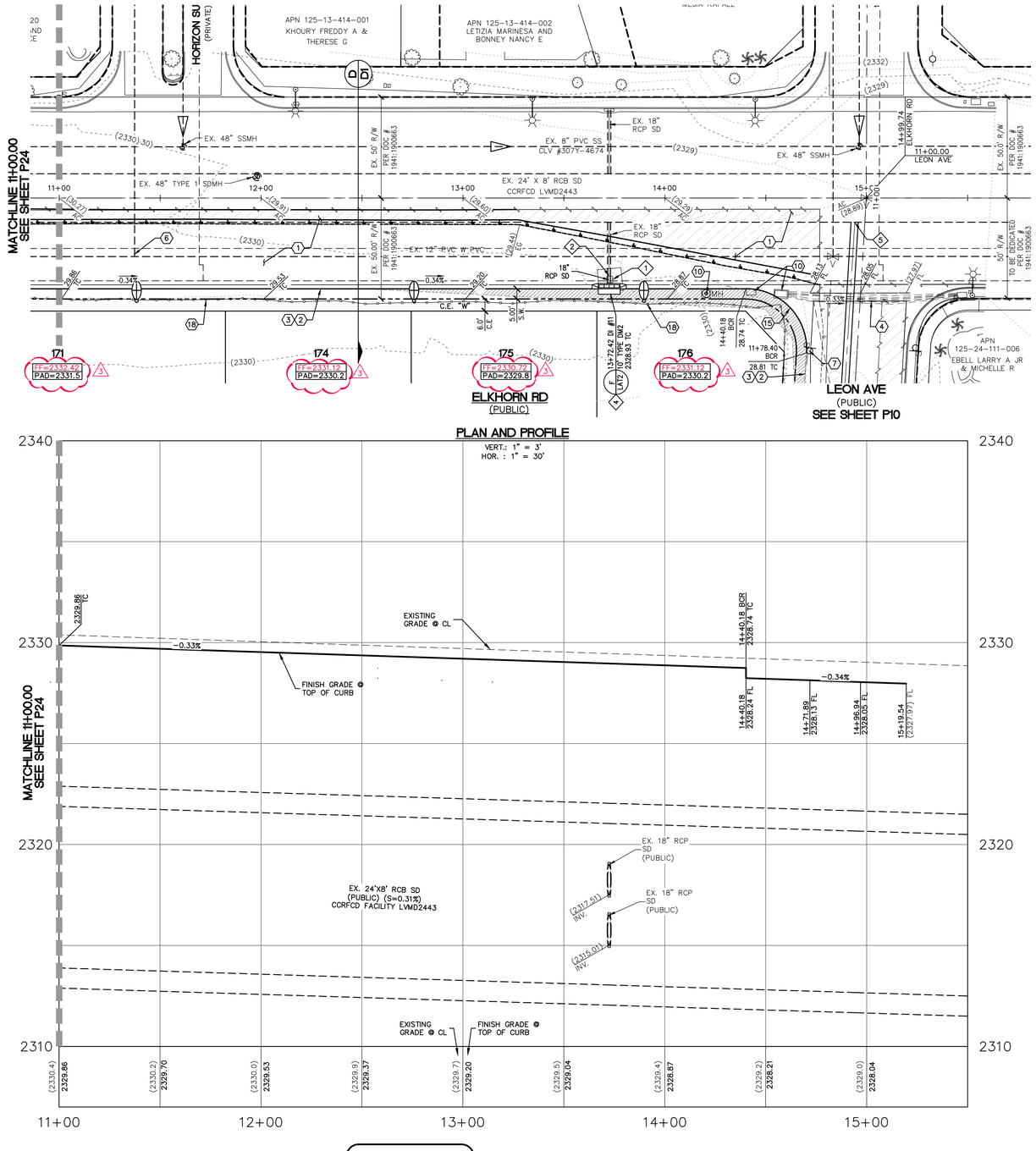
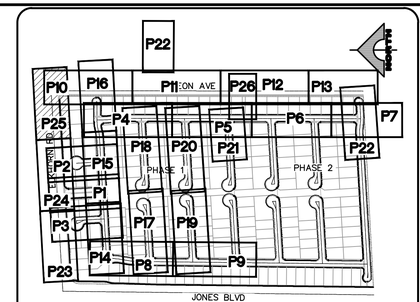
L#: 22-00068 CLV#: 107Y5206

STATE OF NEVADA — PROFESSIONAL ENGINEER — ROBERT A. MURNANE — No. 9680 — Exp. 11/01/2023 — CIVIL

DATE: 9/20/2022

REV	DATE	DESCRIPTION





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DATE: 9/20/2022

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PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:07:28

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

F:\PROJECTS\700\743-240\DWG\PRODUCTION\TOS\743-240C-PH1-PH4-26.DWG

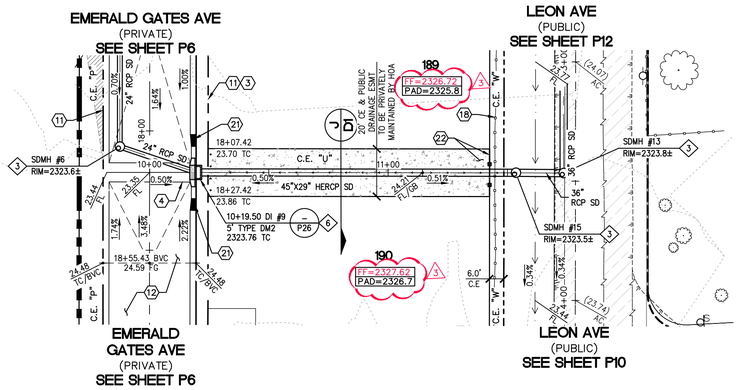
TOLL BROTHERS

JONES & ELKHORN

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

DRAWING
P25
44 OF 62 SHTS

L#: 22-00068 CLV#: 107Y5206



DRAINAGE ESMT
(PUBLIC)

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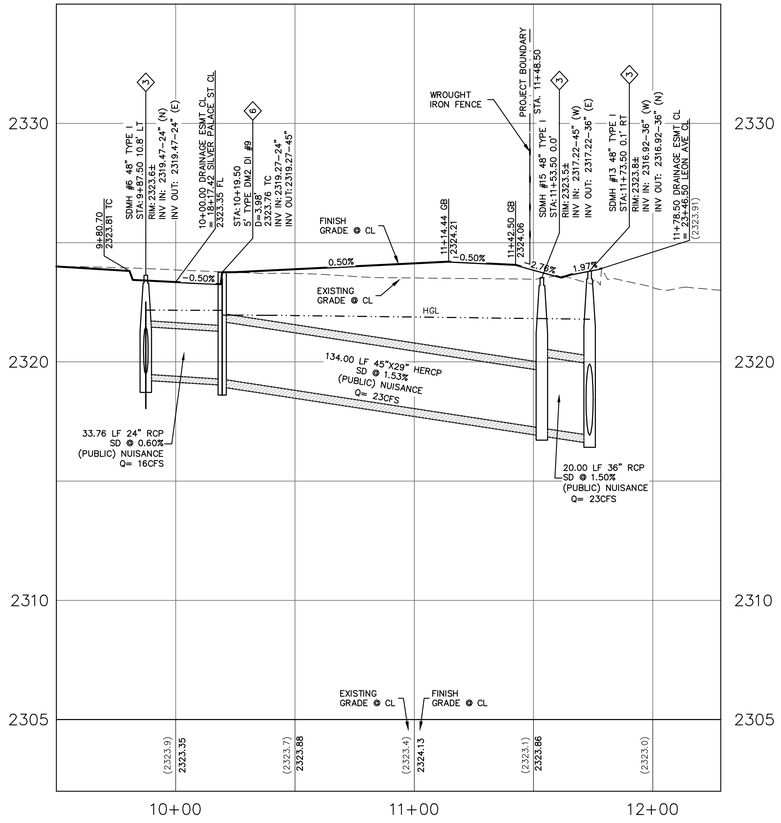

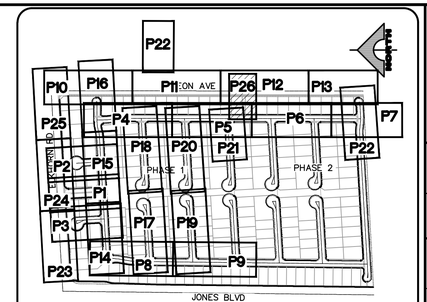

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19. CONSTRUCT 2' SIDEWALK UNDERDRAIN PER USDCCA NO. 236.
20. CONSTRUCT 5' VALLEY GUTTER PER DETAIL E SHEET D3.
21. CONSTRUCT 5' TRANSITION FROM "L" CURB TO RESIDENTIAL ROLL CURB PER DETAIL C SHEET D3.
22. CONSTRUCT FENCE & SURFACE PER USDCCA NO. 425.S1.
23. CONSTRUCT COLLAPSIBLE BOLLARDS PER DETAIL K ON SHEET D3 & CONSTRUCT SURFACE PER USDCCA NO. 425.S1.
24. CONSTRUCT 3" AC PAVEMENT WITH 5" TYPE II BASE PER GEOTECHNICAL REPORT BY GEOTEK DATED APRIL 15, 2021.
25. CONSTRUCT 5' WROUGHT IRON PEDESTRIAN ACCESS GATE PER DETAIL J ON SHEET D3.
26. INSTALL CONCRETE PAVERS AND BANDS PER DETAIL L ON SHEET D3

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.
7. CONSTRUCT 60" TYPE I STORM DRAIN MANHOLE PER STD. DWG 403.
8. CONSTRUCT 60" TYPE III STORM DRAIN MANHOLE PER STD. DWG 406.

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: _____

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

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

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

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 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 — PROFESSIONAL ENGINEER — ROBERT A. MURNANE — No. 9680 — CIVIL — Exp. 12/31/2023 — DATE: 9/20/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE
2	09/16/22	REVISED FF AND PAD ELEVATIONS				

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:07:32

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\TOS\743-240S-PH1-PH4-26.DWG

SCOTT MARSHALL

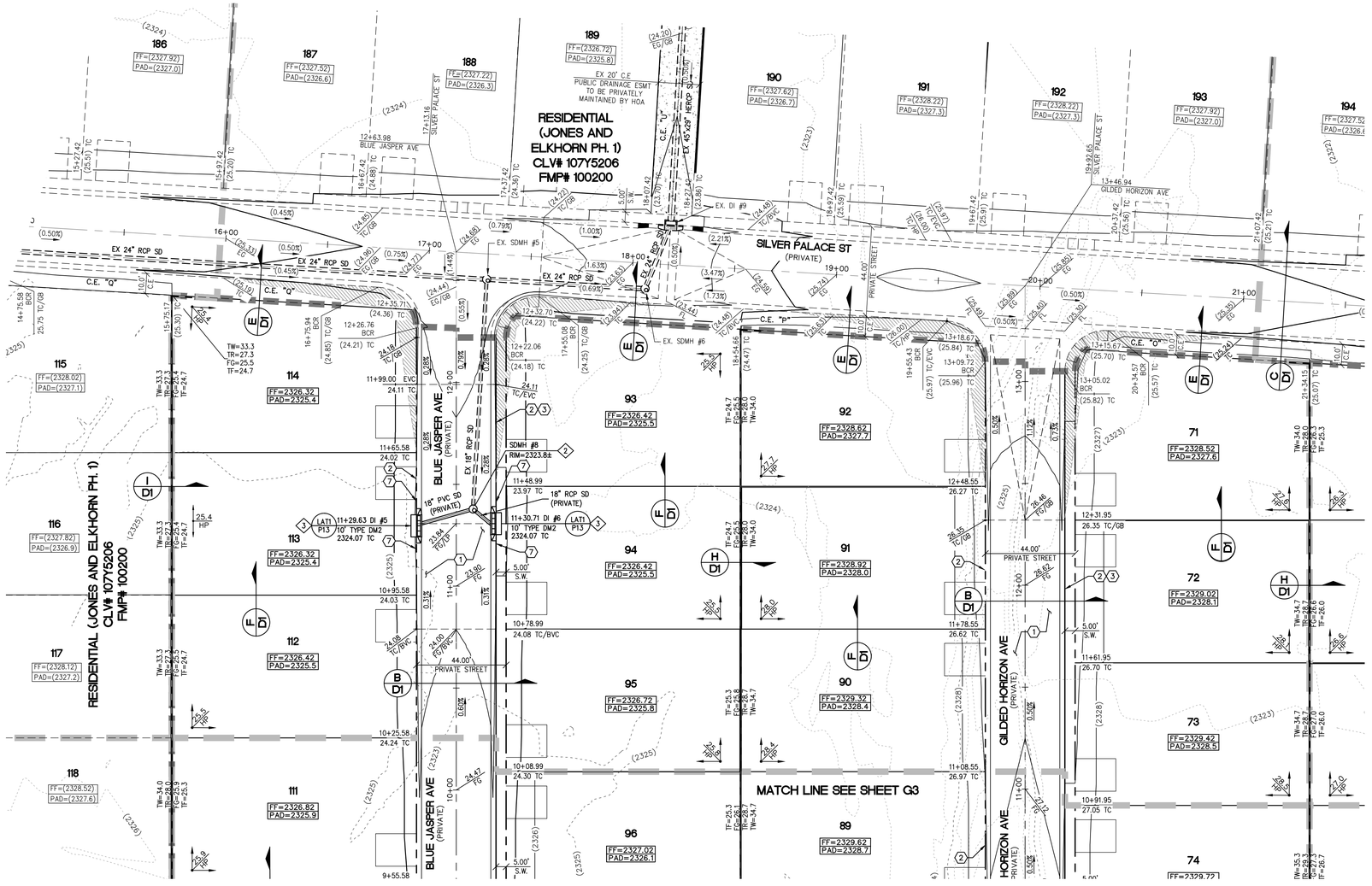
TOLL BROTHERS

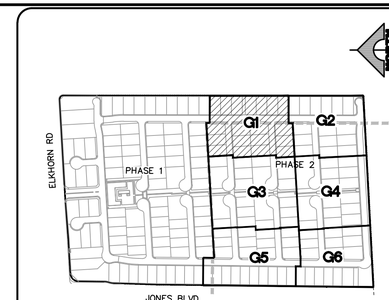
JONES & ELKHORN

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

DRAWING
P26
45 OF 62 SHTS

L#: 22-00068 CLV#: 107Y5206





KEY MAP
NTS

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.
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FLOOD ZONE NOTE

THIS SITE IS LOCATED ON PANEL **32003C1785F**, 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.

