New York State Electric & Gas Corporation

Steuben-Chemung Area Transmission Enhancement Project

Appendix D
EMF Report

Part 1 of 3

Critical Energy/Electric Infrastructure Information (CEII) Has Been Redacted From This Document

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Steuben-Chemung Area Transmission Enhancement (SCATE) Project

EMF Report

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03/27/2025

Prepared	Reviewed	Approved
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INDEX

1. INTRODUCTION

1.1 Project Summary

The Steuben-Chemung Area Transmission Enhancement (SCATE) Project aims to rebuild the 230 kV transmission lines 68, 69, and 72. When Van Auker Substation (S/S) is built, which is expected to occur prior to construction of the SCATE Project, the approximately 0.4 mile portion of Line 68 from Canandaigua S/S to Van Auker S/S will be re-designated as Line 74. The rest of Line 68, from Van Auker S/S to Stoney Ridge S/S, is approximately 23.7 miles. Line 72 is approximately 27.0 miles from Stoney Ridge S/S to Hillside S/S. Line 69 is approximately 1.5 miles from Hillside S/S to Watercure S/S. This report presents the Electric and Magnetic Fields (EMF) levels following project completion. This document does not supersede the NESC or AVANGRID standards unless otherwise stated. The design criteria developed for this project are based on the AVANGRID Overhead Transmission standards, the NESC, and the project work scope.

The design criteria document covers the Conceptual Design of the SCATE transmission lines:

Existing steel lattice towers will be re-used for the L72 and L69 rebuild for a portion of each line between Hillside S/S and Watercure S/S. Where possible, each line will be rebuilt in the existing corridor with a 65' offset from the corresponding existing line to maintain adequate horizontal clearance to the existing energized line during construction. The new lines will use steel construction with suspension V-string insulators. Lines 74 and 68 will use bundled 1192.5 kcmil "Bunting" ACSR conductor and AFL DNO-11467 72 OPGW and 7#7 Alumoweld static wire. Lines 69 and 72 will use 2156 kcmil "Bluebird" ACSR conductor and AFL DNO-11467 72 OPGW and 7#7 Alumoweld static wire. The tower section of L69 and L72 will use 1272 kcmil "Bittern" ACCR.

This project is situated in Chemung and Steuben Counties, New York, and it is projected to pass primarily through upland forest and farmland as shown in Figure 1.

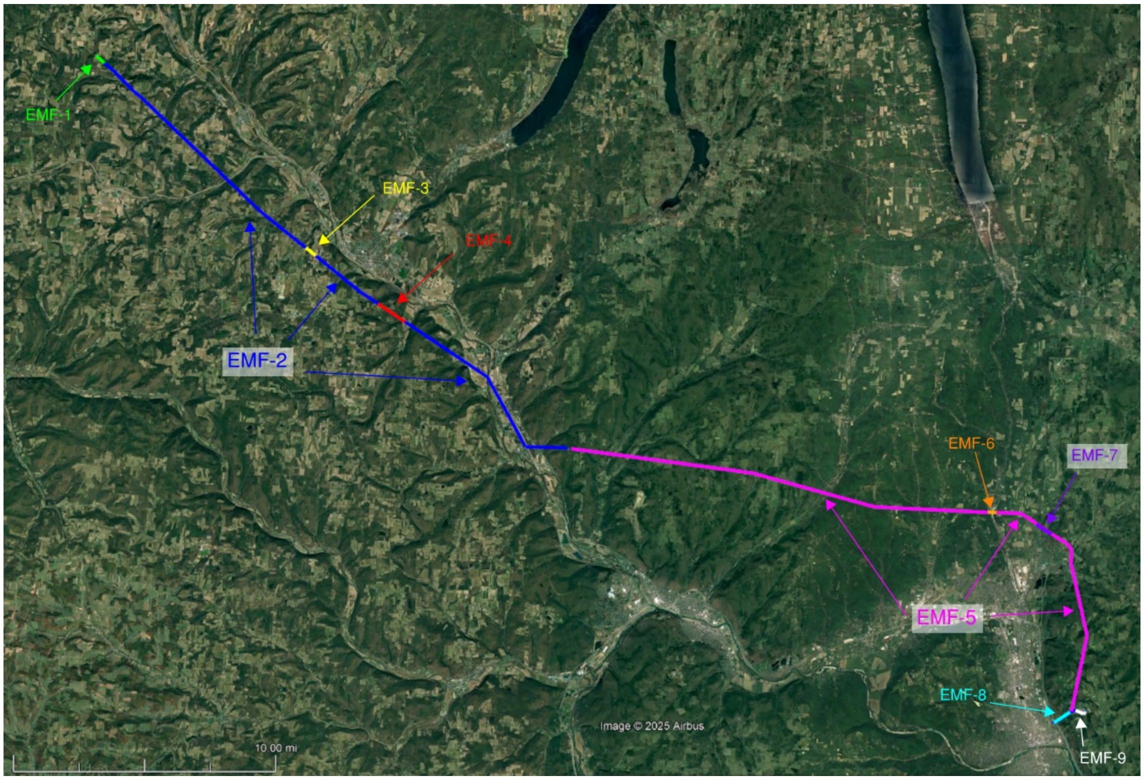


Figure 1: SCATE Project, 52.7 miles, CANANDAIGUA – STONEY RIDGE – HILLSIDE – WATERCURE

1.2 Proposed Corridor

Table A – EMF Segments

EMF Segment	Exhibit 5 Cross Section(s)	Length (Mi)	Proposed ROW Width	Proposed Structure Type	Proposed Structure Numbers	Other Circuits in Corridor
1	*01*	*0.4*	*250'*	*Single Circuit 230kV Three Pole Dead End*	*Canandaigua S/S – 4*	-
2	*02, 04, 06*	*21.9*	*250'*	*Single Circuit 230 kV H-Frame*	*1 – 75,* *80 – 102,* *110 – Stoney Ridge S/S*	-
3	*03*	*0.8*	*270'*	*Single Circuit 230 kV H-Frame*	*76 – 79*	-

4	*05*	*1.0*	*250'*	*Single Circuit 230kV Monopole*	*102 - 110*	*Line 723 (115 kV)*
5	*07, 09, 11, 12*	*25.1*	*250'*	*Single Circuit 230kV H-Frame*	*Stoney Ridge S/S – 111,* *114 – 122,* *126 – 144,* *144 – 176*	*-*
6	*08*	*0.3*	*250'*	*Single Circuit 230kV Single Pole Dead End*	*111 – 112*	*-*
7	*10*	*0.4*	*250'*	*Single Circuit 230kV Single Pole Delta*	*123 – 125*	*-*
8	*13*	*0.8*	*225'*	*Double Circuit 230kV Towers*	*177 – Hillside S/S* *Hillside S/S – 6*	*Line 69 / Line 72, Line 70*
9	*14*	*0.1*	*Varies*	*Single Circuit 230kV Single Pole Dead End*	*9 – Watercure S/S*	*-*

2. GENERAL INFORMATION ON ELECTRIC AND MAGNETIC FIELDS

2.1 Background Information

Electric and magnetic fields (EMFs) are invisible fields that are created by electrical voltage and electrical current produced by various sources, including power lines, and electronic devices, including, but not limited to, cell phones and microwaves. EMFs related to alternating current (AC) power lines in North America are characterized as non-ionizing and fall within the Super Low Frequency (SLF)[3] range of the electromagnetic spectrum, due to the low frequency of 60 Hz used to transmit AC power. EMF levels are generally highest directly beneath power cables and decrease with distance from the cables at a rate proportional to the distance squared.

