

Summerlin West Village 25

Technical Drainage Study for Scurry Bend Drive
Sunset Run Drive to Lake Mead Boulevard

Prepared for The Howard Hughes Company, LLC

December 2022

Supplement to Addendum #2

HYDROLOGIC CRITERIA AND DRAINAGE MANUAL
DRAINAGE STUDY INFORMATION FORM

Name of Development: Scurry Bend Drive – Sunset Run Drive to Lake Mead Boulevard Date: December 2022
Location of Development: a) Descriptive (Cross Streets) North/South: Sunset Run Drive/Lake Mead Boulevard
East/West: _____
b) Section: 23 and 14 Township: 20S Range: 59E
c) APN : 137-15-801-002, 137-15-811-001, 137-22-301-006, 137-23-211-001

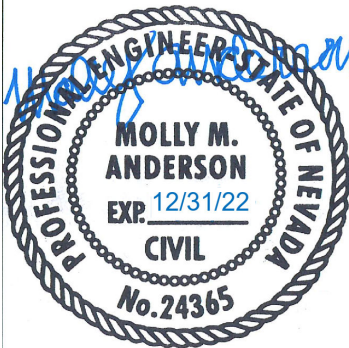
Name of Owner: Howard Hughes Company, LLC
Telephone No.: (702) 791-4201 Fax No.: (702) 791-4450 E-Mail Address: April.Chapman@howardhughes.com
Address: 10845 Griffith Peak Drive, Suite 160, Las Vegas, NV 89135

Contact Person-Name: Molly M. Anderson, PE Telephone No.: (702) 551-0330
* E-Mail Address: molly.anderson@atkinsglobal.com Fax No.: (702) 263-7200
Firm: Atkins North America Inc.
Address: 2270 Corporate Circle, Ste 200, Henderson, NV 89074

Type of Land Development/Land Disturbance Process:

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

1. Total Owned Land Area: At Site: +/- 446 acres Being Developed/Disturbed: +/- 4.74 acres
2. Is a portion or all of the subject property located in a designated FEMA Flood Hazard Area? ☐ Yes** ☒ No
3. Is the property bordered or crossed by an existing or proposed Clark County Regional Flood Control District Master Planned Facility? ☒ Yes** ☐ No
4. Proposed type of development (Residential, Commercial, Etc.): Public - Roadway Improvements
5. Approximate upstream land area which drains to the subject site: 225.54 acres
6. Has the site drainage been evaluated in the past? ☒ YES ☐ NO If yes, please identify documentation: Overall Master Conceptual Drainage Study for Summerlin West, Scurry Bend Rough Grade DS#5253
7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: Existing CC-215 Western Beltway Channel
8. Briefly describe your proposed schedule for the subject project: ASAP



Engineer's Seal

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

***New Required Field**

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

DS# 5427 Local Entity File No.	Revision	Date

REFERENCE:

STANDARD FORM 1

Engineer's Certification

Atkins certifies that the information contained herein has been prepared in accordance with generally accepted engineering principles and practices, and to the best of our knowledge, is true and correct.

This letter certifies that all items in the **Supplement to V25 Scurry Bend Drive – Sunset Run Drive to Lake Mead Boulevard Addendum #2** electronic submittal match the paper version bound into the study.



Molly Anderson

Digitally signed by Molly Anderson
Location: Henderson, NV
Reason: I attest to the accuracy
and integrity of this document
Contact Info:
molly.anderson@atkinglobal.com
Date: 2022.12.14 15:09:10-08'00'

Molly M. Anderson, PE (NV #24365)
Senior Engineer

Contents

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Supplemental Information

This supplemental document aids to clarify and document the changes made in the hydraulic analysis originating from the revisions made to the plans for the storm drain system in Addendum #2. The revisions made affects only the hydraulics of storm drainage system. The revisions were minimal, and it did not affect the system capacity adversely. The invert levels and pipe lengths were revised for some segments and have been documented in the table below. The WSPG-W model has been updated and rerun to reflect the changes.

A previous version of this supplement was submitted in October 2022 with the columns below not described clearly. The updated value is the value that was updated in the WSPG-W model because the previously approved WSPG-W model did not match the Revision submittal from the improvement plans, so updated value refers only to the WSPG-W model. The plans did not change. The previous value column describes the original WSPG-W value. Neither the plans nor the WSPG-W model have been revised since the October 2022 submittal, only this clarification.

Item No.	Location	Parameter	Updated value, ft	Previous value, ft
1	SDMH#3	INV IN	3491.93	3494.41
2	SDMH#3	INV OUT	3491.73	3494.21
3	SDMH#3 to SDMH#4	LF	167.13	168.1
4	SDMH#4 to SDMH#5	LF	131.23	131.41
5	SDHM#7 to SDMH#6	LF	404.90	411.67
6	SDMH#7	INV IN	3500.02	3500.22
7	SDDI#2	INV OUT	3493.35	3494.6
8	SDMH#3	INV IN	3491.93	3494.41
9	SDMH#3	INV OUT	3491.73	3494.21
10	SDDI#3	INV OUT	3494.18	3495.18
11	SDDI#2 to SDMH#3	LF	14.34	11
12	SDDI#3 to SDHM#3	LF	68.76	66.77
13	SDDI#4 to SDMH#5	LF	NA	Added
14	SDMH#7	INV OUT	3500.20	3500.02
15	SDDI#6 to SDMH#7	LF	68.14	68.15
16	SDDI#5 to SDHM#7	LF	16.62	16.87

Appendices



Appendix A. Comment Letter

CITY OF LAS VEGAS			DATE:	
INTER-OFFICE MEMORANDUM			October 26, 2022	
TO: Land Development Services Department of Building & Safety			FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works	
SUBJECT:		Drainage Study for:	COPIES TO:	
Summerlin West V25 - Scurry Bend Drive Improvements (from Sunset Run Dr. to Lake Mead Blvd.) – Update #1			Atkins	
Cross Streets:	Scurry Bend Drive. & Lake Mead Boulevard		Howard Hughes Company, LLC	
File Number:	F:\Depot\DSMemos\DS5427D.doc		Bart Anderson, P.E., DevCo	
Parcel Number:	137-15-801-002 & more			
Zoning Action:	N/A			
FEMA Flood Zone	YES	NO	X	
Proposed Storm Drain	YES	X	NO	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	3/11/2021	3/31/2021	Not Approved	\$400.00	4198949: \$400
2 nd Submittal	4/21/2021	5/5/2021	Not Approved	\$400.00	4255233: \$400
3 rd Submittal	5/20/2021	6/3/2021	Approved	\$400.00	4298724: \$400
4 th Submittal	10/12/2022	10/26/2022	See Comments Below	\$100.00	5000576: \$100
			TOTAL FEES (LDDRS):	\$1,300.00	----

REMARKS:

4th Submittal: Update #1 to revise the horizontal and vertical values of the storm drain system

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

	is approved subject to conformance to all City standards and the following conditions:
X	must be resubmitted or supplemented including the following:
	is conditionally approved subject to Clark County Regional Flood Control District concurrence.
	is conditionally approved subject to Clark County Public Works Department concurrence.

1. The plans in the last submittal appear to be not revised at all:

For example: Per the *Table of Revision* in Page 4 of the *Update Study*, the “INV IN” of SDMH #3 has been updated from 3491.93 to 3494.41 while the “INV OUT” has been updated from 3491.73 to 3494.21.

However, per **Storm Drain Lateral Profiles (Sheet 24/49)**, see **Storm Drain Lateral 2 (B/24)**, both the “INV IN” and “INV OUT” showed the previous values still.

Double check the plans for other impacted SDMHs and SDDIs whether they have been revised per the revision table in the *Update Study*.

The following condition is repeated until it is complete:

1. The subject project is based on the premise that the downstream *Fleet Wing Avenue* and *Flight Range Avenue* and the associated storm drain facilities are in place for flood flow perpetuation. The subject improvement plans will not be finally approved prior to the posting of the construction bonds of the *Summerlin West Village 22 – Fleet Wing Avenue (Kettle Ridge to Scurry Bend)* and *Summerlin West Village 22- Flight Range Avenue (Scurry Bend to Kettle Ridge)* street improvements project.

NOTE: Please be advised that all land surface area disturbances over 1 acre or any area adjacent to a water way must submit to the Nevada Division of Environmental Protection a "Notice of Intent" to discharge that certifies a stormwater pollution prevention plan has been developed and is maintained on site; for inclusion in the Stormwater General Permit No. NVR100000. A phased construction unit in a contiguous subdivision is considered under construction until all stripped or disturbed surface areas have been covered by paving, building construction or planting. For more information, including forms and applications see <http://ndep.nv.gov/bwpc/storm01.htm> or call (775) 687-9429.

NOTE: Any future changes to the proposed design (or design assumptions) as outlined in the approved drainage study and attached preliminary grading plan which affect drainage must be addressed in a Drainage Study Update and accepted by the *City of Las Vegas Flood Control Section*. Additionally, conditional acceptance of a drainage study is valid for a period of one (1) year. If the proposed construction has not been completed in that time period, the *City of Las Vegas* reserves the right to require additional conditions and/or submission and acceptance of a complete drainage study update prior to further construction of a project.

END OF REMARKS
HDR/AYS

T/R/S: T20S/R59E/15
AREA K-15

Appendix B. Updated WSPG-W Model

SCURRY-BEND-SOUTH_ULT.WSW

T1 SUMMERLIN WEST VILLAGE 25
 T2 SCURRY BEND DR (FLIGHT RANGE AVENUE TO FLEET WING AVENUE)
 T3 100-YEAR INTERIM CONTDITION
 SO .0003485.360 1 3486.229
 REM*****SCURRY BEND DRIVE SDMH#5
 R 126.2303488.000 1 .013 .000 .000 0
 R 126.2303488.200 1 .013 .000 -12.13 1
 REM*****SCURRY BEND DRIVE SDMH#4
 R 293.3603491.730 1 .013 .000 .000 0
 JX 295.8603491.830 1 2 2.013 4.000 4.5103491.93 3491.93 81.0-90.0 .000
 REM*****SCURRY BEND DRIVE SDMH#3
 R 298.3603491.930 1 .013 .000 .000 0
 SH 298.3603491.930 1 3491.930
 CD 1 4 1 .000 2.500 .000 .000 .000 .00
 CD 2 4 1 .000 2.000 .000 .000 .000 .00
 Q 0.001 .0

SCURRY-BEND-SOUTH_ULT.OUT

FILE: SCURRY-BEND-SOUTH_ULT.WSW

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WATER SURFACE PROFILE LISTING

Date: 9-29-2022 Time: 4:22: 0

SUMMERLIN WEST VILLAGE 25

SCURRY BEND DR (FLIGHT RANGE AVENUE TO FLEET WING AVENUE)

100-YEAR INTERIM CONTDITION

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
.000	3485.360	.640	3486.000	8.51	8.58	1.14	3487.14	.00	.97	2.18	2.500	.000	.00	1 .0
63.918	.0209					.0209	1.34	.64	2.24	.64	.013	.00	.00	PIPE
63.918	3486.697	.640	3487.337	8.51	8.58	1.14	3488.48	.00	.97	2.18	2.500	.000	.00	1 .0
62.312	.0209					.0210	1.31	.64	2.24	.64	.013	.00	.00	PIPE
126.230	3488.200	.638	3488.838	8.51	8.61	1.15	3489.99	.00	.97	2.18	2.500	.000	.00	1 .0
6.300	.0211					.0211	.13	.64	2.25	.64	.013	.00	.00	PIPE
132.530	3488.333	.638	3488.971	8.51	8.61	1.15	3490.12	.00	.97	2.18	2.500	.000	.00	1 .0
62.474	.0211					.0209	1.31	.64	2.25	.64	.013	.00	.00	PIPE
195.005	3489.652	.641	3490.293	8.51	8.56	1.14	3491.43	.00	.97	2.18	2.500	.000	.00	1 .0
49.412	.0211					.0195	.96	.64	2.24	.64	.013	.00	.00	PIPE
244.416	3490.696	.663	3491.359	8.51	8.16	1.03	3492.39	.00	.97	2.21	2.500	.000	.00	1 .0
17.400	.0211					.0170	.30	.66	2.09	.64	.013	.00	.00	PIPE
261.816	3491.063	.686	3491.749	8.51	7.78	.94	3492.69	.00	.97	2.23	2.500	.000	.00	1 .0
9.932	.0211					.0149	.15	.69	1.96	.64	.013	.00	.00	PIPE
271.748	3491.273	.710	3491.983	8.51	7.42	.86	3492.84	.00	.97	2.25	2.500	.000	.00	1 .0
6.568	.0211					.0130	.09	.71	1.83	.64	.013	.00	.00	PIPE
278.316	3491.412	.734	3492.146	8.51	7.08	.78	3492.92	.00	.97	2.28	2.500	.000	.00	1 .0
4.646	.0211					.0114	.05	.73	1.72	.64	.013	.00	.00	PIPE

SCURRY-BEND-SOUTH_ULT.OUT

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Date: 9-29-2022 Time: 4:22: 0

SUMMERLIN WEST VILLAGE 25

SCURRY BEND DR (FLIGHT RANGE AVENUE TO FLEET WING AVENUE)

100-YEAR INTERIM CONTDITION

*****																	*****	
Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip				
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch				
*****																	*****	
282.962	3491.510	.760	3492.270	8.51	6.75	.71	3492.98	.00	.97	2.30	2.500	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -			
3.375	.0211					.0100	.03	.76	1.61	.64	.013	.00	.00	PIPE				
286.337	3491.581	.787	3492.368	8.51	6.43	.64	3493.01	.00	.97	2.32	2.500	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -			
2.491	.0211					.0088	.02	.79	1.50	.64	.013	.00	.00	PIPE				
288.828	3491.634	.814	3492.448	8.51	6.13	.58	3493.03	.00	.97	2.34	2.500	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -			
1.806	.0211					.0077	.01	.81	1.40	.64	.013	.00	.00	PIPE				
290.634	3491.672	.843	3492.515	8.51	5.85	.53	3493.05	.00	.97	2.36	2.500	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -			
1.268	.0211					.0067	.01	.84	1.31	.64	.013	.00	.00	PIPE				
291.902	3491.699	.873	3492.572	8.51	5.58	.48	3493.05	.00	.97	2.38	2.500	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -			
.839	.0211					.0059	.00	.87	1.23	.64	.013	.00	.00	PIPE				
292.741	3491.717	.904	3492.621	8.51	5.32	.44	3493.06	.00	.97	2.40	2.500	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -			
.469	.0211					.0052	.00	.90	1.15	.64	.013	.00	.00	PIPE				
293.211	3491.727	.937	3492.663	8.51	5.07	.40	3493.06	.00	.97	2.42	2.500	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -			
.149	.0211					.0045	.00	.94	1.07	.64	.013	.00	.00	PIPE				
293.360	3491.730	.971	3492.701	8.51	4.83	.36	3493.06	.00	.97	2.44	2.500	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -			
JUNCT STR	.0400					.0021	.01	.97	1.00		.013	.00	.00	PIPE				
295.860	3491.830	1.409	3493.239	.00	.00	.00	3493.24	.00	.01	2.48	2.500	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -			
1.338	.0399					.0000	.00	1.41	.00	.01	.013	.00	.00	PIPE				

SCURRY-BEND-SOUTH_ULT.OUT

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WATER SURFACE PROFILE LISTING

Date: 9-29-2022 Time: 4:22: 0

SUMMERLIN WEST VILLAGE 25

SCURRY BEND DR (FLIGHT RANGE AVENUE TO FLEET WING AVENUE)

100-YEAR INTERIM CONTDITION

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*****
| Invert | Depth | Water | Q | Vel | Vel | Energy | Super | Critical | Flow Top | Height/ | Base Wt | | No Wth
Station | Elev | (FT) | Elev | (CFS) | (FPS) | Head | Grd.El. | Elev | Depth | Width | Dia.-FT | or I.D. | ZL | Prs/Pip
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
L/Elem | Ch Slope | | | | | SF Ave | HF | SE Dpth | Froude N | Norm Dp | "N" | X-Fall | ZR | Type Ch
*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****
| | | | | | | | | | | | | | | |
297.198 3491.884 1.356 3493.239 .00 .00 .00 3493.24 .00 .01 2.49 2.500 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
1.162 .0399 .0000 .00 1.36 .00 .01 .013 .00 .00 PIPE
| | | | | | | | | | | | | | | |
298.360 3491.930 1.309 3493.239 .00 .00 .00 3493.24 .00 .01 2.50 2.500 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-

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SCURRY-BEND-SOUTH_INT.WSW

T1 SUMMERLIN WEST VILLAGE 25
 T2 SCURRY BEND DR (FLIGHT RANGE AVENUE TO FLEET WING AVENUE)
 T3 100-YEAR INTERIM CONTDITION
 SO .0003485.360 1 3487.167
 REM*****SCURRY BEND DRIVE SDMH#5
 R 126.2303488.000 1 .013 .000 .000 0
 R 126.2303488.200 1 .013 .000 -12.13 1
 REM*****SCURRY BEND DRIVE SDMH#4
 R 293.3603491.730 1 .013 .000 .000 0
 JX 295.8603491.830 1 2 2.013 4.000 4.5103491.93 3491.93 81.0-90.0 .000
 REM*****SCURRY BEND DRIVE SDMH#3
 R 298.3603491.930 1 .013 .000 .000 0
 SH 298.3603491.930 1 3491.930
 CD 1 4 1 .000 2.500 .000 .000 .000 .00
 CD 2 4 1 .000 2.000 .000 .000 .000 .00
 Q 0.001 .0

SCURRY-BEND-SOUTH_INT.OUT

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WATER SURFACE PROFILE LISTING

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SUMMERLIN WEST VILLAGE 25

SCURRY BEND DR (FLIGHT RANGE AVENUE TO FLEET WING AVENUE)

100-YEAR INTERIM CONTDITION

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/Dia.-FT	Base Wt/I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
.000	3485.360	1.807	3487.167	8.51	2.24	.08	3487.24	.00	.97	2.24	2.500	.000	.00	1 .0
3.445	.0209					.0006	.00	1.81	.30	.64	.013	.00	.00	PIPE
3.445	3485.432	1.729	3487.161	8.51	2.35	.09	3487.25	.00	.97	2.31	2.500	.000	.00	1 .0
3.139	.0209					.0007	.00	1.73	.33	.64	.013	.00	.00	PIPE
6.584	3485.498	1.657	3487.155	8.51	2.46	.09	3487.25	.00	.97	2.36	2.500	.000	.00	1 .0
2.876	.0209					.0008	.00	1.66	.36	.64	.013	.00	.00	PIPE
9.460	3485.558	1.590	3487.147	8.51	2.58	.10	3487.25	.00	.97	2.41	2.500	.000	.00	1 .0
2.633	.0209					.0009	.00	1.59	.39	.64	.013	.00	.00	PIPE
12.093	3485.613	1.526	3487.139	8.51	2.71	.11	3487.25	.00	.97	2.44	2.500	.000	.00	1 .0
2.421	.0209					.0010	.00	1.53	.42	.64	.013	.00	.00	PIPE
14.514	3485.664	1.467	3487.130	8.51	2.84	.13	3487.26	.00	.97	2.46	2.500	.000	.00	1 .0
1.993	.0209					.0011	.00	1.47	.45	.64	.013	.00	.00	PIPE
16.507	3485.705	1.410	3487.116	8.51	2.98	.14	3487.25	.00	.97	2.48	2.500	.000	.00	1 .0
HYDRAULIC JUMP														
16.507	3485.705	.640	3486.345	8.51	8.58	1.14	3487.49	.00	.97	2.18	2.500	.000	.00	1 .0
47.411	.0209					.0209	.99	.64	2.24	.64	.013	.00	.00	PIPE
63.918	3486.697	.640	3487.337	8.51	8.58	1.14	3488.48	.00	.97	2.18	2.500	.000	.00	1 .0
62.312	.0209					.0210	1.31	.64	2.24	.64	.013	.00	.00	PIPE

SCURRY-BEND-SOUTH_INT.OUT

FILE: SCURRY-BEND-SOUTH_INT.WSW

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WATER SURFACE PROFILE LISTING

Date: 9-29-2022 Time:11: 8:20

SUMMERLIN WEST VILLAGE 25

SCURRY BEND DR (FLIGHT RANGE AVENUE TO FLEET WING AVENUE)

100-YEAR INTERIM CONTDITION

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
126.230	3488.200	.638	3488.838	8.51	8.61	1.15	3489.99	.00	.97	2.18	2.500	.000	.00	1 .0
6.300	.0211					.0211	.13	.64	2.25	.64	.013	.00	.00	PIPE
132.530	3488.333	.638	3488.971	8.51	8.61	1.15	3490.12	.00	.97	2.18	2.500	.000	.00	1 .0
62.474	.0211					.0209	1.31	.64	2.25	.64	.013	.00	.00	PIPE
195.005	3489.652	.641	3490.293	8.51	8.56	1.14	3491.43	.00	.97	2.18	2.500	.000	.00	1 .0
49.412	.0211					.0195	.96	.64	2.24	.64	.013	.00	.00	PIPE
244.416	3490.696	.663	3491.359	8.51	8.16	1.03	3492.39	.00	.97	2.21	2.500	.000	.00	1 .0
17.400	.0211					.0170	.30	.66	2.09	.64	.013	.00	.00	PIPE
261.816	3491.063	.686	3491.749	8.51	7.78	.94	3492.69	.00	.97	2.23	2.500	.000	.00	1 .0
9.932	.0211					.0149	.15	.69	1.96	.64	.013	.00	.00	PIPE
271.748	3491.273	.710	3491.983	8.51	7.42	.86	3492.84	.00	.97	2.25	2.500	.000	.00	1 .0
6.568	.0211					.0130	.09	.71	1.83	.64	.013	.00	.00	PIPE
278.316	3491.412	.734	3492.146	8.51	7.08	.78	3492.92	.00	.97	2.28	2.500	.000	.00	1 .0
4.646	.0211					.0114	.05	.73	1.72	.64	.013	.00	.00	PIPE
282.962	3491.510	.760	3492.270	8.51	6.75	.71	3492.98	.00	.97	2.30	2.500	.000	.00	1 .0
3.375	.0211					.0100	.03	.76	1.61	.64	.013	.00	.00	PIPE
286.337	3491.581	.787	3492.368	8.51	6.43	.64	3493.01	.00	.97	2.32	2.500	.000	.00	1 .0
2.491	.0211					.0088	.02	.79	1.50	.64	.013	.00	.00	PIPE

SCURRY-BEND-SOUTH_INT.OUT

FILE: SCURRY-BEND-SOUTH_INT.WSW

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WATER SURFACE PROFILE LISTING

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SUMMERLIN WEST VILLAGE 25

SCURRY BEND DR (FLIGHT RANGE AVENUE TO FLEET WING AVENUE)

100-YEAR INTERIM CONTDITION

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/Dia.-FT	Base Wt/I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
288.828	3491.634	.814	3492.448	8.51	6.13	.58	3493.03	.00	.97	2.34	2.500	.000	.00	1 .0
1.806	.0211					.0077	.01	.81	1.40	.64	.013	.00	.00	PIPE
290.634	3491.672	.843	3492.515	8.51	5.85	.53	3493.05	.00	.97	2.36	2.500	.000	.00	1 .0
1.268	.0211					.0067	.01	.84	1.31	.64	.013	.00	.00	PIPE
291.902	3491.699	.873	3492.572	8.51	5.58	.48	3493.05	.00	.97	2.38	2.500	.000	.00	1 .0
.839	.0211					.0059	.00	.87	1.23	.64	.013	.00	.00	PIPE
292.741	3491.717	.904	3492.621	8.51	5.32	.44	3493.06	.00	.97	2.40	2.500	.000	.00	1 .0
.469	.0211					.0052	.00	.90	1.15	.64	.013	.00	.00	PIPE
293.211	3491.727	.937	3492.663	8.51	5.07	.40	3493.06	.00	.97	2.42	2.500	.000	.00	1 .0
.149	.0211					.0045	.00	.94	1.07	.64	.013	.00	.00	PIPE
293.360	3491.730	.971	3492.701	8.51	4.83	.36	3493.06	.00	.97	2.44	2.500	.000	.00	1 .0
JUNCT STR	.0400					.0021	.01	.97	1.00		.013	.00	.00	PIPE
295.860	3491.830	1.409	3493.239	.00	.00	.00	3493.24	.00	.01	2.48	2.500	.000	.00	1 .0
1.338	.0399					.0000	.00	1.41	.00	.01	.013	.00	.00	PIPE
297.198	3491.884	1.356	3493.239	.00	.00	.00	3493.24	.00	.01	2.49	2.500	.000	.00	1 .0
1.162	.0399					.0000	.00	1.36	.00	.01	.013	.00	.00	PIPE
298.360	3491.930	1.309	3493.239	.00	.00	.00	3493.24	.00	.01	2.50	2.500	.000	.00	1 .0

SCURRY-BEND-NORTH_ULI.WSW

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T1 SUMMERLIN WEST VILLAGE 25
T2 SCURRY BEND DR (FLEETWING AVENUE TO LAKE MEAD)
T3 100-YEAR INTERIM CONTDITION
SO      .0003485.360  1      3486.229
REM*****SCURRY BEND DRIVE SDMH#5
R      170.7203489.000  1      .013      .000      .000  0
R      175.7203489.200  1      .013      .000      7.43  1
REM*****SCURRY BEND DRIVE SDMH#6
R      575.6203500.020  1      .013      .000      .000  0
JX      578.1203500.120  1  2  2.013      4.000      4.0003500.22 3500.22 56.2-90.0 .000
REM*****SCURRY BEND DRIVE SDMH#7
R      580.6203500.220  1      .013      .000      .000  0
SH      580.6203500.220  1      3500.000
CD  1  4  1      .000      2.500      .000      .000      .000      .00
CD  2  4  1      .000      2.000      .000      .000      .000      .00
Q      0.001      .0

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SCURRY-BEND-NORTH_ULT.OUT

FILE: SCURRY-BEND-NORTH_ULT.WSW

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SUMMERLIN WEST VILLAGE 25

SCURRY BEND DR (FLEETWING AVENUE TO LAKE MEAD)