09/20/2022
SCOTT R. MARSHALL, P.E. 29269 — DATE

L#: L22-01964 CLV#: XXXXXXX

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
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T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\PROJECTS\700\Y43-240\DWG\PRODUCTION\PH2\Y43-240S-PH2-G1.DWG

SCOTT MARSHALL

PROJECT NO. 743-240

DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:16:12

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

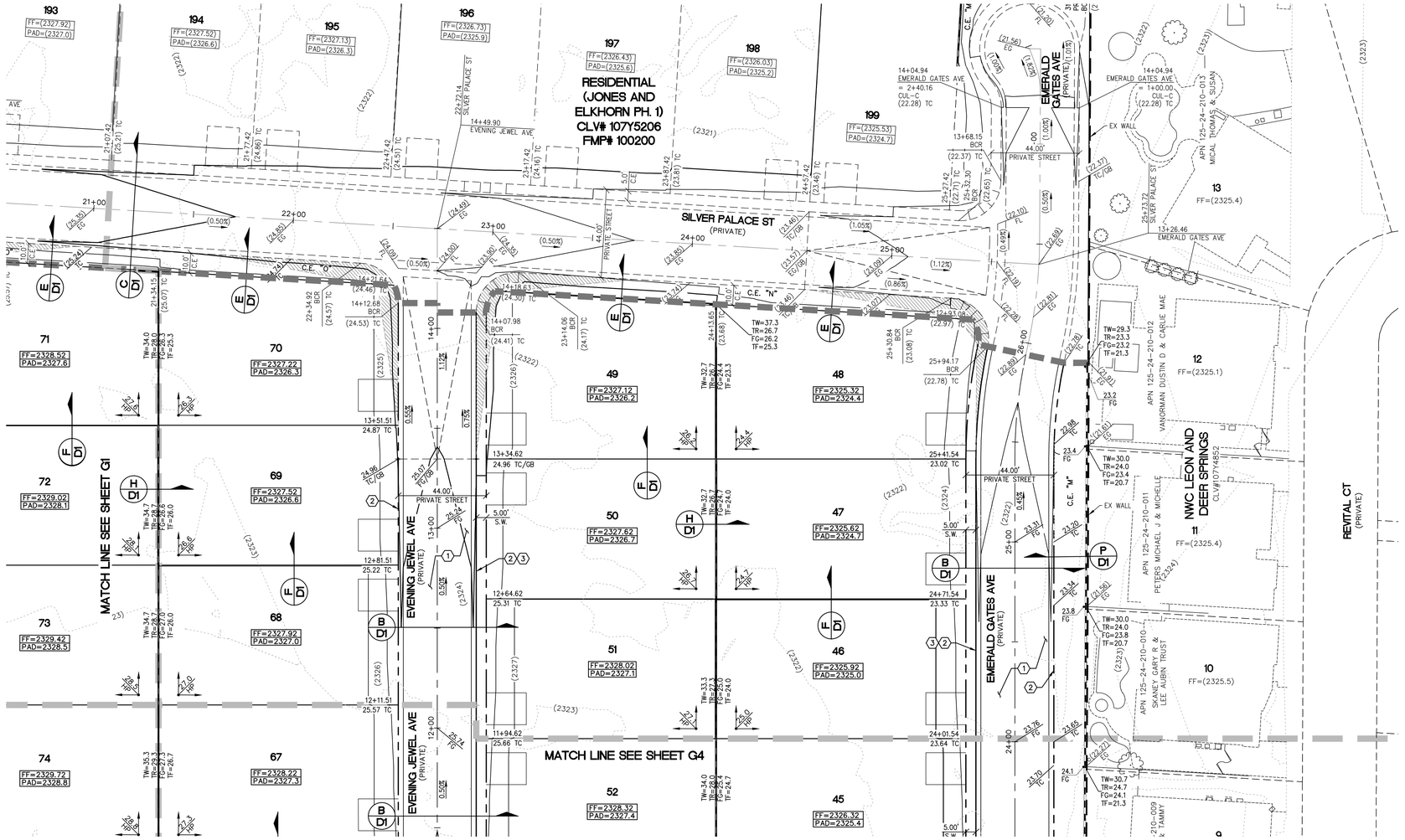
DATE: 09/20/2022

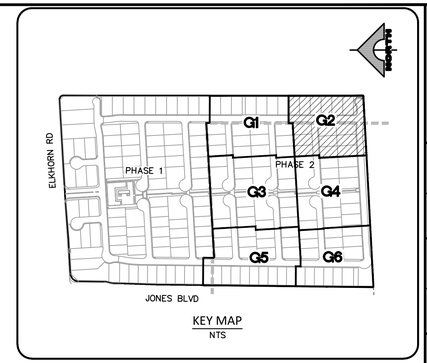
TOLL BROTHERS

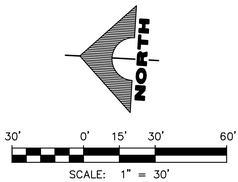
JONES & ELKHORN
PHASE 2

GRADING PLAN 1

DRAWING
G1
4 OF 37 SHTS







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8. CONSTRUCT COLLAPSIBLE BOLLARDS PER DETAIL D ON SHEET D2 & CONSTRUCT SURFACE PER USDCCA NO. 425.31.
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10. CONSTRUCT 2' SIDEWALK UNDERDRAIN PER USDCCA NO 236.

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ELEVATION: 2328.96 (FEET)
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09/20/2022

SCOTT R. MARSHALL, P.E. 29269 — DATE

L#: L22-01964 CLV#: XXXXXXXX

Call before you Dig
Avoid cutting underground utility lines. It's costly.
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FAST — Call before you UnderGround 1-702-432-5300 FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

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EARTHWORKS

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

ELEVATION OF SCOTT R. MARSHALL, No. 29269, STATE OF NEVADA, PROFESSIONAL ENGINEER, Exp. 12/31/2023, CIVIL — DATE: 09/20/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

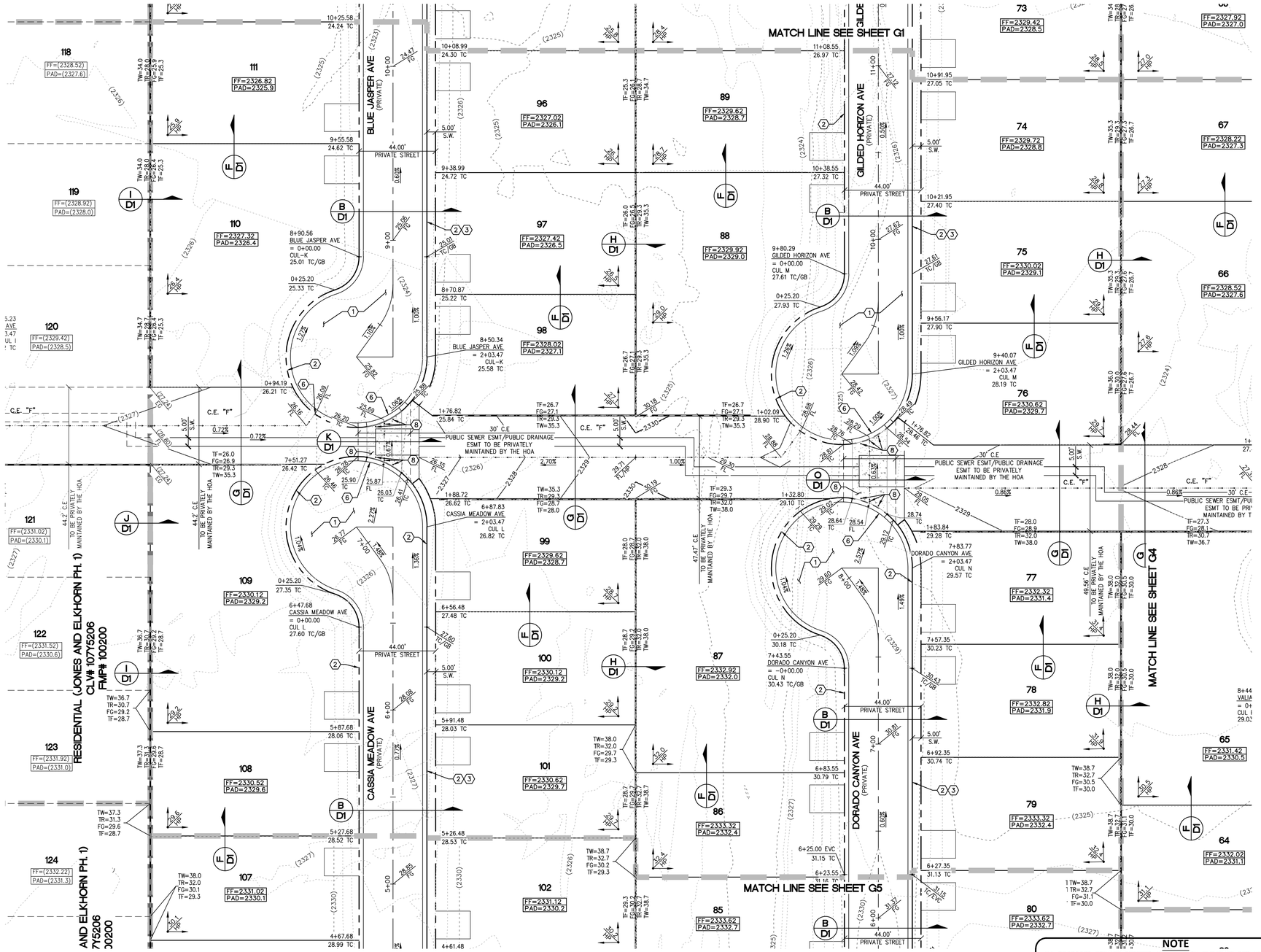
PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:16:15

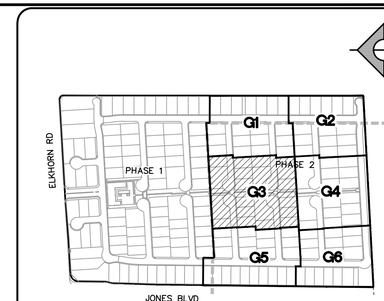
GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\PROJECTS\Y20\743-240\DWG\PRODUCTION\PHC\743-240C-PH2-G.DWG — SCOTT MARSHALL

TOLL BROTHERS
JONES & ELKHORN PHASE 2
GRADING PLAN 2

DRAWING G2
5 OF 37 SHTS





KEY MAP
NTS

NORTH

30' 0' 15' 30' 60'

SCALE: 1" = 30'

CONSTRUCTION NOTES

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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.

