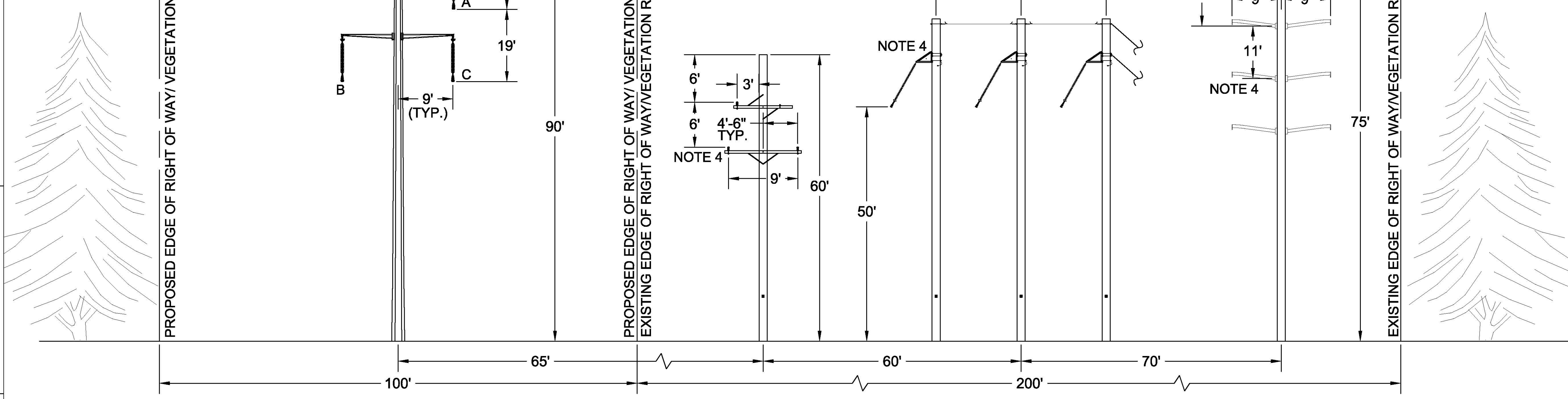


ROW Segment 3:

Overhead 115kV line with steel monopoles and an adjacent existing 115/34.5kV transmission and distribution lines (On the North side)



PROPOSED CROSS SECTION
LOOKING TOWARDS PROPOSED COLLECTOR TAKEOFF



PRELIMINARY
NOT FOR CONSTRUCTION

- | | | | | | | | | |
|----|------------|------------------------------------|------|------|------|------|-----------|------------------|
| A | 03/24/2017 | PRELIMINARY - NOT FOR CONSTRUCTION | NJT | WAS | - | S&L | PREP: NJT | CHKD: WAS |
| NO | DATE | REVISIONS AND RECORD OF ISSUE | DRWN | REVD | APPR | COMP | APPD: KVP | DATE: 03/24/2017 |

SCALE:

NONE

PREP: NJT CHKD: WAS

P APPD: KVP DATE: 03/24/2017

NEXtera
ENERGY
RESOURCES

13139-043-T1-0900

Steel Pole with Adjacent T-lines - ROW Segment 3

[illegible]

INPUT DATA LIST

```

                2/13/2018                11:33:36
EIGHT POINT - EMF CALC - 13139-043-TL-006 - STL POLE,,,,,,,,,,,,,
PREPARED: SAHMADZAI,,,,,,,,,,,,,,,,,
1,0,15,20,0.0,    0.50,    1.00,1350.00

```

(ENGLISH UNITS OPTION)

(GRADIENTS ARE COMPUTED BY PROGRAM)

PHYSICAL SYSTEM CONSISTS OF 20 CONDUCTORS, OF WHICH 15 ARE ENERGIZED PHASES

[illegible]

1COMBINED OUTPUT OF AUDIBLE NOISE, RADIO NOISE, TVI, OZONE CONCENTRATION, GROUND GRADIENT AND MAGNETIC FIELD
EIGHT POINT - EMF CALC - 13139-043-TL-006 - STL POLE,,,,,,,,,,,,,
PREPARED: SAHMADZAI,,,,,,,,,,,,,

Segment 3 Left.txt

	DIST. FROM CENTER OF TOWER (FEET)	HEIGHT (FEET)	MAXIMUM GRADIENT (KV/CM)	SUBCON DIAM. (IN)	NO. OF SUBCON	SUBCON SPACING (IN)	VOLTAGE L-N (KV)	PHASE ANGLE (DEGREES)	CURRENT (kAmps)	CORONA LOSSES (KW/MI)
8P. A-1	9.00	42.80	5.89	1.50	1	0.00	66.39	0.00	1.98	0.030
8P. B-1	-9.20	23.80	6.08	1.50	1	0.00	66.39	240.00	1.98	0.037
8P. C-1	9.20	23.80	6.31	1.50	1	0.00	66.39	120.00	1.98	0.047
DIST A-2	62.00	35.00	3.42	0.81	1	0.00	19.92	0.00	0.60	0.000
DIST B-2	60.50	29.00	3.82	0.81	1	0.00	19.92	240.00	0.60	0.000
DIST C-2	69.50	29.00	3.61	0.81	1	0.00	19.92	120.00	0.60	0.000
H115 A-3	106.00	20.30	11.17	0.74	1	0.00	66.39	0.00	0.72	0.113
H115 B-3	120.00	20.30	11.81	0.74	1	0.00	66.39	240.00	0.72	0.163
H115 C-3	134.00	20.30	11.27	0.74	1	0.00	66.39	120.00	0.72	0.121
DC115 A4	186.00	42.30	7.51	1.21	1	0.00	66.39	0.00	0.73	0.062
DC115 B4	186.00	31.30	8.17	1.21	1	0.00	66.39	240.00	0.73	0.107
DC115 C4	186.00	20.30	7.69	1.21	1	0.00	66.39	120.00	0.73	0.072
DC34.5A4	204.00	42.30	1.92	1.21	1	0.00	19.92	0.00	0.60	0.000
DC34.5B4	204.00	31.30	2.34	1.21	1	0.00	19.92	240.00	0.60	0.000
DC34.5C4	204.00	20.30	2.12	1.21	1	0.00	19.92	120.00	0.60	0.000
OPGW 1	1.20	60.00	1.73	0.53	1	0.00	0.00	0.00	0.00	0.000
OPGW 2	65.00	40.00	1.07	0.53	1	0.00	0.00	0.00	0.00	0.000
OPGW 3-1	111.00	36.30	0.96	0.53	1	0.00	0.00	0.00	0.00	0.000
OPGW 3-2	139.00	36.30	0.85	0.53	1	0.00	0.00	0.00	0.00	0.000
OPGW 4	195.00	58.30	1.81	0.53	1	0.00	0.00	0.00	0.00	0.000

AN MICROPHONE HT.= 5.0 FT, RI ANT. HT.= 6.6 FT, TV ANT. HT.= 9.8 FT, ALTITUDE= 1350.0 FT

RI FREQ= 1.000 MHZ, TV FREQ= 75.000 MHZ, WIND VEL.(OZ)= 0.500 MPH, GROUND CONDUCTIVITY = 10.0 MMHOS/M

E-FIELD TRANSDUCER HT.= 3.3FT, B-FIELD TRANSDUCER HT.= 3.3FT

LATERAL DIST FROM REFERENCE (FEET)	AUDIBLE NOISE (RAIN) L50 DBA	NOISE (FAIR) L50 DBA	RADIO INTERFERENCE (RAIN) L50 DBUV/M	(FAIR) L50 DBUV/M	TVI TOTAL RAIN DBUV/M	OZONE FOR RAIN RATE OF 1.00 IN/HR AT 0. FT LEVEL PPB	ELECTRIC FIELD KV/M	MAGNETIC FIELD GAUSS
-500.0	7.7	-17.3	0.6	-16.4	-33.4	0.000000	0.005	0.00133
-495.0	7.7	-17.3	0.6	-16.4	-33.3	0.000000	0.005	0.00135
-490.0	7.8	-17.2	0.7	-16.3	-33.1	0.000000	0.005	0.00138
-485.0	7.8	-17.2	0.8	-16.2	-33.0	0.000000	0.005	0.00141
-480.0	7.8	-17.2	0.9	-16.1	-32.8	0.000000	0.005	0.00143
-475.0	7.9	-17.1	1.0	-16.0	-32.7	0.000000	0.005	0.00146
-470.0	7.9	-17.1	1.0	-16.0	-32.6	0.000000	0.006	0.00149
-465.0	8.0	-17.0	1.1	-15.9	-32.4	0.000000	0.006	0.00152
-460.0	8.0	-17.0	1.2	-15.8	-32.3	0.000000	0.006	0.00155
-455.0	8.0	-17.0	1.3	-15.7	-32.1	0.000000	0.006	0.00158
-450.0	8.1	-16.9	1.4	-15.6	-32.0	0.000000	0.006	0.00161
-445.0	8.1	-16.9	1.4	-15.6	-31.8	0.000000	0.006	0.00165
-440.0	8.2	-16.8	1.5	-15.5	-31.6	0.000000	0.006	0.00168
-435.0	8.2	-16.8	1.6	-15.4	-31.5	0.000000	0.006	0.00172
-430.0	8.3	-16.7	1.7	-15.3	-31.3	0.000000	0.006	0.00176
-425.0	8.3	-16.7	1.8	-15.2	-31.2	0.000000	0.007	0.00179
-420.0	8.4	-16.6	1.9	-15.1	-31.0	0.000000	0.007	0.00183
-415.0	8.4	-16.6	1.9	-15.1	-30.9	0.000000	0.007	0.00187

Segment 3 Left.txt

-410.0	8.4	-16.6	2.0	-15.0	-30.7	0.000000	0.007	0.00192
-405.0	8.5	-16.5	2.1	-14.9	-30.5	0.000000	0.007	0.00196
-400.0	8.5	-16.5	2.2	-14.8	-30.4	0.000000	0.007	0.00201
-395.0	8.6	-16.4	2.3	-14.7	-30.2	0.000000	0.007	0.00205
-390.0	8.6	-16.4	2.4	-14.6	-30.0	0.000000	0.008	0.00210
-385.0	8.7	-16.3	2.5	-14.5	-29.9	0.000000	0.008	0.00215
-380.0	8.7	-16.3	2.6	-14.4	-29.7	0.000000	0.008	0.00221
-375.0	8.8	-16.2	2.7	-14.3	-29.5	0.000000	0.008	0.00226
-370.0	8.8	-16.2	2.8	-14.2	-29.3	0.000000	0.008	0.00232
-365.0	8.9	-16.1	2.9	-14.1	-29.2	0.000000	0.009	0.00238
-360.0	8.9	-16.1	3.0	-14.0	-29.0	0.000000	0.009	0.00244
-355.0	9.0	-16.0	3.1	-13.9	-28.8	0.000000	0.009	0.00251
-350.0	9.0	-16.0	3.2	-13.8	-28.6	0.000000	0.009	0.00257
-345.0	9.1	-15.9	3.3	-13.7	-28.4	0.000000	0.009	0.00264
-340.0	9.1	-15.9	3.4	-13.6	-28.2	0.000000	0.010	0.00272
-335.0	9.2	-15.8	3.5	-13.5	-28.0	0.000000	0.010	0.00279
-330.0	9.3	-15.7	3.6	-13.4	-27.9	0.000000	0.010	0.00287
-325.0	9.3	-15.7	3.7	-13.3	-27.7	0.000000	0.010	0.00295
-320.0	9.4	-15.6	3.8	-13.2	-27.5	0.000000	0.011	0.00304
-315.0	9.4	-15.6	3.9	-13.1	-27.3	0.000000	0.011	0.00313
-310.0	9.5	-15.5	4.0	-13.0	-27.1	0.000000	0.011	0.00323
-305.0	9.5	-15.5	4.1	-12.9	-26.9	0.000000	0.012	0.00333
-300.0	9.6	-15.4	4.3	-12.7	-26.7	0.000000	0.012	0.00343
-295.0	9.6	-15.4	4.4	-12.6	-26.4	0.000000	0.012	0.00354
-290.0	9.7	-15.3	4.5	-12.5	-26.2	0.000000	0.012	0.00366
-285.0	9.8	-15.2	4.6	-12.4	-26.0	0.000000	0.013	0.00378
-280.0	9.8	-15.2	4.7	-12.3	-25.8	0.000000	0.013	0.00391
-275.0	9.9	-15.1	4.9	-12.1	-25.6	0.000000	0.014	0.00405
-270.0	10.0	-15.0	5.0	-12.0	-25.4	0.000000	0.014	0.00419
-265.0	10.0	-15.0	5.1	-11.9	-25.1	0.000000	0.014	0.00434
-260.0	10.1	-14.9	5.3	-11.7	-24.9	0.000000	0.015	0.00450
-255.0	10.1	-14.9	5.4	-11.6	-24.7	0.000000	0.015	0.00467
-250.0	10.2	-14.8	5.5	-11.5	-24.5	0.000000	0.016	0.00485
-245.0	10.3	-14.7	5.7	-11.3	-24.2	0.000000	0.016	0.00504
-240.0	10.4	-14.6	5.8	-11.2	-24.0	0.000000	0.017	0.00524
-235.0	10.4	-14.6	5.9	-11.1	-23.7	0.000000	0.018	0.00545
-230.0	10.5	-14.5	6.1	-10.9	-23.5	0.000000	0.018	0.00568
-225.0	10.6	-14.4	6.2	-10.8	-23.2	0.000000	0.019	0.00592
-220.0	10.6	-14.4	6.4	-10.6	-23.0	0.000000	0.019	0.00618
-215.0	10.7	-14.3	6.5	-10.5	-22.7	0.000000	0.020	0.00646
-210.0	10.8	-14.2	6.7	-10.3	-22.5	0.000000	0.021	0.00676
-205.0	10.9	-14.1	6.8	-10.2	-22.2	0.000000	0.022	0.00708
-200.0	10.9	-14.1	7.0	-10.0	-21.9	0.000000	0.023	0.00742
-195.0	11.0	-14.0	7.2	-9.8	-21.7	0.000000	0.024	0.00779
-190.0	11.1	-13.9	7.3	-9.7	-21.4	0.000000	0.024	0.00818
-185.0	11.2	-13.8	7.5	-9.5	-21.1	0.000000	0.026	0.00861
-180.0	11.3	-13.7	7.7	-9.3	-20.8	0.000000	0.027	0.00907
-175.0	11.3	-13.7	7.8	-9.2	-20.5	0.000000	0.028	0.00958
-170.0	11.4	-13.6	8.0	-9.0	-20.2	0.000000	0.029	0.01012
-165.0	11.5	-13.5	8.2	-8.8	-19.9	0.000000	0.031	0.01072
-160.0	11.6	-13.4	8.4	-8.6	-19.6	0.000000	0.032	0.01137
-155.0	11.7	-13.3	8.6	-8.4	-19.3	0.000000	0.034	0.01208

Segment 3 Left.txt

-150.0	11.8	-13.2	8.8	-8.2	-19.0	0.000000	0.036	0.01286
-145.0	11.9	-13.1	9.0	-8.0	-18.7	0.000000	0.038	0.01372
-140.0	12.0	-13.0	9.2	-7.8	-18.3	0.000000	0.040	0.01467
-135.0	12.1	-12.9	9.4	-7.6	-18.0	0.000000	0.042	0.01572
-130.0	12.2	-12.8	9.6	-7.4	-17.6	0.000000	0.045	0.01689
-125.0	12.3	-12.7	9.9	-7.1	-17.3	0.000000	0.048	0.01819
-120.0	12.4	-12.6	10.1	-6.9	-16.9	0.000000	0.051	0.01965
-115.0	12.5	-12.5	10.3	-6.7	-16.6	0.000000	0.055	0.02129
-110.0	12.6	-12.4	10.6	-6.4	-16.2	0.000000	0.060	0.02315
-105.0	12.7	-12.3	10.8	-6.2	-15.8	0.000000	0.065	0.02526
-100.0	12.8	-12.2	11.1	-5.9	-15.4	0.000000	0.072	0.02767
-95.0	12.9	-12.1	11.4	-5.6	-15.0	0.000000	0.079	0.03043
-90.0	13.0	-12.0	11.6	-5.4	-14.6	0.000000	0.089	0.03363
-85.0	13.2	-11.8	11.9	-5.1	-14.2	0.000000	0.100	0.03734
-80.0	13.3	-11.7	12.2	-4.8	-13.8	0.000000	0.115	0.04169
-75.0	13.4	-11.6	12.5	-4.5	-13.3	0.000000	0.133	0.04683
-70.0	13.6	-11.4	12.8	-4.2	-12.9	0.000000	0.157	0.05294
-65.0	13.7	-11.3	13.2	-3.8	-12.4	0.000000	0.188	0.06029
-60.0	13.9	-11.1	13.5	-3.5	-12.0	0.000000	0.229	0.06921
-55.0	14.0	-11.0	13.8	-3.2	-11.8	0.000000	0.283	0.08014
-50.0	14.2	-10.8	14.2	-2.8	-11.5	0.000000	0.357	0.09368
-45.0	14.3	-10.7	15.5	-1.5	-11.3	0.000000	0.455	0.11063
-40.0	14.5	-10.5	17.5	0.5	-11.0	0.000000	0.588	0.13204
-35.0	14.7	-10.3	19.7	2.7	-10.7	0.000000	0.765	0.15924
-30.0	14.9	-10.1	22.0	5.0	-10.5	0.000000	0.992	0.19367
-25.0	15.1	-9.9	24.5	7.5	-10.2	0.000000	1.265	0.23641
-20.0	15.3	-9.7	26.9	9.9	-9.9	0.000000	1.546	0.28670
-15.0	15.5	-9.5	28.9	11.9	-9.5	0.000000	1.744	0.33961
-10.0	15.7	-9.3	29.8	12.8	-9.2	0.000000	1.743	0.38481
-5.0	15.9	-9.1	29.3	12.3	-8.9	0.002321	1.518	0.41075
0.0	16.1	-8.9	29.5	12.5	-8.5	0.003289	1.286	0.41180
5.0	16.3	-8.7	31.2	14.2	-8.2	0.002734	1.360	0.38879
10.0	16.5	-8.5	31.7	14.7	-7.8	0.002259	1.508	0.34593
15.0	16.6	-8.4	30.8	13.8	-7.4	0.006700	1.469	0.29148
20.0	16.8	-8.2	28.9	11.9	-7.0	0.007245	1.253	0.23648
25.0	17.0	-8.0	26.4	9.4	-6.5	0.006412	0.973	0.19103
30.0	17.2	-7.8	24.0	7.0	-6.1	0.005584	0.713	0.16224
35.0	17.4	-7.6	23.8	6.8	-5.6	0.004912	0.505	0.14078
40.0	17.6	-7.4	24.8	7.8	-5.1	0.004377	0.346	0.12211
45.0	17.9	-7.1	26.0	9.0	-4.5	0.003948	0.228	0.10547
50.0	18.2	-6.8	27.3	10.3	-3.9	0.003597	0.143	0.09051
55.0	18.5	-6.5	28.7	11.7	-3.3	0.003305	0.094	0.07751
60.0	18.9	-6.1	30.3	13.3	-2.6	0.003060	0.086	0.06845
65.0	19.3	-5.7	32.1	15.1	-1.9	0.002876	0.128	0.06666
70.0	19.7	-5.3	34.0	17.0	-1.1	0.002732	0.218	0.07182
75.0	20.2	-4.8	36.2	19.2	-0.1	0.002593	0.359	0.08119
80.0	20.7	-4.3	38.6	21.6	1.2	0.002454	0.562	0.09459
85.0	21.3	-3.7	41.3	24.3	2.8	0.002320	0.839	0.11277
90.0	21.9	-3.1	44.3	27.3	4.5	0.002200	1.188	0.13647
95.0	22.6	-2.4	47.4	30.4	6.5	0.002092	1.578	0.16622
100.0	23.2	-1.8	50.2	33.2	8.5	0.001996	1.895	0.19993
105.0	23.8	-1.2	51.7	34.7	9.7	0.001910	1.942	0.22980

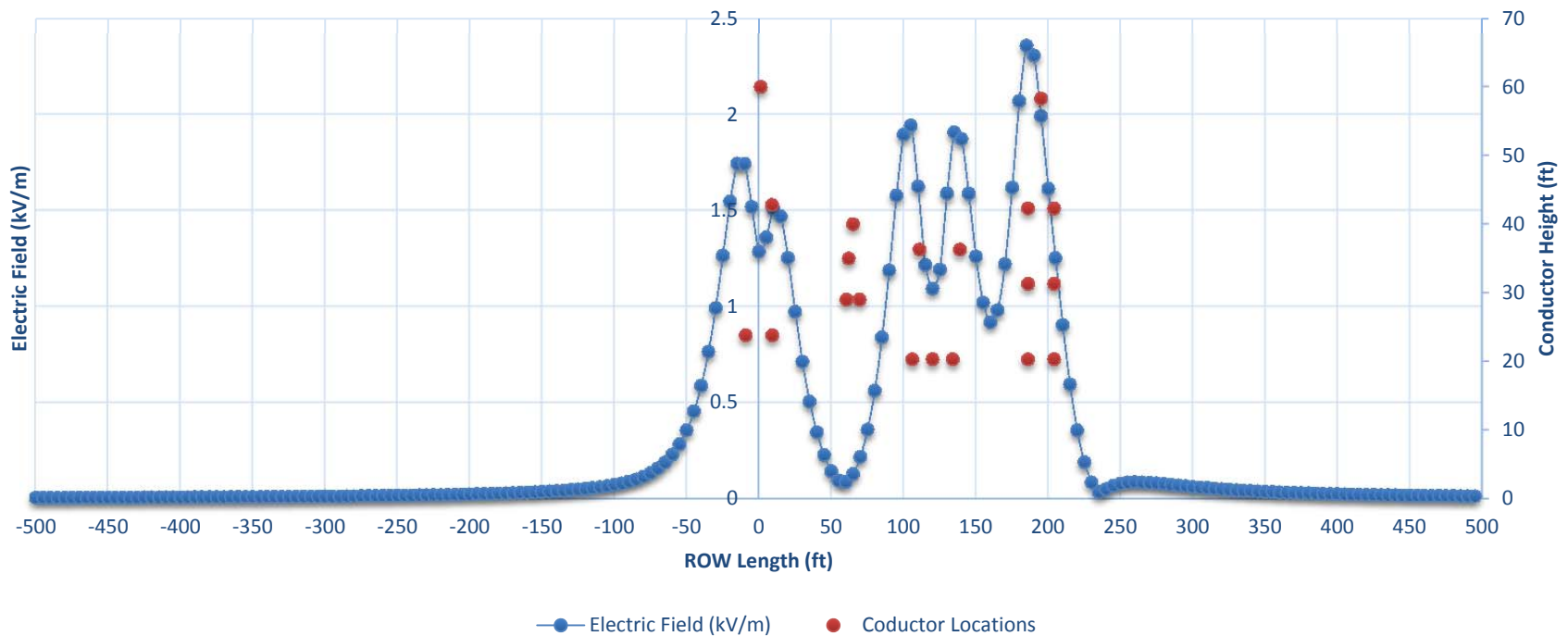
Segment 3 Left.txt

110.0	24.3	-0.7	51.0	34.0	9.9	0.035522	1.625	0.24556
115.0	24.6	-0.4	53.6	36.6	11.8	0.039711	1.216	0.24553
120.0	24.7	-0.3	54.7	37.7	12.7	0.031645	1.093	0.23937
125.0	24.7	-0.3	53.6	36.6	11.8	0.088966	1.192	0.23365
130.0	24.4	-0.6	51.5	34.5	9.9	0.080081	1.589	0.21976
135.0	24.0	-1.0	52.2	35.2	10.2	0.064990	1.906	0.18958
140.0	23.5	-1.5	50.7	33.7	9.0	0.098832	1.872	0.14717
145.0	22.8	-2.2	47.9	30.9	7.0	0.084283	1.587	0.10395
150.0	22.2	-2.8	44.8	27.8	5.0	0.070937	1.260	0.06829
155.0	21.7	-3.3	41.8	24.8	3.3	0.061320	1.020	0.04619
160.0	21.2	-3.8	39.1	22.1	1.7	0.054185	0.918	0.04836
165.0	20.9	-4.1	36.7	19.7	0.4	0.048680	0.981	0.06886
170.0	20.6	-4.4	34.6	17.6	-0.8	0.044292	1.221	0.09665
175.0	20.4	-4.6	36.5	19.5	-1.8	0.040702	1.618	0.12741
180.0	20.2	-4.8	39.3	22.3	-2.4	0.037705	2.069	0.15572
185.0	20.0	-5.0	40.8	23.8	-1.2	0.035159	2.358	0.17321
190.0	19.7	-5.3	40.1	23.1	-1.7	0.046906	2.306	0.17589
195.0	19.4	-5.6	37.7	20.7	-3.5	0.059287	1.991	0.17256
200.0	19.0	-6.0	35.2	18.2	-5.1	0.055887	1.613	0.17365
205.0	18.6	-6.4	33.6	16.6	-5.6	0.050892	1.252	0.17525
210.0	18.3	-6.7	31.9	14.9	-6.1	0.046525	0.904	0.16770
215.0	17.9	-7.1	30.2	13.2	-6.5	0.042908	0.595	0.15076
220.0	17.6	-7.4	28.6	11.6	-7.0	0.039903	0.355	0.13034
225.0	17.3	-7.7	27.0	10.0	-7.4	0.037372	0.190	0.11085
230.0	17.0	-8.0	25.5	8.5	-7.8	0.035206	0.085	0.09399
235.0	16.7	-8.3	24.1	7.1	-8.2	0.033327	0.034	0.07998
240.0	16.5	-8.5	22.9	5.9	-8.5	0.031677	0.049	0.06851
245.0	16.2	-8.8	21.7	4.7	-8.9	0.030213	0.068	0.05913
250.0	16.0	-9.0	20.5	3.5	-9.2	0.028903	0.079	0.05144
255.0	15.8	-9.2	19.5	2.5	-9.5	0.027721	0.085	0.04510
260.0	15.6	-9.4	18.5	1.5	-9.9	0.026648	0.086	0.03984
265.0	15.4	-9.6	17.6	0.6	-10.2	0.025668	0.085	0.03543
270.0	15.2	-9.8	16.7	-0.3	-10.5	0.024769	0.083	0.03171
275.0	15.0	-10.0	15.9	-1.1	-10.7	0.023940	0.080	0.02856
280.0	14.8	-10.2	15.1	-1.9	-11.0	0.023173	0.076	0.02585
285.0	14.6	-10.4	14.6	-2.4	-11.3	0.022460	0.072	0.02352
290.0	14.5	-10.5	14.2	-2.8	-11.5	0.021796	0.069	0.02150
295.0	14.3	-10.7	13.8	-3.2	-11.8	0.021175	0.065	0.01973
300.0	14.2	-10.8	13.5	-3.5	-12.0	0.020593	0.061	0.01818
305.0	14.0	-11.0	13.2	-3.8	-12.4	0.020046	0.058	0.01681
310.0	13.9	-11.1	12.8	-4.2	-12.9	0.019531	0.055	0.01560
315.0	13.7	-11.3	12.5	-4.5	-13.3	0.019045	0.052	0.01452
320.0	13.6	-11.4	12.2	-4.8	-13.8	0.018585	0.049	0.01355
325.0	13.5	-11.5	11.9	-5.1	-14.2	0.018150	0.047	0.01268
330.0	13.3	-11.7	11.6	-5.4	-14.6	0.017737	0.044	0.01190
335.0	13.2	-11.8	11.4	-5.6	-15.0	0.017344	0.042	0.01118
340.0	13.1	-11.9	11.1	-5.9	-15.4	0.016971	0.040	0.01054
345.0	13.0	-12.0	10.8	-6.2	-15.8	0.016615	0.038	0.00995
350.0	12.9	-12.1	10.6	-6.4	-16.2	0.016275	0.036	0.00941
355.0	12.7	-12.3	10.3	-6.7	-16.6	0.015950	0.035	0.00892
360.0	12.6	-12.4	10.1	-6.9	-16.9	0.015639	0.033	0.00846
365.0	12.5	-12.5	9.9	-7.1	-17.3	0.015342	0.032	0.00804