100-YEAR INTERIM CONTDITION

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
.000	3485.360	.617	3485.977	8.00	8.49	1.12	3487.10	.00	.94	2.16	2.500	.000	.00	1 .0
54.434	.0213					.0213	1.16	.62	2.26	.62	.013	.00	.00	PIPE
54.434	3486.521	.617	3487.138	8.00	8.49	1.12	3488.26	.00	.94	2.16	2.500	.000	.00	1 .0
59.900	.0213					.0218	1.30	.62	2.26	.62	.013	.00	.00	PIPE
114.335	3487.798	.611	3488.408	8.00	8.61	1.15	3489.56	.00	.94	2.15	2.500	.000	.00	1 .0
38.240	.0213					.0238	.91	.61	2.31	.62	.013	.00	.00	PIPE
152.575	3488.613	.591	3489.204	8.00	9.03	1.27	3490.47	.00	.94	2.12	2.500	.000	.00	1 .0
18.145	.0213					.0272	.49	.59	2.46	.62	.013	.00	.00	PIPE
170.720	3489.000	.571	3489.571	8.00	9.47	1.39	3490.96	.00	.94	2.10	2.500	.000	.00	1 .0
5.000	.0400					.0281	.14	.57	2.63	.53	.013	.00	.00	PIPE
175.720	3489.200	.581	3489.781	8.00	9.24	1.32	3491.11	.00	.94	2.11	2.500	.000	.00	1 .0
287.098	.0271					.0271	7.77	.58	2.54	.58	.013	.00	.00	PIPE
462.818	3496.968	.581	3497.549	8.00	9.24	1.32	3498.87	.00	.94	2.11	2.500	.000	.00	1 .0
59.141	.0271					.0254	1.50	.58	2.54	.58	.013	.00	.00	PIPE
521.959	3498.568	.601	3499.169	8.00	8.82	1.21	3500.38	.00	.94	2.14	2.500	.000	.00	1 .0
18.464	.0271					.0222	.41	.60	2.38	.58	.013	.00	.00	PIPE
540.422	3499.068	.621	3499.689	8.00	8.40	1.10	3500.79	.00	.94	2.16	2.500	.000	.00	1 .0
10.286	.0271					.0194	.20	.62	2.23	.58	.013	.00	.00	PIPE

SCURRY-BEND-NORTH_ULT.OUT

FILE: SCURRY-BEND-NORTH_ULT.WSW

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SUMMERLIN WEST VILLAGE 25

SCURRY BEND DR (FLEETWING AVENUE TO LAKE MEAD)

100-YEAR INTERIM CONTDITION

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/FT	Base Wt I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
550.709	3499.346	.643	3499.989	8.00	8.01	1.00	3500.99	.00	.94	2.19	2.500	.000	.00	1 .0
6.821	.0271					.0170	.12	.64	2.09	.58	.013	.00	.00	PIPE
557.530	3499.531	.665	3500.195	8.00	7.64	.91	3501.10	.00	.94	2.21	2.500	.000	.00	1 .0
4.870	.0271					.0149	.07	.66	1.96	.58	.013	.00	.00	PIPE
562.400	3499.662	.688	3500.350	8.00	7.29	.82	3501.17	.00	.94	2.23	2.500	.000	.00	1 .0
3.641	.0271					.0130	.05	.69	1.83	.58	.013	.00	.00	PIPE
566.041	3499.761	.712	3500.473	8.00	6.95	.75	3501.22	.00	.94	2.26	2.500	.000	.00	1 .0
2.765	.0271					.0114	.03	.71	1.71	.58	.013	.00	.00	PIPE
568.806	3499.836	.737	3500.572	8.00	6.62	.68	3501.25	.00	.94	2.28	2.500	.000	.00	1 .0
2.114	.0271					.0100	.02	.74	1.60	.58	.013	.00	.00	PIPE
570.920	3499.893	.762	3500.655	8.00	6.31	.62	3501.27	.00	.94	2.30	2.500	.000	.00	1 .0
1.615	.0271					.0087	.01	.76	1.50	.58	.013	.00	.00	PIPE
572.535	3499.937	.789	3500.726	8.00	6.02	.56	3501.29	.00	.94	2.32	2.500	.000	.00	1 .0
1.204	.0271					.0076	.01	.79	1.40	.58	.013	.00	.00	PIPE
573.739	3499.969	.817	3500.786	8.00	5.74	.51	3501.30	.00	.94	2.35	2.500	.000	.00	1 .0
.866	.0271					.0067	.01	.82	1.31	.58	.013	.00	.00	PIPE
574.605	3499.992	.846	3500.838	8.00	5.47	.47	3501.30	.00	.94	2.37	2.500	.000	.00	1 .0
.580	.0271					.0059	.00	.85	1.23	.58	.013	.00	.00	PIPE

SCURRY-BEND-NORTH_ULT.OUT

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WATER SURFACE PROFILE LISTING

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SUMMERLIN WEST VILLAGE 25

SCURRY BEND DR (FLEETWING AVENUE TO LAKE MEAD)

100-YEAR INTERIM CONTDITION

*****																	*****	
Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip				
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch				
*****																	*****	
575.185	3500.008	.876	3500.884	8.00	5.22	.42	3501.31	.00	.94	2.39	2.500	.000	.00	1	.0			
	.331	.0271				.0051	.00	.88	1.15	.58	.013	.00	.00	PIPE				
575.516	3500.017	.907	3500.924	8.00	4.98	.38	3501.31	.00	.94	2.40	2.500	.000	.00	1	.0			
	.104	.0271				.0045	.00	.91	1.07	.58	.013	.00	.00	PIPE				
575.620	3500.020	.941	3500.961	8.00	4.74	.35	3501.31	.00	.94	2.42	2.500	.000	.00	1	.0			
JUNCT STR	.0400					.0021	.01	.94	1.00		.013	.00	.00	PIPE				
578.120	3500.120	1.310	3501.430	.00	.00	.00	3501.43	.00	.01	2.50	2.500	.000	.00	1	.0			
	1.214	.0399				.0000	.00	1.31	.00	.01	.013	.00	.00	PIPE				
579.334	3500.169	1.261	3501.430	.00	.00	.00	3501.43	.00	.01	2.50	2.500	.000	.00	1	.0			
	1.159	.0399				.0000	.00	1.26	.00	.01	.013	.00	.00	PIPE				
580.493	3500.215	1.215	3501.430	.00	.00	.00	3501.43	.00	.01	2.50	2.500	.000	.00	1	.0			
	.127	.0399				.0000	.00	1.21	.00	.01	.013	.00	.00	PIPE				
580.620	3500.220	1.210	3501.430	.00	.00	.00	3501.43	.00	.01	2.50	2.500	.000	.00	1	.0			

SCURRY-BEND-NORTH_INT.WSW

T1 SUMMERLIN WEST VILLAGE 25
 T2 SCURRY BEND DR (FLEETWING AVENUE TO LAKE MEAD)
 T3 100-YEAR INTERIM CONTDITION
 SO .0003485.360 1 3487.167
 REM****SCURRY BEND DRIVE SDMH#5
 R 170.7203489.000 1 .013 .000 .000 0
 R 175.7203489.200 1 .013 .000 7.43 1
 REM****SCURRY BEND DRIVE SDMH#6
 R 575.6203500.020 1 .013 .000 .000 0
 JX 578.1203500.120 1 2 2.013 4.000 4.0003500.22 3500.22 56.2-90.0 .000
 REM****SCURRY BEND DRIVE SDMH#7
 R 580.6203500.220 1 .013 .000 .000 0
 SH 580.6203500.220 1 3500.000
 CD 1 4 1 .000 2.500 .000 .000 .000 .00
 CD 2 4 1 .000 2.000 .000 .000 .000 .00
 Q 0.001 .0

SCURRY-BEND-NORTH_INT.OUT

FILE: SCURRY-BEND-NORTH_INT.WSW

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SUMMERLIN WEST VILLAGE 25

SCURRY BEND DR (FLEETWING AVENUE TO LAKE MEAD)

100-YEAR INTERIM CONTDITION

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Width	Top Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
.000	3485.360	1.807	3487.167	8.00	2.11	.07	3487.24	.00	.94	2.24	2.500	.000	.00	1 .0
3.410	.0213					.0005	.00	1.81	.28	.62	.013	.00	.00	PIPE
3.410	3485.433	1.729	3487.162	8.00	2.21	.08	3487.24	.00	.94	2.31	2.500	.000	.00	1 .0
3.113	.0213					.0006	.00	1.73	.31	.62	.013	.00	.00	PIPE
6.523	3485.499	1.657	3487.156	8.00	2.32	.08	3487.24	.00	.94	2.36	2.500	.000	.00	1 .0
2.860	.0213					.0007	.00	1.66	.34	.62	.013	.00	.00	PIPE
9.383	3485.560	1.590	3487.150	8.00	2.43	.09	3487.24	.00	.94	2.41	2.500	.000	.00	1 .0
2.627	.0213					.0008	.00	1.59	.37	.62	.013	.00	.00	PIPE
12.010	3485.616	1.526	3487.143	8.00	2.55	.10	3487.24	.00	.94	2.44	2.500	.000	.00	1 .0
2.424	.0213					.0009	.00	1.53	.40	.62	.013	.00	.00	PIPE
14.434	3485.668	1.467	3487.135	8.00	2.67	.11	3487.25	.00	.94	2.46	2.500	.000	.00	1 .0
2.221	.0213					.0010	.00	1.47	.43	.62	.013	.00	.00	PIPE
16.655	3485.715	1.410	3487.126	8.00	2.80	.12	3487.25	.00	.94	2.48	2.500	.000	.00	1 .0
1.366	.0213					.0011	.00	1.41	.46	.62	.013	.00	.00	PIPE
18.021	3485.744	1.357	3487.101	8.00	2.94	.13	3487.24	.00	.94	2.49	2.500	.000	.00	1 .0
HYDRAULIC JUMP														
18.021	3485.744	.617	3486.362	8.00	8.49	1.12	3487.48	.00	.94	2.16	2.500	.000	.00	1 .0
36.413	.0213					.0213	.78	.62	2.26	.62	.013	.00	.00	PIPE

SCURRY-BEND-NORTH_INT.OUT

FILE: SCURRY-BEND-NORTH_INT.WSW

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WATER SURFACE PROFILE LISTING

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SUMMERLIN WEST VILLAGE 25

SCURRY BEND DR (FLEETWING AVENUE TO LAKE MEAD)

100-YEAR INTERIM CONTDITION

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
54.434	3486.521	.617	3487.138	8.00	8.49	1.12	3488.26	.00	.94	2.16	2.500	.000	.00	1 .0
59.900	.0213					.0218	1.30	.62	2.26	.62	.013	.00	.00	PIPE
114.335	3487.798	.611	3488.408	8.00	8.61	1.15	3489.56	.00	.94	2.15	2.500	.000	.00	1 .0
38.240	.0213					.0238	.91	.61	2.31	.62	.013	.00	.00	PIPE
152.575	3488.613	.591	3489.204	8.00	9.03	1.27	3490.47	.00	.94	2.12	2.500	.000	.00	1 .0
18.145	.0213					.0272	.49	.59	2.46	.62	.013	.00	.00	PIPE
170.720	3489.000	.571	3489.571	8.00	9.47	1.39	3490.96	.00	.94	2.10	2.500	.000	.00	1 .0
5.000	.0400					.0281	.14	.57	2.63	.53	.013	.00	.00	PIPE
175.720	3489.200	.581	3489.781	8.00	9.24	1.32	3491.11	.00	.94	2.11	2.500	.000	.00	1 .0
287.098	.0271					.0271	7.77	.58	2.54	.58	.013	.00	.00	PIPE
462.818	3496.968	.581	3497.549	8.00	9.24	1.32	3498.87	.00	.94	2.11	2.500	.000	.00	1 .0
59.141	.0271					.0254	1.50	.58	2.54	.58	.013	.00	.00	PIPE
521.959	3498.568	.601	3499.169	8.00	8.82	1.21	3500.38	.00	.94	2.14	2.500	.000	.00	1 .0
18.464	.0271					.0222	.41	.60	2.38	.58	.013	.00	.00	PIPE
540.422	3499.068	.621	3499.689	8.00	8.40	1.10	3500.79	.00	.94	2.16	2.500	.000	.00	1 .0
10.286	.0271					.0194	.20	.62	2.23	.58	.013	.00	.00	PIPE
550.709	3499.346	.643	3499.989	8.00	8.01	1.00	3500.99	.00	.94	2.19	2.500	.000	.00	1 .0
6.821	.0271					.0170	.12	.64	2.09	.58	.013	.00	.00	PIPE

SCURRY-BEND-NORTH_INT.OUT

FILE: SCURRY-BEND-NORTH_INT.WSW

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WATER SURFACE PROFILE LISTING

Date: 9-29-2022 Time: 1:31: 4

SUMMERLIN WEST VILLAGE 25

SCURRY BEND DR (FLEETWING AVENUE TO LAKE MEAD)

100-YEAR INTERIM CONTDITION

*****																	*****	
Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip				
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch				
*****																	*****	
557.530	3499.531	.665	3500.195	8.00	7.64	.91	3501.10	.00	.94	2.21	2.500	.000	.00	1	.0			
	4.870	.0271				.0149	.07	.66	1.96	.58	.013	.00	.00	PIPE				
562.400	3499.662	.688	3500.350	8.00	7.29	.82	3501.17	.00	.94	2.23	2.500	.000	.00	1	.0			
	3.641	.0271				.0130	.05	.69	1.83	.58	.013	.00	.00	PIPE				
566.041	3499.761	.712	3500.473	8.00	6.95	.75	3501.22	.00	.94	2.26	2.500	.000	.00	1	.0			
	2.765	.0271				.0114	.03	.71	1.71	.58	.013	.00	.00	PIPE				
568.806	3499.836	.737	3500.572	8.00	6.62	.68	3501.25	.00	.94	2.28	2.500	.000	.00	1	.0			
	2.114	.0271				.0100	.02	.74	1.60	.58	.013	.00	.00	PIPE				
570.920	3499.893	.762	3500.655	8.00	6.31	.62	3501.27	.00	.94	2.30	2.500	.000	.00	1	.0			
	1.615	.0271				.0087	.01	.76	1.50	.58	.013	.00	.00	PIPE				
572.535	3499.937	.789	3500.726	8.00	6.02	.56	3501.29	.00	.94	2.32	2.500	.000	.00	1	.0			
	1.204	.0271				.0076	.01	.79	1.40	.58	.013	.00	.00	PIPE				
573.739	3499.969	.817	3500.786	8.00	5.74	.51	3501.30	.00	.94	2.35	2.500	.000	.00	1	.0			
	.866	.0271				.0067	.01	.82	1.31	.58	.013	.00	.00	PIPE				
574.605	3499.992	.846	3500.838	8.00	5.47	.47	3501.30	.00	.94	2.37	2.500	.000	.00	1	.0			
	.580	.0271				.0059	.00	.85	1.23	.58	.013	.00	.00	PIPE				
575.185	3500.008	.876	3500.884	8.00	5.22	.42	3501.31	.00	.94	2.39	2.500	.000	.00	1	.0			
	.331	.0271				.0051	.00	.88	1.15	.58	.013	.00	.00	PIPE				

SCURRY-BEND-NORTH_INT.OUT

FILE: SCURRY-BEND-NORTH_INT.WSW

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WATER SURFACE PROFILE LISTING

Date: 9-29-2022 Time: 1:31: 4

SUMMERLIN WEST VILLAGE 25

SCURRY BEND DR (FLEETWING AVENUE TO LAKE MEAD)

100-YEAR INTERIM CONTDITION

*****																	*****	
Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip				
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch				
*****																	*****	
575.516	3500.017	.907	3500.924	8.00	4.98	.38	3501.31	.00	.94	2.40	2.500	.000	.00	1	.0			
	.104	.0271				.0045	.00	.91	1.07	.58	.013	.00	.00	PIPE				
575.620	3500.020	.941	3500.961	8.00	4.74	.35	3501.31	.00	.94	2.42	2.500	.000	.00	1	.0			
JUNCT STR	.0400					.0021	.01	.94	1.00		.013	.00	.00	PIPE				
578.120	3500.120	1.310	3501.430	.00	.00	.00	3501.43	.00	.01	2.50	2.500	.000	.00	1	.0			
	1.214	.0399				.0000	.00	1.31	.00	.01	.013	.00	.00	PIPE				
579.334	3500.169	1.261	3501.430	.00	.00	.00	3501.43	.00	.01	2.50	2.500	.000	.00	1	.0			
	1.159	.0399				.0000	.00	1.26	.00	.01	.013	.00	.00	PIPE				
580.493	3500.215	1.215	3501.430	.00	.00	.00	3501.43	.00	.01	2.50	2.500	.000	.00	1	.0			
	.127	.0399				.0000	.00	1.21	.00	.01	.013	.00	.00	PIPE				
580.620	3500.220	1.210	3501.430	.00	.00	.00	3501.43	.00	.01	2.50	2.500	.000	.00	1	.0			

LATERAL-MH1W-INT.WSW

0

T1 SUMMERLIN WEST VILLAGE 25
T2 SCURRY BEND DRIVE LATERAL FROM SDMH1 WEST TO SDDI#1
T3 ATKINS / INTERIM CONDITIONS
SO 63.8103511.200 2 3511.211
R 84.0303512.170 2 .013 .000 0.000 0
REM LATERAL FROM SDDI#1
SH 84.0303512.170 2 3512.170
CD 1 4 1 .000 2.500 .000 .000 .000 .00
CD 2 4 1 .000 2.000 .000 .000 .000 .00
Q 4.000 .0

LATERAL-MH1W-INT.OUT

FILE: LATERAL-MH1W-INT.WSW

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SUMMERLIN WEST VILLAGE 25

SCURRY BEND DRIVE LATERAL FROM SDMH1 WEST TO SDDI#1

ATKINS / INTERIM CONDITIONS

*****																	*****	
Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip				
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch				
*****																	*****	
63.810	3511.199	.422	3511.622	4.00	8.27	1.06	3512.68	.00	.70	1.63	2.000	.000	.00	1	.0			
4.247	.0480					.0310	.13	.42	2.68	.38	.013	.00	.00	PIPE				
68.057	3511.403	.434	3511.837	4.00	7.95	.98	3512.82	.00	.70	1.65	2.000	.000	.00	1	.0			
3.611	.0480					.0274	.10	.43	2.54	.38	.013	.00	.00	PIPE				
71.668	3511.576	.449	3512.026	4.00	7.58	.89	3512.92	.00	.70	1.67	2.000	.000	.00	1	.0			
2.736	.0480					.0239	.07	.45	2.38	.38	.013	.00	.00	PIPE				
74.404	3511.708	.465	3512.172	4.00	7.23	.81	3512.98	.00	.70	1.69	2.000	.000	.00	1	.0			
2.137	.0480					.0209	.04	.46	2.22	.38	.013	.00	.00	PIPE				
76.541	3511.810	.480	3512.291	4.00	6.89	.74	3513.03	.00	.70	1.71	2.000	.000	.00	1	.0			
1.702	.0480					.0183	.03	.48	2.08	.38	.013	.00	.00	PIPE				
78.242	3511.892	.497	3512.389	4.00	6.57	.67	3513.06	.00	.70	1.73	2.000	.000	.00	1	.0			
1.370	.0480					.0160	.02	.50	1.95	.38	.013	.00	.00	PIPE				
79.612	3511.958	.514	3512.471	4.00	6.26	.61	3513.08	.00	.70	1.75	2.000	.000	.00	1	.0			
1.109	.0480					.0140	.02	.51	1.83	.38	.013	.00	.00	PIPE				
80.721	3512.011	.532	3512.542	4.00	5.97	.55	3513.10	.00	.70	1.77	2.000	.000	.00	1	.0			
.894	.0480					.0122	.01	.53	1.71	.38	.013	.00	.00	PIPE				
81.615	3512.054	.550	3512.604	4.00	5.69	.50	3513.11	.00	.70	1.79	2.000	.000	.00	1	.0			
.716	.0480					.0107	.01	.55	1.60	.38	.013	.00	.00	PIPE				

LATERAL-MH1W-INT.OUT

FILE: LATERAL-MH1W-INT.WSW

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SUMMERLIN WEST VILLAGE 25

SCURRY BEND DRIVE LATERAL FROM SDMH1 WEST TO SDDI#1

ATKINS / INTERIM CONDITIONS

*****																	*****	
Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip				
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch				
*****																	*****	
82.331	3512.088	.569	3512.657	4.00	5.43	.46	3513.11	.00	.70	1.80	2.000	.000	.00	1	.0			
	.562	.0480				.0094	.01	.57	1.50	.38	.013	.00	.00	PIPE				
82.893	3512.115	.589	3512.704	4.00	5.18	.42	3513.12	.00	.70	1.82	2.000	.000	.00	1	.0			
	.436	.0480				.0082	.00	.59	1.40	.38	.013	.00	.00	PIPE				
83.329	3512.136	.610	3512.746	4.00	4.94	.38	3513.12	.00	.70	1.84	2.000	.000	.00	1	.0			
	.318	.0480				.0072	.00	.61	1.31	.38	.013	.00	.00	PIPE				
83.647	3512.151	.631	3512.782	4.00	4.71	.34	3513.13	.00	.70	1.86	2.000	.000	.00	1	.0			
	.217	.0480				.0063	.00	.63	1.23	.38	.013	.00	.00	PIPE				
83.864	3512.162	.653	3512.815	4.00	4.49	.31	3513.13	.00	.70	1.88	2.000	.000	.00	1	.0			
	.125	.0480				.0055	.00	.65	1.15	.38	.013	.00	.00	PIPE				
83.990	3512.168	.676	3512.844	4.00	4.28	.28	3513.13	.00	.70	1.89	2.000	.000	.00	1	.0			
	.040	.0480				.0048	.00	.68	1.07	.38	.013	.00	.00	PIPE				
84.030	3512.170	.701	3512.871	4.00	4.07	.26	3513.13	.00	.70	1.91	2.000	.000	.00	1	.0			

LATERAL-MH3E-INT.WSW

0

T1 SUMMERLIN WEST VILLAGE 25
T2 SCURRY BEND DRIVE LATERAL FROM SDMH3 EAST TO SDDI#3
T3 ATKINS / INTERIM CONDITIONS
SO 299.5103494.410 1 3495.719
R 365.1803494.180 2 .013 .000 0.000 0
REM LATERAL FROM SDDI#3
SH 365.1803494.180 2 3494.180
CD 1 4 1 .000 2.500 .000 .000 .000 .00
CD 2 4 1 .000 2.000 .000 .000 .000 .00
Q 4.000 .0

LATERAL-MH3E-INT.OUT

FILE: LATERAL-MH3E-INT.WSW

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SUMMERLIN WEST VILLAGE 25

SCURRY BEND DRIVE LATERAL FROM SDMH3 EAST TO SDDI#3

ATKINS / INTERIM CONDITIONS

*****																	*****	
Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth	Prs/Pip			
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch				
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
299.510	3494.410	1.309	3495.719	4.00	1.84	.05	3495.77	.00	.70	1.90	2.000	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -		
14.988	-.0035					.0005	.01	1.31	.30	.00	.013	.00	.00	PIPE				
314.498	3494.357	1.375	3495.732	4.00	1.74	.05	3495.78	.00	.70	1.85	2.000	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -		
16.235	-.0035					.0004	.01	1.37	.27	.00	.013	.00	.00	PIPE				
330.733	3494.301	1.443	3495.744	4.00	1.65	.04	3495.79	.00	.70	1.79	2.000	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -		
17.494	-.0035					.0004	.01	1.44	.25	.00	.013	.00	.00	PIPE				
348.227	3494.239	1.515	3495.755	4.00	1.57	.04	3495.79	.00	.70	1.71	2.000	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -		
16.953	-.0035					.0004	.01	1.52	.23	.00	.013	.00	.00	PIPE				
365.180	3494.180	1.584	3495.764	4.00	1.50	.03	3495.80	.00	.70	1.62	2.000	.000	.00	1	.0			
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -		

LATERAL-MH3W-INT.WSW

0

T1 SUMMERLIN WEST VILLAGE 25
T2 SCURRY BEND DRIVE LATERAL FROM SDMH3 WEST TO SDDI#2
T3 ATKINS / INTERIM CONDITIONS
SO 299.5103491.930 1 3495.719
R 312.7203493.350 2 .013 .000 0.000 0
REM LATERAL FROM SDDI#2
SH 312.7203493.350 2 3493.350
CD 1 4 1 .000 2.500 .000 .000 .000 .00
CD 2 4 1 .000 2.000 .000 .000 .000 .00
Q 4.510 .0

LATERAL-MH3W-INT.OUT

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SUMMERLIN WEST VILLAGE 25

SCURRY BEND DRIVE LATERAL FROM SDMH3 WEST TO SDDI#2

ATKINS / INTERIM CONDITIONS

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip			
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch			

299.510	3491.930	3.789	3495.719	4.51	1.44	.03	3495.75	.00	.75	.00	2.000	.000	.00	1	.0		
13.210	.1075					.0004	.01	3.79	.00	.33	.013	.00	.00	PIPE			
312.720	3493.350	2.374	3495.724	4.51	1.44	.03	3495.76	.00	.75	.00	2.000	.000	.00	1	.0		

LATERAL-MH5W-INT.WSW

0

T1 SUMMERLIN WEST VILLAGE 25
T2 SCURRY BEND DRIVE LATERAL FROM SDMH5 WEST TO SDDI#4
T3 ATKINS / INTERIM CONDITIONS
SO 0.0003485.360 1 3501.430
R 16.5803485.730 2 .013 .000 0.000 0
REM LATERAL FROM SDDI#5
SH 16.5803485.730 2 3485.730
CD 1 4 1 .000 2.500 .000 .000 .000 .00
CD 2 4 1 .000 2.000 .000 .000 .000 .00
Q 4.000 .0

LATERAL-MH5W-INT.OUT

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SUMMERLIN WEST VILLAGE 25

SCURRY BEND DRIVE LATERAL FROM SDMH5 WEST TO SDDI#4

ATKINS / INTERIM CONDITIONS

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*****
| Invert | Depth | Water | Q | Vel | Vel | Energy | Super | Critical | Flow Top | Height/ | Base Wt | | No Wth
Station | Elev | (FT) | Elev | (CFS) | (FPS) | Head | Grd.El. | Elev | Depth | Width | Dia.-FT | or I.D. | ZL | Prs/Pip
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
L/Elem |Ch Slope |
*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****|*****
|
.000 3485.360 16.070 3501.430 4.00 1.27 .03 3501.46 .00 .70 .00 2.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-
16.580 .0223 .0003 .01 16.07 .00 .46 .013 .00 .00 PIPE
|
16.580 3485.730 15.705 3501.435 4.00 1.27 .03 3501.46 .00 .70 .00 2.000 .000 .00 1 .0
-|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|- -|-

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LATERAL-MH7E-INT.WSW

0

T1 SUMMERLIN WEST VILLAGE 25
T2 SCURRY BEND DRIVE LATERAL FROM SDMH7 EAST TO SDDI#6
T3 ATKINS / INTERIM CONDITIONS
SO 580.6203500.220 1 3501.430
R 648.7703501.110 2 .013 .000 0.000 0
REM LATERAL FROM SDDI#6
SH 648.7703501.110 2 3501.110
CD 1 4 1 .000 2.500 .000 .000 .000 .00
CD 2 4 1 .000 2.000 .000 .000 .000 .00
Q 4.000 .0