09/21/2022
SCOTT R. MARSHALL, P.E. 29269 — DATE

EARTHWORKS

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

Call before you Dig
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FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

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

L#: L22-01964 CLV#: XXXXXXXX

REGISTERED PROFESSIONAL ENGINEER — STATE OF NEVADA — SCOTT R. MARSHALL — No. 29269 — Exp. 12/31/2023 — CIVIL — DATE: 09/21/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE: 09/21/2022

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-21-22
PLOT TIME: 10:05:03

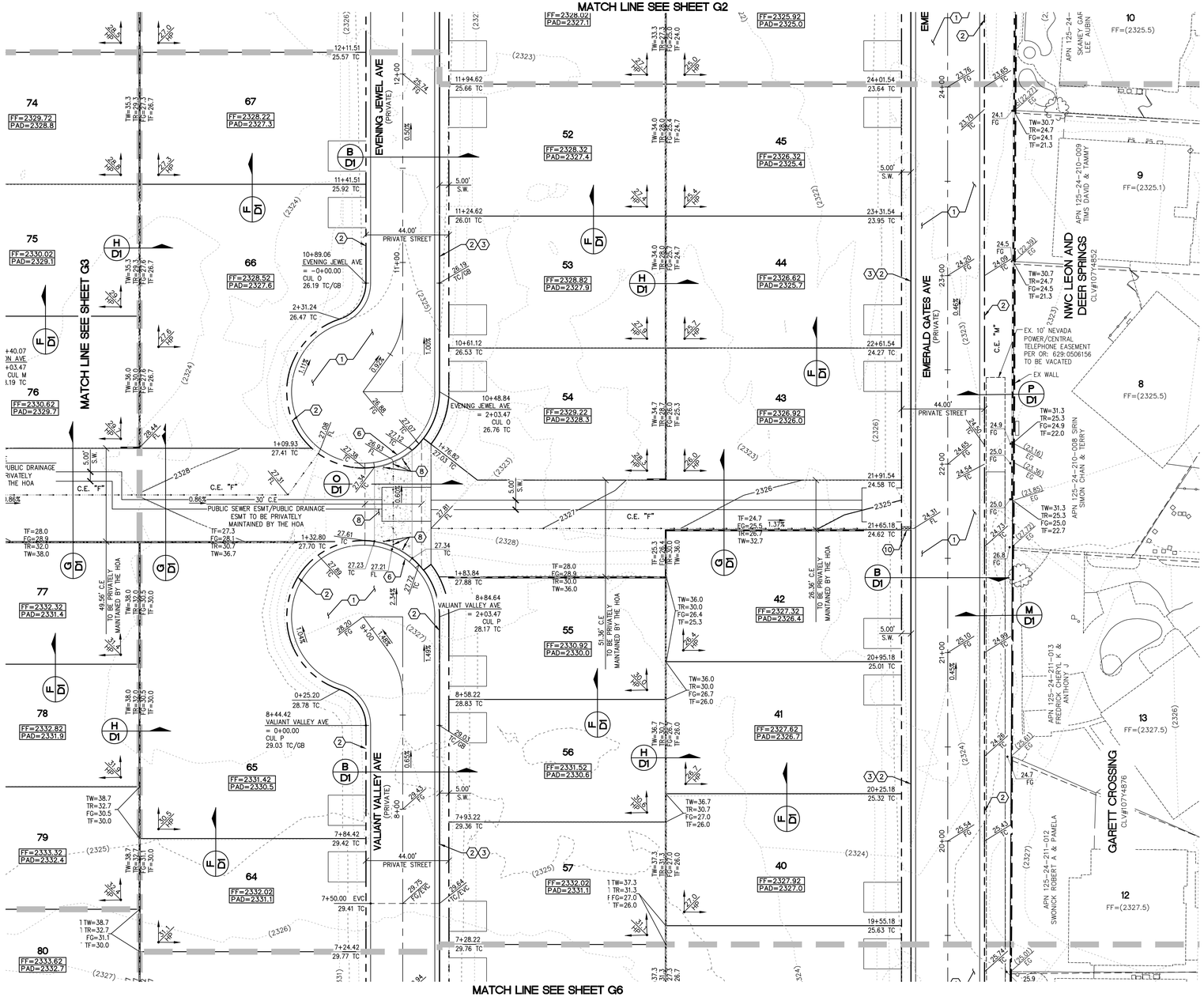
GCW
ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\PROJECTS\2021\743-240\DWG\PRODUCTION\PH2\743-240C-PH2-G.DWG

SCOTT MARSHALL

TOLL BROTHERS
JONES & ELKHORN PHASE 2
GRADING PLAN 3

DRAWING G3
6 OF 37 SHTS



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. A/B=8.0' UNLESS NOTED OTHERWISE ON THIS PLAN SET.
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9. EXISTING FENCES & GATES TO BE REMOVED.
10. CONSTRUCT 2' SIDEWALK UNDERDRAIN PER USDCCA NO 236.

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.

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

NOTE

ALL PROPOSED PRIVATE STREETS AND COMMON ELEMENTS PER NFM.

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

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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.

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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09/21/2022

SCOTT R. MARSHALL, P.E. 29269 — DATE

L#: L22-01964 CLV#: XXXXXXXX

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F: 702.804.2299
gcwengineering.com

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-21-22
PLOT TIME: 10:05:06

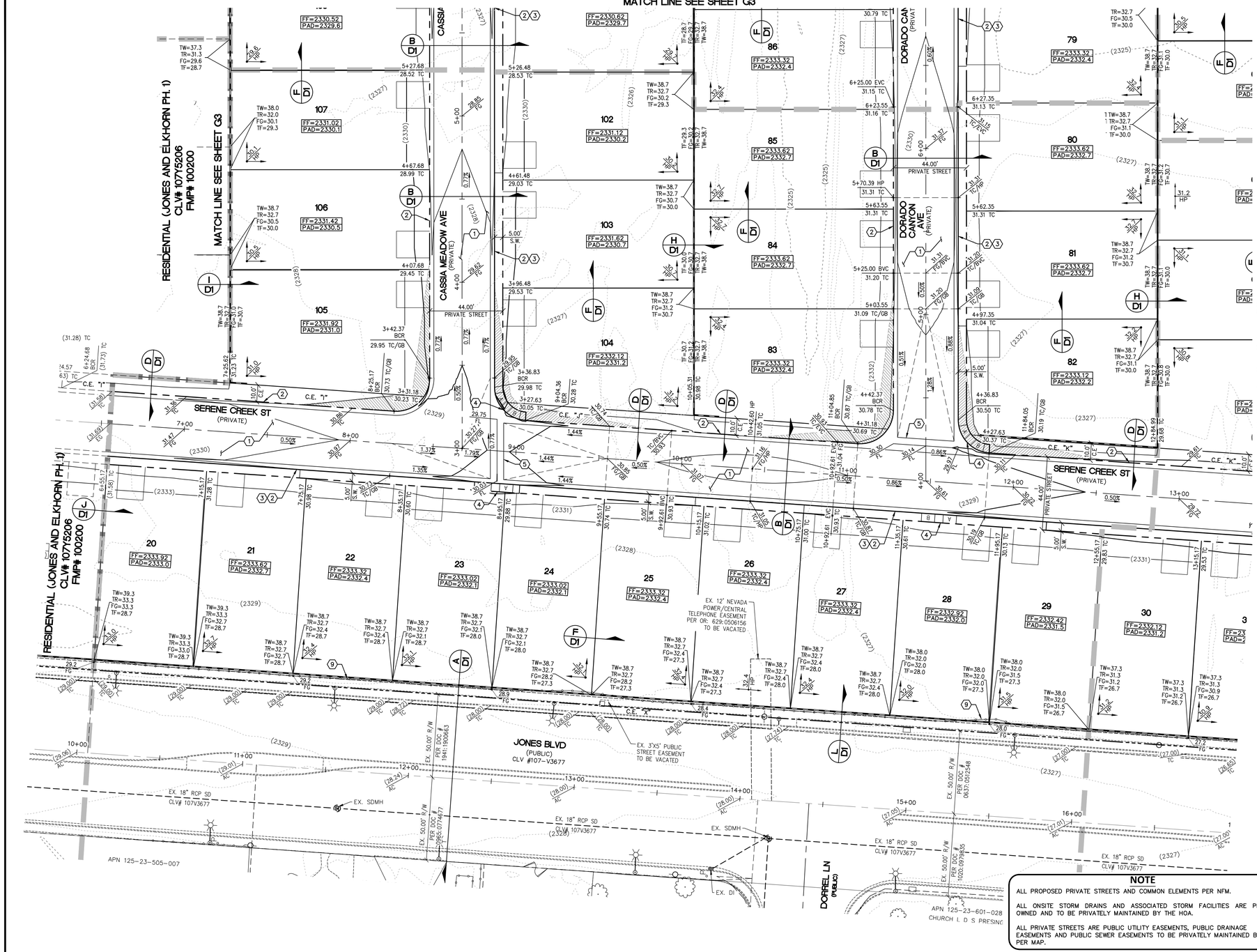
REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

STATE OF NEVADA — SCOTT R. MARSHALL — No. 29269 — PROFESSIONAL ENGINEER — Exp. 12/31/2023 — CIVIL — 09/21/2022

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

TOLL BROTHERS
JONES & ELKHORN
PHASE 2
GRADING PLAN 4

DRAWING G4
7 OF 37 SHTS



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SCOTT R. MARSHALL, P.E. 29269 — 09/20/2022 — DATE

L#: L22-01964 CLV#: XXXXXXXX

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STATE OF NEVADA — PROFESSIONAL ENGINEER — SCOTT R. MARSHALL — No. 29269 — Exp. 12/31/2023 — CIVIL — 09/20/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-20-22
PLOT TIME: 16:16:24

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-G.DWG

SCOTT MARSHALL

TOLL BROTHERS
JONES & ELKHORN
PHASE 2
GRADING PLAN 5

DRAWING
G5
8 OF 37 SHTS

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SCOTT R. MARSHALL, P.E. 29269 — DATE

L#: L22-01964 CLV#: XXXXXXXX

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SCOTT R. MARSHALL, PROFESSIONAL ENGINEER, STATE OF NEVADA, No. 29269, Exp. 12/31/2023, CIVIL — DATE: 09/20/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
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PLOT DATE: 09-20-22
PLOT TIME: 16:16:27

GCW
ENGINEERS \ SURVEYORS
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T: 702.804.2000
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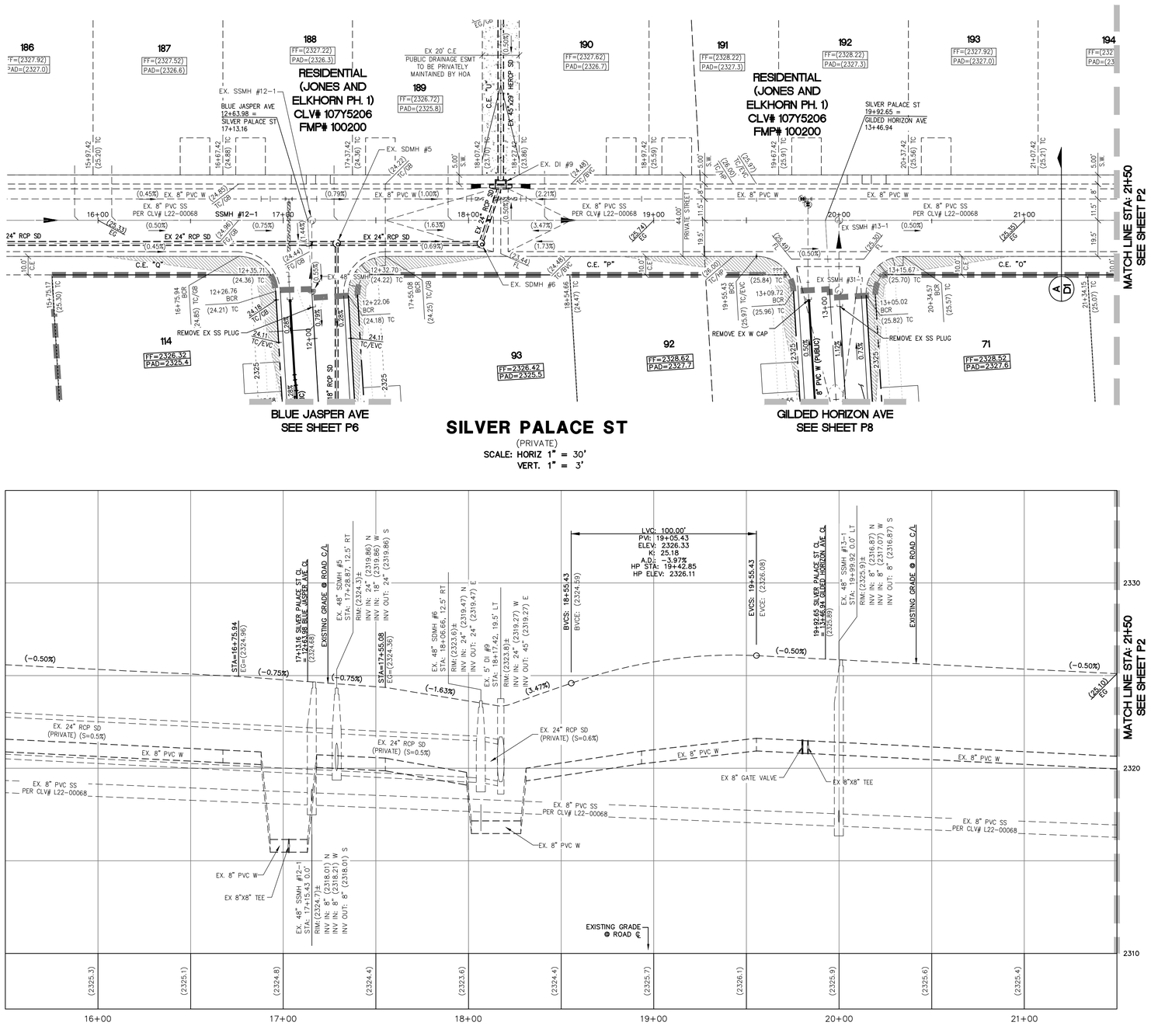
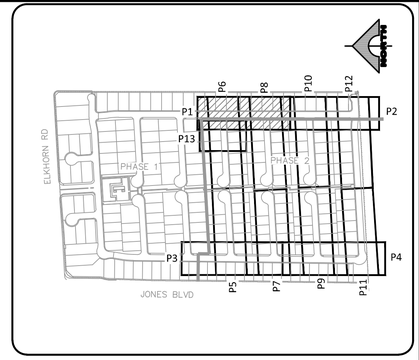
F:\PROJECTS\700\743-240\DWG\PRODUCTION\PH2\743-240C-PH2-GDWG

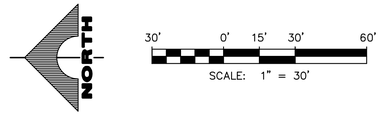
SCOTT MARSHALL

TOLL BROTHERS
JONES & ELKHORN
PHASE 2
GRADING PLAN 6

DRAWING
G6
9 OF 37 SHTS







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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.

