

COBABE RANCH

PRELIMINARY SUBMITTAL - PHASE 1
WEBER COUNTY, UTAH

LOCATION MAP



PREPARED FOR:

COBABE RANCH LLC.
JOHN LEWIS/SHANE DUNLEAVY
3718 N WOLF CREEK DR
EDEN, UTAH 84310
801.430.1507- 801.979.7989

CONSULTANTS:

LANDSCAPE ARCHITECT
LANGVARDT DESIGN GROUP
328 WEST, 200 SOUTH, SUITE 102
SALT LAKE CITY, UTAH 84101
801.583.1295



ENGINEER:
GARDNER ENGINEERING
RYAN CHRISTENSEN
968 CHAMBERS STREET, SUITE 5
SOUTH OGDEN, UTAH 84403
801.476.0202



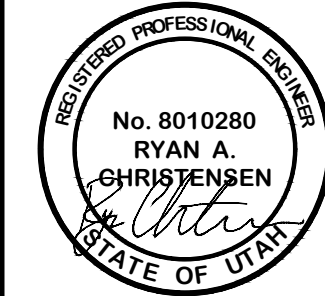
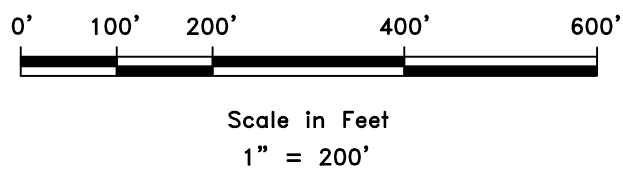
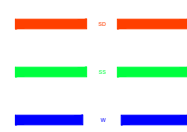
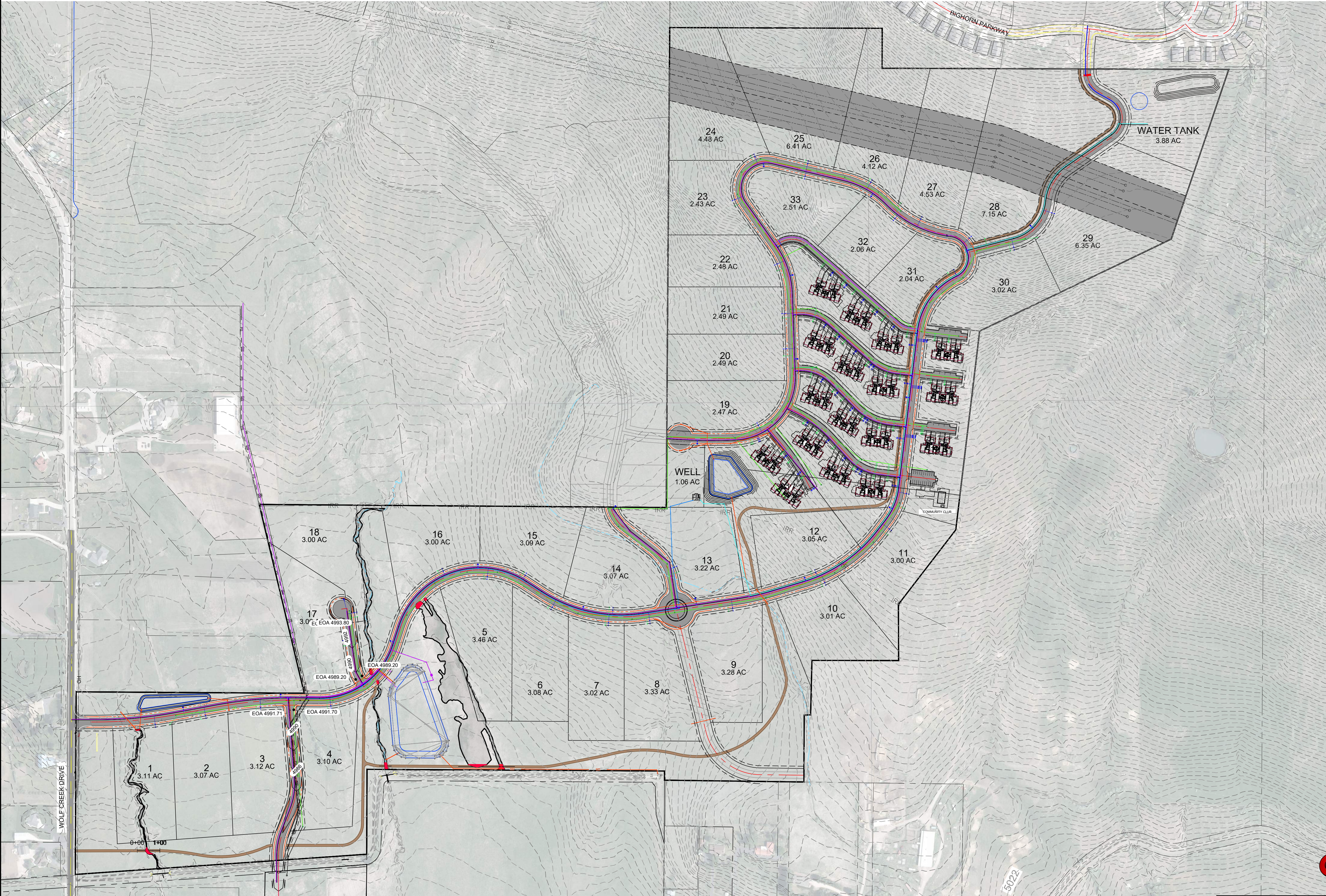
PROJECT MANAGEMENT:
THE HOUSEHOLDER GROUP
ERIC HOUSEHOLDER
2850 NORTH NORDIC VALLEY DRIVE
EDEN, UTAH 84310
801.389.0040

SHEET INDEX:

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OVERALL UTILITY



REVISIONS	
DATE	DESCRIPTION

SCALE	1" = 200'
DATE	8-20-25
DESIGN	KAN/JKH
DRAWN	KAN/JKH
CHECKED	RC

DWG:

OVERALL UTILITY
COBABE RANCH
SR-158 2800 N
EDEN, WEBER, UTAH

GARDNER ENGINEERING
CIVIL • LAND PLANNING
MUNICIPAL • LAND SURVEYING
5150 SOUTH 375 EAST OGDEN, UT
OFFICE: 801.476.0202 FAX: 801.476.0066

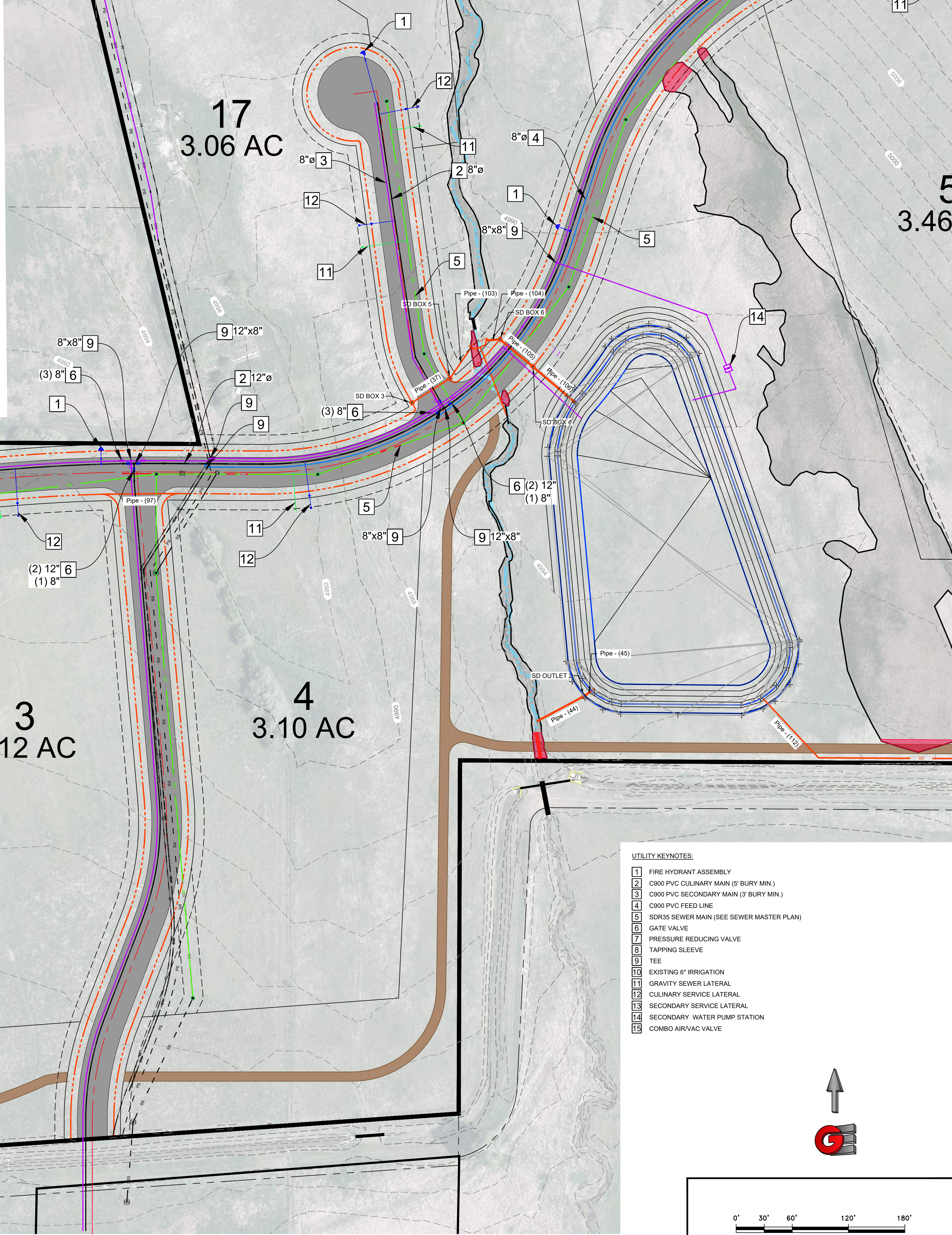
UTO

AS 1201 - LEWIS HOMES 2101 - COBARE RANCH DESIGN DWS COBARE RANCH DESIGN 02-25-25.DWG

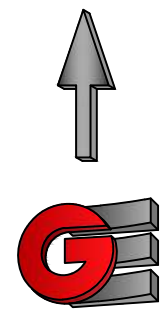
WOLF CREEK DRIVE

STORM DRAIN STRUCTURE TABLE			
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
SD BOX 1 - 3X3 SD BOX STA: 7+01.02 (23.01R)	GRATE = 4988.68 INV OUT = 4985.74		15" RCP INV (N) =4985.74
SD BOX 2 - 3X3 SD BOX STA: 7+00.89 (-22.97L)	GRATE = 4988.68 INV IN = 4985.56 INV OUT = 4985.56	15" RCP INV (S) =4985.56	15" RCP INV (W) =4985.56
SD BOX 3 - 2X2 SD BOX STA: 12+91.12 (-32.28L)	GRATE = 4988.16 INV IN = 4985.50	15" RCP INV (NE) =4985.50	
SD BOX 4 - 3X3 SD BOX STA: 14+16.86 (22.80R)	GRATE = 4987.92 INV IN = 4982.90 INV OUT = 4982.90	24" RCP INV (NW) =4982.90	24" RCP INV (SE) =4982.90
SD BOX 5 - 2X2 SD BOX STA: 13+44.00 (-30.85L)	GRATE = 4988.14 INV OUT = 4985.70 INV OUT = 4985.50		15" RCP INV (SW) =4985.70 15" RCP INV (NE) =4985.50
SD BOX 6 - 3X3 SD BOX STA: 14+17.03 (-23.00L)	GRATE = 4987.88		
SD OUTLET 1 - OUTLET BOX STA: 3+14.34 (-40.66L)	GRATE = 4988.00 INV IN = 4985.26 INV OUT = 4985.26	15" RCP INV (N) =4985.26	15" RCP INV (S) =4985.26
SD OUTLET 2 - OUTLET BOX STA: 2+38.14 (158.61R)	GRATE = 4982.00 INV IN = 4978.50 INV OUT = 4978.50	24" RCP INV (NE) =4978.50	24" RCP INV (SW) =4978.50

STORM DRAIN PIPE TABLE					
NAME	SIZE	LENGTH	SLOPE	MATERIAL	INVERTS
Pipe - (26)	15"	45.98'	0.40%	Reinforced Concrete Pipe	START:4985.74 END:4985.56
Pipe - (27)	15"	88.53'	0.33%	Reinforced Concrete Pipe	START:4985.56 END:4985.26
Pipe - (28)	15"	86.53'	0.30%	Reinforced Concrete Pipe	START:4985.00 END:4985.26
Pipe - (34)	15"	7.83'	0.06%	Reinforced Concrete Pipe	START:4985.26 END:4985.26
Pipe - (37)	15"	48.06'	0.42%	Reinforced Concrete Pipe	START:4985.70 END:4985.50
Pipe - (44)	24"	56.44'	0.89%	Reinforced Concrete Pipe	START:4978.50 END:4978.00
Pipe - (45)	24"	14.12'	0.00%	Reinforced Concrete Pipe	START:4978.50 END:4978.50
Pipe - (97)	15"	78.82'	1.00%	Reinforced Concrete Pipe	START:4990.50 END:4989.71
Pipe - (103)	15"	41.17'	1.21%	Reinforced Concrete Pipe	START:4985.50 END:4985.00
Pipe - (104)	24"	14.40'	2.08%	Reinforced Concrete Pipe	START:4984.00 END:4983.70
Pipe - (105)	24"	45.80'	1.75%	Reinforced Concrete Pipe	START:4983.70 END:4982.90
Pipe - (106)	24"	59.82'	4.85%	Reinforced Concrete Pipe	START:4982.90 END:4980.00
Pipe - (112)	15"	85.94'	1.00%	Reinforced Concrete Pipe	START:4980.86 END:4980.00
Pipe - (134)	24"	108.49'	1.69%	Reinforced Concrete Pipe	START:4987.77 END:4985.94



- UTILITY KEYNOTES:
- 1 FIRE HYDRANT ASSEMBLY
 - 2 C900 PVC CULINARY MAIN (5' BURY MIN.)
 - 3 C900 PVC SECONDARY MAIN (3' BURY MIN.)
 - 4 C900 PVC FEED LINE
 - 5 SDR36 SEWER MAIN (SEE SEWER MASTER PLAN)
 - 6 GATE VALVE
 - 7 PRESSURE REDUCING VALVE
 - 8 TAPPING SLEEVE
 - 9 TEE
 - 10 EXISTING 6" IRRIGATION
 - 11 GRAVITY SEWER LATERAL
 - 12 CULINARY SERVICE LATERAL
 - 13 SECONDARY SERVICE LATERAL
 - 14 SECONDARY WATER PUMP STATION
 - 15 COMBO AIR/VAC VALVE



SCALE: 1" = 60'	DATE: 8-20-25	DESIGN: KAN/JKH	DRAWN: KAN/JKH	CHECKED: RC
REVISIONS		DESCRIPTION		
DATE				
DWG:				
REGISTERED PROFESSIONAL ENGINEER No. 8010280 RYAN A. CHRISTENSEN STATE OF UTAH				
PHASE 1 UTILITY				
COBARE RANCH				
SR-158 2800 N				
EDEN, WEBER, UTAH				
GARDNER ENGINEERING CIVIL • LAND PLANNING MUNICIPAL • LAND SURVEYING 5150 SOUTH 375 EAST OGDEN, UT OFFICE: 801.476.0202 FAX: 801.476.0066				
UT1				

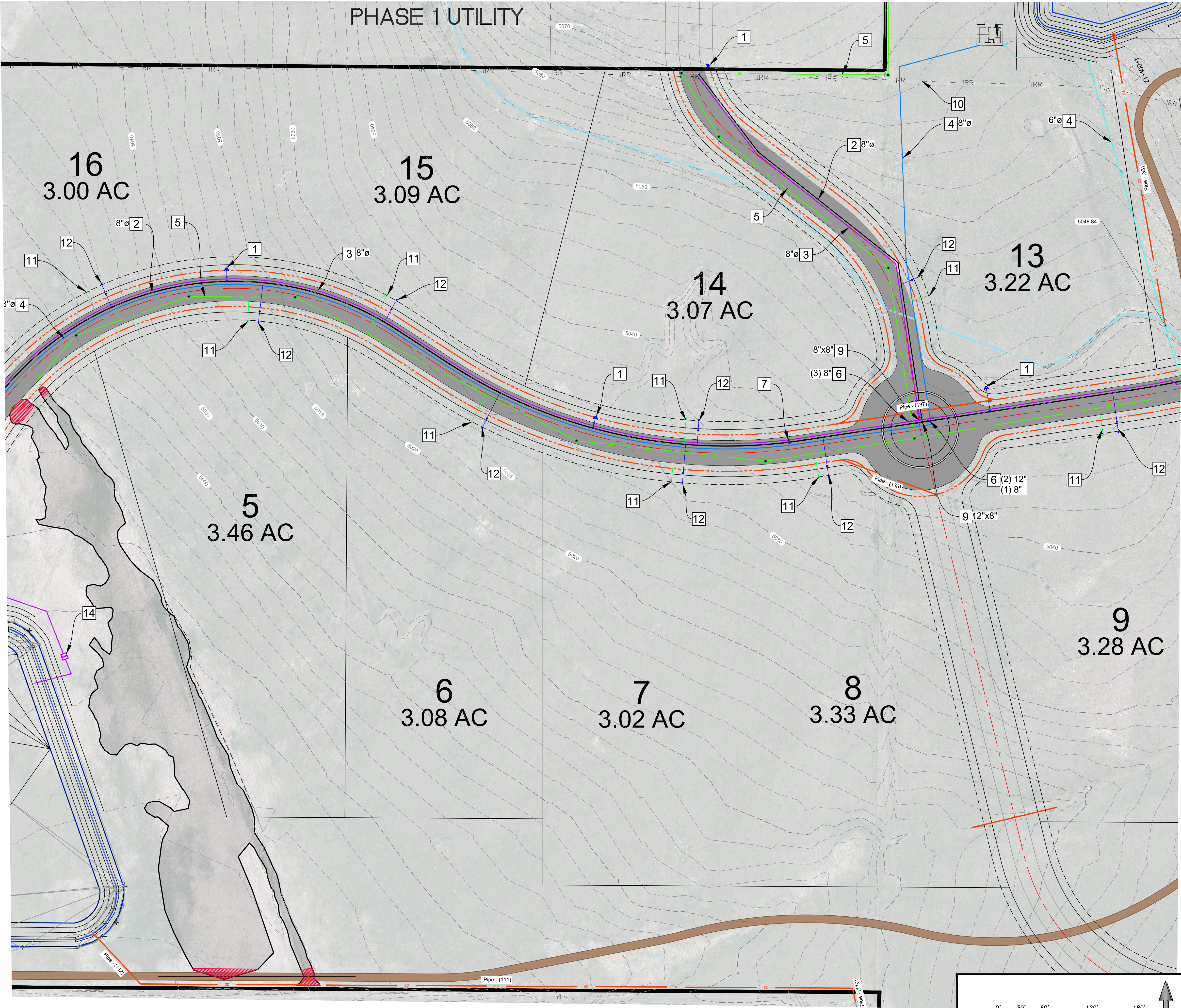
AL 1201 - LEWIS HOMES 2101 - COBARE RANCH DESIGN DWS COBARE RANCH DESIGN 02-25-25.DWG

UTILITY KEYNOTES:

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STORM DRAIN STRUCTURE TABLE			
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT:
Structure - (128) - 24 x 24 inch Rectangular Structure STA: 30+24.02 (84.68R)	GRATE = 5043.01 INV OUT = 5040.50		15" RCP INV (W) =5040.50
Structure - (129) - 24 x 24 inch Rectangular Structure STA: 31+10.01 (-23.01L)	GRATE = 5046.50 INV OUT = 5043.50		15" RCP INV (W) =5043.50

STORM DRAIN PIPE TABLE					
NAME	SIZE	LENGTH	SLOPE	MATERIAL	INVERTS
Pipe - (33)	15"	373.55'	5.26%	Reinforced Concrete Pipe	START:5068.50 END:5048.84
Pipe - (136)	15"	127.27'	0.39%	Reinforced Concrete Pipe	START:5040.50 END:5040.00
Pipe - (137)	15"	197.39'	1.77%	Reinforced Concrete Pipe	START:5043.50 END:5040.00



SCALE: 1" = 60'

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REVISIONS

DESCRIPTION

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REGISTERED PROFESSIONAL ENGINEER

No. 8010280

RYAN A. CHRISTENSEN

STATE OF UTAH

PHASE 1 UTILITY

COBARE RANCH

SR-158 2800 N

EDEN, WEBER, UTAH

GARDNER
ENGINEERING

CIVIL • LAND PLANNING
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5150 SOUTH 375 EAST OGDEN, UT
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UT2

AL 1201 - LEWIS HOMES 2101 - COBACE RANCH DESIGN DWS COBACE RANCH DESIGN 02-25-25.DWG

UTILITY KEYNOTES:

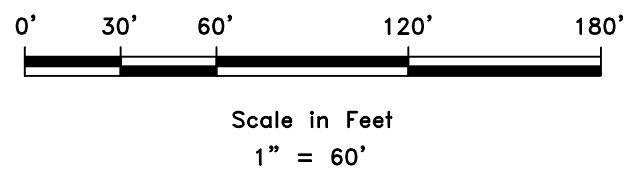
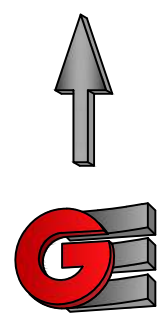
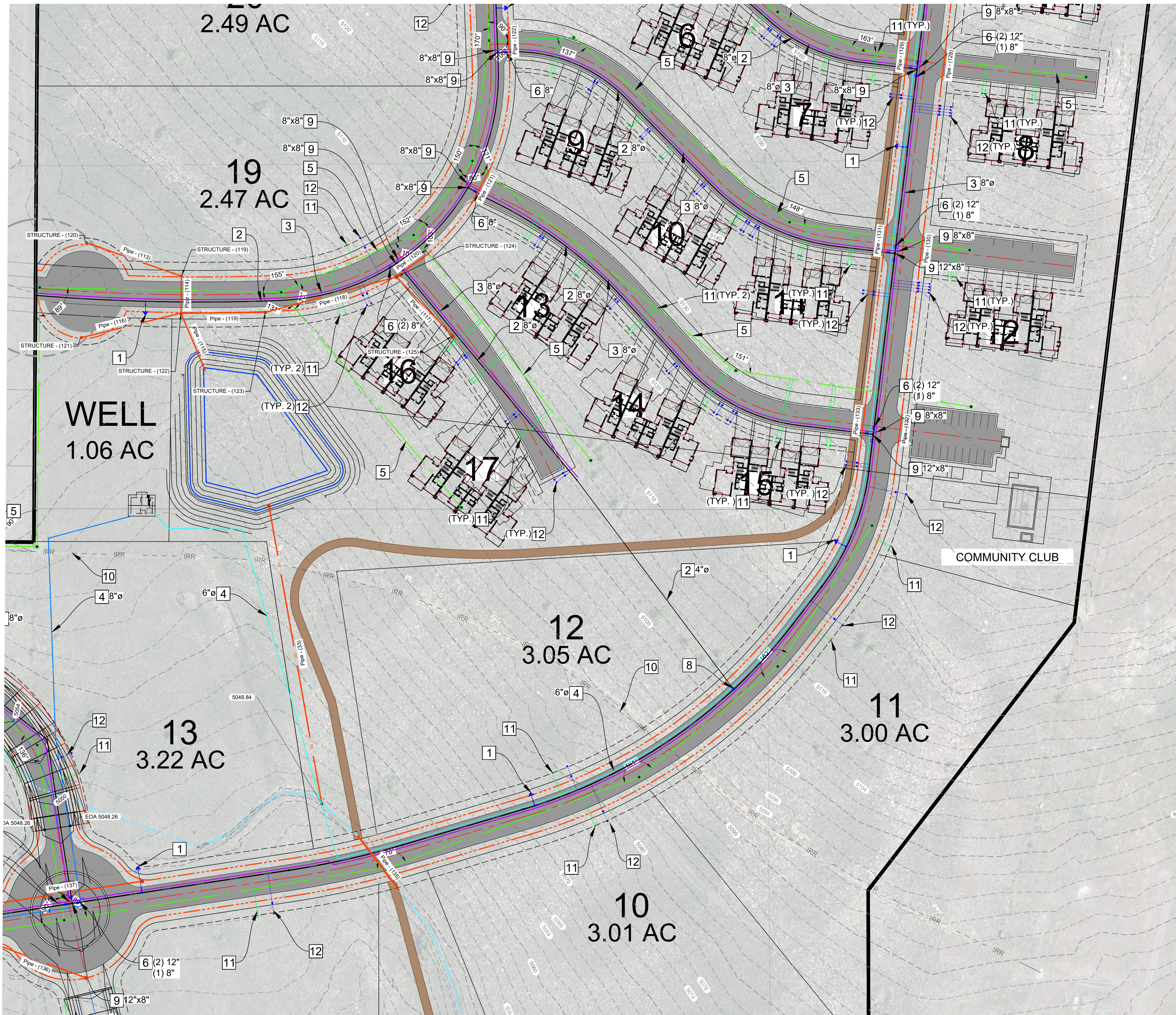
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- 13 SECONDARY SERVICE LATERAL
- 14 SECONDARY WATER PUMP STATION
- 15 COMBO AIR/VAC VALVE

STORM DRAIN STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
Structure - (119) - 24 x 24 inch Rectangular Structure STA: 80+11.11 (23.03R)	GRATE = 5080.51 INV IN = 5076.31 INV OUT = 5076.31	15" RCP INV (W) =5076.31	15" RCP INV (S) =5076.31
Structure - (120) - 24 x 24 inch Rectangular Structure STA: 81+31.63 (60.16R)	GRATE = 5079.42 INV IN = 5076.92 INV OUT = 5076.92		15" RCP INV (E) =5076.92
Structure - (121) - 24 x 24 inch Rectangular Structure STA: 81+30.94 (-57.08L)	GRATE = 5079.84 INV IN = 5076.81 INV OUT = 5076.81		15" RCP INV (E) =5076.81
Structure - (122) - CONST. 2'x2' CATCH BASIN STA: 80+11.02 (-22.98L)	GRATE = 5080.51 INV IN = 5076.18 INV IN = 5076.18 INV OUT = 5076.18 INV OUT = 5087.12	15" RCP INV (N) =5076.18 15" RCP INV (W) =5076.18	15" RCP INV (SE) =5076.18 15" RCP INV (E) =5087.12
Structure - (124) - 24 x 24 inch Rectangular Structure STA: 77+50.00 (-23.04L)	GRATE = 5099.49 INV IN = 5096.47 INV IN = 5096.47 INV OUT = 5096.47	15" RCP INV (SE) =5096.47 15" RCP INV (NE) =5096.47	15" RCP INV (W) =5096.47
Structure - (125) - 24 x 24 inch Rectangular Structure STA: 1+21.26 (14.33R)	GRATE = 5100.36 INV OUT = 5097.36		15" RCP INV (NW) =5097.36

STORM DRAIN PIPE TABLE

NAME	SIZE	LENGTH	SLOPE	MATERIAL	INVERTS
Pipe - (113)	15"	124.32'	0.49%	Reinforced Concrete Pipe	START:5076.92 END:5076.31
Pipe - (114)	15"	46.01'	0.29%	Reinforced Concrete Pipe	START:5076.31 END:5076.18
Pipe - (115)	15"	76.47'	10.04%	Reinforced Concrete Pipe	START:5076.18 END:5068.50
Pipe - (116)	15"	126.63'	0.50%	Reinforced Concrete Pipe	START:5076.81 END:5076.18
Pipe - (117)	15"	100.58'	0.88%	Reinforced Concrete Pipe	START:5097.36 END:5096.47
Pipe - (118)	15"	167.52'	9.00%	Reinforced Concrete Pipe	START:5096.47 END:5081.39
Pipe - (119)	15"	104.15'	5.50%	Reinforced Concrete Pipe	START:5081.39 END:5087.12
Pipe - (33)	15"	373.55'	5.26%	Reinforced Concrete Pipe	START:5068.50 END:5048.84
Pipe - (120)	15"	46.94'	14.55%	Reinforced Concrete Pipe	START:5096.47 END:5103.30
Pipe - (121)	15"	48.46'	8.05%	Reinforced Concrete Pipe	START:5113.84 END:5109.94
Pipe - (122)	15"	45.49'	8.62%	Reinforced Concrete Pipe	START:5128.77 END:5124.85
Pipe - (128)	15"	38.68'	9.31%	Reinforced Concrete Pipe	START:5169.81 END:5166.21
Pipe - (129)	15"	44.76'	9.40%	Reinforced Concrete Pipe	START:5170.44 END:5166.23
Pipe - (130)	15"	37.27'	8.80%	Reinforced Concrete Pipe	START:5149.48 END:5146.20
Pipe - (131)	15"	43.43'	8.77%	Reinforced Concrete Pipe	START:5150.08 END:5146.27
Pipe - (132)	15"	38.44'	8.35%	Reinforced Concrete Pipe	START:5129.90 END:5126.69
Pipe - (133)	15"	44.67'	8.37%	Reinforced Concrete Pipe	START:5130.51 END:5126.77
Pipe - (135)	24"	83.87'	0.08%	Reinforced Concrete Pipe	START:5048.15 END:5048.08



SCALE: 1" = 60'
DATE: 8-20-25
DESIGN: KAN/JKH
DRAWN: KAN/JKH
CHECKED: RC

REVISIONS
DATE
DESCRIPTION

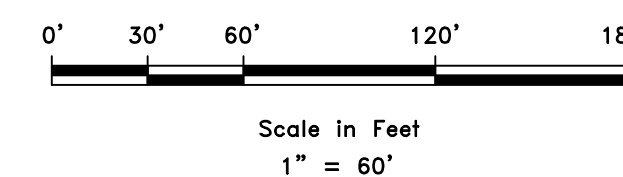
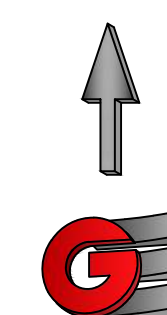
PHASE 1 UTILITY
COBACE RANCH
SR-158 2800 N
EDEN, WEBER, UTAH

UT3

REGISTERED PROFESSIONAL ENGINEER
No. 8010280
RYAN A. CHRISTENSEN
STATE OF UTAH

- | | |
|----|--|
| 1 | FIRE HYDRANT ASSEMBLY |
| 2 | C900 PVC CULINARY MAIN (5' BURY MIN.) |
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| 8 | TAPPING SLEEVE |
| 9 | TEE |
| 10 | EXISTING 6" IRRIGATION |
| 11 | GRAVITY SEWER LATERAL |
| 12 | CULINARY SERVICE LATERAL |
| 13 | SECONDARY SERVICE LATERAL |
| 14 | COMBINATION WATER PUMP STATION |
| 15 | COMBO AIR/VAC VALVE |

STORM DRAIN PIPE TABLE					
NAME	SIZE	LENGTH	SLOPE	MATERIAL	INVERTS
Pipe - (124)	15"	41.72'	1.98%	Reinforced Concrete Pipe	START:5162.97 END:5162.14
Pipe - (125)	15"	40.61'	5.81%	Reinforced Concrete Pipe	START:5231.05 END:5228.69
Pipe - (126)	15"	41.44'	6.35%	Reinforced Concrete Pipe	START:5188.91 END:5186.28
Pipe - (127)	15"	37.72'	10.29%	Reinforced Concrete Pipe	START:5188.87 END:5184.99



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5150 SOUTH 375 EAST OGDEN, UT

PHASE UTILITY
COBABE RANCH
SR-158 2800 N
EDEN, WEBER, UTAH

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SCALE: 1" = 60'