2.2 Electric Fields

Electric fields result from the potential or voltage (electrical pressure) on an object, which causes an electric field. Any object with an electric charge has a voltage (potential) at its surface due to the accumulation of more electrons compared to another object or surface. This voltage effect is not limited to the surface of the object but exists in the surrounding space with diminishing intensity. Electric fields are commonly measured in units of kilovolts per meter (kV/m) and are based on the voltage. As the operating voltage of a given line is maintained at a steady level with very little deviation, electric field levels are relatively constant. Grounded objects, such as trees, adjacent to a line can cause a reduction in the electric field when encountered. Electric fields can exert a force on other electric charges at a distance, becoming stronger near a charged object and decreasing with distance away from the object.

In the United States, electric power transmission lines create 60 Hz electric fields. These fields result from the voltage of the transmission line phase conductors with respect to the ground. Electric field strengths of a transmission line decrease with distance away from the outermost conductor, typically at a rate of approximately one divided by the distance squared ($1/d^2$). For example, in an undisturbed field, if the electric strength is 10 kV/m at a distance of 1 meter away, it will be approximately 2.5 kV/m at 2 meters away, and 0.625 kV/m at 4 meters away. Electric field strengths for a transmission line remain relatively constant over time because the voltage of the line is kept within bounds of about ± 5 percent of its rated voltage. Transmission line electric fields are affected by the presence of grounded and conductive objects. Trees and buildings, for example, can significantly reduce ground-level electric fields by shielding the area nearby.

2.3 Magnetic Fields

An electric current flowing through a conductor (such as electric equipment, household appliances, power lines, etc.) creates a magnetic field. The most used magnetic field intensity unit of measure is milligauss (mG).

[3]Super low frequency is the frequency range between 30 and 300 hertz.

Electric power transmission lines create magnetic fields, generated by the current (amperes) flowing through the phase conductors. Like electric fields, magnetic field strengths decrease with the inverse square of the distance away from the power line. However, unlike electric fields which vary little over time, magnetic fields are not constant because the current on any electric power line changes in response to varying electrical loads based on the operational needs of the day. Additionally, magnetic fields are not easily shielded the way electric fields can be.

2.4 New York State EMF Limits

The New York State Public Service Commission (NYSPSC) has established an edge of right-of-way (ROW) magnetic field (MF) interim standard of 200 mG and an edge of ROW Electric Field (EF) interim standard of 1.6 kV/m (NYSPSC, 1990, 1978). According to the NYSPSC's "Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities," issued on September 11, 1990, the interim MF standard applies to MFs at 1 meter above the ground surface at the edge-of-ROW for line loading conditions corresponding to winter normal conductor ratings. This interim standard is not health-based and is 10 times lower than the health-based guideline issued by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) for allowable public exposure to MFs (2,000 mG; ICNIRP, 2010). It is based on modeled average edge-of-ROW MFs for a large sample of 345 kV transmission lines in New York State under assumed line loading conditions at winter normal conductor ratings (NYSPSC, 1990).

The New York State Public Service Commission (NYSPSC) on June 19, 1978, issued Opinion No. 78-13 establishing the edge-of-ROW EF limit of 1.6 kV/m, applicable to a height of one meter above ground level and with the line at the rated voltage. Similar to the MF interim standard, this EF standard is not health-based and is approximately 2.6 times lower than the health-based guideline issued by the ICNIRP for allowable public exposure to EFs (4.2 kV/m; ICNIRP, 2010).

The NYSPSC standards limit the electromagnetic and electric field strength that is caused by an electric power transmission line at the nominal minimum winter-normal loading. Those standards are summarized as follows:

- At the edge of the ROW
  - Electric: 1.6kV/m
  - Magnetic: 200mG (20μT)
- At the public road crossings
  - Electric: 7kV/m
- At the private road crossings
  - Electric: 11kV/m
- At anywhere (others)
  - Electric: 11.8kV/m

3. CALCULATIONS

3.1 Proposed Overhead Electrical Conductor

Table B – EMF Segment Conductors

EMF Segment	Circuit	Proposed Conductor	Winter Norm Ampacity	Frequency
1	74 (230 kV)	(2) 1192.5 kcmil 45/7 Strands Bundled BUNTING ACSR	[redacted]	60 Hz
2	68 (230 kV)	(2) 1192.5 kcmil 45/7 Strands Bundled BUNTING ACSR	[redacted]	60 Hz
3	68 (230 kV)	(2) 1192.5 kcmil 45/7 Strands Bundled BUNTING ACSR	[redacted]	60 Hz
4	68 (230 kV)	(2) 1192.5 kcmil 45/7 Strands Bundled BUNTING ACSR	[redacted]	60 Hz
5	72 (230 kV)	2156 kcmil 84/19 Strands BLUEBIRD ACSR	[redacted]	60 Hz
6	72 (230 kV)	2156 kcmil 84/19 Strands BLUEBIRD ACSR	[redacted]	60 Hz
7	72 (230 kV)	2156 kcmil 84/19 Strands BLUEBIRD ACSR	[redacted]	60 Hz
8	72 (230 kV) 69 (230 kV)	1271-T11 BITTERN ACCR	[redacted]	60 Hz
9	69 (230 kV)	2156 kcmil 84/19 Strands BLUEBIRD ACSR	[redacted]	60 Hz

*Bittern ACCR has a higher winter normal ampacity than Bluebird ACSR. Where Bittern ACCR is utilized on L69 and L72, the winter normal ampacity of Bluebird ACSR was used in the EF and MF calculations due to it being the limiting element.

Critical Energy/Electric Infrastructure Information (CEII) Has Been Redacted From This Document

3.2 Methodology

The PLS-CADD software version 20.01 EMF Calculator module has been used to perform all electric and magnetic field calculations. These calculations are based on the methods outlined in the Electric Power Research Institute (EPRI) Red Book (2nd Edition, 1982) and Institute of Electrical and Electronics Engineers (IEEE) standards. The modeling and calculations of electric and magnetic fields were performed using the 3D EMF calculator within PLS-CADD including Finite Element (FE) structure and phase geometry (PLS POLE or TOWER) models, based on EPRI and IEEE methods.

The calculations were performed at a 60 Hz frequency, with the conductors loaded to their winter normal maximum operating current in accordance with the 1990 NYSPSC standards. Calculations were made based on IEEE standard C95.3-2021, at a height of 1 meter (3.28 feet) above ground, in 5-foot increments across the ROW, a standardized maximum electric field allowed at road crossings assumed to be 7.00 kV/m and 11kV/m at anywhere along the route within the ROW. EMF levels were calculated across cross sections perpendicular along the line route considering entire corridors shared with NYSEG-owned or other transmission owners' existing circuits.