NOTE

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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.

LVVWD NOTES

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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#: L22-01964 CLV#: XXXXXXXX

STATE OF NEVADA
PROFESSIONAL ENGINEER
SCOTT W. MARSHALL
No. 29269
CIVIL
Exp. 12/31/2023

REV	DATE	DESCRIPTION
	DATE	AGEN APP
	DATE	GCW APP
	09/21/2022	DATE:

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-21-22
PLOT TIME: 10:23:49

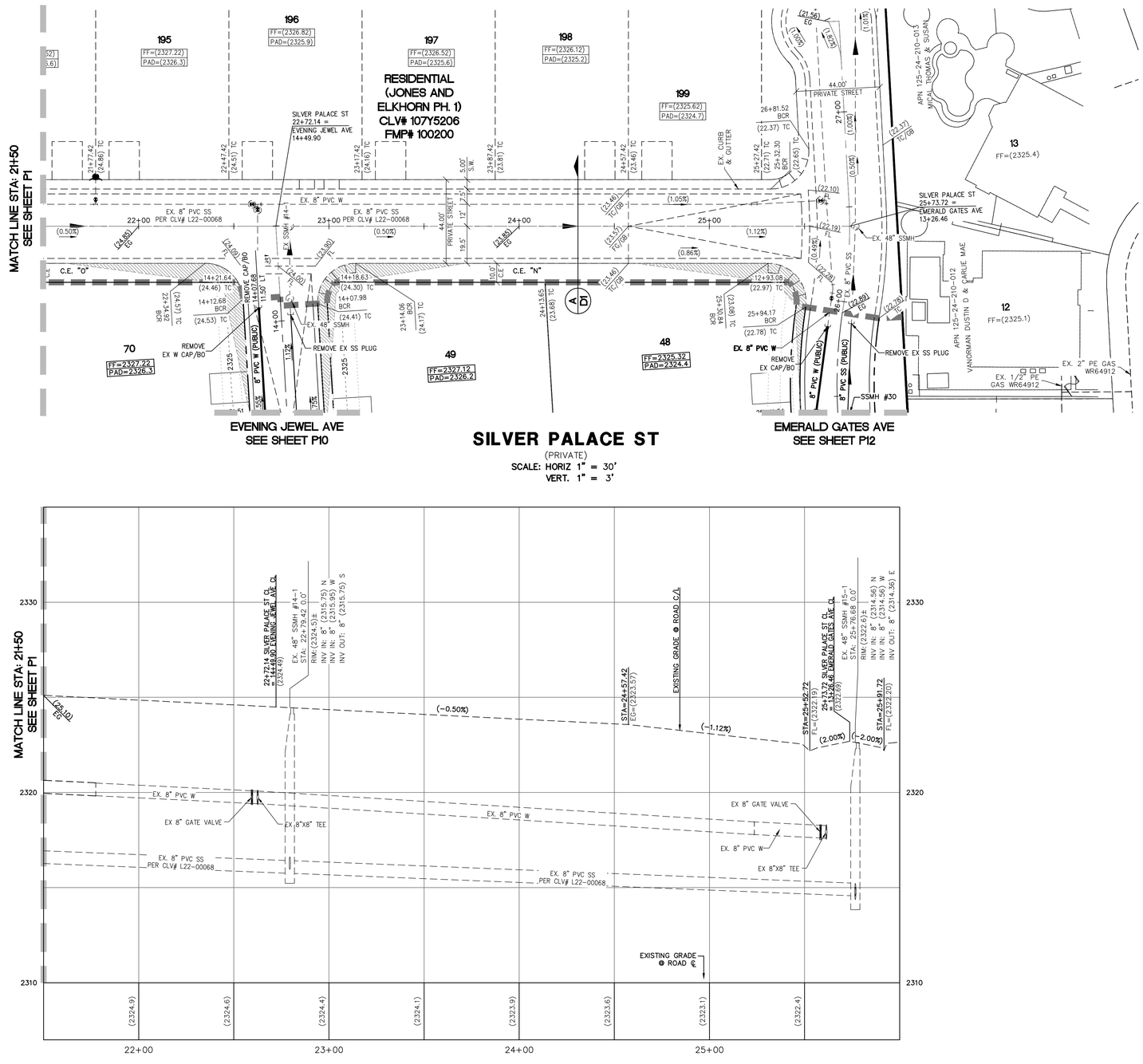
GCW
ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
F:\PROJECTS\Y20\743-240\DWG\PRODUCTION\PHC\743-240C-PH2-P.DWG
SCOTT MARSHALL

TOLL BROTHERS

JONES & ELKHORN
PHASE 2

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

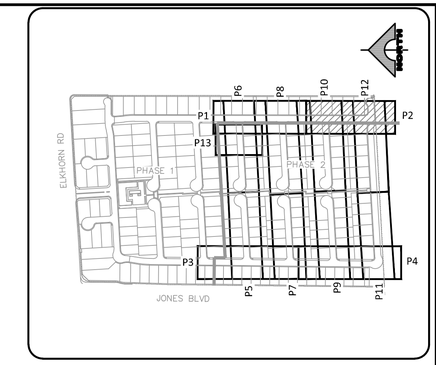
DRAWING
P1
12 OF 37 SHTS

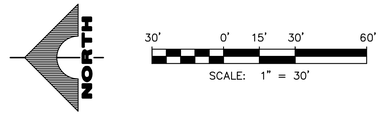


SILVER PALACE ST

(PRIVATE)

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





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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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE:

L#: L22-01964 CLV#: XXXXXXXX

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

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811
OR
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REGISTERED PROFESSIONAL ENGINEER — STATE OF NEVADA — SCOTT M. MARSHALL — No. 29268 — Exp. 12/31/2023 — CIVIL

DATE: 09/21/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240

DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-21-22
PLOT TIME: 10:23:55

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\V20\743-240\DWG\PRODUCTION\PHS\743-240C-PH2-P.DWG

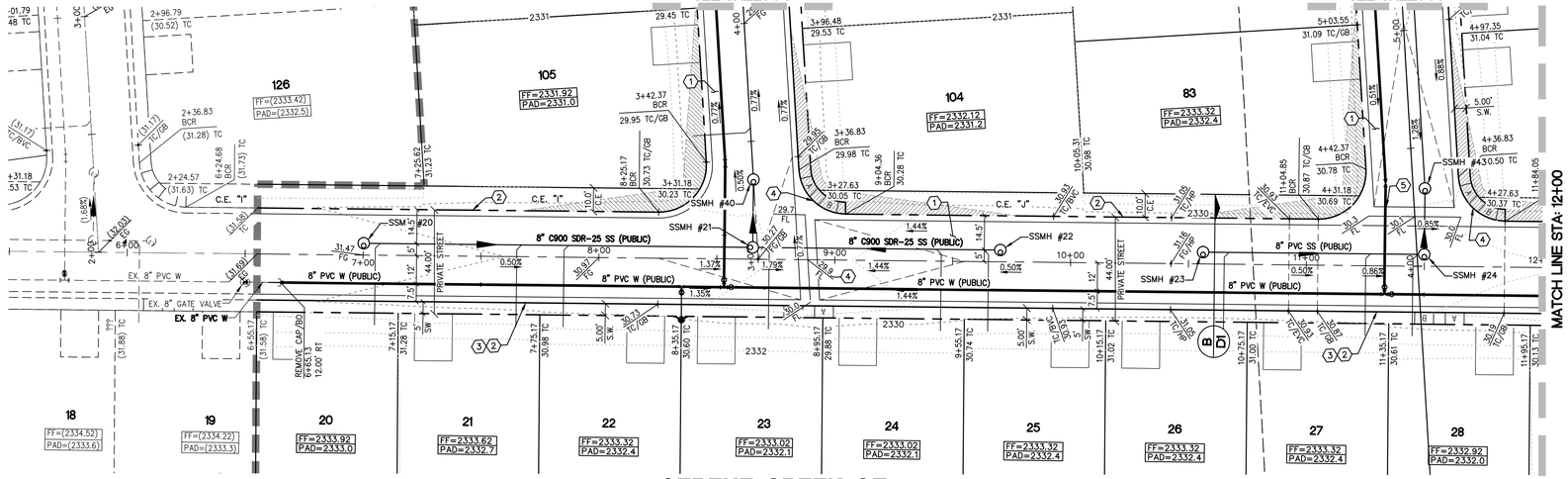
SCOTT MARSHALL

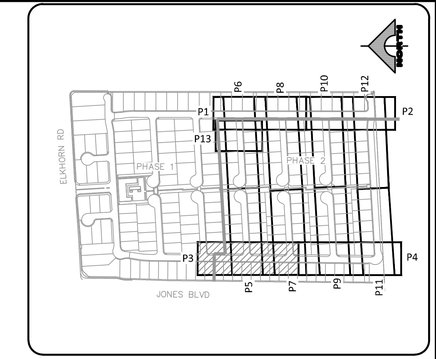
TOLL BROTHERS

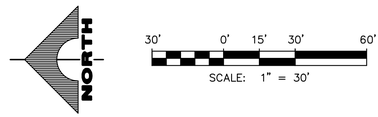
JONES & ELKHORN
PHASE 2

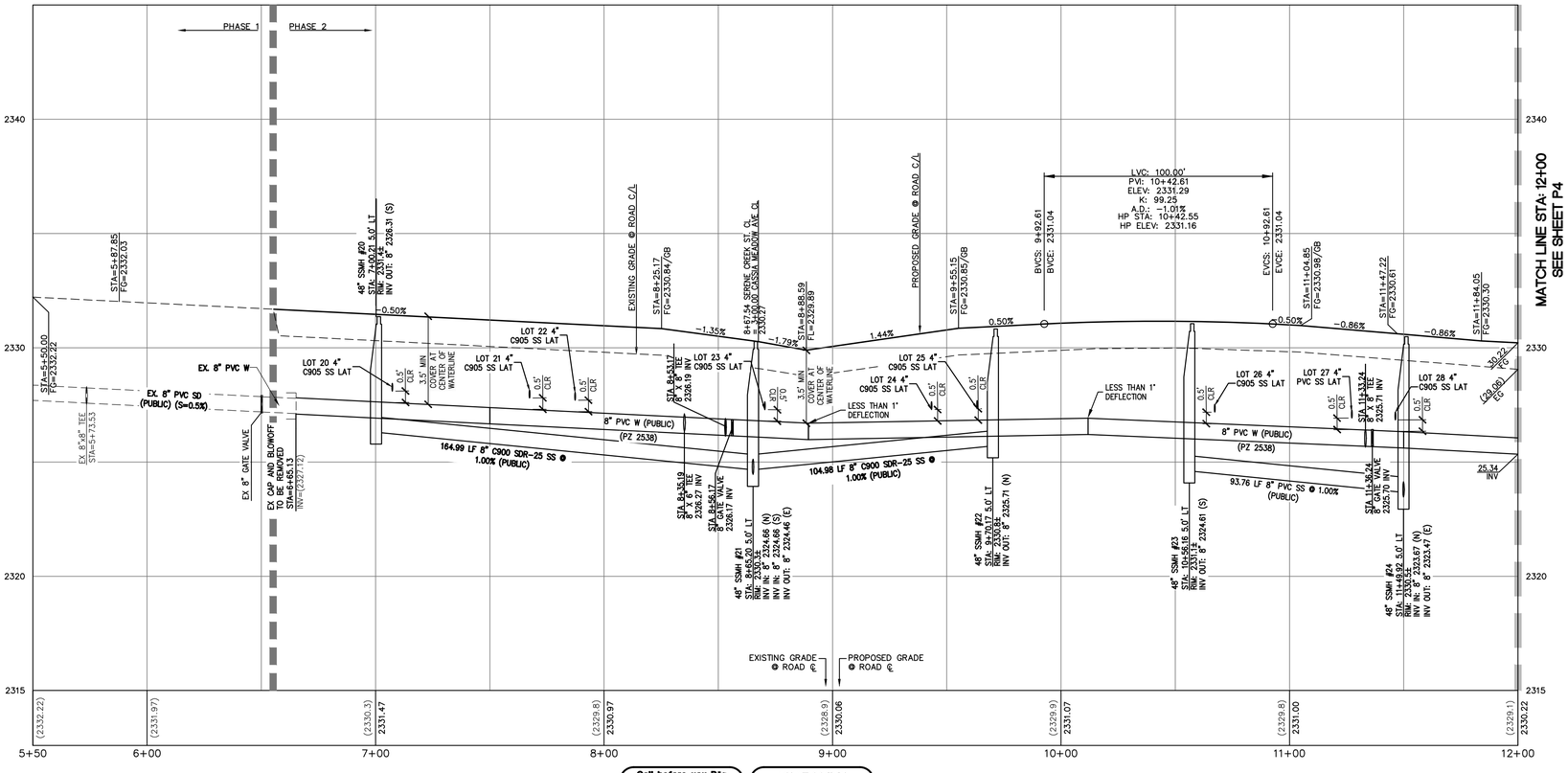
SILVER PALACE ST PLAN AND PROFILE
STA 21+50 TO END