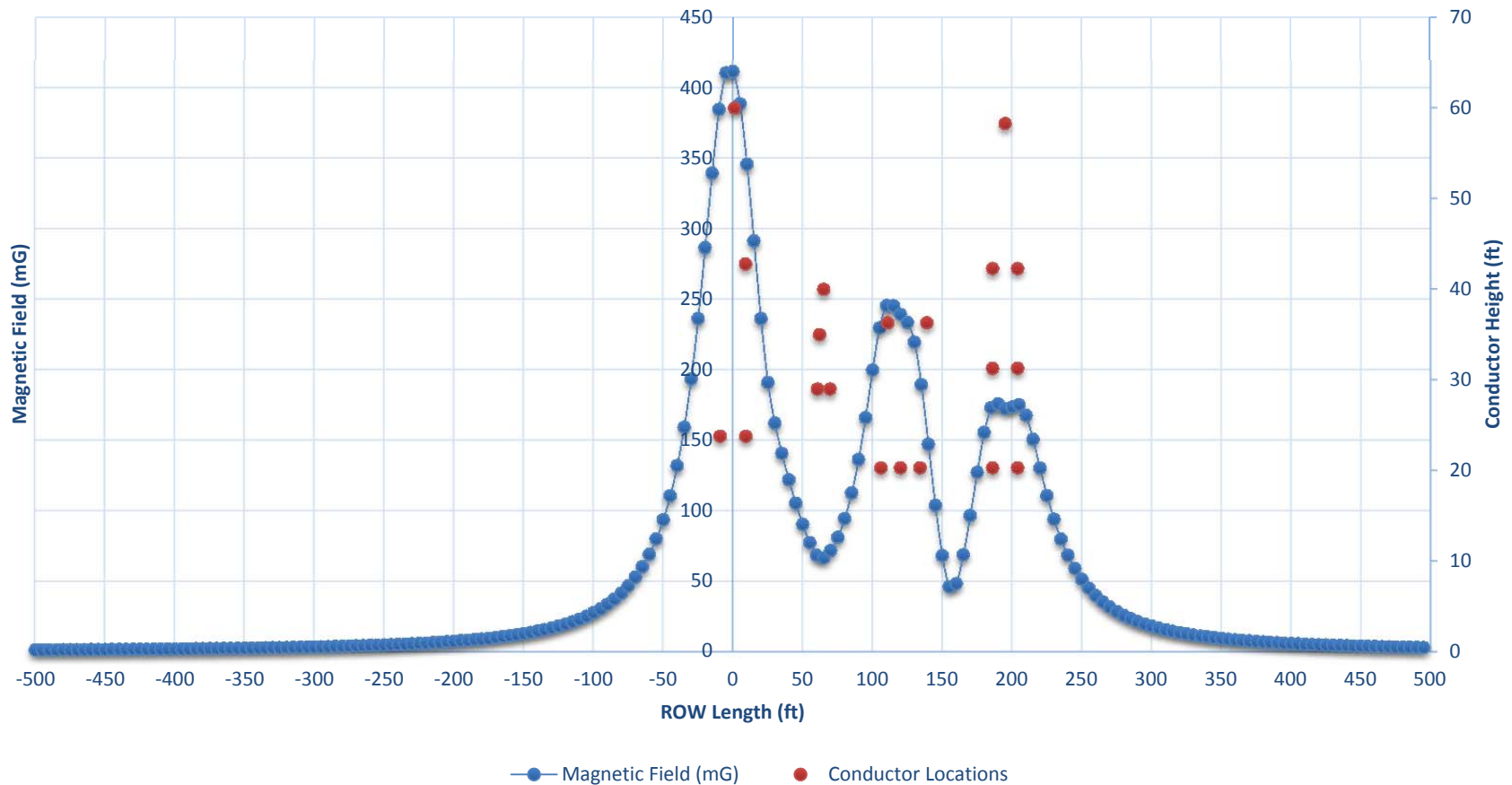
Segment 3 Left.txt								
370.0	12.4	-12.6	9.6	-7.4	-17.6	0.015056	0.030	0.00766
375.0	12.3	-12.7	9.4	-7.6	-18.0	0.014783	0.029	0.00730
380.0	12.2	-12.8	9.2	-7.8	-18.3	0.014520	0.028	0.00697
385.0	12.1	-12.9	9.0	-8.0	-18.7	0.014267	0.027	0.00666
390.0	12.0	-13.0	8.8	-8.2	-19.0	0.014023	0.025	0.00637
395.0	11.9	-13.1	8.6	-8.4	-19.3	0.013789	0.024	0.00610
400.0	11.8	-13.2	8.4	-8.6	-19.6	0.013563	0.024	0.00585
405.0	11.7	-13.3	8.2	-8.8	-19.9	0.013345	0.023	0.00561
410.0	11.6	-13.4	8.0	-9.0	-20.2	0.013135	0.022	0.00539
415.0	11.6	-13.4	7.8	-9.2	-20.5	0.012932	0.021	0.00519
420.0	11.5	-13.5	7.7	-9.3	-20.8	0.012735	0.020	0.00499
425.0	11.4	-13.6	7.5	-9.5	-21.1	0.012545	0.020	0.00481
430.0	11.3	-13.7	7.3	-9.7	-21.4	0.012361	0.019	0.00463
435.0	11.2	-13.8	7.2	-9.8	-21.7	0.012183	0.018	0.00447
440.0	11.1	-13.9	7.0	-10.0	-21.9	0.012011	0.018	0.00432
445.0	11.1	-13.9	6.8	-10.2	-22.2	0.011844	0.017	0.00417
450.0	11.0	-14.0	6.7	-10.3	-22.5	0.011682	0.016	0.00403
455.0	10.9	-14.1	6.5	-10.5	-22.7	0.011524	0.016	0.00390
460.0	10.8	-14.2	6.4	-10.6	-23.0	0.011371	0.015	0.00377
465.0	10.7	-14.3	6.2	-10.8	-23.2	0.011223	0.015	0.00365
470.0	10.7	-14.3	6.1	-10.9	-23.5	0.011079	0.015	0.00354
475.0	10.6	-14.4	5.9	-11.1	-23.7	0.010938	0.014	0.00343
480.0	10.5	-14.5	5.8	-11.2	-24.0	0.010802	0.014	0.00333
485.0	10.5	-14.5	5.7	-11.3	-24.2	0.010669	0.013	0.00323
490.0	10.4	-14.6	5.5	-11.5	-24.5	0.010540	0.013	0.00314
495.0	10.3	-14.7	5.4	-11.6	-24.7	0.010414	0.013	0.00305

ROW Segment 3 – Steel Monopole Tangent Structure with Adjacent T-Lines

**ROW Segment 3
BPA Output - Electric Field**



ROW Segment 3 BPA Output - Magnetic Field



ROW Segment 4:

Overhead 115kV line with steel monopoles and an adjacent existing 34.5kV
transmission line (On the East side)

Steel Pole With Adjacent T-line- ROW Segment 4 Inputs

[illegible]

INPUT DATA LIST

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10/ 9/2017      12:34:18
EIGHT POINT - EMF CALC - 13139-043-TL-006 - STL POLE,,,,,,,,,
PREPARED: SAHMADZAI,,,,,,,,,
1,0, 6, 8,0.0,  0.50,  1.00,1350.00

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(ENGLISH UNITS OPTION)

(GRADIENTS ARE COMPUTED BY PROGRAM)

PHYSICAL SYSTEM CONSISTS OF 8 CONDUCTORS, OF WHICH 6 ARE ENERGIZED PHASES

OPTIONS:										
'COMB'	'XX'	'XX'	'XX'	'XX'	'XX'	'XX'	'XX'			
5.000,	6.600,	9.800,	0.000,	1.000,	75.000,	3.280,	10.000,	3.280		
'PH. A-1	'A'	9.00,	42.80,	1,	1.504,	0.000,	66.390,	0.000,	1.979,	0.000
'PH. B-1	'A'	-9.20,	23.80,	1,	1.504,	0.000,	66.390,	240.000,	1.979,	0.000
'PH. C-1	'A'	9.20,	23.80,	1,	1.504,	0.000,	66.390,	120.000,	1.979,	0.000
'PH. A-2	'A'	-83.00,	35.00,	1,	0.806,	0.000,	19.920,	0.000,	0.595,	0.000
'PH. B-2	'A'	-84.50,	29.00,	1,	0.806,	0.000,	19.920,	240.000,	0.595,	0.000
'PH. C-2	'A'	-75.50,	29.00,	1,	0.806,	0.000,	19.920,	120.000,	0.595,	0.000
'OPGW 1	'A'	1.20,	60.00,	1,	0.530,	0.000,	0.000,	0.000,	0.000,	0.000
'OPGW 2	'A'	-80.00,	40.00,	1,	0.530,	0.000,	0.000,	0.000,	0.000,	0.000
100 -500.0	5.0									

1COMBINED OUTPUT OF AUDIBLE NOISE, RADIO NOISE, TVI, OZONE CONCENTRATION, GROUND GRADIENT AND MAGNETIC FIELD
EIGHT POINT - EMF CALC - 13139-043-TL-006 - STL POLE,,,,,,,,,
PREPARED: SAHMADZAI,,,,,,,,,

	DIST. FROM CENTER OF TOWER (FEET)	HEIGHT (FEET)	MAXIMUM GRADIENT (KV/CM)	SUBCON DIAM. (IN)	NO. OF SUBCON	SUBCON SPACING (IN)	VOLTAGE L-N (KV)	PHASE ANGLE (DEGREES)	CURRENT (kAmps)	CORONA LOSSES (KW/MI)
PH. A-1	9.00	42.80	5.91	1.50	1	0.00	66.39	0.00	1.98	0.031
PH. B-1	-9.20	23.80	6.09	1.50	1	0.00	66.39	240.00	1.98	0.038
PH. C-1	9.20	23.80	6.28	1.50	1	0.00	66.39	120.00	1.98	0.046
PH. A-2	-83.00	35.00	3.67	0.81	1	0.00	19.92	0.00	0.60	0.000
PH. B-2	-84.50	29.00	3.61	0.81	1	0.00	19.92	240.00	0.60	0.000
PH. C-2	-75.50	29.00	3.50	0.81	1	0.00	19.92	120.00	0.60	0.000
OPGW 1	1.20	60.00	1.66	0.53	1	0.00	0.00	0.00	0.00	0.000
OPGW 2	-80.00	40.00	0.61	0.53	1	0.00	0.00	0.00	0.00	0.000

AN MICROPHONE HT.= 5.0 FT, RI ANT. HT.= 6.6 FT, TV ANT. HT.= 9.8 FT, ALTITUDE= 1350.0 FT
RI FREQ= 1.000 MHZ, TV FREQ= 75.000 MHZ, WIND VEL.(OZ)= 0.500 MPH, GROUND CONDUCTIVITY = 10.0 MMHOS/M
E-FIELD TRANSDUCER HT.= 3.3FT, B-FIELD TRANSDUCER HT.= 3.3FT

Steel Pole with Adjacent T-line- ROW Segment 4 Results

LATERAL DIST FROM REFERENCE (FEET)	AUDIBLE NOISE (RAIN) L50 DBA	(FAIR) L50 DBA	RADIO INTERFERENCE (RAIN) L50 DBUV/M	(FAIR) L50 DBUV/M	TVI TOTAL RAIN DBUV/M	OZONE FOR RAIN RATE OF 1.00 IN/HR AT 0. FT LEVEL PPB	ELECTRIC FIELD KV/M	MAGNETIC FIELD GAUSS
-500.0	-7.8	-32.8	-14.9	-31.9	-48.2	0.000000	0.003	0.00129
-495.0	-7.8	-32.8	-14.8	-31.8	-48.0	0.000000	0.004	0.00131
-490.0	-7.7	-32.7	-14.7	-31.7	-47.8	0.000000	0.004	0.00134
-485.0	-7.7	-32.7	-14.6	-31.6	-47.7	0.000000	0.004	0.00137
-480.0	-7.6	-32.6	-14.6	-31.6	-47.5	0.000000	0.004	0.00140
-475.0	-7.6	-32.6	-14.5	-31.5	-47.3	0.000000	0.004	0.00143
-470.0	-7.5	-32.5	-14.4	-31.4	-47.1	0.000000	0.004	0.00146
-465.0	-7.5	-32.5	-14.3	-31.3	-46.9	0.000000	0.004	0.00149
-460.0	-7.4	-32.4	-14.2	-31.2	-46.8	0.000000	0.004	0.00153
-455.0	-7.4	-32.4	-14.1	-31.1	-46.6	0.000000	0.004	0.00156
-450.0	-7.3	-32.3	-13.9	-30.9	-46.4	0.000000	0.004	0.00160
-445.0	-7.2	-32.2	-13.8	-30.8	-46.2	0.000000	0.004	0.00163
-440.0	-7.2	-32.2	-13.7	-30.7	-46.0	0.000000	0.004	0.00167
-435.0	-7.1	-32.1	-13.6	-30.6	-45.8	0.000000	0.005	0.00171
-430.0	-7.1	-32.1	-13.5	-30.5	-45.6	0.000000	0.005	0.00175
-425.0	-7.0	-32.0	-13.4	-30.4	-45.4	0.000000	0.005	0.00179
-420.0	-7.0	-32.0	-13.3	-30.3	-45.2	0.000000	0.005	0.00184
-415.0	-6.9	-31.9	-13.2	-30.2	-45.0	0.000000	0.005	0.00188
-410.0	-6.8	-31.8	-13.1	-30.1	-44.8	0.000000	0.005	0.00193
-405.0	-6.8	-31.8	-13.0	-30.0	-44.6	0.000000	0.005	0.00198
-400.0	-6.7	-31.7	-12.8	-29.8	-44.4	0.000000	0.005	0.00203
-395.0	-6.7	-31.7	-12.7	-29.7	-44.2	0.000000	0.005	0.00208
-390.0	-6.6	-31.6	-12.6	-29.6	-44.0	0.000000	0.006	0.00214
-385.0	-6.5	-31.5	-12.5	-29.5	-43.8	0.000000	0.006	0.00219
-380.0	-6.5	-31.5	-12.3	-29.3	-43.5	0.000000	0.006	0.00225
-375.0	-6.4	-31.4	-12.2	-29.2	-43.3	0.000000	0.006	0.00231
-370.0	-6.3	-31.3	-12.1	-29.1	-43.2	0.000000	0.006	0.00238
-365.0	-6.3	-31.3	-12.0	-29.0	-43.0	0.000000	0.006	0.00245
-360.0	-6.2	-31.2	-11.8	-28.8	-42.9	0.000000	0.007	0.00252
-355.0	-6.1	-31.1	-11.7	-28.7	-42.8	0.000000	0.007	0.00259
-350.0	-6.1	-31.1	-11.6	-28.6	-42.7	0.000000	0.007	0.00267
-345.0	-6.0	-31.0	-11.4	-28.4	-42.6	0.000000	0.007	0.00275
-340.0	-5.9	-30.9	-11.3	-28.3	-42.4	0.000000	0.007	0.00283
-335.0	-5.9	-30.9	-11.1	-28.1	-42.3	0.000000	0.007	0.00292
-330.0	-5.8	-30.8	-11.0	-28.0	-42.2	0.000000	0.008	0.00301
-325.0	-5.7	-30.7	-10.8	-27.8	-42.1	0.000000	0.008	0.00311
-320.0	-5.6	-30.6	-10.7	-27.7	-41.9	0.000000	0.008	0.00321
-315.0	-5.6	-30.6	-10.5	-27.5	-41.8	0.000000	0.008	0.00331
-310.0	-5.5	-30.5	-10.4	-27.4	-41.7	0.000000	0.009	0.00343
-305.0	-5.4	-30.4	-10.2	-27.2	-41.5	0.000000	0.009	0.00354
-300.0	-5.3	-30.3	-10.0	-27.0	-41.4	0.000000	0.009	0.00367
-295.0	-5.2	-30.2	-9.9	-26.9	-41.1	0.000000	0.010	0.00380
-290.0	-5.1	-30.1	-9.7	-26.7	-40.8	0.000000	0.010	0.00393
-285.0	-5.1	-30.1	-9.5	-26.5	-40.5	0.000000	0.010	0.00408
-280.0	-5.0	-30.0	-9.3	-26.3	-40.2	0.000000	0.011	0.00423
-275.0	-4.9	-29.9	-9.1	-26.1	-39.9	0.000000	0.011	0.00439
-270.0	-4.8	-29.8	-9.0	-26.0	-39.6	0.000000	0.011	0.00457
-265.0	-4.7	-29.7	-8.8	-25.8	-39.3	0.000000	0.012	0.00475

Steel Pole With Adjacent T-line- ROW Segment 4

Results

-260.0	-4.6	-29.6	-8.6	-25.6	-39.0	0.000000	0.012	0.00494
-255.0	-4.5	-29.5	-8.4	-25.4	-38.7	0.000000	0.013	0.00515
-250.0	-4.4	-29.4	-8.2	-25.2	-38.3	0.000000	0.013	0.00537
-245.0	-4.3	-29.3	-8.0	-25.0	-38.0	0.000000	0.014	0.00560
-240.0	-4.2	-29.2	-7.7	-24.7	-37.7	0.000000	0.014	0.00585
-235.0	-4.1	-29.1	-7.5	-24.5	-37.3	0.000000	0.015	0.00612
-230.0	-4.0	-29.0	-7.3	-24.3	-36.9	0.000000	0.016	0.00641
-225.0	-3.9	-28.9	-7.1	-24.1	-36.6	0.000000	0.016	0.00672
-220.0	-3.8	-28.8	-6.8	-23.8	-36.2	0.000000	0.017	0.00705
-215.0	-3.7	-28.7	-6.6	-23.6	-35.8	0.000000	0.018	0.00741
-210.0	-3.6	-28.6	-6.3	-23.3	-35.4	0.000000	0.019	0.00780
-205.0	-3.5	-28.5	-6.1	-23.1	-35.0	0.000000	0.020	0.00822
-200.0	-3.3	-28.3	-5.8	-22.8	-34.8	0.000000	0.021	0.00867
-195.0	-3.2	-28.2	-5.5	-22.5	-34.6	0.000000	0.022	0.00917
-190.0	-3.1	-28.1	-5.2	-22.2	-34.4	0.000000	0.023	0.00971
-185.0	-3.0	-28.0	-4.9	-21.9	-34.1	0.000000	0.025	0.01031
-180.0	-2.8	-27.8	-4.6	-21.6	-33.9	0.000000	0.027	0.01096
-175.0	-2.7	-27.7	-4.3	-21.3	-33.7	0.000000	0.028	0.01169
-170.0	-2.6	-27.6	-4.0	-21.0	-33.4	0.000000	0.030	0.01249
-165.0	-2.4	-27.4	-3.6	-20.6	-33.2	0.000000	0.033	0.01338
-160.0	-2.3	-27.3	-3.3	-20.3	-32.9	0.000000	0.035	0.01437
-155.0	-2.1	-27.1	-2.9	-19.9	-32.7	0.000000	0.038	0.01548
-150.0	-2.0	-27.0	-2.6	-19.6	-32.4	0.000000	0.042	0.01674
-145.0	-1.8	-26.8	-2.2	-19.2	-32.1	0.000000	0.046	0.01817
-140.0	-1.6	-26.6	-1.8	-18.8	-31.9	0.000000	0.051	0.01979
-135.0	-1.5	-26.5	-1.3	-18.3	-31.6	0.000000	0.057	0.02163
-130.0	-1.3	-26.3	-0.9	-17.9	-31.3	0.000000	0.064	0.02375
-125.0	-1.1	-26.1	-0.4	-17.4	-30.9	0.000000	0.073	0.02616
-120.0	-0.9	-25.9	0.1	-16.9	-30.6	0.000000	0.084	0.02889
-115.0	-0.7	-25.7	0.6	-16.4	-30.3	0.000000	0.098	0.03193
-110.0	-0.5	-25.5	1.1	-15.9	-29.9	0.000000	0.115	0.03523
-105.0	-0.3	-25.3	1.6	-15.4	-29.6	0.000000	0.135	0.03866
-100.0	-0.1	-25.1	2.2	-14.8	-29.2	0.000000	0.156	0.04217
-95.0	0.2	-24.8	2.8	-14.2	-28.7	0.000000	0.174	0.04572
-90.0	0.4	-24.6	3.7	-13.3	-28.2	0.000000	0.184	0.04856
-85.0	0.7	-24.3	4.6	-12.4	-27.7	0.000000	0.186	0.04940
-80.0	1.0	-24.0	5.6	-11.4	-27.1	0.000016	0.189	0.04724
-75.0	1.3	-23.7	6.7	-10.3	-26.5	0.000055	0.194	0.04238
-70.0	1.6	-23.4	7.9	-9.1	-25.8	0.000073	0.191	0.03819
-65.0	1.9	-23.1	9.2	-7.8	-25.1	0.000073	0.176	0.04211
-60.0	2.2	-22.8	10.6	-6.4	-24.4	0.000064	0.167	0.05357
-55.0	2.6	-22.4	12.1	-4.9	-23.5	0.000056	0.197	0.06774
-50.0	3.0	-22.0	13.8	-3.2	-22.6	0.000049	0.270	0.08384
-45.0	3.5	-21.5	15.6	-1.4	-21.6	0.000044	0.379	0.10260
-40.0	3.9	-21.1	17.6	0.6	-20.5	0.000040	0.525	0.12524
-35.0	4.4	-20.6	19.8	2.8	-19.3	0.000036	0.714	0.15321
-30.0	5.0	-20.0	22.2	5.2	-17.9	0.000033	0.952	0.18810
-25.0	5.5	-19.5	24.6	7.6	-16.4	0.000031	1.233	0.23110
-20.0	6.1	-18.9	27.1	10.1	-14.9	0.000029	1.520	0.28163
-15.0	6.6	-18.4	29.0	12.0	-13.5	0.000027	1.724	0.33508
-10.0	7.0	-18.0	29.9	12.9	-12.9	0.000026	1.729	0.38154
-5.0	7.3	-17.7	29.4	12.4	-13.2	0.002397	1.512	0.40986
0.0	7.4	-17.6	29.3	12.3	-12.8	0.003384	1.294	0.41454