For this EMF study, phases A, B, and C will have phase angles of 0 degrees, -120 degrees, and 120 degrees, respectively. Balanced three-phase loads were assumed. Typically, the maximum EMF values are produced when the phases have the same configurations across all circuits. Other phase configurations were tested to ensure the maximum EMF values are included in the results.

Results of these calculations will demonstrate that post-construction EMF levels will be compliant with the NYSPSC standard of 1.6 kilovolts per meter for electric fields and the 200 mG standard at the edges of the major transmission facility and ROW in all portions of the route.

4. RESULTS

This exhibit addresses the requirements specified in 19 New York Codes, Rules and Regulations (NYCRR) §900-2.23.

The expected maximum EMF values within each section measured at one meter from ground level can be seen within each of the following appendixes.

Appendix A Electric Field Results – Graphical

Appendix B Magnetic Field Results – Graphical

Appendix C EMF Results – Summary Table

Appendix D EMF Results – Plan View

Appendix E Structure Drawings

Appendix F EMF Results – PLS-CADD Detailed Data

4.1 Electrical Field Results Summary

As demonstrated in the appendixes, the maximum electric field produced by SCATE Project lines and adjacent circuits anywhere within the ROW measured at one meter from ground level is predicted to be 4.186 kV/m, which is below the New York state limit of 11.8 kV/m. The maximum electric field produced by SCATE Project lines and adjacent circuits at the edge of the ROW is predicted to be 0.782 kV/m, which is below the New York state limit of 1.6 kV/m.

4.2 Magnetic Field Results Summary

As demonstrated in the appendixes, the maximum magnetic field produced by SCATE Project lines and adjacent circuits at the edge of the ROW measured at one meter from ground level is predicted to be 126.212 mG, which is below the New York state limit of 200 mG.

5. REFERENCES

EPRI (1982), Transmission Line Reference Book - 345kv and Above, Second Edition, Electrical Power Research Institute, Palo Alto, CA, USA.

EPRI (1988), TLOP/SAGT Manual, TLWorkstation Code, EPRI EL-4540, Vol. 6, Electrical Power Research Institute, Palo Alto, CA, USA

PLS-CADD – Version 20.00 2 © Power Line Systems, 2024 and Manuals

NESC (2012), National Electrical Safety Code, ANSI C2-2012 and older editions, IEEE, New York, N.Y.

ASCE (1991), Guidelines for Electrical Transmission Line Structural Loading, ASCE Manual 74, ASCE, New York, NY

Institute of Electrical and Electronics Engineers (IEEE). Standard Procedures for Measurement of Power Frequency Electric and Magnetic Fields from AC Power Lines (ANSI/IEEE Std. 644-1994, R2008). New York: IEEE, 2008.

Institute of Electrical and Electronics Engineers (IEEE). IEEE Recommended Practice for Measurements and Computations of Electric, Magnetic, and Electromagnetic fields with respect to Human Exposure to Such Fields, 0 Hz to 100 kHz. New York: IEEE. IEEE Std. C95.3.1-2010.

New York State Public Service Commission (NYSPSC). Opinion No. 78-13. Cases 26529 and 26559, Issued June 19, 1978.

New York State Public Service Commission (NYSPSC). Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities. Cases 26529 and 26559 Proceeding on Motion of the Commission. Issued and Effective: September 11, 1990.

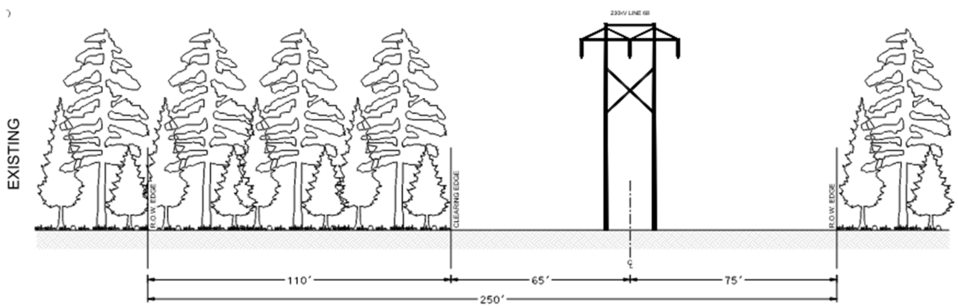
Perrin N, Aggarwal RP, Bracken TD, Rankin RF. Survey of Magnetic Fields near BPA 230-kV and 500-kV Transmission Lines, 1991.

World Health Organization (WHO). Environmental Health Criteria 238: Extremely Low Frequency (ELF) Fields. Geneva, Switzerland: World Health Organization, 2007.

APPENDIX A: ELECTRIC FIELD RESULTS – GRAPHICAL

The lines on the SCATE Project were analyzed to determine the maximum electric fields generated in each segment of the line. The figures below show the existing and proposed right-of-way (ROW) for each segment, as well as a graph depicting the existing and proposed electric fields, the ROW limit of 1.6 kV/m, and the proposed ROW boundary.

Electric Field Segment 1



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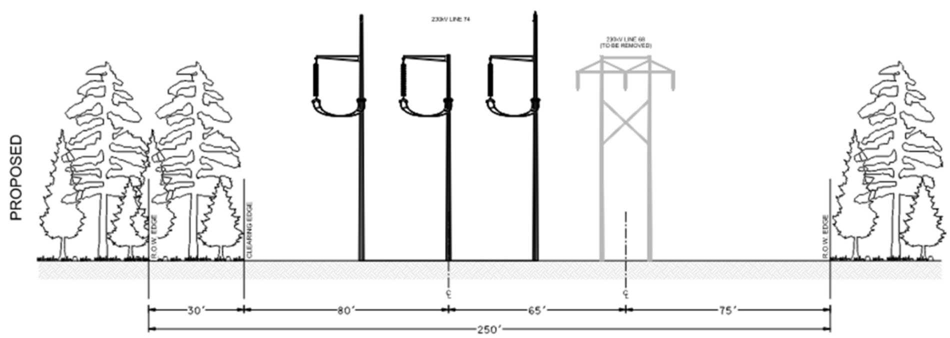