DRAWING
P2
13 OF 37 SHTS









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LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE: _____

L#: L22-01964 CLV#: XXXXXXXX

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ENGINEER'S STATE OF NEVADA PROFESSIONAL SCOTT M. MARSHALL No. 29369 CIVIL Exp. 12/31/2023 — DATE: 09/21/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
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GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
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SCOTT MARSHALL
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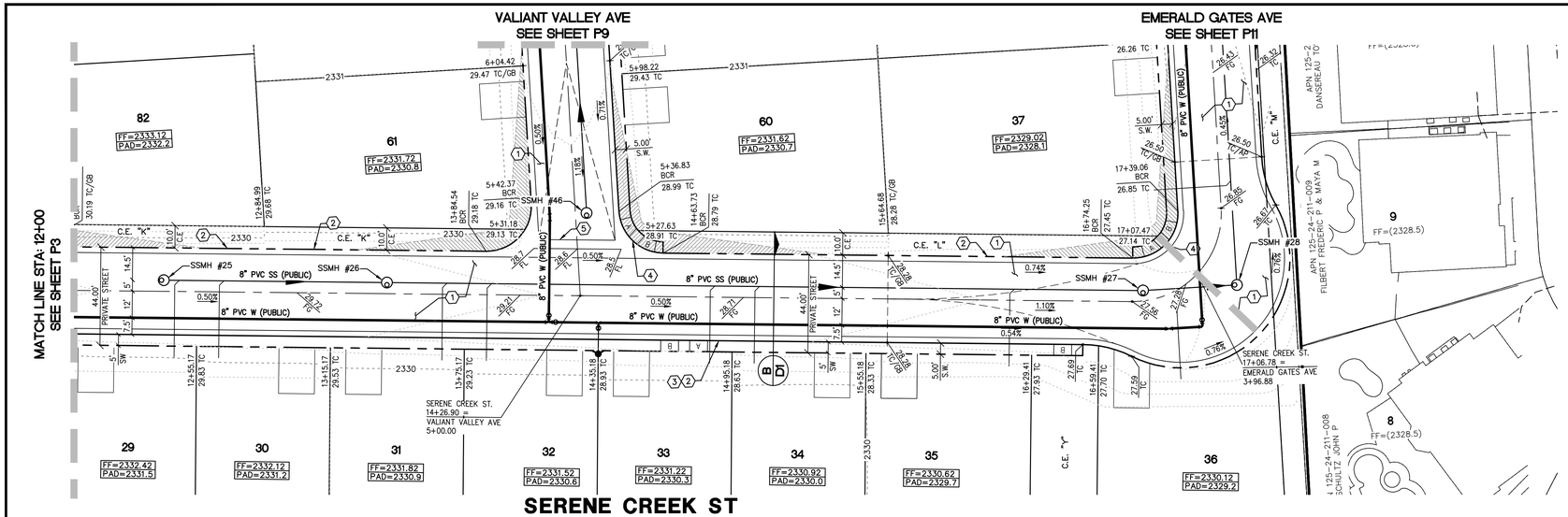

SERENE CREEK ST

(PRIVATE)

SCALE: HORIZ 1" = 30'
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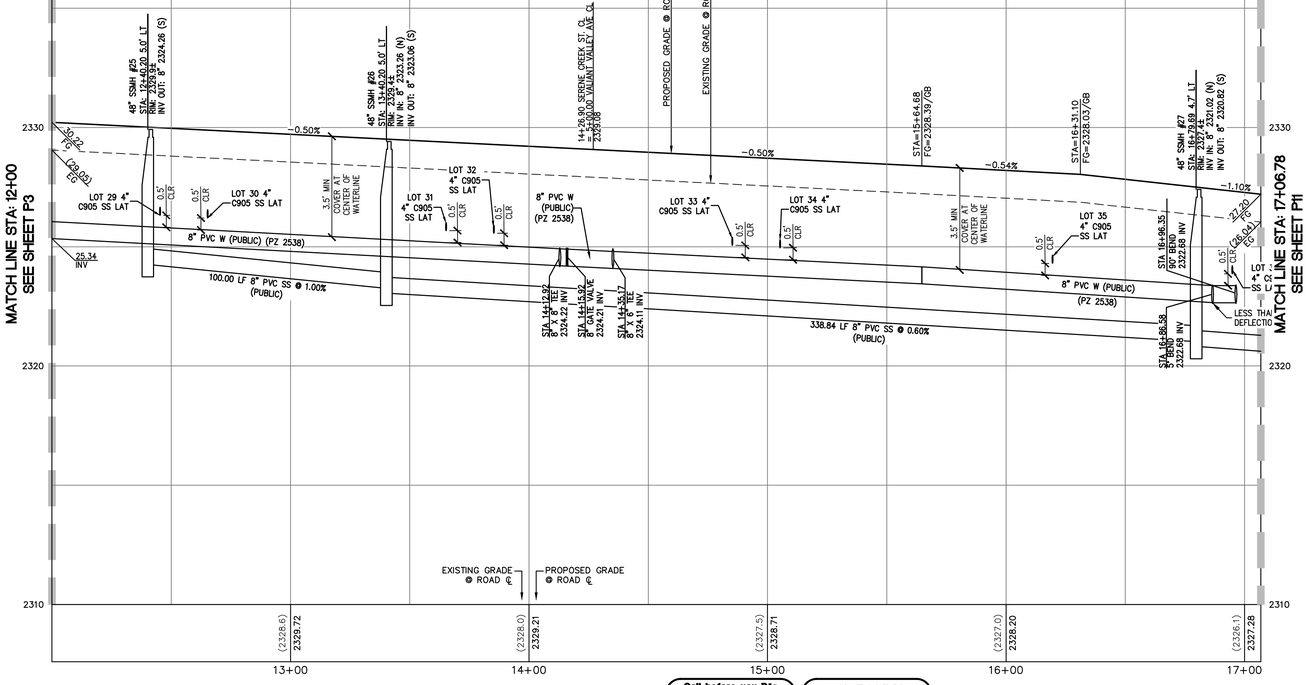

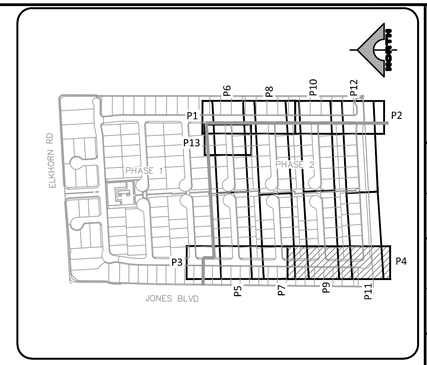

NORTH

30' 0' 15' 30' 60'

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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).

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE: _____

L#: L22-01964 CLV#: XXXXXXXX

ENGINEER - STATE OF NEVADA - PROFESSIONAL - SCOTT M. MARSHALL - No. 29369 - CIVIL - Exp. 12/31/2023 - DATE: 09/21/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-21-22
PLOT TIME: 10:24:08

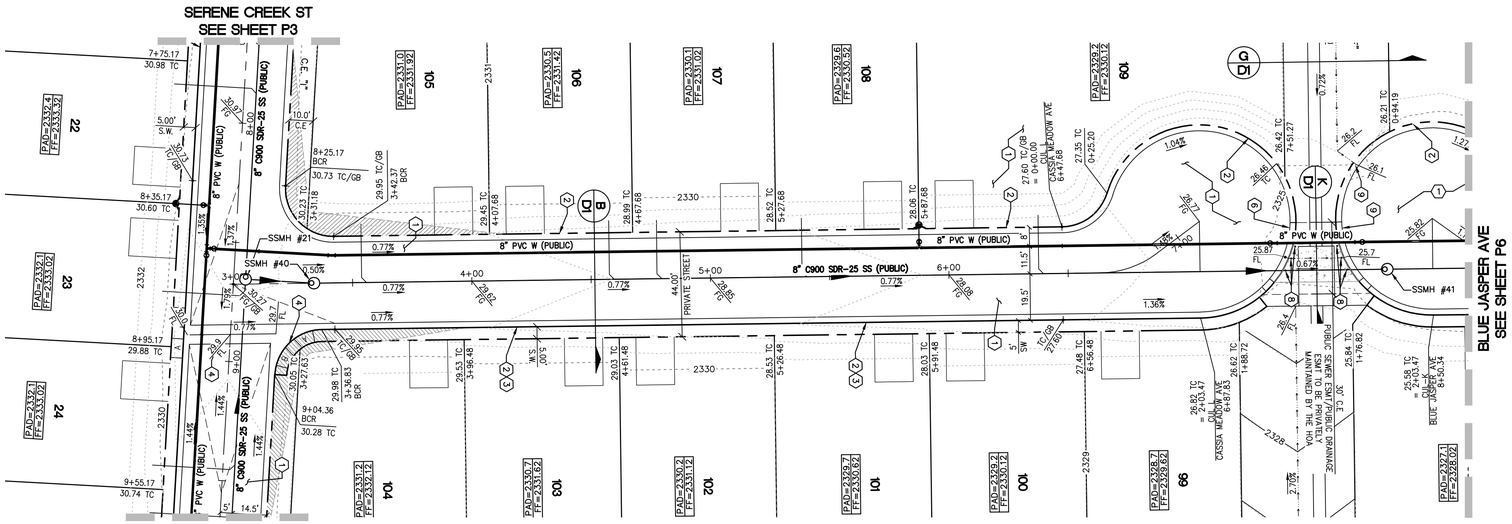
GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
F:\PROJECTS\700\743-240\DWG\PRODUCTION\PHS2\743-240C-PH2-P.DWG
SCOTT MARSHALL

TOLL BROTHERS

JONES & ELKHORN
PHASE 2

SERENE CREEK ST PLAN AND PROFILE
STA 12+00 TO END

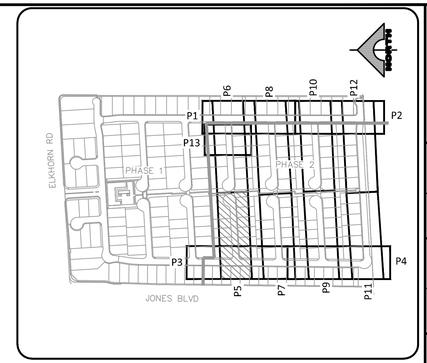
DRAWING
P4
15 OF 37 SHTS



CASSIE MEADOWS 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.
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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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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE:

L#: L22-01964 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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Call
811
OR
1-800-642-2444

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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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

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REGISTERED PROFESSIONAL ENGINEER — STATE OF NEVADA — SCOTT M. MARSHALL — No. 29268 — Exp. 12/31/2023 — CIVIL — DATE: 09/21/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-21-22
PLOT TIME: 10:24:14