LATERAL-MH7E-INT.OUT

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SUMMERLIN WEST VILLAGE 25

SCURRY BEND DRIVE LATERAL FROM SDMH7 EAST TO SDDI#6

ATKINS / INTERIM CONDITIONS

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
580.620	3500.220	1.210	3501.430	4.00	2.01	.06	3501.49	.00	.70	1.96	2.000	.000	.00	1 .0
3.311	.0131					.0007	.00	1.21	.35	.53	.013	.00	.00	PIPE
583.931	3500.263	1.163	3501.426	4.00	2.11	.07	3501.50	.00	.70	1.97	2.000	.000	.00	1 .0
3.068	.0131					.0008	.00	1.16	.38	.53	.013	.00	.00	PIPE
586.999	3500.303	1.118	3501.422	4.00	2.21	.08	3501.50	.00	.70	1.99	2.000	.000	.00	1 .0
2.858	.0131					.0009	.00	1.12	.41	.53	.013	.00	.00	PIPE
589.857	3500.341	1.076	3501.417	4.00	2.32	.08	3501.50	.00	.70	1.99	2.000	.000	.00	1 .0
2.640	.0131					.0010	.00	1.08	.44	.53	.013	.00	.00	PIPE
592.497	3500.375	1.036	3501.411	4.00	2.44	.09	3501.50	.00	.70	2.00	2.000	.000	.00	1 .0
2.441	.0131					.0012	.00	1.04	.47	.53	.013	.00	.00	PIPE
594.938	3500.407	.998	3501.405	4.00	2.55	.10	3501.51	.00	.70	2.00	2.000	.000	.00	1 .0
2.251	.0131					.0013	.00	1.00	.51	.53	.013	.00	.00	PIPE
597.190	3500.436	.961	3501.397	4.00	2.68	.11	3501.51	.00	.70	2.00	2.000	.000	.00	1 .0
2.052	.0131					.0015	.00	.96	.55	.53	.013	.00	.00	PIPE
599.241	3500.463	.926	3501.390	4.00	2.81	.12	3501.51	.00	.70	1.99	2.000	.000	.00	1 .0
1.679	.0131					.0017	.00	.93	.59	.53	.013	.00	.00	PIPE
600.920	3500.485	.893	3501.378	4.00	2.95	.13	3501.51	.00	.70	1.99	2.000	.000	.00	1 .0

HYDRAULIC JUMP

LATERAL-MH7E-INT.OUT

FILE: LATERAL-MH7E-INT.WSW

W S P G W - CIVILDESIGN Version 14.08

PAGE 2

Program Package Serial Number: 7271

WATER SURFACE PROFILE LISTING

Date: 9-29-2022 Time: 1:44:31

SUMMERLIN WEST VILLAGE 25

SCURRY BEND DRIVE LATERAL FROM SDMH7 EAST TO SDDI#6

ATKINS / INTERIM CONDITIONS

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
600.920	3500.485	.532	3501.017	4.00	5.97	.55	3501.57	.00	.70	1.77	2.000	.000	.00	1 .0
22.584	.0131					.0122	.28	.53	1.71	.53	.013	.00	.00	PIPE
623.504	3500.780	.550	3501.330	4.00	5.69	.50	3501.83	.00	.70	1.79	2.000	.000	.00	1 .0
11.347	.0131					.0107	.12	.55	1.60	.53	.013	.00	.00	PIPE
634.851	3500.928	.569	3501.497	4.00	5.43	.46	3501.96	.00	.70	1.80	2.000	.000	.00	1 .0
5.888	.0131					.0094	.06	.57	1.50	.53	.013	.00	.00	PIPE
640.739	3501.005	.589	3501.594	4.00	5.18	.42	3502.01	.00	.70	1.82	2.000	.000	.00	1 .0
3.568	.0131					.0082	.03	.59	1.40	.53	.013	.00	.00	PIPE
644.307	3501.052	.610	3501.661	4.00	4.94	.38	3502.04	.00	.70	1.84	2.000	.000	.00	1 .0
2.209	.0131					.0072	.02	.61	1.31	.53	.013	.00	.00	PIPE
646.516	3501.081	.631	3501.712	4.00	4.71	.34	3502.06	.00	.70	1.86	2.000	.000	.00	1 .0
1.338	.0131					.0063	.01	.63	1.23	.53	.013	.00	.00	PIPE
647.855	3501.098	.653	3501.751	4.00	4.49	.31	3502.06	.00	.70	1.88	2.000	.000	.00	1 .0
.704	.0131					.0055	.00	.65	1.15	.53	.013	.00	.00	PIPE
648.559	3501.107	.676	3501.784	4.00	4.28	.28	3502.07	.00	.70	1.89	2.000	.000	.00	1 .0
.211	.0131					.0048	.00	.68	1.07	.53	.013	.00	.00	PIPE
648.770	3501.110	.701	3501.812	4.00	4.07	.26	3502.07	.00	.70	1.91	2.000	.000	.00	1 .0

LATERAL-MH7W-INT.WSW

0

T1 SUMMERLIN WEST VILLAGE 25
T2 SCURRY BEND DRIVE LATERAL FROM SDMH7 WEST TO SDDI#5
T3 ATKINS / INTERIM CONDITIONS
SO 580.6203500.220 1 3501.430
R 597.2403500.550 2 .013 .000 0.000 0
REM LATERAL FROM SDDI#5
SH 597.2403500.550 2 3500.550
CD 1 4 1 .000 2.500 .000 .000 .000 .00
CD 2 4 1 .000 2.000 .000 .000 .000 .00
Q 4.000 .0

LATERAL-MH7W-INT.OUT

FILE: LATERAL-MH7W-INT.WSW

W S P G W - CIVILDESIGN Version 14.08

PAGE 1

Program Package Serial Number: 7271

WATER SURFACE PROFILE LISTING

Date: 9-29-2022 Time: 1:44:42

SUMMERLIN WEST VILLAGE 25

SCURRY BEND DRIVE LATERAL FROM SDMH7 WEST TO SDDI#5

ATKINS / INTERIM CONDITIONS

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/Dia.-FT	Base Wt/I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
580.620	3500.220	1.210	3501.430	4.00	2.01	.06	3501.49	.00	.70	1.96	2.000	.000	.00	1 .0
2.135	.0199					.0007	.00	1.21	.35	.48	.013	.00	.00	PIPE
582.755	3500.262	1.163	3501.425	4.00	2.11	.07	3501.49	.00	.70	1.97	2.000	.000	.00	1 .0
1.973	.0199					.0008	.00	1.16	.38	.48	.013	.00	.00	PIPE
584.728	3500.302	1.118	3501.420	4.00	2.21	.08	3501.50	.00	.70	1.99	2.000	.000	.00	1 .0
1.832	.0199					.0009	.00	1.12	.41	.48	.013	.00	.00	PIPE
586.560	3500.338	1.076	3501.414	4.00	2.32	.08	3501.50	.00	.70	1.99	2.000	.000	.00	1 .0
1.686	.0199					.0010	.00	1.08	.44	.48	.013	.00	.00	PIPE
588.246	3500.372	1.036	3501.407	4.00	2.44	.09	3501.50	.00	.70	2.00	2.000	.000	.00	1 .0
1.552	.0199					.0012	.00	1.04	.47	.48	.013	.00	.00	PIPE
589.798	3500.402	.998	3501.400	4.00	2.55	.10	3501.50	.00	.70	2.00	2.000	.000	.00	1 .0
1.424	.0199					.0013	.00	1.00	.51	.48	.013	.00	.00	PIPE
591.223	3500.431	.961	3501.392	4.00	2.68	.11	3501.50	.00	.70	2.00	2.000	.000	.00	1 .0
1.291	.0199					.0015	.00	.96	.55	.48	.013	.00	.00	PIPE
592.513	3500.456	.926	3501.383	4.00	2.81	.12	3501.51	.00	.70	1.99	2.000	.000	.00	1 .0
1.161	.0199					.0017	.00	.93	.59	.48	.013	.00	.00	PIPE
593.675	3500.479	.893	3501.372	4.00	2.95	.13	3501.51	.00	.70	1.99	2.000	.000	.00	1 .0
1.024	.0199					.0020	.00	.89	.63	.48	.013	.00	.00	PIPE

LATERAL-MH7W-INT.OUT

FILE: LATERAL-MH7W-INT.WSW

W S P G W - CIVILDESIGN Version 14.08

PAGE 2

Program Package Serial Number: 7271

WATER SURFACE PROFILE LISTING

Date: 9-29-2022 Time: 1:44:42

SUMMERLIN WEST VILLAGE 25

SCURRY BEND DRIVE LATERAL FROM SDMH7 WEST TO SDDI#5

ATKINS / INTERIM CONDITIONS

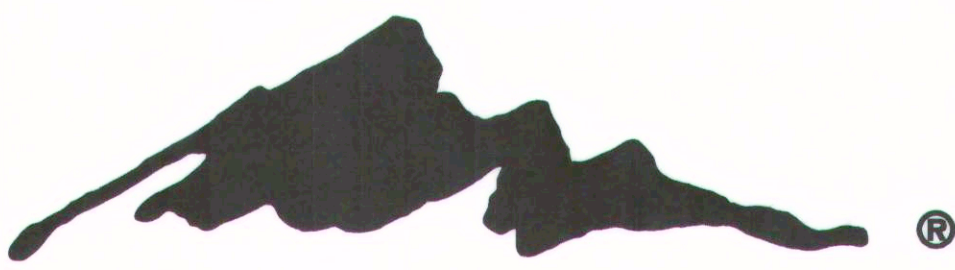
*****																	*****	
Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt/ I.D.	ZL	No Wth Prs/Pip				
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch				
*****																	*****	
594.699	3500.500	.861	3501.361	4.00	3.09	.15	3501.51	.00	.70	1.98	2.000	.000	.00	1	.0			
	.890	.0199				.0023	.00	.86	.67	.48	.013	.00	.00	PIPE				
595.589	3500.517	.831	3501.348	4.00	3.24	.16	3501.51	.00	.70	1.97	2.000	.000	.00	1	.0			
	.745	.0199				.0026	.00	.83	.72	.48	.013	.00	.00	PIPE				
596.335	3500.532	.802	3501.333	4.00	3.40	.18	3501.51	.00	.70	1.96	2.000	.000	.00	1	.0			
	.594	.0199				.0029	.00	.80	.77	.48	.013	.00	.00	PIPE				
596.928	3500.544	.774	3501.317	4.00	3.57	.20	3501.51	.00	.70	1.95	2.000	.000	.00	1	.0			
	.312	.0199				.0033	.00	.77	.83	.48	.013	.00	.00	PIPE				
597.240	3500.550	.756	3501.305	4.00	3.68	.21	3501.52	.00	.70	1.94	2.000	.000	.00	1	.0			

Appendix C. CD-ROM

SHEET INDEX		
1	COVER SHEET	
2	LEGEND AND ABBREVIATIONS	
3	GENERAL NOTES	
4	HORIZONTAL CONTROL PLAN	
5	MASTER DRAINAGE PLAN	
6	MASTER WATER PLAN	
7	MASTER SEWER PLAN	
8	ROADWAY GRADING PLAN	BEGIN TO STA 13+00
9	ROADWAY PLAN & PROFILE	BEGIN TO STA 13+00
10	ROADWAY GRADING PLAN	STA 13+00 TO STA 17+00
11	ROADWAY PLAN & PROFILE	STA 13+00 TO STA 17+00
12	ROADWAY GRADING PLAN	STA 17+00 TO STA 21+00
13	ROADWAY PLAN & PROFILE	STA 17+00 TO STA 21+00
14	ROADWAY GRADING PLAN	STA 21+00 TO STA 25+00
15	ROADWAY PLAN & PROFILE	STA 21+00 TO STA 25+00
16	ROADWAY GRADING PLAN	STA 25+00 TO STA 29+30
17	ROADWAY PLAN & PROFILE	STA 25+00 TO STA 29+30
18	ROADWAY GRADING PLAN	STA 29+30 TO STA 33+00
19	ROADWAY PLAN & PROFILE	STA 29+30 TO STA 33+00
20	ROADWAY GRADING PLAN	STA 33+00 TO STA 37+00
21	ROADWAY PLAN & PROFILE	STA 33+00 TO STA 37+00
22	ROADWAY GRADING PLAN	STA 37+00 TO END
23	ROADWAY PLAN & PROFILE	STA 37+00 TO END
24	STORM DRAIN LATERAL PROFILES	
25	WATER LATERAL PROFILES	
26	WATER LATERAL PROFILES	
27	SEWER LATERAL PROFILES	
28	STREETLIGHT PLAN	BEGIN TO STA 21+50
29	STREETLIGHT PLAN	STA 21+50 TO STA 33+50
30	STREETLIGHT PLAN	STA 33+50 TO END
31	INTERIM TRAFFIC CONTROL PLAN	BEGIN TO STA 21+50
32	INTERIM TRAFFIC CONTROL PLAN	STA 21+50 TO STA 33+50
33	INTERIM TRAFFIC CONTROL PLAN	STA 33+50 TO END
34	FINAL TRAFFIC CONTROL PLAN	BEGIN TO STA 21+50
35	FINAL TRAFFIC CONTROL PLAN	STA 21+50 TO STA 33+50
36	FINAL TRAFFIC CONTROL PLAN	STA 33+50 TO END
37	UNDERGROUNDS	
38	TRAFFIC SIGNAL CONDUIT SCHEDULE	
39	TYPICAL SECTIONS	
40	TYPICAL SECTIONS	
41	TYPICAL SECTIONS	
42	STORM DRAIN DETAILS	
43	STREET LIGHT DETAILS	
44	WATER DETAILS	
45	FRA INTERSECTION DETAILS	
46	FWA INTERSECTION DETAILS	
47	ACCESSIBLE PARKING DETAILS	
48	ACCESSIBLE PARKING DETAILS	
49	ACCESSIBLE PARKING DETAILS	

50-57 SW Gas Design Plans

SUMMERLIN WEST VILLAGE 25 IMPROVEMENT PLANS FOR: SCURRY BEND DRIVE (STREET N) SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD V22 SID #816 PROJECT APN: 137-15-801-002, 137-15-810-008, 137-22-301-006 AND 137-23-210-001 GROSS AREA ACREAGE: 5.42 AC.



SUMMERLIN®

NOTE:
THIS PERMIT IS FOR APPROVAL CONTINGENT ON OTHER PERMITS.

OWNER / DEVELOPER

OWNER

CONTACT: BRIAN WALSH
HOWARD HUGHES COMPANY LLC, A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135

Brian Walsh
BRIAN WALSH, SR. VICE PRESIDENT

1/10/22
DATE

ENGINEER / CONSULTANT

CIVIL

CONTACT: DAVID WILSON P.E.
ATKINS
2270 CORPORATE CIRCLE SUITE 200
HENDERSON, NEVADA 89074
(702) 263-7275

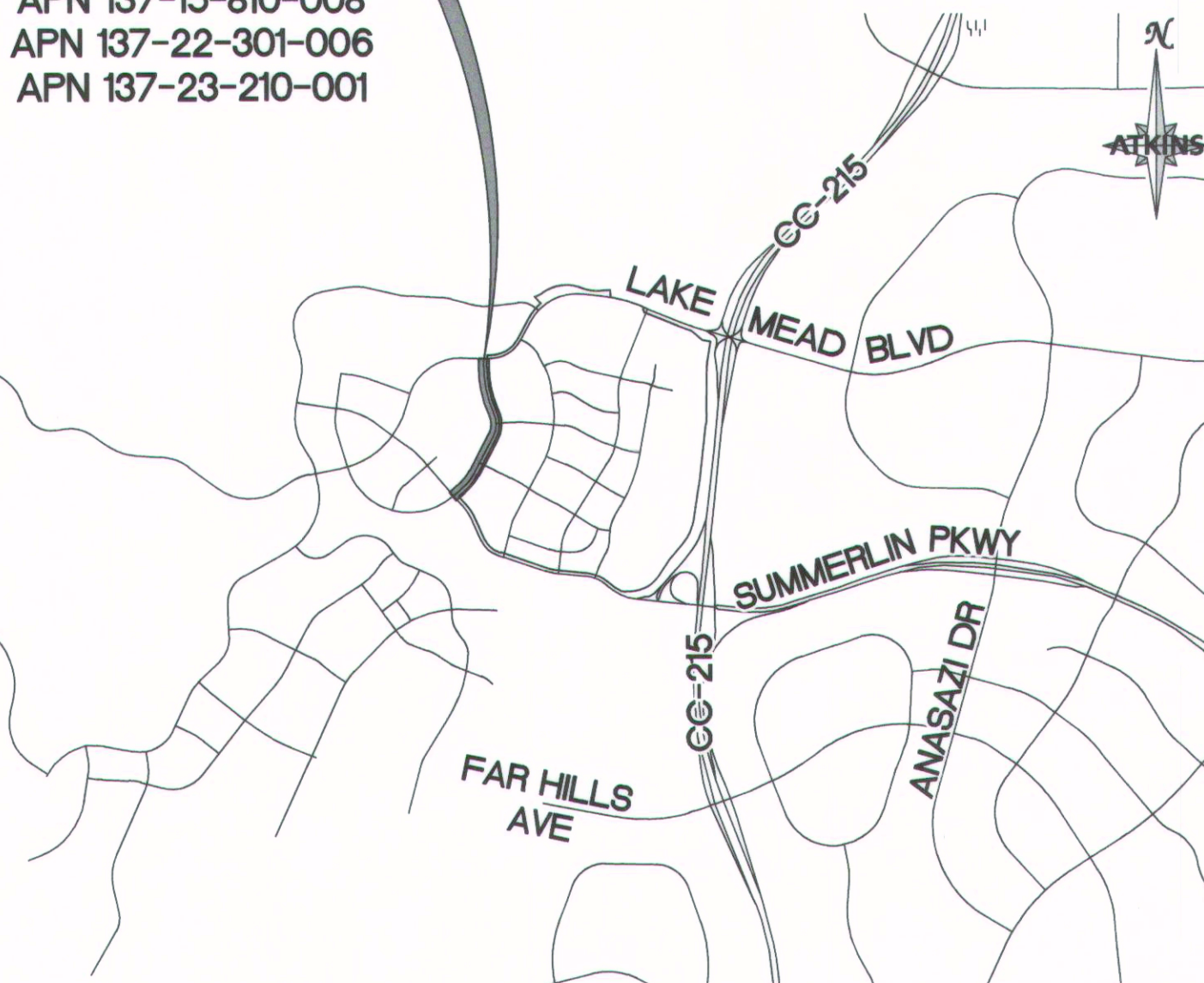
NPDES PERMIT NOTE

THE ENGINEER SHOULD CONTACT THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP) TO OBTAIN A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT PRIOR TO CONSTRUCTION. ALL CONSTRUCTION PROJECTS ONE ACRE OR LARGER MUST APPLY FOR THE PERMIT THROUGH NDEP. ALL QUESTIONS REGARDING THE NPDES PERMIT REQUIREMENTS SHOULD BE DIRECTED TO THE NDEP AT (775) 687-9429.

LOCATION MAP

PROJECT SITE

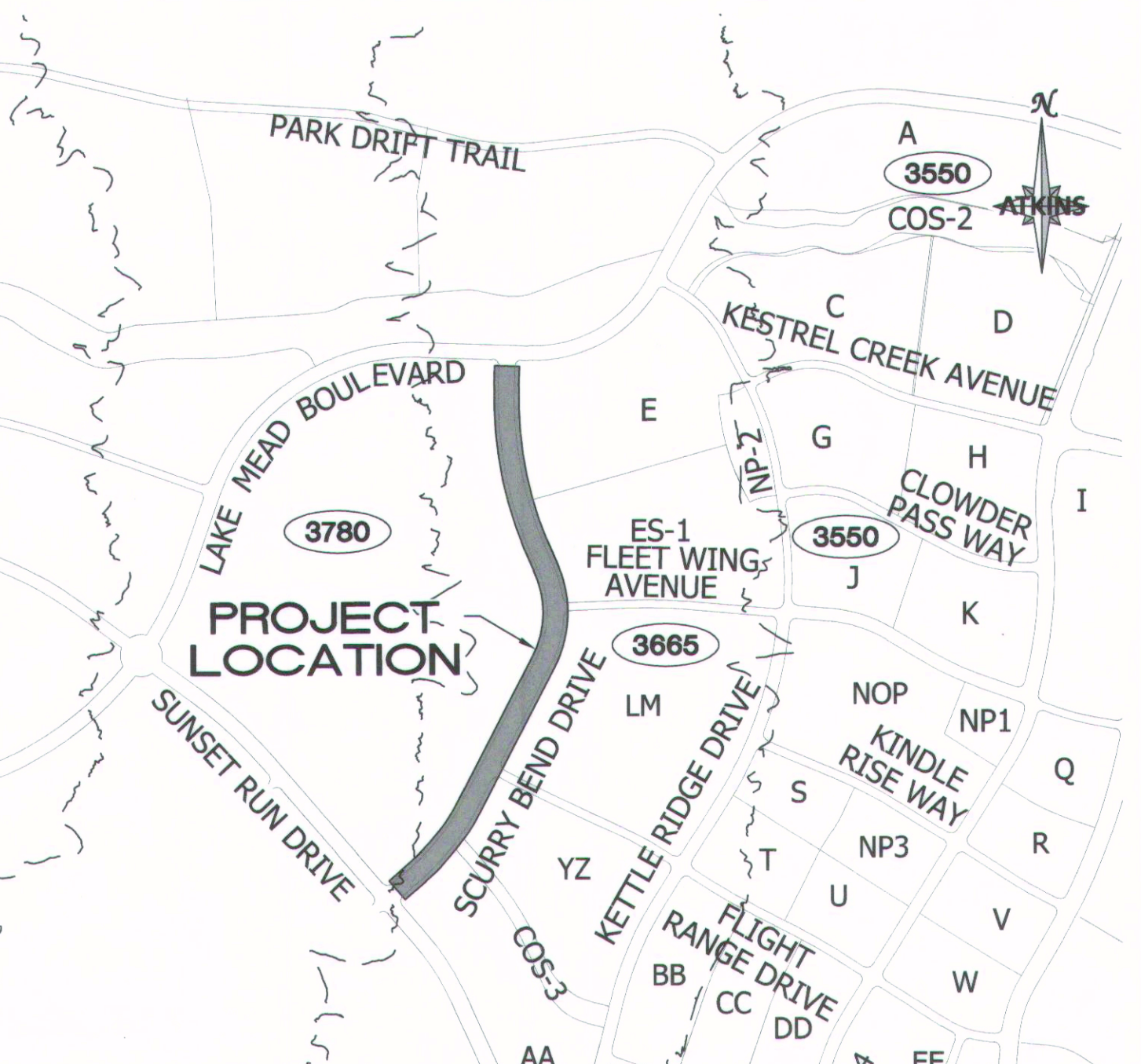
APN 137-15-801-002
APN 137-15-810-008
APN 137-22-301-006
APN 137-23-210-001



FEMA FLOOD ZONE INFORMATION

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANEL 32003C2150E, DATED 9/27/2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

VICINITY MAP



UTILITY NOTE

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.

CALL BEFORE YOU DIG 1-800-642-2444

THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE) PRESSURE REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOTE BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF THE LAS VEGAS VALLEY WATER DISTRICT FACILITIES.

NOTICE OF INTENT NOTE

NOTE: ALL LAND SURFACE AREA DISTURBANCES OVER 1 ACRE REQUIRE A STORMWATER DISCHARGE PERMIT ISSUED BY THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP). A PHASED CONSTRUCTION UNIT IN A CONTIGUOUS SUBDIVISION IS CONSIDERED UNDER CONSTRUCTION UNTIL ALL STRIPPED SURFACE AREAS HAVE BEEN COVERED BY PAVING, BUILDING OR ANTING. A STORMWATER DISCHARGE PERMIT APPLICATION AND ASSOCIATED INFORMATION MAY BE DOWNLOADED FROM THE WEB SITE: [HTTP://WWW.STATE.NV.US/BWPC/STORM01.HTM](http://www.state.nv.us/bwpc/storm01.htm) PROJECTS THAT DISTURB MORE THAN ONE ACRE OF LAND MUST SUBMIT TO NDEP A "NOTICE OF INTENT" FOR INCLUSION UNDER STORMWATER PERMIT NO. NV1000000 ALONG WITH APPROPRIATE FILLING FEE.

DISCLAIMER NOTE

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 IN THEIR PROPER LOCATION.

PROPOSED RIGHT-OF-WAY ACREAGE
5.42 AC.

PROPOSED DISTURBED AREA ACREAGE
5.16 AC.

GEOTECHNICAL ENGINEER
PREPARED BY: NOVA GEOTECHNICAL & INSPECTION SERVICES
4480 W. HACIENDA AVENUE, SUITE 104, LAS VEGAS, NV 89118
PHONE: 702-873-3478
PROJECT NO.: G-19-026
DATED: JUNE 18, 2020

EARTHWORK QUANTITIES
-CUT = 100 CUBIC YARDS
-FILL = 5,200 CUBIC YARDS

APPROVALS

CITY OF LAS VEGAS ENGINEERING



PLANS APPROVED
BY LAND DEVELOPMENT ON BEHALF
OF THE CITY ENGINEERS OFFICE
Siguerra
Feb 28 2022

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

LAS VEGAS FIRE AND RESCUE



REVIEWED BY
LAS VEGAS FIRE & RESCUE

RELEASE FOR INSTALLATION AS SUBMITTED

This review does not constitute permission to violate any City, State, or
Federal Laws or Ordinances. Ultimate responsibility for compliance
rests with the Owner.

Final acceptance of installation is based upon field inspection and
acceptance testing.

REVIEWED BY
bhalvorson 12/22/2021

Brian Walsh
CENTRAL TELEPHONE COMPANY d/b/a CENTURYLINK

David Wilson
DATE

1/10/22
DATE

THE AFFIXED CENTRAL TELEPHONE COMPANY d/b/a CENTURYLINK APPROVAL DOES
NOT ASSUME OR GUARANTEE LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH
EXISTING OR PROPOSED IMPROVEMENTS. RESOLUTION OF ANY CONFLICTS WILL BE
ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES,
AND/OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.

APPROVED FOR CONSTRUCTION

Mao Fang

LAS VEGAS VALLEY WATER DISTRICT PLANNING & ENGINEERING SERVICES

PROJECT NO. 139396 FIRST APPROVED DATE: 01/13/2022

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

SHEETS: 1-3,6,9,11,13,15,17,19,21,23-27

Barbara Garrison
NV ENERGY

1-6-2022
DATE

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

UID 2021DAF37859

PLANNER: David Friedlander

09/07/2021
DATE

SOUTHWEST GAS CORPORATION

David Wilson
COX COMMUNICATIONS OF LAS VEGAS, INC

1/10/2022
DATE

BASIS OF BEARING

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

LINEAR UNIT: US SURVEY FOOT (FTUS)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR

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

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

NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)

EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)

SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:

1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES
BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS
DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO
"GROUND" DISTANCES IN THE PROJECT AREA.