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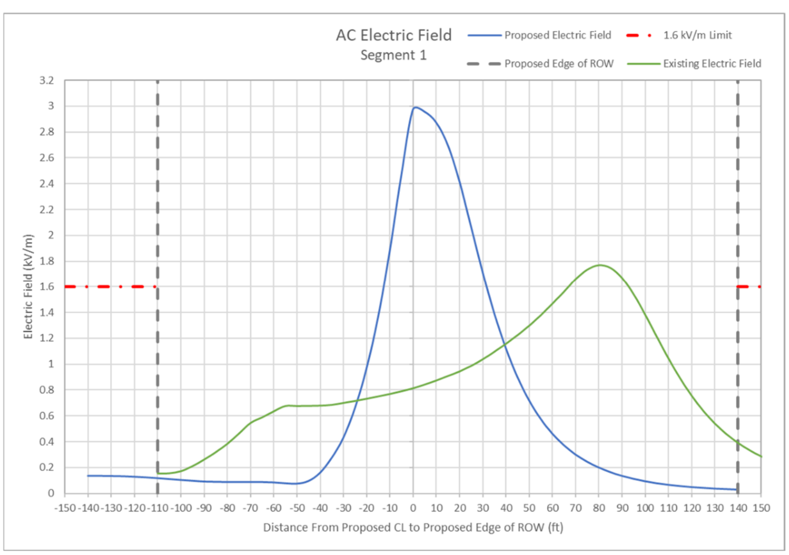
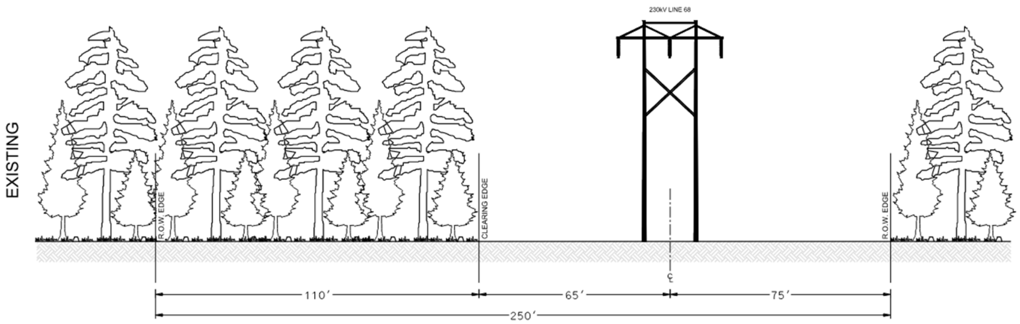


Graphical Calculated AC Electric Fields

Electric Field Segment 2



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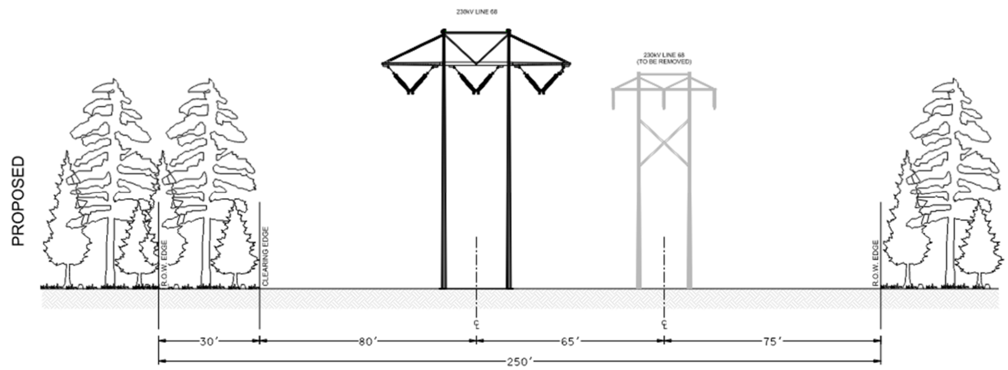

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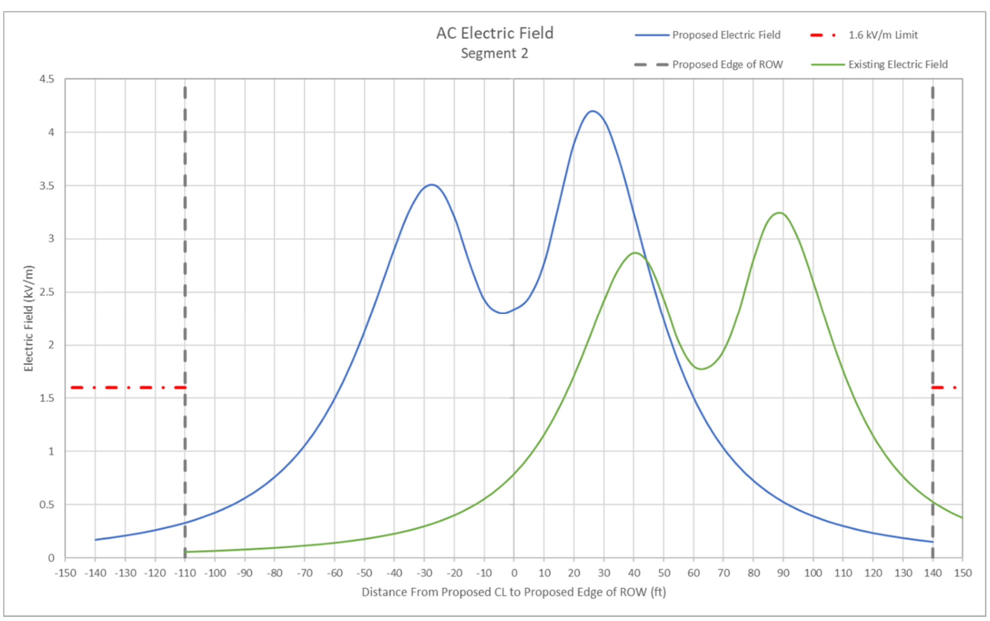

Graphical Calculated AC Electric Fields

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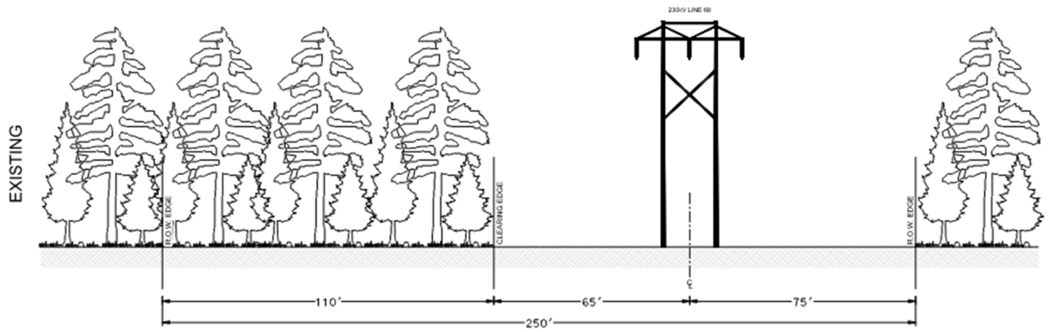

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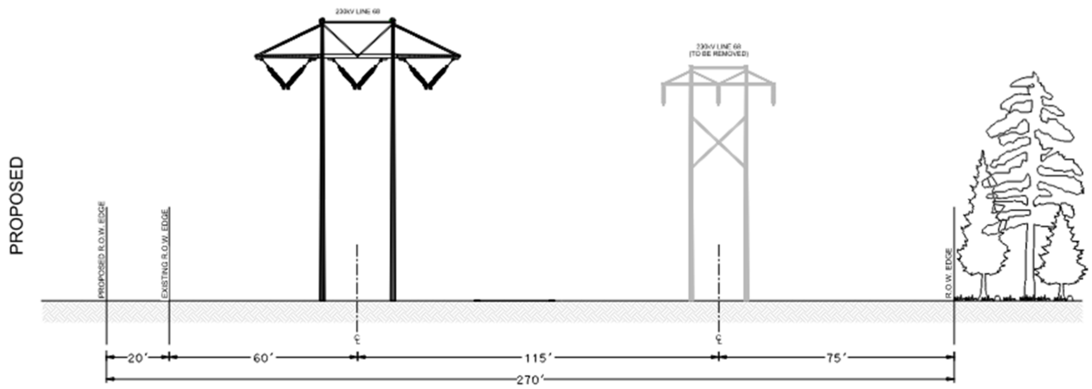