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\PHS2\743-240C-PHS2-P.DWG

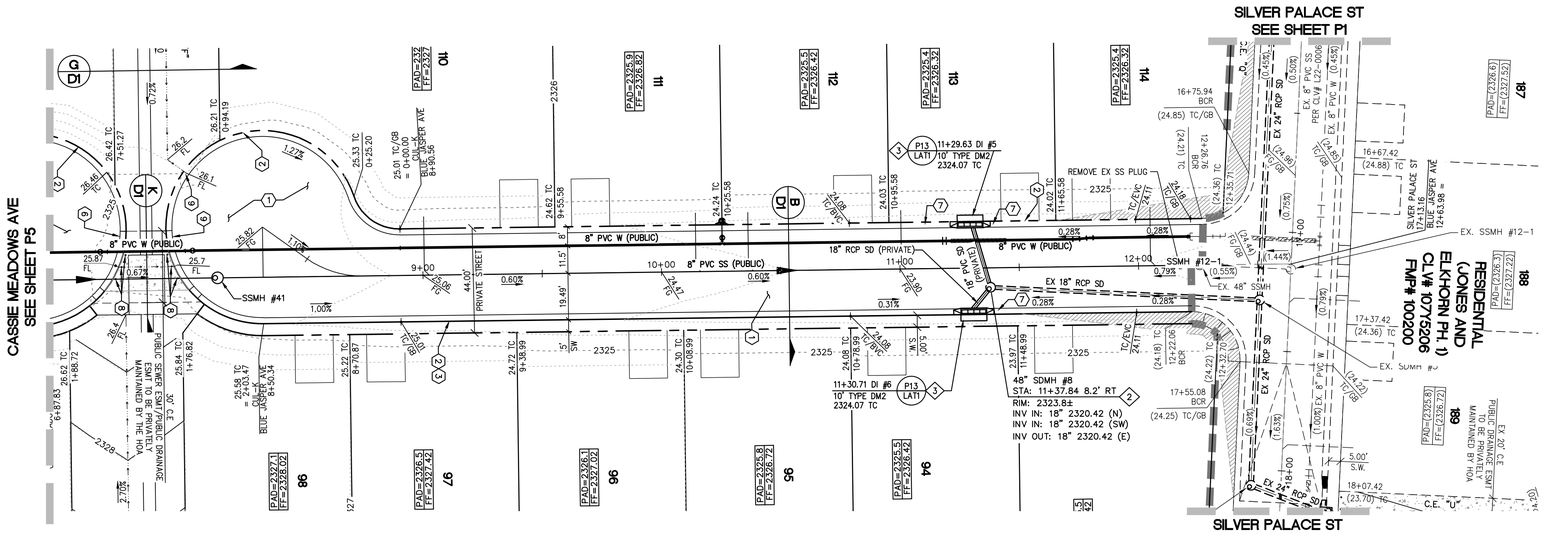
SCOTT MARSHALL

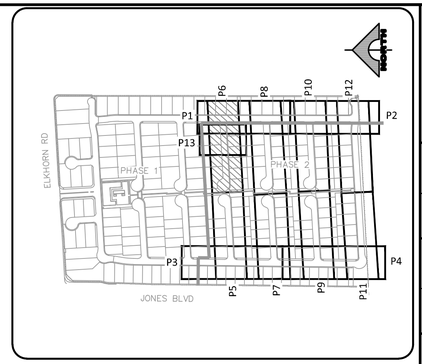
TOLL BROTHERS

JONES & ELKHORN
PHASE 2

CASSIE MEADOWS AVE PLAN AND PROFILE
BEGIN TO END

DRAWING
P5
16 OF 37 SHTS





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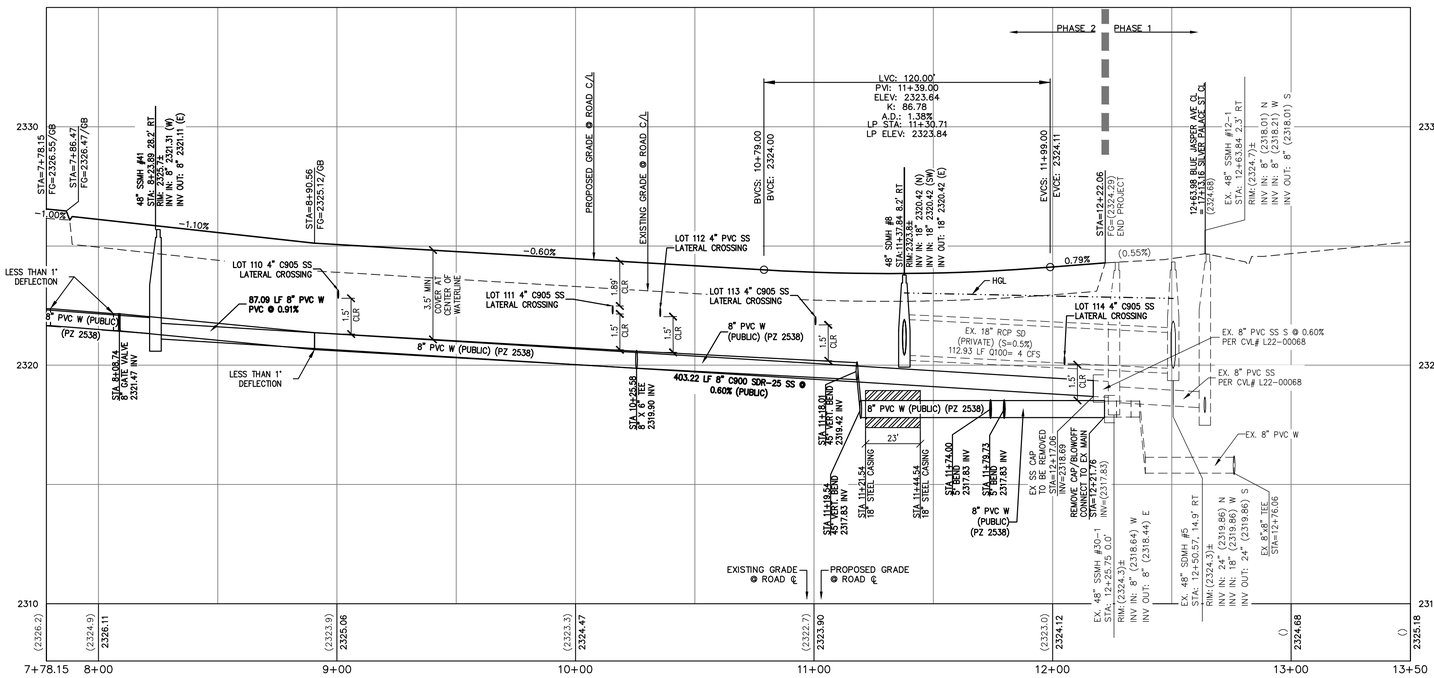
SCALE: 1" = 30'



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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE: _____

L#: L22-01964 CLV#: XXXXXXXX

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PROFESSIONAL ENGINEER — STATE OF NEVADA — SCOTT R. MARSHALL — No. 29268 — Exp. 12/31/2023 — CIVIL

DATE: 09/21/2022	
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PROJECT NO. 743-240
DESIGN: GCW
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GCW ENGINEERS \ SURVEYORS
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F:\PROJECTS\700\743-240\GWD\PRODUCTION\PVD\743-240C-PH2-P.DWG

TOLL BROTHERS

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BLUE JASPER AVE PLAN AND PROFILE
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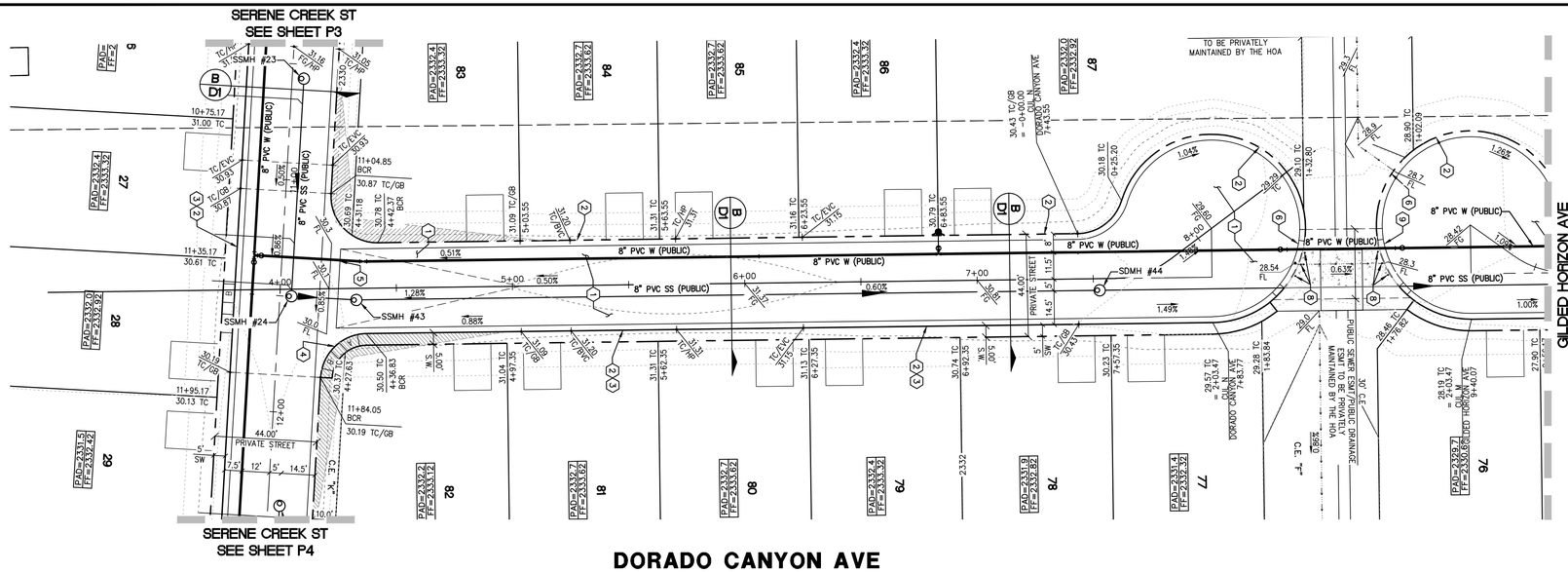
17 OF 37 SHTS



DORADO CANYON AVE

(PRIVATE)

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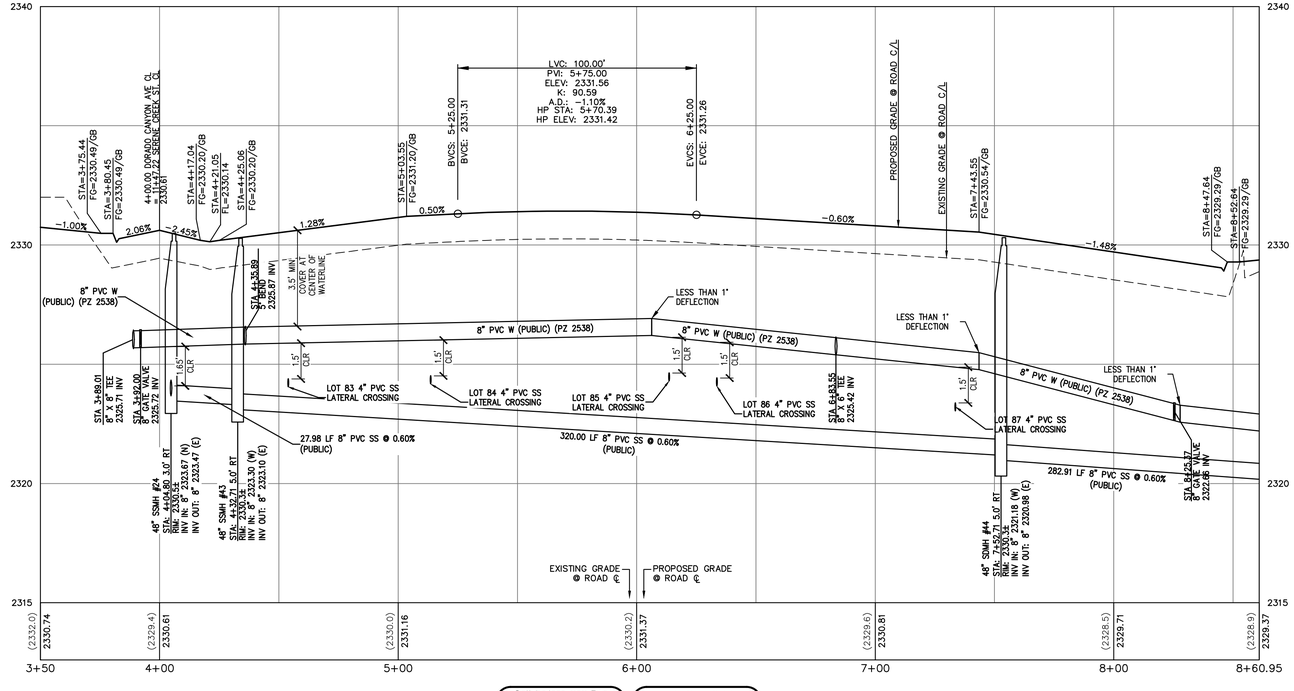

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LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE:

L#: L22-01964 CLV#: XXXXXXXX

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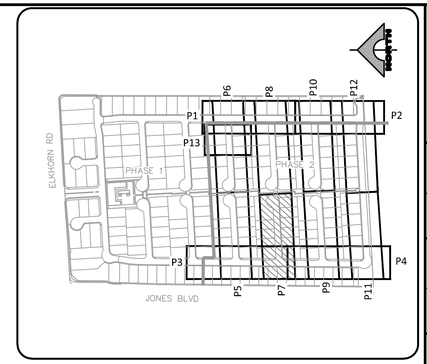
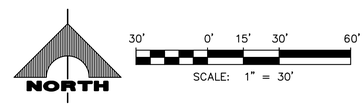




PROFESSIONAL ENGINEER - STATE OF NEVADA - SCOTT M. MARSHALL - No. 29268 - CIVIL - Exp. 12/31/2023 - DATE: 09/21/2022

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-21-22
PLOT TIME: 10:24:27

GCW ENGINEERS \ SURVEYORS
1556 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
SCOTT MARSHALL

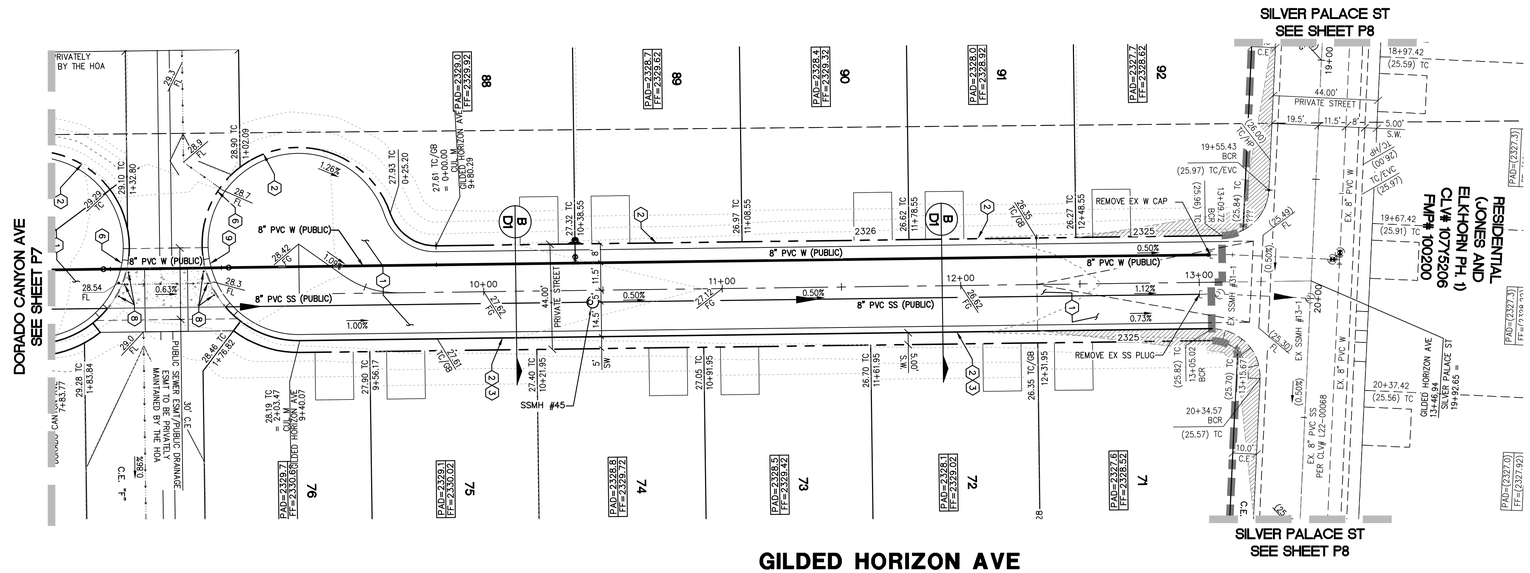
F:\PROJECTS\700\743-240\DWG\PRODUCTION\Phz2\743-240C-Ph2-P.DWG