2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT
EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)

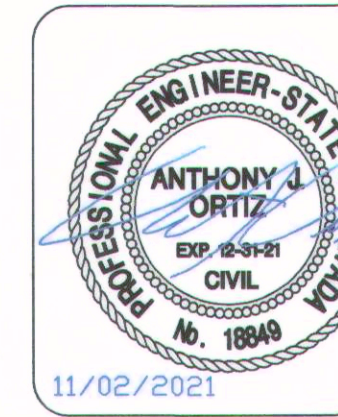
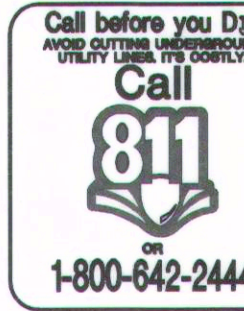
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)

FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. &
WEST OF DETENTION BASIN.

T21S,R59E,S03

LEGAL DESCRIPTION

BEING A PORTION OF LOT 1 AS SHOWN ON THE MAP
THEREOF IN BOOK 161 OF PLATS, PAGE 68, OFFICIAL
RECORDS, CITY OF LAS VEGAS CLARK COUNTY, NEVADA.



SUMMERLIN WEST VILLAGE 25

SCURRY BEND DRIVE (STREET N)

SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD

COVER SHEET

DESIGNED BY:
B. MOCHTAK

DRAWN BY:
K. HENRY

CHECKED BY:
N. BARCOS

HORIZ.: NONE
VERT.: NONE

107V9269

L21-011406

DATE:
DECEMBER, 2021

DRAWING NO.

1 / 49

JOB NO. 100069098

STORM DRAIN CONSTRUCTION NOTES

- 1 INSTALL STORM DRAIN. SEE SHEET 3 FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
- 2 INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
- 3 INSTALL TYPE II SD MANHOLE PER CCAUSD #405.2
- 4 INSTALL TYPE III SD MANHOLE PER CCAUSD #406
- 5 INSTALL NDOT TYPE 2 DROP INLET PER NDOT R-4.2.1 (SEE SHEET 29)
- 6 STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL (SEE SHEET 42)
- 7 NOT USED
- 8 INSTALL SD JUNCTION STRUCTURE
- 9 DIRECT CONNECTION INTO RCB SEE SHEET 42 FOR DETAIL
- 10 INSTALL TYPE I SD RISER PER CCAUSD #403.1
- 11 INSTALL TYPE "CM" DROP INLET PER CCAUSD #421 & #422
- 12 INSTALL PRECAST REINFORCED CONCRETE BOX PER NDOT STANDARD 502 AND 503 SEE SHEET 42 FOR RCB INFORMATION

LVVWD CONSTRUCTION NOTES

- 1 ADJUST EXISTING WATER VALVE TO GRADE
- 2 ADJUST EXISTING WATER ACCESS MANHOLE TO GRADE
- 3 ADJUST EXISTING WATER TEST STATION TO GRADE
- 4 ADJUST EXISTING WATER VAULT COVER TO GRADE
- 5 ADJUST EXISTING WATER AVAR TO GRADE

REVISIONS

REV.	DESCRIPTION	DATE	APPROVAL
1	REVISED FH ELEVATION		
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1702.263.7755
Fax: +1702.263.7200

SUMMERLIN

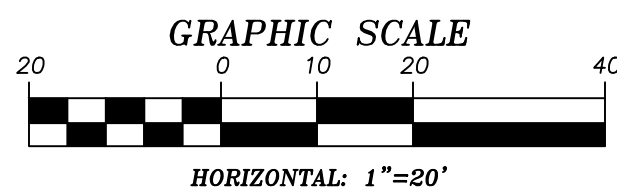
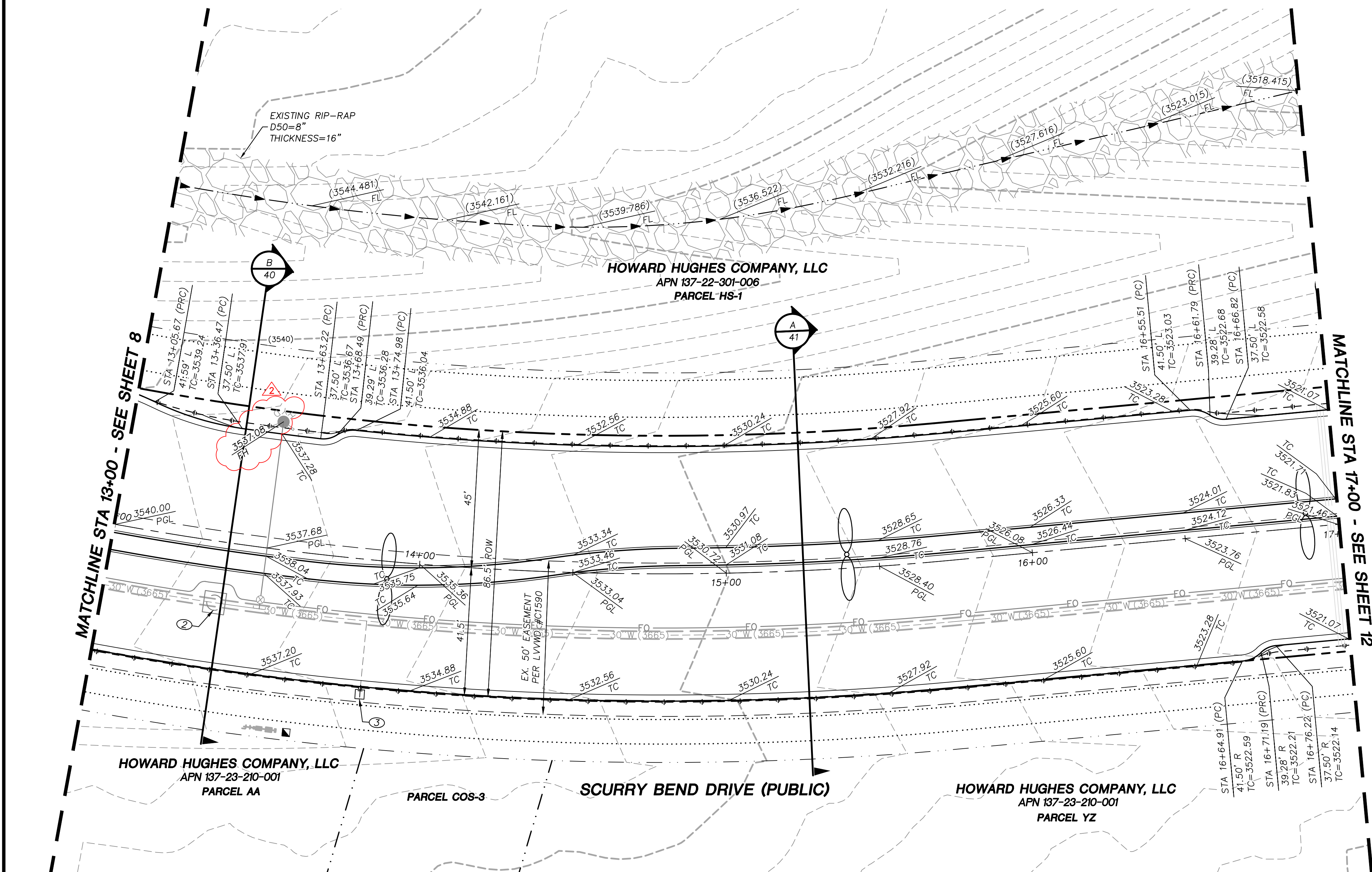
SUMMERLIN WEST VILLAGE 25
SCURRY BEND DRIVE (STREET N)

SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD

ROADWAY GRADING PLAN
STA 13+00 TO STA 17+00

DESIGNED BY: B. MOCHTYAK
DRAWN BY: K. HENDRY
CHECKED BY: N. BARCOS
DATE: JULY, 2022
DRAWING NO.: 10/49
JOB NO.: 100069098

C:\pwwork\atkins\01\drms\56326\69098-08-GRAD-G1.dwg LAYOUT: 10 ROADWAY GRADING PLAN Jul 08, 2022 10:38AM



GRADING PLAN CERTIFICATION

ANTHONY J. ORTIZ PE#18849 DATE 7/8/2021
CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.
DS#####

BASIS OF BEARING

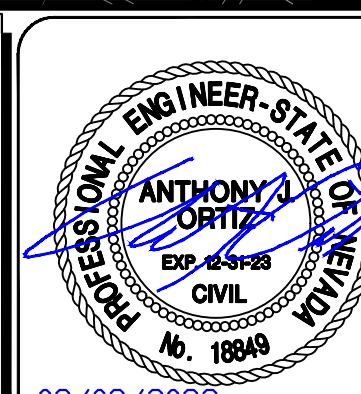
GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NORS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

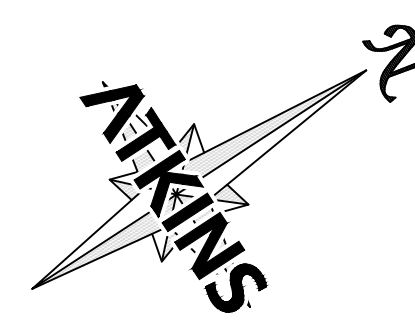
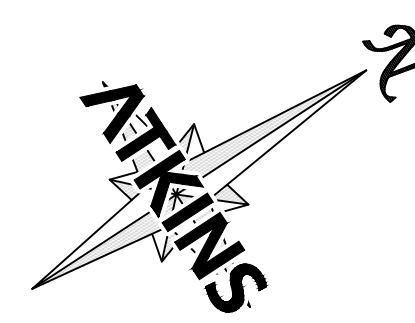
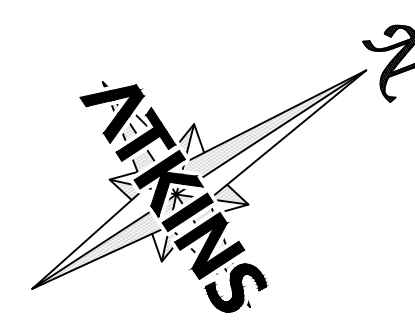
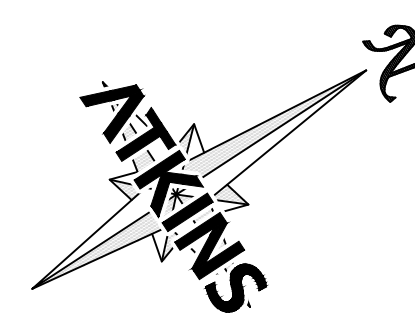
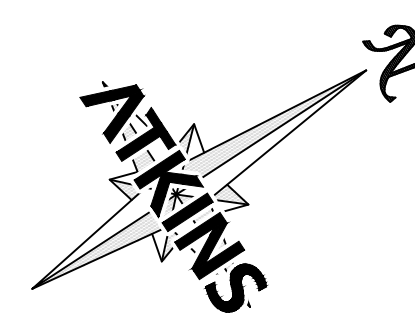
BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
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FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03



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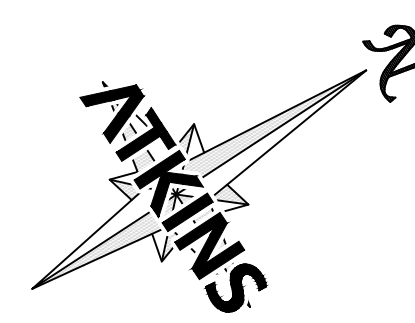
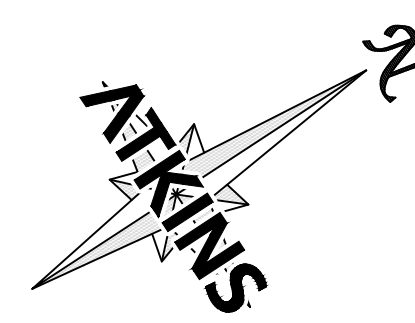


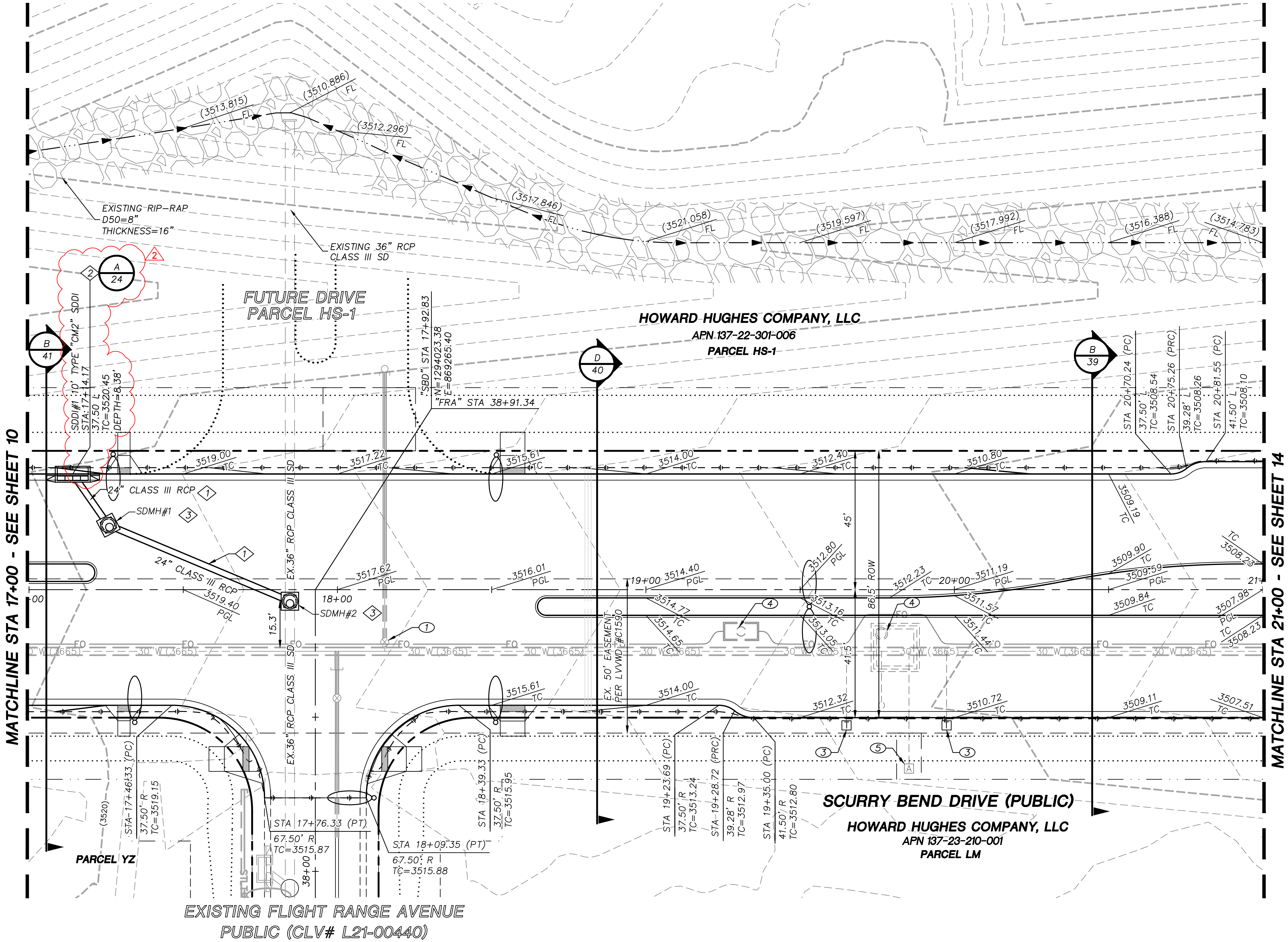
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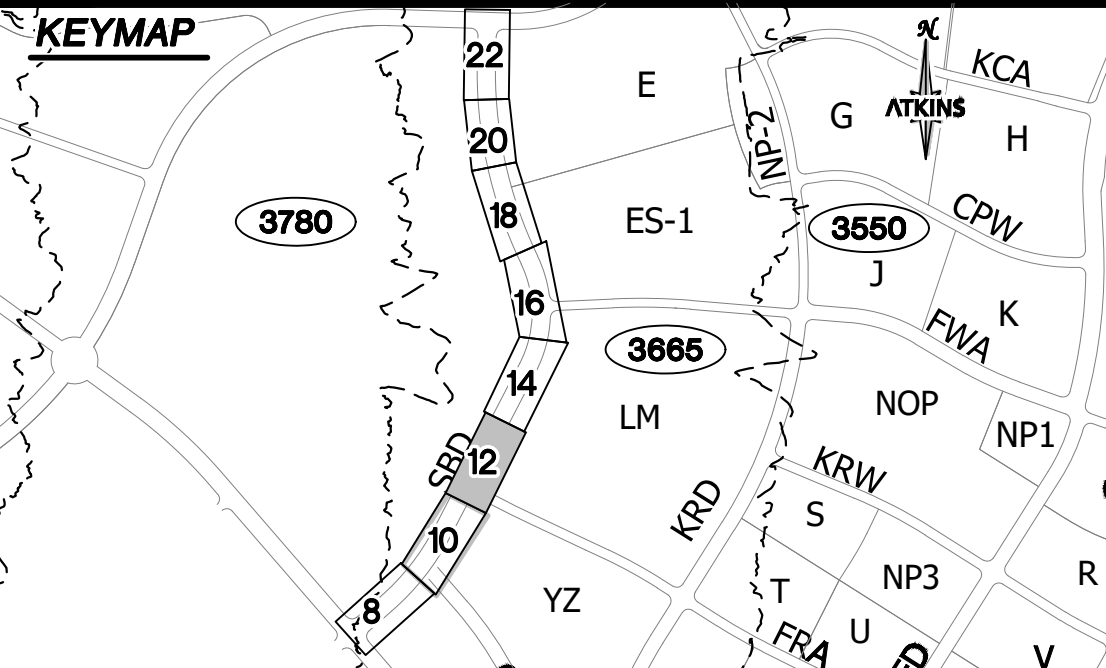


STORM DRAIN CONSTRUCTION NOTES

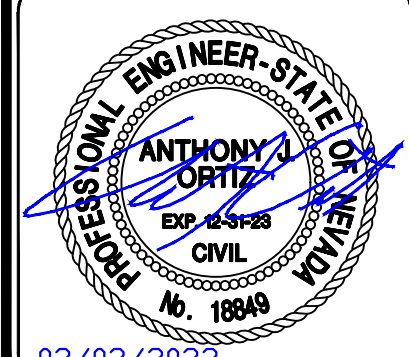
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- 2 INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
- 3 INSTALL TYPE II SD MANHOLE PER CCAUSD #405.2
- 4 INSTALL TYPE III SD MANHOLE PER CCAUSD #406
- 5 INSTALL NDOT TYPE 2 DROP INLET PER NDOT R-4.2.1 (SEE SHEET 29)
- 6 STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL (SEE SHEET 42)
- 7 NOT USED
- 8 INSTALL SD JUNCTION STRUCTURE
- 9 DIRECT CONNECTION INTO RCB SEE SHEET 42 FOR DETAIL
- 10 INSTALL TYPE I SD RISER PER CCAUSD #403.1
- 11 INSTALL TYPE "CM" DROP INLET PER CCAUSD #421 & #422
- 12 INSTALL PRECAST REINFORCED CONCRETE BOX PER NDOT STANDARD 502 AND 503 SEE SHEET 42 FOR RCB INFORMATION

LVVWD CONSTRUCTION NOTES

- 1 ADJUST EXISTING WATER VALVE TO GRADE
- 2 ADJUST EXISTING WATER ACCESS MANHOLE TO GRADE
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- 4 ADJUST EXISTING WATER VAULT COVER TO GRADE
- 5 ADJUST EXISTING WATER AVAR TO GRADE



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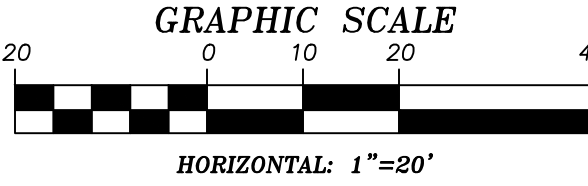
DESIGNED BY:	B. MOCHTYAK
DRAWN BY:	K. HENDRY
CHECKED BY:	N. BARCOS
DATE:	JULY, 2022
DRAWING NO.:	12/49
JOB NO.:	100069098

SUMMERLIN WEST VILLAGE 25
SCURRY BEND DRIVE (STREET N)
SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD
ROADWAY GRADING PLAN
STA 17+00 TO STA 21+00



ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1702.263.7755
Fax: +1702.263.7200

REV.	DESCRIPTION	DATE	APPROVAL
1	REVISED DROP INLET OFFSET AND ELEVATIONS		



GRADING PLAN CERTIFICATION

ANTHONY J. ORTIZ PE#18849 DATE 7/8/2021
CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.
DS#####

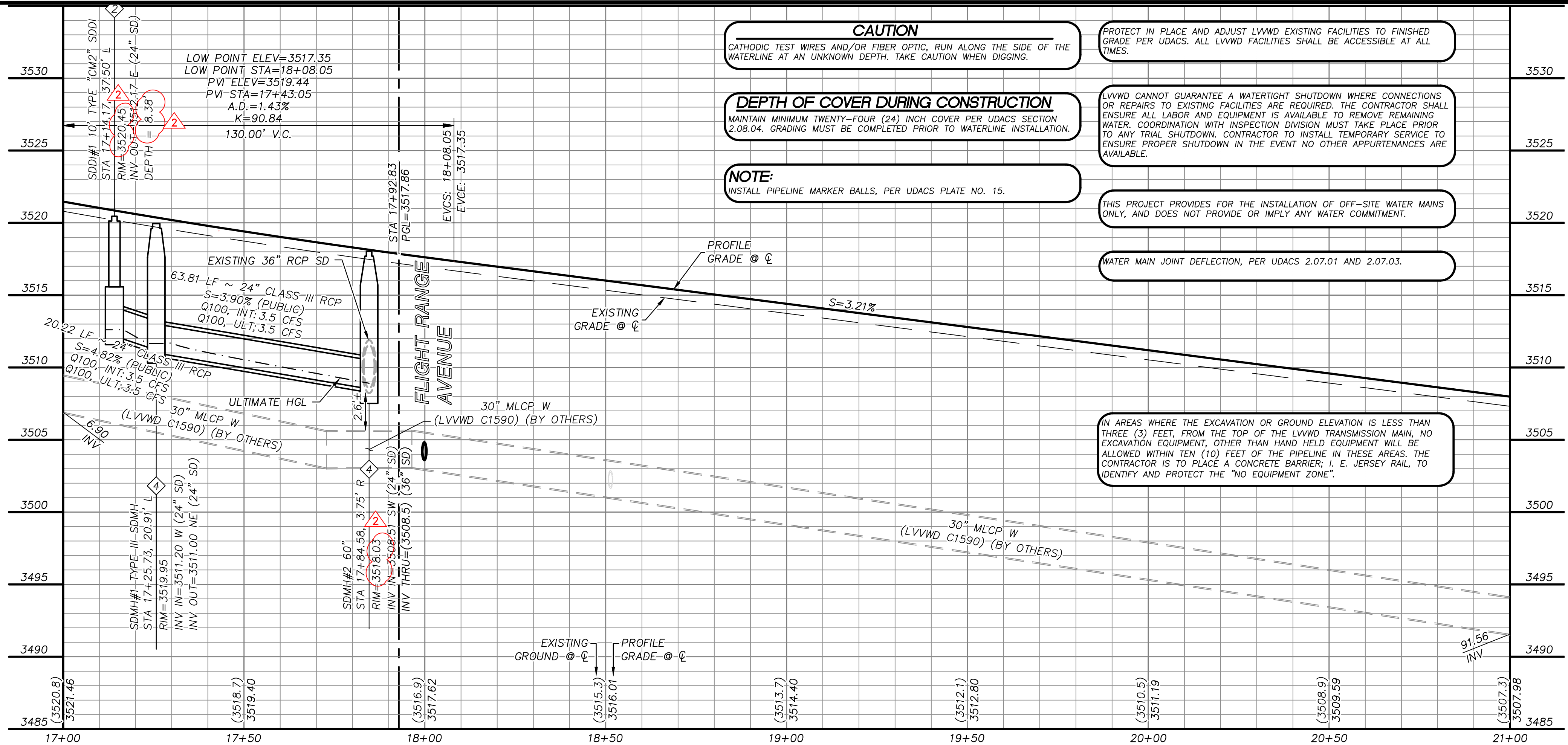
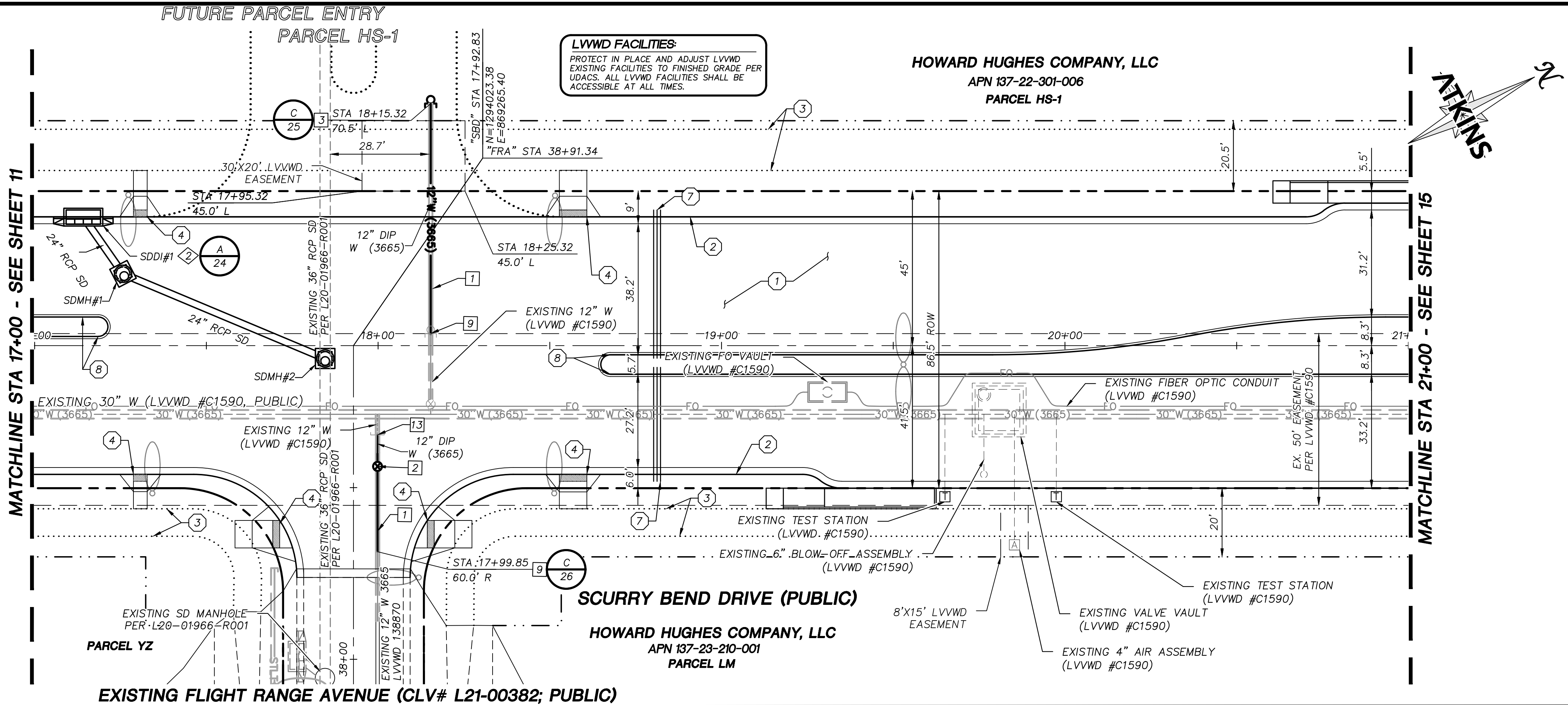
BASIS OF BEARING