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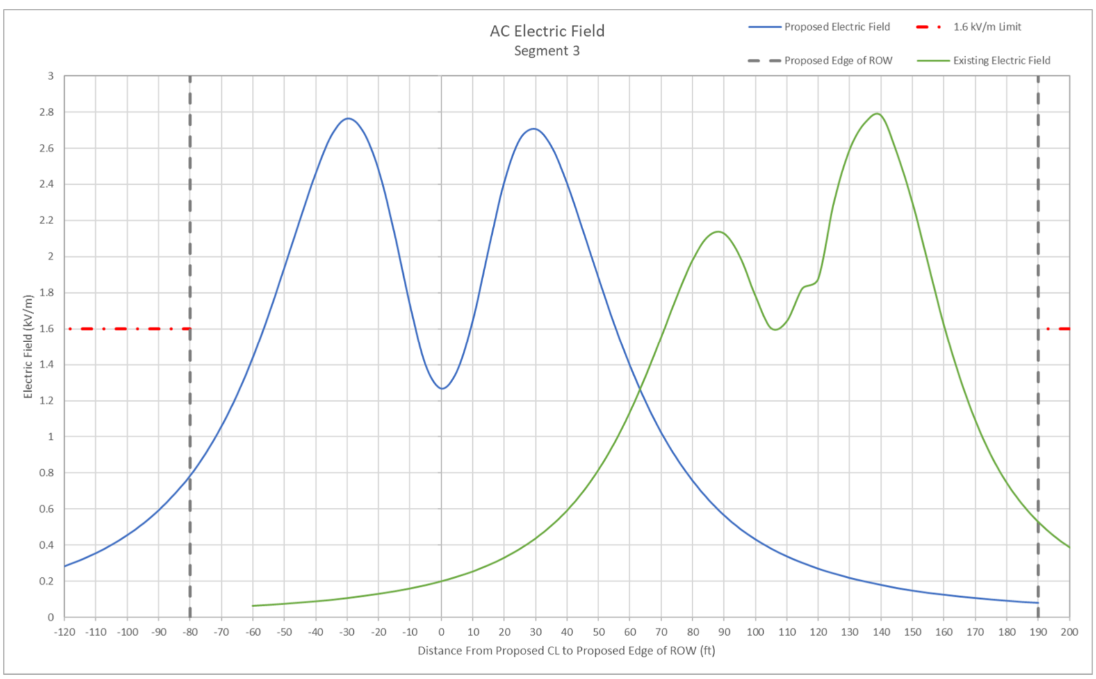

Graphical Calculated AC Electric Fields

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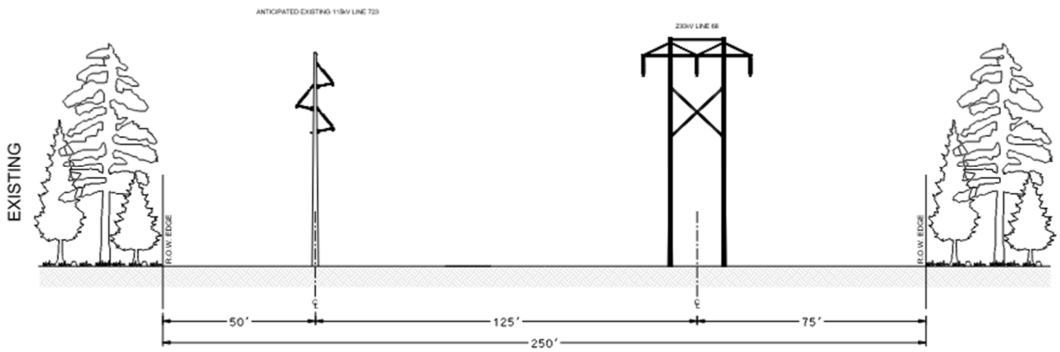

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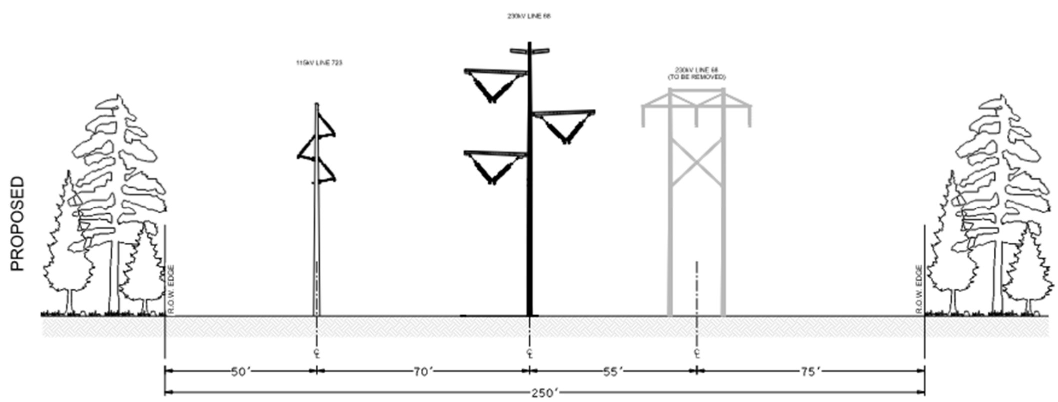

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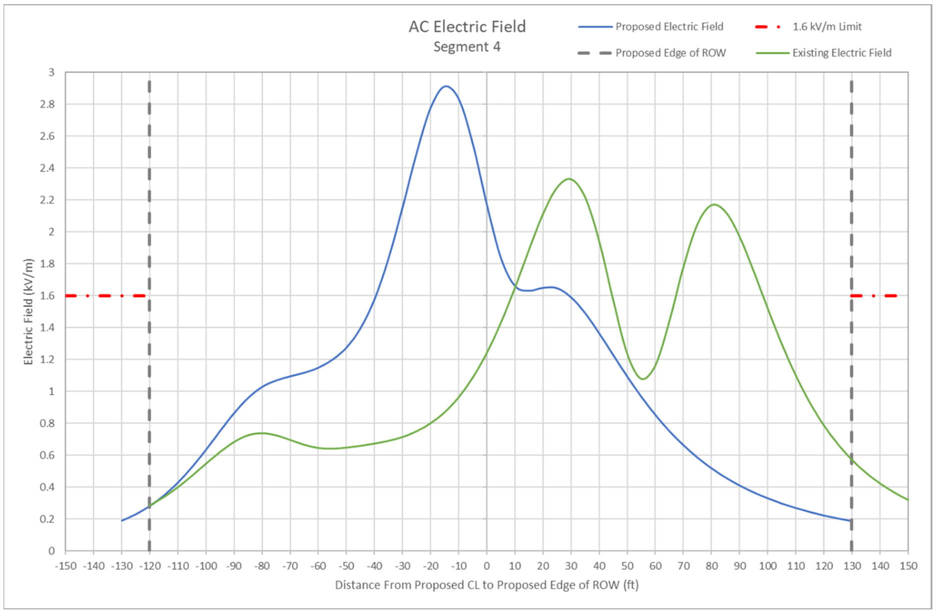

