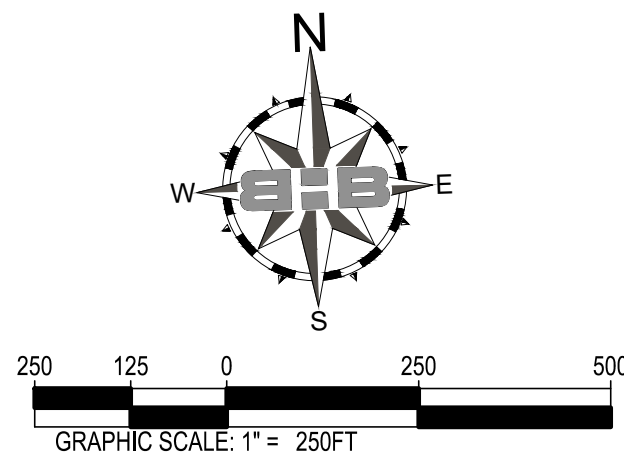
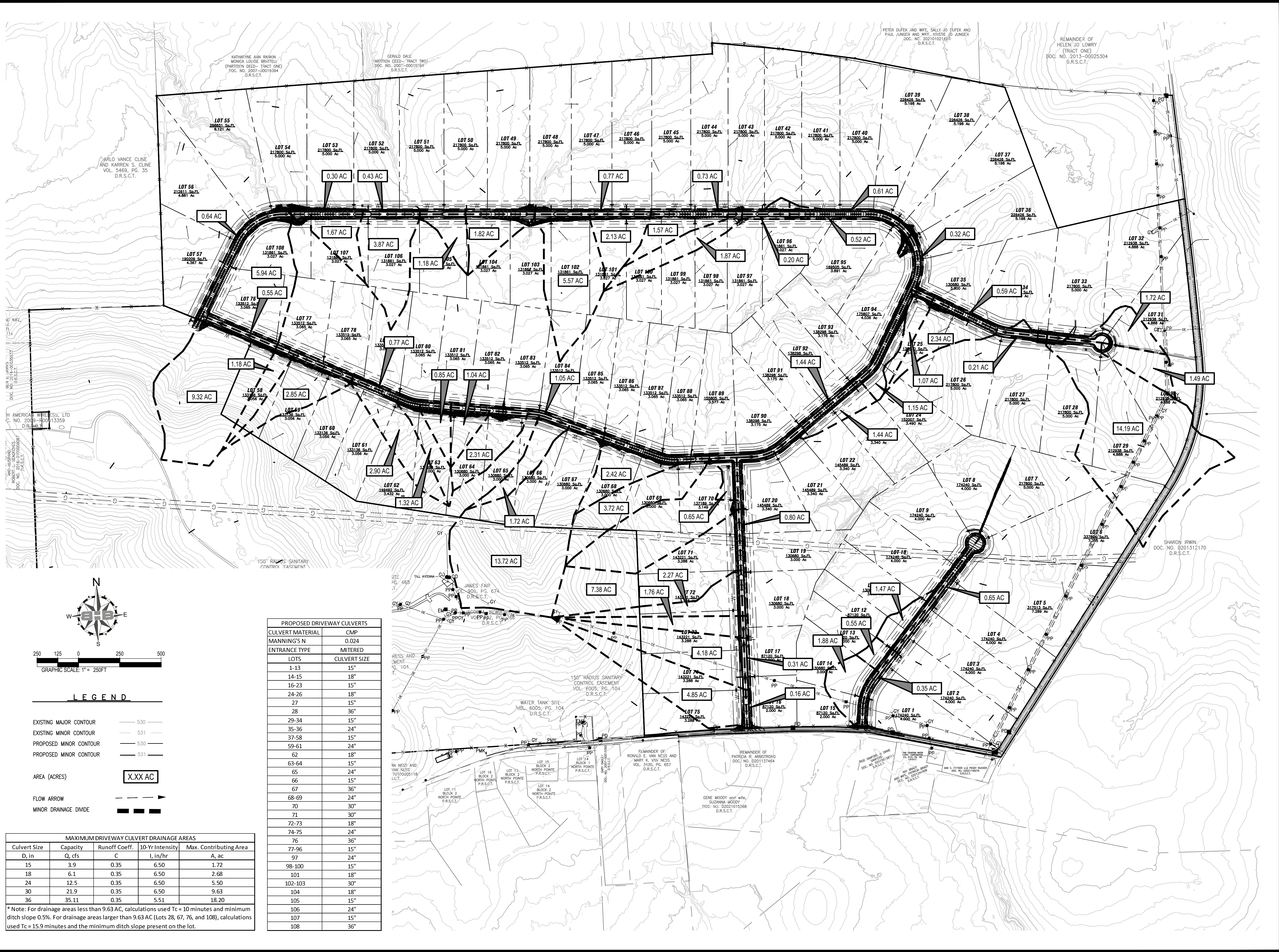
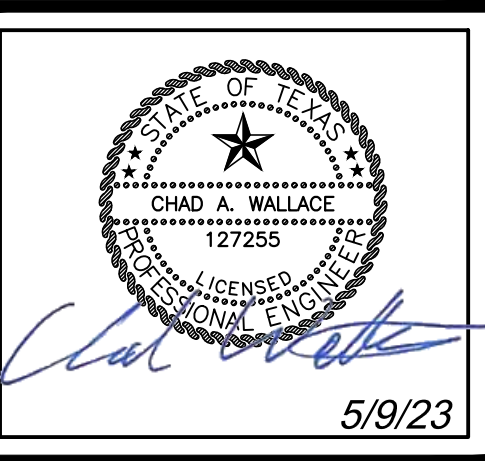