DATE: 8-20-25

DESIGN: KAN/JKH

DRAWN: KAN/JKH

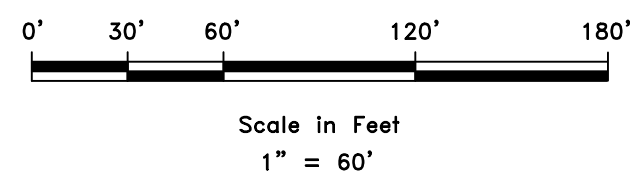
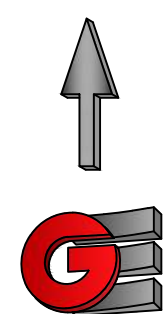
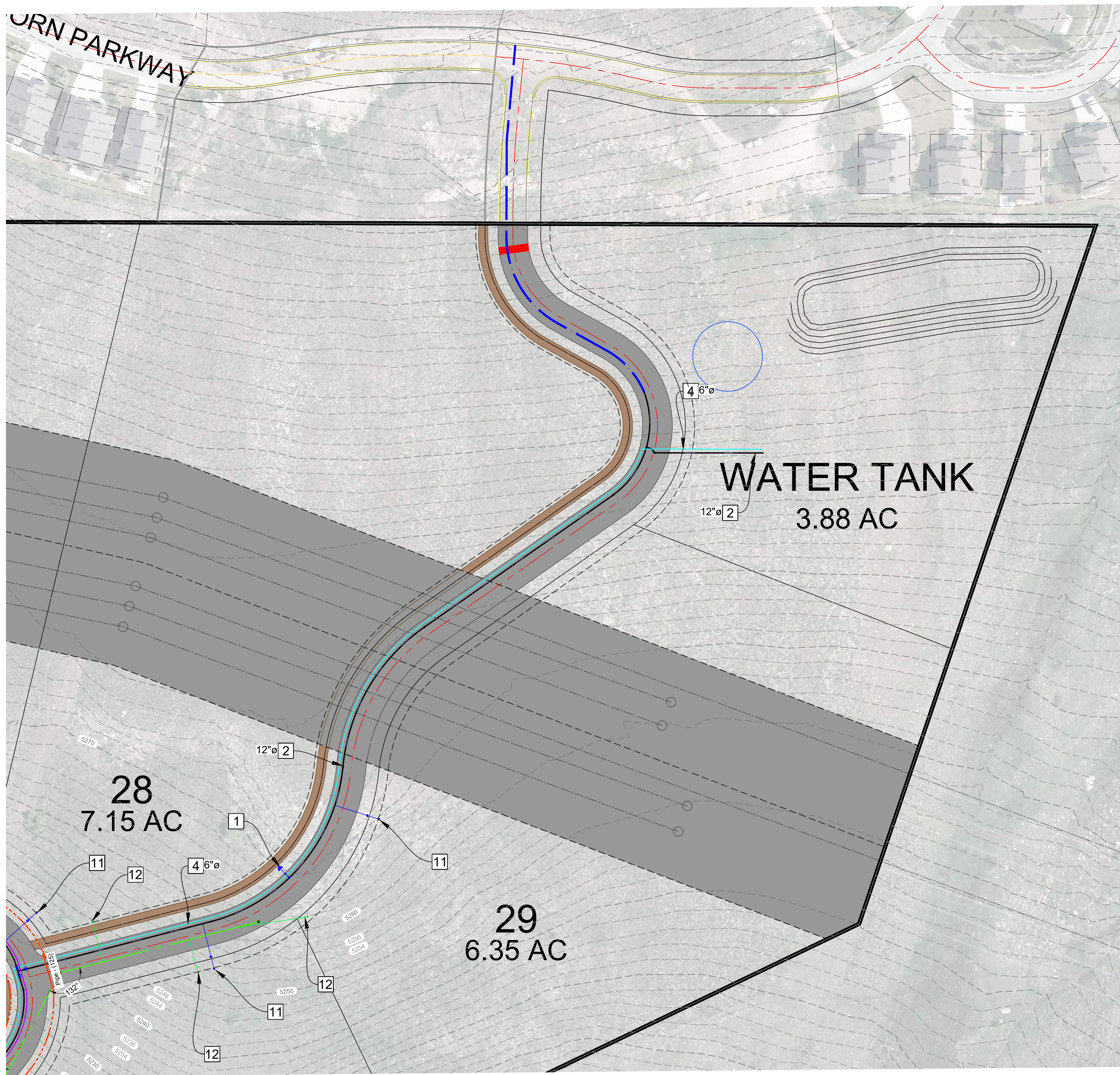
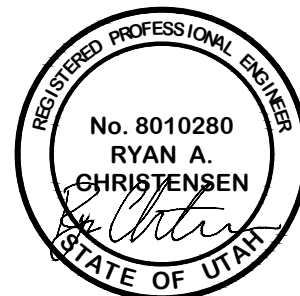
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REGISTERED PROFESSIONAL ENGINEER
No. 8010280
RYAN A. CHRISTENSEN
STATE OF UTAH

DWG:

UT4

- | UTILITY KEYNOTES: | |
|-------------------|--|
| 1 | FIRE HYDRANT ASSEMBLY |
| 2 | C900 PVC CULINARY MAIN (5" BURY MIN.) |
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| 12 | CULINARY SERVICE LATERAL |
| 13 | SECONDARY SERVICE LATERAL |
| 14 | COMBOND WATER PUMP STATION |
| 15 | CONDO AIR/VC VALVE |

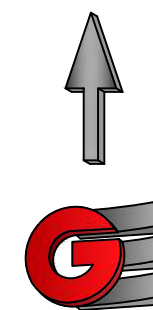
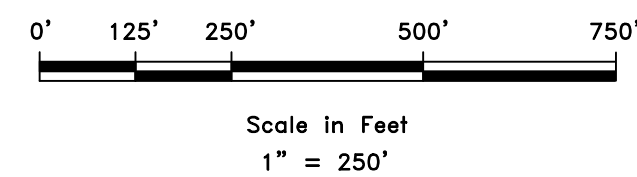
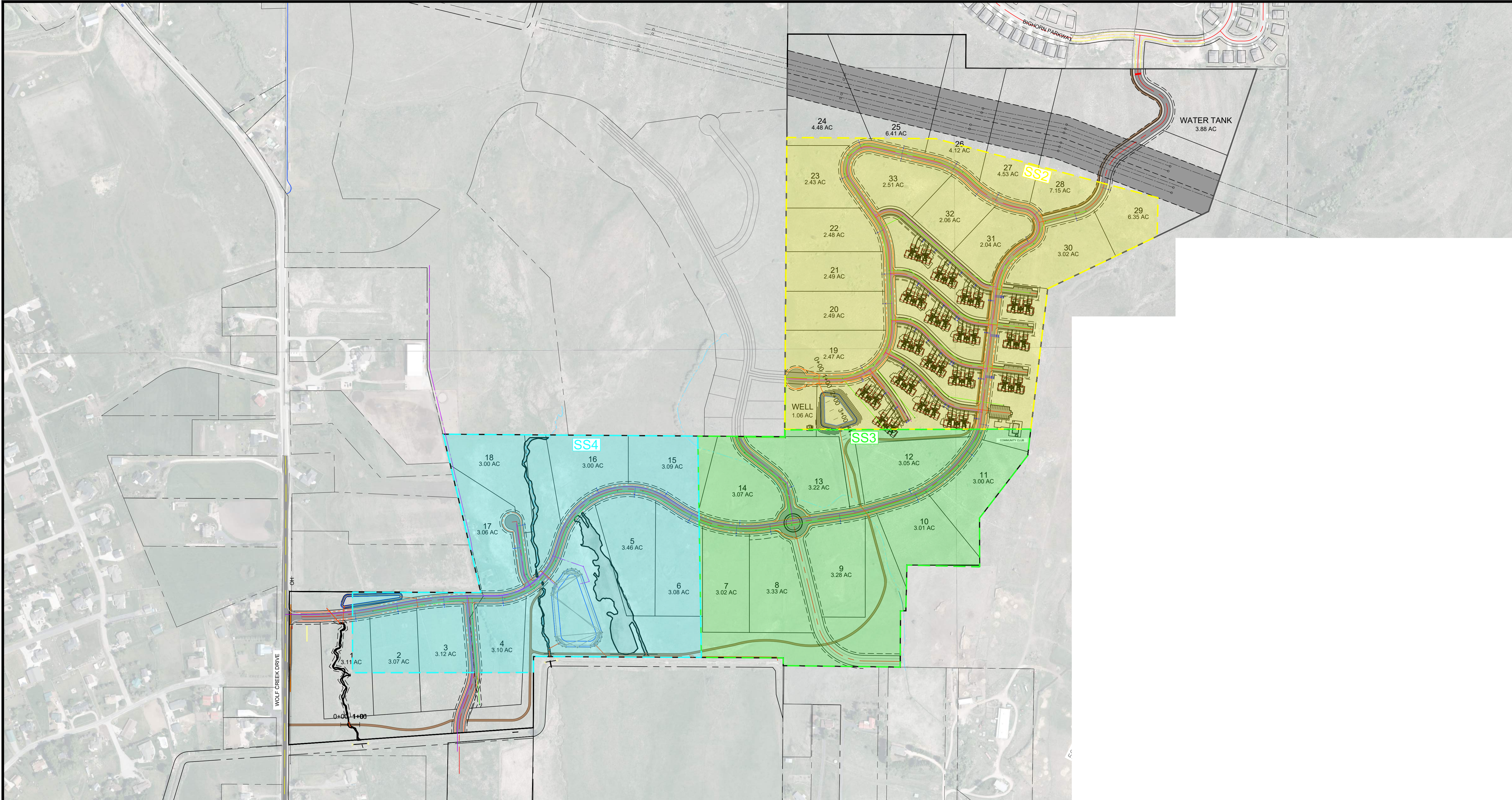
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PHASE UTILITY
COBABE RANCH SR-158 2800 N
EDEN, WEBER, UTAH

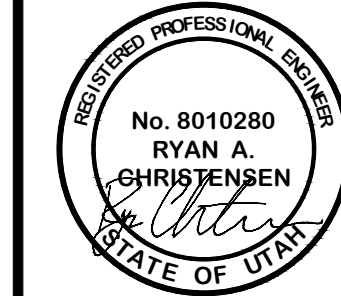


UT5

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SEWER MASTER PLAN
COBABE RANCH
SR-158 2800 N
EDEN, WEBER, UTAH



DATE	DESCRIPTION

SCALE: 1" = 250'
DATE: 8-20-25
DESIGN: KAN/JKH
DRAWN: KAN/JKH
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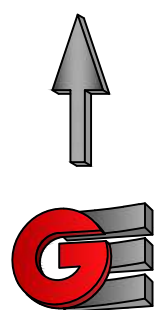
DWG:

SS1

P:\1201 - LEWIS HOMES\1201 - COBABE RANCH\DESIGN\DWG\COBABE RANCH DESIGN 02-24-25.DWG

0' 50' 100' 200' 300'

Scale in Feet
1" = 100'



SEE SHEET SS2 FOR
SSMH 48 AND PIPE 55
DATA



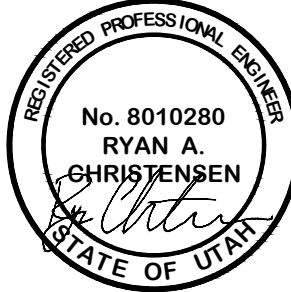
SEWER STRUCTURE TABLE			
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
SSMH 12 5' SSMH	RIM = 5187.93 INV IN = 5179.77 INV IN = 5179.77 INV OUT = 5179.67	INV (E) =5179.77 INV (N) =5179.77	INV (NW) =5179.67
SSMH 13 4' SSMH	RIM = 5201.74 INV IN = 5192.81 INV OUT = 5192.71	INV (NE) =5192.81	INV (S) =5192.71
SSMH 22 4' SSMH	RIM = 5256.13 INV IN = 5245.14		INV (W) =5245.14
SSMH 23 4' SSMH	RIM = 5235.71 INV IN = 5223.74 INV OUT = 5223.64	INV (E) =5223.74	INV (SW) =5223.64
SSMH 24 4' SSMH	RIM = 5220.18 INV IN = 5212.50 INV OUT = 5212.40	INV (NE) =5212.50	INV (SW) =5212.40
SSMH 25 4' SSMH	RIM = 5229.79 INV IN = 5222.27		INV (NW) =5222.27
SSMH 26 4' SSMH	RIM = 5225.85 INV IN = 5216.30 INV OUT = 5216.20	INV (SE) =5216.30	INV (NW) =5216.20
SSMH 27 4' SSMH	RIM = 5219.42 INV IN = 5209.66 INV OUT = 5209.56	INV (SE) =5209.66	INV (W) =5209.56
SSMH 28 4' SSMH	RIM = 5188.33 INV IN = 5177.43 INV OUT = 5177.33	INV (E) =5177.43	INV (SW) =5177.33
SSMH 29 4' SSMH	RIM = 5182.73 INV IN = 5170.61 INV OUT = 5170.51	INV (NE) =5170.61	INV (S) =5170.51
SSMH 30 4' SSMH	RIM = 5176.82 INV IN = 5166.14 INV OUT = 5166.04	INV (N) =5166.14	INV (SE) =5166.04
SSMH 31 4' SSMH	RIM = 5190.34 INV IN = 5184.03		INV (W) =5184.03
SSMH 32 4' SSMH	RIM = 5183.71 INV IN = 5174.95 INV OUT = 5174.85	INV (SE) =5174.95	INV (NW) =5174.85
SSMH 33 4' SSMH	RIM = 5171.22 INV IN = 5165.39 INV OUT = 5165.29	INV (SE) =5165.39	INV (SW) =5165.29
SSMH 34 5' SSMH	RIM = 5162.74 INV IN = 5150.51 INV IN = 5150.51 INV OUT = 5150.41	INV (NE) =5150.51 INV (NW) =5150.51	INV (S) =5150.41
SSMH 35 5' SSMH	RIM = 5128.31 INV IN = 5118.50 INV IN = 5118.50 INV OUT = 5118.40	INV (N) =5118.50 INV (E) =5118.50	INV (S) =5118.40

SEWER PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
Pipe - (47)	8"	221.10'	9.68%	PVC
Pipe - (50)	8"	130.21'	4.59%	PVC
Pipe - (51)	8"	163.50'	4.00%	PVC
Pipe - (52)	8"	381.64'	8.42%	PVC
Pipe - (55)	8"	319.94'	3.25%	PVC
Pipe - (63)	8"	164.86'	2.58%	PVC
Pipe - (64)	8"	425.00'	2.23%	PVC
Pipe - (65)	8"	128.07'	11.54%	PVC
Pipe - (66)	8"	232.52'	3.89%	PVC
Pipe - (67)	8"	259.96'	8.76%	PVC
Pipe - (68)	8"	150.16'	8.86%	PVC
Pipe - (69)	8"	116.69'	8.24%	PVC
Pipe - (70)	8"	178.05'	8.91%	PVC
Pipe - (71)	8"	298.21'	3.06%	PVC
Pipe - (72)	8"	116.00'	5.00%	PVC
Pipe - (73)	8"	344.96'	0.50%	PVC

SEWER STRUCTURE TABLE			
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
SSMH 36 4' SSMH	RIM = 5171.94 INV IN = 5169.03		INV (W) =5169.03
SSMH 37 4' SSMH	RIM = 5167.02 INV IN = 5158.36 INV OUT = 5158.26	INV (E) =5158.36	INV (NW) =5158.26
SSMH 38 4' SSMH	RIM = 5164.03 INV IN = 5152.46 INV OUT = 5152.36	INV (SE) =5152.46	INV (NW) =5152.36
SSMH 39 4' SSMH	RIM = 5156.93 INV IN = 5150.64 INV OUT = 5150.54	INV (SE) =5150.64	INV (W) =5150.54
SSMH 40 5' SSMH	RIM = 5150.79 INV IN = 5141.36 INV IN = 5141.36 INV OUT = 5141.26	INV (E) =5141.36 INV (N) =5141.36	INV (S) =5141.26
SSMH 41 4' SSMH	RIM = 5143.08 INV IN = 5133.08		INV (W) =5133.08
SSMH 42 4' SSMH	RIM = 5129.13 INV IN = 5118.23 INV OUT = 5118.13	INV (E) =5118.23	INV (NW) =5118.13
SSMH 43 5' SSMH	RIM = 5115.16 INV IN = 5105.10 INV IN = 5105.10 INV OUT = 5105.00	INV (SE) =5105.10 INV (N) =5105.10	INV (SW) =5105.00
SSMH 44 4' SSMH	RIM = 5103.09 INV IN = 5097.13		INV (NW) =5097.13
SSMH 45 5' SSMH	RIM = 5104.75 INV IN = 5095.38 INV IN = 5095.38 INV OUT = 5095.28	INV (SE) =5095.38 INV (NE) =5095.38	INV (SW) =5095.28
SSMH 47 5' SSMH	RIM = 5088.99 INV IN = 5079.42 INV IN = 5079.42 INV OUT = 5079.32	INV (SE) =5079.42 INV (NE) =5079.42	INV (W) =5079.32
SSMH 48 5' SSMH	RIM = 5081.02 INV IN = 5070.20 INV IN = 5070.20 INV OUT = 5070.10	INV (E) =5070.20	INV (S) =5070.10
SSMH 49 4' SSMH	RIM = 5149.10 INV IN = 5144.67		INV (W) =5144.67
SSMH 50 4' SSMH	RIM = 5144.33 INV IN = 5135.43	INV (E) =5135.43	INV (NW) =5135.43
SSMH 51 4' SSMH	RIM = 5132.32 INV IN = 5122.65 INV OUT = 5122.55	INV (SE) =5122.65	INV (W) =5122.55

SEWER PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
Pipe - (74)	8"	107.13'	8.57%	PVC
Pipe - (75)	8"	350.77'	3.64%	PVC
Pipe - (76)	8"	293.84'	5.05%	PVC
Pipe - (77)	8"	415.63'	3.14%	PVC
Pipe - (78)	8"	354.01'	0.50%	PVC
Pipe - (63) (1)	8"	217.03'	2.17%	PVC
Pipe - (91)	8"	133.31'	8.36%	PVC
Pipe - (92)	8"	184.43'	10.62%	PVC
Pipe - (96)	8"	276.86'	3.85%	PVC
Pipe - (75) (1)	8"	104.38'	3.88%	PVC
Pipe - (85)	8"	102.16'	6.58%	PVC
Pipe - (86)	8"	99.68'	4.38%	PVC
Pipe - (87)	8"	342.24'	4.54%	PVC
Pipe - (93)	8"	133.65'	9.68%	PVC
Pipe - (94)	8"	224.96'	4.06%	PVC

REVISIONS		DESCRIPTION
DATE		
SCALE: 1" = 100'		
DATE: 8-20-25		
DESIGN: KAN/JKH		
DRAWN: KAN/JKH		
CHECKED: RC		
DWG:		

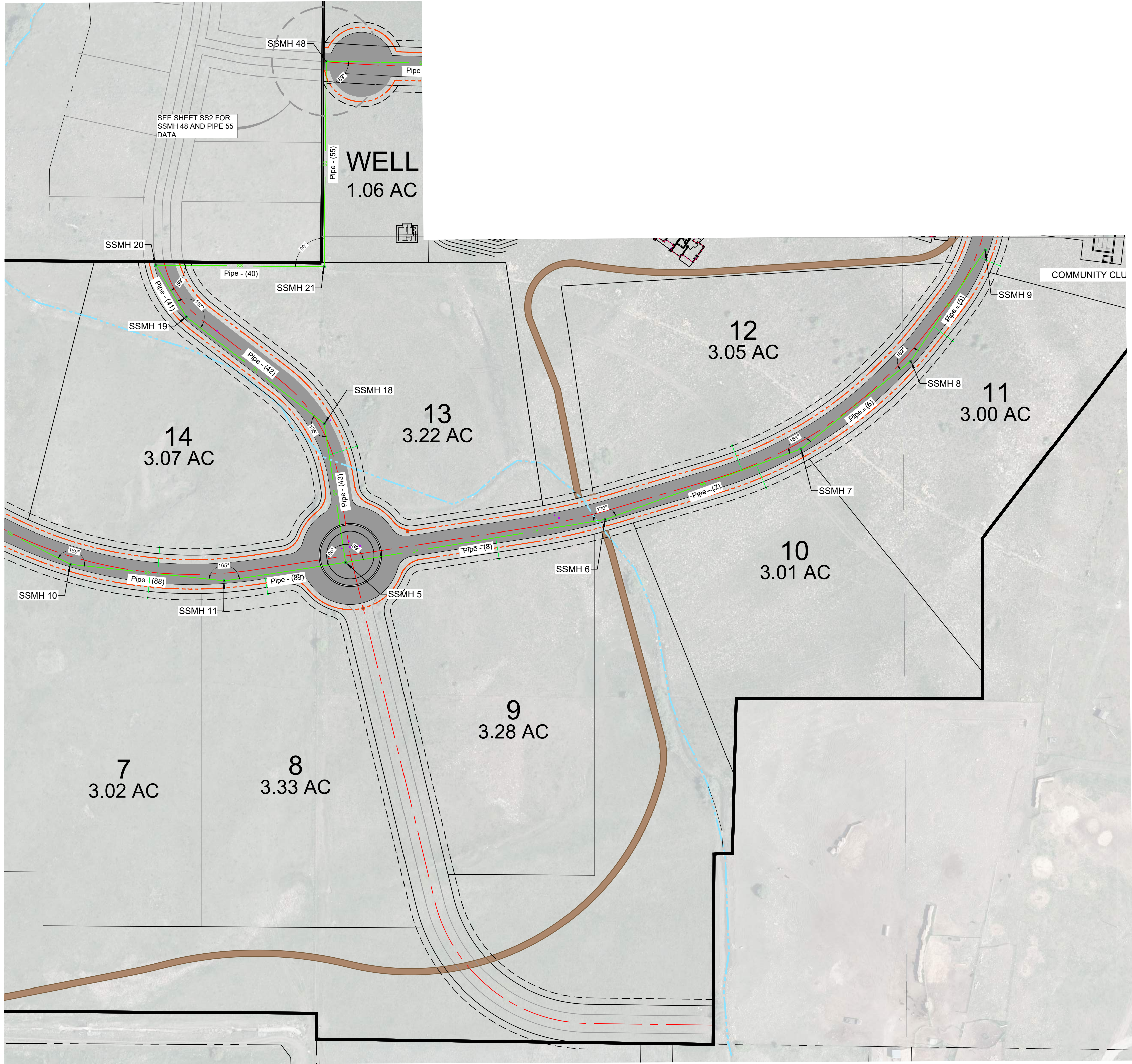


SEWER MASTER PLAN	COBABE RANCH	
	SR-158 2800 N	
EDEN, WEBER, UTAH		



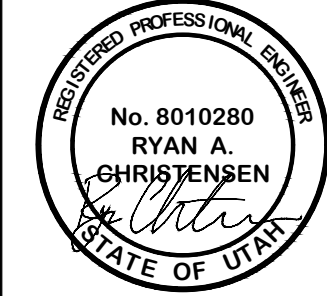
SS2

P:\1201 - LEWIS HOMES\1201 - COBABE RANCH\DESIGN\DWG\COBABE RANCH DESIGN 02-25-25.DWG

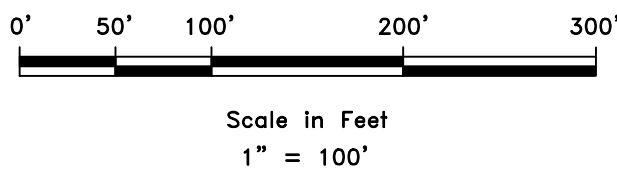


SEWER STRUCTURE TABLE			
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
SSMH 5 5' SSMH	RIM = 5046.00 INV IN = 5034.19 INV IN = 5034.19 INV OUT = 5034.09	INV (E) =5034.19 INV (N) =5034.10	INV (W) =5034.09
SSMH 6 4' SSMH	RIM = 5054.65 INV IN = 5040.76 INV OUT = 5040.66	INV (E) =5040.76	INV (W) =5040.66
SSMH 7 4' SSMH	RIM = 5086.59 INV IN = 5075.33 INV OUT = 5075.23	INV (NE) =5075.33	INV (W) =5075.23
SSMH 8 4' SSMH	RIM = 5108.21 INV IN = 5098.21 INV OUT = 5098.11	INV (NE) =5098.21	INV (SW) =5098.11
SSMH 9 4' SSMH	RIM = 5125.28 INV IN = 5115.18		INV (SW) =5115.18
SSMH 10 4' SSMH	RIM = 5031.42 INV IN = 5019.42 INV OUT = 5019.32	INV (E) =5019.42	INV (NW) =5019.32
SSMH 11 4' SSMH	RIM = 5036.16 INV IN = 5023.83 INV OUT = 5023.73	INV (E) =5023.83	INV (W) =5023.73
SSMH 18 4' SSMH	RIM = 5052.54 INV IN = 5043.97 INV OUT = 5043.87	INV (NW) =5043.97	INV (S) =5043.87
SSMH 19 4' SSMH	RIM = 5062.93 INV IN = 5048.73 INV OUT = 5048.63	INV (NW) =5048.73	INV (SE) =5048.63
SSMH 20 5' SSMH	RIM = 5069.64 INV IN = 5058.55 INV OUT = 5058.45	INV (E) =5058.55	INV (SE) =5058.45
SSMH 21 5' SSMH	RIM = 5069.84 INV IN = 5059.70 INV OUT = 5059.60	INV (N) =5059.70	INV (W) =5059.60

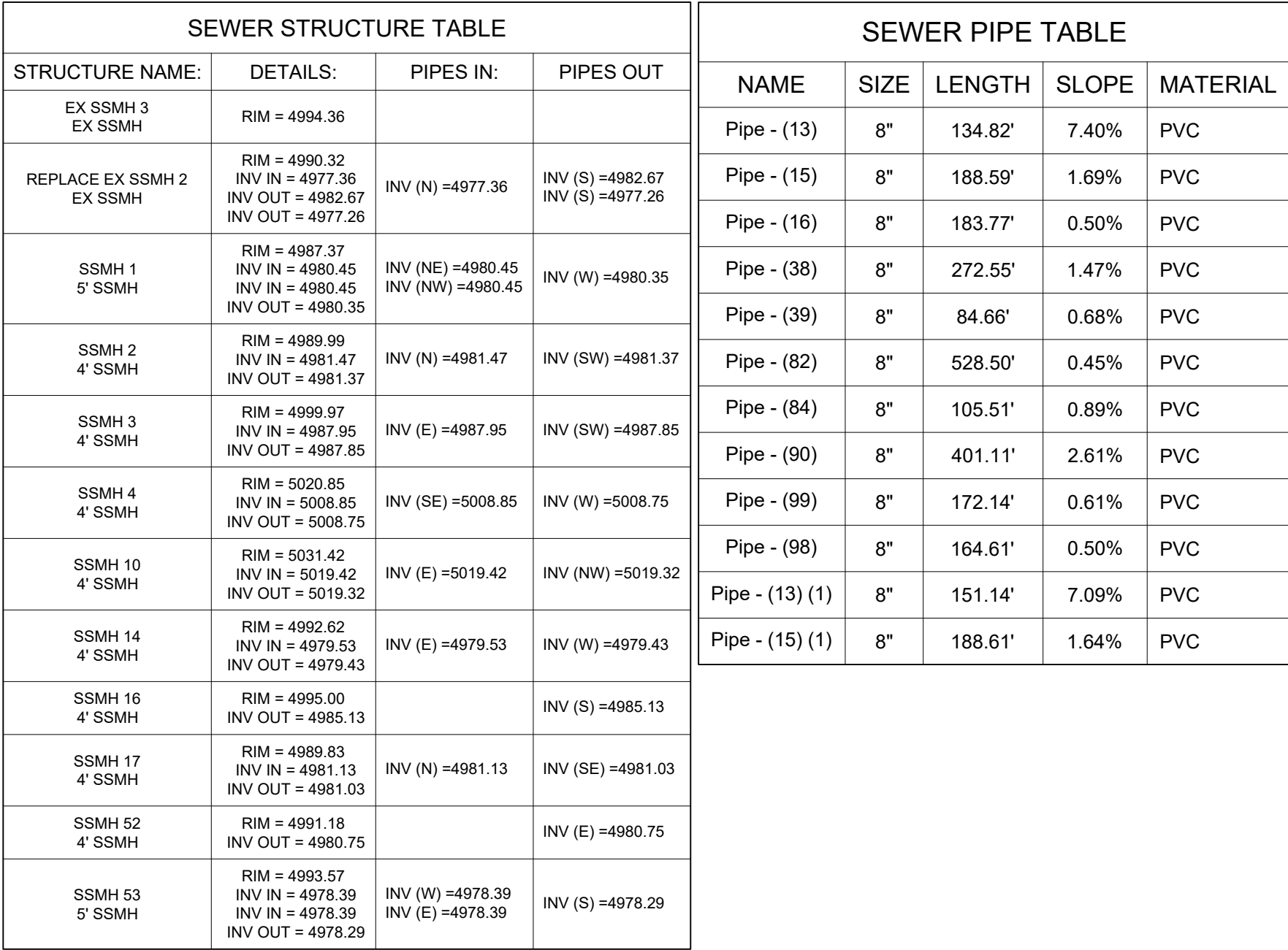
SEWER PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
Pipe - (5)	8"	209.20'	8.11%	PVC
Pipe - (6)	8"	218.90'	10.41%	PVC
Pipe - (7)	8"	324.63'	10.62%	PVC
Pipe - (8)	8"	409.94'	1.58%	PVC
Pipe - (40)	8"	262.28'	0.40%	PVC
Pipe - (41)	8"	93.77'	10.37%	PVC
Pipe - (42)	8"	271.85'	1.71%	PVC
Pipe - (43)	8"	218.79'	4.42%	PVC
Pipe - (88)	8"	241.27'	1.79%	PVC
Pipe - (89)	8"	191.17'	5.37%	PVC
Pipe - (90)	8"	401.11'	2.61%	PVC



SEWER MASTER PLAN
COBABE RANCH
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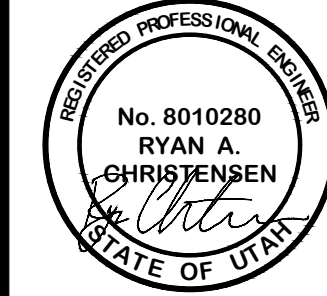


SS3



SEWER STRUCTURE TABLE			
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
EX SSMH 3 EX SSMH	RIM = 4994.36		
REPLACE EX SSMH 2 EX SSMH	RIM = 4990.32 INV IN = 4977.36 INV OUT = 4982.67 INV OUT = 4977.26	INV (N) = 4977.36	INV (S) = 4982.67 INV (S) = 4977.26
SSMH 1 5' SSMH	RIM = 4987.37 INV IN = 4980.45 INV IN = 4980.45 INV OUT = 4980.35	INV (NE) = 4980.45 INV (NW) = 4980.45	INV (W) = 4980.35
SSMH 2 4' SSMH	RIM = 4989.99 INV IN = 4981.47 INV OUT = 4981.37	INV (N) = 4981.47	INV (SW) = 4981.37
SSMH 3 4' SSMH	RIM = 4999.97 INV IN = 4987.95 INV OUT = 4987.85	INV (E) = 4987.95	INV (SW) = 4987.85
SSMH 4 4' SSMH	RIM = 5020.85 INV IN = 5008.85 INV OUT = 5008.75	INV (SE) = 5008.85	INV (W) = 5008.75
SSMH 10 4' SSMH	RIM = 5031.42 INV IN = 5019.42 INV OUT = 5019.32	INV (E) = 5019.42	INV (NW) = 5019.32
SSMH 14 4' SSMH	RIM = 4992.62 INV IN = 4979.53 INV OUT = 4979.43	INV (E) = 4979.53	INV (W) = 4979.43
SSMH 16 4' SSMH	RIM = 4995.00 INV IN = 4985.13		INV (S) = 4985.13
SSMH 17 4' SSMH	RIM = 4989.83 INV IN = 4981.13 INV OUT = 4981.03	INV (N) = 4981.13	INV (SE) = 4981.03
SSMH 52 4' SSMH	RIM = 4991.18 INV OUT = 4980.75		INV (E) = 4980.75
SSMH 53 5' SSMH	RIM = 4995.57 INV IN = 4978.39 INV IN = 4978.39 INV OUT = 4978.29	INV (W) = 4978.39 INV (E) = 4978.39	INV (S) = 4978.29

SEWER PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
Pipe - (13)	8"	134.82'	7.40%	PVC
Pipe - (15)	8"	188.59'	1.69%	PVC
Pipe - (16)	8"	183.77'	0.50%	PVC
Pipe - (38)	8"	272.55'	1.47%	PVC
Pipe - (39)	8"	84.66'	0.68%	PVC
Pipe - (82)	8"	528.50'	0.45%	PVC
Pipe - (84)	8"	105.51'	0.89%	PVC
Pipe - (90)	8"	401.11'	2.61%	PVC
Pipe - (99)	8"	172.14'	0.61%	PVC
Pipe - (98)	8"	164.61'	0.50%	PVC
Pipe - (13) (1)	8"	15.14'	7.09%	PVC
Pipe - (15) (1)	8"	188.61'	1.64%	PVC

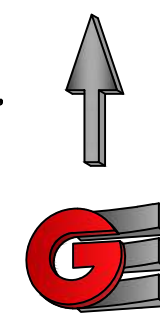
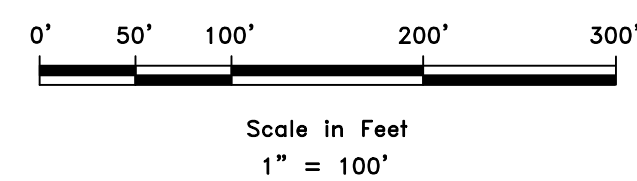


SEWER MASTER PLAN
COBABE RANCH
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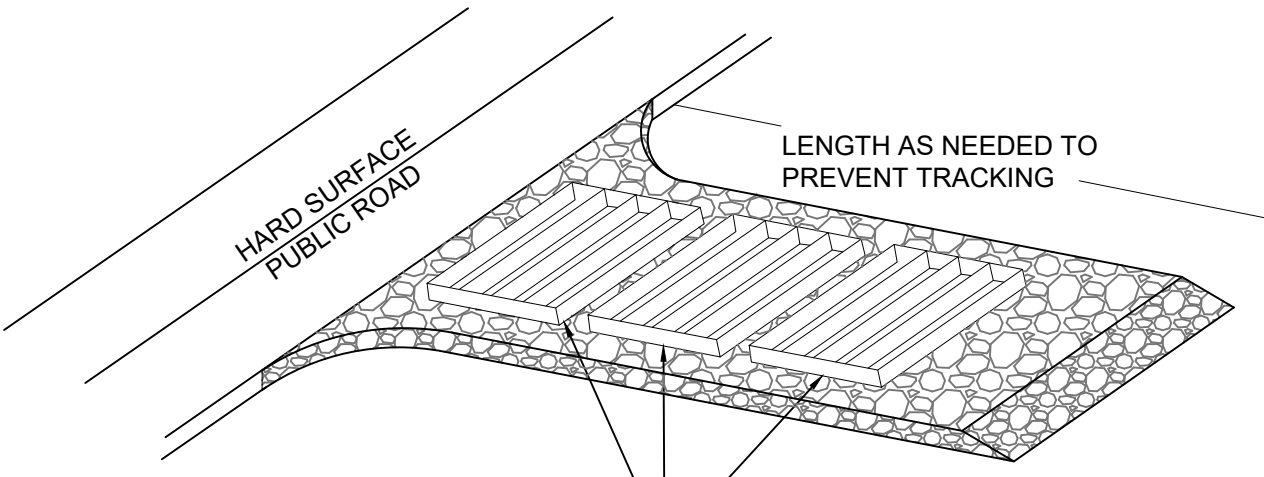
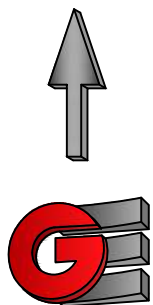
**5150 SOUTH 375 EAST OGDEN, UT
OFFICE-801 476 0303 FAX: 801 476 0066**

SS4



EROSION CONTROL NOTES:

- 1. SANDBAGS WILL BE PLACED AT DISCHARGE LOCATIONS TO CONTAIN AND DIVERT STORM WATER THROUGH THE INLET PROTECTION.
- 2. AN EARTHEN BERM 6" HIGH WILL BE CONSTRUCTED TO CONTAIN THE STORM WATER AND DIVERT IT TO DISCHARGE AREAS.
- 3. STORM WATER WILL BE DISCHARGED INTO AN EXISTING DRAINAGE SYSTEM. EXISTING LINES SHALL BE INSPECTED PRIOR TO CERTIFICATE OF OCCUPANCY AND CLEANED IF NECESSARY.
- 4. THE STORM WATER POLLUTION PREVENTION PLAN SHALL CONFORM TO ALL STATE DIVISION OF ENVIRONMENTAL PROTECTION REGULATIONS.