Graphical Calculated AC Electric Fields

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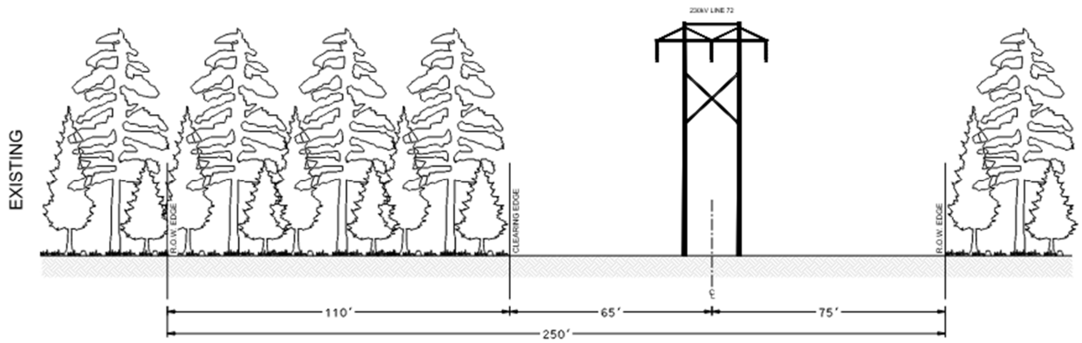

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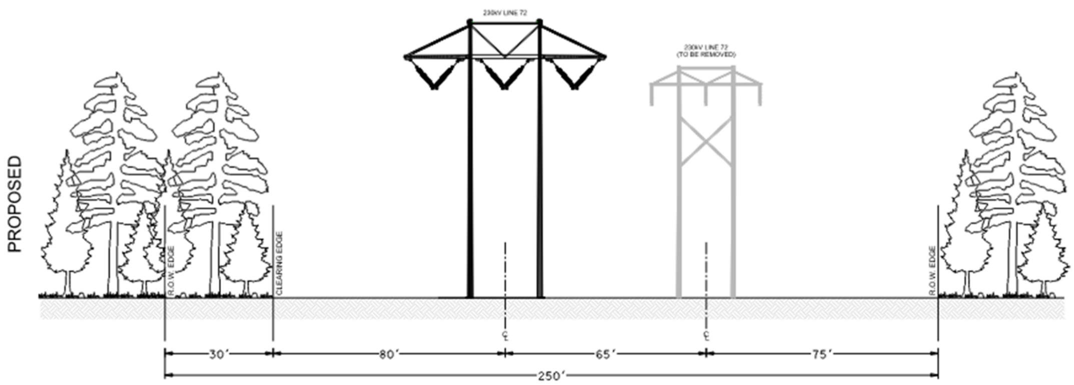

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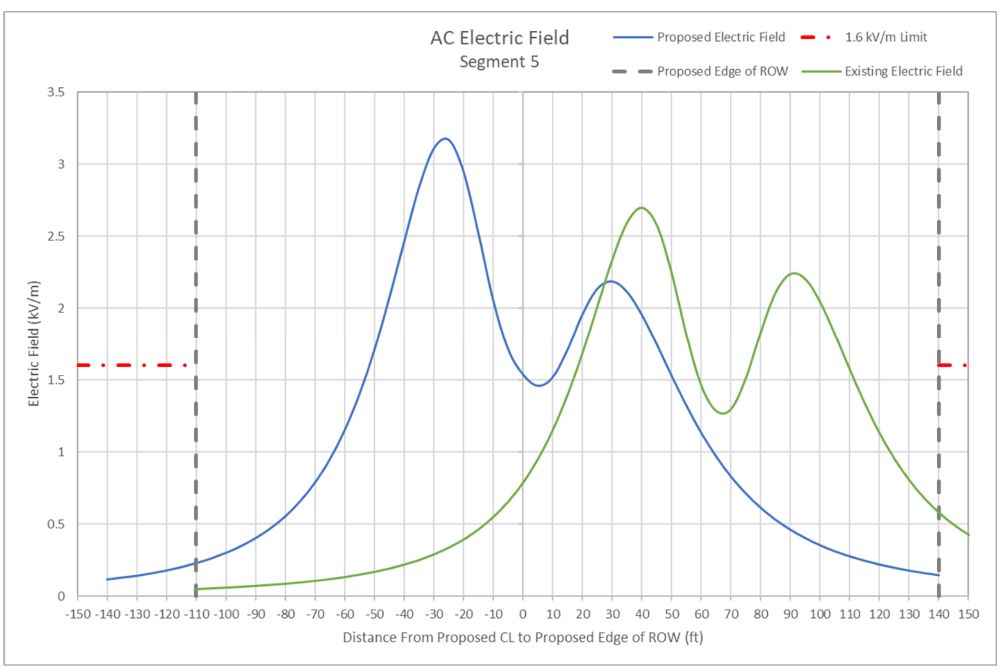

Graphical Calculated AC Electric Fields

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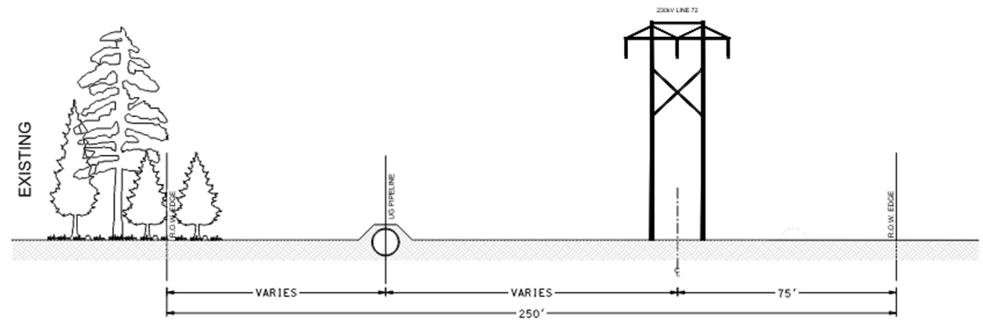

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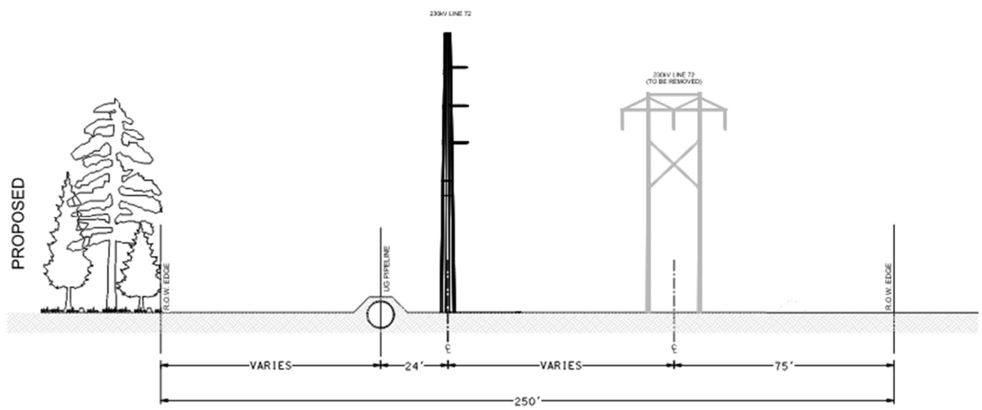