Steel Pole with Adjacent T-line- ROW Segment 4

Results

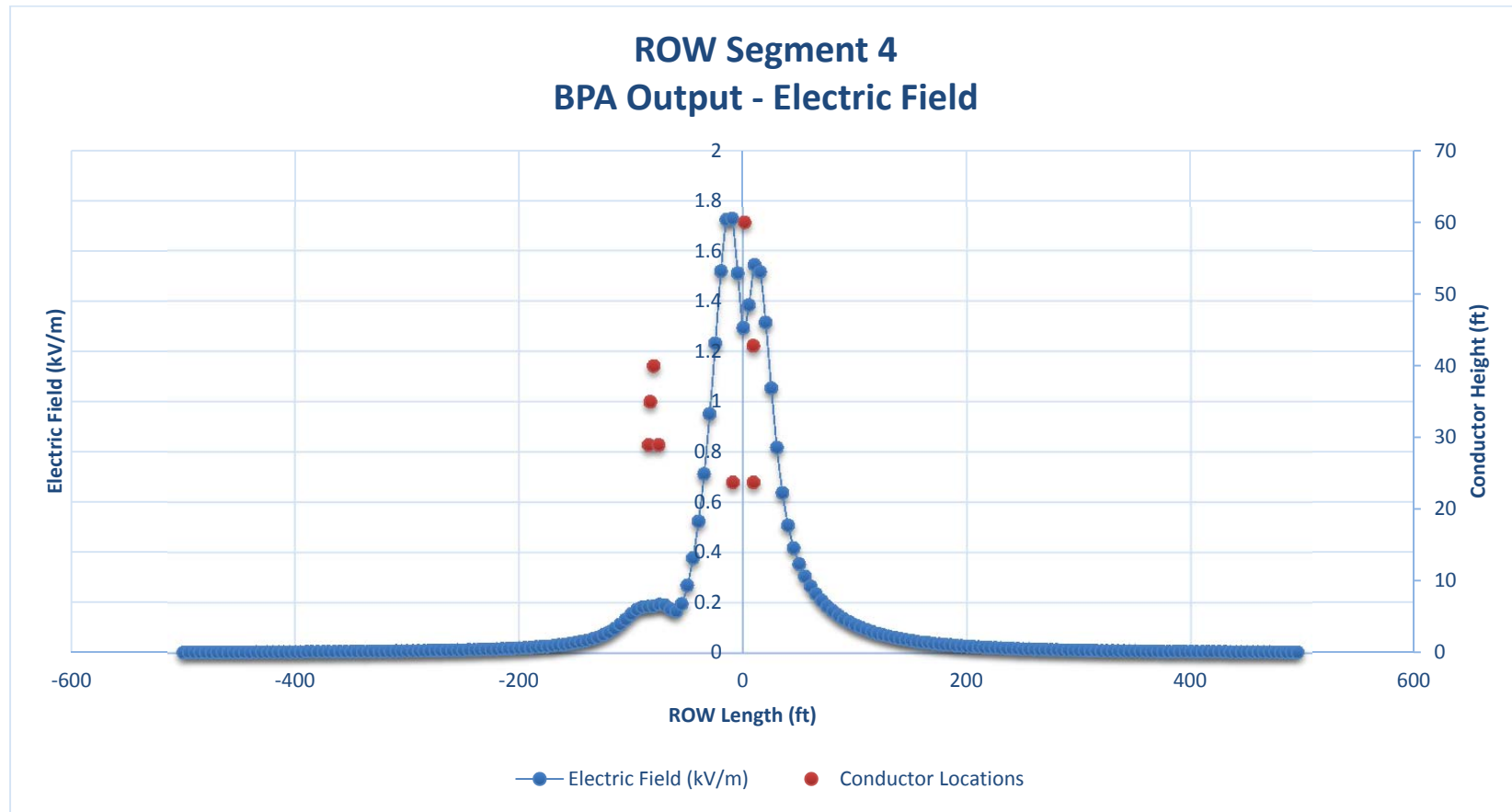
5.0	7.5	-17.5	31.0	14.0	-11.6	0.002816	1.385	0.39608
10.0	7.3	-17.7	31.5	14.5	-11.3	0.002330	1.545	0.35784
15.0	7.0	-18.0	30.6	13.6	-12.0	0.006619	1.517	0.30702
20.0	6.6	-18.4	28.6	11.6	-13.3	0.007184	1.316	0.25386
25.0	6.0	-19.0	26.2	9.2	-14.8	0.006377	1.055	0.20641
30.0	5.5	-19.5	23.7	6.7	-16.3	0.005564	0.818	0.16814
35.0	4.9	-20.1	21.4	4.4	-17.7	0.004900	0.638	0.13930
40.0	4.4	-20.6	19.2	2.2	-18.9	0.004370	0.509	0.11779
45.0	3.9	-21.1	17.2	0.2	-20.0	0.003944	0.419	0.10089
50.0	3.5	-21.5	15.4	-1.6	-21.0	0.003596	0.355	0.08713
55.0	3.0	-22.0	13.7	-3.3	-22.0	0.003307	0.306	0.07576
60.0	2.7	-22.3	12.2	-4.8	-22.8	0.003062	0.267	0.06630
65.0	2.3	-22.7	10.8	-6.2	-23.5	0.002854	0.236	0.05838
70.0	1.9	-23.1	9.5	-7.5	-24.2	0.002673	0.210	0.05171
75.0	1.6	-23.4	8.6	-8.4	-24.9	0.002515	0.187	0.04606
80.0	1.3	-23.7	7.7	-9.3	-25.5	0.002376	0.168	0.04124
85.0	1.0	-24.0	6.9	-10.1	-26.1	0.002253	0.151	0.03711
90.0	0.7	-24.3	6.0	-11.0	-26.6	0.002142	0.136	0.03355
95.0	0.5	-24.5	5.3	-11.7	-27.1	0.002043	0.124	0.03045
100.0	0.2	-24.8	4.6	-12.4	-27.6	0.001953	0.112	0.02776
105.0	-0.0	-25.0	3.9	-13.1	-28.1	0.001871	0.103	0.02539
110.0	-0.2	-25.2	3.2	-13.8	-28.5	0.001796	0.094	0.02331
115.0	-0.5	-25.5	2.6	-14.4	-28.9	0.001728	0.086	0.02147
120.0	-0.7	-25.7	2.0	-15.0	-29.3	0.001665	0.079	0.01984
125.0	-0.9	-25.9	1.4	-15.6	-29.7	0.001606	0.073	0.01838
130.0	-1.1	-26.1	0.9	-16.1	-30.0	0.001552	0.068	0.01707
135.0	-1.2	-26.2	0.4	-16.6	-30.4	0.001502	0.063	0.01590
140.0	-1.4	-26.4	-0.1	-17.1	-30.7	0.001455	0.058	0.01484
145.0	-1.6	-26.6	-0.6	-17.6	-31.1	0.001411	0.054	0.01388
150.0	-1.8	-26.8	-1.1	-18.1	-31.4	0.001370	0.051	0.01301
155.0	-1.9	-26.9	-1.5	-18.5	-31.7	0.001331	0.047	0.01222
160.0	-2.1	-27.1	-1.9	-18.9	-32.0	0.001295	0.044	0.01150
165.0	-2.2	-27.2	-2.3	-19.3	-32.2	0.001260	0.042	0.01084
170.0	-2.4	-27.4	-2.7	-19.7	-32.5	0.001228	0.039	0.01024
175.0	-2.5	-27.5	-3.1	-20.1	-32.8	0.001197	0.037	0.00968
180.0	-2.7	-27.7	-3.4	-20.4	-33.0	0.001168	0.035	0.00917
185.0	-2.8	-27.8	-3.8	-20.8	-33.3	0.001141	0.033	0.00870
190.0	-2.9	-27.9	-4.1	-21.1	-33.5	0.001115	0.031	0.00826
195.0	-3.1	-28.1	-4.4	-21.4	-33.8	0.001090	0.029	0.00785
200.0	-3.2	-28.2	-4.7	-21.7	-34.0	0.001066	0.028	0.00748
205.0	-3.3	-28.3	-5.0	-22.0	-34.2	0.001043	0.026	0.00713
210.0	-3.4	-28.4	-5.3	-22.3	-34.4	0.001022	0.025	0.00680
215.0	-3.5	-28.5	-5.6	-22.6	-34.6	0.001001	0.024	0.00650
220.0	-3.7	-28.7	-5.9	-22.9	-34.8	0.000981	0.023	0.00621
225.0	-3.8	-28.8	-6.2	-23.2	-35.2	0.000962	0.022	0.00594
230.0	-3.9	-28.9	-6.4	-23.4	-35.6	0.000944	0.021	0.00569
235.0	-4.0	-29.0	-6.7	-23.7	-36.0	0.000927	0.020	0.00546
240.0	-4.1	-29.1	-6.9	-23.9	-36.3	0.000910	0.019	0.00524
245.0	-4.2	-29.2	-7.2	-24.2	-36.7	0.000894	0.018	0.00503
250.0	-4.3	-29.3	-7.4	-24.4	-37.1	0.000878	0.017	0.00484
255.0	-4.4	-29.4	-7.6	-24.6	-37.4	0.000863	0.017	0.00465
260.0	-4.5	-29.5	-7.8	-24.8	-37.8	0.000849	0.016	0.00448
265.0	-4.6	-29.6	-8.0	-25.0	-38.1	0.000835	0.015	0.00432

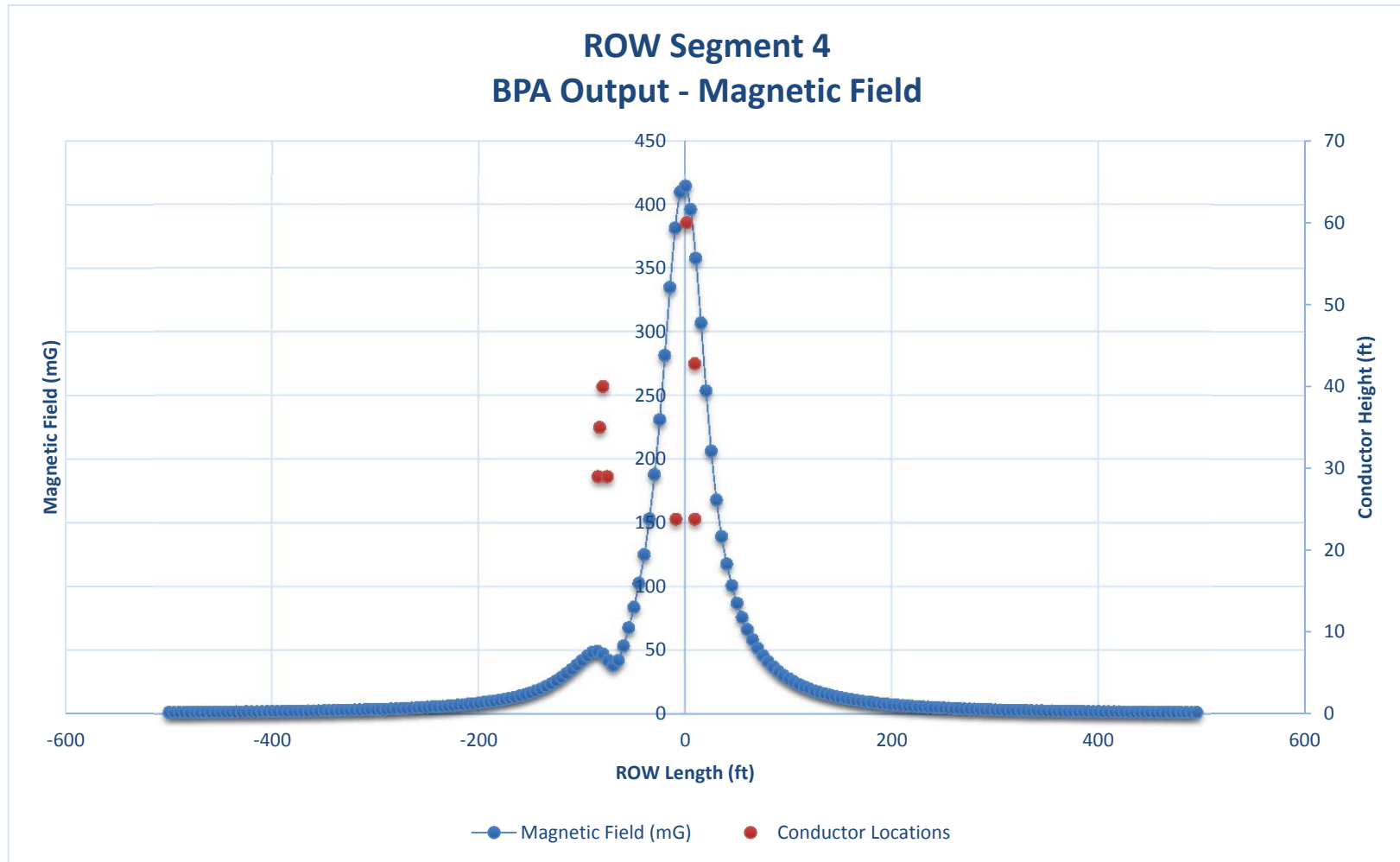
Steel Pole with Adjacent T-line- ROW Segment 4

Results

270.0	-4.7	-29.7	-8.2	-25.2	-38.4	0.000822	0.015	0.00416
275.0	-4.8	-29.8	-8.5	-25.5	-38.8	0.000809	0.014	0.00401
280.0	-4.9	-29.9	-8.7	-25.7	-39.1	0.000796	0.014	0.00387
285.0	-5.0	-30.0	-8.8	-25.8	-39.4	0.000784	0.013	0.00374
290.0	-5.0	-30.0	-9.0	-26.0	-39.7	0.000772	0.013	0.00362
295.0	-5.1	-30.1	-9.2	-26.2	-40.0	0.000761	0.012	0.00350
300.0	-5.2	-30.2	-9.4	-26.4	-40.3	0.000750	0.012	0.00338
305.0	-5.3	-30.3	-9.6	-26.6	-40.6	0.000739	0.011	0.00327
310.0	-5.4	-30.4	-9.8	-26.8	-40.9	0.000729	0.011	0.00317
315.0	-5.5	-30.5	-9.9	-26.9	-41.2	0.000719	0.011	0.00307
320.0	-5.5	-30.5	-10.1	-27.1	-41.5	0.000709	0.010	0.00298
325.0	-5.6	-30.6	-10.3	-27.3	-41.6	0.000700	0.010	0.00289
330.0	-5.7	-30.7	-10.4	-27.4	-41.7	0.000691	0.010	0.00280
335.0	-5.8	-30.8	-10.6	-27.6	-41.9	0.000682	0.009	0.00272
340.0	-5.8	-30.8	-10.7	-27.7	-42.0	0.000673	0.009	0.00264
345.0	-5.9	-30.9	-10.9	-27.9	-42.1	0.000664	0.009	0.00257
350.0	-6.0	-31.0	-11.0	-28.0	-42.2	0.000656	0.009	0.00250
355.0	-6.0	-31.0	-11.2	-28.2	-42.4	0.000648	0.008	0.00243
360.0	-6.1	-31.1	-11.3	-28.3	-42.5	0.000640	0.008	0.00236
365.0	-6.2	-31.2	-11.5	-28.5	-42.6	0.000633	0.008	0.00230
370.0	-6.3	-31.3	-11.6	-28.6	-42.7	0.000625	0.008	0.00224
375.0	-6.3	-31.3	-11.7	-28.7	-42.9	0.000618	0.007	0.00218
380.0	-6.4	-31.4	-11.9	-28.9	-43.0	0.000611	0.007	0.00212
385.0	-6.5	-31.5	-12.0	-29.0	-43.1	0.000604	0.007	0.00207
390.0	-6.5	-31.5	-12.1	-29.1	-43.2	0.000598	0.007	0.00202
395.0	-6.6	-31.6	-12.3	-29.3	-43.4	0.000591	0.007	0.00197
400.0	-6.6	-31.6	-12.4	-29.4	-43.6	0.000585	0.007	0.00192
405.0	-6.7	-31.7	-12.5	-29.5	-43.8	0.000578	0.006	0.00187
410.0	-6.8	-31.8	-12.6	-29.6	-44.1	0.000572	0.006	0.00183
415.0	-6.8	-31.8	-12.8	-29.8	-44.3	0.000566	0.006	0.00178
420.0	-6.9	-31.9	-12.9	-29.9	-44.5	0.000560	0.006	0.00174
425.0	-6.9	-31.9	-13.0	-30.0	-44.7	0.000555	0.006	0.00170
430.0	-7.0	-32.0	-13.1	-30.1	-44.9	0.000549	0.006	0.00166
435.0	-7.1	-32.1	-13.2	-30.2	-45.1	0.000544	0.005	0.00163
440.0	-7.1	-32.1	-13.3	-30.3	-45.3	0.000538	0.005	0.00159
445.0	-7.2	-32.2	-13.5	-30.5	-45.5	0.000533	0.005	0.00155
450.0	-7.2	-32.2	-13.6	-30.6	-45.7	0.000528	0.005	0.00152
455.0	-7.3	-32.3	-13.7	-30.7	-45.9	0.000523	0.005	0.00149
460.0	-7.3	-32.3	-13.8	-30.8	-46.1	0.000518	0.005	0.00145
465.0	-7.4	-32.4	-13.9	-30.9	-46.3	0.000513	0.005	0.00142
470.0	-7.4	-32.4	-14.0	-31.0	-46.5	0.000509	0.005	0.00139
475.0	-7.5	-32.5	-14.1	-31.1	-46.7	0.000504	0.005	0.00137
480.0	-7.5	-32.5	-14.2	-31.2	-46.8	0.000499	0.004	0.00134
485.0	-7.6	-32.6	-14.3	-31.3	-47.0	0.000495	0.004	0.00131
490.0	-7.7	-32.7	-14.4	-31.4	-47.2	0.000491	0.004	0.00128
495.0	-7.7	-32.7	-14.5	-31.5	-47.4	0.000486	0.004	0.00126

ROW Segment 4 – Steel Monopole Tangent Structure with Adjacent T-Line





ROW Segment 5:

Overhead 115kV T-line with steel monopoles and adjacent UG 34.5kV Collection
line

The diagram illustrates a cross-section of a proposed 34.5kV transmission line tower and its associated infrastructure within a 100-foot right-of-way. The tower is a lattice structure with a total height of 90 feet. It features three main horizontal arms: a top arm with a 1-foot clearance from the tower, a middle arm with a 17-foot clearance, and a bottom arm with a 19-foot clearance. The bottom arm is labeled 'A', the middle arm is labeled 'B', and the top arm is labeled 'C'. The tower is positioned 38.5 feet from the left edge of the right-of-way and 11.5 feet from the right edge. A 34.5kV UG Collection Cable is shown entering the tower from the left. The right-of-way is 100 feet wide, with the proposed edge of right-of-way/vegetation removal indicated on both sides. The diagram also shows the proposed edge of right-of-way/vegetation removal on both sides of the tower, with a 1-foot clearance from the tower. The diagram includes labels for '34.5kV UG COLLECTION CABLE', 'A', 'B', 'C', and dimensions for height (90', 17', 19', 1') and width (100', 38.5', 11.5').

PROPOSED CROSS SECTION
LOOKING TOWARDS PROPOSED COLLECTOR TAKEOFF

- | | | | | | | | | |
|----|------------|-------------------------------------|--|------|------|------|------|---|
| - | | | | | | | | SCALE:

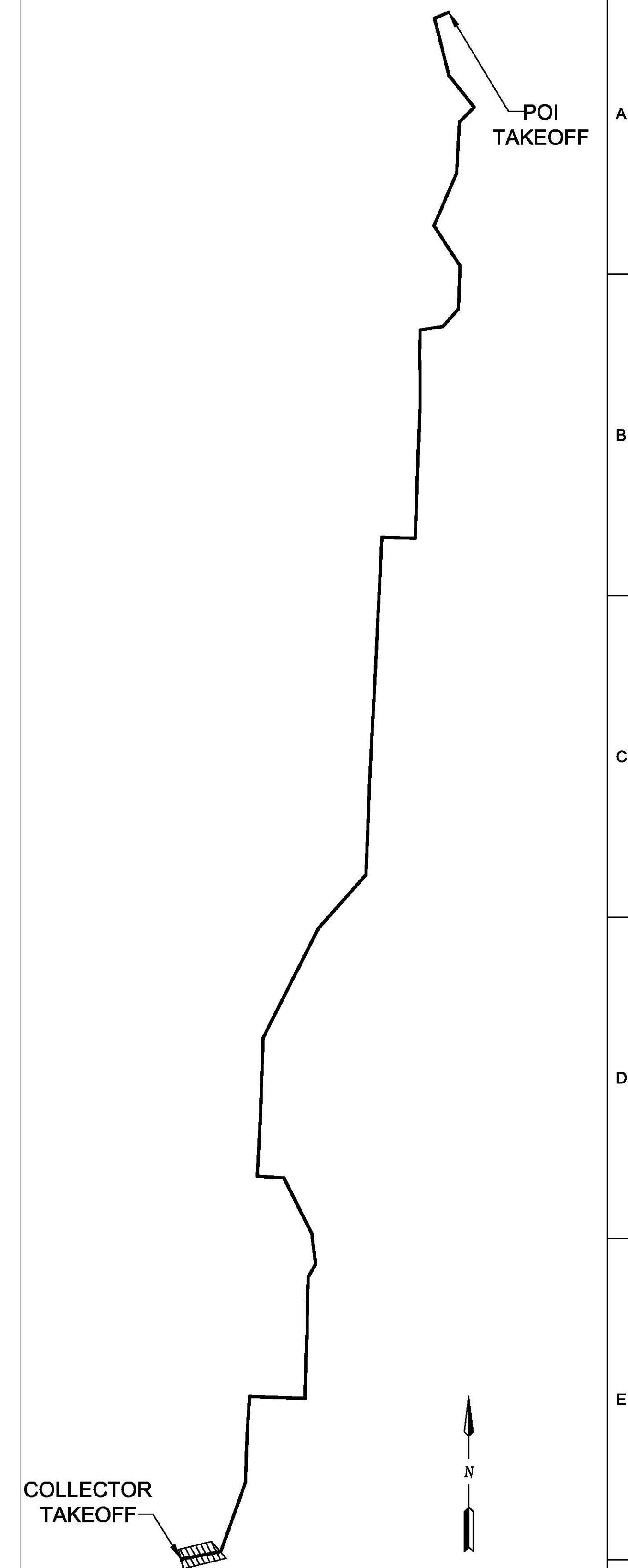
NONE
 |
| - | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| - | | | | | | | | |
| C | 02/16/2018 | PRELIMINARY - ARTICLE VII/ARTICLE X | | NJT | TRK | KVP | S&L | |
| B | 01/08/2018 | PRELIMINARY - ARTICLE VII | | NJT | JDJ | KVP | S&L | |
| A | 10/04/2017 | PRELIMINARY - NOT FOR CONSTRUCTION | | CRC | JDJ | KVP | S&L | PREP: CRC CHKD: JDJ |
| NO | DATE | REVISIONS AND RECORD OF ISSUE | | DRWN | REVD | APPR | COMP | APPD: KVP DATE: 10/04/2017 |

L	PREP: CRC	CHKD: JDJ
MP	APPD: KVP	DATE: 10/04/2017

ANY MODIFICATION OR ADDITION TO THIS
DRAWING BY ANY ORGANIZATION OTHER
THAN SARGENT & LUNDY IS NOT THE
RESPONSIBILITY OF SARGENT & LUNDY.