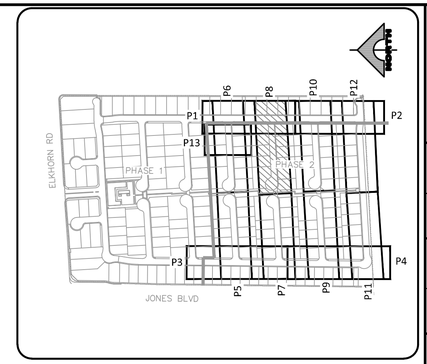
TOLL BROTHERS

JONES & ELKHORN
PHASE 2

DORADO CANYON AVE PLAN AND PROFILE
BEGIN TO END

DRAWING
P7
18 OF 37 SHTS





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
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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#: L22-01964 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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Avoid cutting underground utility lines. It's costly.
Call 811 OR 1-800-642-2444

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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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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.

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3. INSTALL PIPELINE MARKER BALLS PER UDACS PLATE NO. 15.
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REGISTERED PROFESSIONAL ENGINEER — STATE OF NEVADA — SCOTT M. MARSHALL — No. 29269 — Exp. 12/31/2023 — CIVIL

DATE: 09/21/2022

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SCOTT MARSHALL

F:\PROJECTS\700\743-240\DWG\PRODUCTION\Ph2\743-240C-PH2-P.DWG

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PHASE 2

GILDED HORIZON AVE PLAN AND PROFILE
BEGIN TO END

DRAWING
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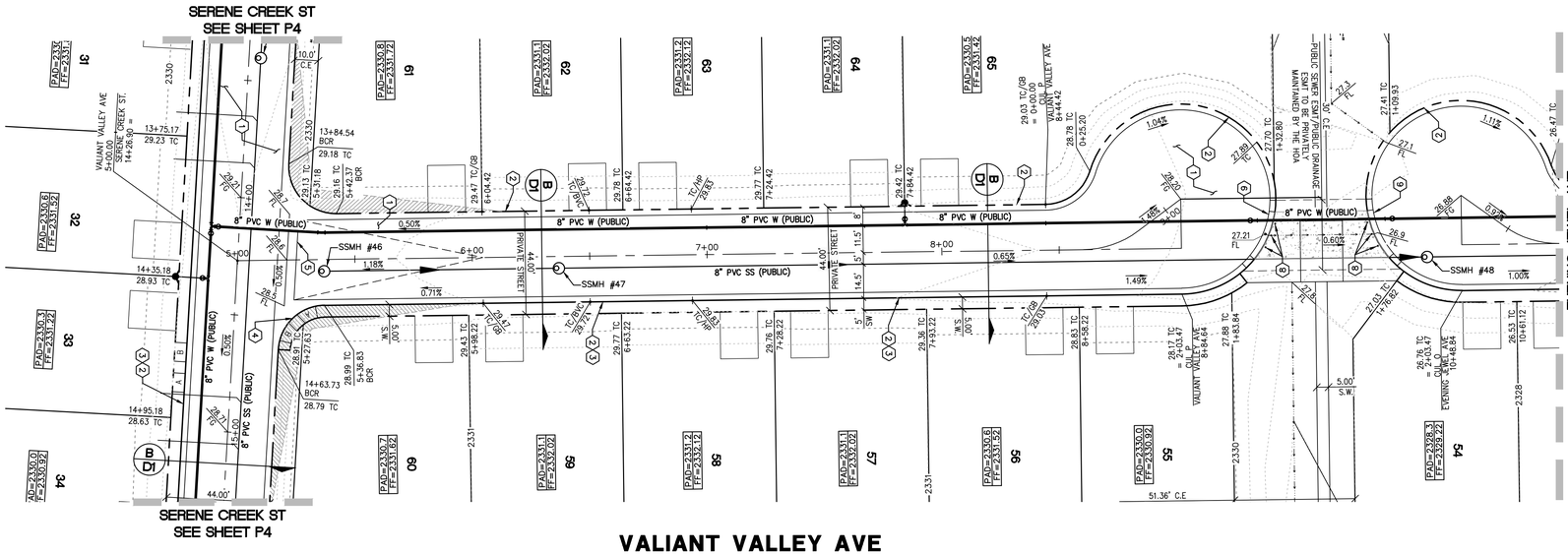
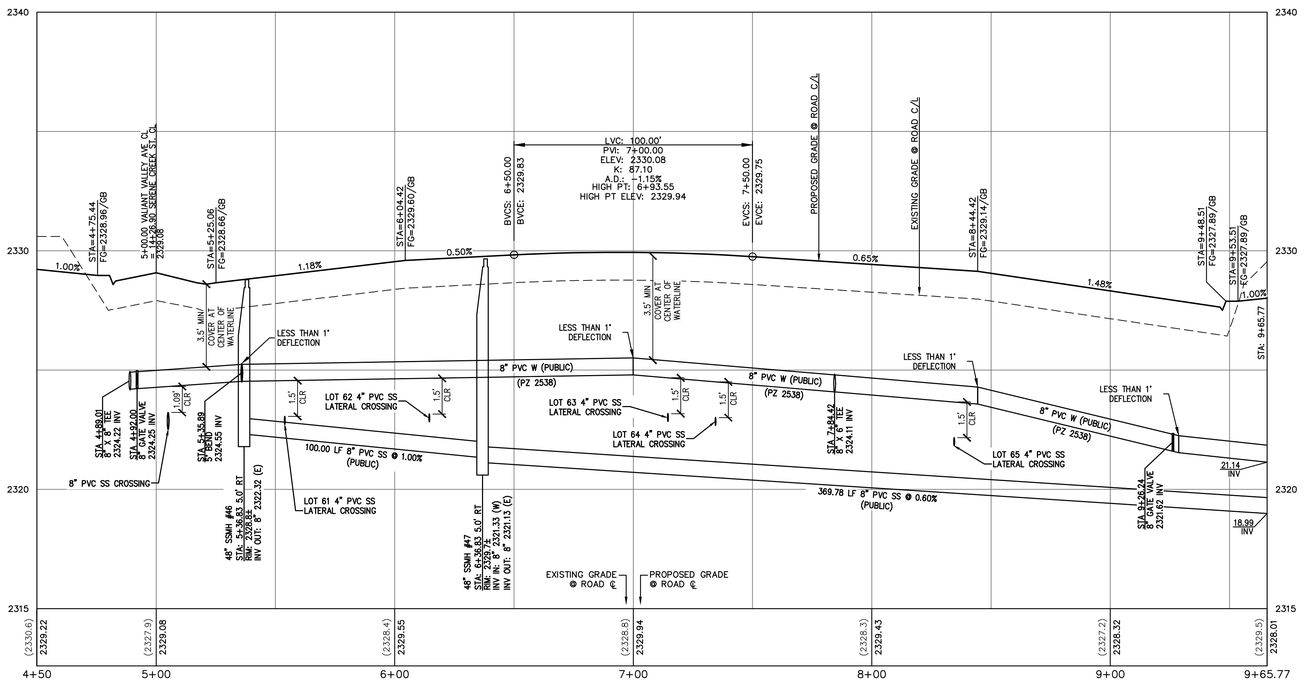
19 OF 37 SHTS

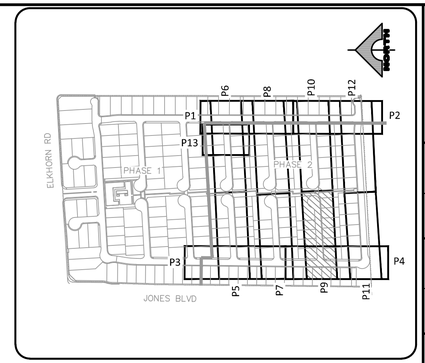


VALIANT VALLEY AVE

(PRIVATE)

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





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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)
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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#: L22-01964 CLV#: XXXXXXXX

PROFESSIONAL ENGINEER - STATE OF NEVADA - SCOTT M. MARSHALL - No. 29369 - CIVIL - Exp. 12/31/2023 - DATE: 09/21/2022

REV	DATE	DESCRIPTION	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
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GCW ENGINEERS \ SURVEYORS
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F:\PROJECTS\700\743-240\DWG\PRODUCTION\PHS2\743-240C-PH2-P.DWG

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PHASE 2

VALIANT VALLEY AVE PLAN AND PROFILE
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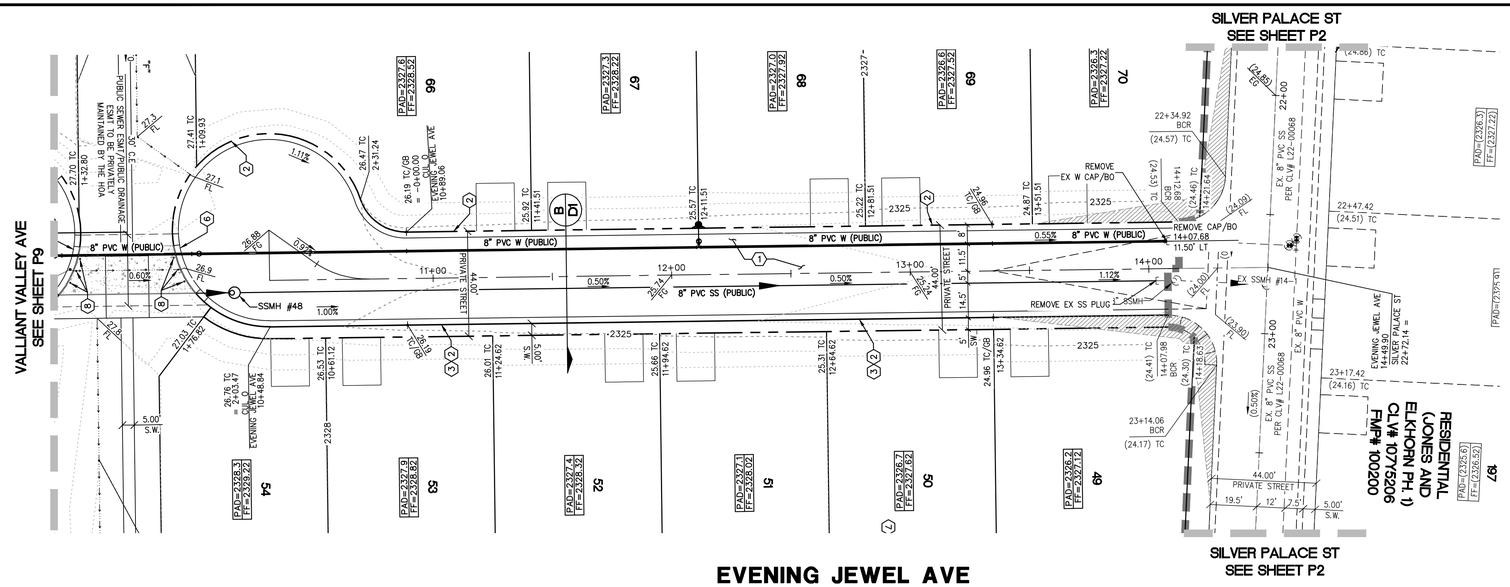
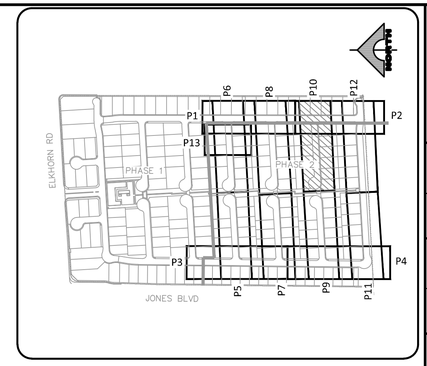
P9
20 OF 37 SHTS





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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE: _____