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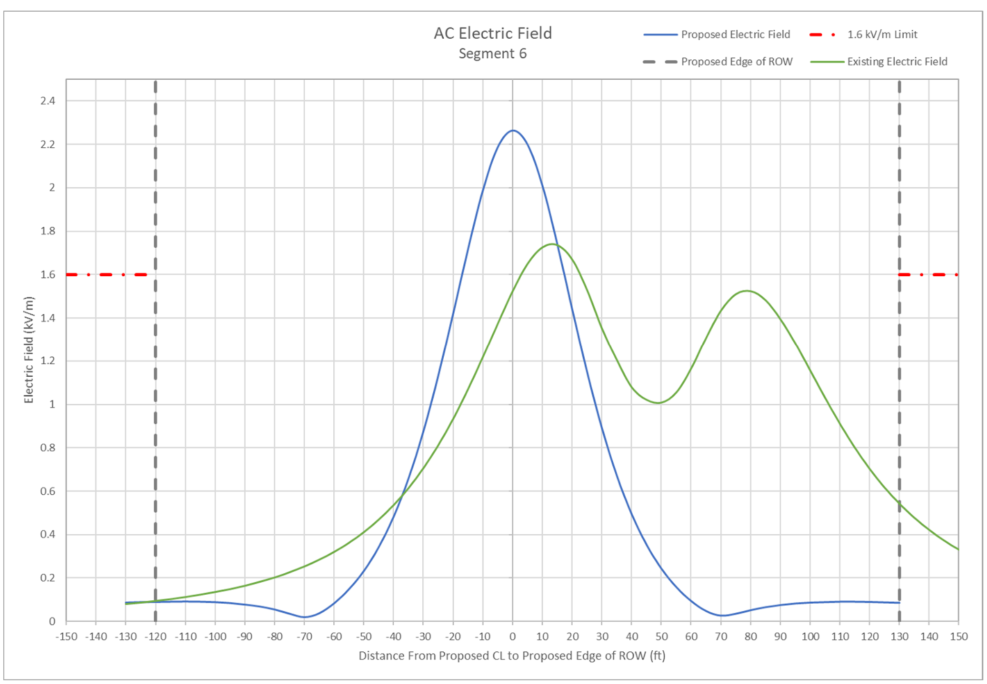

Graphical Calculated AC Electric Fields

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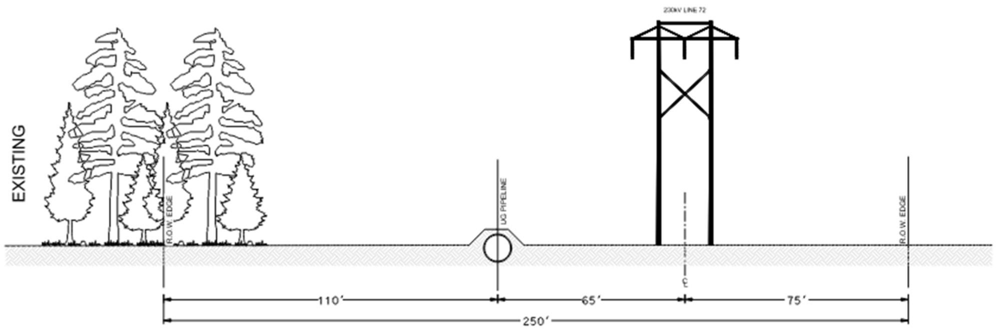

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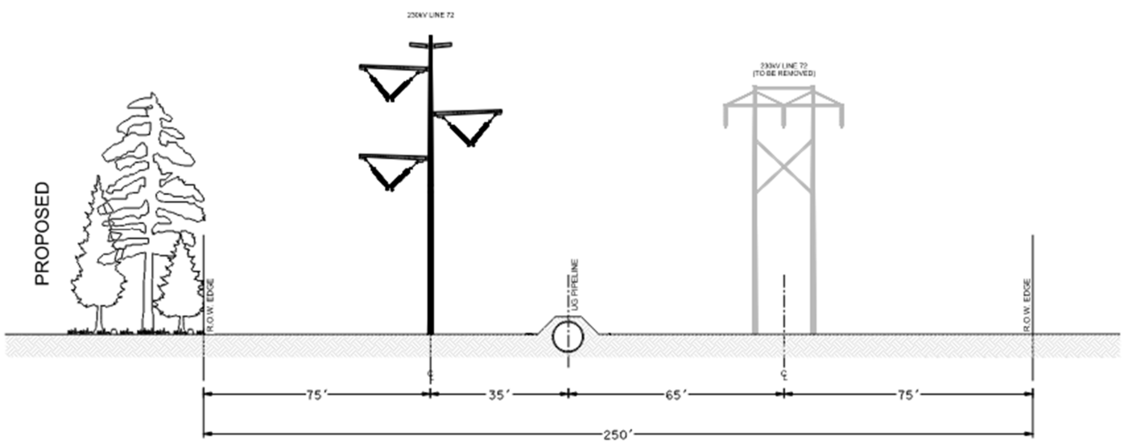

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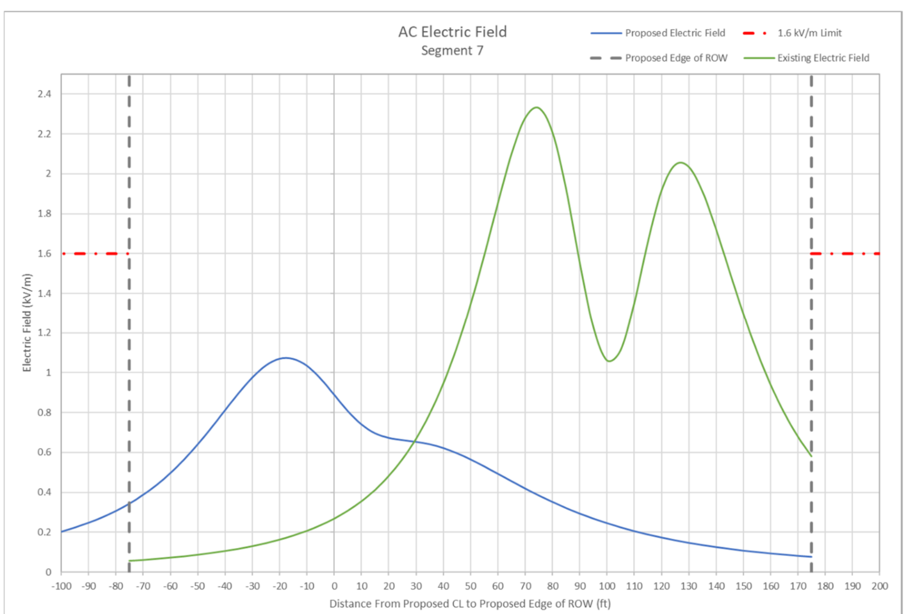
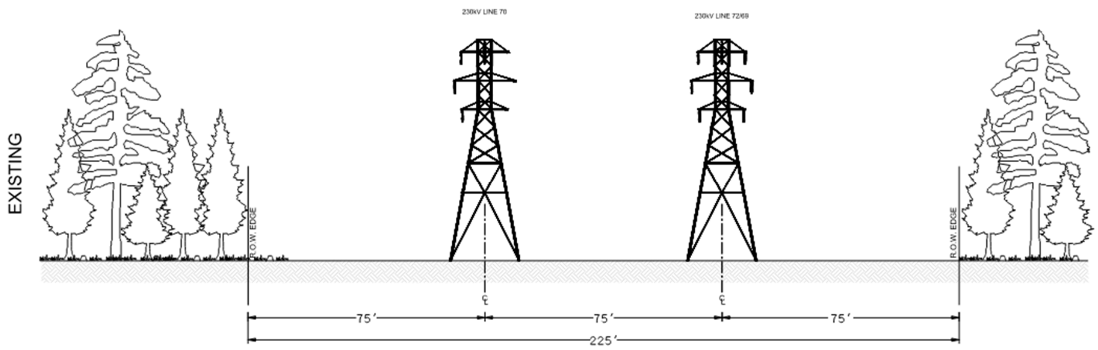