NEXtera
ENERGY
RESOURCES

13139-043-T1-0915



34.5kV UG Collection line- ROW Segment 5 Inputs

[illegible]

INPUT DATA LIST

10/ 3/2017 15:39:51
EIGHT POINT - EMF CALC - 13139-043-TL-006 - STL POLE,,,,,,,,,
PREPARED: SAHMADZAI,,,,,,,,,
1.0, 3, 4,0.0, 0.50, 1.00,1980.00

(ENGLISH UNITS OPTION)

(GRADIENTS ARE COMPUTED BY PROGRAM)

PHYSICAL SYSTEM CONSISTS OF 4 CONDUCTORS, OF WHICH 3 ARE ENERGIZED PHASES

[illegible]

COMBINED OUTPUT OF AUDIBLE NOISE, RADIO NOISE, TVI, OZONE CONCENTRATION, GROUND GRADIENT AND MAGNETIC FIELD
EIGHT POINT - EMF CALC - 13139-043-TL-006 - STL POLE,,,,,,,,,
PREPARED: SAHMADZAI,,,,,,,,,

	DIST. FROM CENTER OF TOWER (FEET)	HEIGHT (FEET)	MAXIMUM GRADIENT (KV/CM)	SUBCON DIAM. (IN)	NO. OF SUBCON	SUBCON SPACING (IN)	VOLTAGE L-N (KV)	PHASE ANGLE (DEGREES)	CURRENT (kAmps)	CORONA LOSSES (KW/MI)
PH. A-1	9.00	42.80	5.90	1.50	1	0.00	66.39	0.00	1.98	0.035
PH. B-1	-9.20	23.80	6.08	1.50	1	0.00	66.39	240.00	1.98	0.043
PH. C-1	9.20	23.80	6.28	1.50	1	0.00	66.39	120.00	1.98	0.053
OPGW 1	1.20	60.00	1.66	0.53	1	0.00	0.00	0.00	0.00	0.000

AN MICROPHONE HT.= 5.0 FT, RI ANT. HT.= 6.6 FT, TV ANT. HT.= 9.8 FT, ALTITUDE= 1980.0 FT
RI FREQ= 1.000 MHZ, TV FREQ= 75.000 MHZ, WIND VEL.(OZ)= 0.500 MPH, GROUND CONDUCTIVITY = 10.0 MMHOS/M
E-FIELD TRANSDUCER HT.= 3.3FT, B-FIELD TRANSDUCER HT.= 3.3FT

34.5kv UG Collection line- ROW Segment 5 Results (Electric Field)

LATERAL DIST FROM REFERENCE (FEET)	AUDIBLE NOISE (RAIN) L50 DBA	NOISE (FAIR) L50 DBA	RADIO INTERFERENCE (RAIN) L50 DBUV/M	INTERFERENCE (FAIR) L50 DBUV/M	TVI TOTAL RAIN DBUV/M	OZONE FOR RAIN RATE OF 1.00 IN/HR AT 0. FT LEVEL PPB	ELECTRIC FIELD KV/M	MAGNETIC FIELD GAUSS
-500.0	-7.2	-32.2	-14.3	-31.3	-47.5	0.000000	0.003	0.00118
-495.0	-7.1	-32.1	-14.2	-31.2	-47.4	0.000000	0.003	0.00120
-490.0	-7.1	-32.1	-14.1	-31.1	-47.2	0.000000	0.003	0.00123
-485.0	-7.0	-32.0	-14.0	-31.0	-47.0	0.000000	0.003	0.00125
-480.0	-7.0	-32.0	-13.9	-30.9	-46.9	0.000000	0.003	0.00128
-475.0	-6.9	-31.9	-13.8	-30.8	-46.7	0.000000	0.004	0.00131
-470.0	-6.9	-31.9	-13.7	-30.7	-46.5	0.000000	0.004	0.00133
-465.0	-6.8	-31.8	-13.6	-30.6	-46.3	0.000000	0.004	0.00136
-460.0	-6.8	-31.8	-13.5	-30.5	-46.1	0.000000	0.004	0.00139
-455.0	-6.7	-31.7	-13.4	-30.4	-45.9	0.000000	0.004	0.00142
-450.0	-6.7	-31.7	-13.3	-30.3	-45.8	0.000000	0.004	0.00146
-445.0	-6.6	-31.6	-13.2	-30.2	-45.6	0.000000	0.004	0.00149
-440.0	-6.6	-31.6	-13.1	-30.1	-45.4	0.000000	0.004	0.00152
-435.0	-6.5	-31.5	-13.0	-30.0	-45.2	0.000000	0.004	0.00156
-430.0	-6.4	-31.4	-12.9	-29.9	-45.0	0.000000	0.004	0.00159
-425.0	-6.4	-31.4	-12.8	-29.8	-44.8	0.000000	0.004	0.00163
-420.0	-6.3	-31.3	-12.7	-29.7	-44.6	0.000000	0.004	0.00167
-415.0	-6.3	-31.3	-12.6	-29.6	-44.4	0.000000	0.005	0.00171
-410.0	-6.2	-31.2	-12.4	-29.4	-44.2	0.000000	0.005	0.00175
-405.0	-6.2	-31.2	-12.3	-29.3	-44.0	0.000000	0.005	0.00180
-400.0	-6.1	-31.1	-12.2	-29.2	-43.8	0.000000	0.005	0.00184
-395.0	-6.0	-31.0	-12.1	-29.1	-43.6	0.000000	0.005	0.00189
-390.0	-6.0	-31.0	-12.0	-29.0	-43.3	0.000000	0.005	0.00194
-385.0	-5.9	-30.9	-11.8	-28.8	-43.1	0.000000	0.005	0.00199
-380.0	-5.8	-30.8	-11.7	-28.7	-42.9	0.000000	0.005	0.00204
-375.0	-5.8	-30.8	-11.6	-28.6	-42.7	0.000000	0.005	0.00209
-370.0	-5.7	-30.7	-11.5	-28.5	-42.5	0.000000	0.006	0.00215
-365.0	-5.6	-30.6	-11.3	-28.3	-42.4	0.000000	0.006	0.00221
-360.0	-5.6	-30.6	-11.2	-28.2	-42.3	0.000000	0.006	0.00227
-355.0	-5.5	-30.5	-11.1	-28.1	-42.2	0.000000	0.006	0.00233
-350.0	-5.4	-30.4	-10.9	-27.9	-42.1	0.000000	0.006	0.00240
-345.0	-5.4	-30.4	-10.8	-27.8	-41.9	0.000000	0.006	0.00247
-340.0	-5.3	-30.3	-10.6	-27.6	-41.8	0.000000	0.007	0.00254
-335.0	-5.2	-30.2	-10.5	-27.5	-41.7	0.000000	0.007	0.00262
-330.0	-5.2	-30.2	-10.3	-27.3	-41.6	0.000000	0.007	0.00270
-325.0	-5.1	-30.1	-10.2	-27.2	-41.4	0.000000	0.007	0.00278
-320.0	-5.0	-30.0	-10.0	-27.0	-41.3	0.000000	0.007	0.00287
-315.0	-4.9	-29.9	-9.9	-26.9	-41.2	0.000000	0.008	0.00296
-310.0	-4.8	-29.8	-9.7	-26.7	-41.0	0.000000	0.008	0.00305
-305.0	-4.8	-29.8	-9.6	-26.6	-40.9	0.000000	0.008	0.00315
-300.0	-4.7	-29.7	-9.4	-26.4	-40.7	0.000000	0.008	0.00326
-295.0	-4.6	-29.6	-9.2	-26.2	-40.4	0.000000	0.008	0.00337
-290.0	-4.5	-29.5	-9.1	-26.1	-40.1	0.000000	0.009	0.00349
-285.0	-4.4	-29.4	-8.9	-25.9	-39.9	0.000000	0.009	0.00361
-280.0	-4.4	-29.4	-8.7	-25.7	-39.6	0.000000	0.009	0.00374
-275.0	-4.3	-29.3	-8.5	-25.5	-39.3	0.000000	0.010	0.00387
-270.0	-4.2	-29.2	-8.3	-25.3	-38.9	0.000000	0.010	0.00402
-265.0	-4.1	-29.1	-8.1	-25.1	-38.6	0.000000	0.010	0.00417

34.5kV UG Collection line- ROW Segment 5 Results (Electric Field)

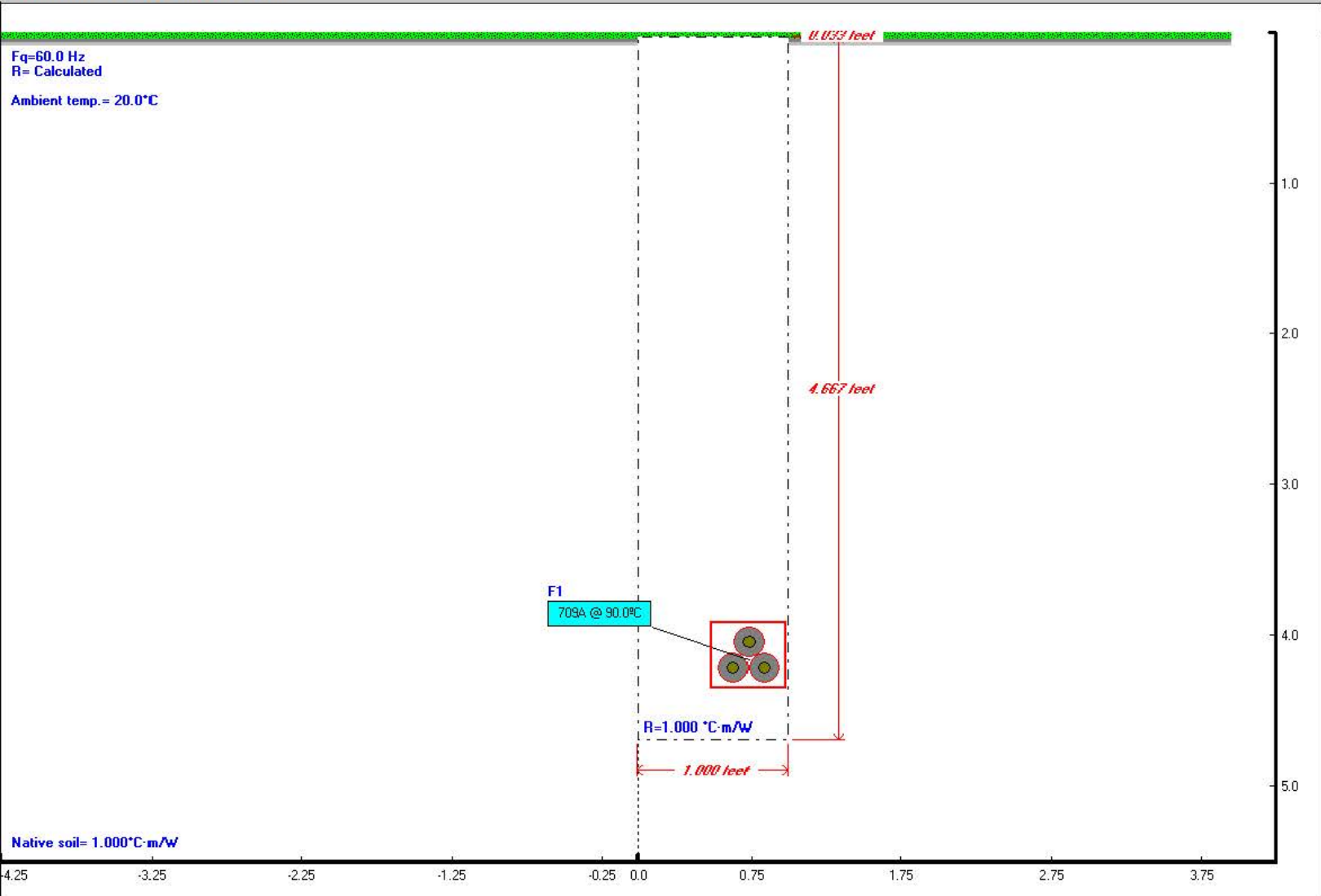
-260.0	-4.0	-29.0	-7.9	-24.9	-38.3	0.000000	0.011	0.00433
-255.0	-3.9	-28.9	-7.7	-24.7	-38.0	0.000000	0.011	0.00450
-250.0	-3.8	-28.8	-7.5	-24.5	-37.7	0.000000	0.011	0.00468
-245.0	-3.7	-28.7	-7.3	-24.3	-37.3	0.000000	0.012	0.00487
-240.0	-3.6	-28.6	-7.1	-24.1	-37.0	0.000000	0.012	0.00507
-235.0	-3.5	-28.5	-6.9	-23.9	-36.6	0.000000	0.013	0.00528
-230.0	-3.4	-28.4	-6.7	-23.7	-36.3	0.000000	0.013	0.00551
-225.0	-3.3	-28.3	-6.4	-23.4	-35.9	0.000000	0.014	0.00576
-220.0	-3.2	-28.2	-6.2	-23.2	-35.5	0.000000	0.014	0.00602
-215.0	-3.1	-28.1	-5.9	-22.9	-35.1	0.000000	0.015	0.00629
-210.0	-3.0	-28.0	-5.7	-22.7	-34.8	0.000000	0.016	0.00659
-205.0	-2.8	-27.8	-5.4	-22.4	-34.4	0.000000	0.016	0.00691
-200.0	-2.7	-27.7	-5.2	-22.2	-34.1	0.000000	0.017	0.00726
-195.0	-2.6	-27.6	-4.9	-21.9	-33.9	0.000000	0.018	0.00763
-190.0	-2.5	-27.5	-4.6	-21.6	-33.7	0.000000	0.019	0.00802
-185.0	-2.3	-27.3	-4.3	-21.3	-33.5	0.000000	0.019	0.00845
-180.0	-2.2	-27.2	-4.0	-21.0	-33.2	0.000000	0.020	0.00892
-175.0	-2.1	-27.1	-3.7	-20.7	-33.0	0.000000	0.021	0.00942
-170.0	-1.9	-26.9	-3.3	-20.3	-32.8	0.000000	0.023	0.00997
-165.0	-1.8	-26.8	-3.0	-20.0	-32.5	0.000000	0.024	0.01057
-160.0	-1.6	-26.6	-2.7	-19.7	-32.3	0.000000	0.025	0.01122
-155.0	-1.5	-26.5	-2.3	-19.3	-32.0	0.000000	0.027	0.01194
-150.0	-1.3	-26.3	-1.9	-18.9	-31.7	0.000000	0.028	0.01272
-145.0	-1.2	-26.2	-1.5	-18.5	-31.5	0.000000	0.030	0.01358
-140.0	-1.0	-26.0	-1.1	-18.1	-31.2	0.000000	0.032	0.01454
-135.0	-0.8	-25.8	-0.7	-17.7	-30.9	0.000000	0.034	0.01559
-130.0	-0.7	-25.7	-0.3	-17.3	-30.6	0.000000	0.037	0.01677
-125.0	-0.5	-25.5	0.2	-16.8	-30.3	0.000000	0.040	0.01807
-120.0	-0.3	-25.3	0.7	-16.3	-29.9	0.000000	0.043	0.01954
-115.0	-0.1	-25.1	1.2	-15.8	-29.6	0.000000	0.047	0.02119
-110.0	0.1	-24.9	1.7	-15.3	-29.3	0.000000	0.052	0.02305
-105.0	0.3	-24.7	2.3	-14.7	-28.9	0.000000	0.057	0.02517
-100.0	0.6	-24.4	2.9	-14.1	-28.5	0.000000	0.064	0.02758
-95.0	0.8	-24.2	3.5	-13.5	-28.1	0.000000	0.071	0.03036
-90.0	1.1	-23.9	4.2	-12.8	-27.7	0.000000	0.081	0.03356
-85.0	1.3	-23.7	5.2	-11.8	-27.1	0.000000	0.093	0.03728
-80.0	1.6	-23.4	6.2	-10.8	-26.5	0.000000	0.107	0.04164
-75.0	1.9	-23.1	7.3	-9.7	-25.9	0.000000	0.126	0.04678
-70.0	2.2	-22.8	8.5	-8.5	-25.3	0.000000	0.150	0.05290
-65.0	2.5	-22.5	9.7	-7.3	-24.6	0.000000	0.182	0.06025
-60.0	2.9	-22.1	11.1	-5.9	-23.8	0.000000	0.223	0.06916
-55.0	3.2	-21.8	12.7	-4.3	-23.0	0.000000	0.278	0.08008
-50.0	3.6	-21.4	14.3	-2.7	-22.1	0.000000	0.351	0.09360
-45.0	4.1	-20.9	16.1	-0.9	-21.1	0.000000	0.450	0.11052
-40.0	4.5	-20.5	18.2	1.2	-20.0	0.000000	0.584	0.13188
-35.0	5.0	-20.0	20.3	3.3	-18.7	0.000000	0.761	0.15900
-30.0	5.6	-19.4	22.7	5.7	-17.4	0.000000	0.988	0.19336
-25.0	6.1	-18.9	25.2	8.2	-15.9	0.000000	1.261	0.23603
-20.0	6.7	-18.3	27.6	10.6	-14.3	0.000000	1.542	0.28638
-15.0	7.2	-17.8	29.5	12.5	-13.0	0.000000	1.739	0.33966
-10.0	7.6	-17.4	30.5	13.5	-12.3	0.000000	1.739	0.38582
-5.0	7.9	-17.1	30.0	13.0	-12.7	0.002710	1.516	0.41361
0.0	8.0	-17.0	30.0	13.0	-12.1	0.003839	1.291	0.41749

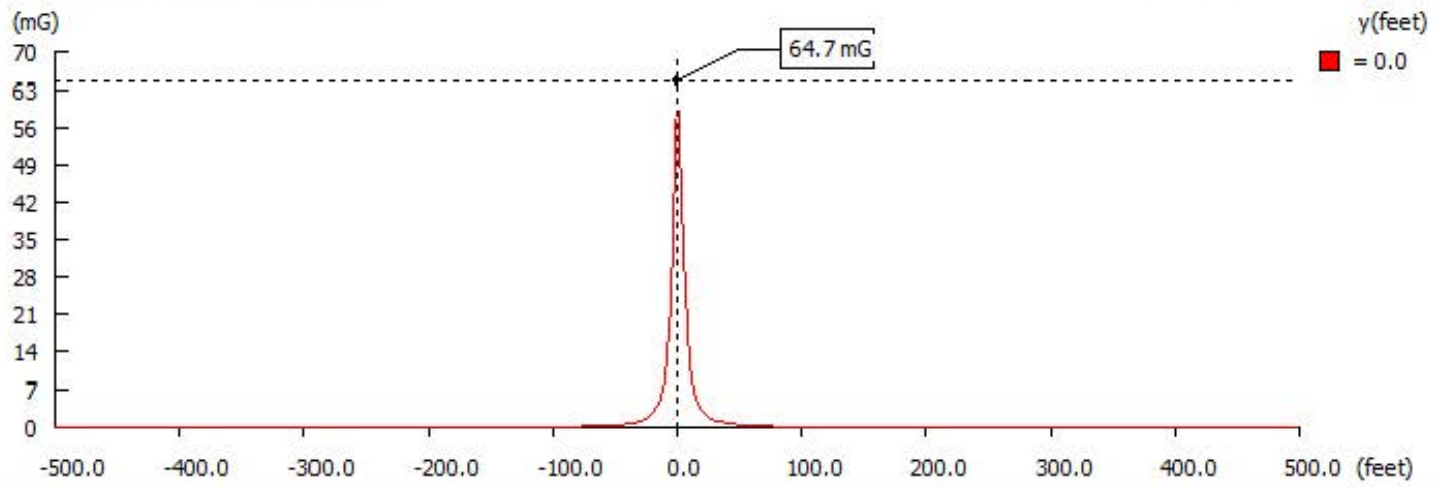
34.5kV UG Collection line- ROW Segment 5 Results (Electric Field)

5.0	8.1	-16.9	31.7	14.7	-11.0	0.003192	1.379	0.39799
10.0	8.0	-17.0	32.2	15.2	-10.6	0.002638	1.539	0.35858
15.0	7.7	-17.3	31.2	14.2	-11.3	0.007647	1.511	0.30666
20.0	7.2	-17.8	29.3	12.3	-12.6	0.008305	1.311	0.25261
25.0	6.7	-18.3	26.9	9.9	-14.2	0.007368	1.050	0.20454
30.0	6.1	-18.9	24.4	7.4	-15.6	0.006424	0.814	0.16588
35.0	5.5	-19.5	22.1	5.1	-17.0	0.005655	0.633	0.13703
40.0	5.0	-20.0	19.9	2.9	-18.3	0.005042	0.505	0.11585
45.0	4.5	-20.5	17.9	0.9	-19.4	0.004548	0.416	0.09925
50.0	4.1	-20.9	16.0	-1.0	-20.4	0.004145	0.351	0.08570
55.0	3.7	-21.3	14.4	-2.6	-21.3	0.003810	0.303	0.07450
60.0	3.3	-21.7	12.9	-4.1	-22.1	0.003528	0.265	0.06517
65.0	2.9	-22.1	11.5	-5.5	-22.9	0.003286	0.233	0.05736
70.0	2.6	-22.4	10.2	-6.8	-23.6	0.003078	0.207	0.05078
75.0	2.2	-22.8	9.2	-7.8	-24.2	0.002895	0.185	0.04520
80.0	1.9	-23.1	8.3	-8.7	-24.8	0.002735	0.166	0.04045
85.0	1.7	-23.3	7.5	-9.5	-25.4	0.002592	0.149	0.03637
90.0	1.4	-23.6	6.7	-10.3	-25.9	0.002465	0.135	0.03286
95.0	1.1	-23.9	5.9	-11.1	-26.4	0.002350	0.122	0.02981
100.0	0.9	-24.1	5.2	-11.8	-26.9	0.002246	0.111	0.02716
105.0	0.6	-24.4	4.5	-12.5	-27.4	0.002152	0.101	0.02483
110.0	0.4	-24.6	3.8	-13.2	-27.8	0.002065	0.093	0.02279
115.0	0.2	-24.8	3.2	-13.8	-28.2	0.001986	0.085	0.02098
120.0	-0.0	-25.0	2.6	-14.4	-28.6	0.001913	0.078	0.01937
125.0	-0.2	-25.2	2.1	-14.9	-29.0	0.001846	0.072	0.01793
130.0	-0.4	-25.4	1.5	-15.5	-29.4	0.001784	0.067	0.01665
135.0	-0.6	-25.6	1.0	-16.0	-29.7	0.001725	0.062	0.01550
140.0	-0.8	-25.8	0.5	-16.5	-30.0	0.001671	0.057	0.01446
145.0	-1.0	-26.0	0.0	-17.0	-30.4	0.001621	0.053	0.01352
150.0	-1.1	-26.1	-0.4	-17.4	-30.7	0.001573	0.050	0.01267
155.0	-1.3	-26.3	-0.9	-17.9	-31.0	0.001529	0.046	0.01189
160.0	-1.4	-26.4	-1.3	-18.3	-31.3	0.001487	0.044	0.01119
165.0	-1.6	-26.6	-1.7	-18.7	-31.6	0.001448	0.041	0.01054
170.0	-1.8	-26.8	-2.1	-19.1	-31.8	0.001410	0.038	0.00995
175.0	-1.9	-26.9	-2.4	-19.4	-32.1	0.001375	0.036	0.00940
180.0	-2.0	-27.0	-2.8	-19.8	-32.3	0.001342	0.034	0.00890
185.0	-2.2	-27.2	-3.1	-20.1	-32.6	0.001310	0.032	0.00844
190.0	-2.3	-27.3	-3.5	-20.5	-32.8	0.001280	0.030	0.00801
195.0	-2.4	-27.4	-3.8	-20.8	-33.1	0.001251	0.029	0.00761
200.0	-2.6	-27.6	-4.1	-21.1	-33.3	0.001224	0.027	0.00725
205.0	-2.7	-27.7	-4.4	-21.4	-33.5	0.001198	0.026	0.00690
210.0	-2.8	-27.8	-4.7	-21.7	-33.7	0.001173	0.025	0.00659
215.0	-2.9	-27.9	-5.0	-22.0	-34.0	0.001149	0.023	0.00629
220.0	-3.0	-28.0	-5.3	-22.3	-34.2	0.001126	0.022	0.00601
225.0	-3.1	-28.1	-5.5	-22.5	-34.5	0.001105	0.021	0.00575
230.0	-3.3	-28.3	-5.8	-22.8	-34.9	0.001084	0.020	0.00551
235.0	-3.4	-28.4	-6.0	-23.0	-35.3	0.001064	0.019	0.00528
240.0	-3.5	-28.5	-6.3	-23.3	-35.6	0.001044	0.019	0.00507
245.0	-3.6	-28.6	-6.5	-23.5	-36.0	0.001026	0.018	0.00486
250.0	-3.7	-28.7	-6.8	-23.8	-36.4	0.001008	0.017	0.00467
255.0	-3.8	-28.8	-7.0	-24.0	-36.7	0.000991	0.016	0.00449
260.0	-3.9	-28.9	-7.2	-24.2	-37.1	0.000974	0.016	0.00433
265.0	-4.0	-29.0	-7.4	-24.4	-37.4	0.000958	0.015	0.00417

34.5kV UG Collection line- ROW Segment 5 Results (Electric Field)

270.0	-4.1	-29.1	-7.6	-24.6	-37.8	0.000943	0.015	0.00401
275.0	-4.1	-29.1	-7.8	-24.8	-38.1	0.000928	0.014	0.00387
280.0	-4.2	-29.2	-8.0	-25.0	-38.4	0.000913	0.013	0.00374
285.0	-4.3	-29.3	-8.2	-25.2	-38.7	0.000899	0.013	0.00361
290.0	-4.4	-29.4	-8.4	-25.4	-39.0	0.000886	0.012	0.00349
295.0	-4.5	-29.5	-8.6	-25.6	-39.4	0.000873	0.012	0.00337
300.0	-4.6	-29.6	-8.8	-25.8	-39.7	0.000860	0.012	0.00326
305.0	-4.7	-29.7	-9.0	-26.0	-39.9	0.000848	0.011	0.00315
310.0	-4.7	-29.7	-9.1	-26.1	-40.2	0.000836	0.011	0.00305
315.0	-4.8	-29.8	-9.3	-26.3	-40.5	0.000825	0.010	0.00296
320.0	-4.9	-29.9	-9.5	-26.5	-40.8	0.000813	0.010	0.00287
325.0	-5.0	-30.0	-9.6	-26.6	-41.0	0.000802	0.010	0.00278
330.0	-5.1	-30.1	-9.8	-26.8	-41.1	0.000792	0.009	0.00270
335.0	-5.1	-30.1	-9.9	-26.9	-41.2	0.000782	0.009	0.00262
340.0	-5.2	-30.2	-10.1	-27.1	-41.4	0.000772	0.009	0.00254
345.0	-5.3	-30.3	-10.3	-27.3	-41.5	0.000762	0.009	0.00247
350.0	-5.3	-30.3	-10.4	-27.4	-41.6	0.000752	0.008	0.00240
355.0	-5.4	-30.4	-10.6	-27.6	-41.7	0.000743	0.008	0.00233
360.0	-5.5	-30.5	-10.7	-27.7	-41.9	0.000734	0.008	0.00227
365.0	-5.6	-30.6	-10.8	-27.8	-42.0	0.000726	0.008	0.00221
370.0	-5.6	-30.6	-11.0	-28.0	-42.1	0.000717	0.007	0.00215
375.0	-5.7	-30.7	-11.1	-28.1	-42.2	0.000709	0.007	0.00209
380.0	-5.8	-30.8	-11.2	-28.2	-42.3	0.000701	0.007	0.00204
385.0	-5.8	-30.8	-11.4	-28.4	-42.5	0.000693	0.007	0.00199
390.0	-5.9	-30.9	-11.5	-28.5	-42.6	0.000685	0.007	0.00194
395.0	-5.9	-30.9	-11.6	-28.6	-42.8	0.000678	0.007	0.00189
400.0	-6.0	-31.0	-11.8	-28.8	-43.0	0.000670	0.006	0.00184
405.0	-6.1	-31.1	-11.9	-28.9	-43.2	0.000663	0.006	0.00180
410.0	-6.1	-31.1	-12.0	-29.0	-43.4	0.000656	0.006	0.00175
415.0	-6.2	-31.2	-12.1	-29.1	-43.6	0.000649	0.006	0.00171
420.0	-6.3	-31.3	-12.3	-29.3	-43.9	0.000643	0.006	0.00167
425.0	-6.3	-31.3	-12.4	-29.4	-44.1	0.000636	0.006	0.00163
430.0	-6.4	-31.4	-12.5	-29.5	-44.3	0.000630	0.005	0.00159
435.0	-6.4	-31.4	-12.6	-29.6	-44.5	0.000623	0.005	0.00156
440.0	-6.5	-31.5	-12.7	-29.7	-44.7	0.000617	0.005	0.00152
445.0	-6.5	-31.5	-12.8	-29.8	-44.9	0.000611	0.005	0.00149
450.0	-6.6	-31.6	-12.9	-29.9	-45.1	0.000605	0.005	0.00146
455.0	-6.7	-31.7	-13.0	-30.0	-45.3	0.000600	0.005	0.00142
460.0	-6.7	-31.7	-13.1	-30.1	-45.5	0.000594	0.005	0.00139
465.0	-6.8	-31.8	-13.3	-30.3	-45.6	0.000588	0.005	0.00136
470.0	-6.8	-31.8	-13.4	-30.4	-45.8	0.000583	0.005	0.00134
475.0	-6.9	-31.9	-13.5	-30.5	-46.0	0.000578	0.004	0.00131
480.0	-6.9	-31.9	-13.6	-30.6	-46.2	0.000572	0.004	0.00128
485.0	-7.0	-32.0	-13.7	-30.7	-46.4	0.000567	0.004	0.00125
490.0	-7.0	-32.0	-13.8	-30.8	-46.6	0.000562	0.004	0.00123
495.0	-7.1	-32.1	-13.9	-30.9	-46.7	0.000557	0.004	0.00120





Input data:

Circuit No.	Phase	X (feet)	Y (feet)	Ampacity	Angle
1	A	0.636	4.226	700.9	0.0
1	B	0.843	4.226	700.9	-120.0
1	C	0.741	4.049	700.9	120.0

X Min: -500 X Max: 500 Step X: 5 feet

- ☒ Add a range of Y values
☐ Add a single Y value

Y Min: 0.0 feet

Y Max: 1.0 feet

Step Y: 1.0 feet

> 0.0
1.0

<

<<

Save...