A SERIES OF STEEL PLATES (3 OR MORE) WITH RUMBLE STRIPS OR MIN. 3" COARSE AGGREGATE.

ENTRANCE STABILIZATION NOTES:

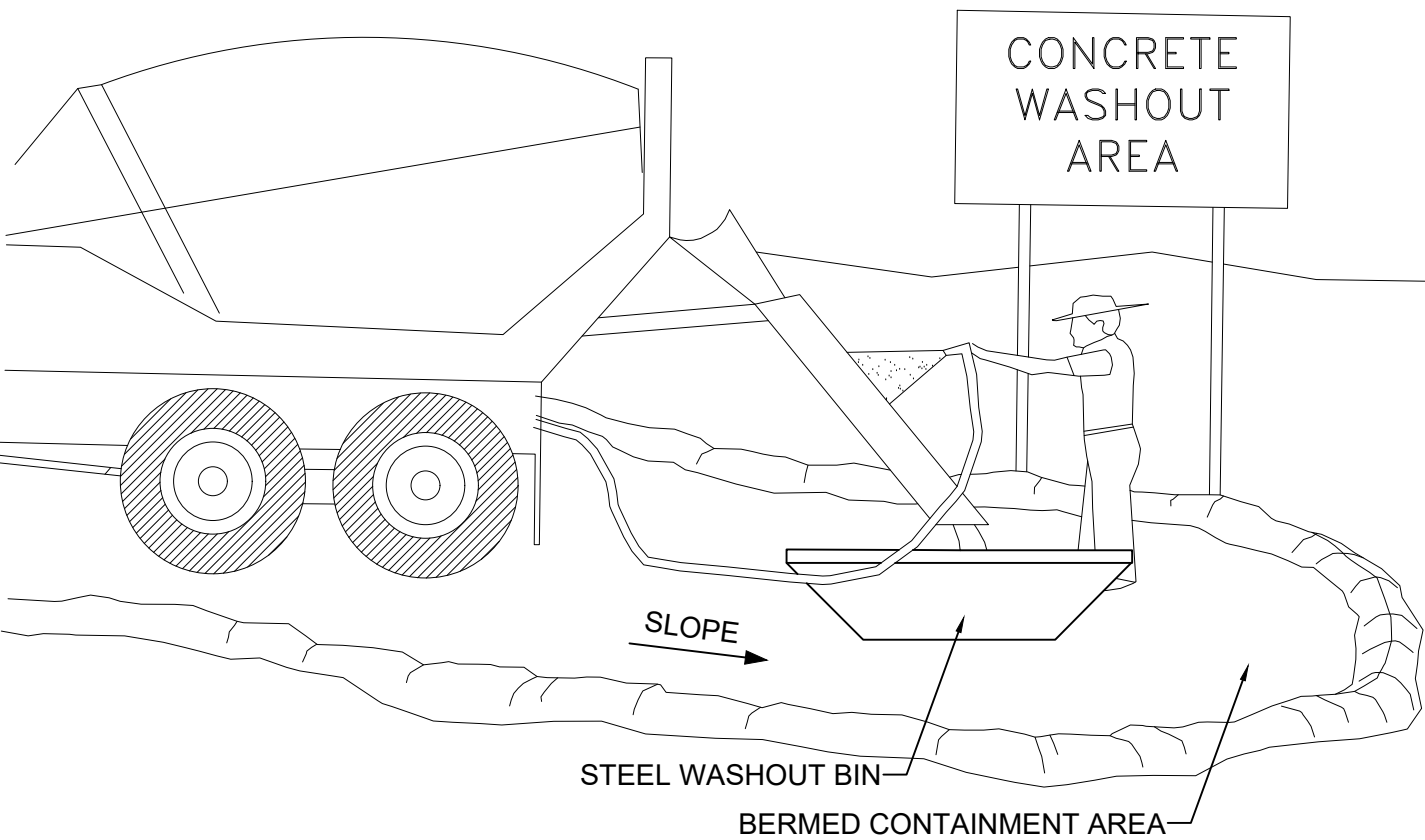
- 1. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE STORM DRAIN SYSTEMS. DEPOSITIONS MUST BE SWEEP UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.
- 2. STABILIZED CONSTRUCTION ENTRANCE SHALL BE:
 - a. LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY AND SIDEWALK OR PARKING AREA.
 - b. A SERIES OF STEEL PLATES WITH "RUMBLE STRIPS", AND/OR MIN. 3" COARSE AGGREGATE WITH LENGTH, WIDTH AND THICKNESS AS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACES.
- 3. ADDING A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER CAN GREATLY IMPROVE EFFICIENCY.
- 4. ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE SITES.

STREET MAINTENANCE NOTES:

- 1. REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY.
- 2. SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
- 3. PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM.

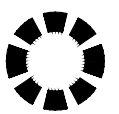
NOTE:

CONTRACTOR SHALL COMPLETE AND SUBMIT A STATE NOTICE OF INTENT (NOI) AND A STORM WATER POLLUTION PREVENTION PLAN BOOKLET

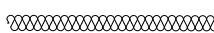


NOTES:

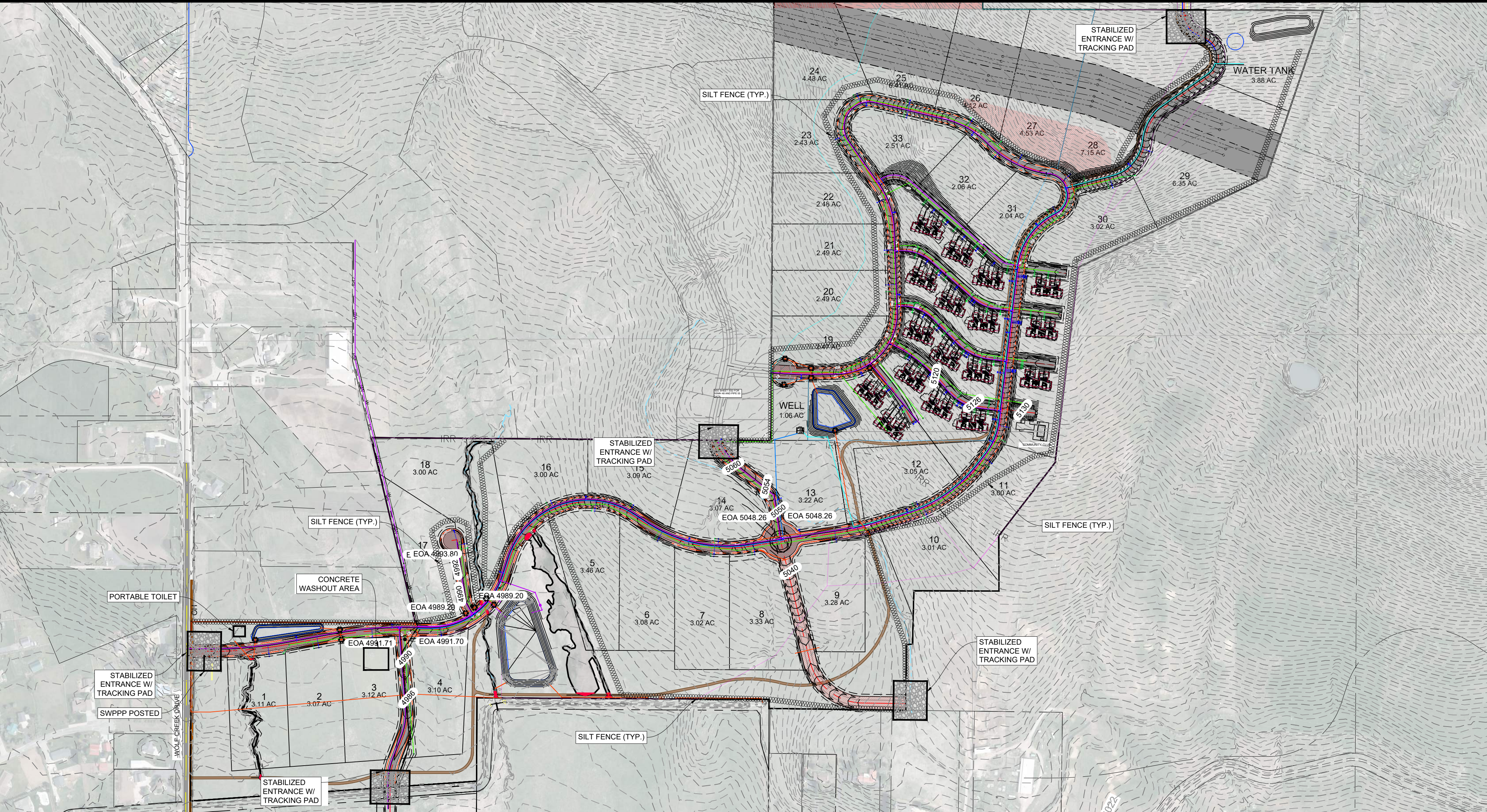
- 1. EXCESS AND WASTE CONCRETE SHALL BE DISPOSED OF OFF SITE OR AT DESIGNATED AREAS ONLY.
- 2. EXCESS AND WASTE CONCRETE SHALL NOT BE WASHED INTO THE STREET OR INTO A DRAINAGE SYSTEM.
- 3. FOR WASHOUT OF CONCRETE AND MORTAR PRODUCTS ONSITE, A DESIGNATED CONTAINMENT FACILITY OF SUFFICIENT CAPACITY TO RETAIN LIQUID AND SOLID WASTE SHALL BE PROVIDED.
- 4. ONSITE CONCRETE WASHOUT CONTAINMENT FACILITY SHALL BE A STEEL BIN OR APPROVED ALTERNATE.
- 5. SLURRY FROM CONCRETE AND ASPHALT SAW CUTTING SHAL BE VACUUMED OR CONTAINED, DRIED, PICKED UP AND DISPOSED OF PROPERLY.



INLET PROTECTION (EITHER OPTION)

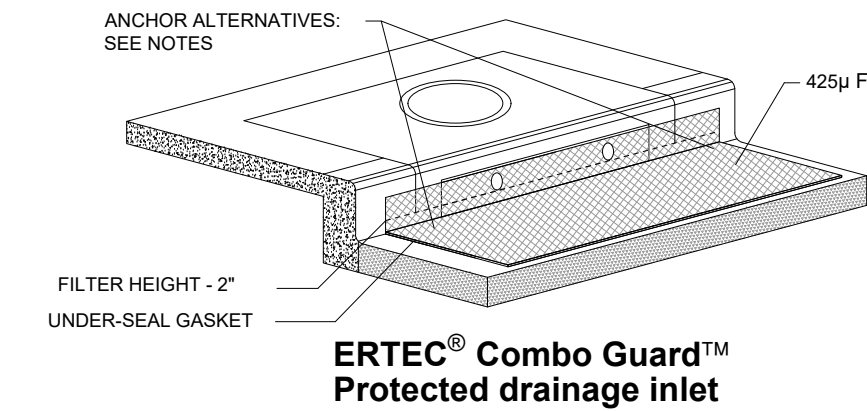


SILT FENCE

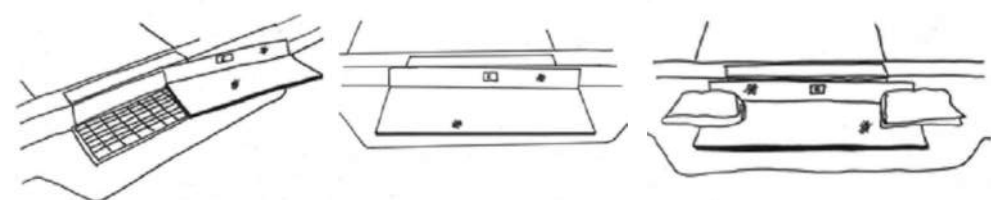


INSTALLATION NOTES

- 1. PLACEMENT: PLACE CG TIGHTLY AGAINST CURB OPENING AND COVER ENTIRE GRATE. CG SHOULD EXTEND AT LEAST 2 INCHES PAST GRATE TOWARDS STREET.
- 2. OVERLAP FOR LONG OPENINGS: OVERLAP CG UNITS AT LONGER OPENINGS.
- 3. ANCHOR: ANCHOR CG SO THAT WATER CANNOT FLOW BEHIND IT.
- 4. ALTERNATE ANCHOR METHODS: A) INSTALL GRAVEL BAGS AT EACH SIDE OF CG - HALF-ON AND HALF-OFF THE EDGES. USE HALF-FILLED GRAVEL BAGS (15 OR 20 LBS). ROUND ROCK IS RECOMMENDED. OR B) ATTACH WITH 16 GAUGE TIE-WIRE. CUT WIRE TO 18" LENGTH. AT EACH CORNER OF CG, FEED ONE END OF WIRE DOWN THROUGH CG, AROUND GRATE BAR, AND BACK UP THRU CG. ABOVE GROUND, TWIST WIRES SEVERAL TIMES. CUT-OFF EXCESS. OR C) FASTEN WITH CONCRETE ANCHORS/NAILS AT THE OUTSIDE EDGES OF CG.

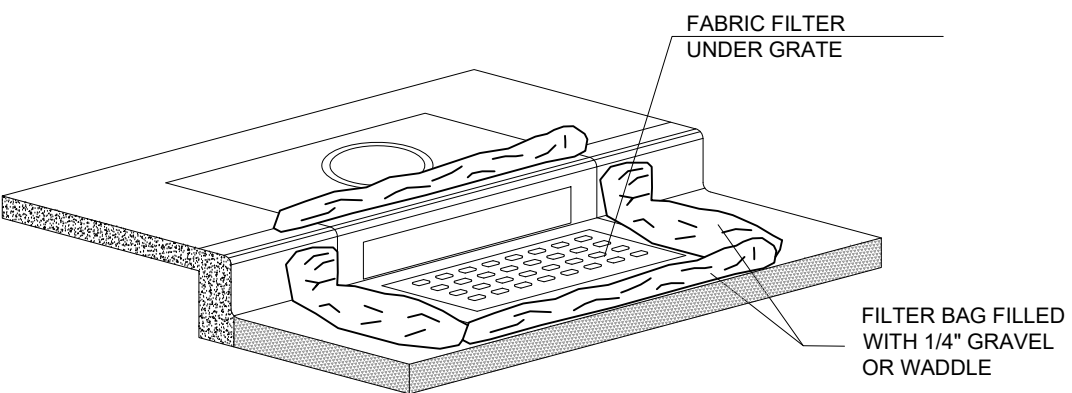


ERTEC® Combo Guard™ Protected drainage inlet



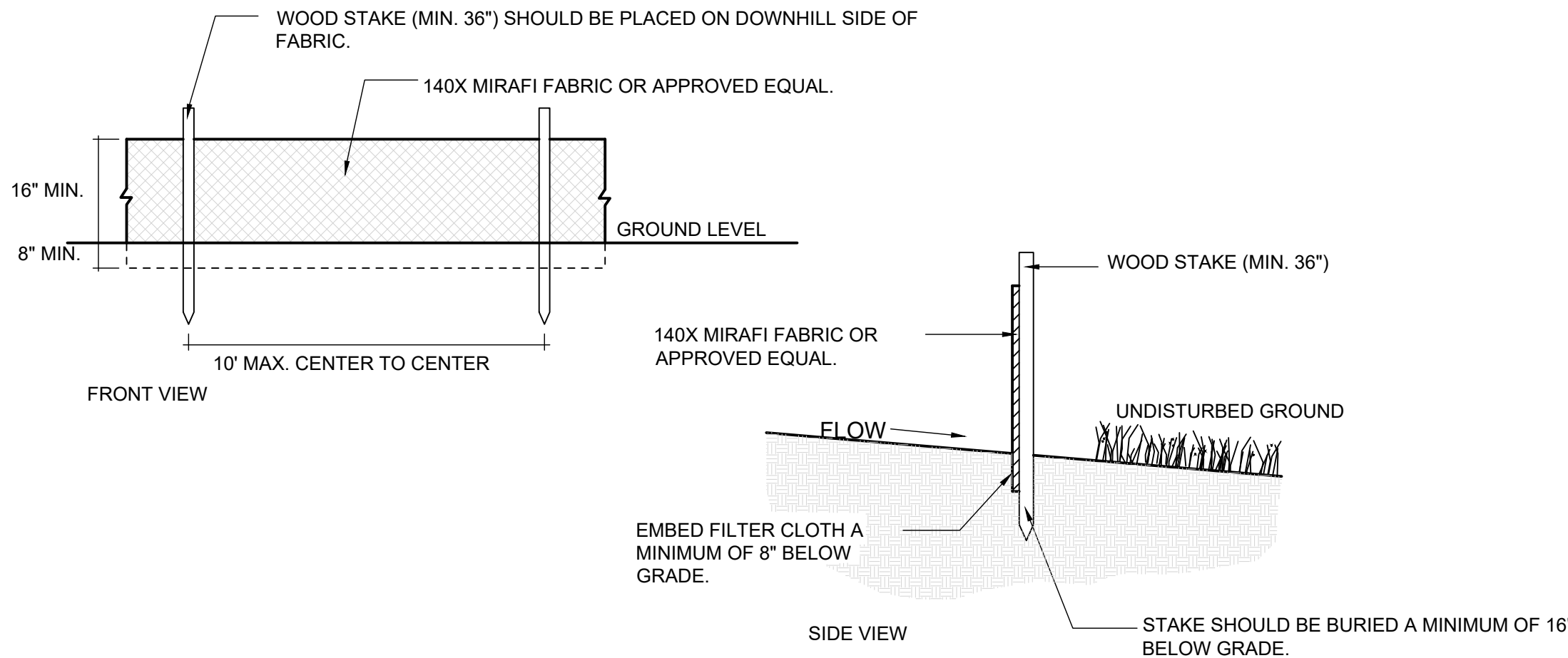
1A INLET PROTECTION - OPTION 1

Scale: NTS



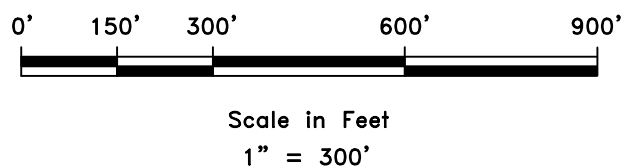
1B INLET PROTECTION - OPTION 2

Scale: NTS



2 SILT FENCE

Scale: NTS



STORMWATER POLLUTION PREVENTION

COBABE RANCH

SR-158 2800 N

EDEN, WEBER, UTAH



SWP-01

REVISIONS

DESCRIPTION

DATE

DATE

DATE

DATE

DATE

DATE

DATE

SCALE: 1" = 300'

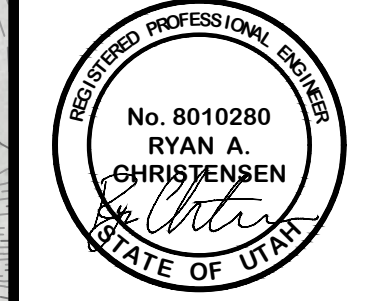
DATE: 8-20-25

DESIGN: KAN/UKH

DRAWN: KAN/UKH

CHECKED: RC

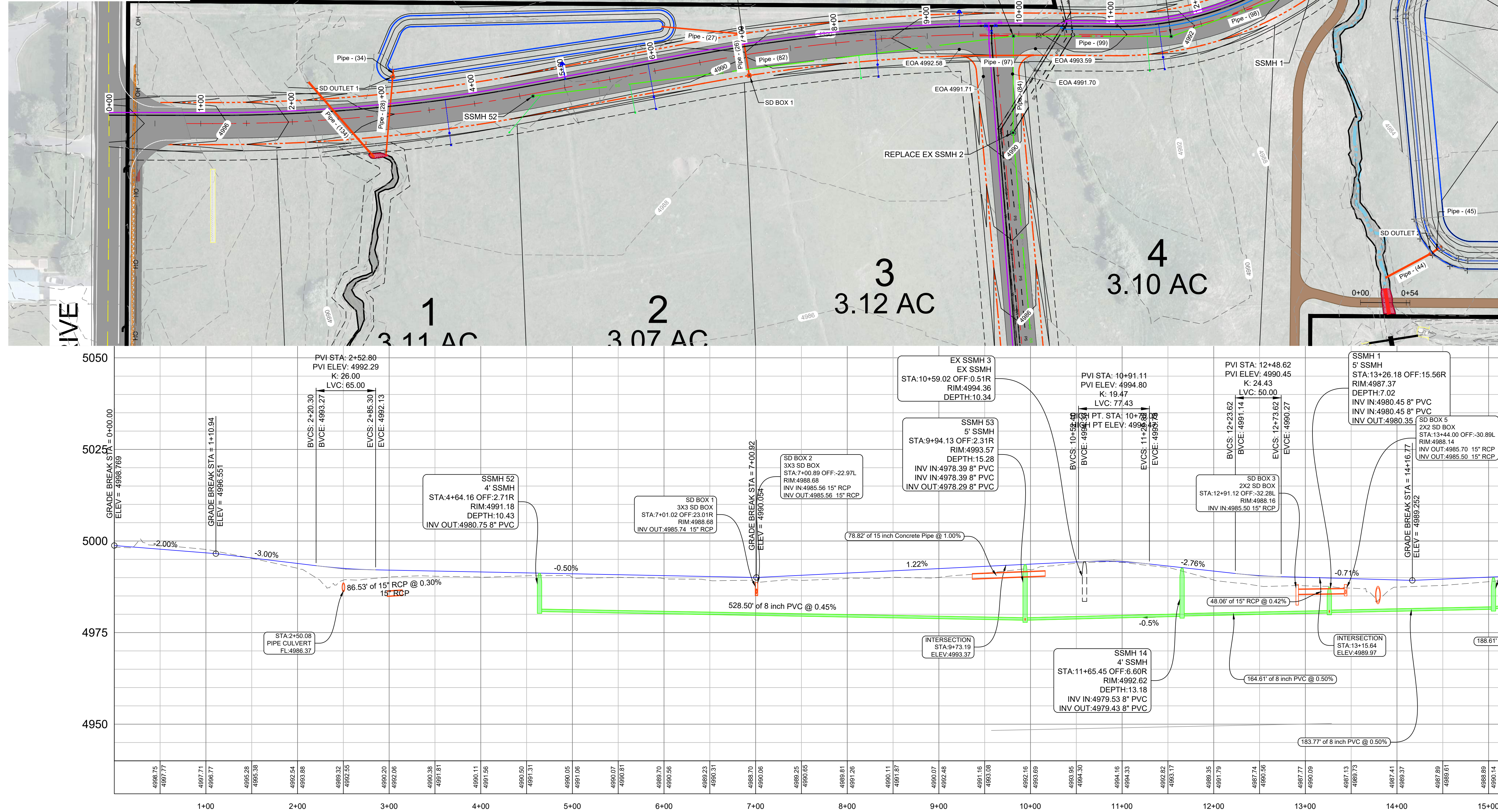
DWG:



The site plan illustrates four distinct areas, each with specific acreage and engineering features:

- Area 1:** 3.11 AC. Features include Pipe - (34), SD OUTLET 1, Pipe - (28) *100, Pipe - (134), SSMH 52, and EOA 4990. Stationing markers 1+00, 2+00, 3+00, and 4+00 are present.
- Area 2:** 3.07 AC. Features include SD BOX 1, SD BOX 2, Pipe - (27), Pipe - (82), Pipe - (25), and EOA 4990. Stationing markers 5+00, 6+00, 7+00, 8+00, and 9+00 are present.
- Area 3:** 3.12 AC. Features include SSMH 53, EX SSMH 3 REMOVE, Pipe - (97), EOA 4992.58, EOA 4991.71, and EOA 4993.59. Stationing markers 10+00, 11+00, and 12+00 are present.
- Area 4:** 3.10 AC. Features include SSMH 14, SSMH 17, SSMH 1, SSMH 2, SD BOX 3, SD BOX 4, SD BOX 5, SD BOX 6, Pipe - (103), Pipe - (104), Pipe - (105), Pipe - (106), Pipe - (98), Pipe - (99), Pipe - (84), Pipe - (45), Pipe - (44), SD OUTLET 2, and EOA 4989.20. Stationing markers 13+00, 14+00, 15+00, and 16+00 are present.

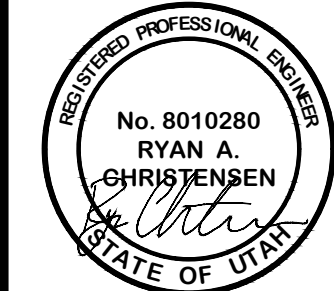
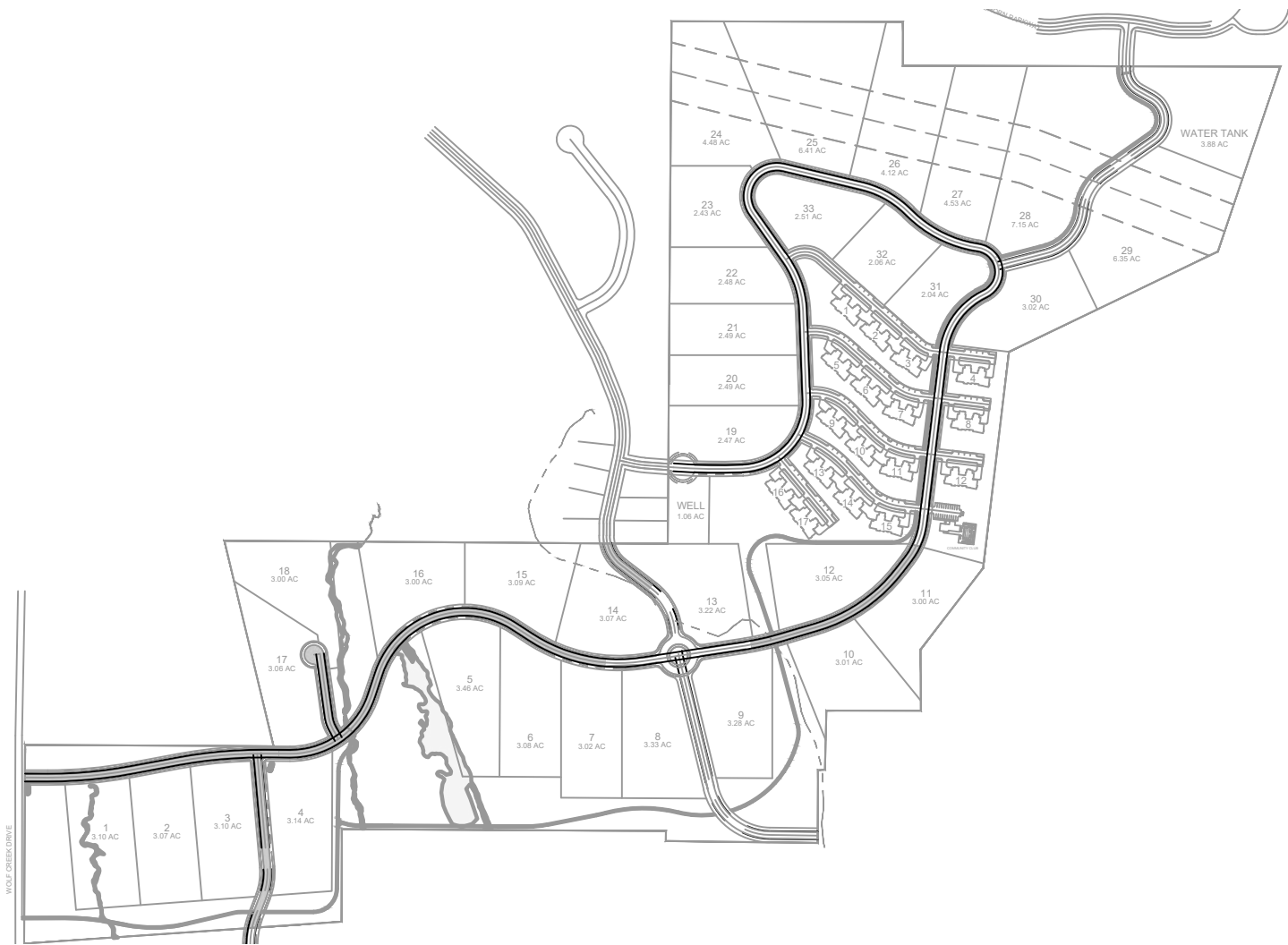
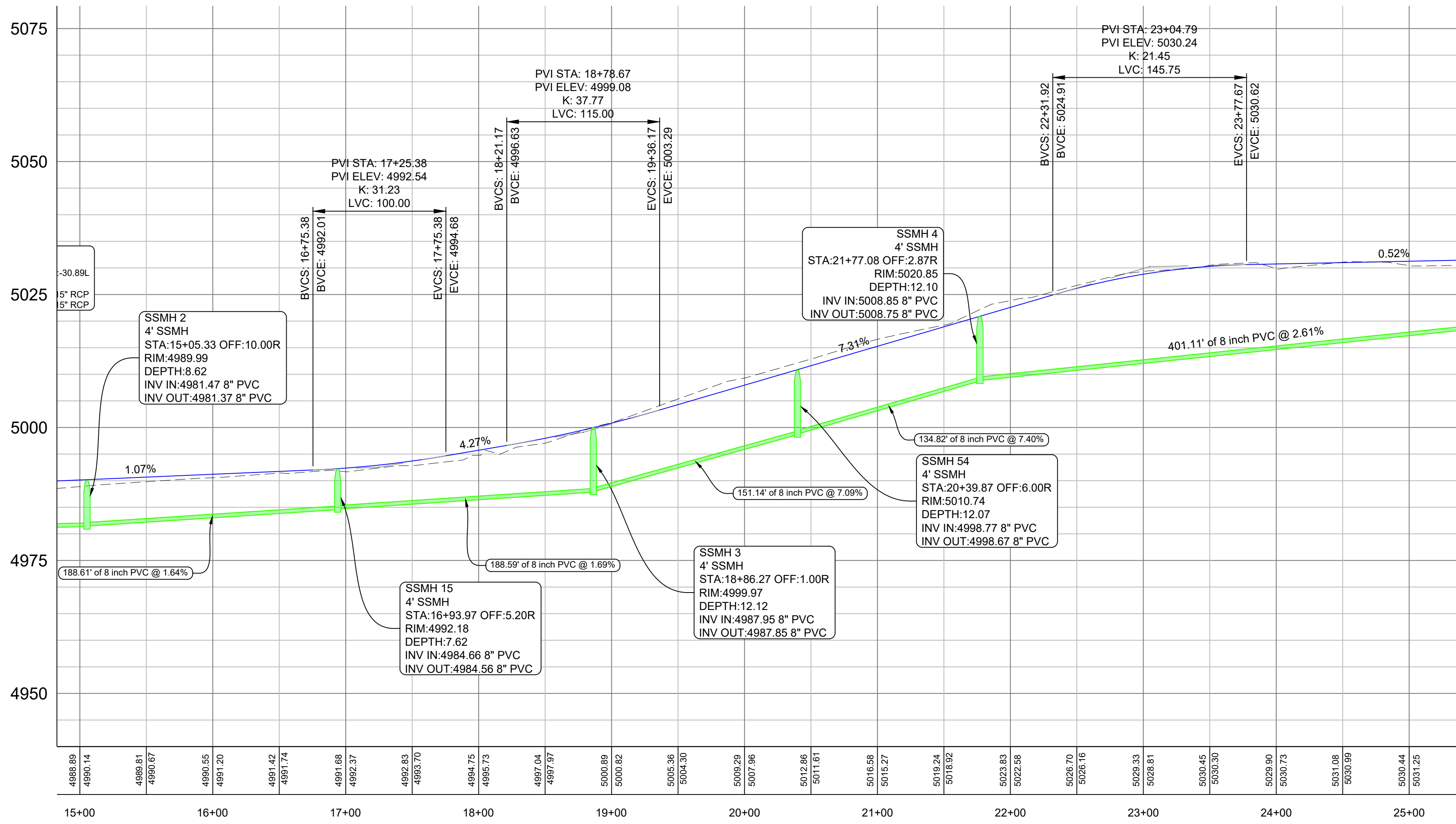
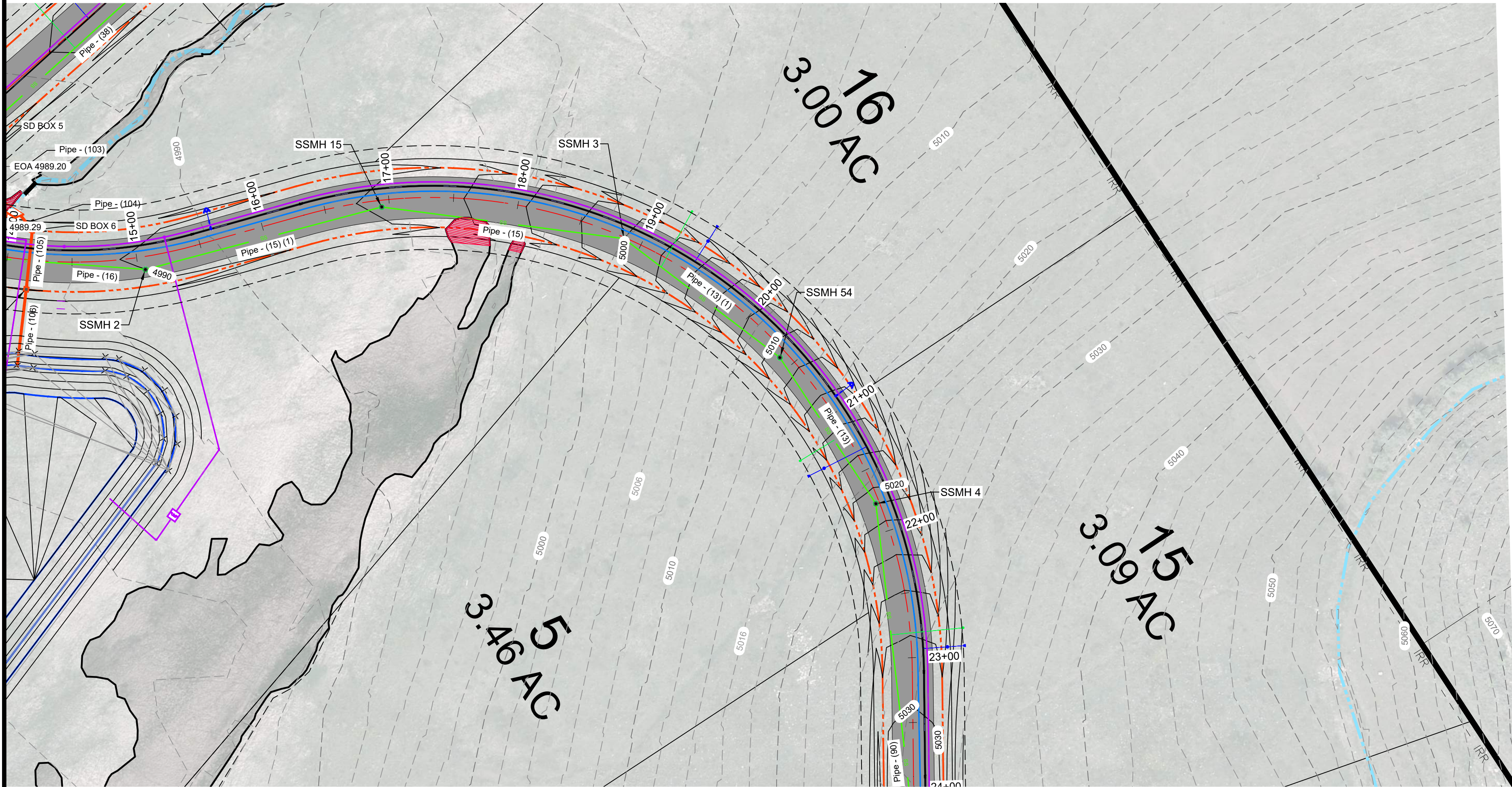
Additional features include various EOA (Existing Outer Alignment) points, SSMH (Structural Steel Member) locations, and pipe specifications throughout the plan.