L#: L22-01964 CLV#: XXXXXXXX

ENGINEER - STATE OF NEVADA
PROFESSIONAL
SCOTT W. MARSHALL
Exp. 12/31/2023
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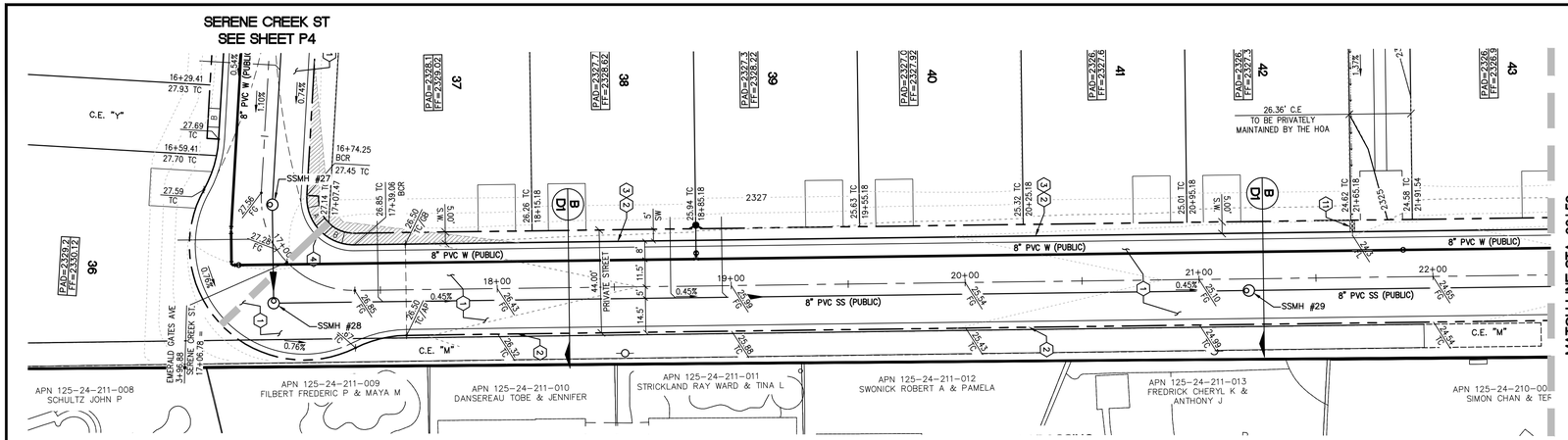
gcwengineering.com
SCOTT MARSHALL
F:\PROJECTS\700\743-240\DWG\PRODUCTION\PH2\743-240C-PH2-P.DWG

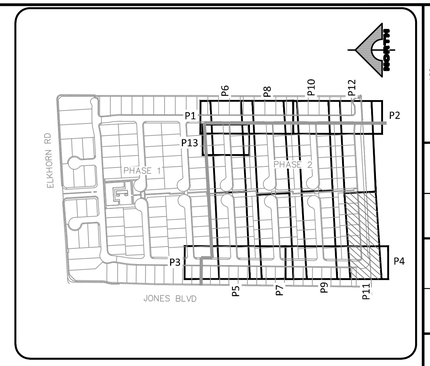
TOLL BROTHERS

JONES & ELKHORN
PHASE 2

EVENING JEWEL AVE PLAN AND PROFILE
BEGIN TO END

DRAWING
P10
21 OF 37 SHTS





NORTH

30' 0' 15' 30' 60'

SCALE: 1" = 30'

EMERALD GATES AVE

(PRIVATE)

SCALE: HORIZ 1" = 30'
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CONSTRUCTION NOTES

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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).

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE: _____

L#: L22-01964 CLV#: XXXXXXXX

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

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Avoid cutting underground utility lines. It's costly.
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NOTE

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REGISTERED PROFESSIONAL ENGINEER — STATE OF NEVADA — SCOTT M. MARSHALL — No. 29269 — Exp. 12/31/2023 — CIVIL — DATE: 09/21/2022

REV	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-21-22
PLOT TIME: 10:24:51

GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
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F: 702.804.2299
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SCOTT MARSHALL
F:\PROJECTS\700\743-240\DWG\PRODUCTION\PHS2\743-240C-PH2-P.DWG

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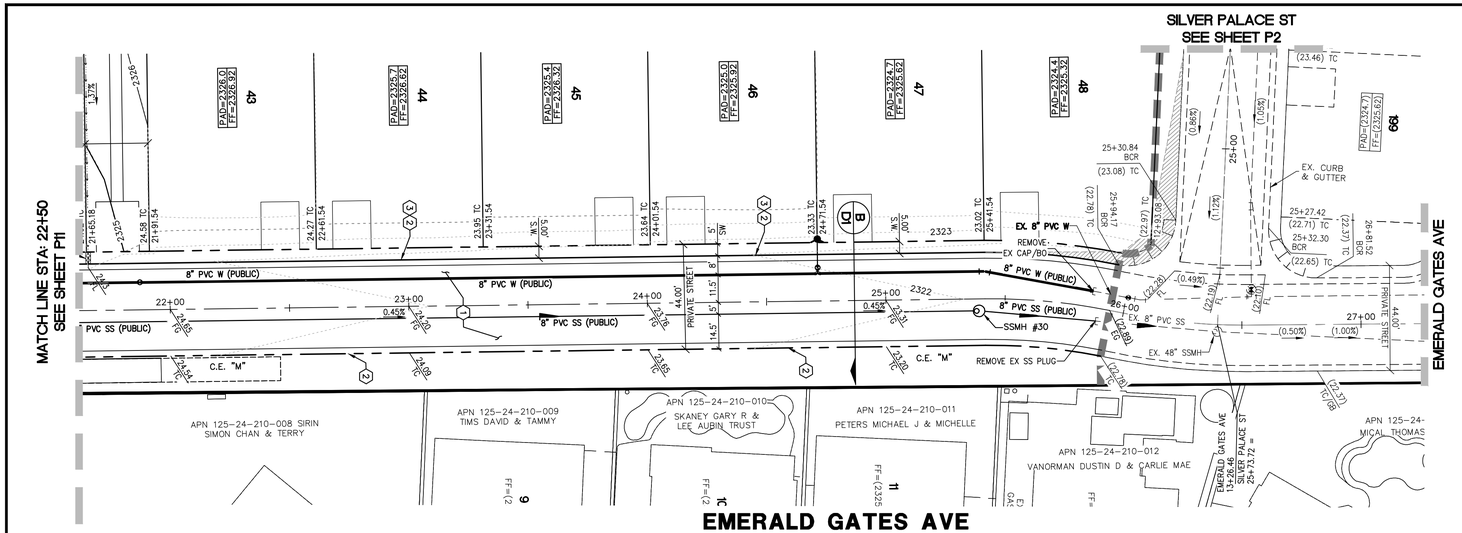
EMERALD GATES AVE PLAN AND PROFILE
BEGIN TO STA 8+50

DRAWING
P11
22 OF 37 SHTS



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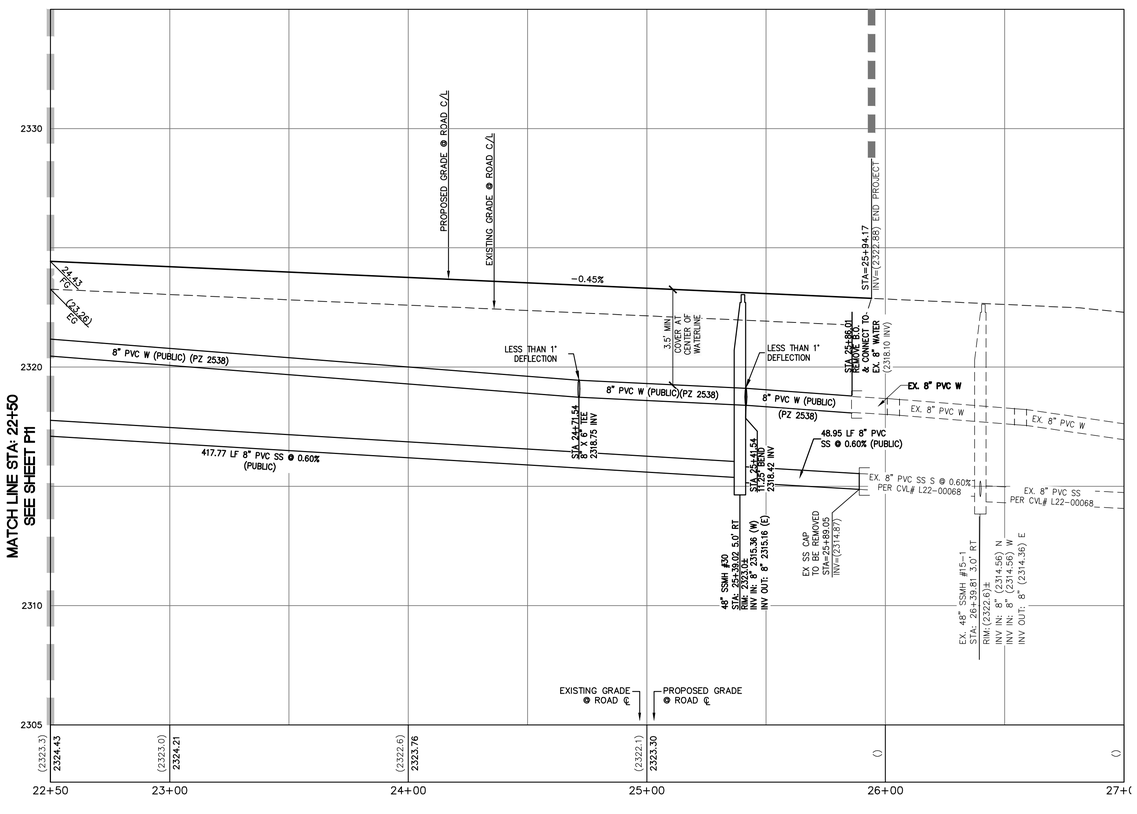

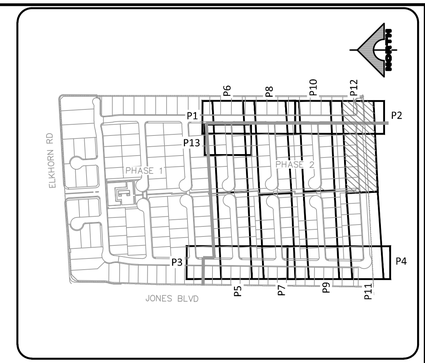

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PROJECT NO. 743-240
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 09-21-22
PLOT TIME: 10:24:57

GCW ENGINEERS \ SURVEYORS
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F: 702.804.2299
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SCOTT MARSHALL
F:\PROJECTS\700\743-240\DWG\PRODUCTION\P12\743-240C-PH2-P.DWG

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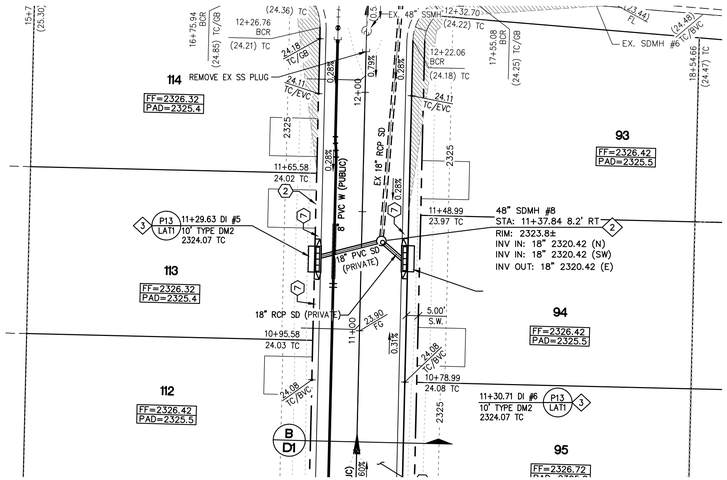

STORM DRAIN LATERAL 1

(PUBLIC)

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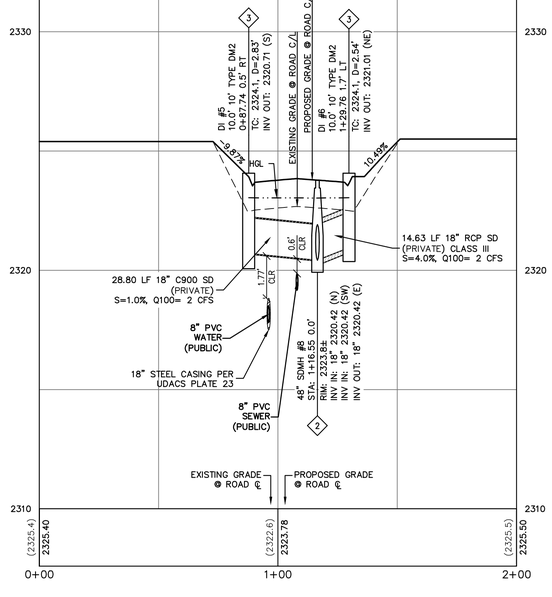

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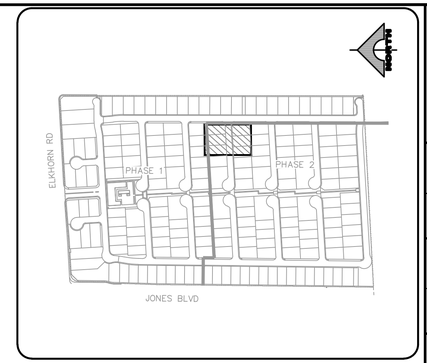

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LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE: _____

L#: L22-01964 CLV#: XXXXXXXX

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