Default

Ok

Cancel

34.5kv UG Collection line- ROW Segment 5

Results (Magnetic Fields)

MAGNETIC FLUX DENSITY [mG]

=====

Study : 34.5KV UG CABLE

Execution: 1250KCMIL UG CABLE

Report created on: 10/16/2017 10:51:17 AM

UG CABLE MAGNETIC FIELD

X Y=3.28
(feet) (feet)

B(mG)

-500.0	0.0046
-495.0	0.0047
-490.0	0.0048
-485.0	0.0049
-480.0	0.005
-475.0	0.0051
-470.0	0.0052
-465.0	0.0053
-460.0	0.0055
-455.0	0.0056
-450.0	0.0057
-445.0	0.0058
-440.0	0.006
-435.0	0.0061
-430.0	0.0062
-425.0	0.0064
-420.0	0.0065
-415.0	0.0067
-410.0	0.0069
-405.0	0.007
-400.0	0.0072
-395.0	0.0074
-390.0	0.0076
-385.0	0.0078
-380.0	0.008
-375.0	0.0082
-370.0	0.0084
-365.0	0.0087
-360.0	0.0089
-355.0	0.0092
-350.0	0.0094
-345.0	0.0097
-340.0	0.01
-335.0	0.0103

OH T-LINE MAGNETIC FIELD

X Y=3.28
(feet) (feet)

B(mG)

-500	1.18
-495	1.2
-490	1.23
-485	1.25
-480	1.28
-475	1.31
-470	1.33
-465	1.36
-460	1.39
-455	1.42
-450	1.46
-445	1.49
-440	1.52
-435	1.56
-430	1.59
-425	1.63
-420	1.67
-415	1.71
-410	1.75
-405	1.8
-400	1.84
-395	1.89
-390	1.94
-385	1.99
-380	2.04
-375	2.09
-370	2.15
-365	2.21
-360	2.27
-355	2.33
-350	2.4
-345	2.47
-340	2.54
-335	2.62

CUMULATIVE MAGNETIC FIELD

X Y=3.28
(feet) (feet)

B(mG)

-510	0.0046
-505	0.0047
-500	1.1848
-495	1.2049
-490	1.235
-485	1.2551
-480	1.2852
-475	1.3153
-470	1.3355
-465	1.3656
-460	1.3957
-455	1.4258
-450	1.466
-445	1.4961
-440	1.5262
-435	1.5664
-430	1.5965
-425	1.6367
-420	1.6769
-415	1.717
-410	1.7572
-405	1.8074
-400	1.8476
-395	1.8978
-390	1.948
-385	1.9982
-380	2.0484
-375	2.0987
-370	2.1589
-365	2.2192
-360	2.2794
-355	2.3397
-350	2.41
-345	2.4803
-340	2.5506
-335	2.6309

34.5kv UG Collection line- ROW Segment 5

Results (Magnetic Fields)

-330.0	0.0106	-330	2.7	-330	2.7113
-325.0	0.0109	-325	2.78	-325	2.7916
-320.0	0.0113	-320	2.87	-320	2.882
-315.0	0.0116	-315	2.96	-315	2.9724
-310.0	0.012	-310	3.05	-310	3.0628
-305.0	0.0124	-305	3.15	-305	3.1632
-300.0	0.0128	-300	3.26	-300	3.2737
-295.0	0.0132	-295	3.37	-295	3.3842
-290.0	0.0137	-290	3.49	-290	3.5047
-285.0	0.0142	-285	3.61	-285	3.6252
-280.0	0.0147	-280	3.74	-280	3.7558
-275.0	0.0152	-275	3.87	-275	3.8864
-270.0	0.0158	-270	4.02	-270	4.037
-265.0	0.0164	-265	4.17	-265	4.1877
-260.0	0.017	-260	4.33	-260	4.3484
-255.0	0.0177	-255	4.5	-255	4.5192
-250.0	0.0184	-250	4.68	-250	4.7
-245.0	0.0192	-245	4.87	-245	4.8908
-240.0	0.02	-240	5.07	-240	5.0917
-235.0	0.0208	-235	5.28	-235	5.3027
-230.0	0.0217	-230	5.51	-230	5.5338
-225.0	0.0227	-225	5.76	-225	5.7849
-220.0	0.0238	-220	6.02	-220	6.0461
-215.0	0.0249	-215	6.29	-215	6.3173
-210.0	0.0261	-210	6.59	-210	6.6187
-205.0	0.0273	-205	6.91	-205	6.9402
-200.0	0.0287	-200	7.26	-200	7.2918
-195.0	0.0302	-195	7.63	-195	7.6635
-190.0	0.0318	-190	8.02	-190	8.0554
-185.0	0.0335	-185	8.45	-185	8.4874
-180.0	0.0354	-180	8.92	-180	8.9597
-175.0	0.0374	-175	9.42	-175	9.4621
-170.0	0.0397	-170	9.97	-170	10.0147
-165.0	0.0421	-165	10.57	-165	10.6177
-160.0	0.0447	-160	11.22	-160	11.2709
-155.0	0.0477	-155	11.94	-155	11.9944
-150.0	0.0509	-150	12.72	-150	12.7783
-145.0	0.0544	-145	13.58	-145	13.6427
-140.0	0.0583	-140	14.54	-140	14.6076
-135.0	0.0627	-135	15.59	-135	15.663
-130.0	0.0676	-130	16.77	-130	16.8492
-125.0	0.073	-125	18.07	-125	18.1561
-120.0	0.0792	-120	19.54	-120	19.6341
-115.0	0.0861	-115	21.19	-115	21.2931
-110.0	0.0941	-110	23.05	-110	23.1635
-105.0	0.1031	-105	25.17	-105	25.2956
-100.0	0.1135	-100	27.58	-100	27.7198
-95.0	0.1256	-95	30.36	-95	30.5164
-90.0	0.1398	-90	33.56	-90	33.7362
-85.0	0.1564	-85	37.28	-85	37.48
-80.0	0.1762	-80	41.64	-80	41.869
-75.0	0.2	-75	46.78	-75	47.0447

34.5kv UG Collection line- ROW Segment 5

Results (Magnetic Fields)

-70.0	0.229	-70	52.9	-70	53.2094
-65.0	0.2647	-65	60.25	-65	60.6164
-60.0	0.3094	-60	69.16	-60	69.6005
-55.0	0.3664	-55	80.08	-55	80.6195
-50.0	0.4405	-50	93.6	-50	94.2755
-45.0	0.5395	-45	110.52	-45	111.3893
-40.0	0.6755	-40	131.88	-40	133.0382
-35.0	0.8693	-35	159	-35	160.6137
-30.0	1.1582	-30	193.36	-30	195.746
-25.0	1.6137	-25	236.03	-25	239.8514
-20.0	2.386	-20	286.38	-20	293.1636
-15.0	3.8214	-15	339.66	-15	352.7665
-10.0	6.7836	-10	385.82	-10	406.5086
-5.0	13.1065	-5	413.61	-5	429.3511
0.0	20.6886	0	417.49	0	425.6951
5.0	15.7411	5	397.99	5	402.4668
10.0	8.2051	10	358.58	10	361.2972
15.0	4.4768	15	306.66	15	308.4591
20.0	2.7172	20	252.61	20	253.881
25.0	1.7991	25	204.54	25	205.4826
30.0	1.271	30	165.88	30	166.6056
35.0	0.9426	35	137.03	35	137.6052
40.0	0.7256	40	115.85	40	116.3168
45.0	0.5752	45	99.25	45	99.6363
50.0	0.4668	50	85.7	50	86.0248
55.0	0.3863	55	74.5	55	74.7769
60.0	0.3248	60	65.17	60	65.4088
65.0	0.2769	65	57.36	65	57.568
70.0	0.2388	70	50.78	70	50.9628
75.0	0.208	75	45.2	75	45.3619
80.0	0.1828	80	40.45	80	40.5944
85.0	0.1619	85	36.37	85	36.4996
90.0	0.1444	90	32.86	90	32.9769
95.0	0.1296	95	29.81	95	29.916
100.0	0.1169	100	27.16	100	27.2566
105.0	0.106	105	24.83	105	24.9184
110.0	0.0966	110	22.79	110	22.8711
115.0	0.0884	115	20.98	115	21.0548
120.0	0.0811	120	19.37	120	19.4391
125.0	0.0748	125	17.93	125	17.9941
130.0	0.0691	130	16.65	130	16.7096
135.0	0.0641	135	15.5	135	15.5555
140.0	0.0596	140	14.46	140	14.5119
145.0	0.0555	145	13.52	145	13.5686
150.0	0.0519	150	12.67	150	12.7156
155.0	0.0486	155	11.89	155	11.9329
160.0	0.0456	160	11.19	160	11.2304
165.0	0.0429	165	10.54	165	10.5781
170.0	0.0404	170	9.95	170	9.986
175.0	0.0381	175	9.4	175	9.4341
180.0	0.036	180	8.9	180	8.9323
185.0	0.0341	185	8.44	185	8.4707

34.5kV UG Collection line- ROW Segment 5

Results (Magnetic Fields)

190.0	0.0323	190	8.01	190	8.0391
195.0	0.0307	195	7.61	195	7.6377
200.0	0.0291	200	7.25	200	7.2764
205.0	0.0277	205	6.9	205	6.9252
210.0	0.0264	210	6.59	210	6.6141
215.0	0.0252	215	6.29	215	6.313
220.0	0.0241	220	6.01	220	6.032
225.0	0.023	225	5.75	225	5.7711
230.0	0.022	230	5.51	230	5.5302
235.0	0.0211	235	5.28	235	5.2994
240.0	0.0202	240	5.07	240	5.0886
245.0	0.0194	245	4.86	245	4.8779
250.0	0.0186	250	4.67	250	4.6872
255.0	0.0179	255	4.49	255	4.5066
260.0	0.0172	260	4.33	260	4.346
265.0	0.0166	265	4.17	265	4.1854
270.0	0.016	270	4.01	270	4.0248
275.0	0.0154	275	3.87	275	3.8843
280.0	0.0148	280	3.74	280	3.7538
285.0	0.0143	285	3.61	285	3.6234
290.0	0.0138	290	3.49	290	3.5029
295.0	0.0134	295	3.37	295	3.3825
300.0	0.0129	300	3.26	300	3.2721
305.0	0.0125	305	3.15	305	3.1617
310.0	0.0121	310	3.05	310	3.0614
315.0	0.0117	315	2.96	315	2.971
320.0	0.0114	320	2.87	320	2.8807
325.0	0.011	325	2.78	325	2.7904
330.0	0.0107	330	2.7	330	2.7101
335.0	0.0104	335	2.62	335	2.6298
340.0	0.0101	340	2.54	340	2.5495
345.0	0.0098	345	2.47	345	2.4792
350.0	0.0095	350	2.4	350	2.409
355.0	0.0092	355	2.33	355	2.3387
360.0	0.009	360	2.27	360	2.2785
365.0	0.0087	365	2.21	365	2.2183
370.0	0.0085	370	2.15	370	2.1581
375.0	0.0083	375	2.09	375	2.0978
380.0	0.0081	380	2.04	380	2.0476
385.0	0.0078	385	1.99	385	1.9975
390.0	0.0076	390	1.94	390	1.9473
395.0	0.0075	395	1.89	395	1.8971
400.0	0.0073	400	1.84	400	1.8469
405.0	0.0071	405	1.8	405	1.8067
410.0	0.0069	410	1.75	410	1.7566
415.0	0.0067	415	1.71	415	1.7164
420.0	0.0066	420	1.67	420	1.6763
425.0	0.0064	425	1.63	425	1.6361
430.0	0.0063	430	1.59	430	1.596
435.0	0.0061	435	1.56	435	1.5659
440.0	0.006	440	1.52	440	1.5257
445.0	0.0059	445	1.49	445	1.4956

34.5kv UG Collection line- ROW Segment 5

Results (Magnetic Fields)

450.0	0.0057	450	1.46	450	1.4655
455.0	0.0056	455	1.42	455	1.4254
460.0	0.0055	460	1.39	460	1.3953
465.0	0.0054	465	1.36	465	1.3651
470.0	0.0053	470	1.34	470	1.345
475.0	0.0051	475	1.31	475	1.3149
480.0	0.005	480	1.28	480	1.2848
485.0	0.0049	485	1.25	485	1.2547
490.0	0.0048	490	1.23	490	1.2346
495.0	0.0047	495	0.0012		1.2
500.0	0.0046				

Peak value found at:

X	Y=3.28
(feet)	(feet)
B(mG)	
0.0	20.6886

Peak value found at:

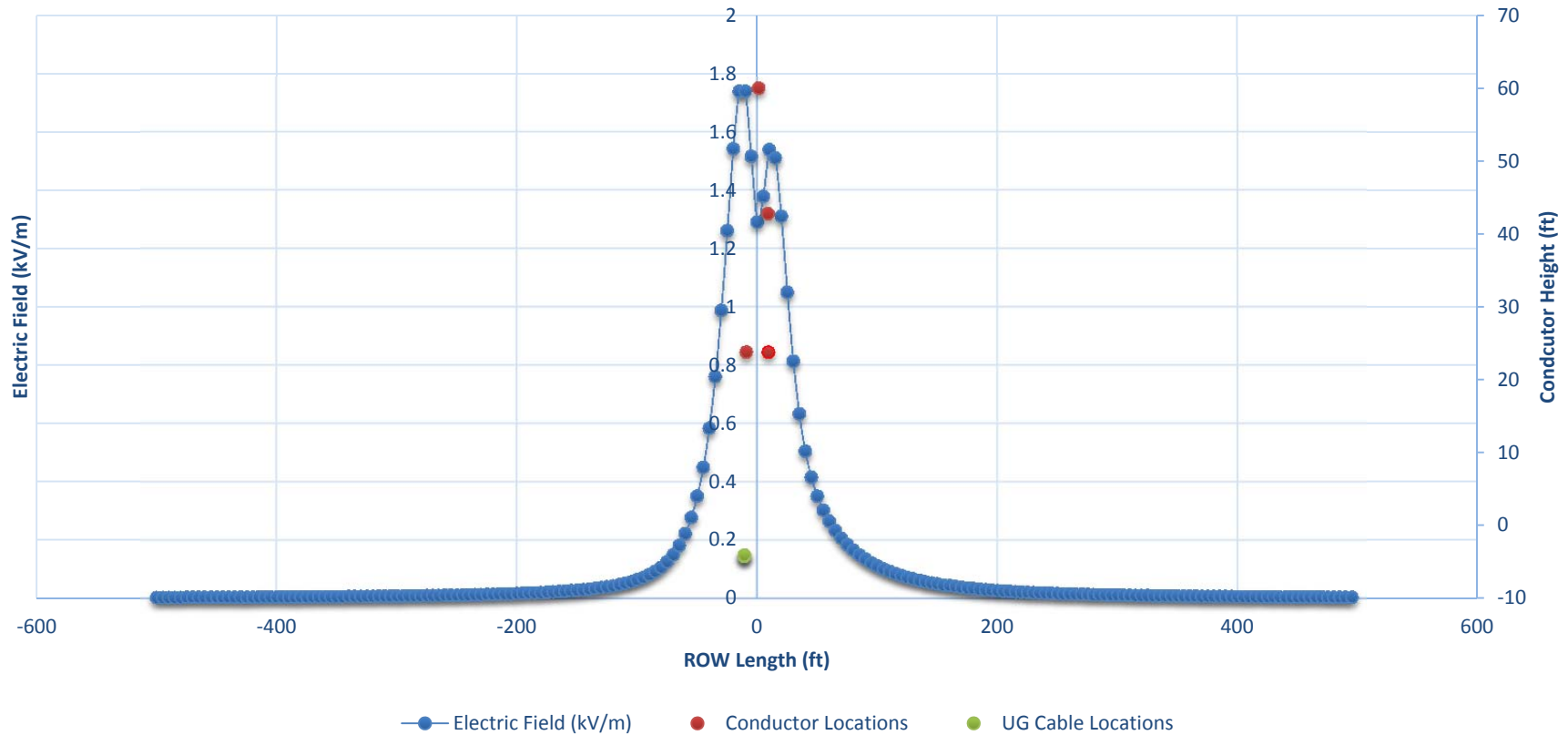
X	Y=3.28
(feet)	(feet)
B(mG)	
0.0	417.49

Peak value found at:

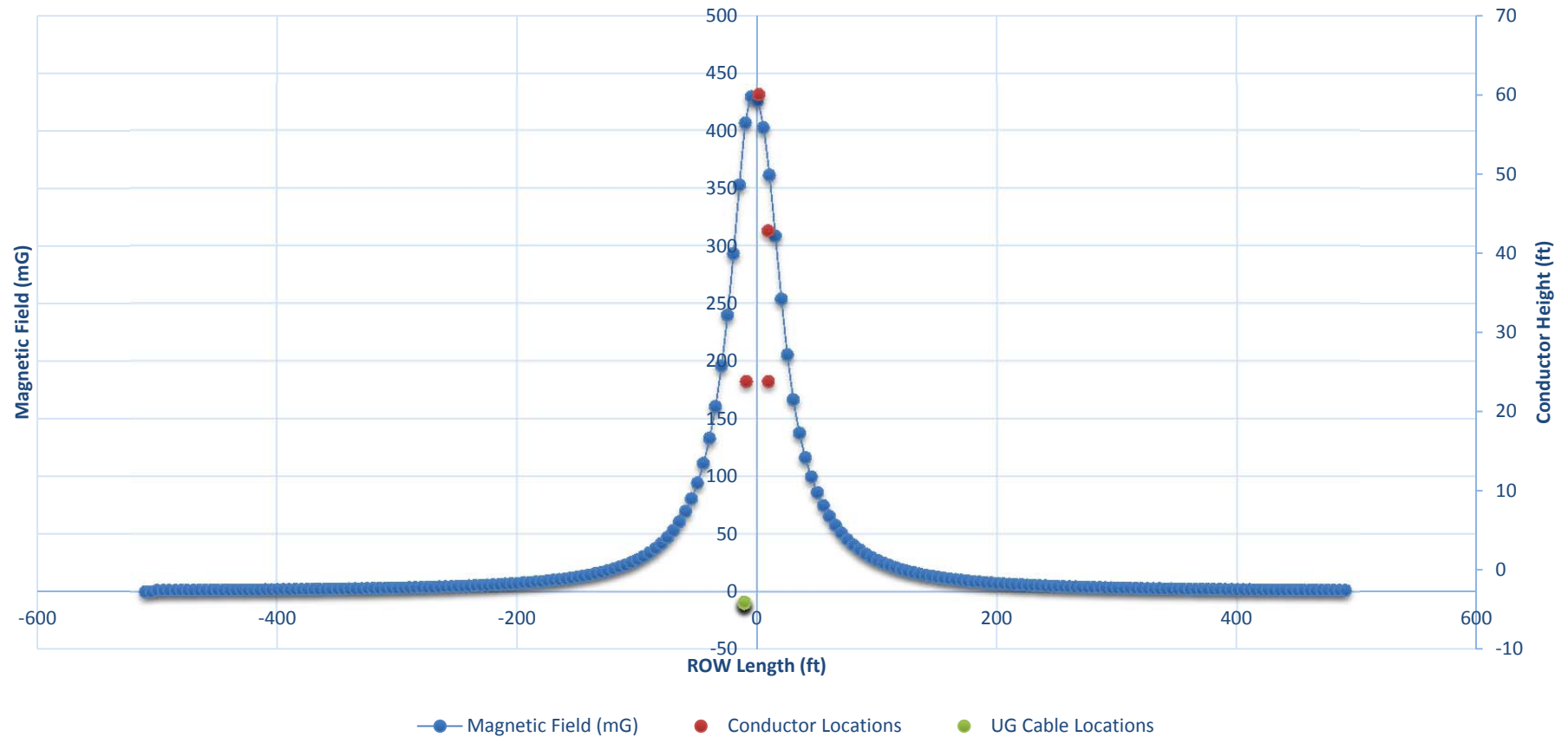
X	Y=3.28
(feet)	(feet)
B(mG)	
-5	429.35

ROW Segment 5 – Steel Monopole Tangent Structure with Adjacent UG Collection line

ROW Segment 5
BPA Output - Electric Field



ROW Segment 5 BPA Output - Magnetic Field



ROW Segment 6:

Overhead 34.5kV Collection line

A



C



5

F

- | | | | | | | | |
|----|------------|-------------------------------------|------|------|------|-----|--|
| - | | | | | | | |
| - | | | | | | | |
| - | | | | | | | |
| - | | | | | | | |
| - | | | | | | | |
| C | 02/16/2018 | PRELIMINARY - ARTICLE VII/ARTICLE X | NJT | TRK | KVP | S&L | |
| B | 10/04/2017 | PRELIMINARY - NOT FOR CONSTRUCTION | SG | JDJ | KVP | S&L | |
| A | 03/24/2017 | PRELIMINARY - NOT FOR CONSTRUCTION | NJT | WAS | - | S&L | |
| NO | DATE | REVISIONS AND RECORD OF ISSUE | DRWN | REVD | APPR | COM | |

NONE

CONTRACTOR/INSTALLER SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO ENSURE THE SAFETY OF ALL PEOPLE LOCATED ON THE WORK SITE; INCLUDING CONTRACTOR'S /INSTALLER'S PERSONNEL (OR THAT OF ITS SUB-CONTRACTOR(S)) PERFORMING THE WORK.

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THAN SARGENT & LUNDY IS NOT THE
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Sargent & Lundy
55 EAST MONROE ST., CHICAGO, ILL.