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PP1

PLAN AND PROFILE

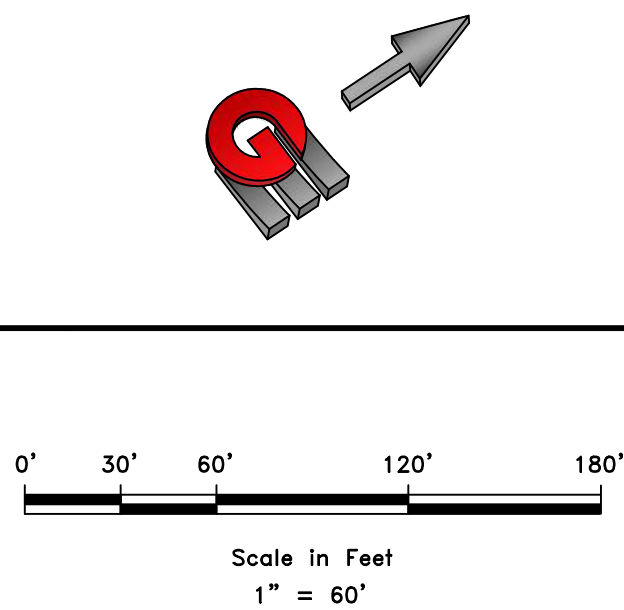


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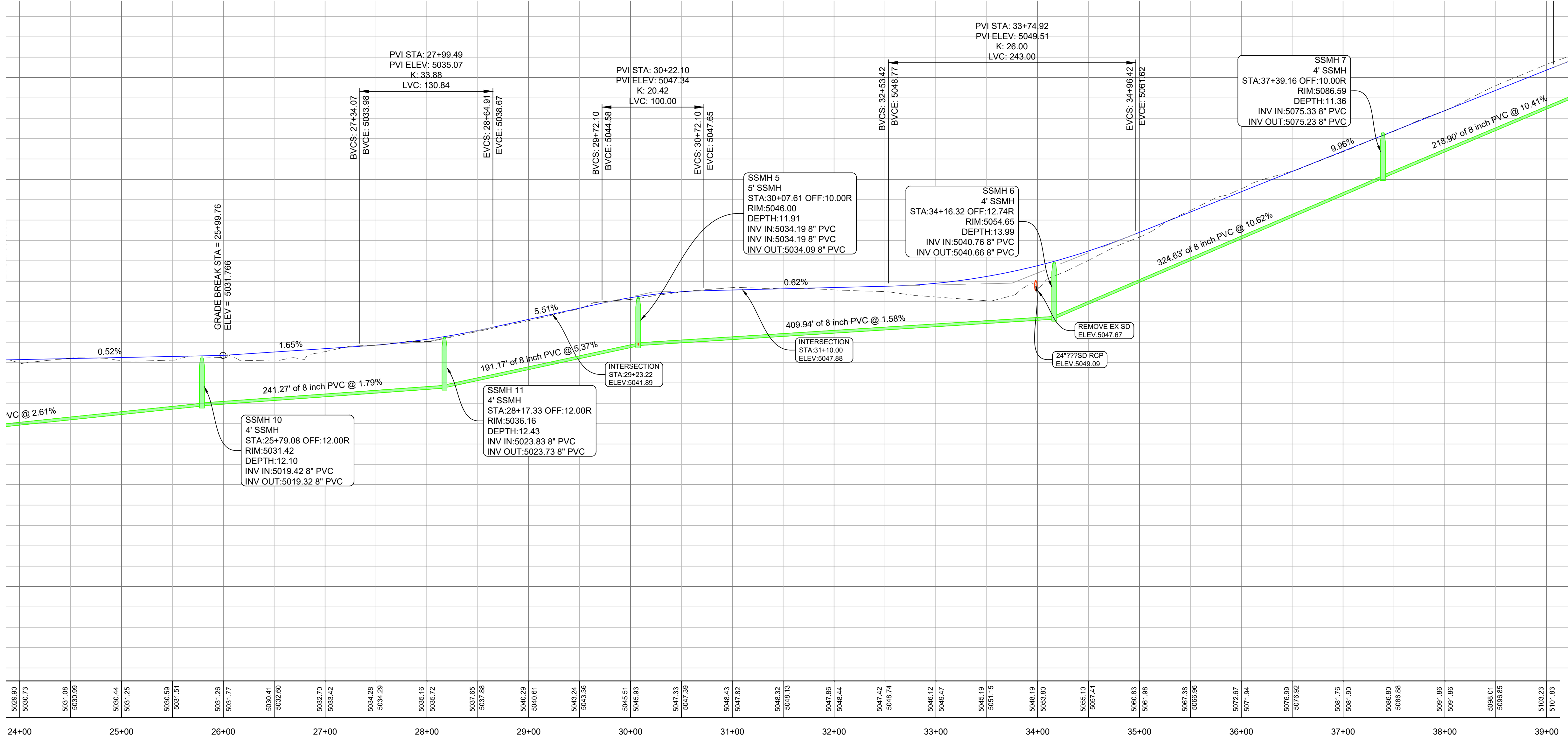
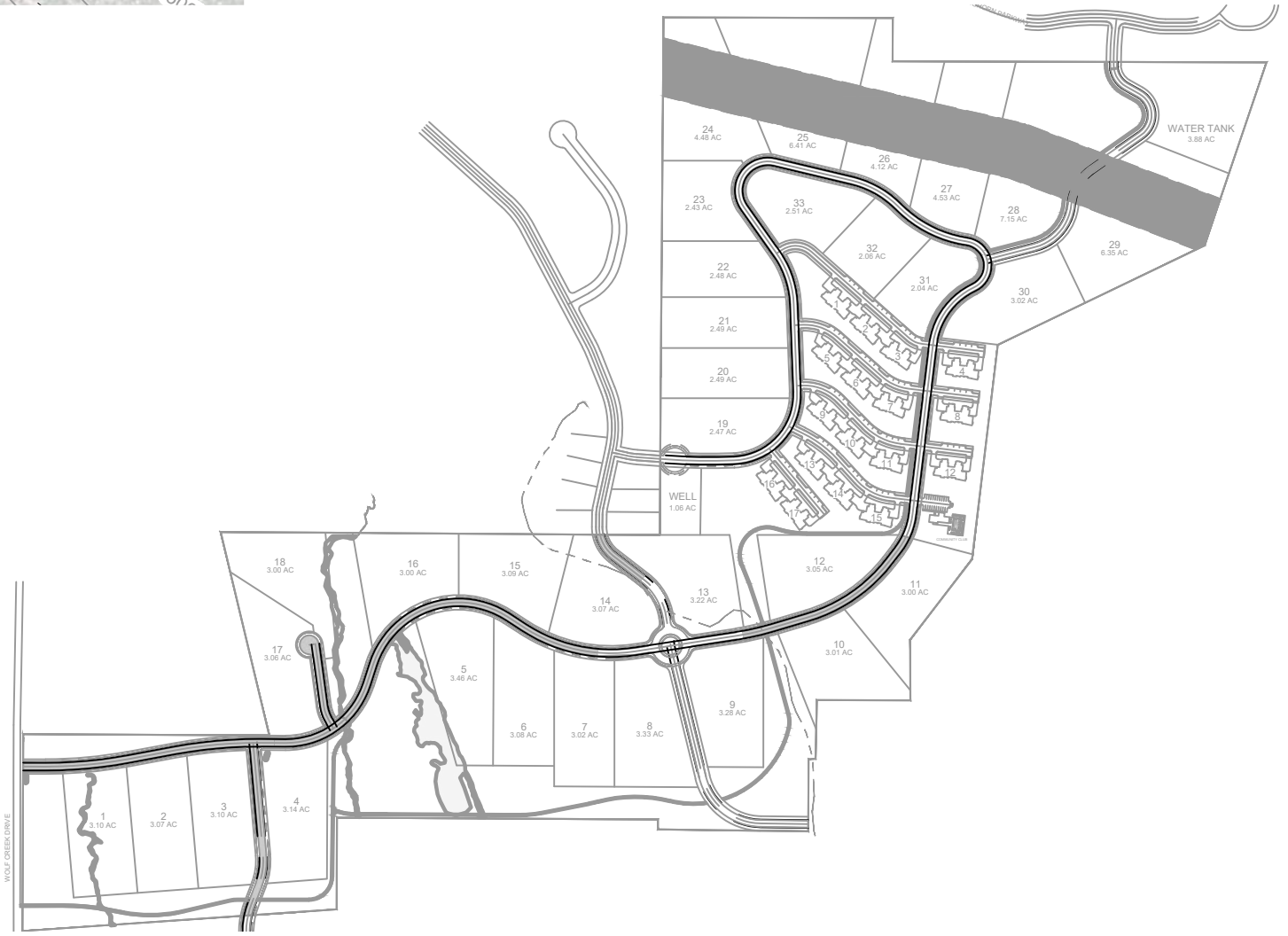
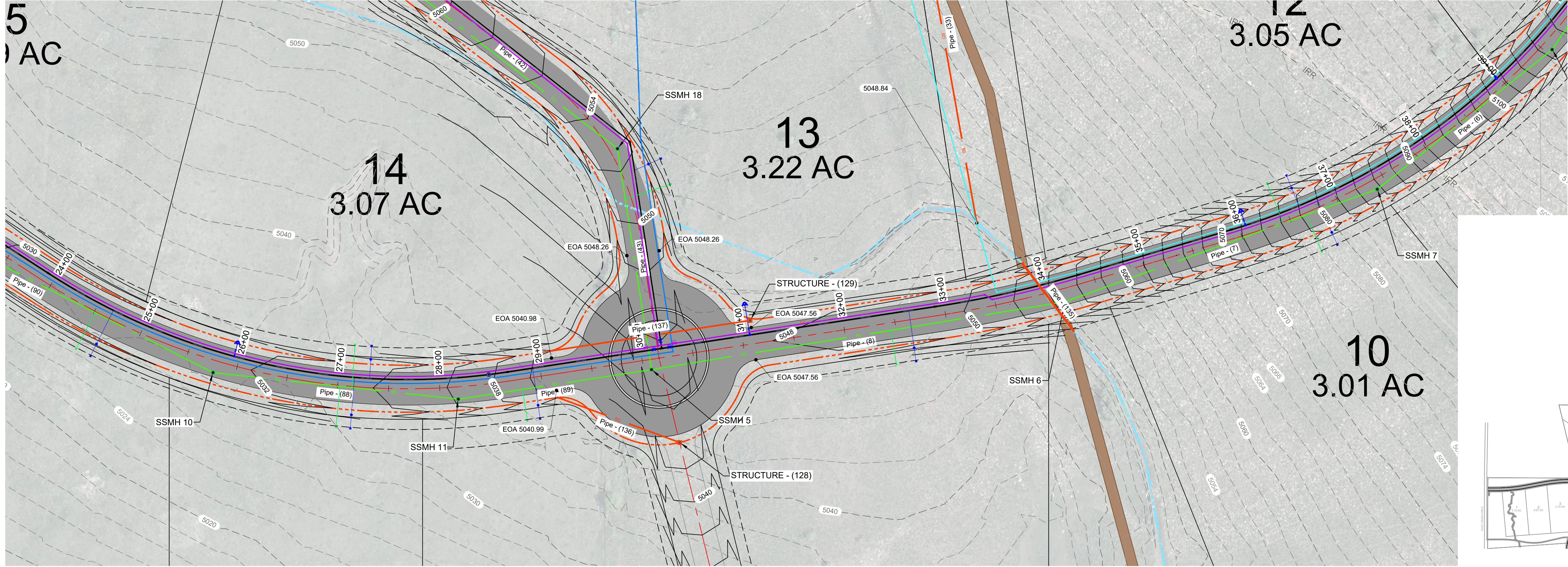
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CHECKED: RC	

PLAN AND PROFILE
COBABE RANCH
SR-158 2800 N
EDEN, WEBER, UTAH

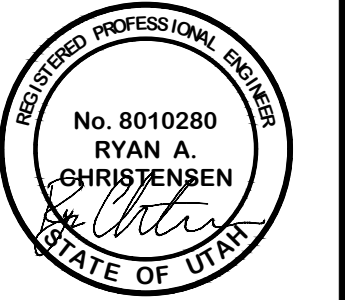
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DATE:	8-20-25
DESIGN:	KAN/JKH
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CHECKED:	RC

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SR-158 2800 N
EDEN, WEBER, UTAH

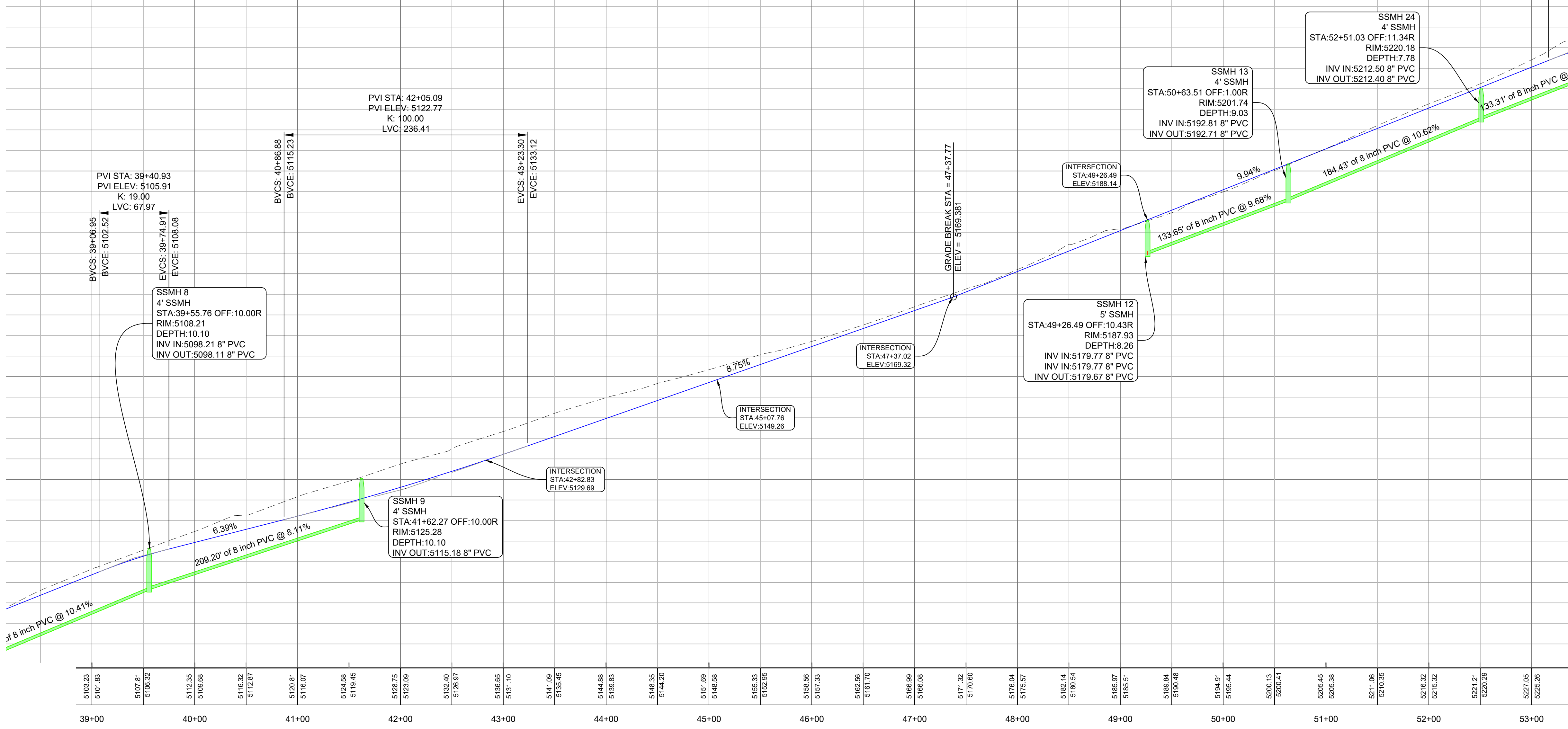
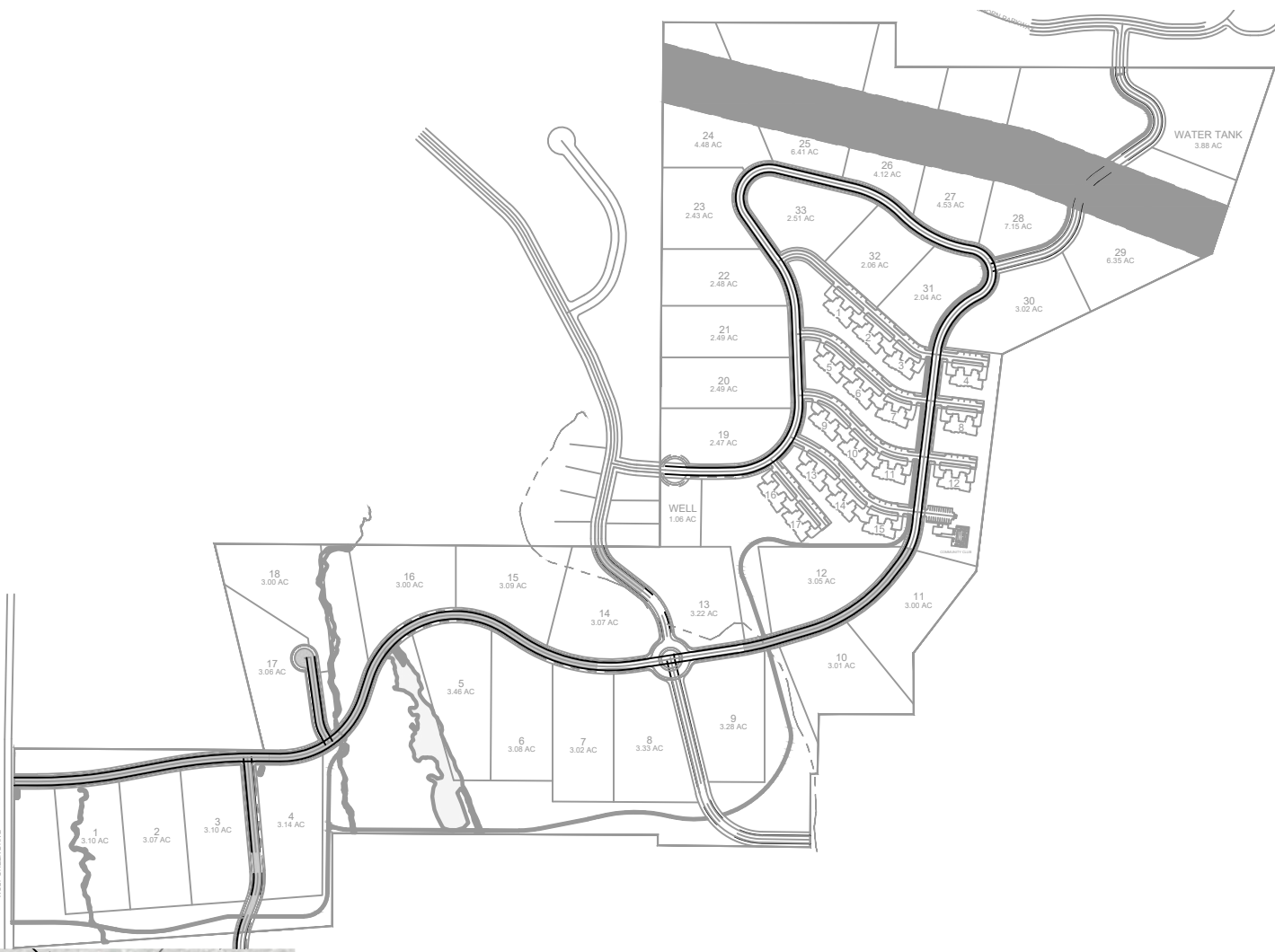
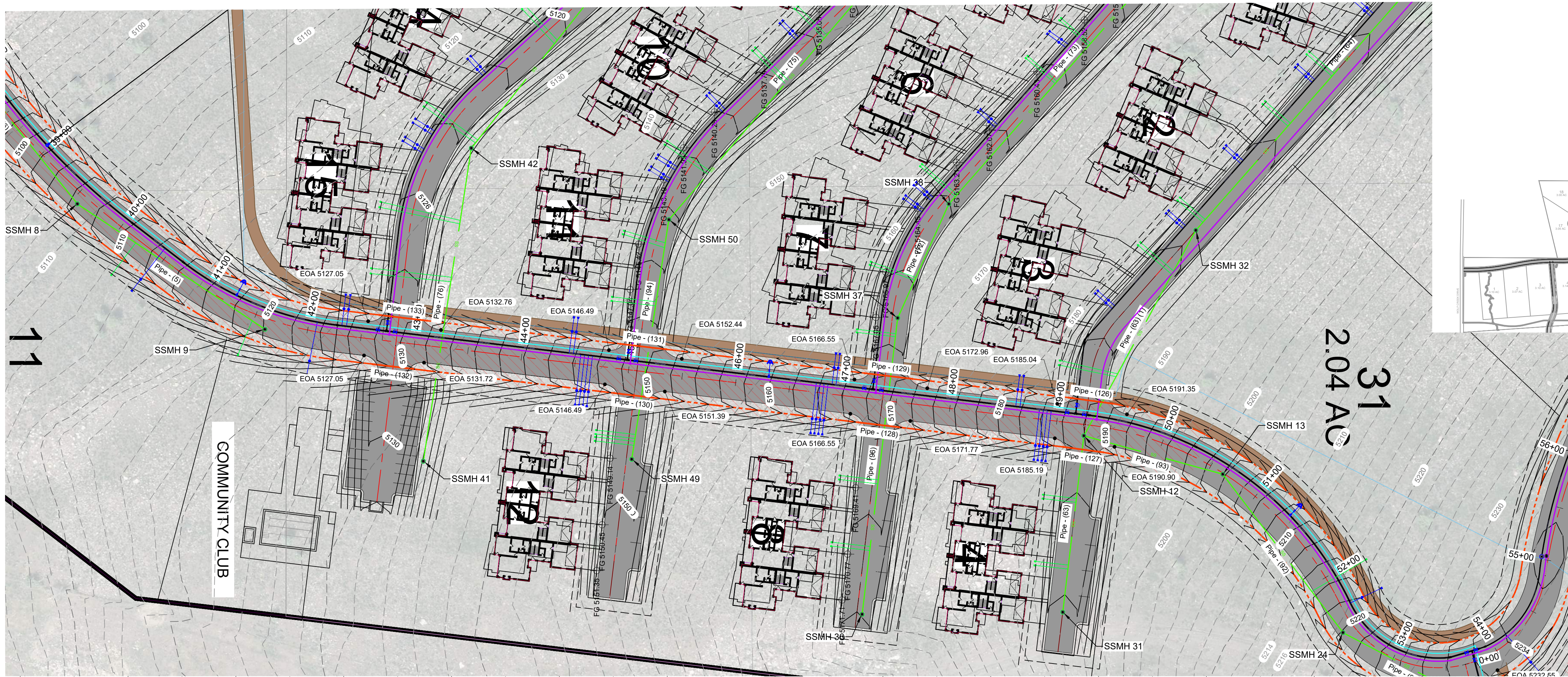
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PP3

PLAN AND PROFILE



REVISIONS	
DATE	DESCRIPTION

REGISTERED PROFESSIONAL ENGINEER
No. 8010280
RYAN A. CHRISTENSEN
STATE OF UTAH

PP4

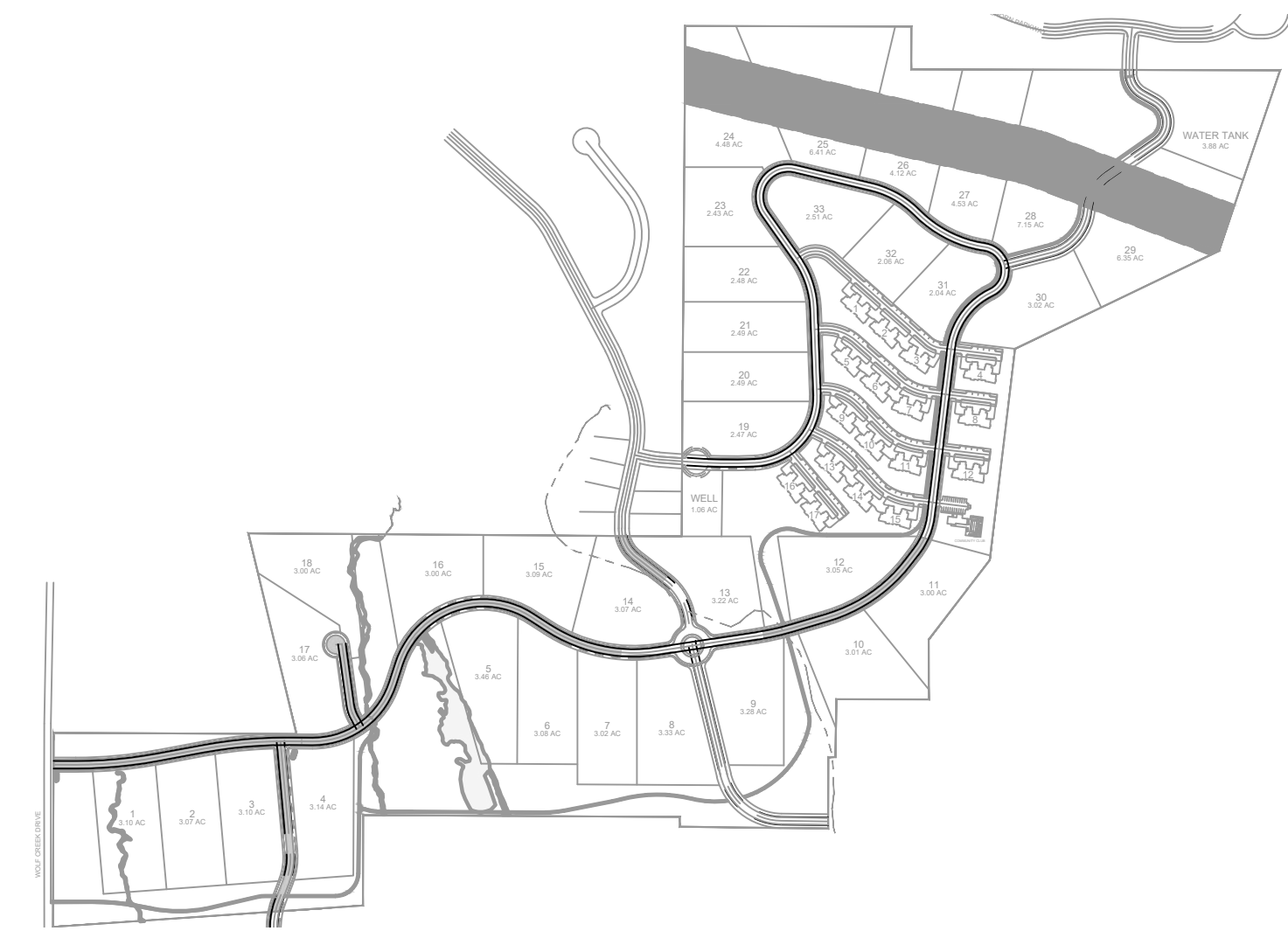
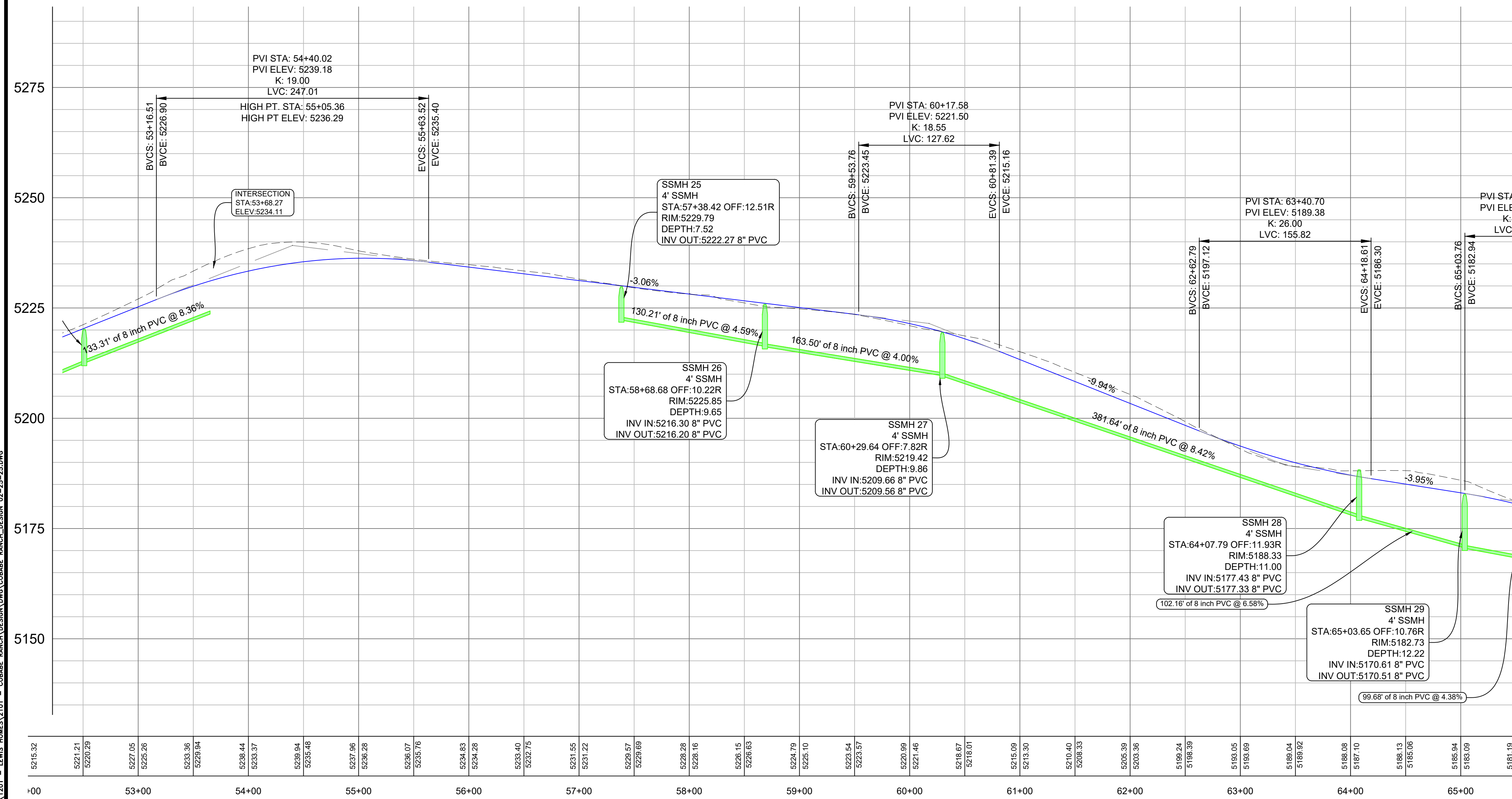
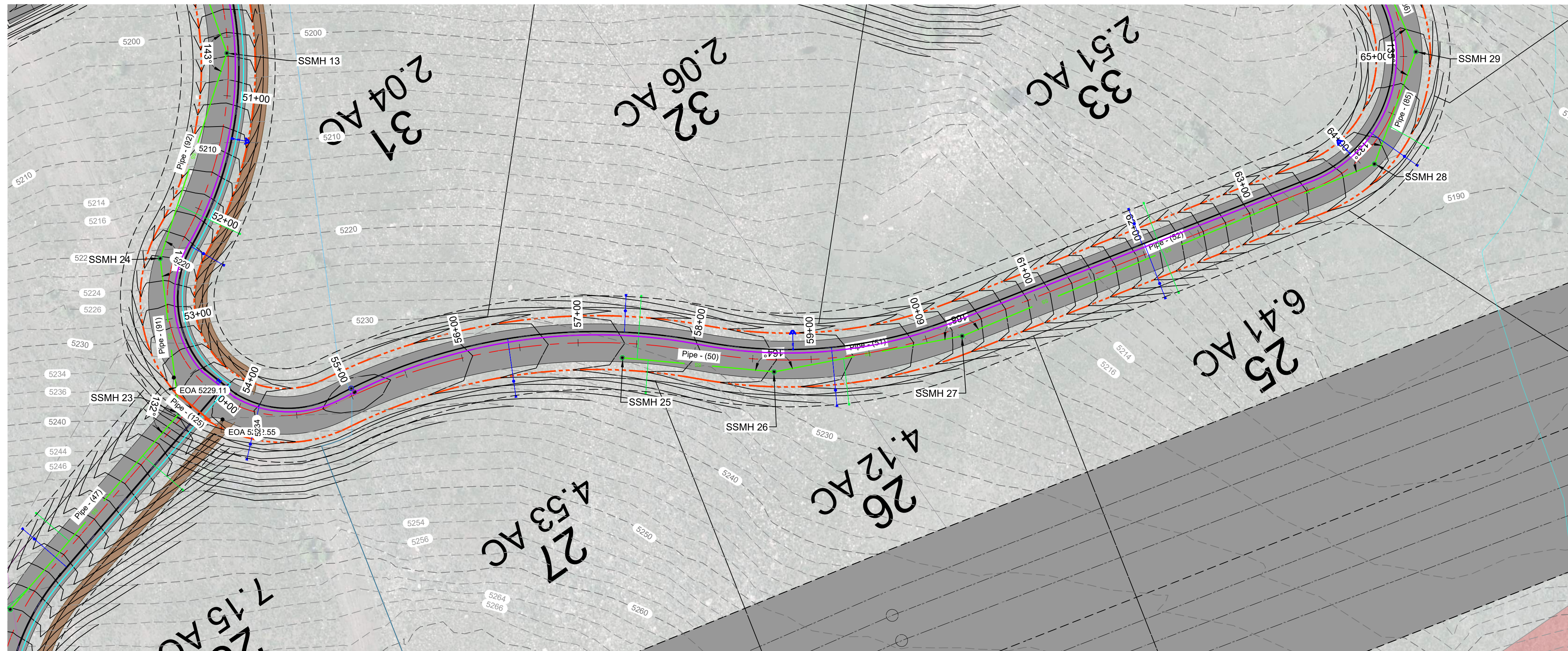
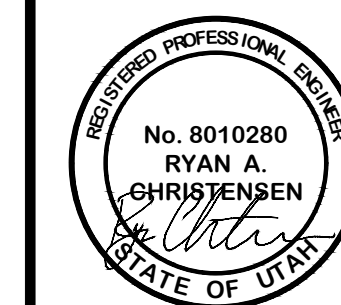
PLAN AND PROFILE
COBACE RANCH
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SCALE: 1" = 60'
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DESIGN: KAN/JKH
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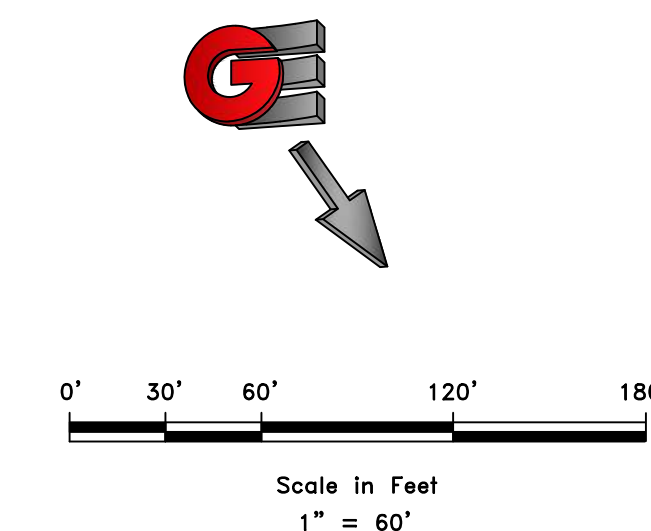
PLAN AND PROFILE