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FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S.R59E.S03





REVISIONS

DESCRIPTION
REV. DATE APPROVAL
2X REVISED DROP INLET ELEVATIONS

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1702.263.7275
Fax: +1702.263.7200

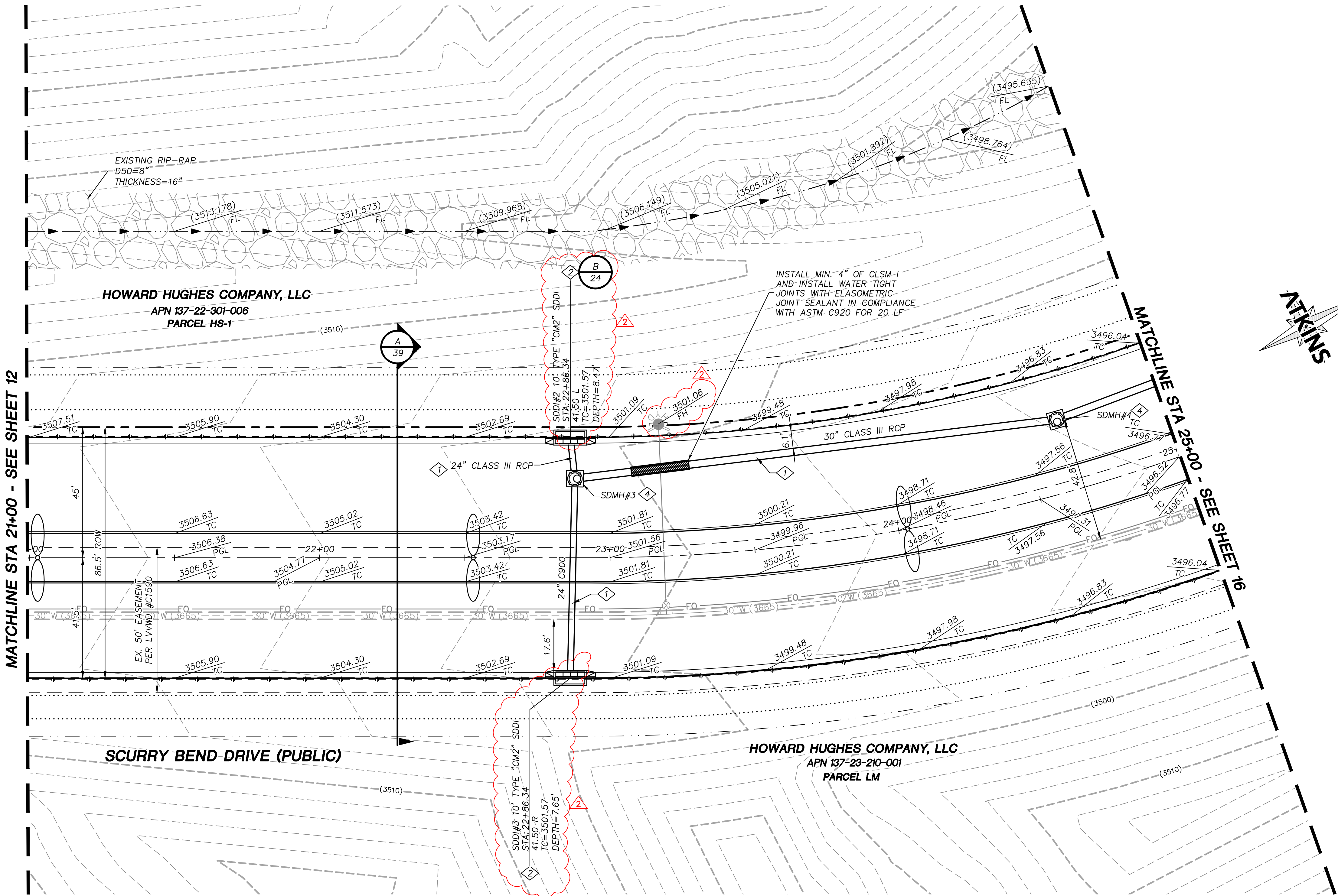
SUMMERLIN

SUMMERLIN WEST VILLAGE 25
SCURRY BEND DRIVE (STREET N)
SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD

ROADWAY PLAN + PROFILE
STA 17+00 TO STA 21+00

107V9269
L21-01406
DATE: JULY, 2022
DRAWING NO.: 13/49
VERT.: 1"=5'

JOB NO. 100069098

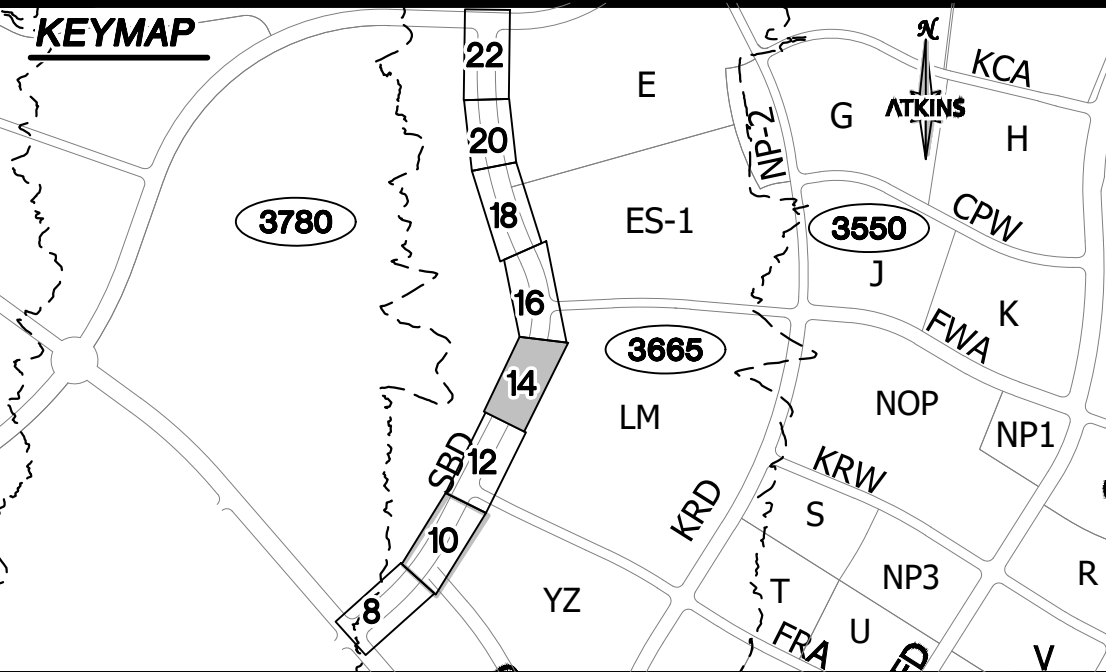


STORM DRAIN CONSTRUCTION NOTES

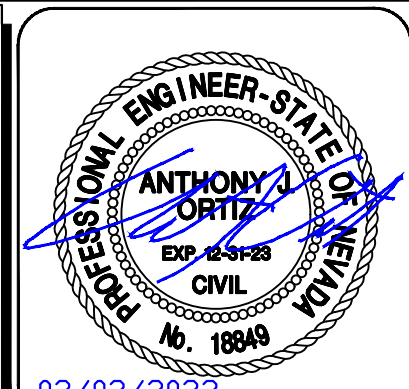
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9. DIRECT CONNECTION INTO RCB SEE SHEET 42 FOR DETAIL
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LVWD CONSTRUCTION NOTES

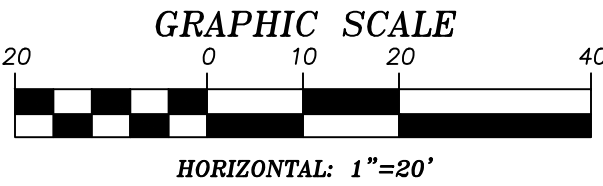
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DESIGNED BY: B. MOCHTYAK
DRAWN BY: K. HENDRY
CHECKED BY: N. BARCOS
DATE: JULY, 2022
DRAWING NO.: 14/49
JOB NO.: 100069098



GRADING PLAN CERTIFICATION

ANTHONY J. ORTIZ PE#18849 DATE 7/8/2021
CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.
DS#####

BASIS OF BEARING

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

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TZ15-R59E-S03

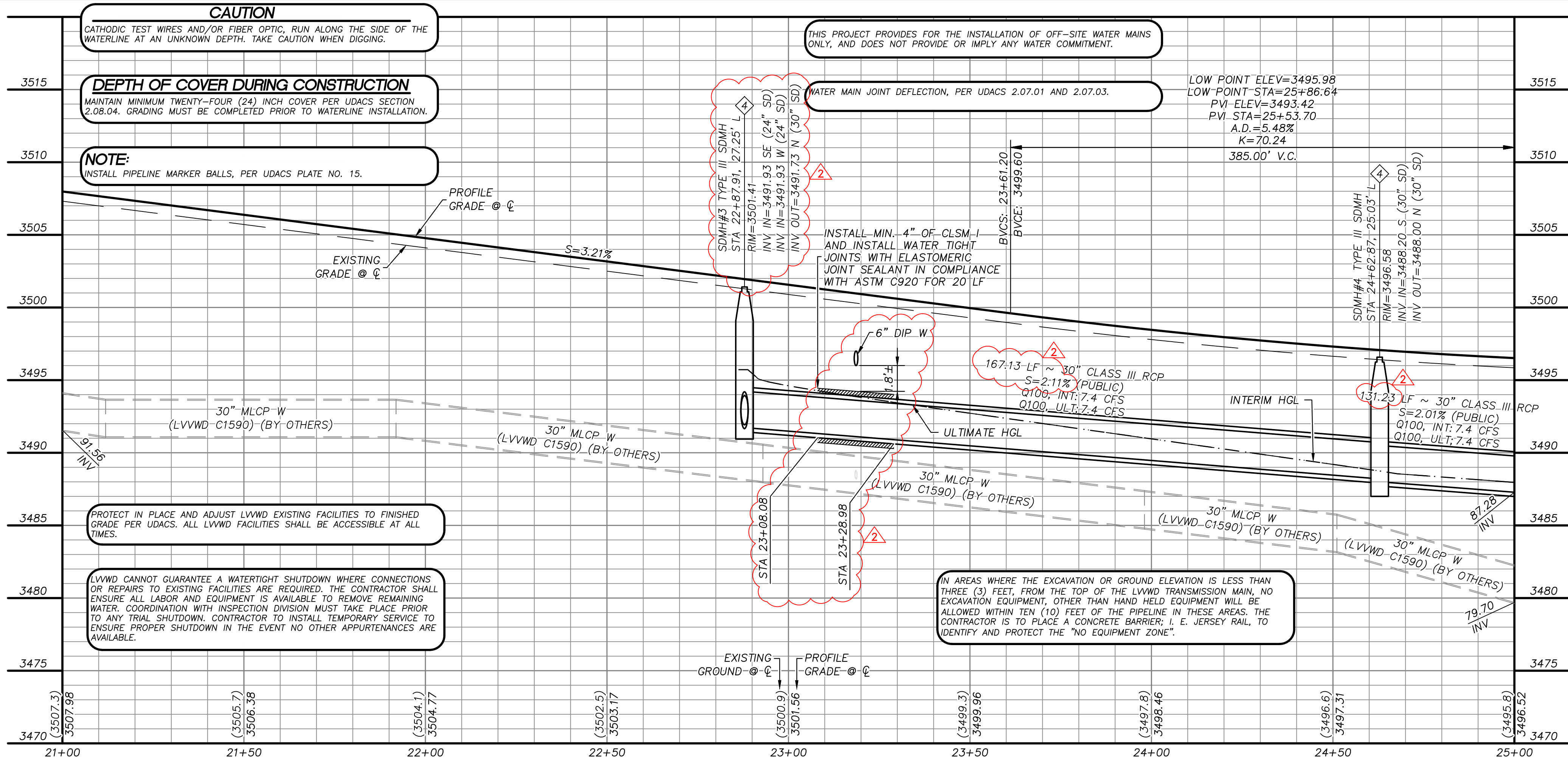
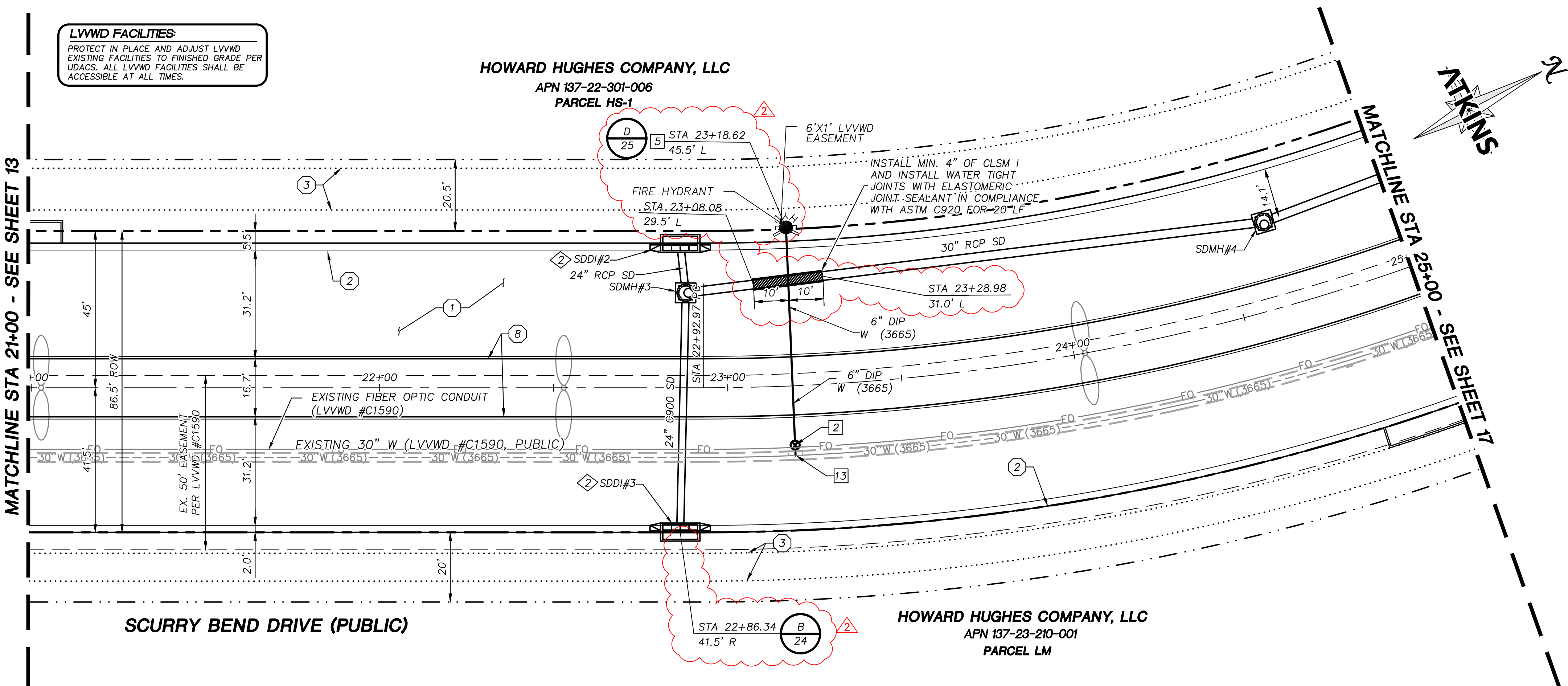


SUMMERLIN WEST VILLAGE 25
SCURRY BEND DRIVE (STREET N)
SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD
ROADWAY GRADING PLAN
STA 21+00 TO STA 25+00



ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1702.263.7275
Fax: +1702.263.7200

REV.	DESCRIPTION	DATE	APPROVAL
2	REVISED SDDI OFFSET AND ELEV. & FH ELEV.		
1			
0			



STORM DRAIN CONSTRUCTION NOTES

1. INSTALL STORM DRAIN. SEE SHEET 3 FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
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12. INSTALL PRECAST REINFORCED CONCRETE BOX PER NDOT STANDARD 502 AND 503 SEE SHEET 42 FOR RCB INFORMATION

SEWER CONSTRUCTION NOTES

1. INSTALL SEWER MANHOLE WITH WATERTIGHT JOINTS PER DCSWCS SD-1 AND SD-4
2. INSTALL SEWER MAIN PER DCSWCS SD-17
3. STUB AND CAP SEWER PIPE. PLACE MARKER BALL AND 4"x4" POST, DOUGLAS FIR, OVER END OF PIPE AND INSTALL THRUST BLOCK (1 CUBIC FT. MINIMUM).
4. CONNECT TO EXISTING SEWER MAIN

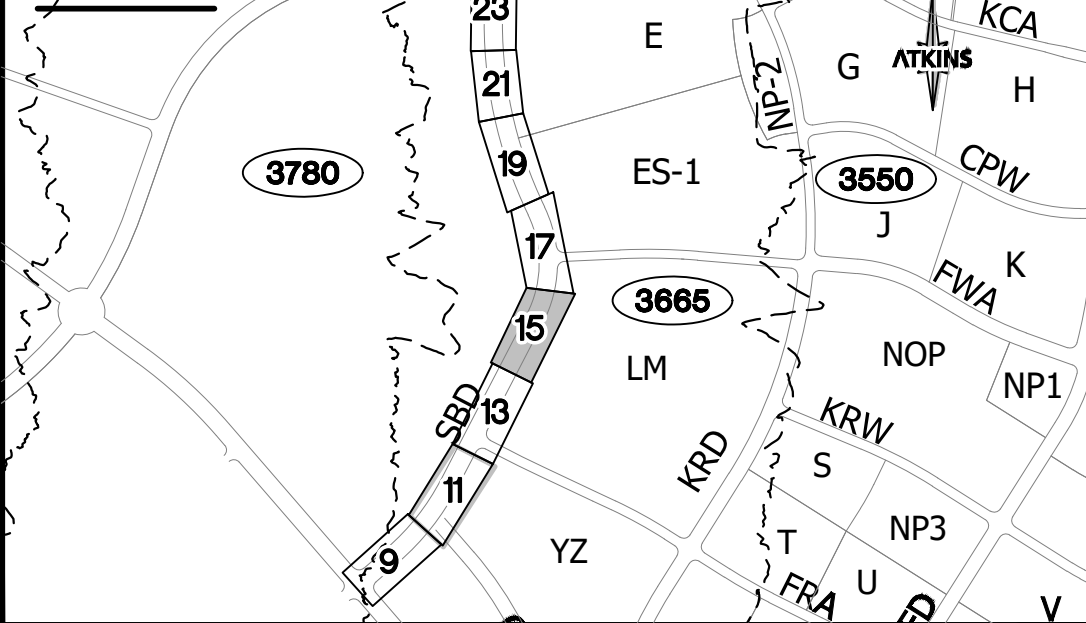
WATERLINE CONSTRUCTION NOTES

1. INSTALL WATER MAIN PER UDACS PLATES #17 AND PLATE #19
2. INSTALL GATE VALVE PER UDACS PLATES #30 AND #39
3. INSTALL CAP AND 2" MANUAL BLOWOFF ASSEMBLY PER UDACS PLATE #36
4. INSTALL TEE W/ VALVE AND LATERAL PER UDACS PLATES #17, #19, #30, #31 AND #39
5. INSTALL FIRE HYDRANT WITH APPURTENANCES (CONCRETE PAD, LATERAL, VALVE, AND TEE) PER UDACS PLATES #30, #31, #39, AND #40.
6. INSTALL DEFLECTION AT PIPE JOINTS (MAXIMUM OF 1')
7. INSTALL 1.5" METER WITH 1.5" RPPA PER UDACS PLATES #4 AND #8 & DETAIL ON SHEET 27
8. INSTALL 6" SERVICE SADDLE PER UDACS PLATE #4
9. REMOVE CAP AND 2" BLOWOFF AND CONNECT TO EXISTING WATERLINE STUB
10. INSTALL VERTICAL BEND PER UDACS PLATE #31
11. ADJUST MANHOLE RIM AND BLOW OFF VALVE TO FINISH GRADE
12. CUT EXISTING WATER LATERAL AND CONNECT TO EXISTING WATERLINE
13. REMOVE BLIND FLANGE AND CONNECT TO EXISTING WATERLINE

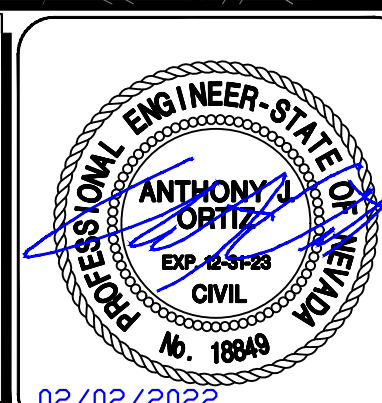
ROADWAY CONSTRUCTION NOTES

1. CONSTRUCT PLANTMIX BITUMINOUS SURFACE OVER TYPE II AGGREGATE BASE PER SOILS REPORT. SEE SHEET 39 FOR TYPICAL PAVEMENT SECTION.
2. CONSTRUCT "L" TYPE CURB AND GUTTER PER CCAUSD #216
3. FUTURE SIDEWALK BY OTHERS
4. CONSTRUCT CURB RAMPS PER SHEETS 45 & 46
5. CONSTRUCT 0" FLUSH CURB
6. TRANSITION CURB FROM FULL HEIGHT (6") TO FLUSH (0")
7. INSTALL SCHEDULE 40 PVC IRRIGATION SLEEVES (2'-4", 1'-6") PER DETAIL C ON SHEET 44.
8. CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219

KEYMAP



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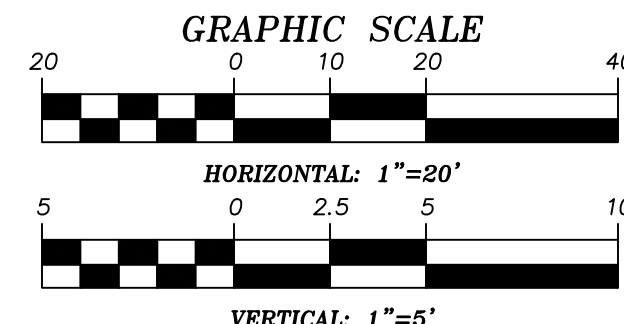


REVISIONS	
NO.	DESCRIPTION
1	REVISED SD & FH ELEV. LENGTH, SLOPE, & OFFSET; ADDED STA. LABELS

DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:
B. MOCHTAK	K. HENDRY	N. BARCOS	JULY, 2022

SUMMERLIN WEST VILLAGE 25	
SCURRY BEND DRIVE (STREET N)	
SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD	
ROADWAY PLAN + PROFILE	
STA 21+00 TO STA 25+00	
107V9269	15/49
L21-01406	
DATE:	
DRAWING NO.	