NEXTERA
ENERGY
RESOURCES

NEXTERA ENERGY RESOURCES, LLC EIGHT POINT WIND, LLC CROSS SECTION OVERHEAD COLLECTION LINE
13139-045-OC1-0900

13139-045-OC1-0900

A

B

C

D

5

F



Wood Pole 34.5kV Overhead Collection line- ROW Segment 6
Inputs

[illegible]

INPUT DATA LIST

10/ 9/2017 17:21:11
EIGHT POINT - EMF CALC - 13139-043-TL-006 - WOOD POLE- COLLECTION LINE,,
PREPARED: SAHMADZAI,,,,,,,,,,,,,
1,0, 6, 7,0.0, 0.50, 1.00,1980.00

(ENGLISH UNITS OPTION)

(GRADIENTS ARE COMPUTED BY PROGRAM)

PHYSICAL SYSTEM CONSISTS OF 7 CONDUCTORS, OF WHICH 6 ARE ENERGIZED PHASES

[illegible]

1COMBINED OUTPUT OF AUDIBLE NOISE, RADIO NOISE, TVI, OZONE CONCENTRATION, GROUND GRADIENT AND MAGNETIC FIELD
EIGHT POINT - EMF CALC - 13139-043-TL-006 - WOOD POLE- COLLECTION LINE,,
PREPARED: SAHMADZAI,,,,,,,,,,

	DIST. FROM CENTER OF TOWER (FEET)	HEIGHT (FEET)	MAXIMUM GRADIENT (KV/CM)	SUBCON DIAM. (IN)	NO. OF SUBCON	SUBCON SPACING (IN)	VOLTAGE L-N (KV)	PHASE ANGLE (DEGREES)	CURRENT (kAmps)	CORONA LOSSES (KW/MI)
PH. A-1	-5.50	30.00	3.68	0.86	1	0.00	19.92	0.00	0.97	0.000
PH. B-1	-2.50	30.00	3.89	0.86	1	0.00	19.92	240.00	0.97	0.000
PH. C-1	5.50	30.00	2.94	0.86	1	0.00	19.92	120.00	0.97	0.000
PH. A-2	-5.50	22.00	3.68	0.86	1	0.00	19.92	0.00	0.97	0.000
PH. B-2	-2.50	22.00	3.88	0.86	1	0.00	19.92	240.00	0.97	0.000
PH. C-2	5.50	22.00	2.96	0.86	1	0.00	19.92	120.00	0.97	0.000
OPGW 1	0.50	60.00	0.10	0.53	1	0.00	0.00	0.00	0.00	0.000

AN MICROPHONE HT.= 5.0 FT, RI ANT. HT.= 6.6 FT, TV ANT. HT.= 9.8 FT, ALTITUDE= 1980.0 FT
RI FREQ= 1.000 MHZ, TV FREQ= 75.000 MHZ, WIND VEL.(OZ)= 0.500 MPH, GROUND CONDUCTIVITY = 10.0 MMHOS/M
E-FIELD TRANSDUCER HT.= 3.3FT, B-FIELD TRANSDUCER HT.= 3.3FT

Wood Pole 34.5kV Overhead Collection Line- ROW Segment 6 Results

LATERAL DIST FROM REFERENCE (FEET)	AUDIBLE (RAIN) L50 DBA	NOISE (FAIR) L50 DBA	RADIO INTERFERENCE (RAIN) L50 DBUV/M	(FAIR) L50 DBUV/M	TVI TOTAL RAIN DBUV/M	OZONE FOR RAIN RATE OF 1.00 IN/HR AT 0. FT LEVEL PPB	ELECTRIC FIELD KV/M	MAGNETIC FIELD GAUSS
-500.0	-44.0	-69.0	-48.7	-65.7	-81.8	0.000000	0.000	0.00050
-495.0	-43.9	-68.9	-48.6	-65.6	-81.6	0.000000	0.000	0.00051
-490.0	-43.9	-68.9	-48.5	-65.5	-81.4	0.000000	0.000	0.00052
-485.0	-43.8	-68.8	-48.4	-65.4	-81.2	0.000000	0.000	0.00053
-480.0	-43.8	-68.8	-48.3	-65.3	-81.0	0.000000	0.000	0.00054
-475.0	-43.7	-68.7	-48.2	-65.2	-80.9	0.000000	0.000	0.00055
-470.0	-43.7	-68.7	-48.1	-65.1	-80.7	0.000000	0.000	0.00057
-465.0	-43.6	-68.6	-48.0	-65.0	-80.5	0.000000	0.000	0.00058
-460.0	-43.6	-68.6	-47.9	-64.9	-80.3	0.000000	0.000	0.00059
-455.0	-43.5	-68.5	-47.8	-64.8	-80.1	0.000000	0.000	0.00060
-450.0	-43.5	-68.5	-47.7	-64.7	-79.9	0.000000	0.000	0.00062
-445.0	-43.4	-68.4	-47.6	-64.6	-79.7	0.000000	0.000	0.00063
-440.0	-43.4	-68.4	-47.5	-64.5	-79.5	0.000000	0.000	0.00064
-435.0	-43.3	-68.3	-47.3	-64.3	-79.3	0.000000	0.000	0.00066
-430.0	-43.2	-68.2	-47.2	-64.2	-79.1	0.000000	0.000	0.00068
-425.0	-43.2	-68.2	-47.1	-64.1	-78.9	0.000000	0.000	0.00069
-420.0	-43.1	-68.1	-47.0	-64.0	-78.7	0.000000	0.000	0.00071
-415.0	-43.1	-68.1	-46.9	-63.9	-78.5	0.000000	0.000	0.00072
-410.0	-43.0	-68.0	-46.8	-63.8	-78.3	0.000000	0.000	0.00074
-405.0	-42.9	-67.9	-46.6	-63.6	-78.1	0.000000	0.000	0.00076
-400.0	-42.9	-67.9	-46.5	-63.5	-77.9	0.000000	0.000	0.00078
-395.0	-42.8	-67.8	-46.4	-63.4	-77.6	0.000000	0.000	0.00080
-390.0	-42.8	-67.8	-46.3	-63.3	-77.4	0.000000	0.000	0.00082
-385.0	-42.7	-67.7	-46.1	-63.1	-77.2	0.000000	0.000	0.00084
-380.0	-42.6	-67.6	-46.0	-63.0	-77.0	0.000000	0.000	0.00086
-375.0	-42.6	-67.6	-45.9	-62.9	-76.7	0.000000	0.000	0.00089
-370.0	-42.5	-67.5	-45.7	-62.7	-76.5	0.000000	0.000	0.00091
-365.0	-42.4	-67.4	-45.6	-62.6	-76.3	0.000000	0.000	0.00094
-360.0	-42.4	-67.4	-45.5	-62.5	-76.0	0.000000	0.000	0.00096
-355.0	-42.3	-67.3	-45.3	-62.3	-75.8	0.000000	0.000	0.00099
-350.0	-42.2	-67.2	-45.2	-62.2	-75.5	0.000000	0.000	0.00102
-345.0	-42.1	-67.1	-45.0	-62.0	-75.3	0.000000	0.001	0.00105
-340.0	-42.1	-67.1	-44.9	-61.9	-75.0	0.000000	0.001	0.00108
-335.0	-42.0	-67.0	-44.7	-61.7	-74.8	0.000000	0.001	0.00111
-330.0	-41.9	-66.9	-44.6	-61.6	-74.5	0.000000	0.001	0.00114
-325.0	-41.8	-66.8	-44.4	-61.4	-74.2	0.000000	0.001	0.00118
-320.0	-41.8	-66.8	-44.3	-61.3	-74.0	0.000000	0.001	0.00122
-315.0	-41.7	-66.7	-44.1	-61.1	-73.7	0.000000	0.001	0.00125
-310.0	-41.6	-66.6	-43.9	-60.9	-73.4	0.000000	0.001	0.00129
-305.0	-41.5	-66.5	-43.8	-60.8	-73.1	0.000000	0.001	0.00134
-300.0	-41.4	-66.4	-43.6	-60.6	-72.8	0.000000	0.001	0.00138
-295.0	-41.4	-66.4	-43.4	-60.4	-72.6	0.000000	0.001	0.00143
-290.0	-41.3	-66.3	-43.2	-60.2	-72.3	0.000000	0.001	0.00148
-285.0	-41.2	-66.2	-43.0	-60.0	-71.9	0.000000	0.001	0.00153
-280.0	-41.1	-66.1	-42.8	-59.8	-71.6	0.000000	0.001	0.00158
-275.0	-41.0	-66.0	-42.6	-59.6	-71.3	0.000000	0.001	0.00164
-270.0	-40.9	-65.9	-42.4	-59.4	-71.0	0.000000	0.001	0.00170
-265.0	-40.8	-65.8	-42.2	-59.2	-70.9	0.000000	0.001	0.00177

Wood Pole 34.5kv Overhead Collection Line- ROW Segment 6

Results

-260.0	-40.7	-65.7	-42.0	-59.0	-70.7	0.000000	0.001	0.00184
-255.0	-40.6	-65.6	-41.8	-58.8	-70.5	0.000000	0.001	0.00191
-250.0	-40.5	-65.5	-41.6	-58.6	-70.4	0.000000	0.001	0.00198
-245.0	-40.4	-65.4	-41.4	-58.4	-70.2	0.000000	0.001	0.00207
-240.0	-40.3	-65.3	-41.1	-58.1	-70.0	0.000000	0.001	0.00215
-235.0	-40.2	-65.2	-40.9	-57.9	-69.8	0.000000	0.001	0.00224
-230.0	-40.1	-65.1	-40.7	-57.7	-69.6	0.000000	0.001	0.00234
-225.0	-40.0	-65.0	-40.4	-57.4	-69.4	0.000000	0.001	0.00244
-220.0	-39.9	-64.9	-40.1	-57.1	-69.2	0.000000	0.001	0.00256
-215.0	-39.8	-64.8	-39.9	-56.9	-69.0	0.000000	0.002	0.00267
-210.0	-39.7	-64.7	-39.6	-56.6	-68.8	0.000000	0.002	0.00280
-205.0	-39.5	-64.5	-39.3	-56.3	-68.6	0.000000	0.002	0.00294
-200.0	-39.4	-64.4	-39.0	-56.0	-68.4	0.000000	0.002	0.00308
-195.0	-39.3	-64.3	-38.7	-55.7	-68.1	0.000000	0.002	0.00324
-190.0	-39.2	-64.2	-38.4	-55.4	-67.9	0.000000	0.002	0.00341
-185.0	-39.0	-64.0	-38.1	-55.1	-67.7	0.000000	0.002	0.00360
-180.0	-38.9	-63.9	-37.7	-54.7	-67.4	0.000000	0.002	0.00379
-175.0	-38.8	-63.8	-37.4	-54.4	-67.2	0.000000	0.003	0.00401
-170.0	-38.6	-63.6	-37.0	-54.0	-66.9	0.000000	0.003	0.00424
-165.0	-38.5	-63.5	-36.6	-53.6	-66.6	0.000000	0.003	0.00450
-160.0	-38.3	-63.3	-36.2	-53.2	-66.4	0.000000	0.003	0.00478
-155.0	-38.2	-63.2	-35.8	-52.8	-66.1	0.000000	0.004	0.00509
-150.0	-38.0	-63.0	-35.4	-52.4	-65.8	0.000000	0.004	0.00542
-145.0	-37.8	-62.8	-34.9	-51.9	-65.5	0.000000	0.005	0.00579
-140.0	-37.7	-62.7	-34.5	-51.5	-65.2	0.000000	0.005	0.00620
-135.0	-37.5	-62.5	-34.0	-51.0	-64.9	0.000000	0.006	0.00665
-130.0	-37.3	-62.3	-33.5	-50.5	-64.6	0.000000	0.006	0.00716
-125.0	-37.1	-62.1	-32.9	-49.9	-64.2	0.000000	0.007	0.00772
-120.0	-36.9	-61.9	-32.4	-49.4	-63.9	0.000000	0.008	0.00835
-115.0	-36.7	-61.7	-31.8	-48.8	-63.5	0.000000	0.009	0.00907
-110.0	-36.5	-61.5	-31.2	-48.2	-63.1	0.000000	0.010	0.00987
-105.0	-36.2	-61.2	-30.5	-47.5	-62.7	0.000000	0.012	0.01079
-100.0	-36.0	-61.0	-29.8	-46.8	-62.3	0.000000	0.014	0.01184
-95.0	-35.7	-60.7	-29.0	-46.0	-61.8	0.000000	0.016	0.01304
-90.0	-35.5	-60.5	-28.3	-45.3	-61.3	0.000000	0.019	0.01443
-85.0	-35.2	-60.2	-27.4	-44.4	-60.8	0.000000	0.022	0.01606
-80.0	-34.9	-59.9	-26.5	-43.5	-60.3	0.000000	0.026	0.01796
-75.0	-34.6	-59.6	-25.6	-42.6	-59.7	0.000000	0.031	0.02022
-70.0	-34.3	-59.3	-24.6	-41.6	-59.1	0.000000	0.037	0.02291
-65.0	-33.9	-58.9	-23.5	-40.5	-58.5	0.000000	0.045	0.02615
-60.0	-33.6	-58.6	-22.3	-39.3	-57.8	0.000000	0.055	0.03010
-55.0	-33.2	-58.2	-21.1	-38.1	-57.0	0.000000	0.068	0.03496
-50.0	-32.7	-57.7	-19.7	-36.7	-56.2	0.000000	0.084	0.04101
-45.0	-32.3	-57.3	-18.3	-35.3	-55.3	0.000000	0.106	0.04863
-40.0	-31.8	-56.8	-16.7	-33.7	-54.3	0.000000	0.133	0.05836
-35.0	-31.3	-56.3	-15.1	-32.1	-53.2	0.000000	0.169	0.07092
-30.0	-30.7	-55.7	-13.3	-30.3	-52.0	0.000000	0.212	0.08725
-25.0	-30.1	-55.1	-11.3	-28.3	-50.6	0.000000	0.261	0.10854
-20.0	-29.5	-54.5	-8.6	-25.6	-49.0	0.000000	0.308	0.13587
-15.0	-28.9	-53.9	-5.8	-22.8	-47.3	0.000000	0.330	0.16931
-10.0	-28.4	-53.4	-3.3	-20.3	-45.5	0.000000	0.294	0.20568
-5.0	-28.2	-53.2	-1.7	-18.7	-44.3	0.000000	0.188	0.23642
0.0	-28.9	-53.9	-2.3	-19.3	-45.0	0.000111	0.193	0.24993

Wood Pole 34.5kv Overhead Collection line- ROW Segment 6

Results

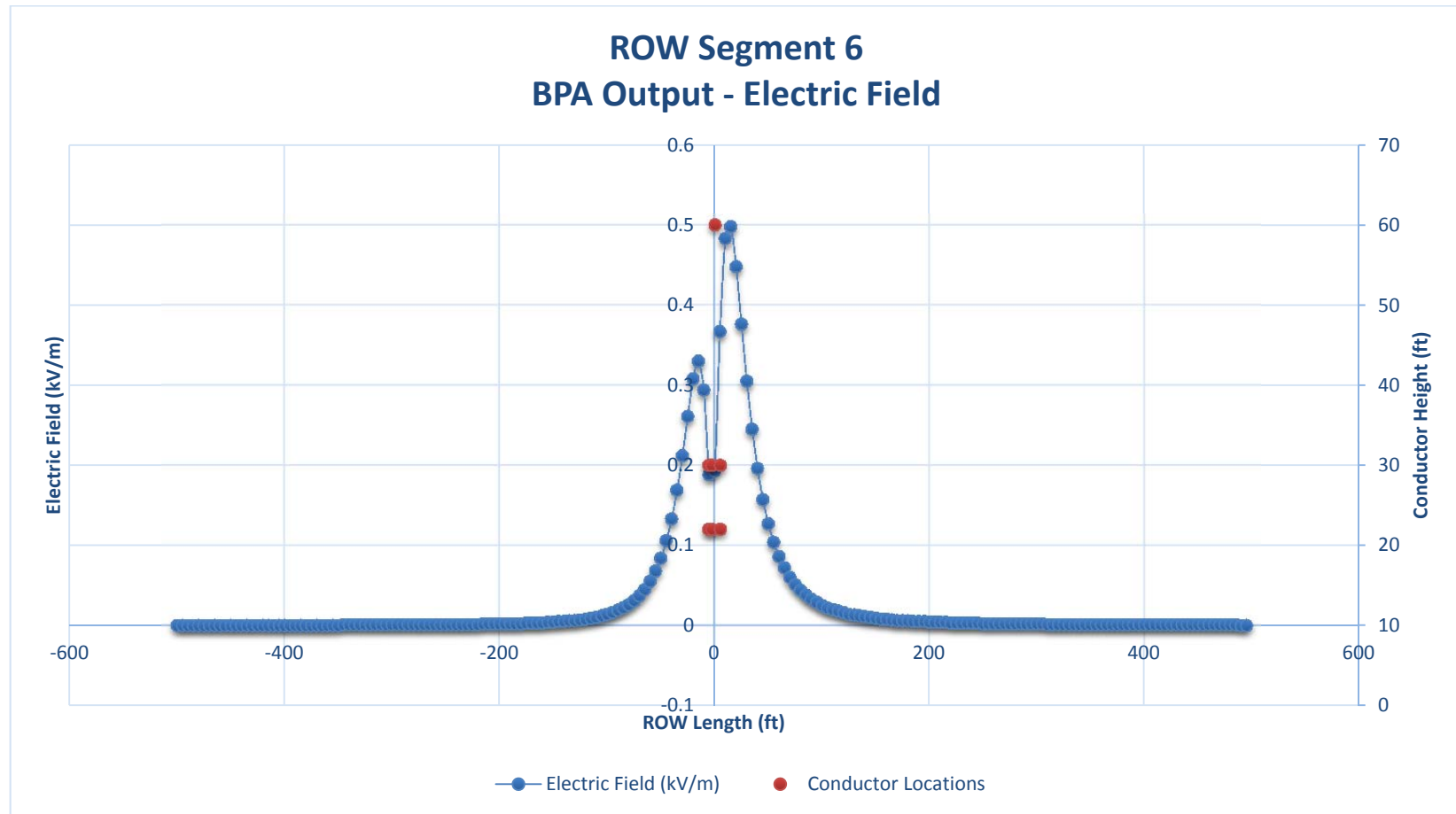
5.0	-29.2	-54.2	-3.9	-20.9	-46.2	0.000259	0.367	0.23980
10.0	-29.7	-54.7	-6.5	-23.5	-47.9	0.000241	0.483	0.21059
15.0	-30.3	-55.3	-9.3	-26.3	-49.6	0.000208	0.498	0.17407
20.0	-30.9	-55.9	-11.9	-28.9	-51.2	0.000177	0.448	0.13980
25.0	-31.5	-56.5	-14.0	-31.0	-52.6	0.000154	0.376	0.11160
30.0	-32.1	-57.1	-15.7	-32.7	-53.9	0.000136	0.305	0.08959
35.0	-32.6	-57.6	-17.4	-34.4	-55.0	0.000121	0.245	0.07270
40.0	-33.1	-58.1	-18.9	-35.9	-56.0	0.000110	0.196	0.05973
45.0	-33.5	-58.5	-20.4	-37.4	-56.9	0.000100	0.157	0.04970
50.0	-33.9	-58.9	-21.7	-38.7	-57.7	0.000093	0.127	0.04185
55.0	-34.3	-59.3	-23.0	-40.0	-58.4	0.000086	0.104	0.03563
60.0	-34.7	-59.7	-24.1	-41.1	-59.1	0.000080	0.086	0.03064
65.0	-35.0	-60.0	-25.2	-42.2	-59.8	0.000075	0.072	0.02659
70.0	-35.3	-60.3	-26.2	-43.2	-60.4	0.000071	0.060	0.02327
75.0	-35.7	-60.7	-27.2	-44.2	-60.9	0.000067	0.051	0.02052
80.0	-35.9	-60.9	-28.1	-45.1	-61.5	0.000064	0.044	0.01822
85.0	-36.2	-61.2	-28.9	-45.9	-62.0	0.000061	0.038	0.01627
90.0	-36.5	-61.5	-29.7	-46.7	-62.4	0.000058	0.033	0.01462
95.0	-36.7	-61.7	-30.4	-47.4	-62.9	0.000055	0.029	0.01320
100.0	-37.0	-62.0	-31.1	-48.1	-63.3	0.000053	0.025	0.01197
105.0	-37.2	-62.2	-31.8	-48.8	-63.7	0.000051	0.022	0.01091
110.0	-37.4	-62.4	-32.4	-49.4	-64.1	0.000049	0.020	0.00998
115.0	-37.6	-62.6	-33.0	-50.0	-64.5	0.000047	0.018	0.00916
120.0	-37.8	-62.8	-33.6	-50.6	-64.9	0.000046	0.016	0.00844
125.0	-38.0	-63.0	-34.1	-51.1	-65.2	0.000044	0.014	0.00780
130.0	-38.2	-63.2	-34.6	-51.6	-65.5	0.000043	0.013	0.00723
135.0	-38.4	-63.4	-35.1	-52.1	-65.8	0.000041	0.012	0.00671
140.0	-38.5	-63.5	-35.6	-52.6	-66.2	0.000040	0.011	0.00625
145.0	-38.7	-63.7	-36.0	-53.0	-66.5	0.000039	0.010	0.00584
150.0	-38.9	-63.9	-36.5	-53.5	-66.7	0.000038	0.009	0.00547
155.0	-39.0	-64.0	-36.9	-53.9	-67.0	0.000037	0.008	0.00513
160.0	-39.2	-64.2	-37.3	-54.3	-67.3	0.000036	0.008	0.00482
165.0	-39.3	-64.3	-37.6	-54.6	-67.5	0.000035	0.007	0.00453
170.0	-39.4	-64.4	-38.0	-55.0	-67.8	0.000034	0.006	0.00427
175.0	-39.6	-64.6	-38.4	-55.4	-68.1	0.000033	0.006	0.00404
180.0	-39.7	-64.7	-38.7	-55.7	-68.3	0.000033	0.006	0.00382
185.0	-39.9	-64.9	-39.0	-56.0	-68.5	0.000032	0.005	0.00362
190.0	-40.0	-65.0	-39.3	-56.3	-68.8	0.000031	0.005	0.00343
195.0	-40.1	-65.1	-39.7	-56.7	-69.0	0.000030	0.005	0.00326
200.0	-40.2	-65.2	-39.9	-56.9	-69.3	0.000030	0.004	0.00310
205.0	-40.3	-65.3	-40.2	-57.2	-69.5	0.000029	0.004	0.00295
210.0	-40.5	-65.5	-40.5	-57.5	-69.7	0.000029	0.004	0.00282
215.0	-40.6	-65.6	-40.8	-57.8	-69.9	0.000028	0.004	0.00269
220.0	-40.7	-65.7	-41.0	-58.0	-70.1	0.000027	0.003	0.00257
225.0	-40.8	-65.8	-41.3	-58.3	-70.3	0.000027	0.003	0.00246
230.0	-40.9	-65.9	-41.5	-58.5	-70.5	0.000026	0.003	0.00235
235.0	-41.0	-66.0	-41.8	-58.8	-70.6	0.000026	0.003	0.00225
240.0	-41.1	-66.1	-42.0	-59.0	-70.8	0.000025	0.003	0.00216
245.0	-41.2	-66.2	-42.2	-59.2	-71.0	0.000025	0.003	0.00208
250.0	-41.3	-66.3	-42.5	-59.5	-71.2	0.000025	0.002	0.00199
255.0	-41.4	-66.4	-42.7	-59.7	-71.3	0.000024	0.002	0.00192
260.0	-41.5	-66.5	-42.9	-59.9	-71.5	0.000024	0.002	0.00184
265.0	-41.6	-66.6	-43.1	-60.1	-71.7	0.000023	0.002	0.00178