THE RANCHES AT STAR MOUNTAIN
PHASE 1
 SMITH COUNTY, TEXAS

DRIVEWAY CULVERTS

NO.	DESCRIPTION	DATE
1	CULVERT MODIFICATIONS	2023-05-09



LEGEND

EXISTING MAJOR CONTOUR	— 530 —
EXISTING MINOR CONTOUR	— 531 —
PROPOSED MAJOR CONTOUR	— 530 —
PROPOSED MINOR CONTOUR	— 531 —
AREA (ACRES)	X.XX AC
FLOW ARROW	→
MINOR DRAINAGE DIVIDE	— — —

PROPOSED DRIVEWAY CULVERTS

CULVERT MATERIAL	CMP
MANNING'S N	0.024
ENTRANCE TYPE	MITERED
LOTS	CULVERT SIZE
1-13	15"
14-15	18"
16-23	15"
24-26	18"
27	15"
28	36"
29-34	15"
35-36	24"
37-58	15"
59-61	24"
62	18"
63-64	15"
65	24"
66	15"
67	36"
68-69	24"
70	30"
71	30"
72-73	18"
74-75	24"
76	36"
77-96	15"
97	24"
98-100	15"
101	18"
102-103	30"
104	18"
105	15"
106	24"
107	15"
108	36"

MAXIMUM DRIVEWAY CULVERT DRAINAGE AREAS

Culvert Size	Capacity	Runoff Coeff.	10-Yr Intensity	Max. Contributing Area
D, in	Q, cfs	C	I, in/hr	A, ac
15	3.9	0.35	6.50	1.72
18	6.1	0.35	6.50	2.68
24	12.5	0.35	6.50	5.50
30	21.9	0.35	6.50	9.63
36	35.11	0.35	5.51	18.20

* Note: For drainage areas less than 9.63 AC, calculations used Tc = 10 minutes and minimum ditch slope 0.5%. For drainage areas larger than 9.63 AC (Lots 28, 67, 76, and 108), calculations used Tc = 15.9 minutes and the minimum ditch slope present on the lot.

5.09.2023 11:50AM E:\2022\000\0001\225.00001 Design & Drafting\2 Civi\01 C3D\Phase 1\125 Phase 1 Drainage Culvert Drainage.dwg DRIVEWAY CULVERTS