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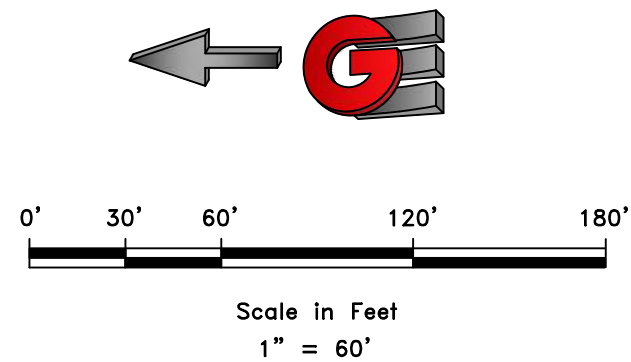
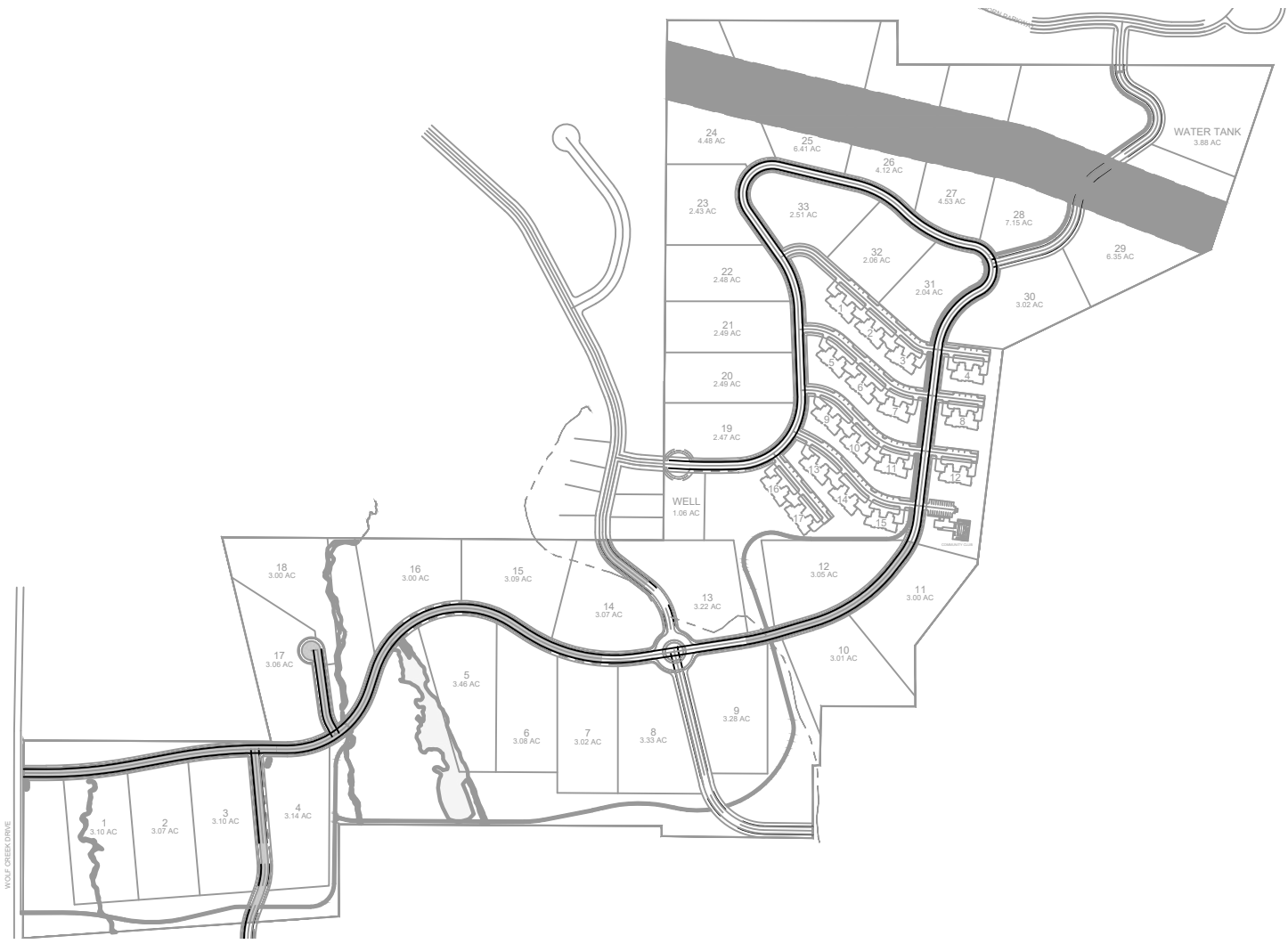
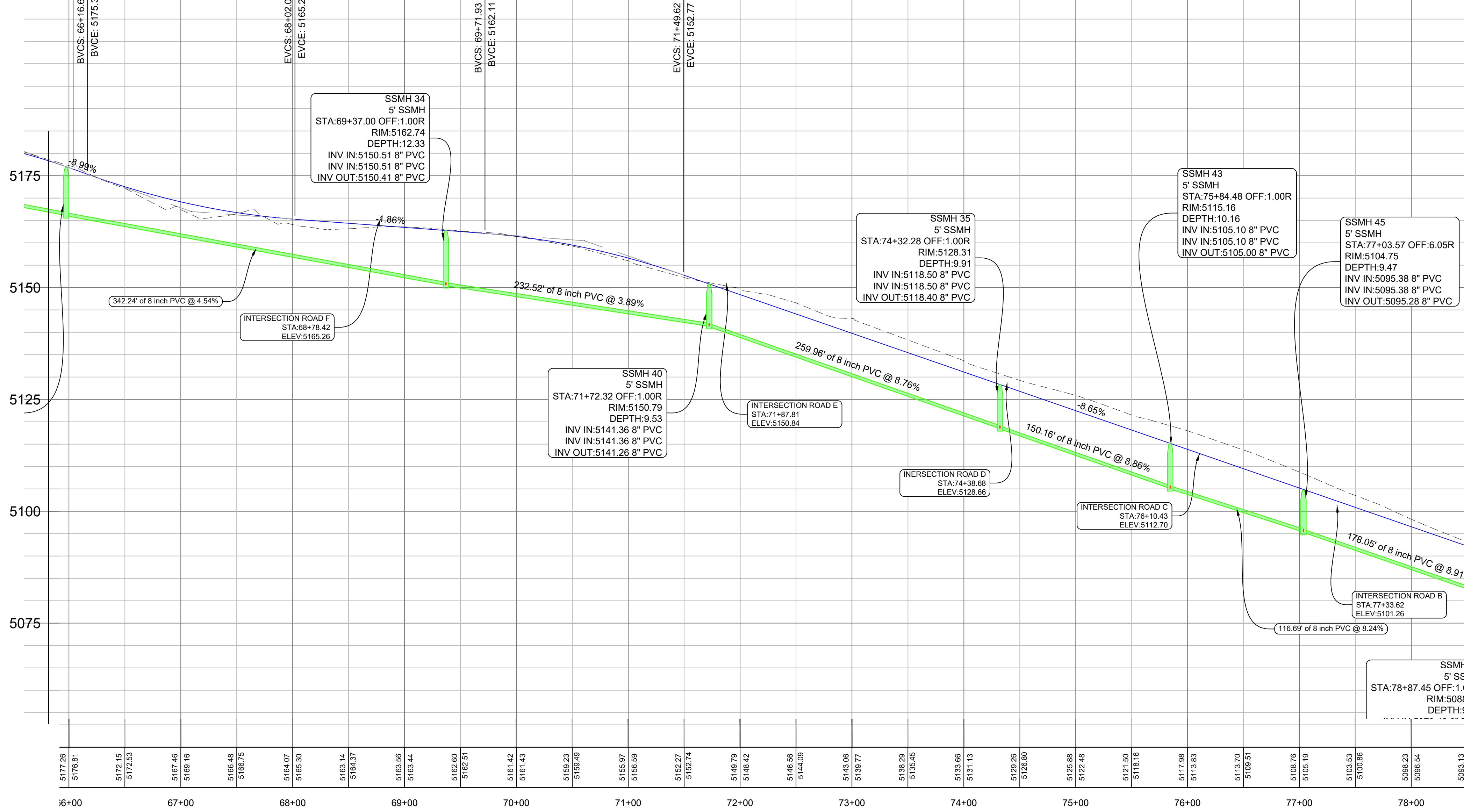
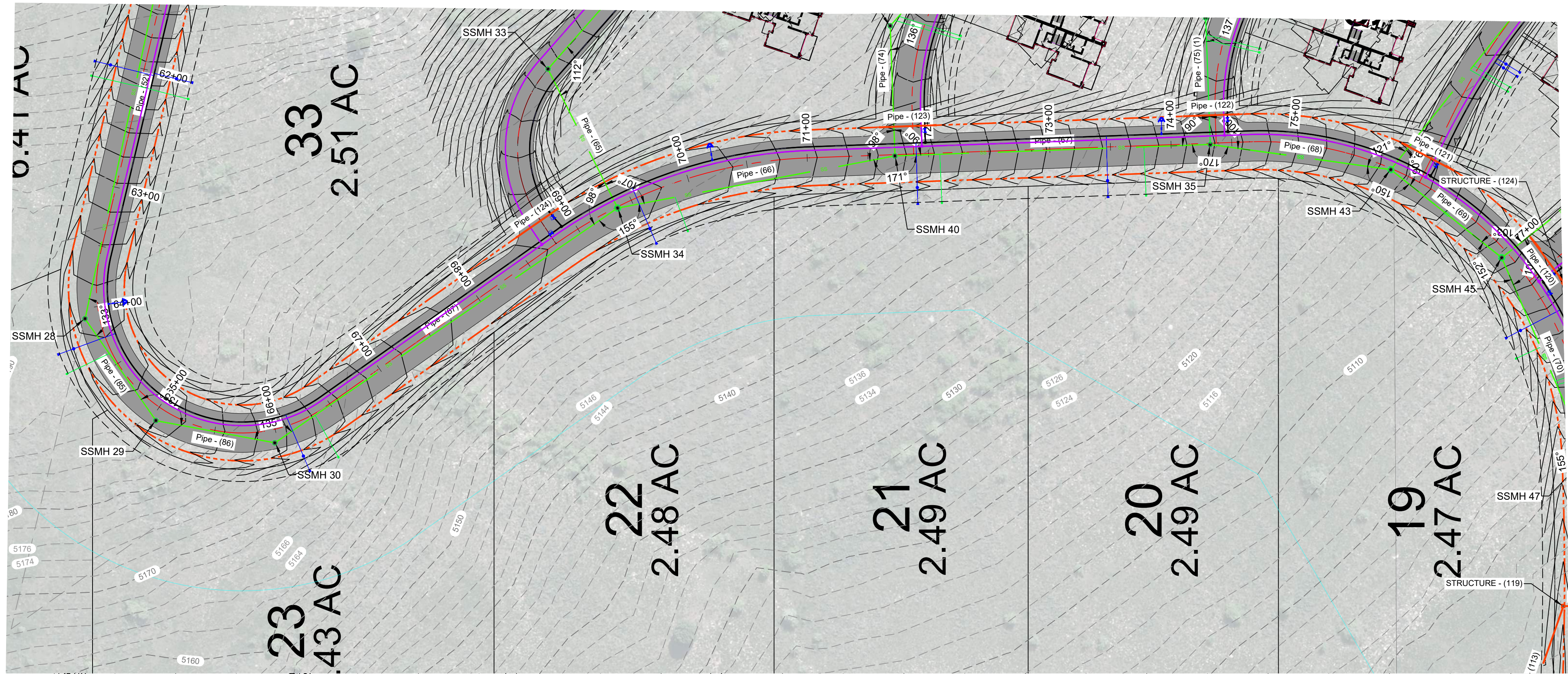
PLAN AND PROFILE
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PP5



PLAN AND PROFILE



REVISIONS	
DATE	DESCRIPTION

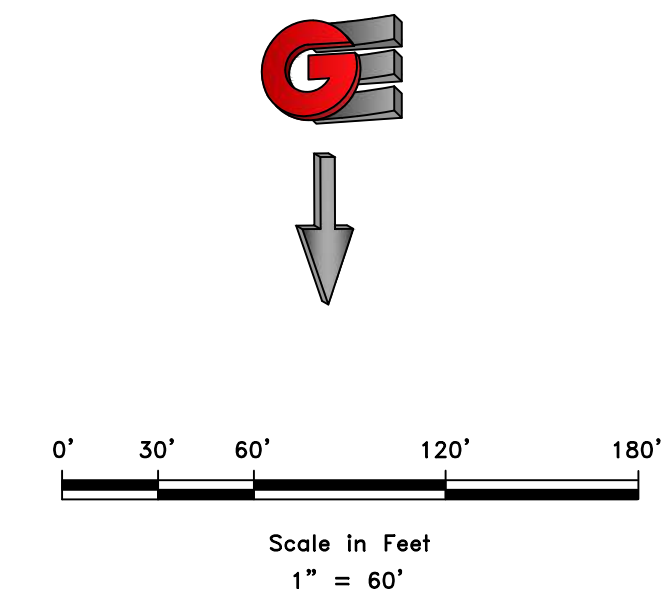
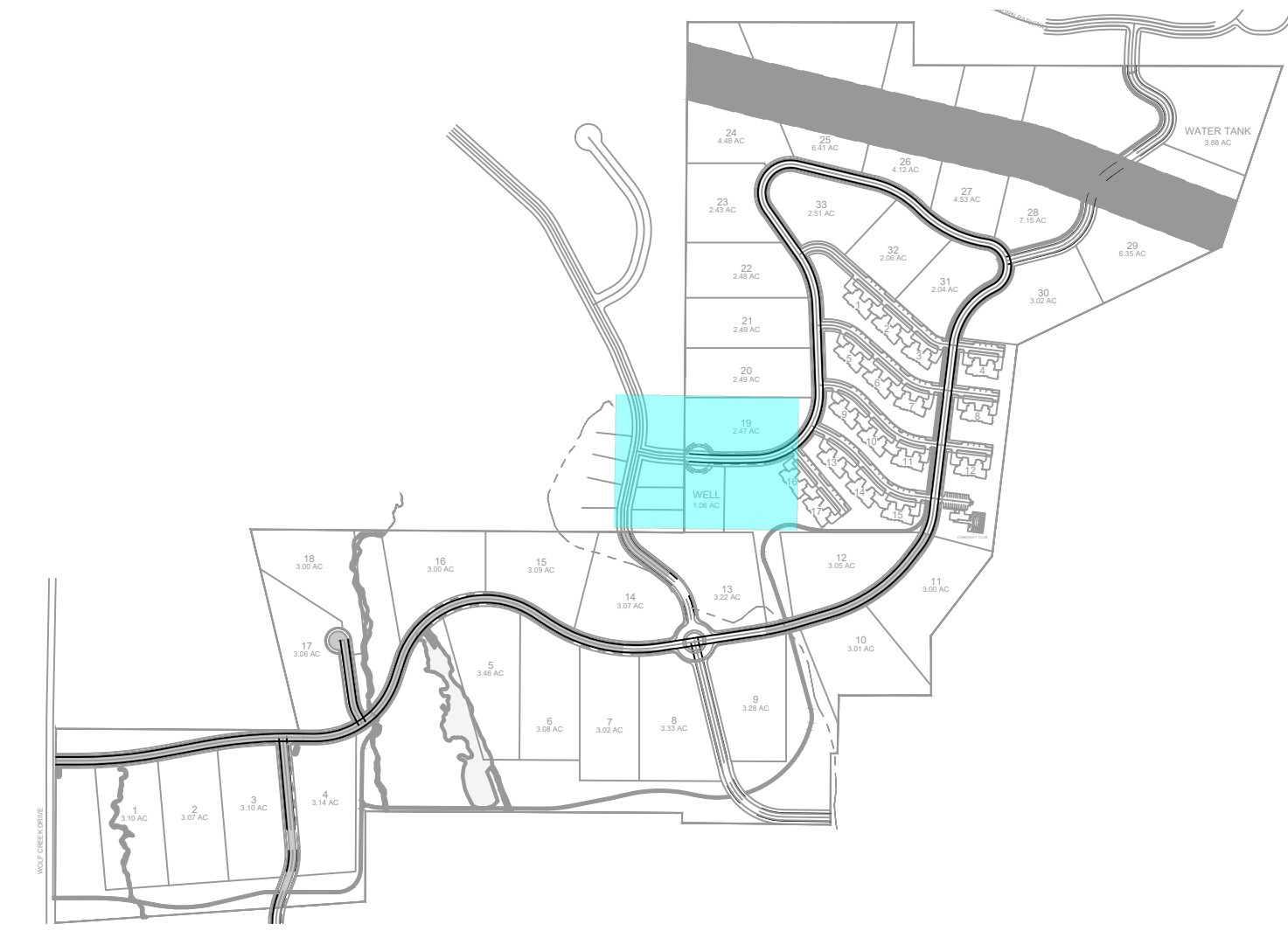
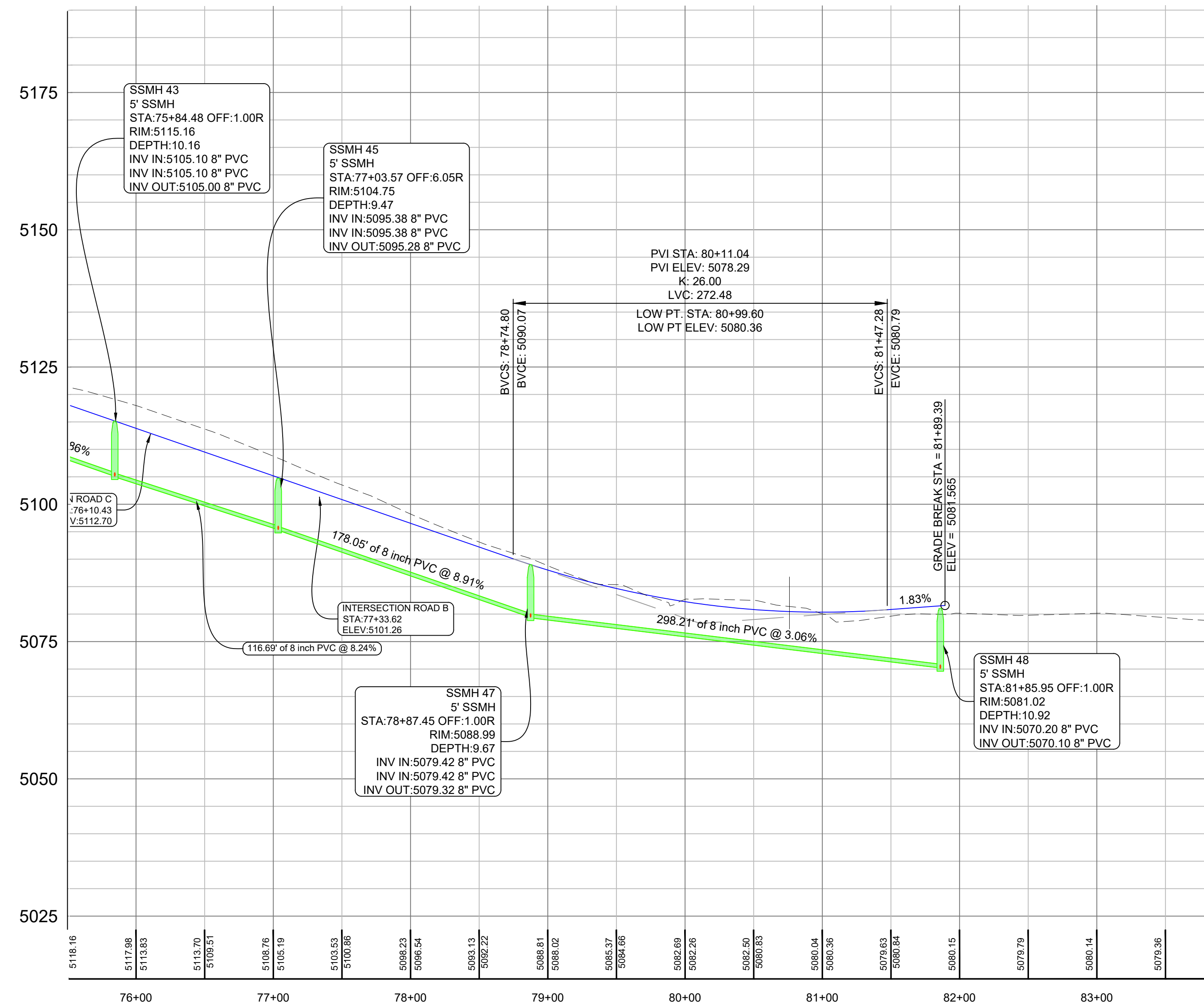
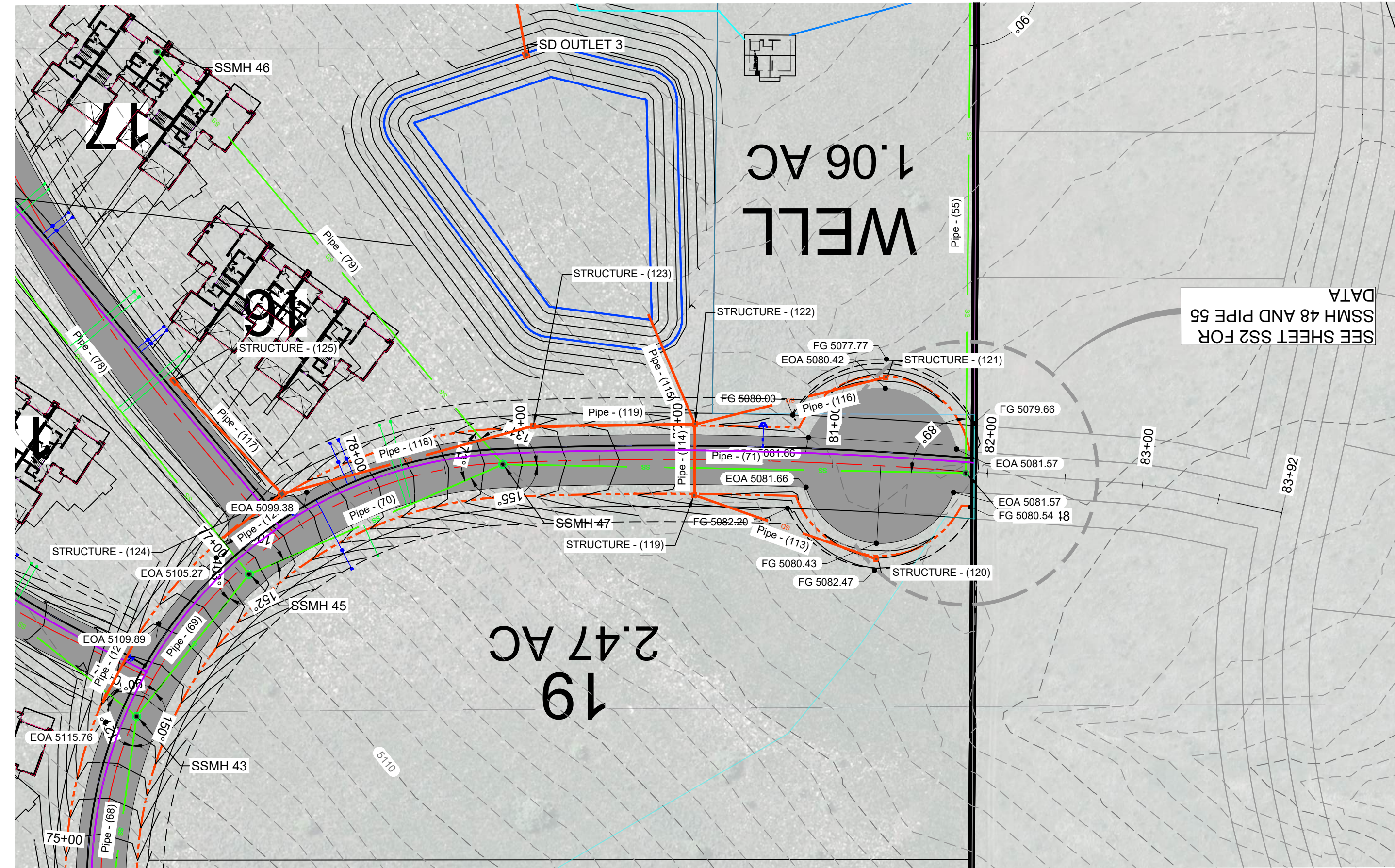
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PP6

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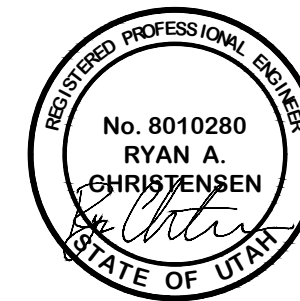
PLAN AND PROFILE
COBABE RANCH
SR-158 2800 N
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PLAN AND PROFILE



REVISIONS	
DATE	DESCRIPTION

DWG:



PLAN AND PROFILE

COBABE RANCH

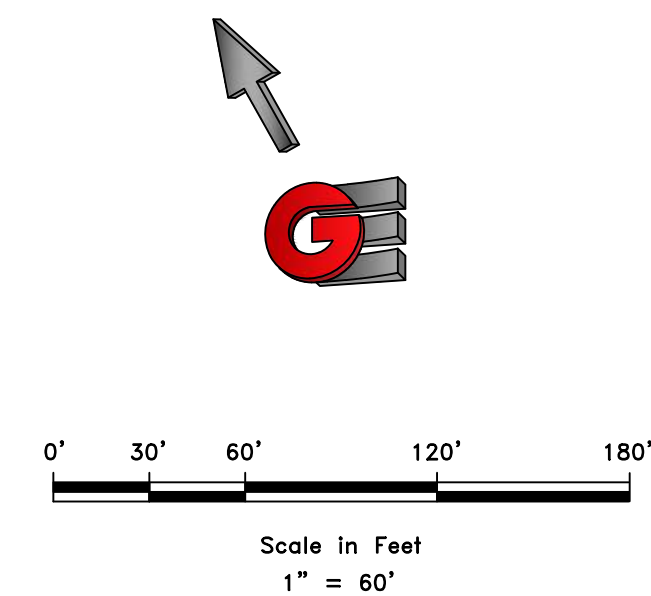
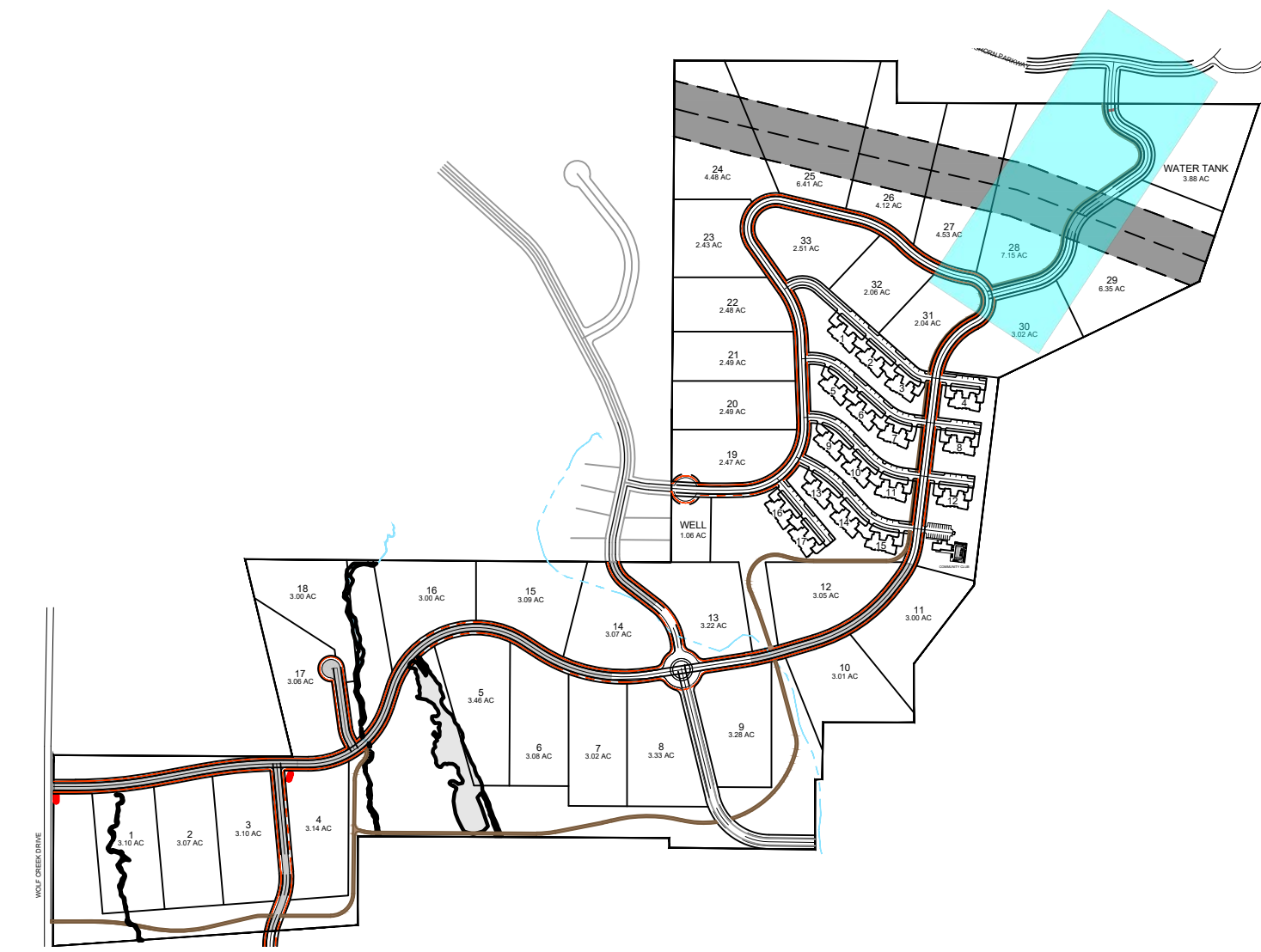
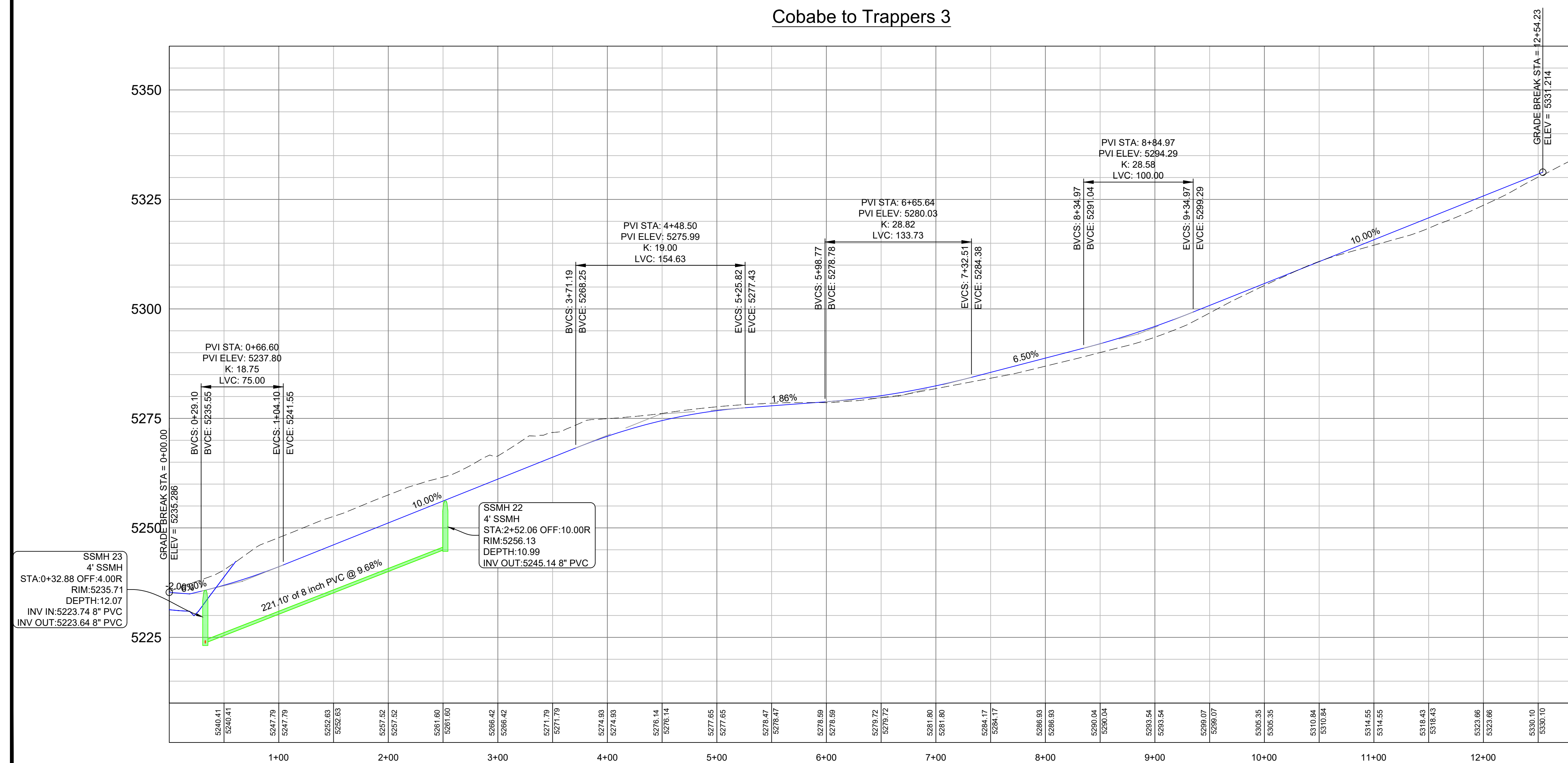
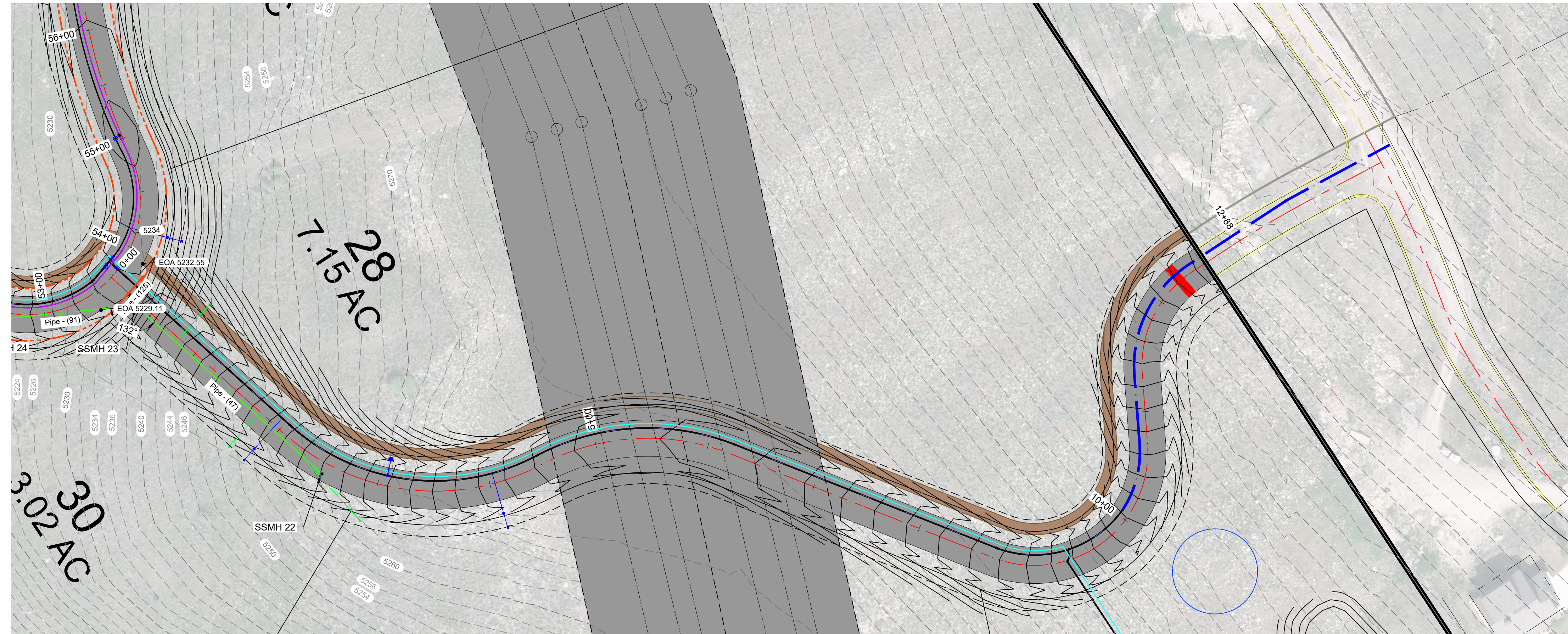
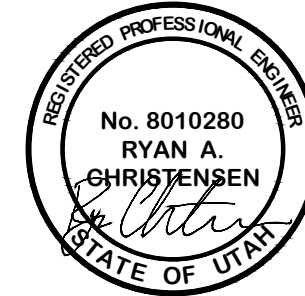
SR-158 2800 N

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PP7

PLAN AND PROFILE

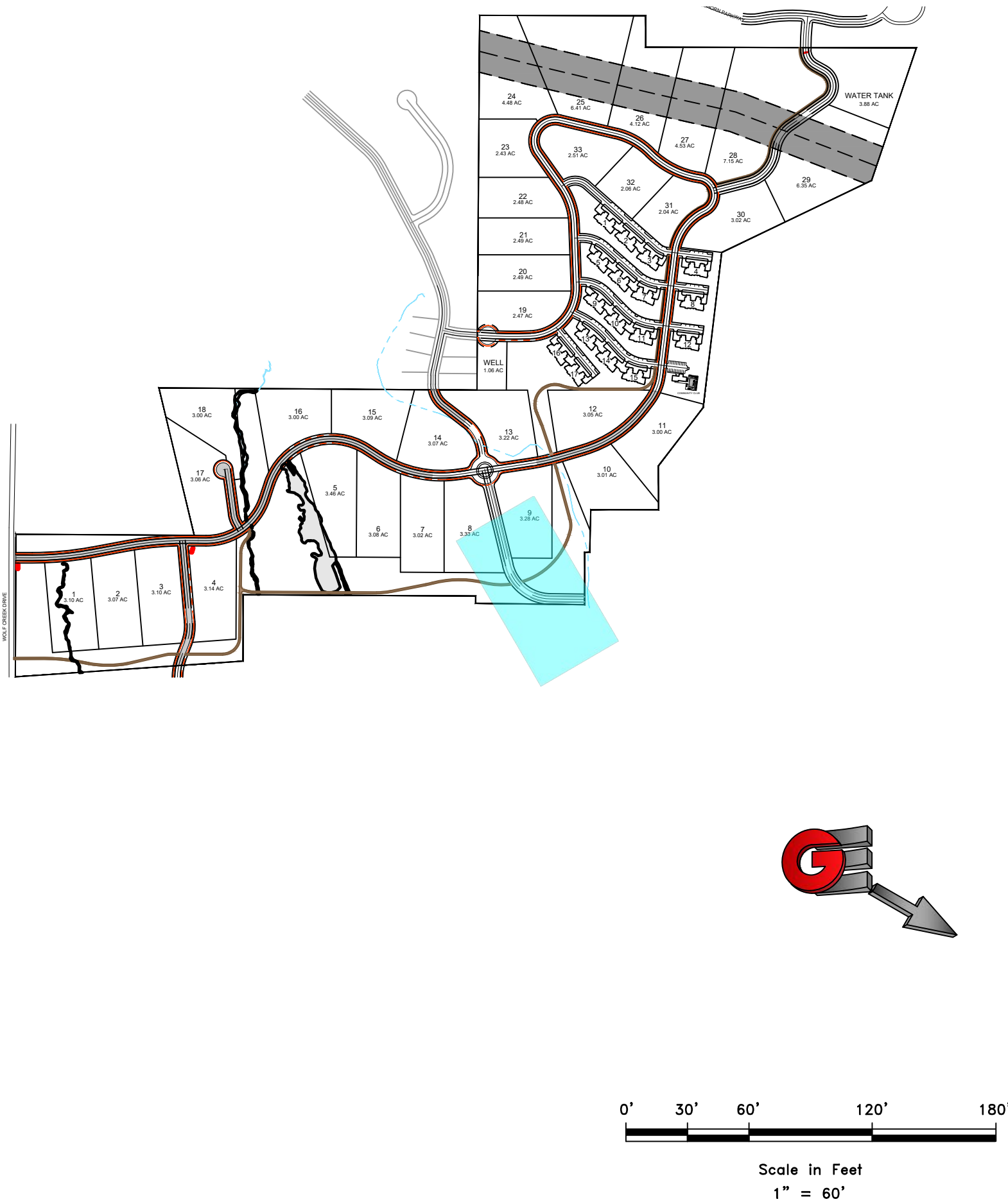
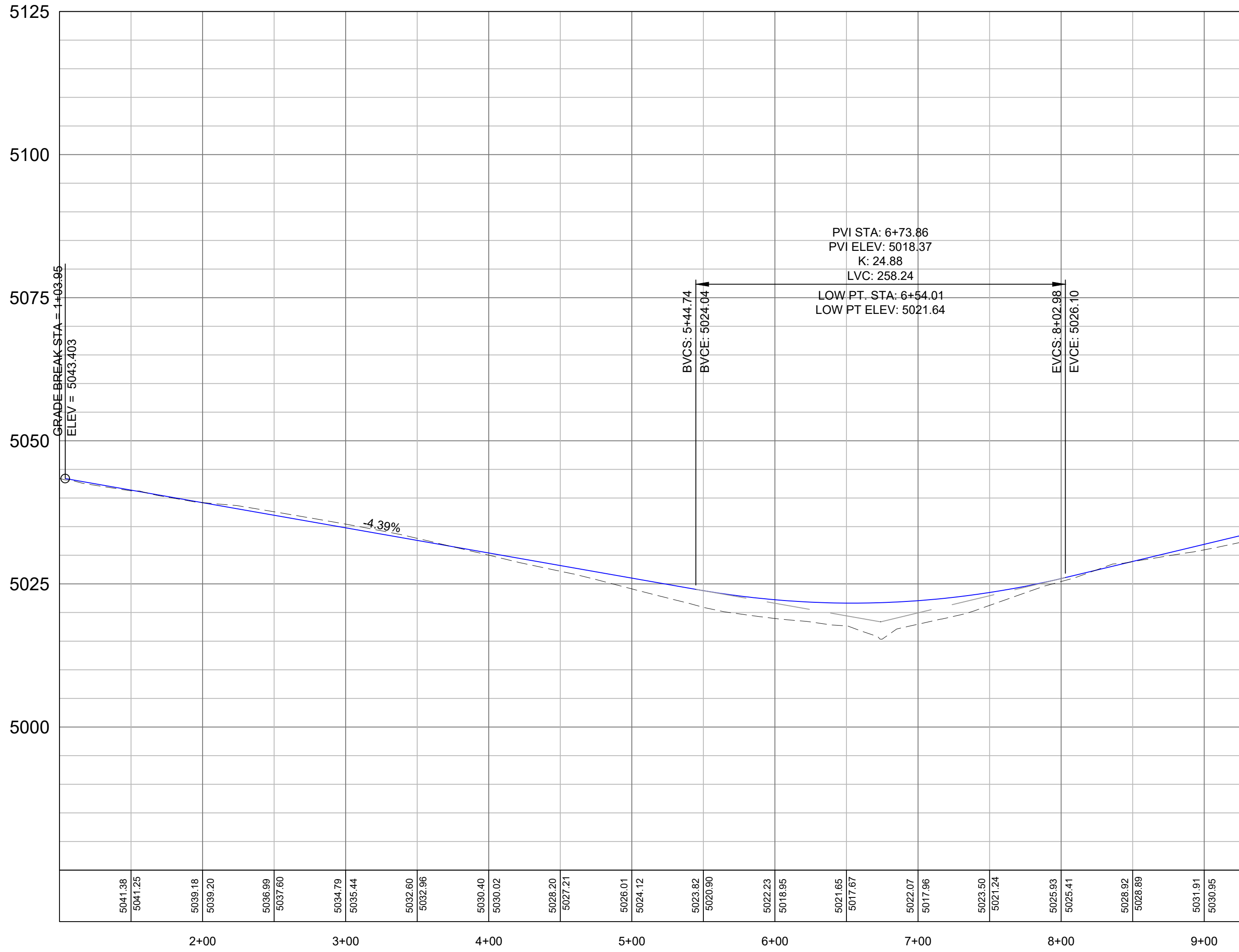
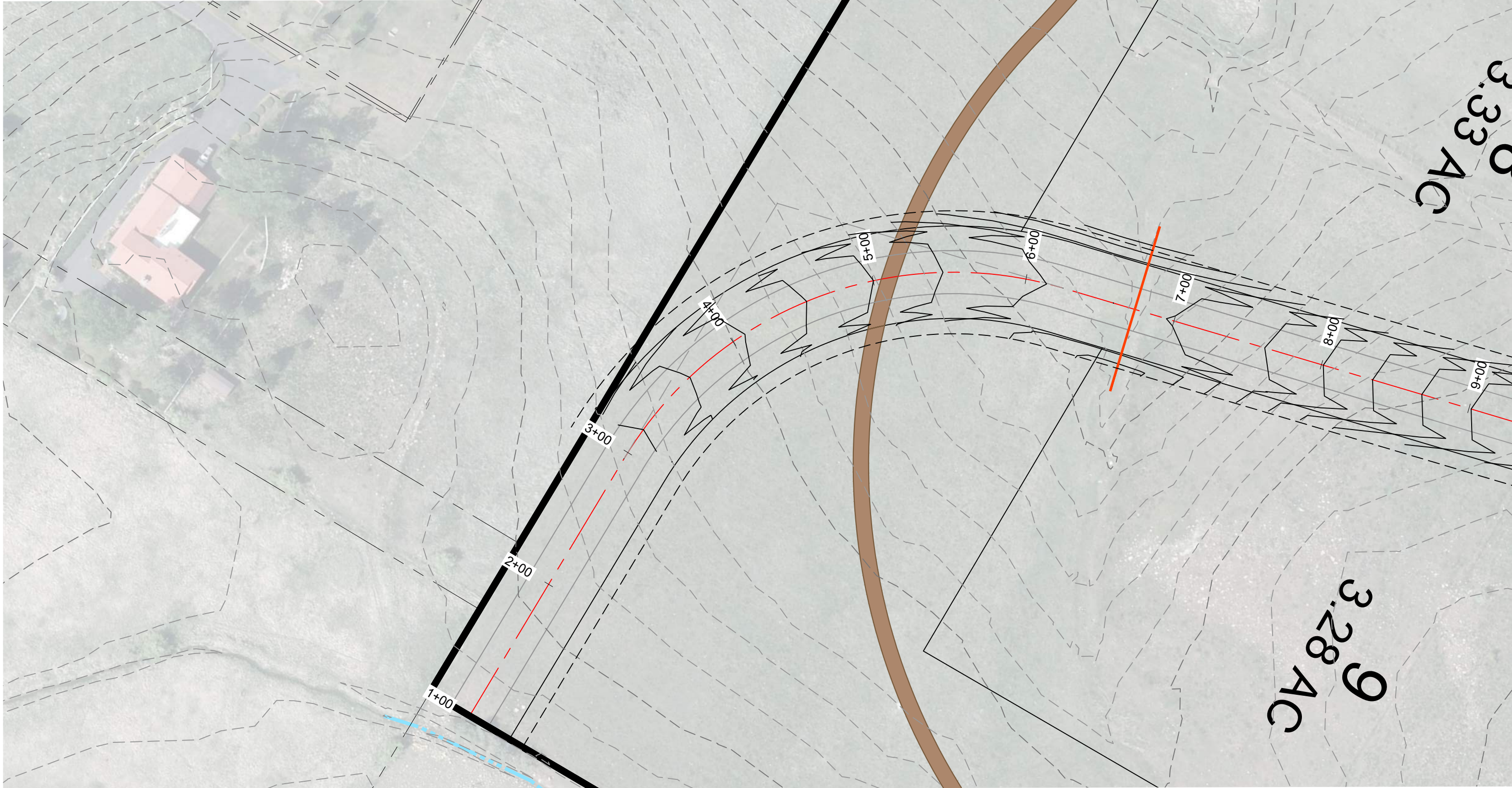
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PP8

DWG: _____



PPA



PLAN AND PROFILE ROAD A (FUTURE)

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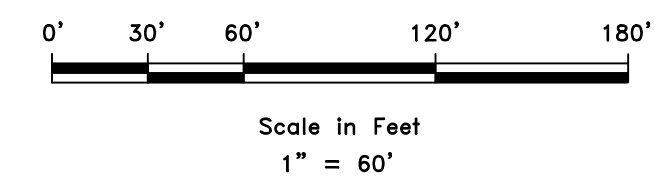
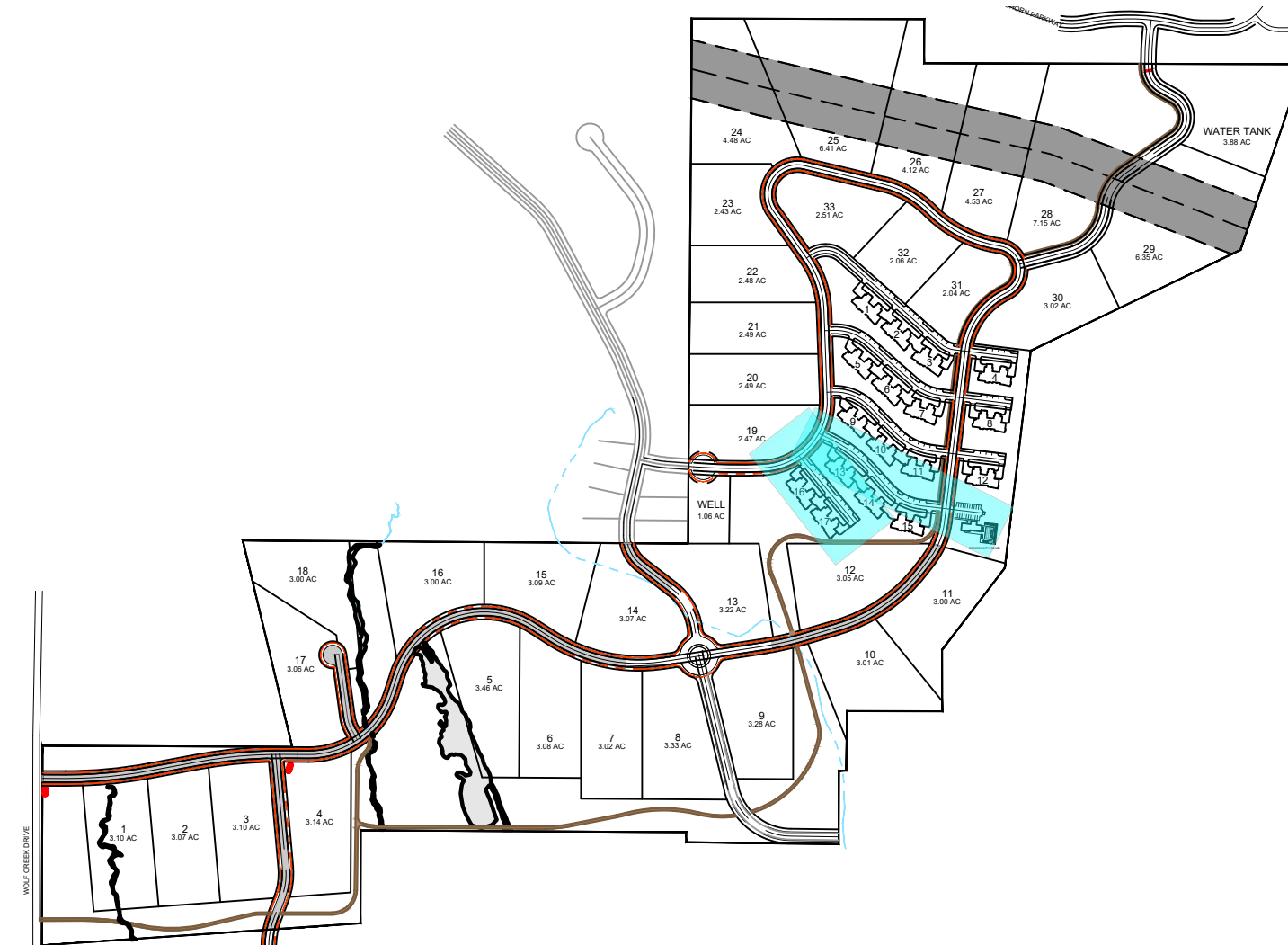
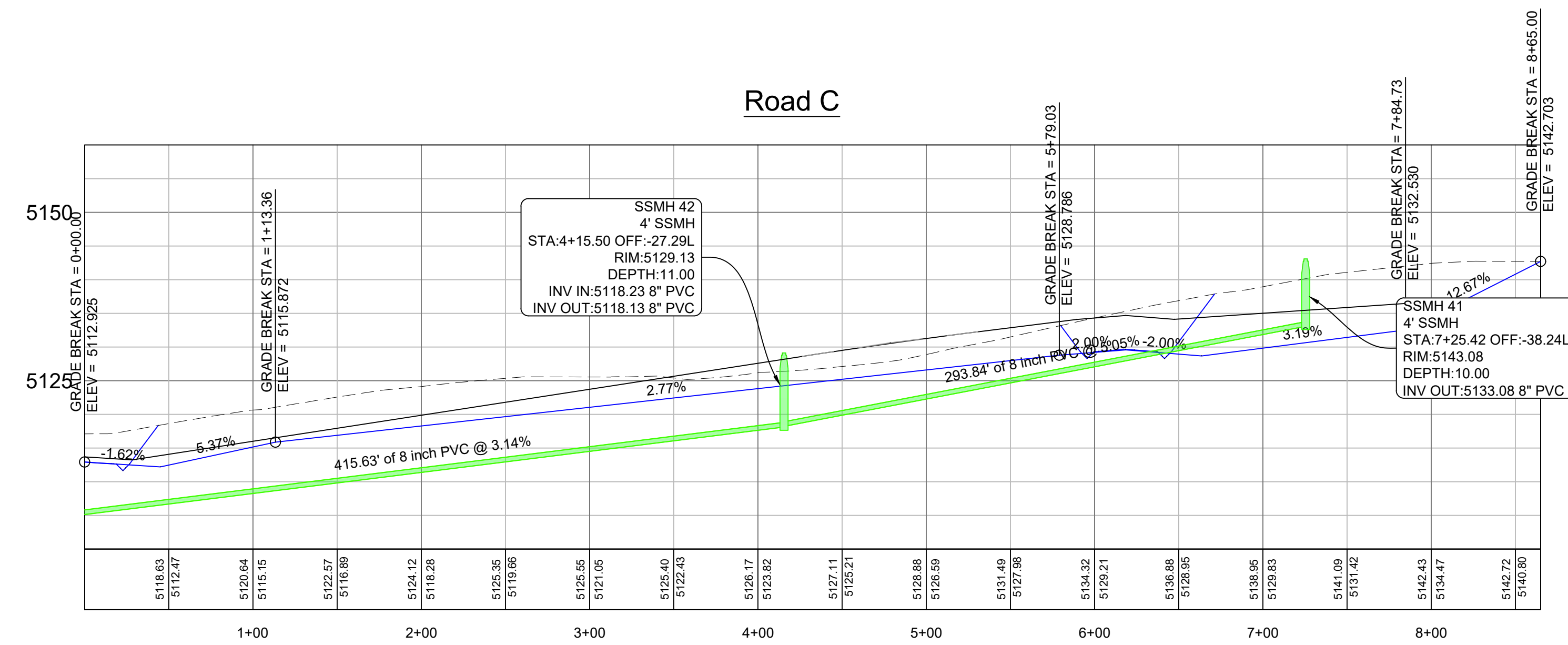
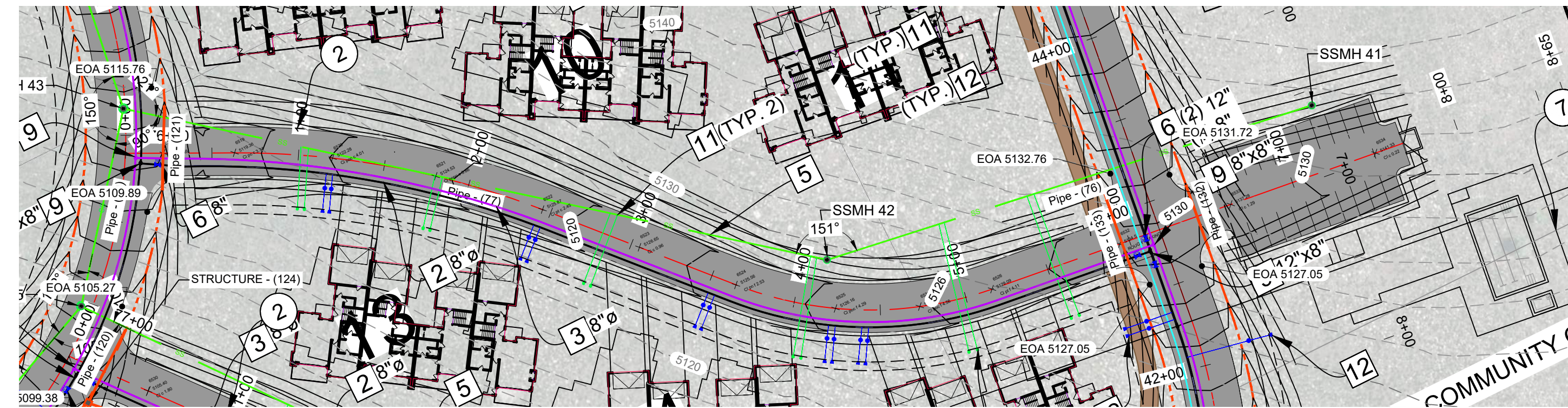
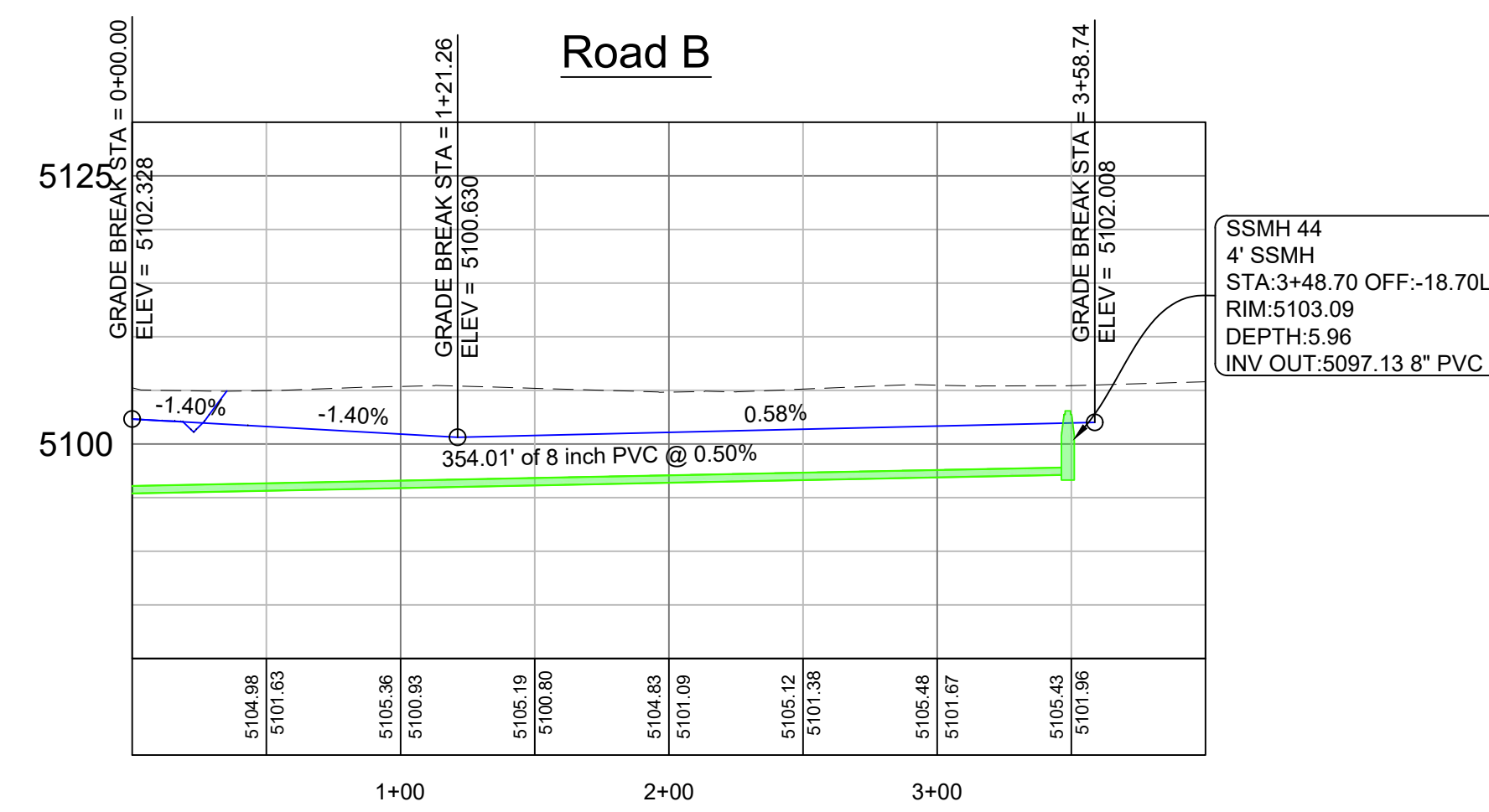
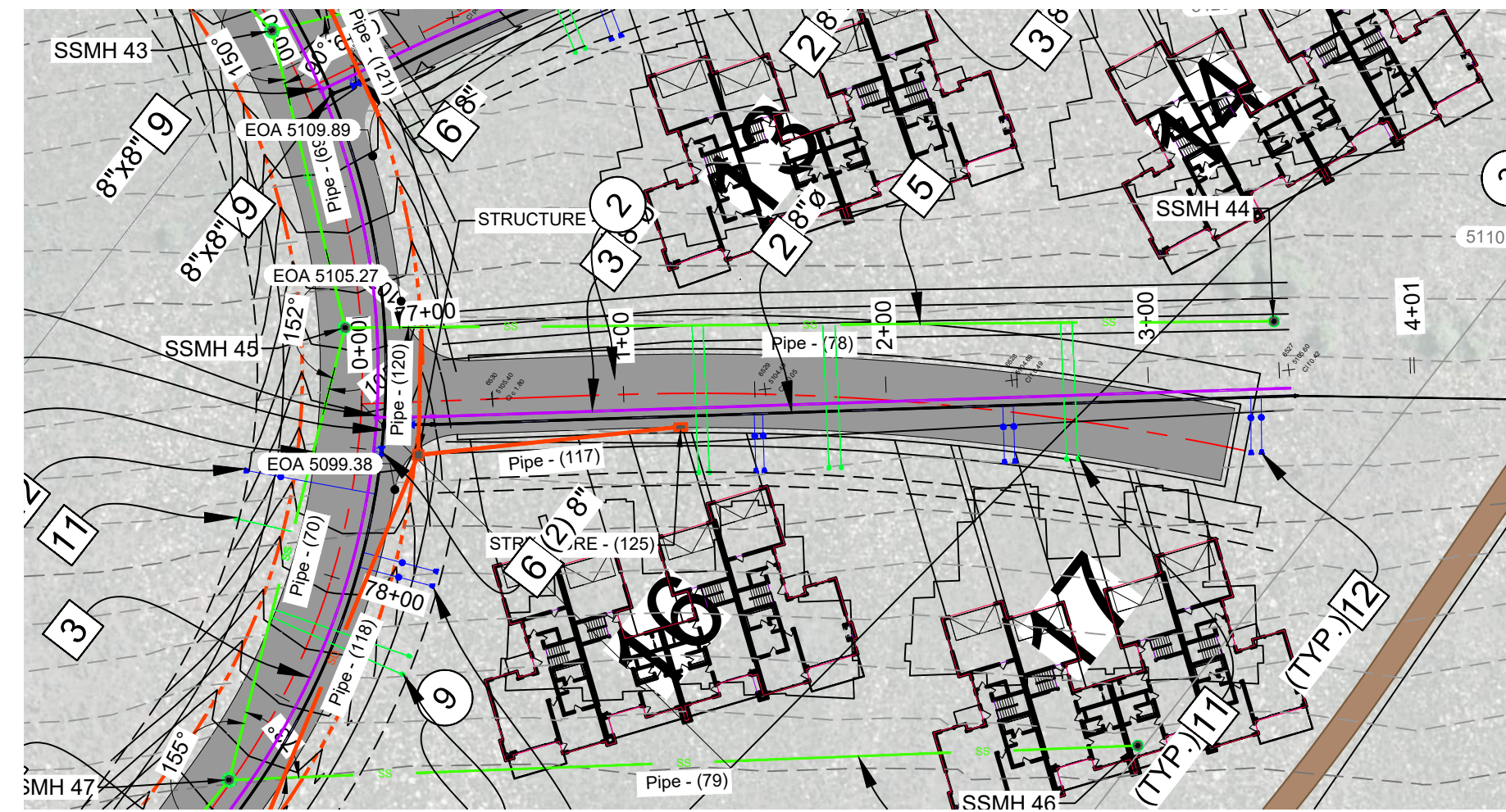
EDEN, WEBER, UTAH