Wood Pole 34.5kv Overhead Collection Line- ROW Segment 6

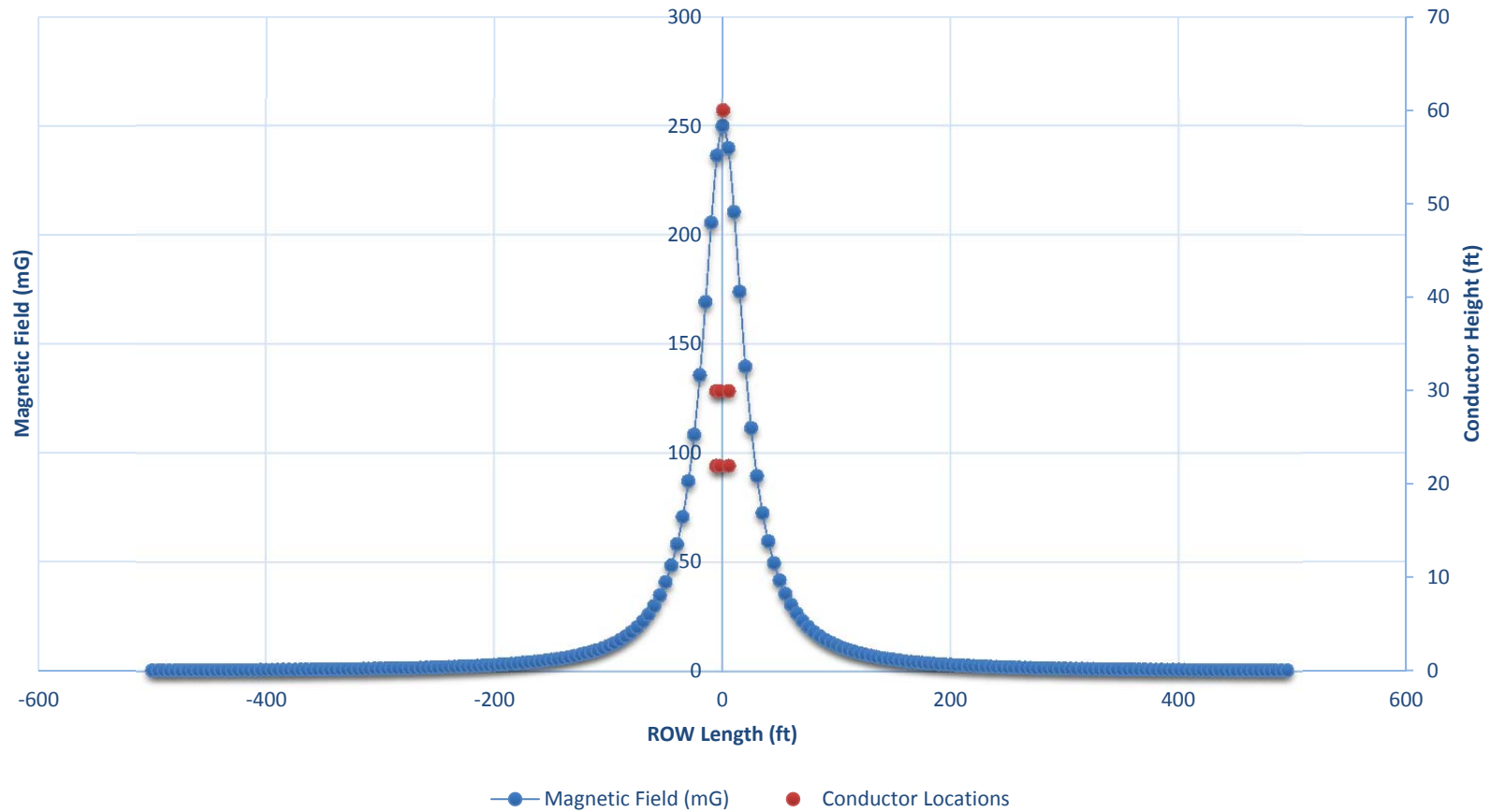
Results

270.0	-41.7	-66.7	-43.3	-60.3	-72.0	0.000023	0.002	0.00171
275.0	-41.8	-66.8	-43.5	-60.5	-72.3	0.000023	0.002	0.00165
280.0	-41.9	-66.9	-43.7	-60.7	-72.6	0.000022	0.002	0.00159
285.0	-41.9	-66.9	-43.9	-60.9	-72.9	0.000022	0.002	0.00154
290.0	-42.0	-67.0	-44.0	-61.0	-73.2	0.000022	0.002	0.00148
295.0	-42.1	-67.1	-44.2	-61.2	-73.5	0.000021	0.002	0.00143
300.0	-42.2	-67.2	-44.4	-61.4	-73.8	0.000021	0.002	0.00139
305.0	-42.3	-67.3	-44.6	-61.6	-74.1	0.000021	0.002	0.00134
310.0	-42.4	-67.4	-44.7	-61.7	-74.3	0.000021	0.001	0.00130
315.0	-42.4	-67.4	-44.9	-61.9	-74.6	0.000020	0.001	0.00126
320.0	-42.5	-67.5	-45.1	-62.1	-74.9	0.000020	0.001	0.00122
325.0	-42.6	-67.6	-45.2	-62.2	-75.1	0.000020	0.001	0.00118
330.0	-42.7	-67.7	-45.4	-62.4	-75.4	0.000019	0.001	0.00115
335.0	-42.7	-67.7	-45.5	-62.5	-75.7	0.000019	0.001	0.00111
340.0	-42.8	-67.8	-45.7	-62.7	-75.9	0.000019	0.001	0.00108
345.0	-42.9	-67.9	-45.8	-62.8	-76.2	0.000019	0.001	0.00105
350.0	-42.9	-67.9	-46.0	-63.0	-76.4	0.000019	0.001	0.00102
355.0	-43.0	-68.0	-46.1	-63.1	-76.7	0.000018	0.001	0.00099
360.0	-43.1	-68.1	-46.3	-63.3	-76.9	0.000018	0.001	0.00097
365.0	-43.2	-68.2	-46.4	-63.4	-77.1	0.000018	0.001	0.00094
370.0	-43.2	-68.2	-46.5	-63.5	-77.4	0.000018	0.001	0.00091
375.0	-43.3	-68.3	-46.7	-63.7	-77.6	0.000017	0.001	0.00089
380.0	-43.3	-68.3	-46.8	-63.8	-77.8	0.000017	0.001	0.00087
385.0	-43.4	-68.4	-46.9	-63.9	-78.1	0.000017	0.001	0.00084
390.0	-43.5	-68.5	-47.0	-64.0	-78.3	0.000017	0.001	0.00082
395.0	-43.5	-68.5	-47.2	-64.2	-78.5	0.000017	0.001	0.00080
400.0	-43.6	-68.6	-47.3	-64.3	-78.7	0.000017	0.001	0.00078
405.0	-43.7	-68.7	-47.4	-64.4	-78.9	0.000016	0.001	0.00076
410.0	-43.7	-68.7	-47.5	-64.5	-79.1	0.000016	0.001	0.00074
415.0	-43.8	-68.8	-47.6	-64.6	-79.4	0.000016	0.001	0.00073
420.0	-43.8	-68.8	-47.8	-64.8	-79.6	0.000016	0.001	0.00071
425.0	-43.9	-68.9	-47.9	-64.9	-79.8	0.000016	0.001	0.00069
430.0	-44.0	-69.0	-48.0	-65.0	-80.0	0.000016	0.001	0.00068
435.0	-44.0	-69.0	-48.1	-65.1	-80.2	0.000015	0.001	0.00066
440.0	-44.1	-69.1	-48.2	-65.2	-80.4	0.000015	0.001	0.00065
445.0	-44.1	-69.1	-48.3	-65.3	-80.6	0.000015	0.001	0.00063
450.0	-44.2	-69.2	-48.4	-65.4	-80.7	0.000015	0.001	0.00062
455.0	-44.2	-69.2	-48.5	-65.5	-80.9	0.000015	0.001	0.00060
460.0	-44.3	-69.3	-48.6	-65.6	-81.1	0.000015	0.001	0.00059
465.0	-44.3	-69.3	-48.7	-65.7	-81.3	0.000015	0.001	0.00058
470.0	-44.4	-69.4	-48.8	-65.8	-81.5	0.000014	0.001	0.00057
475.0	-44.4	-69.4	-48.9	-65.9	-81.7	0.000014	0.001	0.00056
480.0	-44.5	-69.5	-49.0	-66.0	-81.9	0.000014	0.001	0.00054
485.0	-44.5	-69.5	-49.1	-66.1	-82.0	0.000014	0.001	0.00053
490.0	-44.6	-69.6	-49.2	-66.2	-82.2	0.000014	0.000	0.00052
495.0	-44.6	-69.6	-49.3	-66.3	-82.4	0.000014	0.000	0.00051

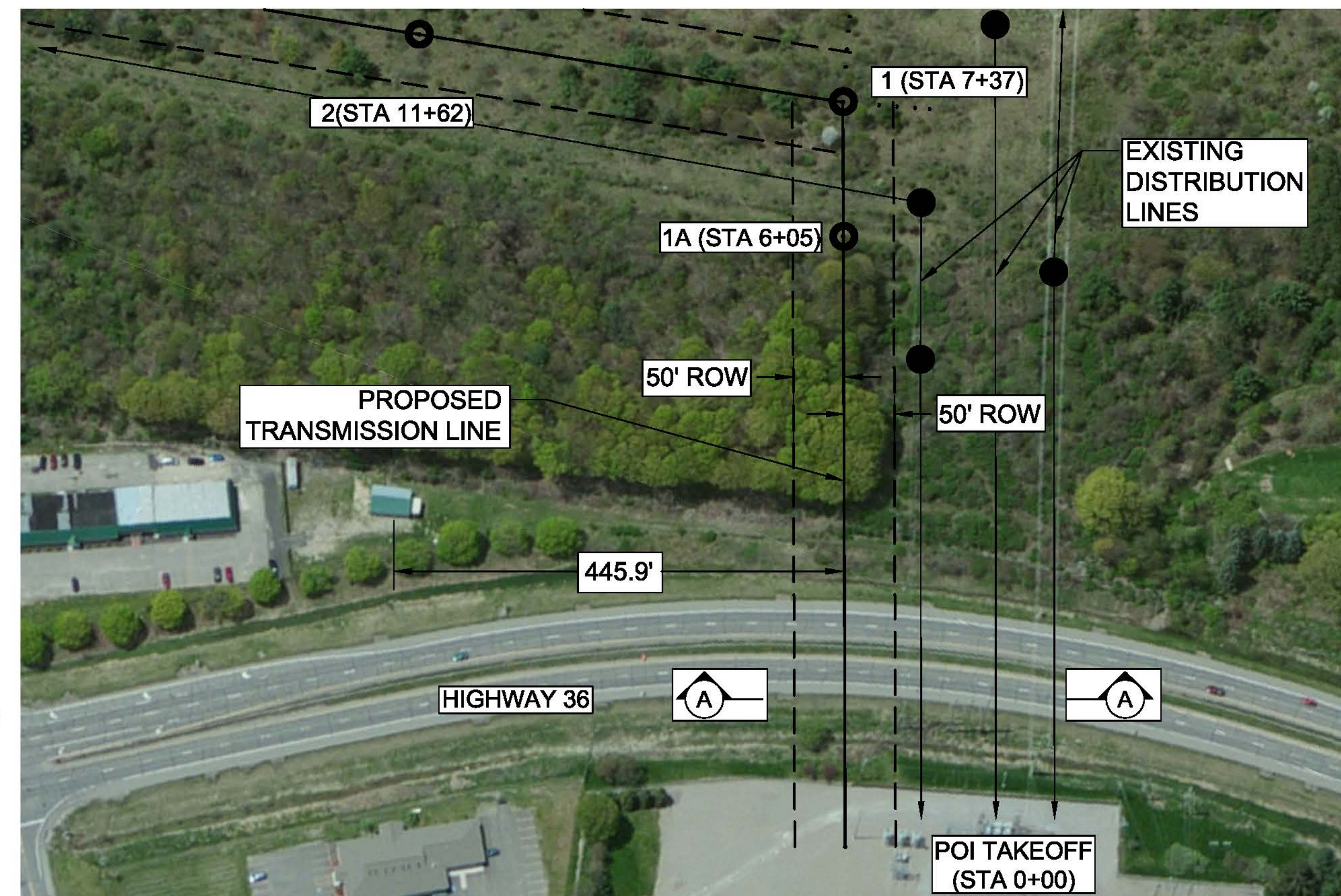
ROW Segment 6 – Double circuit wood Structure (Overhead Collection line)



ROW Segment 6 BPA Output - Magnetic Field



Appendix C: Cross Section Sketches.



PROPOSED EDGE OF RIGHT OF WAY/VEGETATION REMOVAL

EXISTING EDGE OF RIGHT OF WAY/VEGETATION REMOVAL

PROPOSED CROSS SECTION ELEVATION A-A

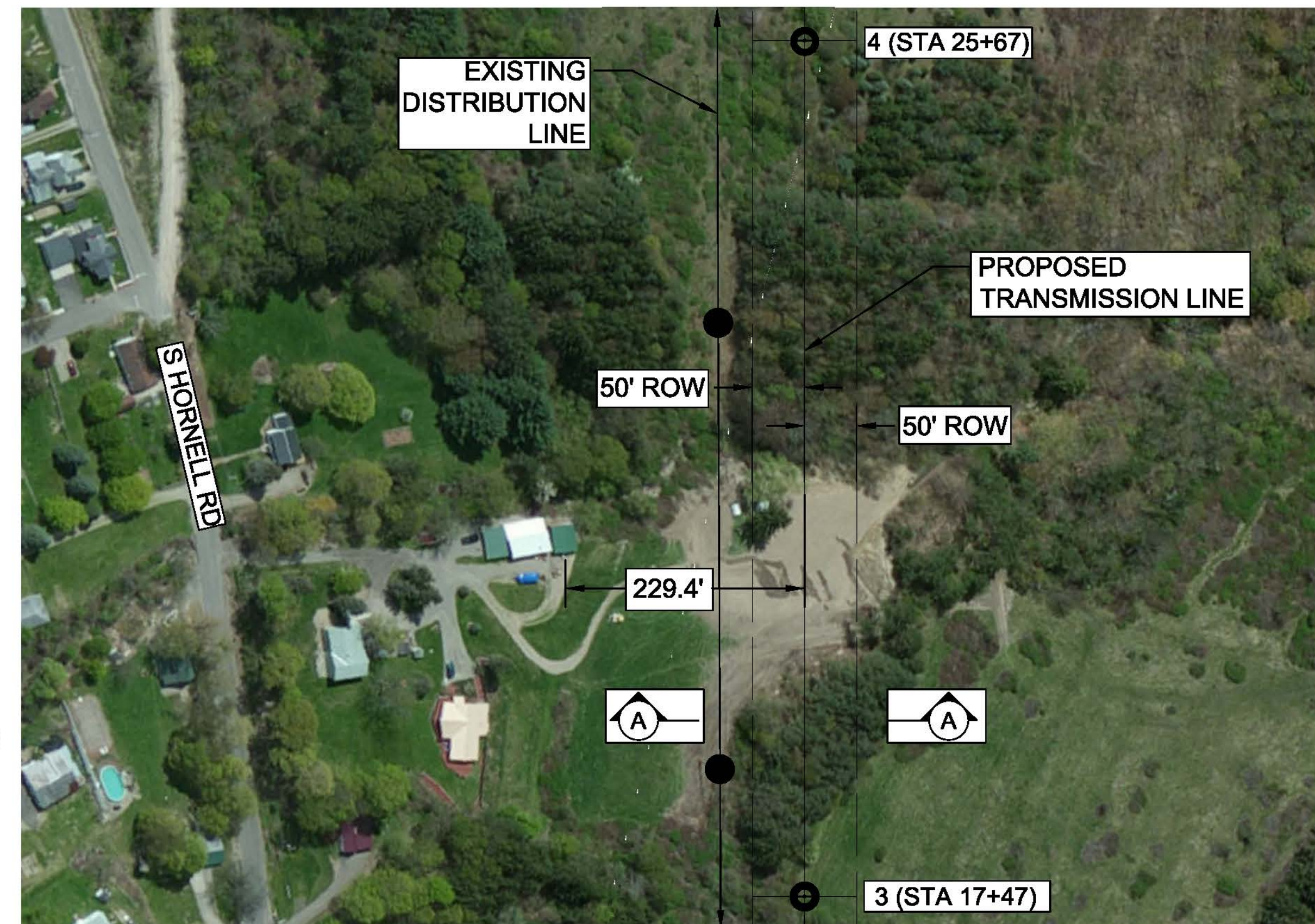
PRELIMINARY NOT FOR CONSTRUCTION

-							SCALE:  NONE	
-								
-								
-								
-								
-								
-								
B	02/16/2018	PRELIMINARY - ARTICLE VII/ARTICLE X		NJT	TRK	KVP	S&L	PREP: NJT CHKD: SA APPD: KVP DATE: 10/04/2017
A	10/04/2017	PRELIMINARY - NOT FOR CONSTRUCTION		NJT	SA	KVP	S&L	
NO	DATE	REVISIONS AND RECORD OF ISSUE		DRWN	REVD	APPR	COMP	

NEXtera
ENERGY
RESOURCES

NEXTERA ENERGY RESOURCES, LLC
EIGHT POINT WIND, LLC
SECTION 1
TRANSMISSION LINE

SKETCH 1

[illegible]

PRELIMINARY
NOT FOR CONSTRUCTION

—								SCALE: NONE	
—									
—									
—									
—									
—									
—									
2	02/16/2018	PRELIMINARY - ARTICLE VII/ARTICLE X			NJT	TRK	KVP	S&L	PREP: NJT CHKD: SA APPD: KVP DATE: 10/04/2017
A	10/04/2017	PRELIMINARY - NOT FOR CONSTRUCTION			NJT	SA	KVP	S&L	
NO	DATE	REVISIONS AND RECORD OF ISSUE			DRWN	REVD	APPR	COMP	

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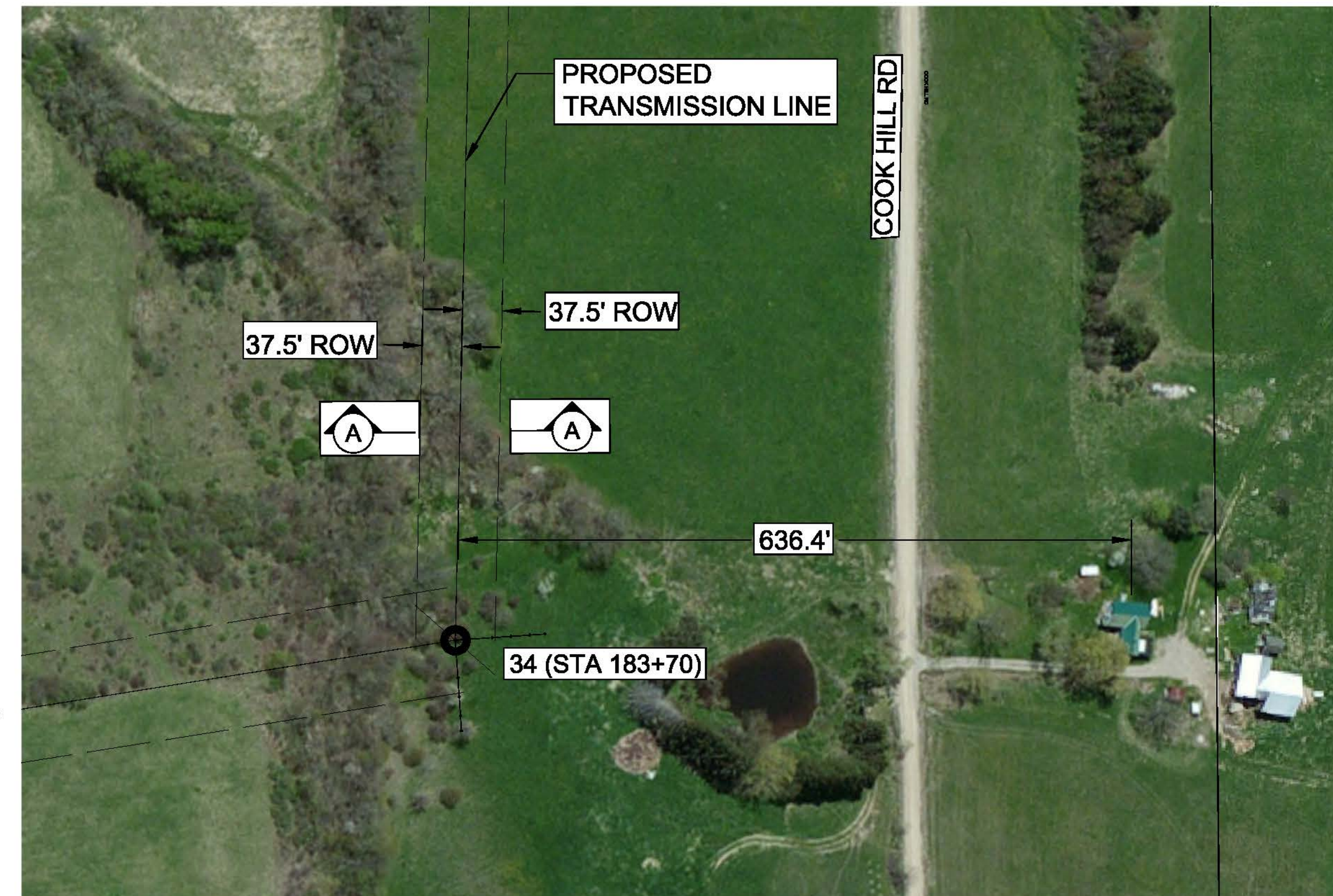
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NEXTERA ENERGY RESOURCES, LLC
EIGHT POINT WIND, LLC
SECTION 2
TRANSMISSION LINE

SKETCH 2



PROPOSED CROSS SECTION
ELEVATION A-A

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SECTION 4
TRANSMISSION LINE

SKETCH 4



1'

17'

A

19'

C

9' (TYP.)

B

90'

PROPOSED EDGE OF RIGHT OF WAY/VEGETATION REMOVAL

100'

PROPOSED EDGE OF RIGHT OF WAY/VEGETATION REMOVAL

PRELIMINARY
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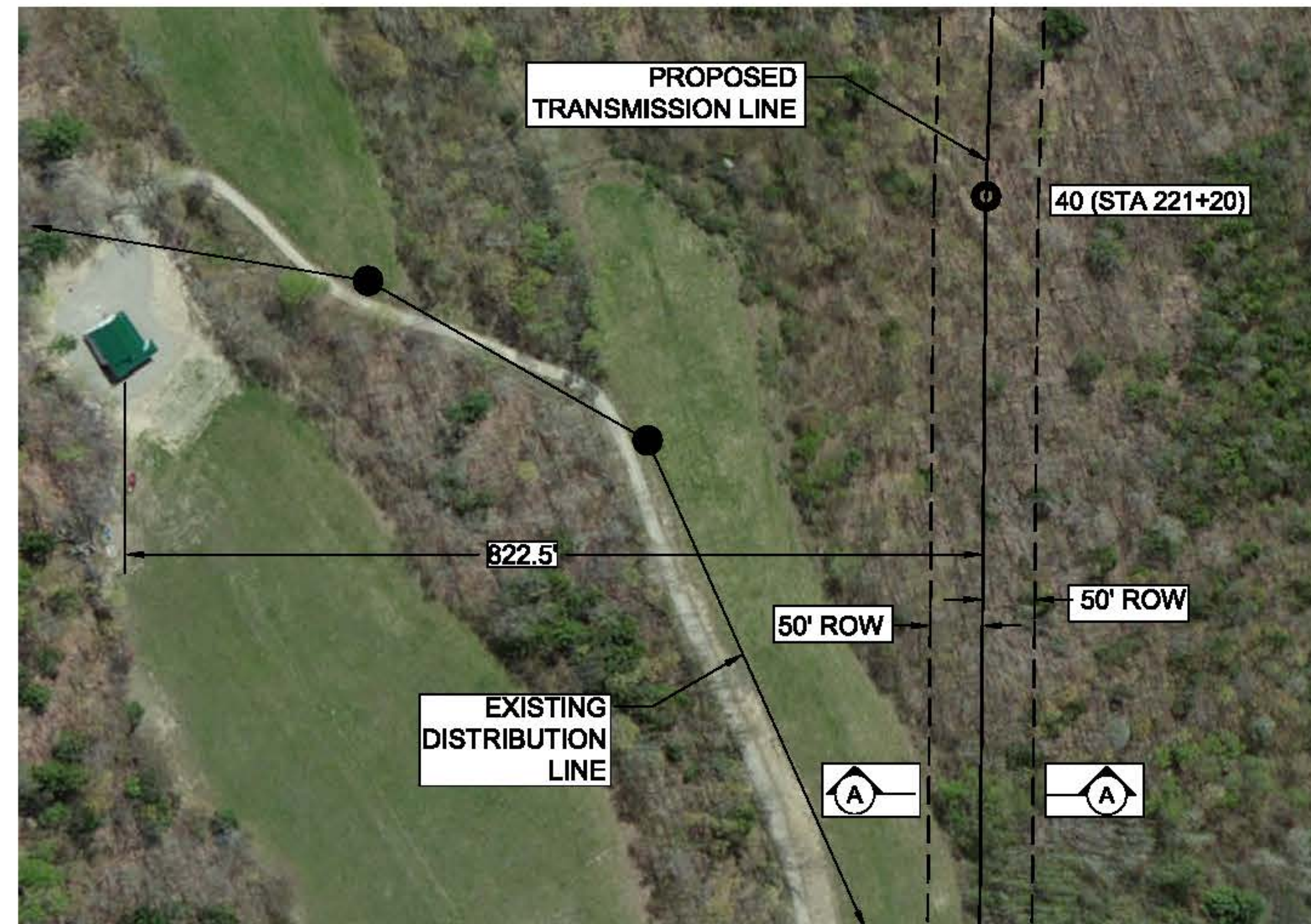
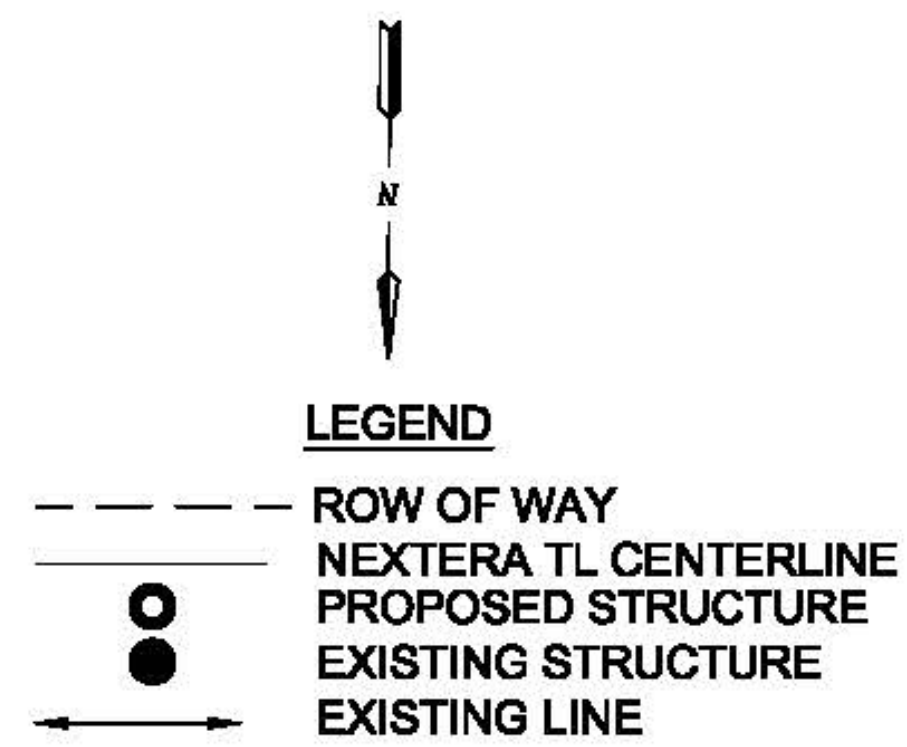
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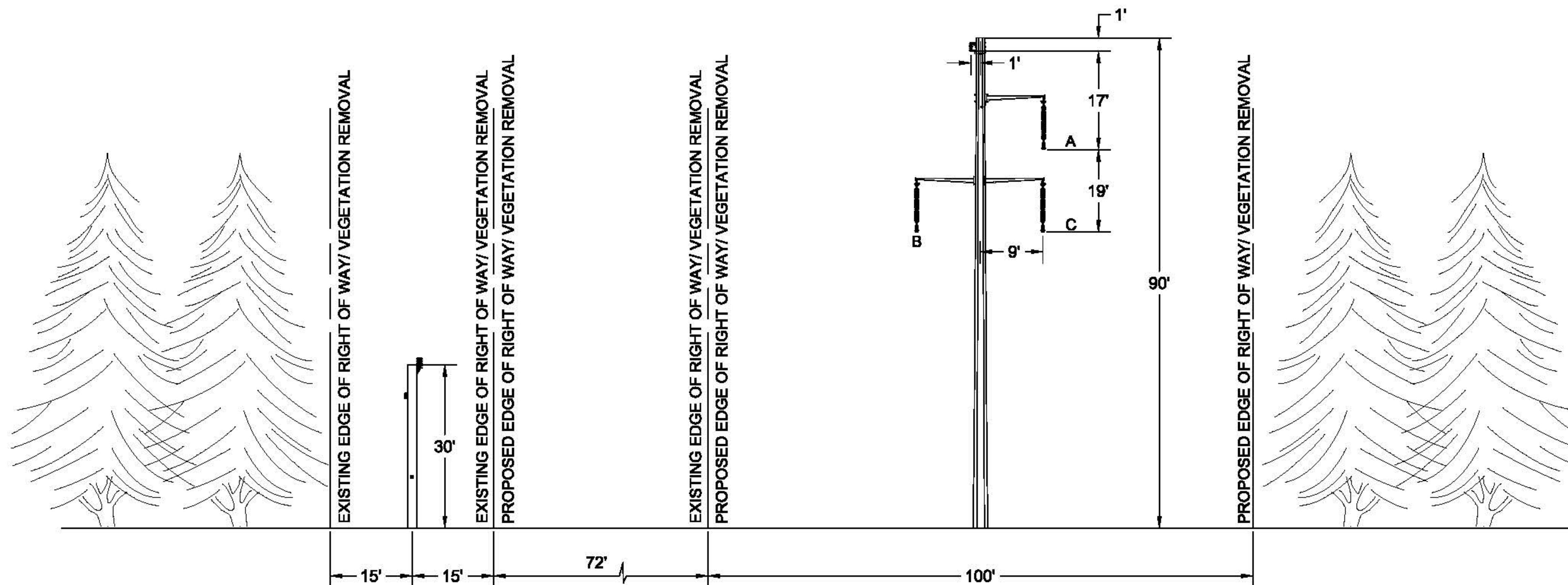
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EIGHT POINT WIND, LLC
SECTION 5
TRANSMISSION LINE