DESIGNED BY: B. MOCHTAK
DRAWN BY: K. HENDRY
CHECKED BY: N. BARCOS
DATE: JULY, 2022
DRAWING NO. 15/49
JOB NO. 100069098



APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. 139396 FIRST APPROVED DATE: 01/13/22

BASIS OF BEARING

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

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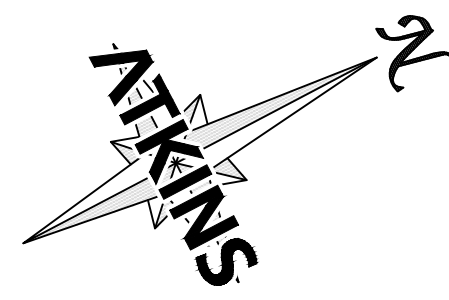
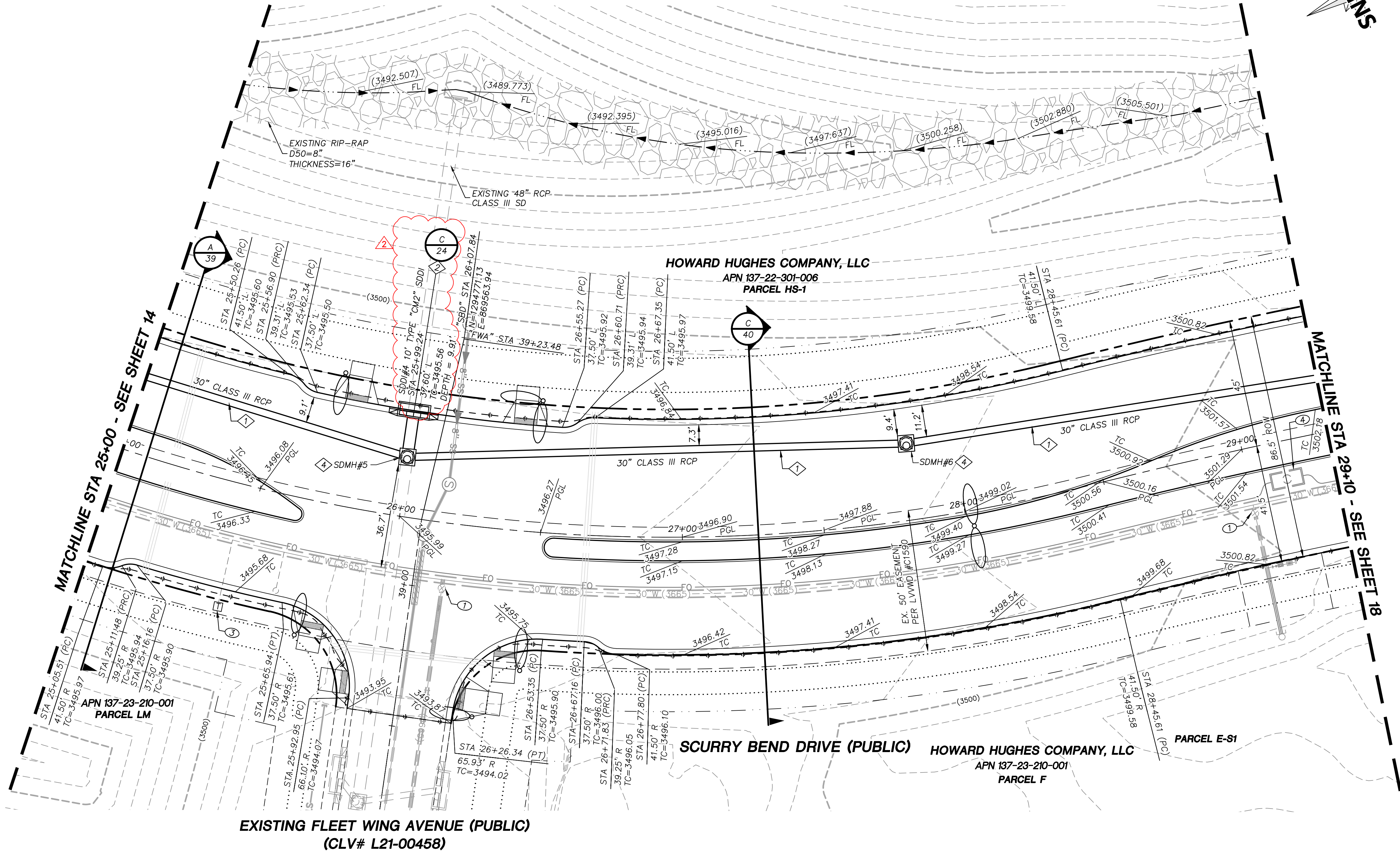
FAST

Call before you Dig

811

1-800-642-2444

1-702-227-2929

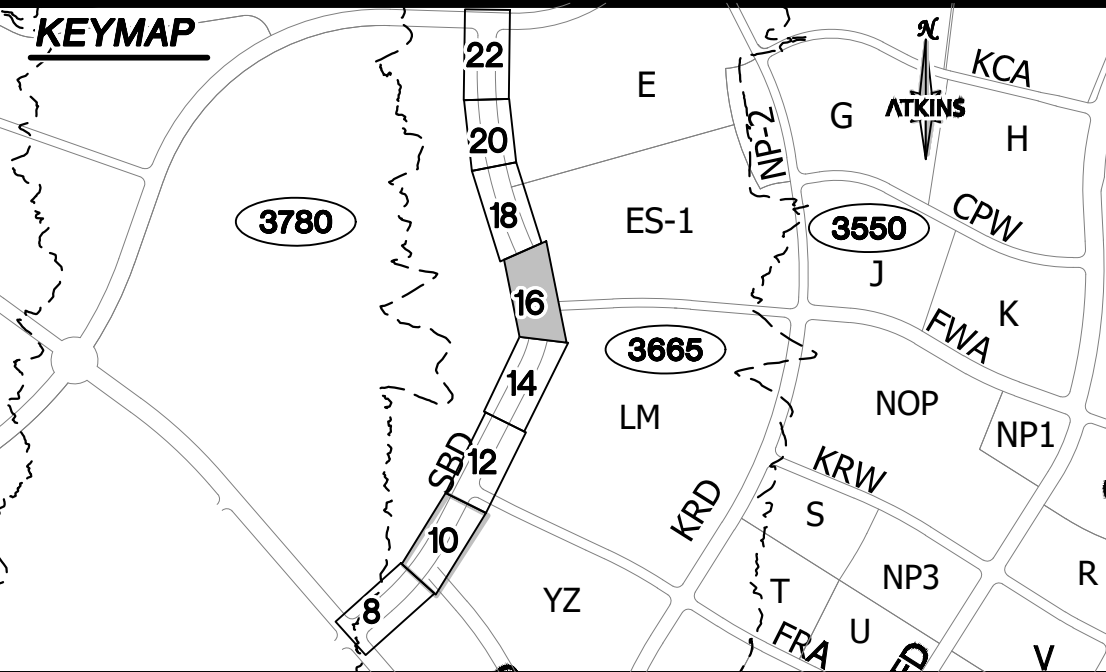


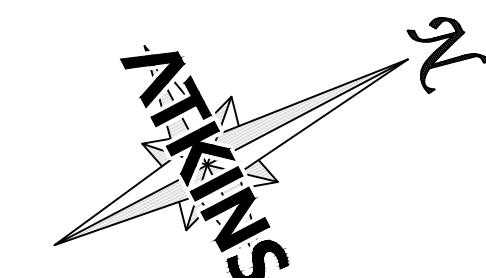
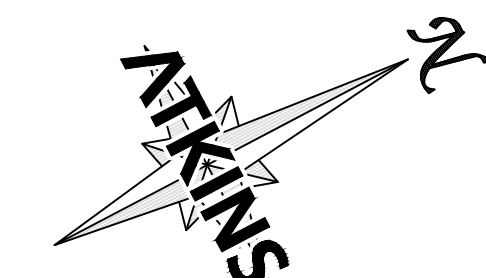
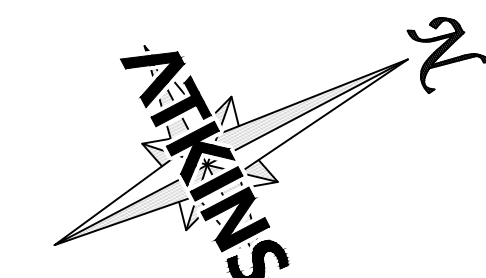
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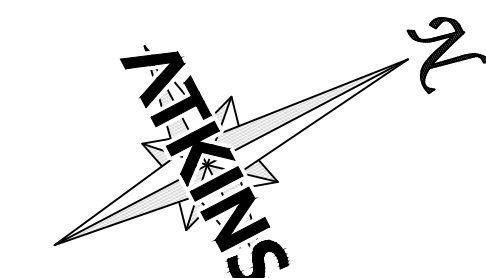
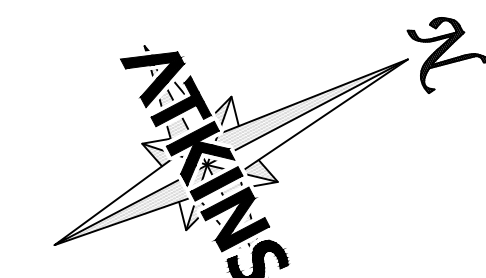


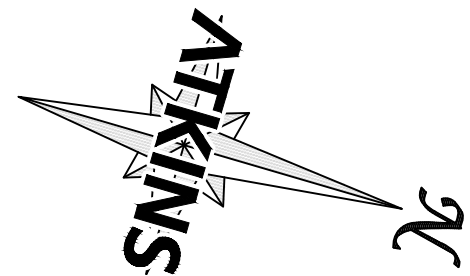
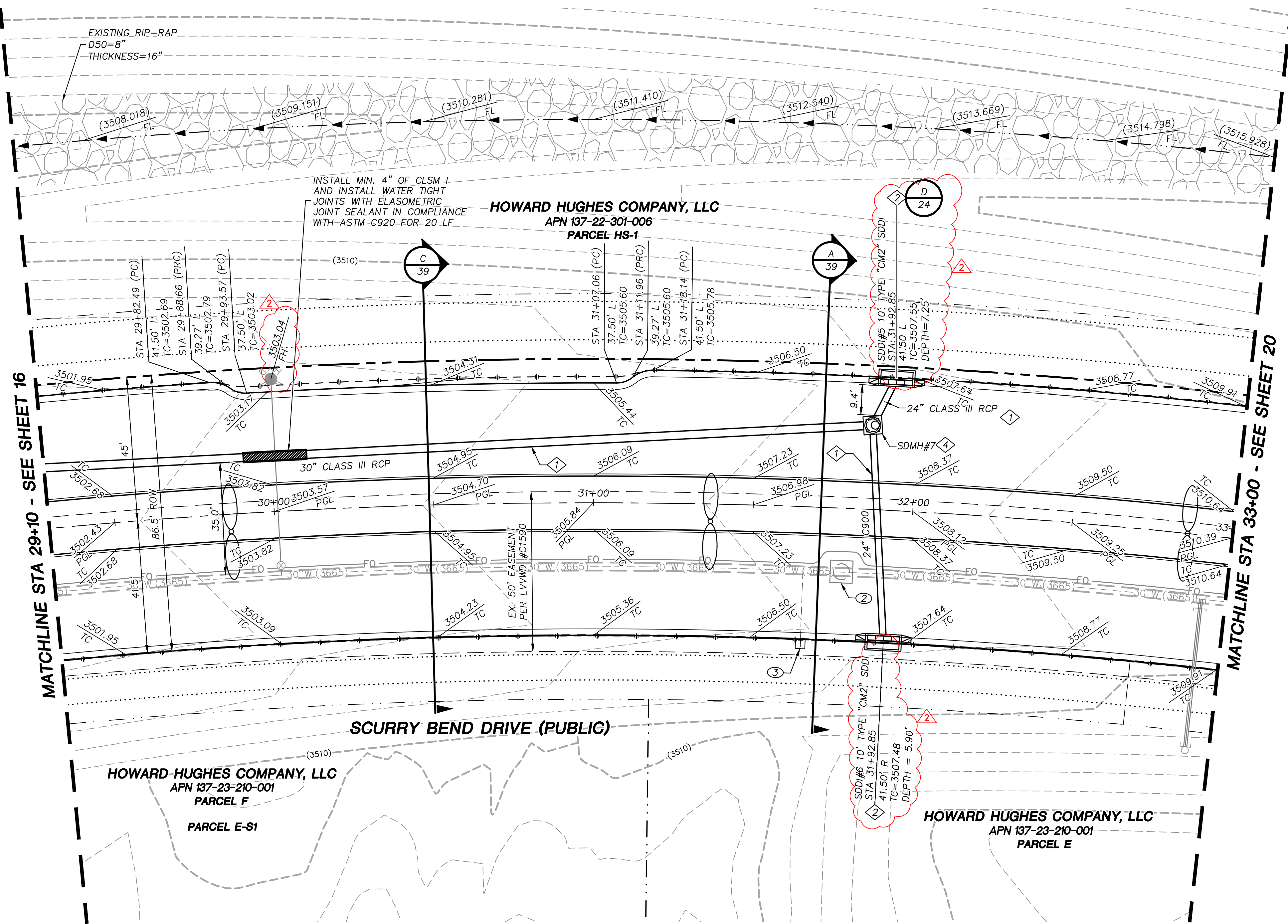
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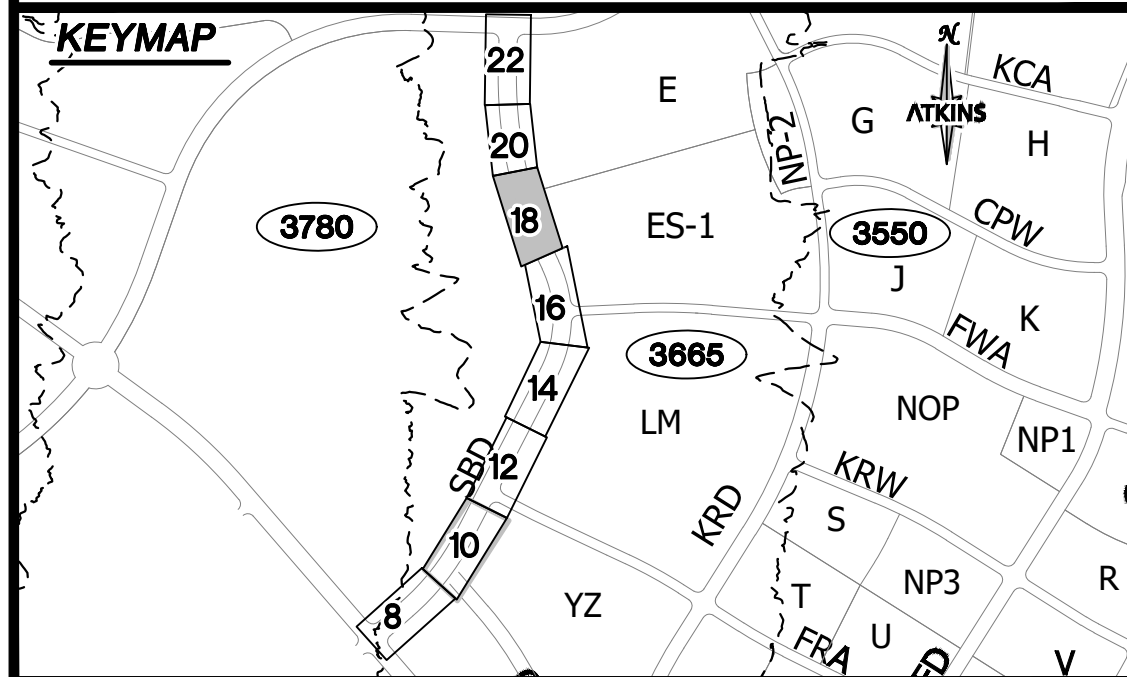


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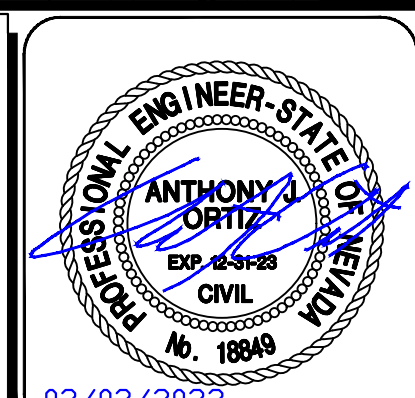
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4. INSTALL TYPE III SD MANHOLE PER CCAUSD #406
5. INSTALL NDOT TYPE 2 DROP INLET PER NDOT R-4.2.1 (SEE SHEET 29)
6. STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL (SEE SHEET 42)
7. NOT USED
8. INSTALL SD JUNCTION STRUCTURE
9. DIRECT CONNECTION INTO RCB SEE SHEET 42 FOR DETAIL
10. INSTALL TYPE I SD RISER PER CCAUSD #403.1
11. INSTALL TYPE "CM" DROP INLET PER CCAUSD #421 & #422
12. INSTALL PRECAST REINFORCED CONCRETE BOX PER NDOT STANDARD 502 AND 503 SEE SHEET 42 FOR RCB INFORMATION

LVVWD CONSTRUCTION NOTES

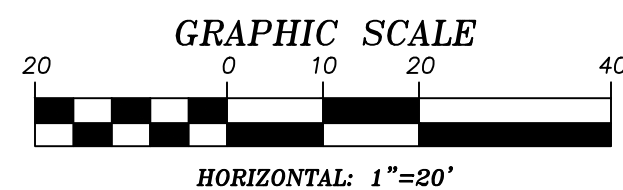
1. ADJUST EXISTING WATER VALVE TO GRADE
2. ADJUST EXISTING WATER ACCESS MANHOLE TO GRADE
3. ADJUST EXISTING WATER TEST STATION TO GRADE
4. ADJUST EXISTING WATER VAULT COVER TO GRADE
5. ADJUST EXISTING WATER AVAR TO GRADE



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DESIGNED BY: B. MOCHTYAK
 DRAWN BY: K. HENDRY
 CHECKED BY: N. BARCOS
 DATE: JULY, 2022
 DRAWING NO.: 18/49
 JOB NO.: 100069098



GRADING PLAN CERTIFICATION

ANTHONY J. ORTIZ PE#18849 DATE 7/8/2021
 CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.
 DS#####

BASIS OF BEARING

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

BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
 NAVD83 ELEVATION: 989.574 METERS (3,246.63 FEET)
 FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
 T21S,R59E,S03



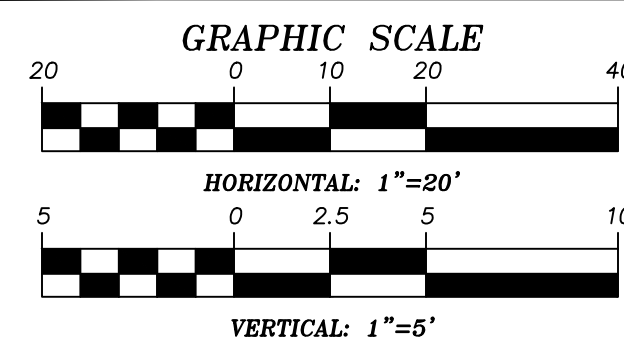
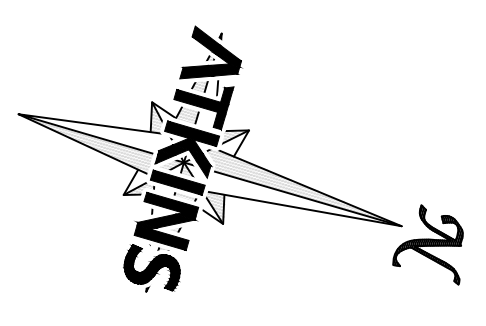
SUMMERLIN WEST VILLAGE 25
 SCURRY BEND DRIVE (STREET N)
 SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD
 ROADWAY GRADING PLAN
 STA 29+30 TO STA 33+00



ATKINS
 2270 Corporate Circle Suite 200
 Henderson, Nevada 89074
 Telephone: +1702.263.7755
 Fax: +1702.263.7200

REV.	DESCRIPTION	BY	DATE	APPROVAL
2	REVISED SDD OFFSET AND ELEV. & FH ELEV.			
1				
0				

REV.	DESCRIPTION	BY	DATE	APPROVAL
2	REVISED SDD OFFSET AND ELEV. & FH ELEV.			
1				
0				



LAS VEGAS VALLEY WATER DISTRICT PLANNING
AND ENGINEERING SERVICES

PROJECT NO. 139396 FIRST APPROVED DATE: 01/13/22

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

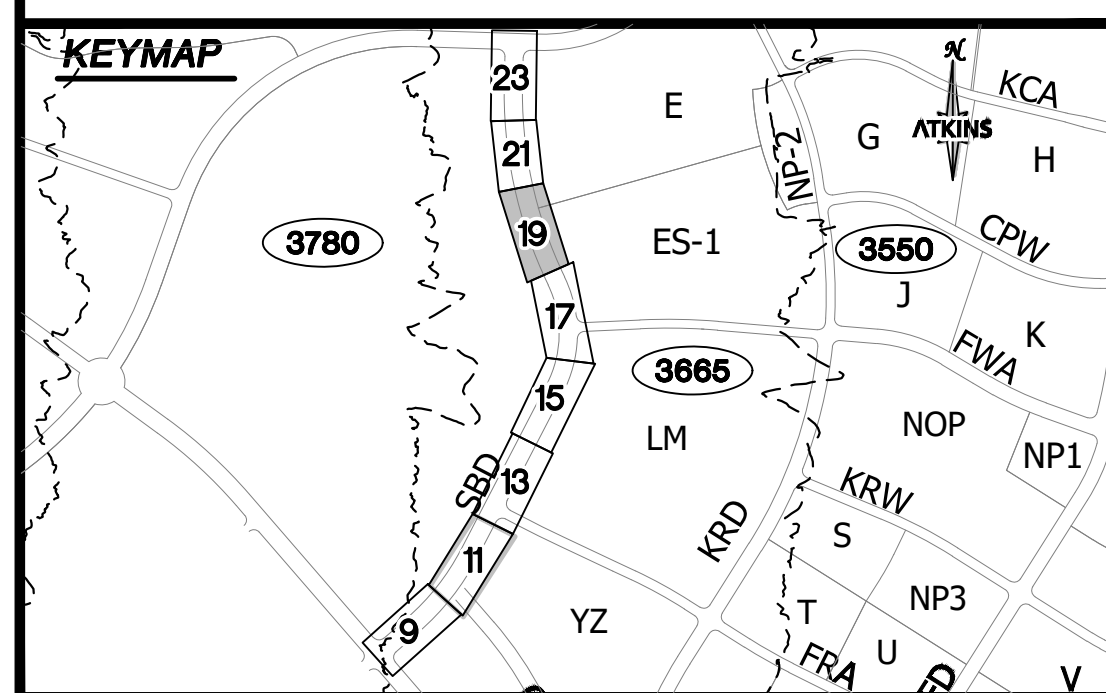
CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FIND USCGS DISC SET IN ROCK RIDGE 150'
SOUTH OF CHARLESTON BLVD. & WEST OF
DETENTION BASIN.

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVDD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150
SOUTH OF CHARLESTON BLVD. & WEST OF
DETENTION BASIN.

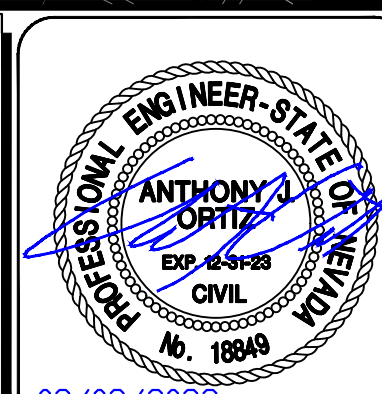


Call before you Dig
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UTILITY LINES. IT'S COSTLY.

Call
811
OR
1-800-642-2444



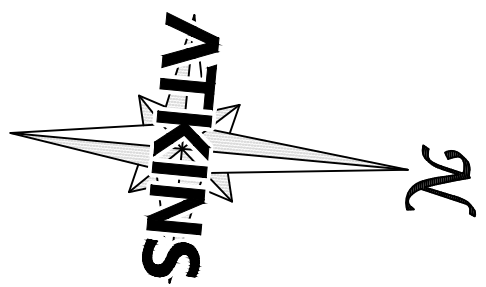
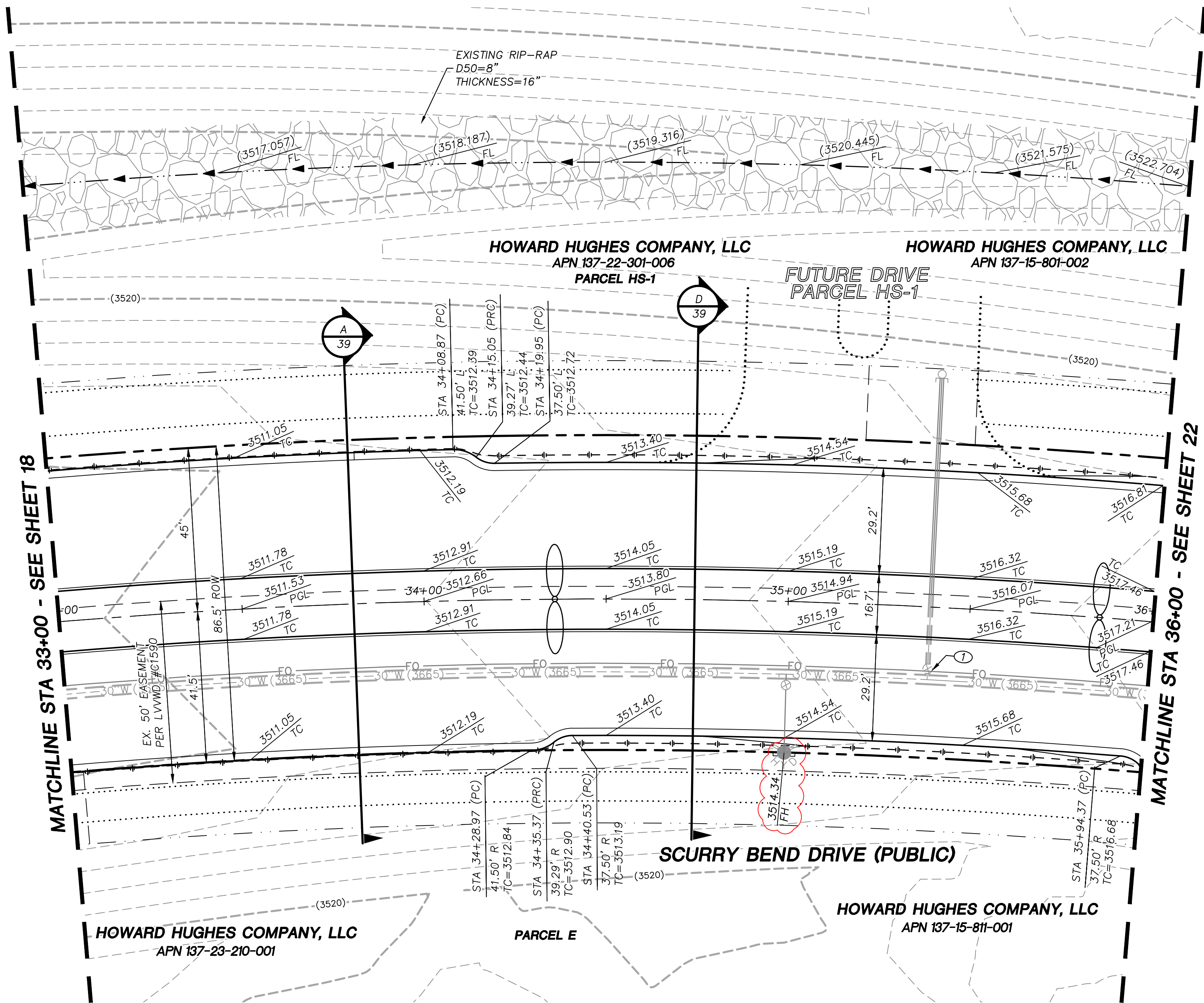
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SUMMERLIN WEST VILLAGE 25
SCURRY BEND DRIVE (STREET N)
SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD

ROADWAY PLAN + PROFILE
STA 29+30 TO STA 33+00

107V9269 L21-01406	DESIGNED BY: B. MOCHTYAK DRAWN BY: K. HENDRY CHECKED BY: N. BARCOS HORIZ.: 1"=20' VERT.: 1"=5'
DATE: JULY, 2022	
DRAWING NO.	
19/49	

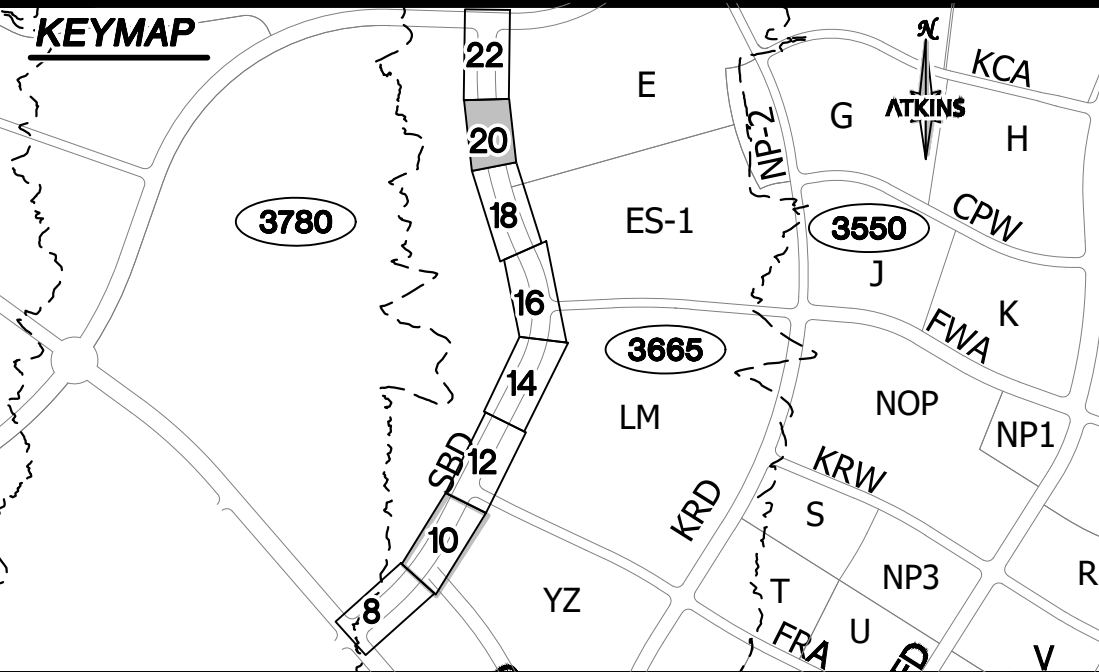


STORM DRAIN CONSTRUCTION NOTES

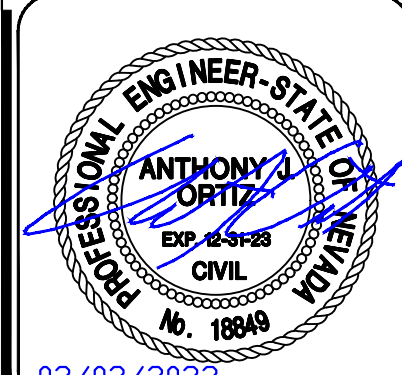
1. INSTALL STORM DRAIN. SEE SHEET 3 FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
2. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
3. INSTALL TYPE II SD MANHOLE PER CCAUSD #405.2
4. INSTALL TYPE III SD MANHOLE PER CCAUSD #406
5. INSTALL NDOT TYPE 2 DROP INLET PER NDOT R-4.2.1 (SEE SHEET 29)
6. STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL (SEE SHEET 42)
7. NOT USED
8. INSTALL SD JUNCTION STRUCTURE
9. DIRECT CONNECTION INTO RCB SEE SHEET 42 FOR DETAIL
10. INSTALL TYPE I SD RISER PER CCAUSD #403.1
11. INSTALL TYPE "CM" DROP INLET PER CCAUSD #421 & #422
12. INSTALL PRECAST REINFORCED CONCRETE BOX PER NDOT STANDARD 502 AND 503 SEE SHEET 42 FOR RCB INFORMATION