DATE	REVISIONS	DESCRIPTION

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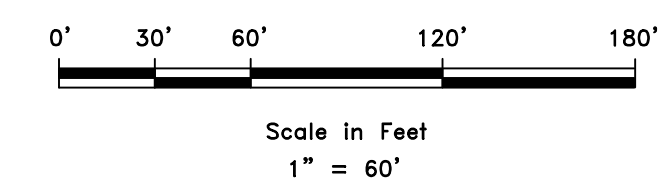
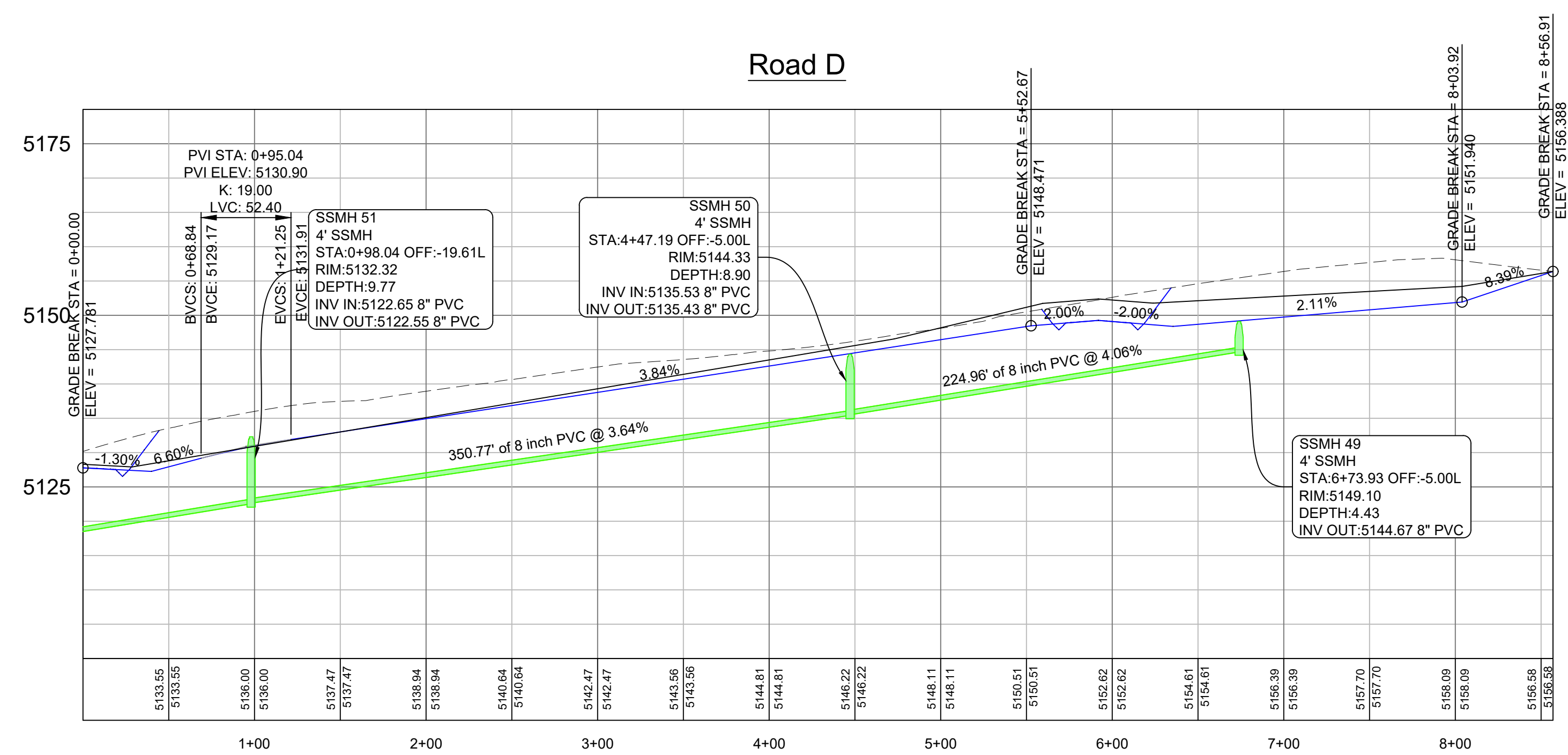
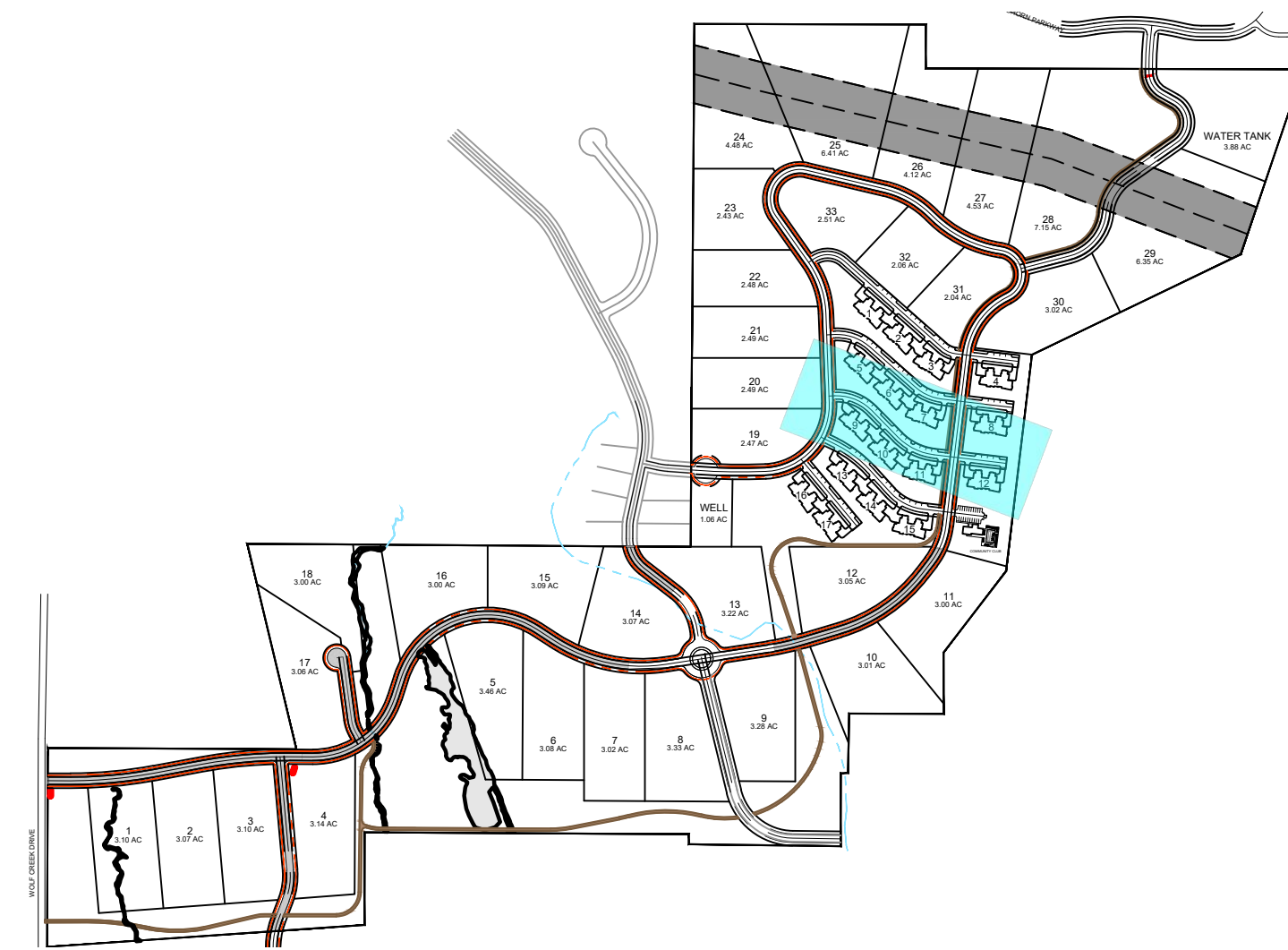
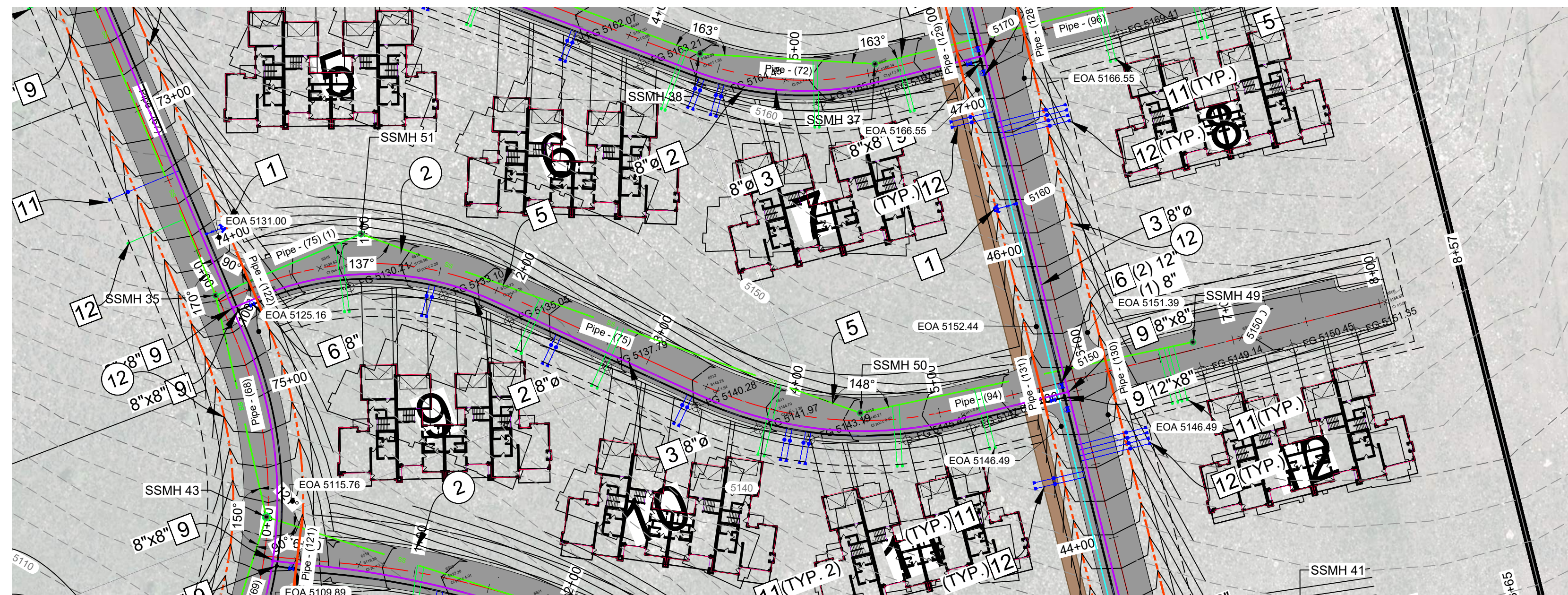
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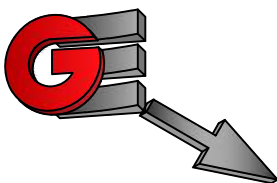
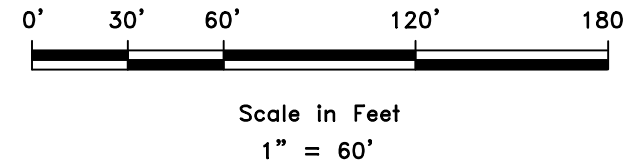
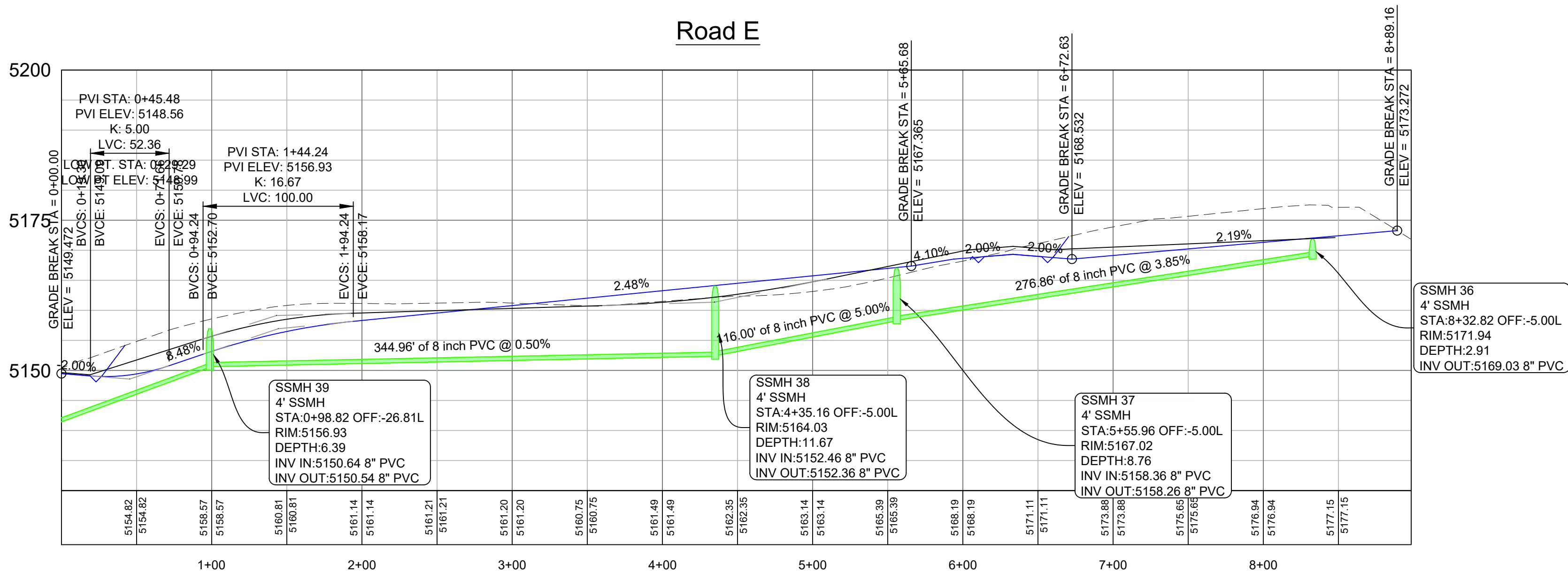
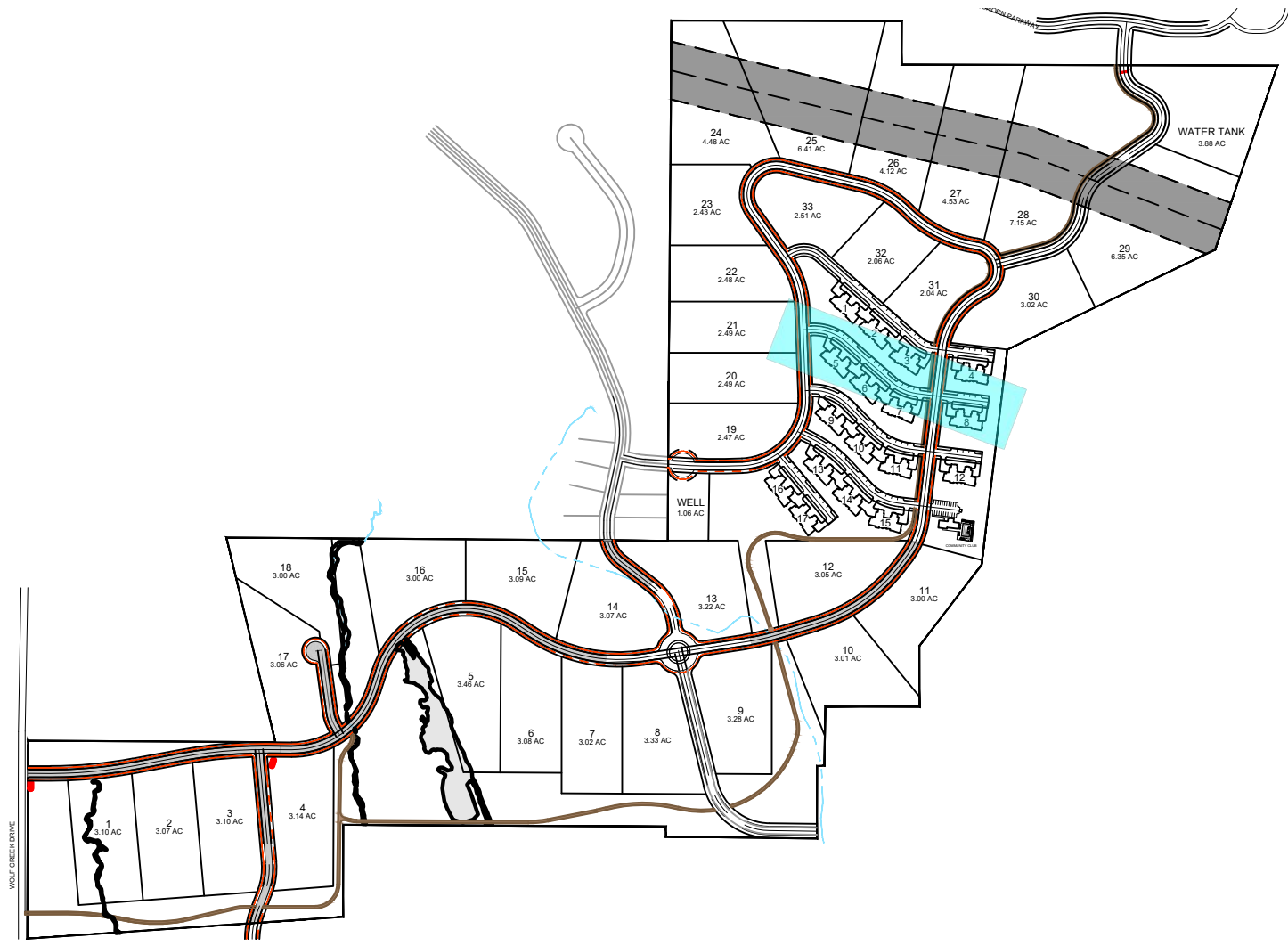
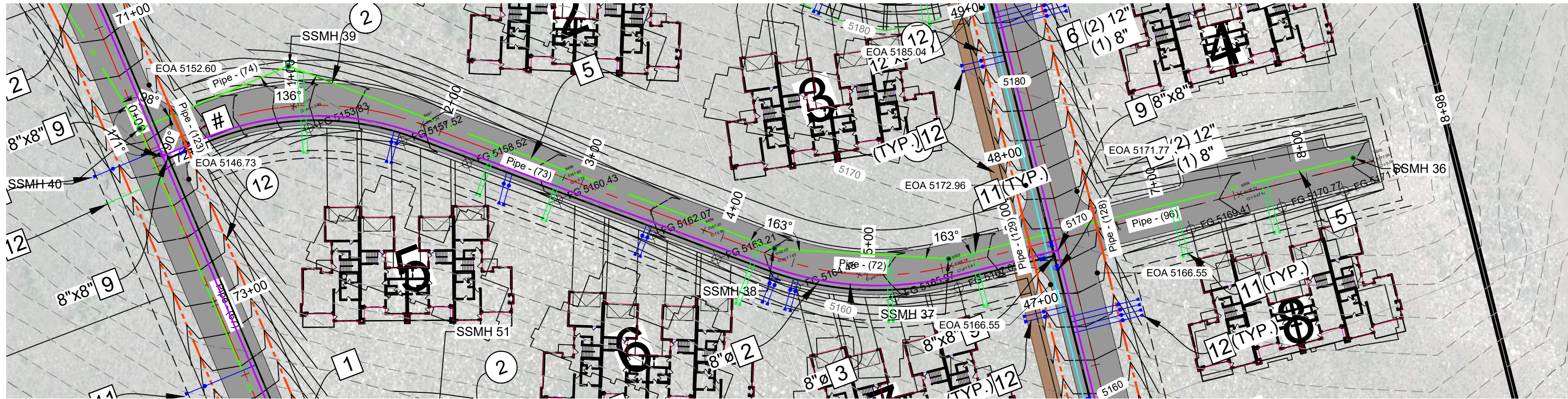
5150 SOUTH 3750 EAST, OGDEN, UT
84403 • 408.741.7777

PPB

- PLAN AND PROFILE ROAD B AND C COBABE RANCH SR-158 2800 N EDEN, WEBER, UTAH	REGISTERED PROFESSIONAL SURVEYOR No. 8010280 RYAN A. CHRISTENSEN <i>[Signature]</i> STATE OF UTAH <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">REVISIONS</td> <td style="width: 50%;"></td> </tr> <tr> <td style="text-align: center;">DATE</td> <td style="text-align: center;">DESCRIPTION</td> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table> SCALE: 1" = 60' DATE: 8-20-25 DESIGN: KANU/JKH DRAWN: KANU/JKH CHECKED: RC DWG: _____	REVISIONS		DATE	DESCRIPTION																
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DATE	DESCRIPTION																				



AL 1201 - LEWIS HOMES 2101 - COBARE RANCH DESIGN DWS COBARE RANCH DESIGN 02-25-25.DWG





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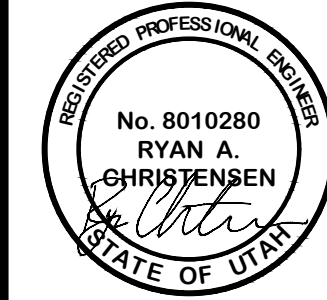
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OFFICE: 801.476.0202 FAX: 801.476.0066

PLAN AND PROFILE ROAD E

COBARE RANCH

SR-158 2800 N

EDEN, WEBER, UTAH

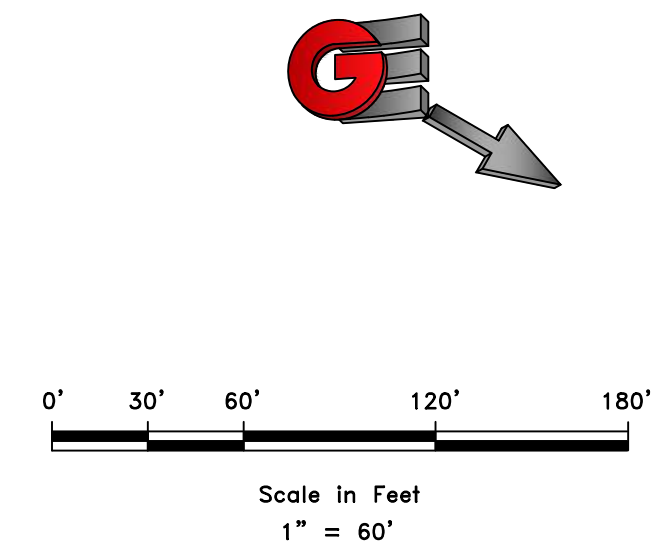
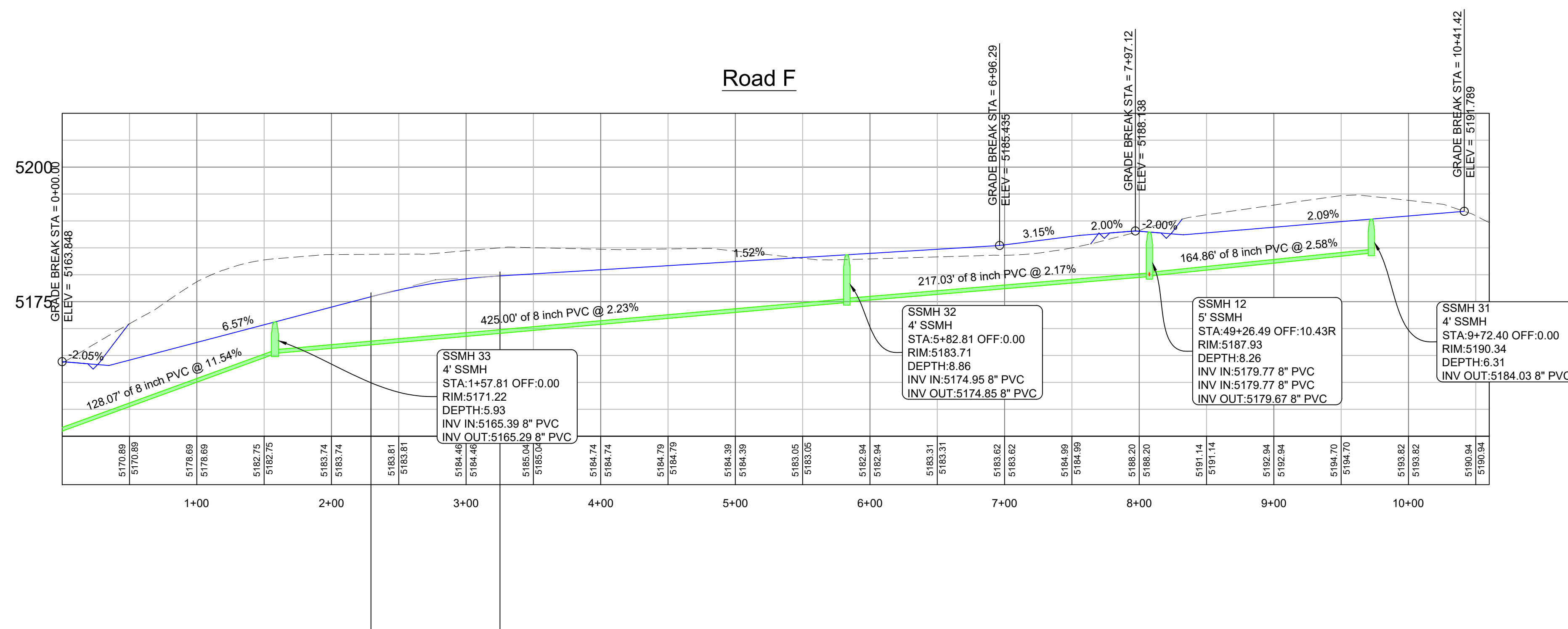
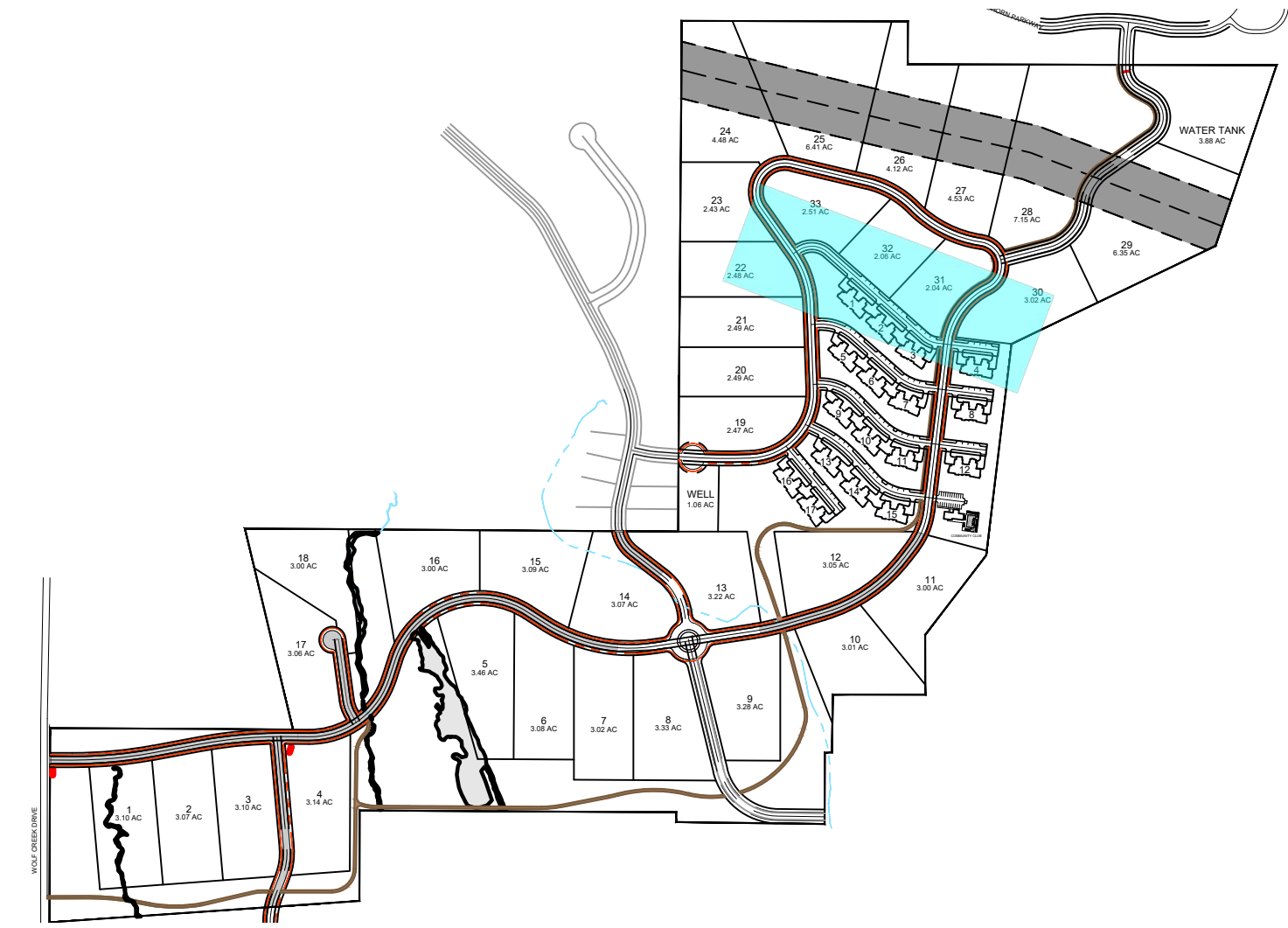


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PPE

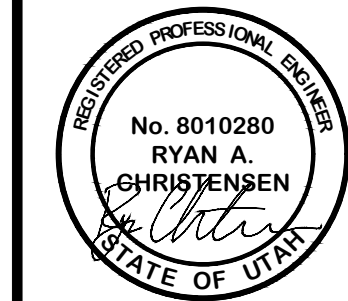


PLAN AND PROFILE ROAD F

COBABE RANCH

SR-158 2800 N

EDEN, WEBER, UTAH

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WATER DETAILS

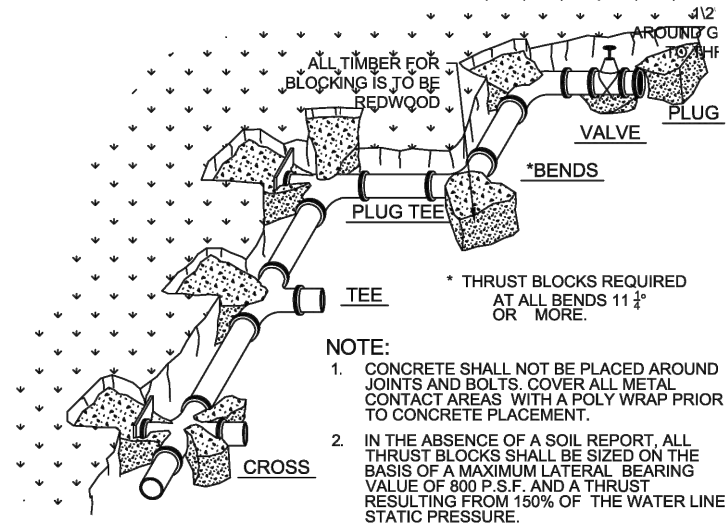


TABLE OF BEARING AREAS IN SQ. FT FOR CONCRETE THRUST BLOCKING

SIZE	BENDS				TEES*	GATE VALVES	DEAD ENDS	CROSS/BY PASS	CROSS/BY PASS
	90°	45°	22 1/2°	11 1/4°					
3	1.0	0.0	0.3	0	0.7	0.5	0.7	0.7	0.7
4	1.8	1.0	0.5	0	1.3	0.5	1.3	1.3	1.3
6	3.1	1.8	1.0	0	2.4	1.0	2.4	2.4	2.4
8	4.7	3.1	1.8	0	3.6	1.5	3.6	3.6	3.6
10	7.1	3.8	2.0	0	5.0	2.4	5.0	5.0	5.0
10	11.1	6.0	3.0	1.5	7.8	4.5	7.8	7.8	7.8
12	15.1	8.4	4.5	2.2	10.6	6.0	10.6	10.6	10.6
14	21.7	11.8	6.0	3.0	15.4	11.0	15.4	15.4	15.4
16	29.7	15.5	7.0	3.5	17.6	17.6	17.6	17.6	17.6
16	28.4	15.3	8.0	4.0	20.0	20.0	20.0	20.0	20.0
20	40.0	22.4	10.0	5.0	25.4	25.4	25.4	25.4	25.4
20	46.0	24.0	12.2	6.1	31.4	31.4	31.4	31.4	31.4
21	49.0	26.5	13.5	6.8	34.6	34.6	34.6	34.6	34.6
22	54.0	29.5	14.8	7.4	38.0	38.0	38.0	38.0	38.0
24	64.0	35.0	17.2	8.5	44.0	44.0	44.0	44.0	44.0
30	100.0	54.0	27.6	13.8	71.0	71.0	71.0	71.0	71.0
36	140.0	78.0	40.0	20.0	102.0	102.0	102.0	102.0	102.0

*ALL VALVES, TEES, CROSSES AND BENDS SHALL ALSO BE FITTED WITH MECHANICAL RESTRAINTS, SUCH AS MEGA LUG OR ROMA GRIP WITH FLUOROPOLYMER COATED BOLTS AND NUTS.