SKETCH 5



**PROPOSED CROSS SECTION
PLAN VIEW**



**PROPOSED CROSS SECTION
ELEVATION A-A**

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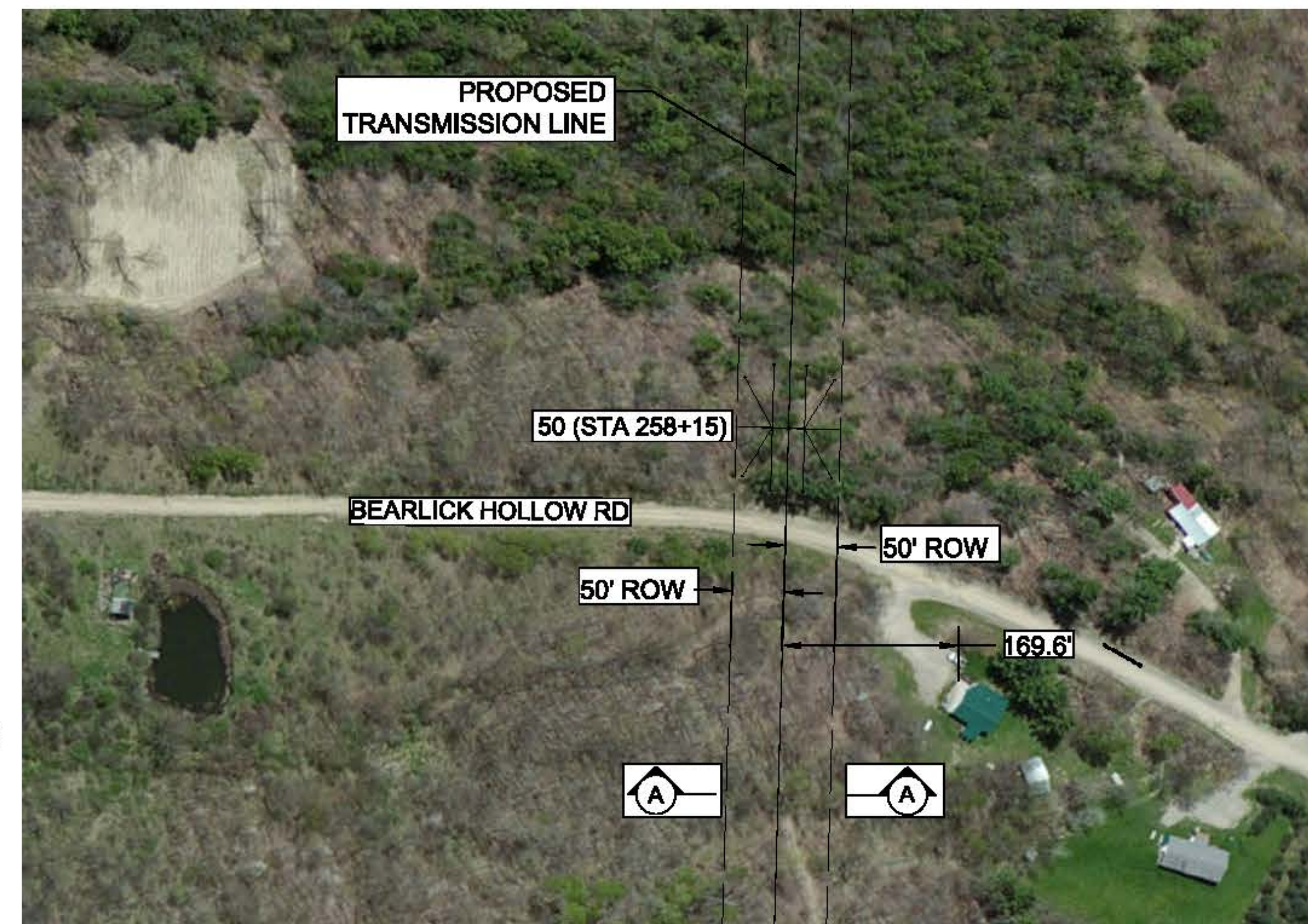


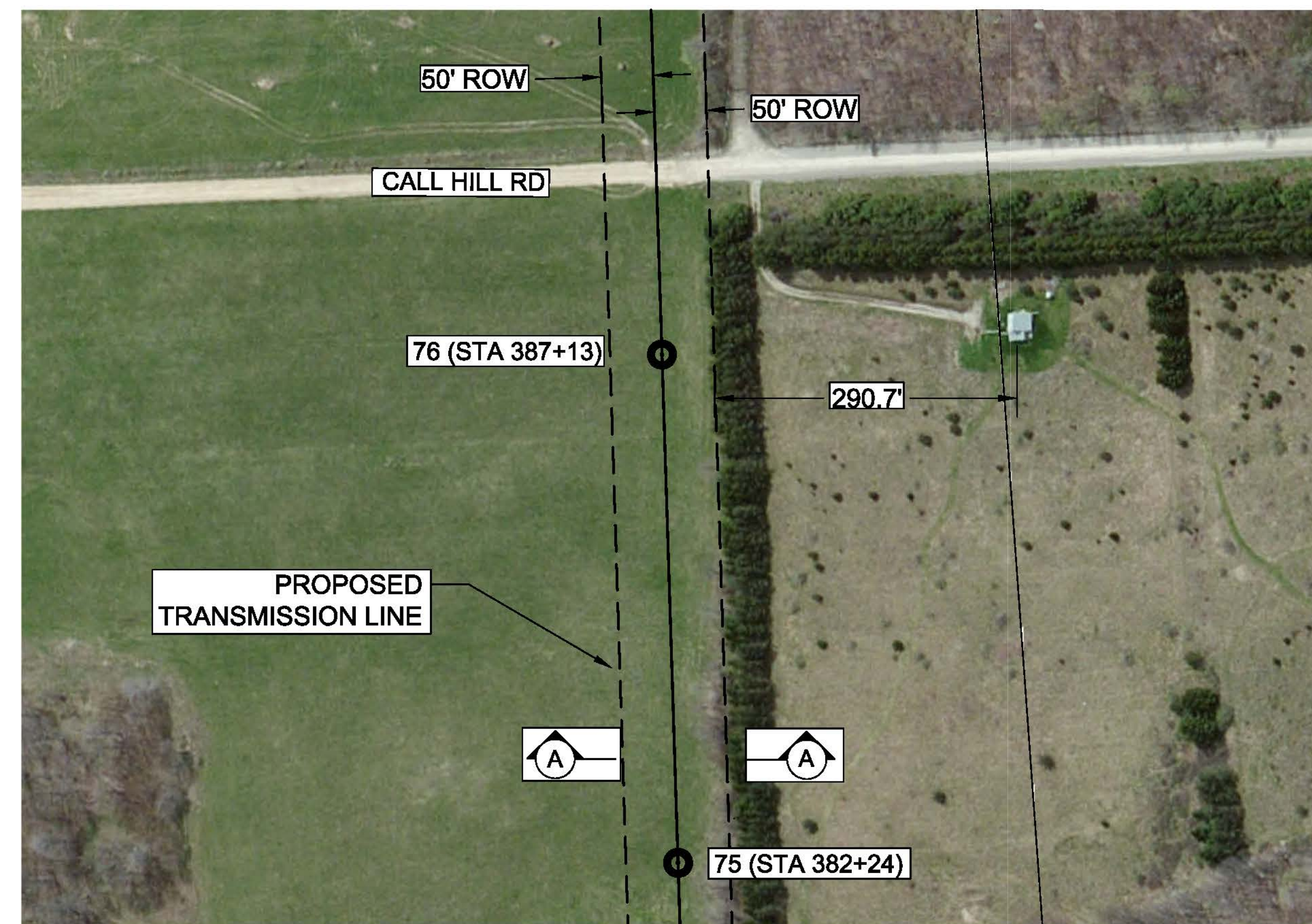
Diagram illustrating the proposed structure and vegetation removal within a 100' Right of Way (ROW). The structure is 90' high and 9' wide (TYP.). The structure includes a central pole with a horizontal arm (B) and two vertical arms (A and C). Dimensions are provided for the structure and the surrounding area.

- Structure Height: 90'
- Structure Width: 9' (TYP.)
- Arm A Height: 17'
- Arm C Height: 19'
- Top Section Height: 1'
- Base Section Height: 1'
- Right of Way (ROW) Width: 100'
- Vegetation Removal: Indicated by the dashed line and the label "PROPOSED EDGE OF RIGHT OF WAY/VEGETATION REMOVAL".

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SECTION 7
TRANSMISSION LINE

SKETCH 7



Technical drawing of a proposed bridge structure. The drawing includes a central bridge structure with dimensions and two side areas labeled for vegetation removal.

Dimensions:

- Overall width: 100'
- Bridge width: 15'-6"
- Bridge height: 60'
- Top horizontal dimension: 15'-6"
- Top vertical dimension: 14'-3"
- Top horizontal dimension (right side): 7'-8"
- Top vertical dimension (right side): 15'-6"

Labels:

- PROPOSED EDGE OF RIGHT OF WAY/VEGETATION REMOVAL** (Left side)
- PROPOSED EDGE OF RIGHT OF WAY/VEGETATION REMOVAL** (Right side)
- B** (Left side of bridge structure)
- A** (Center of bridge structure)
- C** (Right side of bridge structure)

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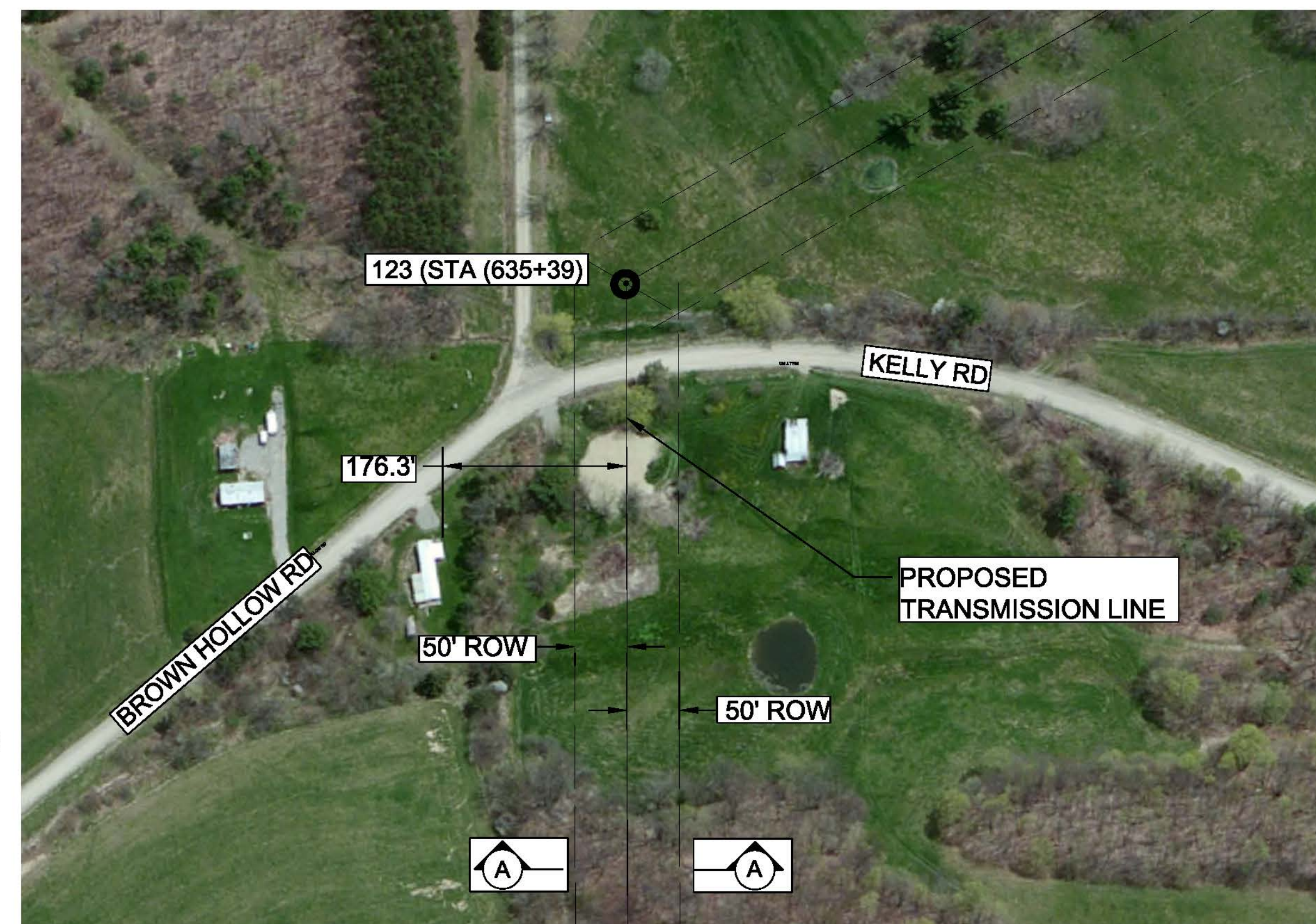


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SECTION 8
TRANSMISSION LINE

SKETCH 8



The diagram is a site plan showing a proposed vegetation removal area. It features a horizontal line at the top representing the 'PROPOSED EDGE OF RIGHT OF WAY/VEGETATION REMOVAL'. Below this line, there are two large, irregular shapes representing trees. To the left of the trees, there is a small circle labeled 'GAS LINE'. The plan is divided into several sections by vertical lines. The width of the first section is labeled '73''. The width of the second section is labeled '100''. The width of the third section is labeled '90''. Within the 90' section, there are further dimensions: a 1' wide area at the top, a 17' wide area below it, a 19' wide area below that, and a 9' wide area at the bottom. The plan is labeled 'PROPOSED EDGE OF RIGHT OF WAY/VEGETATION REMOVAL' on the right side.

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SECTION 10
TRANSMISSION LINE

SKETCH 10



Diagram illustrating the proposed edge of right of way/vegetation removal for a road layout. The diagram shows a central road section with a width of 100'. The road is flanked by vegetation removal areas, indicated by the text "PROPOSED EDGE OF RIGHT OF WAY/VEGETATION REMOVAL". The road layout includes a 90' section and a 17' section. The road is flanked by trees, and the vegetation removal areas are marked with 'A', 'B', and 'C'. The dimensions are as follows:

- Overall width: 100'
- Section 1: 17'
- Section 2: 19'
- Section 3: 90'
- Section 4: 1'
- Section 5: 1'
- Section 6: 9'

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SECTION 11
TRANSMISSION LINE

SKETCH 11



The diagram illustrates a proposed utility structure, likely a transmission tower or pole, with the following dimensions and features:

- Structure Dimensions:**
 - Top horizontal span: 1'
 - Vertical height from top span to point A: 17'
 - Vertical height from point A to point C: 19'
 - Horizontal distance from the central vertical axis to point B: 9'
 - Horizontal distance from the central vertical axis to point C: 9'
 - Horizontal distance from the central vertical axis to the right edge of the structure: 1'
 - Horizontal distance from the central vertical axis to the left edge of the structure: 1'
 - Horizontal distance from the central vertical axis to the right edge of the structure: 1'
 - Horizontal distance from the central vertical axis to the left edge of the structure: 1'
- Vegetation Removal Requirements:**
 - Proposed edge of right of way/vegetation removal: 75'
 - Proposed edge of right of way/vegetation removal: 90'
- Labels:**
 - A: Point on the structure.
 - B: Point on the structure.
 - C: Point on the structure.

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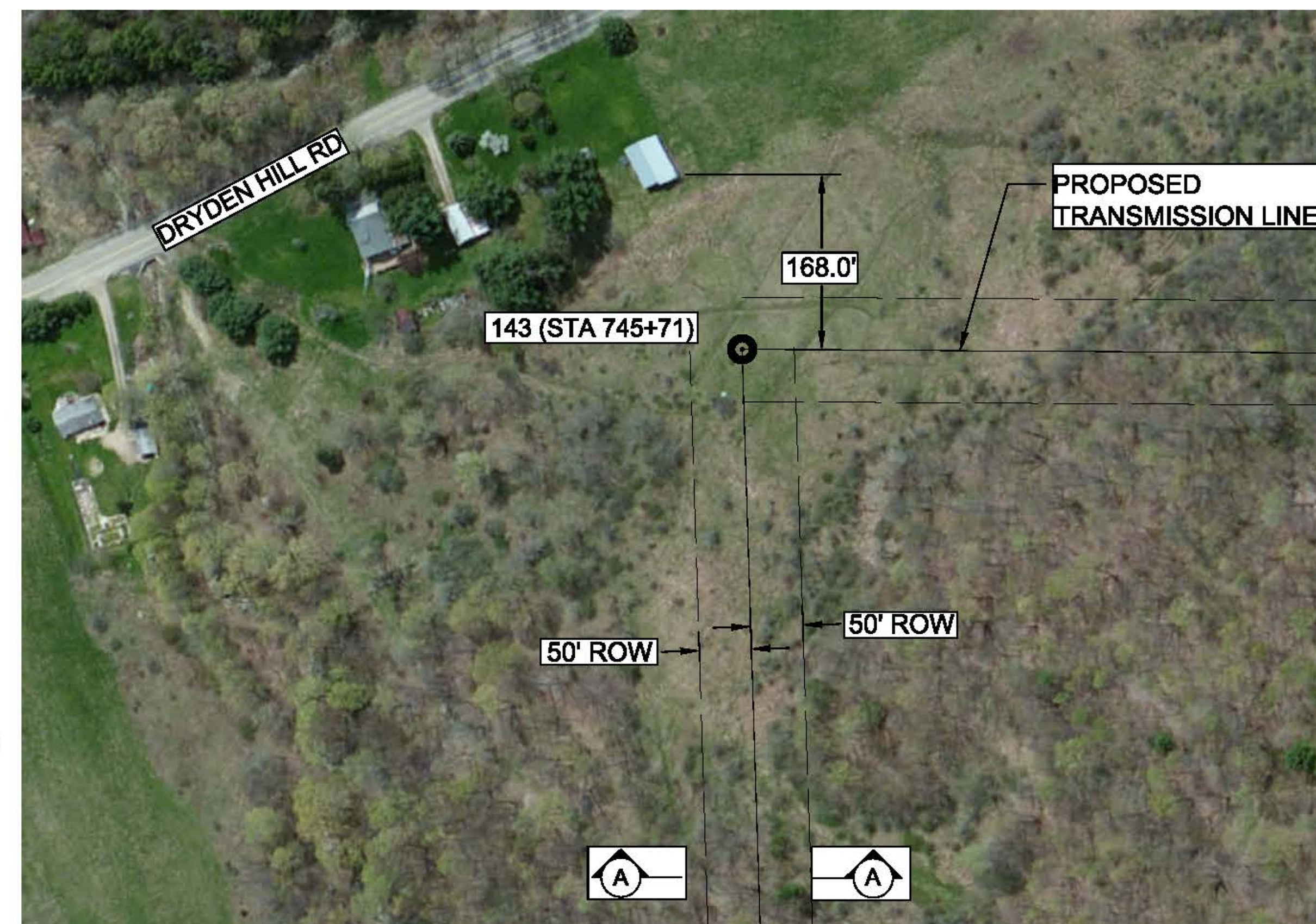
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EIGHT POINT WIND, LLC
SECTION 12
TRANSMISSION LINE**

SKETCH 12



Technical drawing of a proposed utility structure within a 100-foot right-of-way. The structure is a vertical pole with a horizontal cross-arm. Dimensions include a total height of 90 feet, a cross-arm height of 17 feet, and a base offset of 19 feet. The structure is flanked by two 10-foot wide areas labeled "PROPOSED EDGE OF RIGHT OF WAY/ VEGETATION REMOVAL". The drawing shows stylized trees on either side of the structure.

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EIGHT POINT WIND, LLC
SECTION 13
TRANSMISSION LINE

SKETCH 13



PROPOSED CROSS SECTION
ELEVATION A-A

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SECTION 14
TRANSMISSION LINE

SKETCH 14



The diagram illustrates a proposed cross-section of a utility corridor. A central utility pole is shown with a total height of 90 feet. The pole has a main section of 17 feet and a lower section of 19 feet. A horizontal arm extends from the pole at a height of 17 feet, with a vertical clearance of 19 feet to the ground. The pole is positioned 1 foot from the left and right edges of the 100-foot wide right-of-way. The ground is marked with a horizontal line, and the vegetation removal areas are indicated by hatched patterns on either side of the pole. The diagram is labeled 'PROPOSED CROSS SECTION ELEVATION A-A' at the bottom.

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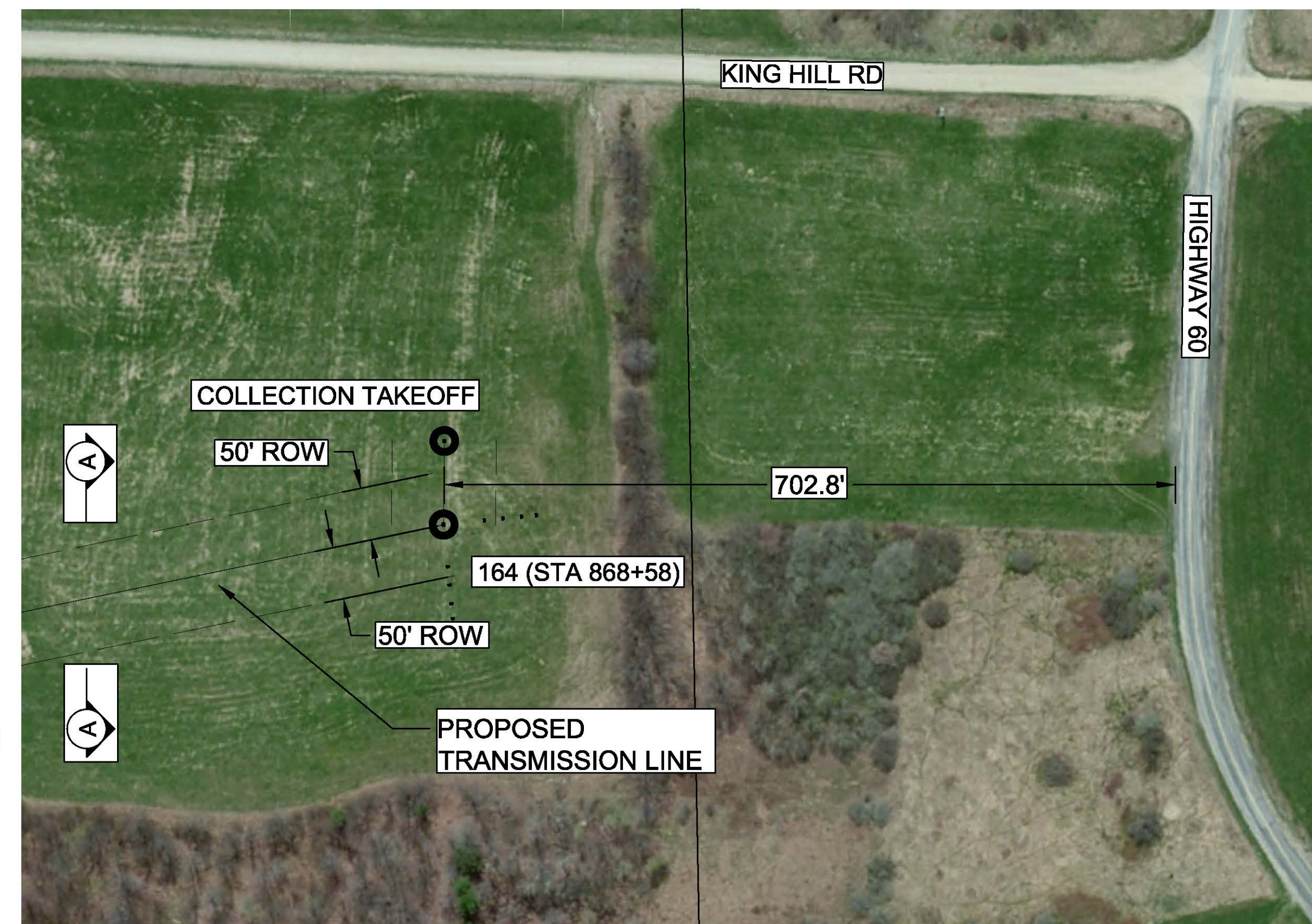
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EIGHT POINT WIND, LLC
SECTION 15
TRANSMISSION LINE

SKETCH 15



34.5kV
UG COLLECTION CABLE

38.5'

11.5'

100'

90'

1'

17'

19'

9'

A

C

PROPOSED EDGE OF RIGHT OF WAY/VEGETATION REMOVAL

PROPOSED EDGE OF RIGHT OF WAY/VEGETATION REMOVAL

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SKETCH 16