L.V.W.D. CONSTRUCTION NOTES

1. ADJUST EXISTING WATER VALVE TO GRADE
2. ADJUST EXISTING WATER ACCESS MANHOLE TO GRADE
3. ADJUST EXISTING WATER TEST STATION TO GRADE
4. ADJUST EXISTING WATER VAULT COVER TO GRADE
5. ADJUST EXISTING WATER AVAR TO GRADE



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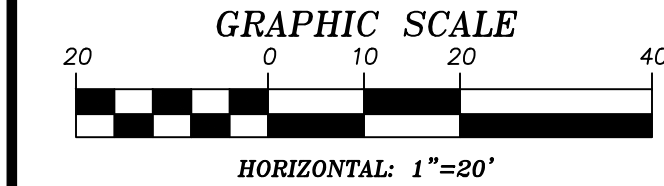


REVISIONS		BY	DATE	APPROVAL
REV.	DESCRIPTION			
2	REVISED FH ELEVATION			
1				
0				

DESIGNED BY:	B. MOCHTYAK
DRAWN BY:	K. HENDRY
CHECKED BY:	N. BARCOS
DATE:	JULY, 2022
DRAWING NO.	20/49
JOB NO.	100069098

PROJECT:	SUMMERLIN WEST VILLAGE 25
LOCATION:	SCURRY BEND DRIVE (STREET N)
DESCRIPTION:	SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD
DATE:	08/08/22
BY:	ATKINS

PROJECT:	ROADWAY GRADING PLAN
LOCATION:	STA 33+00 TO STA 37+00
DATE:	08/08/22
BY:	ATKINS



GRADING PLAN CERTIFICATION

ANTHONY J. ORTIZ PE#18849 DATE 7/8/2021
CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.
DS#####

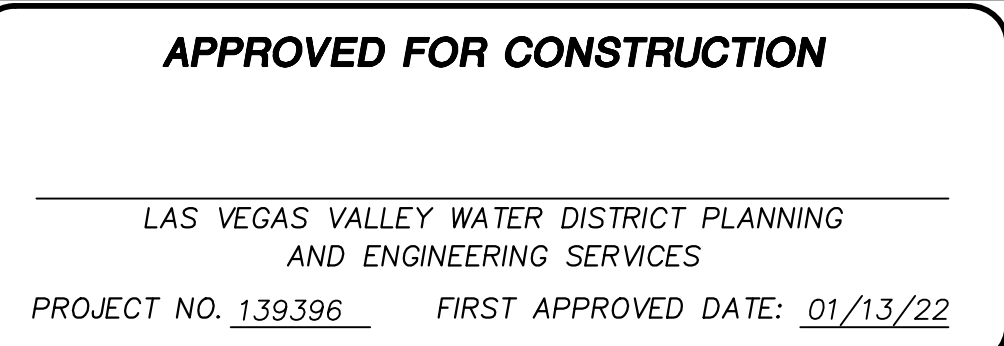
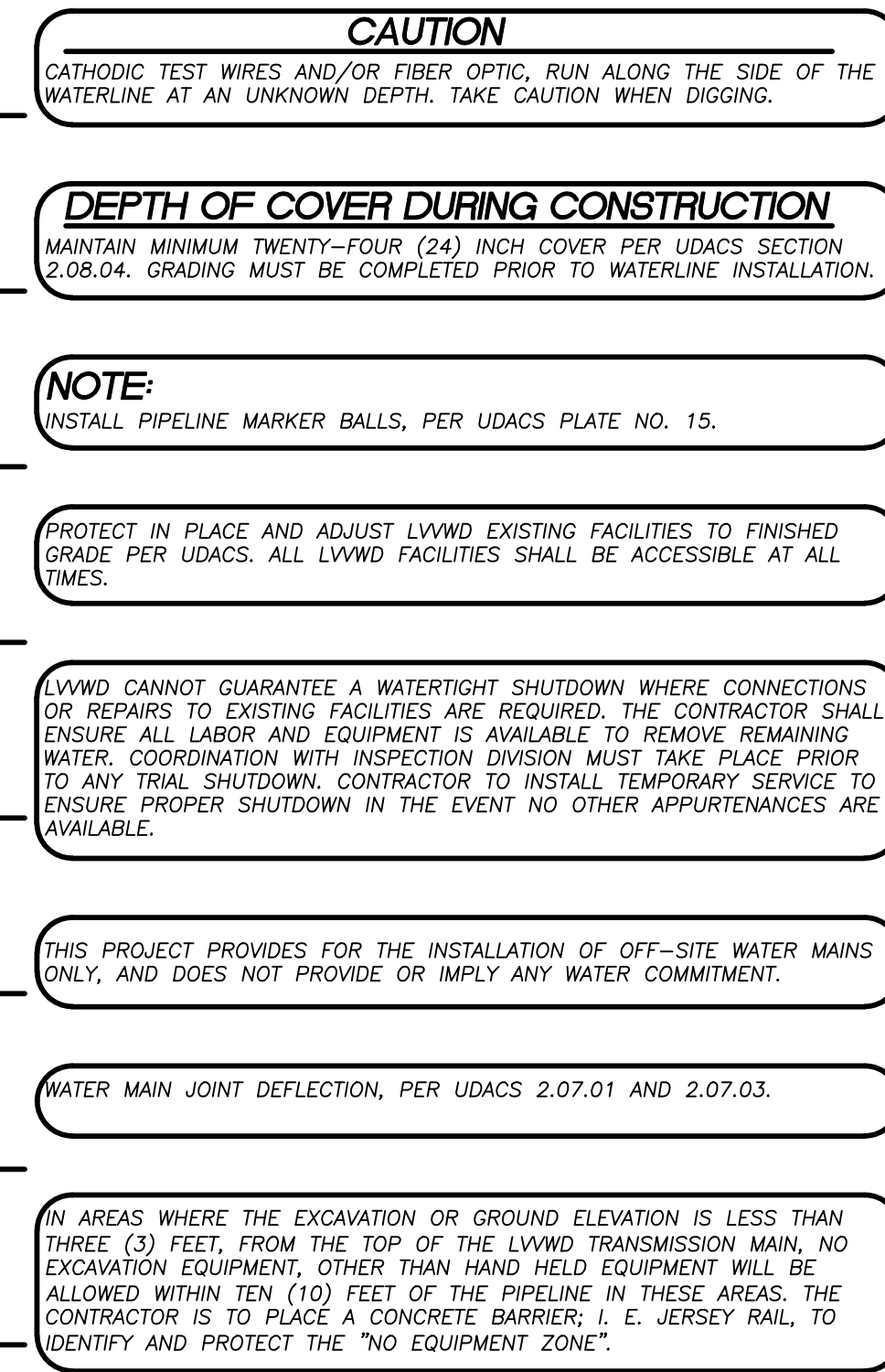
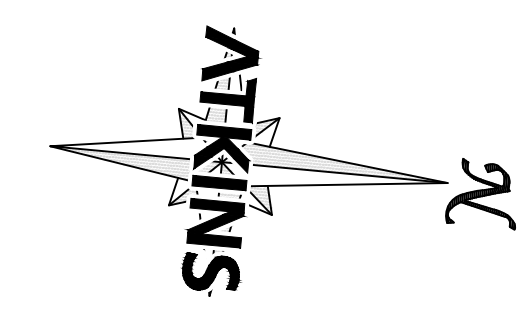
BASIS OF BEARING

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

BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03





<i>BASIS OF BEARING</i>	<i>BENCHMARK</i>
GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE SYSTEM. THE SYSTEM OF LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.	CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008) ELEVATION: 989.574 METERS (3,246.63 FEET) USGS DISC SET IN ROCK RIDGE 150' S. OF CHARLESTON BLVD. & WEST OF DETENTION BASIN. T21S,R99E,S03



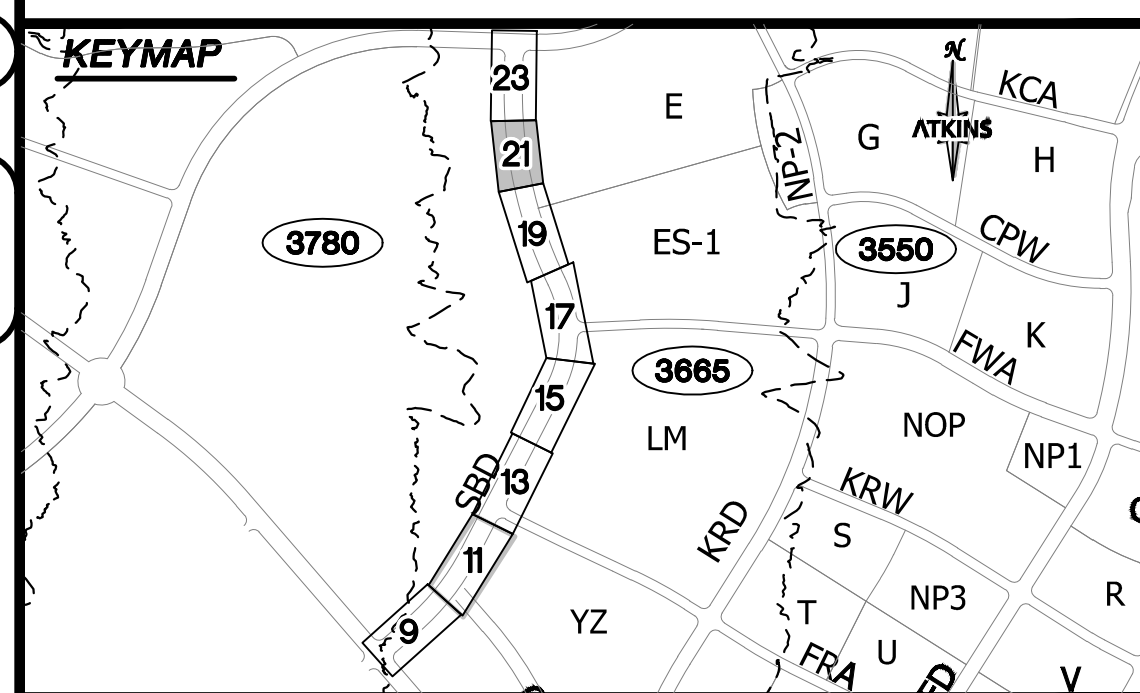
- 1 INSTALL STORM DRAIN. SEE SHEET 3 FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
- 2 INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
- 3 INSTALL TYPE II SD MANHOLE PER CCAUSD #405.2
- 4 INSTALL TYPE III SD MANHOLE PER CCAUSD #406
- 5 INSTALL NDOT TYPE 2 DROP INLET PER NDOT R-4.2.1 (SEE SHEET 29)
- 6 STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL (SEE SHEET 42)
- 7 NOT USED
- 8 INSTALL SD JUNCTION STRUCTURE
- 9 DIRECT CONNECTION INTO RCB SEE SHEET 42 FOR DETAIL
- 10 INSTALL TYPE I SD RISER PER CCAUSD #403.1
- 11 INSTALL TYPE "CM" DROP INLET PER CCAUSD #421 & #422
- 12 INSTALL PRECAST REINFORCED CONCRETE BOX PER NDOT STANDARD 502 AND 503 SEE SHEET 42 FOR RCB INFORMATION

- ① INSTALL SEWER MANHOLE WITH WATER TIGHT JOINTS PER DCSWCS SD-1 AND SD-4
- ② INSTALL SEWER MAIN PER DCSWCS SD-17
- ③ STUB AND CAP SEWER PIPE. PLACE MARKER BALL AND 4"x4" POST, DOUGLAS FIR, OVER END OF PIPE AND INSTALL THRUST BLOCK (1 CUBIC FT. MINIMUM).
- ④ CONNECT TO EXISTING SEWER MAIN

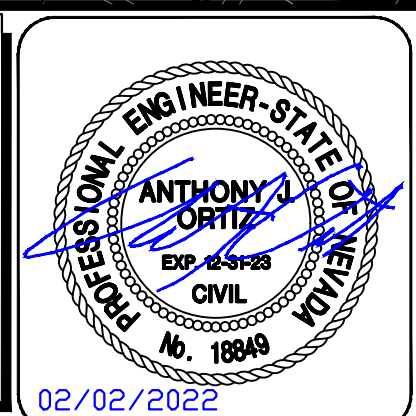
- 1 INSTALL WATER MAIN PER UDACS PLATES #17 AND PLATE #19
- 2 INSTALL GATE VALVE PER UDACS PLATES #30 AND #39
- 3 INSTALL CAP AND 2" MANUAL BLOWOFF ASSEMBLY PER UDACS PLATE #36
- 4 INSTALL TEE W/ VALVE AND LATERAL PER UDACS PLATES #17, #19, #30, #31 AND #39
- 5 INSTALL FIRE HYDRANT WITH APPURTENANCES (CONCRETE PAD, LATERAL, VALVE, AND TEE) PER UDACS PLATES #30, #31, #39, AND #40.
- 6 INSTALL DEFLECTION AT PIPE JOINTS (MAXIMUM OF 1")

- 8 INSTALL 6" SERVICE SADDLE PER UDACS PLATE #4
- 9 REMOVE CAP AND 2" BLOWOFF AND CONNECT TO EXISTING WATERLINE STUB
- 10 INSTALL VERTICAL BEND PER UDACS PLATE #31
- 11 ADJUST MANHOLE RIM AND BLOW OFF VALVE TO FINISH GRADE
- 12 CUT EXISTING WATER LATERAL AND CONNECT TO EXISTING WATERLINE
- 13 REMOVE BLIND FLANGE AND CONNECT TO EXISTING WATERLINE

- ① CONSTRUCT PLANIMIX BITUMINOUS SURFACE OVER TYPE II AGGREGATE BASE PER SOILS REPORT. SEE SHEET 39 FOR TYPICAL PAVEMENT SECTION.
- ② CONSTRUCT "L" TYPE CURB AND GUTTER PER CCAUSD #216
- ③ FUTURE SIDEWALK BY OTHERS
- ④ CONSTRUCT CURB RAMPS PER SHEETS 45 & 46
- ⑤ CONSTRUCT 0" FLUSH CURB
- ⑥ TRANSITION CURB FROM FULL HEIGHT (6") TO FLUSH (0")
- ⑦ INSTALL SCHEDULE 40 PVC IRRIGATION SLEEVES (2-4", 1-6") PER DETAIL C ON SHEET 44.
- ⑧ CONSTRUCT "A" TYPE ISLAND CURB PER CCAUSD #219

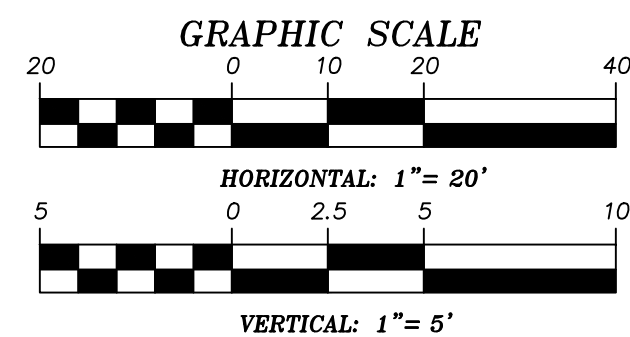
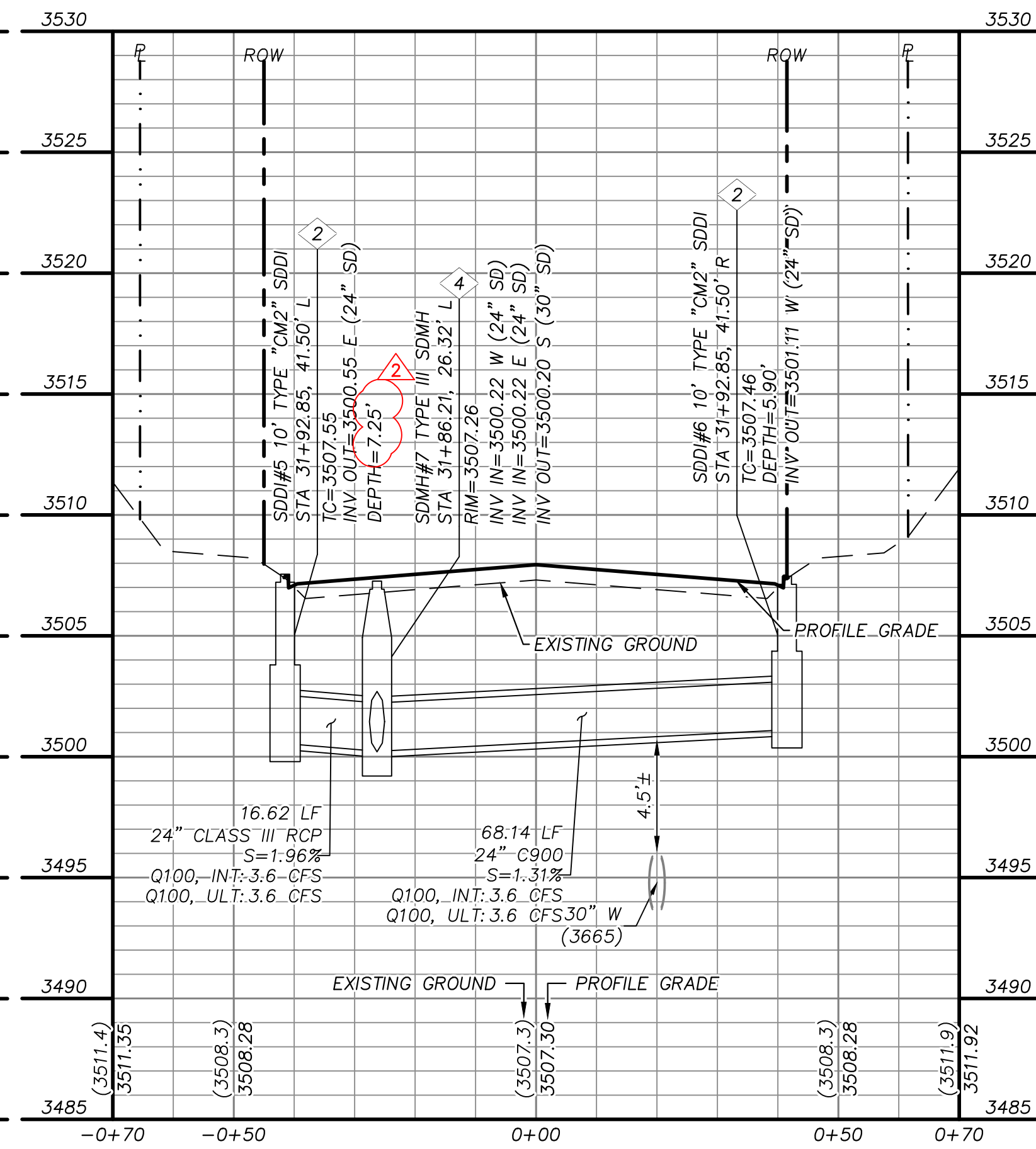
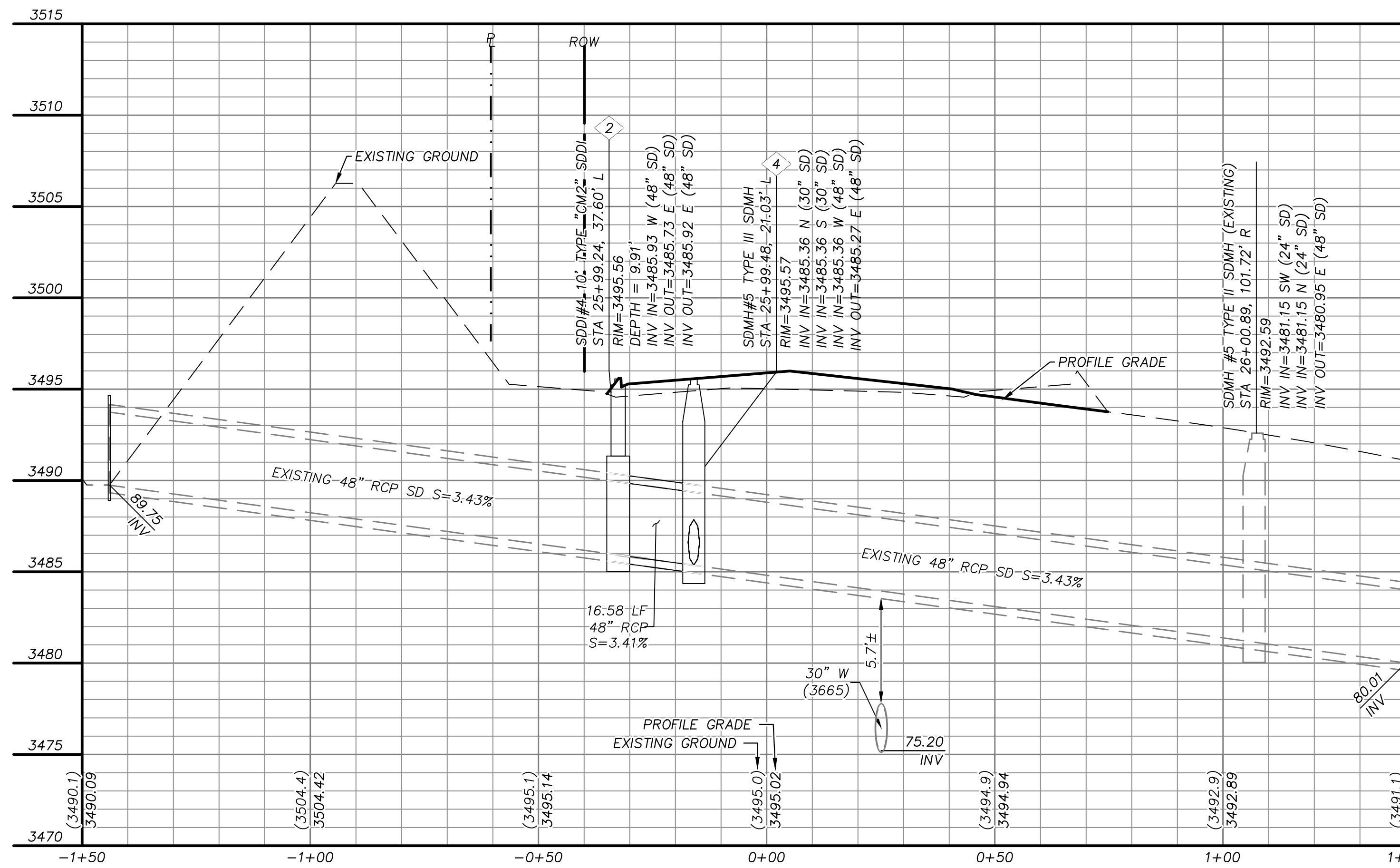
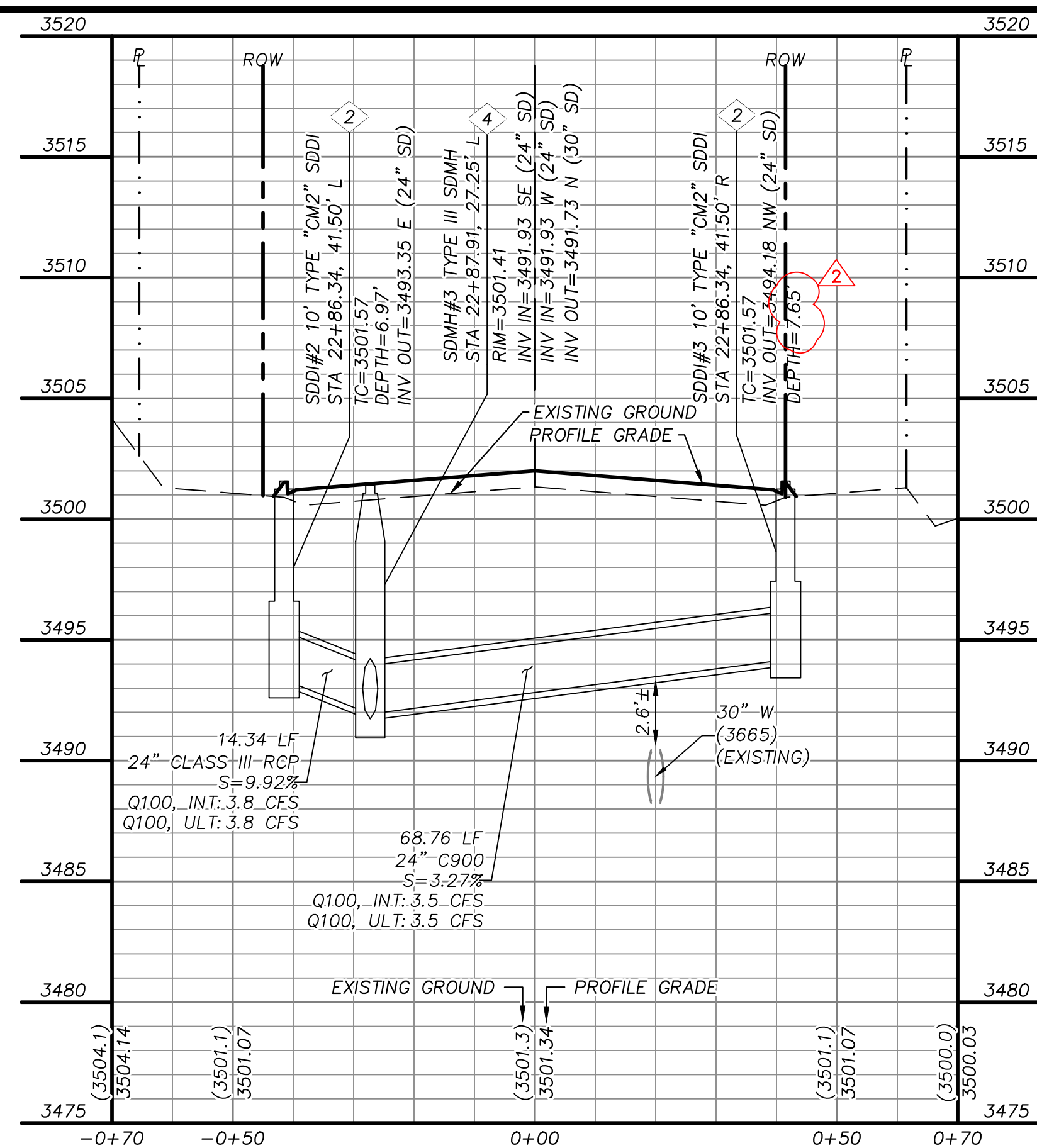
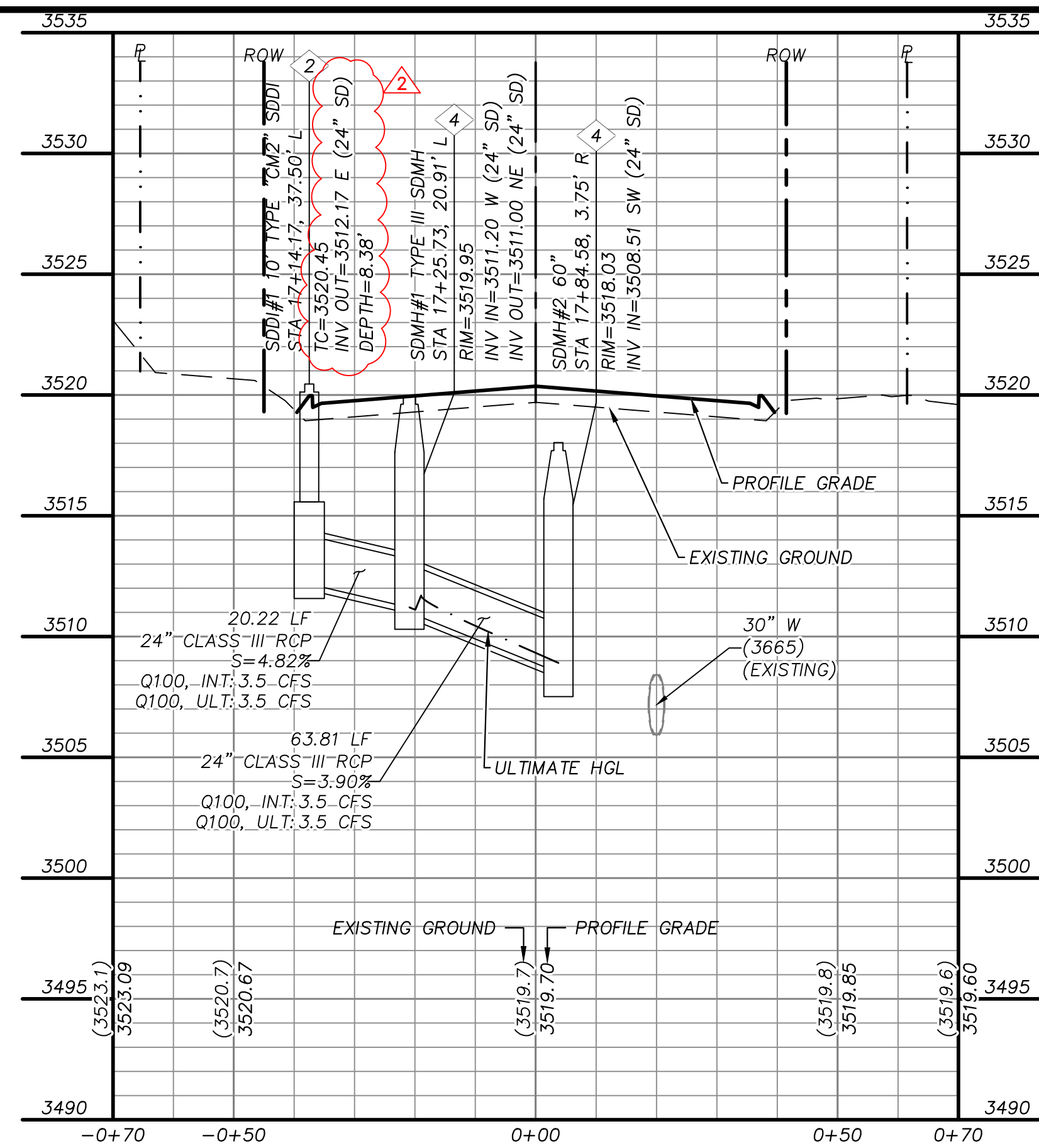