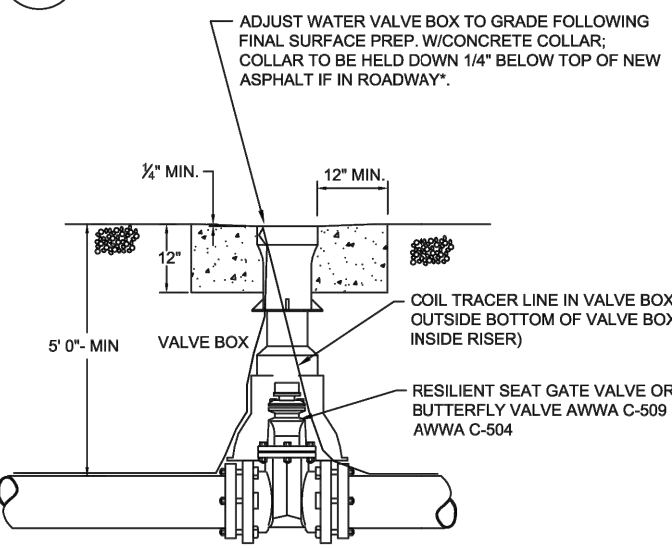
AREAS GIVEN IN TABLE ARE BASED UPON AN INTERNAL STATIC PRESSURE OF 100 P.S.I. AND A SOIL BEARING CAPACITY OF 1000 LBS PER SQ. FT. BEARING AREAS FOR ANY PRESSURE AND SOIL BEARING CAPACITY MAY BE OBTAINED BY MULTIPLYING THE TABULATED VALUES BY A CORRECTION FACTOR "F".

$$F = \frac{\text{ACTUAL SPECIFIED TEST PRESSURE IN HUNDREDS OF LBS/SQ. IN.}}{\text{ACTUAL SOIL BEARING CAPACITY IN THOUSANDS OF LBS.}}$$

EXAMPLE: TO FIND BEARING AREA FOR 8"-90° BEND WITH A STATIC INTERNAL PRESSURE OF 150 P.S.I AND WITH A SOIL BEARING CAPACITY OF 3000 LBS. PER SQ. FT.

0.5 X 7.1 = 3.56 ~ 4 SQ. FT. (~OR 2FT. LONG BY 2FT. HIGH.)

1 THRUST BLOCK DETAIL

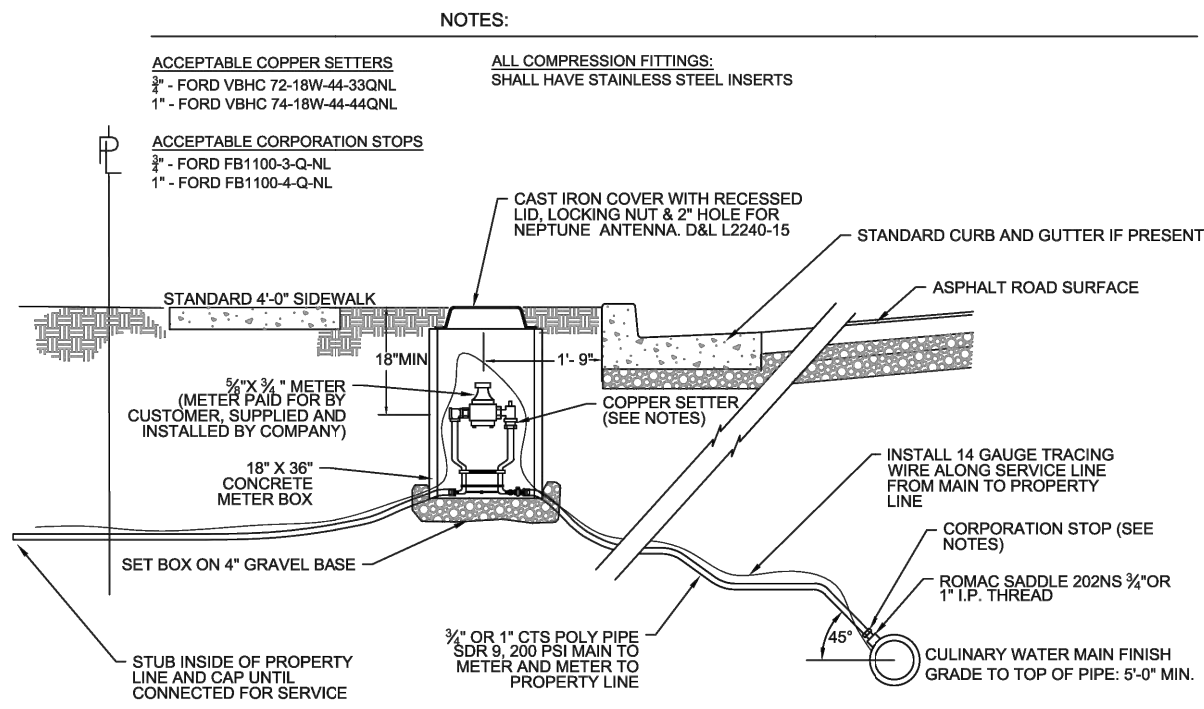


NOTES:

1. VALVE BOX, RISER AND LID MUST COME FROM THE SAME MFR., BE INTENDED FOR USE TOGETHER AND SHALL BE WITHIN PUBLISHED DIMENSION TOLERANCES.
2. IF LOCATED IN ROADWAY W/ SPEED LIMIT OF 40 MPH OR GREATER, LID SHALL BE HEAVY AND EXTRA DEEP.
3. VALVES MUST BE INSTALLED ON EACH SIDE OF TEE'S AND CROSSES, UNLESS THERE IS A VALVE WITHIN 200 FEET OF SAID FITTINGS.

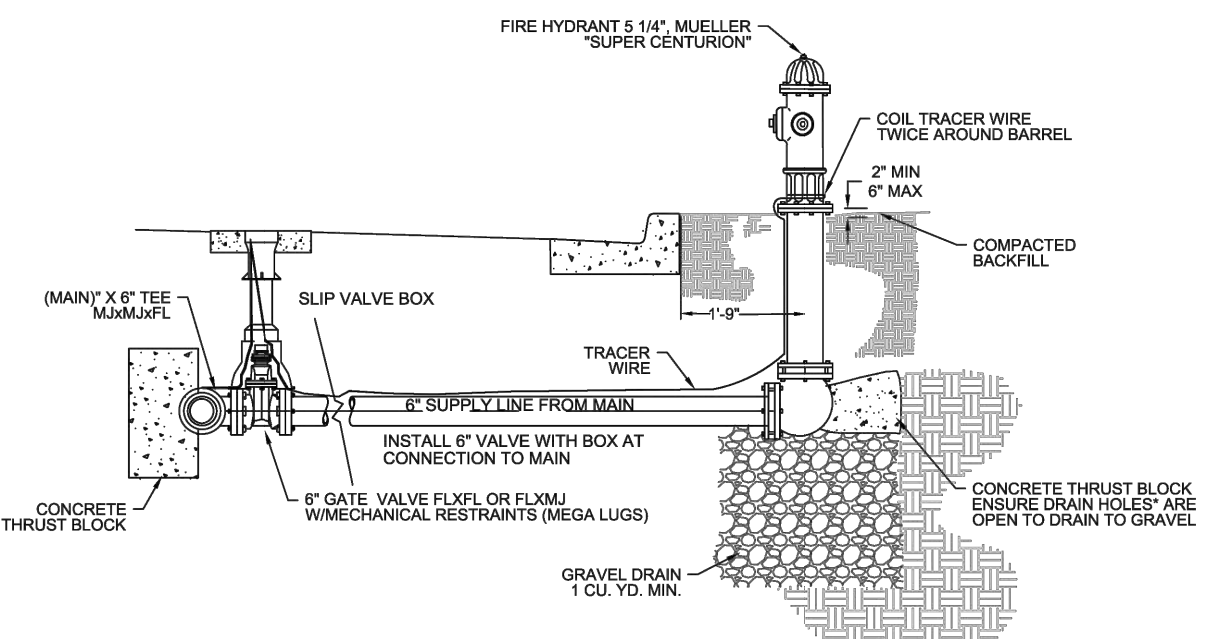
2 TYPICAL VALVE DETAIL

NTS



TYPICAL WATER CONNECTION\RE-CONNECTION

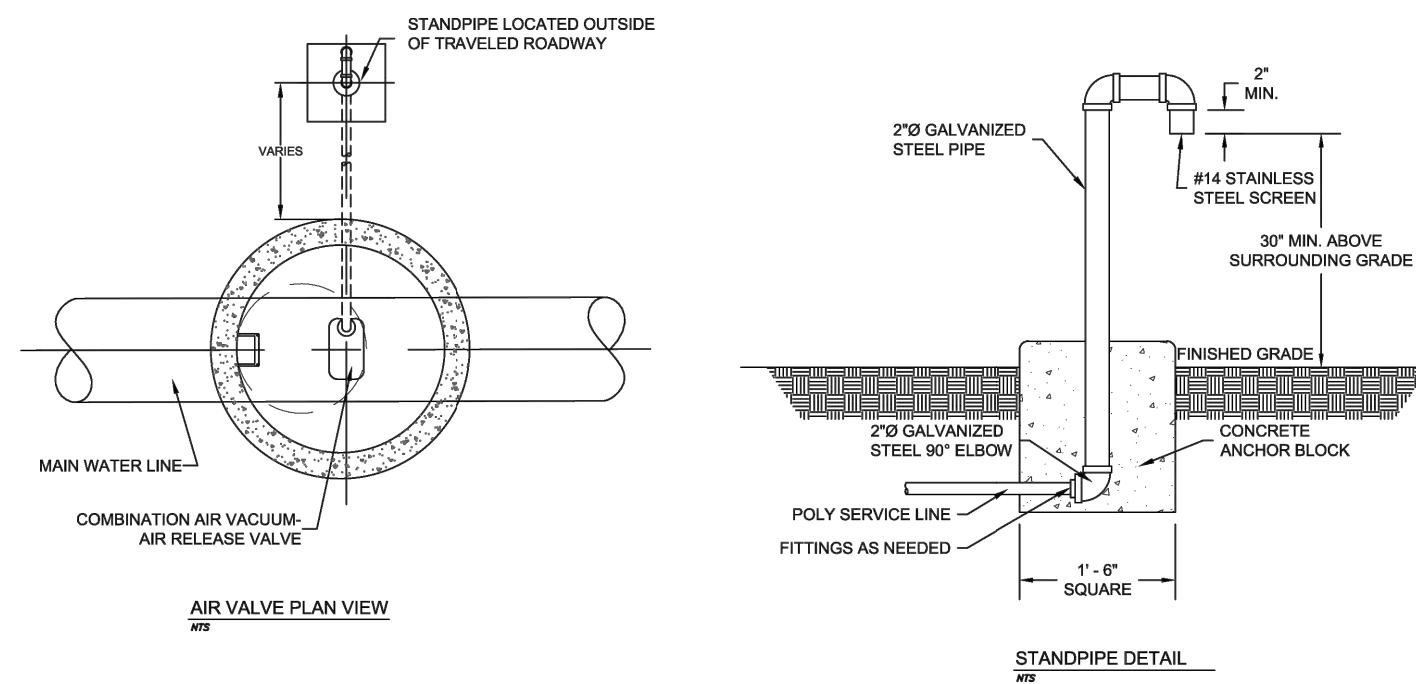
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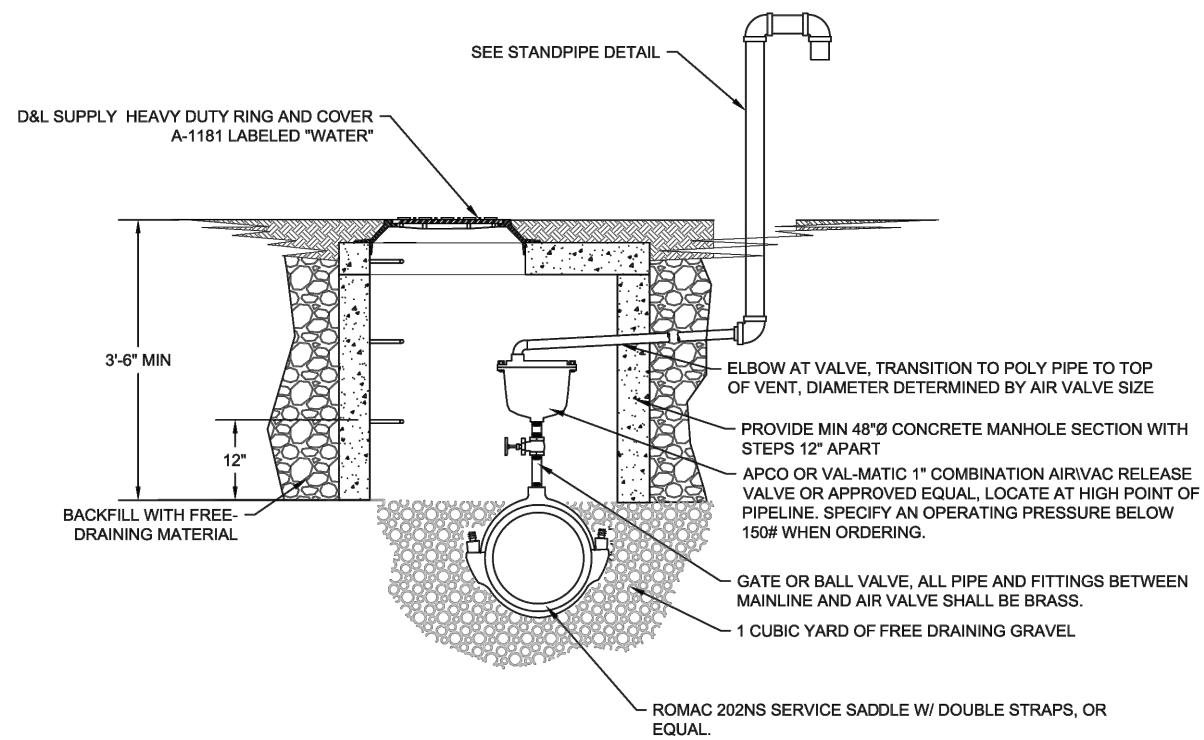
*NOTE: HYDRANT DRAINS SHALL NOT BE CONNECTED TO, OR LOCATED WITHIN, 10 FEET OF SANITARY SEWERS. WHERE POSSIBLE, HYDRANT DRAINS SHALL NOT BE LOCATED WITHIN 10 FEET OF STORM DRAINS.

FIRE HYDRANT DETAIL

NT

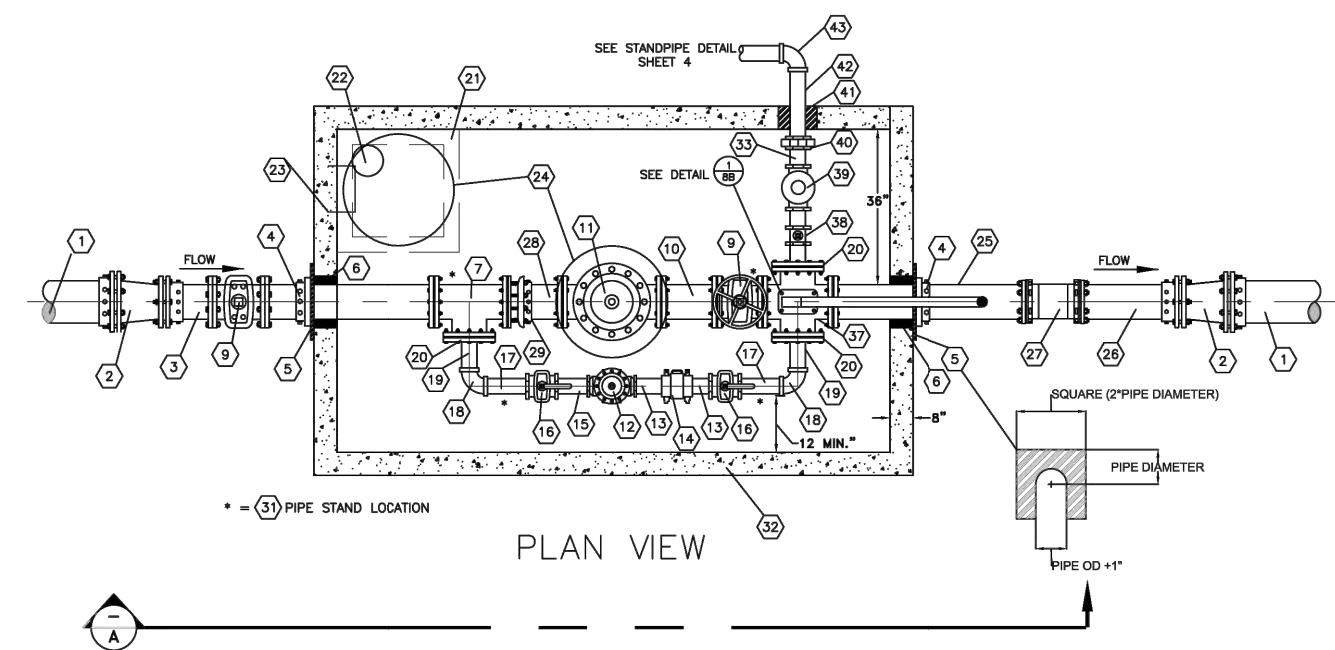


NOTES:
1. LOCATE STANDPIPE WELL OUTSIDE TRAVELED
ROADWAY OR AS DIRECTED BY THE ENGINEER.



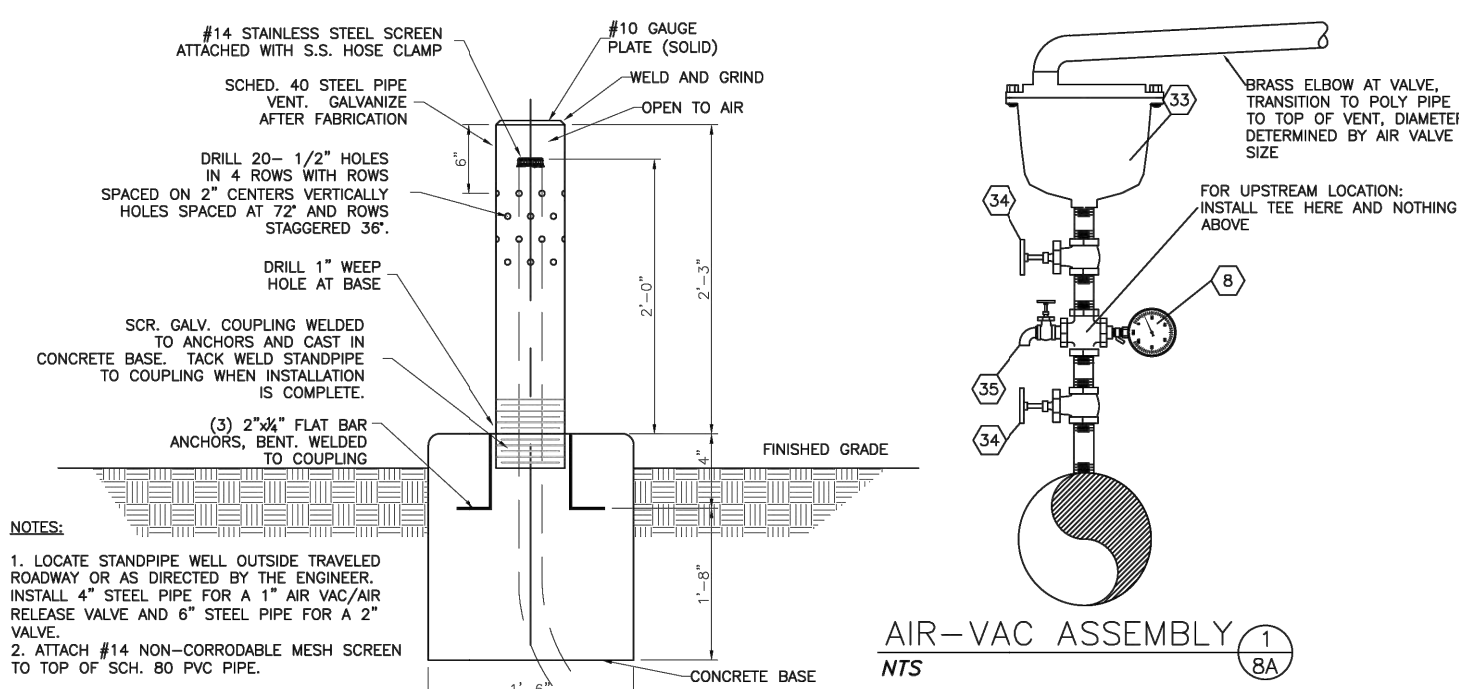
6 COMBINATION AIR/VAC VALVE DETAILS

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8A PRV STATION
SEE DETAIL 8B ON S

SEE DETAIL 8B ON SHEET 7 FOR BILL OF MATERIAL

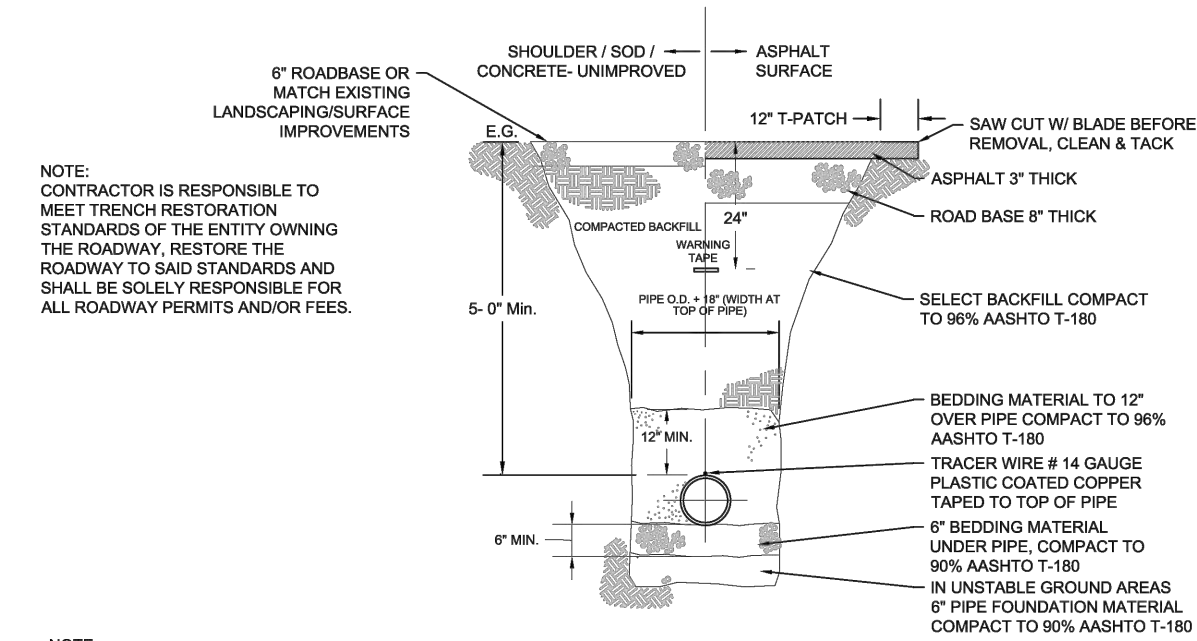


VENT SHROUD DETAIL

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BILL OF MATERIALS						
NO.	QTY	DESCRIPTION	6" LINE	8" LINE	10" LINE	NOTES
1		DP OR DR PIPE MAPE	6"	8"	10"	
2		REDUCER MANHOLE	6"x4"	8"x8"	10"x8"	USE JOINT RETAINER GLANDS
3	1	DP SPOOL - 5' LENGTH FLOPPE	4"	6"	8"	
4		FIELD LENGTH FOR DP	6"	8"	10"	
5	1	1/4" THICK STEEL THRUST PLATE	10"x10"	5"x5"	15"x15"	SD, W/ 8 OUT OUT
6		CORRODED JOULES	6"	8"	10"	SEAL WITH NON-SHRINK GROUT
7		TEE FLOPPE	4"x4"x4"	6"x6"x6"	8"x8"x8"	
8	1/4"	(1-200 PSI) PRESS. RATING PRESSURE GAUGE				SUPPLY WITH BRASS STOP COCK
9		RESILIENT SEAT GATE VALVE W/ VALVE BOX	6"	8"	8"	
10	1	DA 1 X 10" - 1/4" DP FLOPPE	6"	8"	10"	
11		PRESSURE REDUCING VALVE FLOPPE	6"	8"	10"	CL-A=VAL MODEL 90-01 KC
12	1	PRESSURE REDUCING VALVE THIXTND	2"	4"	4"	CL-A=VAL MODEL 90-01 KC
13	4	DA 1/2" GSWY. PIPE THIXTND	2"	2"	2"	FIELD ADJUST LENGTH
14		COUPLING	2"	2"	3"	
15	2	DA 1/2" GSWY. PIPE THIXTND	2"	2"	2"	FIELD ADJUST LENGTH
16	2	DA 1/2" GSWY. PIPE THIXTND	2"	2"	2"	FIELD ADJUST LENGTH
17	4	DA 1/2" GSWY. PIPE THIXTND	2"	2"	2"	FIELD ADJUST LENGTH
18	4	90° BEND THIXTND	2"	2"	2"	
19	4	DA 1/2" GSWY. PIPE THIXTND	2"	2"	2"	
20	2	BUND LENGTH W/ THIXTND TAP	4"	6"x4"	8"x3"	
21		2 X 2 CONCRETE CATCH BASIN				SUMP FOR SURFACE WATER
22	1	8" PRE-CAST HOLE/4" MANHOLE PIPE TO DARTHOZ				*HOLD HOLES IF NO SURFACE WATER
23		STEPS				
24	1	A-1181 DAD MANHOLE RING AND COVER	4"	6"-0"	6"-3/4"	"WATER", GRADE RING IF NEEDED
25	4	DA 1/2" X 10" DP FLOPPE	4"	6"	6"	
26	4	DA 1/2" X 10" DP SPOOL FLOPPE	4"	6"	6"	
27	4	DP SPORE MAPE	4"	6"	6"	
28	1	DA 1 X 10" DP FLOPPE	4"	6"	6"	
29	1	RESTRAINED FLEXIBLE COUPLING ADAPTER	4"	6"	6"	
30						
31		PIPE STAND				
32	6	6" X 12" X 7' TALL PRECAST CONCRETE WALL				H2O LOADING
33	1	COMINATION AIR RELEASE VALVE W/ AIR VENT	1", 1/4"	1", 1/4"	2", 1/4"	APPO MODEL 1430-1450 W/ FITTINGS
34	1	W/ FITTINGS				
35	2	1/2" SMOOTH NOSE TAP				W/ FITTINGS
36	1	SCREWED GATE VALVE	3/4"	3/4"	3/4"	W/ FITTINGS
37	3	CROSS	3/4"	3/4"	3/4"	
38	1	SCREWED GATE VALVE	3/4"	3/4"	3/4"	FNPT
39	1	RELIEF PRESSURIZING VALVE	3/4"	3/4"	3/4"	CL-A=VAL MODEL 90-01 OR EOL
40	1	UNION	2"	2"	2"	FNPT
41	1	CORR. GROUT	2"	2"	2"	
42	*	GALVANIZED STEEL PIPE (OSP)	2"	3"	3"	TAP INSIDE DUCT FOR DRAINAGE
43		FIBER GSP	2"	2"	2"	
44	NO.	4 MESH SCREEN				NON-CORRODIBLE
45	1	CONCRETE COLLAR		12"x12"	12"x12"	

* TO BE DETERMINED BY SITE ** 8" CROSS MAY USE 8"x4" CROSS W/DIP FITTINGS FOR RELIEF VALVE, VERIFY WITH OWNER AND ENGINEER

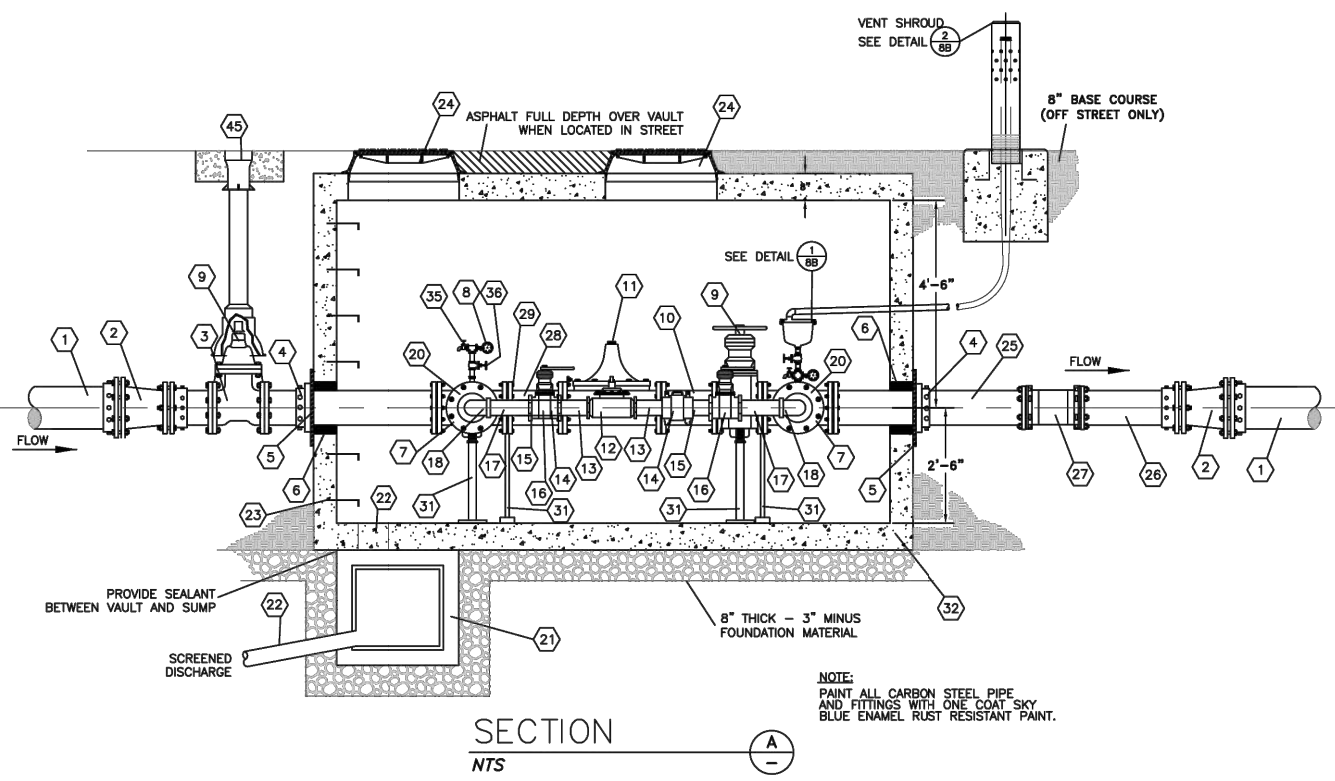


NOTE:

- 1. WATER & SEWER LINES SHALL BE INSTALLED A MINIMUM OF 10 HORIZONTAL FEET FROM EACH OTHER.
- 2. WHERE A WATER LINE AND A SEWER LINE MUST CROSS, THE WATER LINE SHALL BE AT LEAST 18" ABOVE THE SEWER LINE.
- 3. SEPARATION DISTANCES ARE TO BE MEASURED EDGE-TO-EDGE.
- 4. WATER LINES SHALL NOT BE INSTALLED IN THE SAME TRENCH WITH EITHER SEWER OR SECONDARY PIPES.
- 5. IF A STANDARD SEPARATION EXCEPTION TO THE STANDARD IS POSSIBLE, THE ENTITY SEEKING THE EXCEPTION SHALL INITIATE AND PURSUE A REQUEST FOR A SEPARATION EXCEPTION WITH THE STATE DIVISION OF DRINKING WATER, IN ACCORDANCE WITH 9309-550.7 OF THE STATE OF UTAH ADMINISTRATIVE RULES.

3A TYPICAL TRENCH SECTION

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8B PRV STATION

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