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107V9269 L21-01406		SUMMERLIN WEST VILLAGE 25 SCURRY BEND DRIVE (STREET N) SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD		 SUMMERLIN®	ATKINS 2270 Corporate Circle, Suite 200 Henderson, Nevada 89074 Telephone: +1702.263.7275 Fax: +1702.263.7200	REVISIONS			
DATE:	JULY, 2022	REV.	DESCRIPTION			BY	DATE	APPROVAL	
		2/	REVISED FIRE HYDRANT OFFSET						
DRAWING NO.									
21/49									

DESIGNED BY: B. MOCHTAK	SUMMERLIN WEST VILLAGE 25 SCURRY BEND DRIVE (STREET N) SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD ROADWAY PLAN + PROFILE STA 37+00 TO STA 37+00 HORIZ: 1"=20' VERT: 1"=5'	 SUMMERLIN®	ATKINS 2270 Corporate Circle, Suite 200 Henderson, Nevada 89074 Telephone: +1702.263.7275 Fax: +1702.263.7200	REVISIONS				
DRAWN BY: N. BARCOS				REV.	DESCRIPTION	BY	DATE	APPROVAL
CHECKED BY: N. BARCOS				2/	REVISED FIRE HYDRANT OFFSET			



APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING
AND ENGINEERING SERVICES
PROJECT NO. 139396 FIRST APPROVED DATE: 01/13/22

GRADING PLAN CERTIFICATION

ANTHONY J. ORTIZ PE#18849 DATE 7/8/2021
CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE
APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY
OF LAS VEGAS FOR THIS PROJECT. DS#####

BASIS OF BEARING

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

BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150'
SOUTH OF CHARLESTON BLVD. & WEST OF
DETENTION BASIN.
TZ15R59E.S03



STORM DRAIN CONSTRUCTION NOTES

1. INSTALL STORM DRAIN. SEE SHEET 3 FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
2. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
3. INSTALL TYPE II SD MANHOLE PER CCAUSD #405.2
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9. DIRECT CONNECTION INTO RCB SEE SHEET 42 FOR DETAIL
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11. INSTALL TYPE "CM" DROP INLET PER CCAUSD #421 & #422
12. INSTALL PRECAST REINFORCED CONCRETE BOX PER NDOT STANDARD 502 AND 503 SEE SHEET 42 FOR RCB INFORMATION

REVISIONS

REV.	DESCRIPTION	DATE	APPROVAL
2	REVISED DROP INLET DEPTH & ELEVATIONS		

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1702.263.7275
Fax: +1702.263.7200

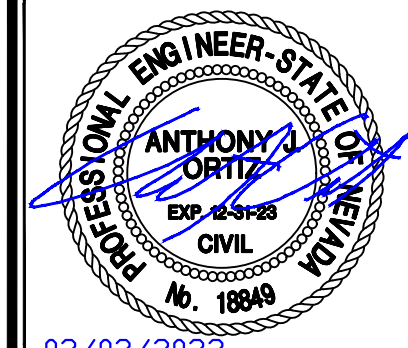
SUMMERLIN

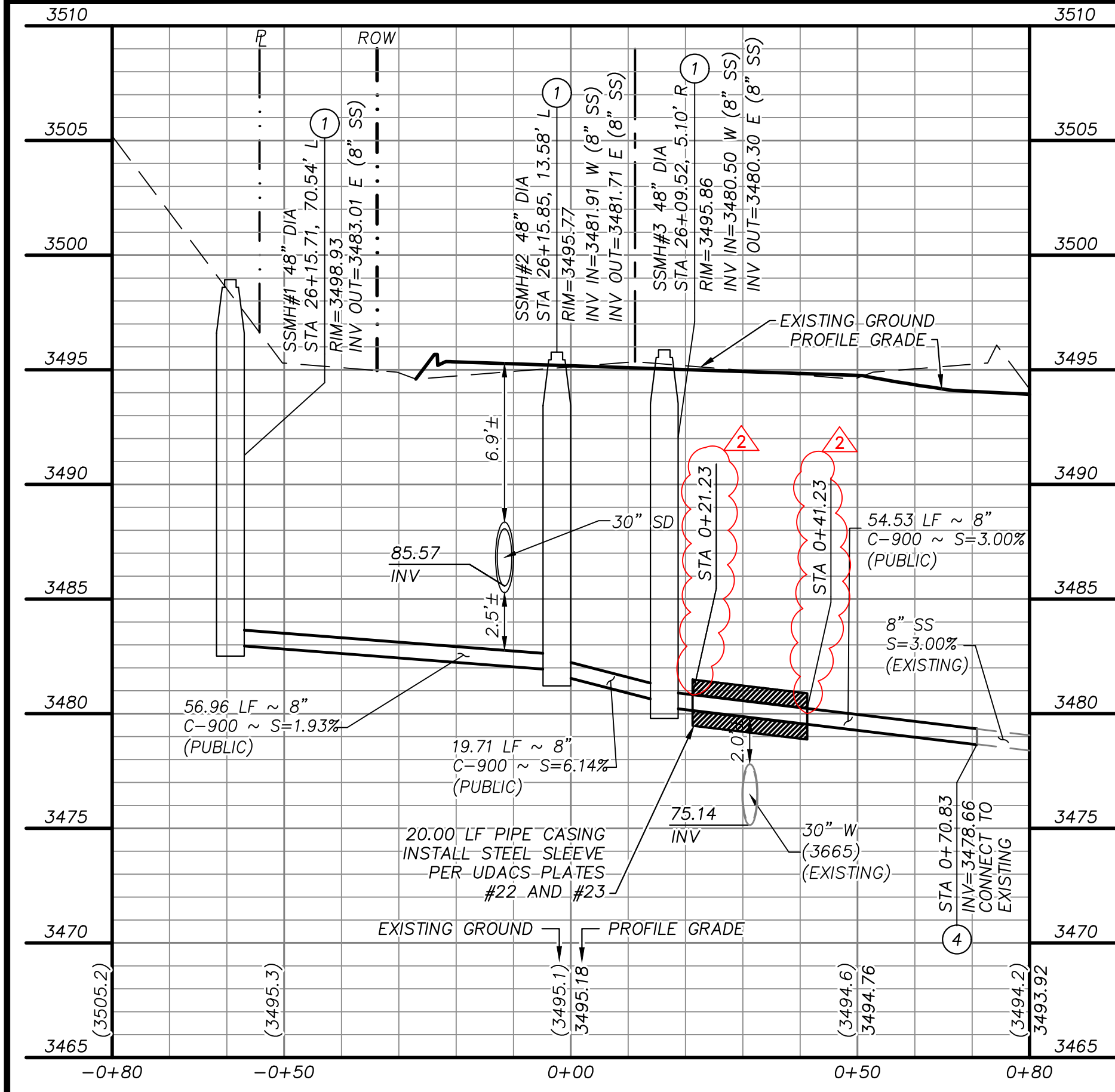
SUMMERLIN WEST VILLAGE 25
SCURRY BEND DRIVE (STREET N)
SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD
STORM DRAIN LATERAL PROFILES

DESIGNED BY: B. MOCHTAK
DRAWN BY: K. HENDRY
CHECKED BY: N. BARCOS
HORIZ.: 1" = 20'
VERT.: 1" = 5'

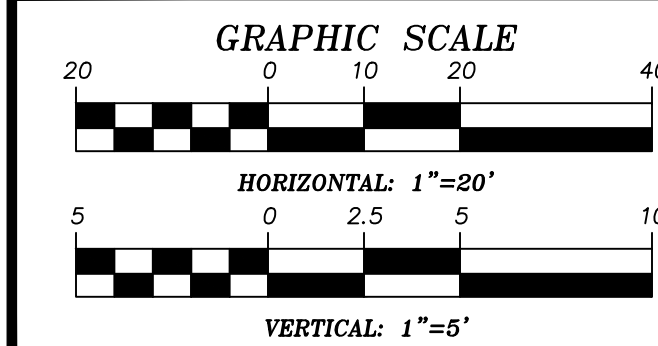
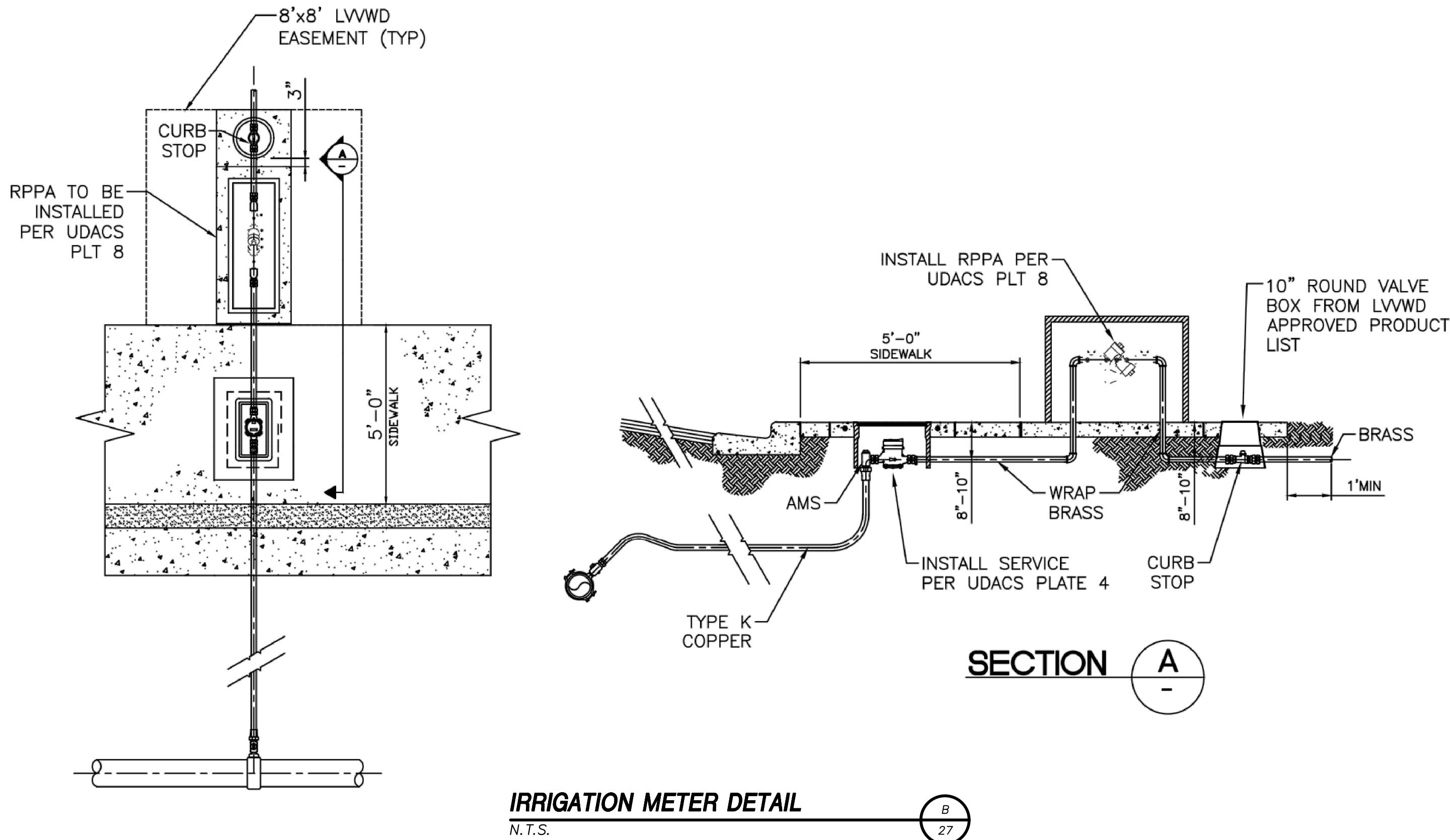
JOB NO. 100069098

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SEWER LATERAL 1
"SBD" STA. 26+09.53 SEE SHEET 17



APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING
AND ENGINEERING SERVICES

PROJECT NO. 139396 FIRST APPROVED DATE: 01/13/22

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FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

FAST

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UnderGround

1-702-432-5300

Call before you Dig

811

1-800-642-2444

CALL BEFORE YOU DIG

1-702-227-2929

- SEWER CONSTRUCTION NOTES**
1. INSTALL SEWER MANHOLE PER DCSWCS SD-1 AND SD-4
 2. INSTALL SEWER MAIN PER DCSWCS SD-17
 3. STUB AND CAP SEWER PIPE. PLACE MARKER BALL AND 4"x4" POST, DOUGLAS FIR, OVER END OF PIPE AND INSTALL THRUST BLOCK (1 CUBIC FT. MINIMUM).
 4. CONNECT TO EXISTING SEWER MAIN

REVISIONS		
REV.	DESCRIPTION	DATE
1	ADDED CASING STATION LABELS	

ATKINS

2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1702.263.7275
Fax: +1702.263.7200

SUMMERLIN

SUMMERLIN WEST VILLAGE 25
SCURRY BEND DRIVE (STREET N)
SUNSET RUN DRIVE TO LAKE MEAD BOULEVARD

SEWER LATERAL PROFILES

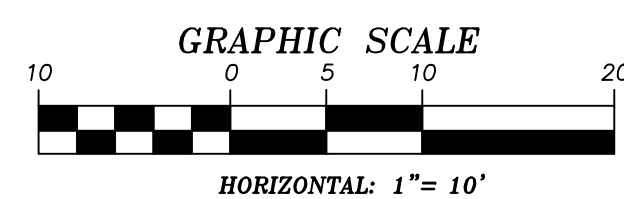
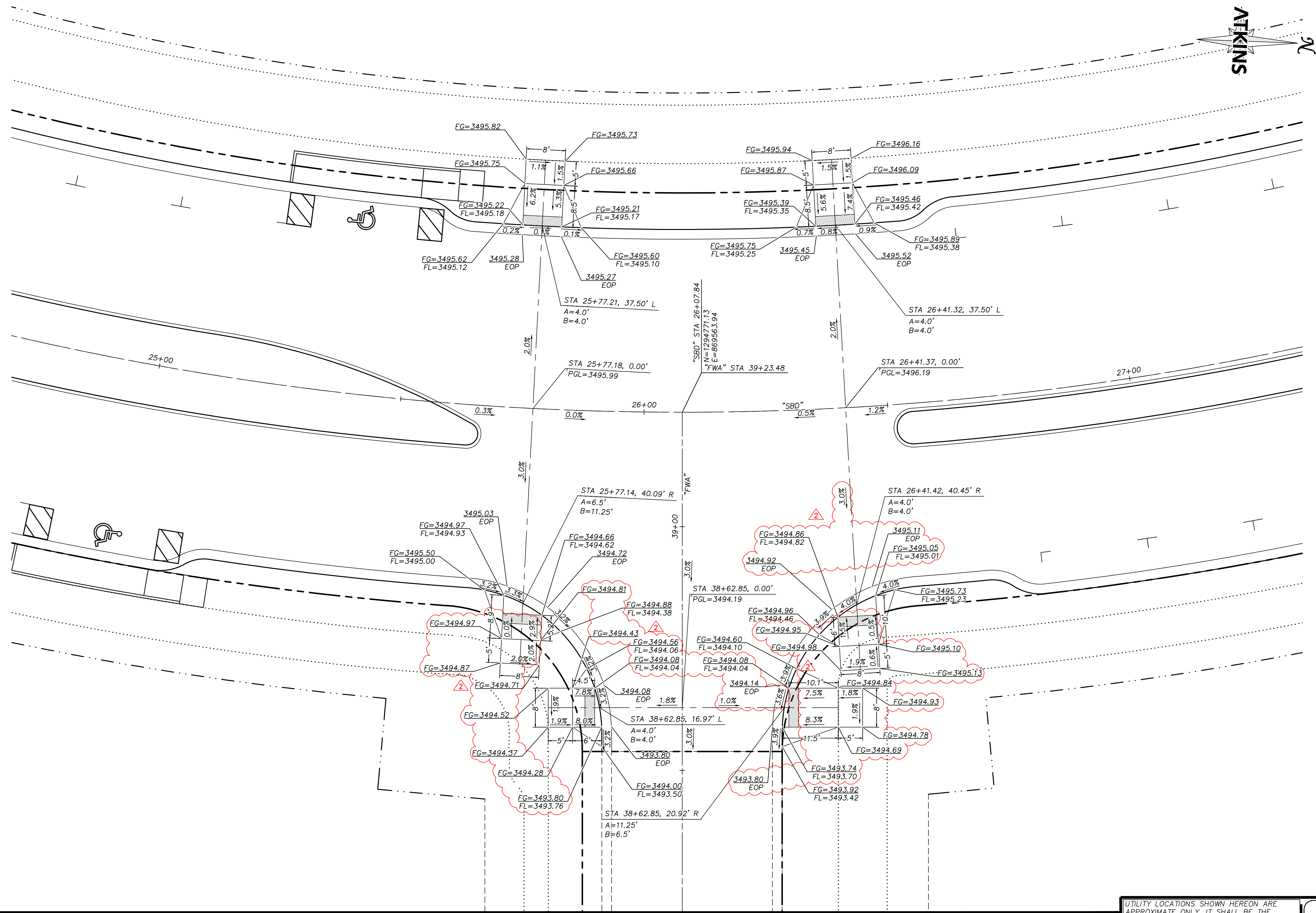
DESIGNED BY: B. MOCHTYAK
DRAWN BY: K. HENDRY
CHECKED BY: N. BARCOS
HORIZ.: 1"=20'
VERT.: 1"=5'

107/9269
L21-01406
DATE: JULY, 2022
DRAWING NO.
27/49

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS 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.

02/02/2022

ANTHONY J. ORTIZ
REGISTERED PROFESSIONAL ENGINEER-STATE OF NEVADA
No. 18849



BASIS OF BEARING

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

BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150
SOUTH OF CHARLESTON BLVD. & WEST OF
DETENTION BASIN.
T21S,R59E,S03



Call before you Dig
AVOID CUTTING UNDERGROUND
UTILITY LINES. IT'S COSTLY.

Call
811
OR
1-800-642-2444



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.



DESIGNED BY: B. MOCHTYAK	10/V9Z69
DRAWN BY: K. HENDRY	L21-01406
CHECKED BY: N. BARCOS	DATE: AUGUST, 2022
HORIZ.: 1"=10'	DRAWING NO.
VERT.: NONE	46/49

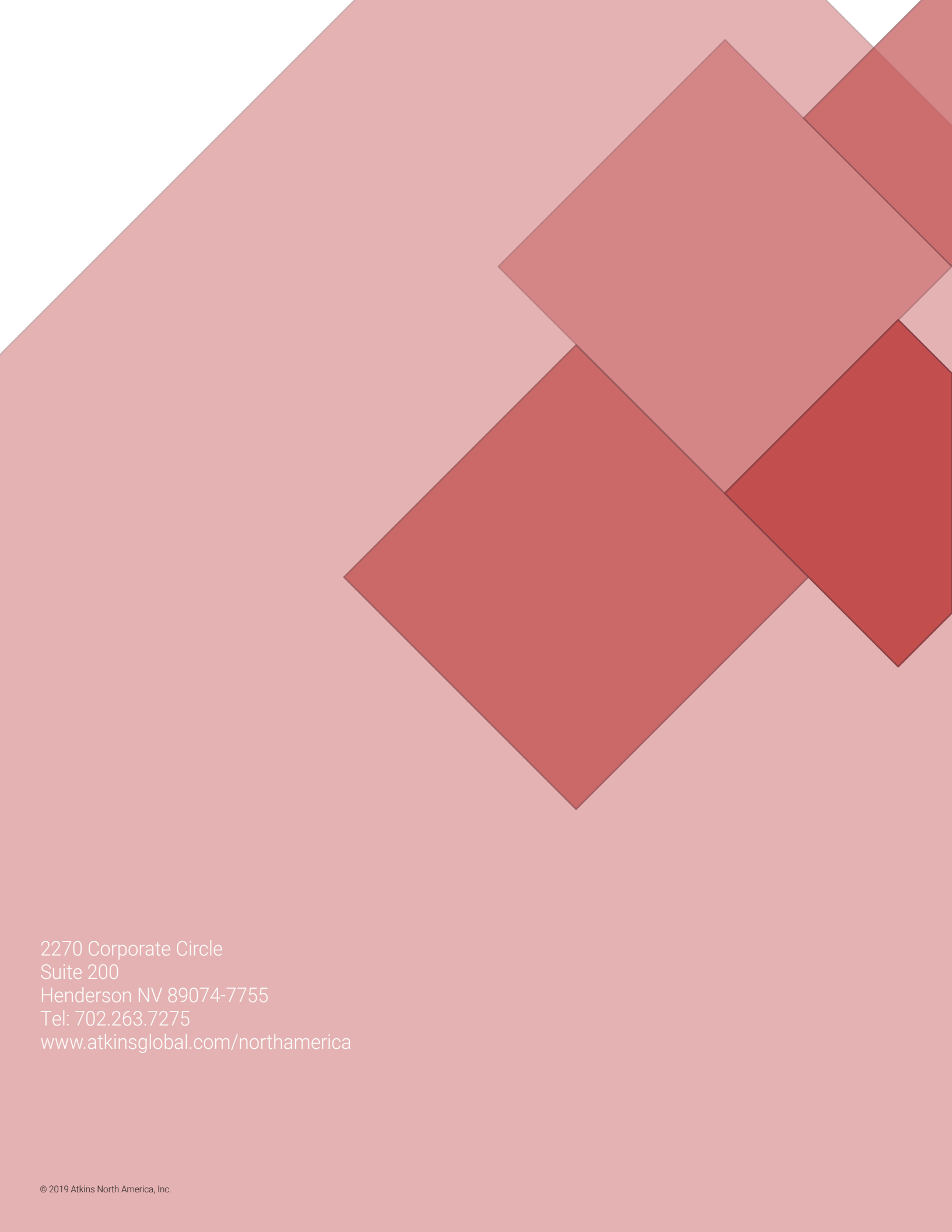
SUMMERLIN WEST VILLAGE 25
SCURRY BEND DRIVE (STREET N)
SUNSET PIN DRIVE TO LAKE MEAD BOULEVARD

FWA INTERSECTION DETAILS



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