Graphical Calculated AC Electric Fields

Electric Field Segment 8



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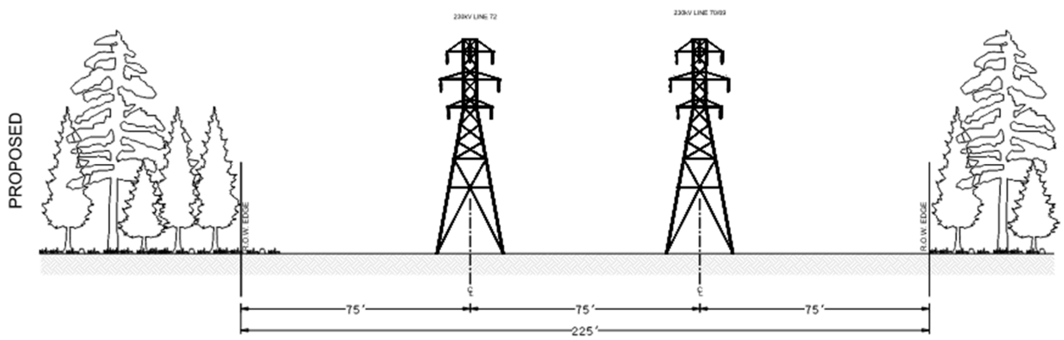

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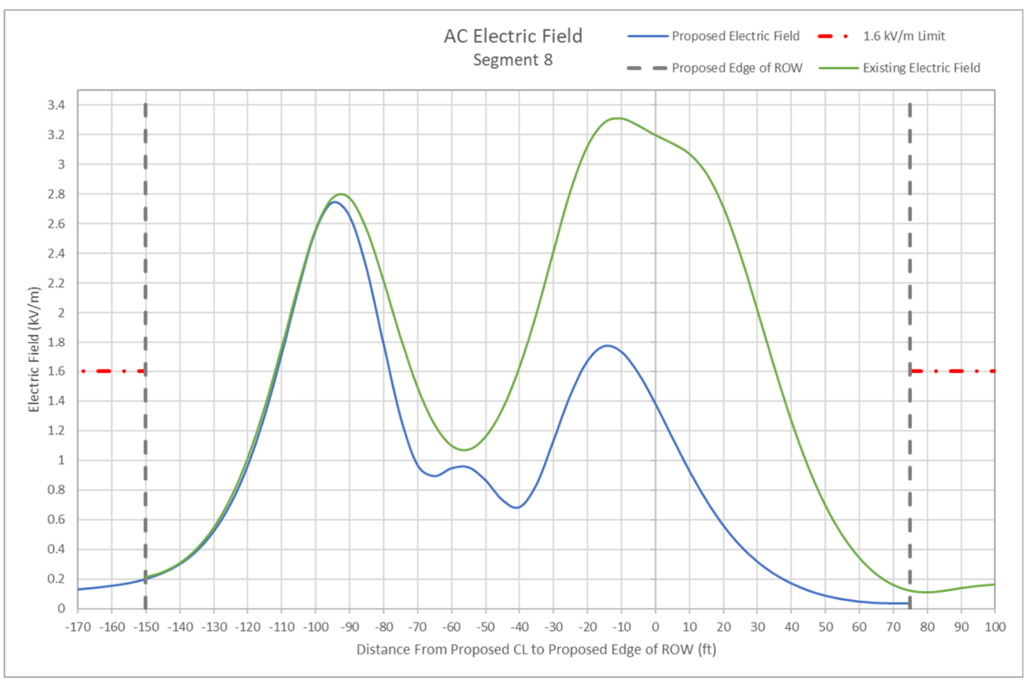
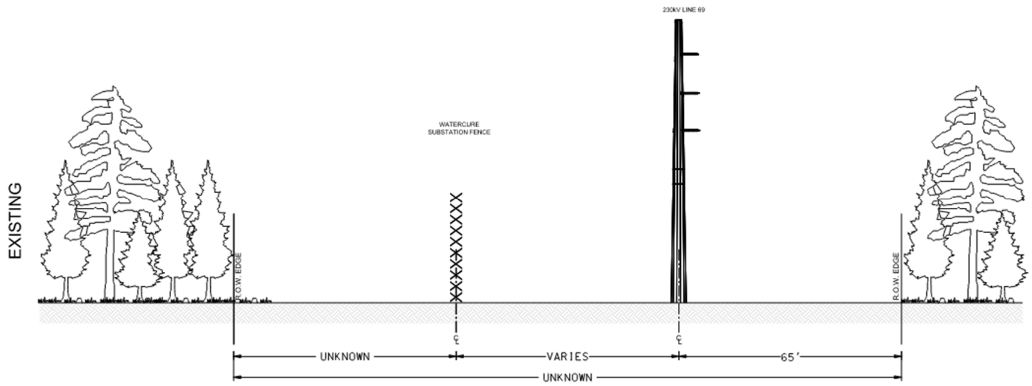


Graphical Calculated AC Electric Fields

Electric Field Segment 9



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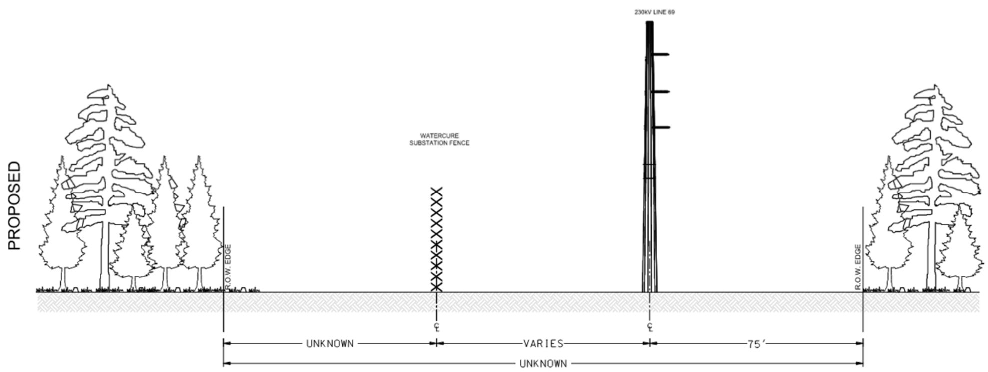

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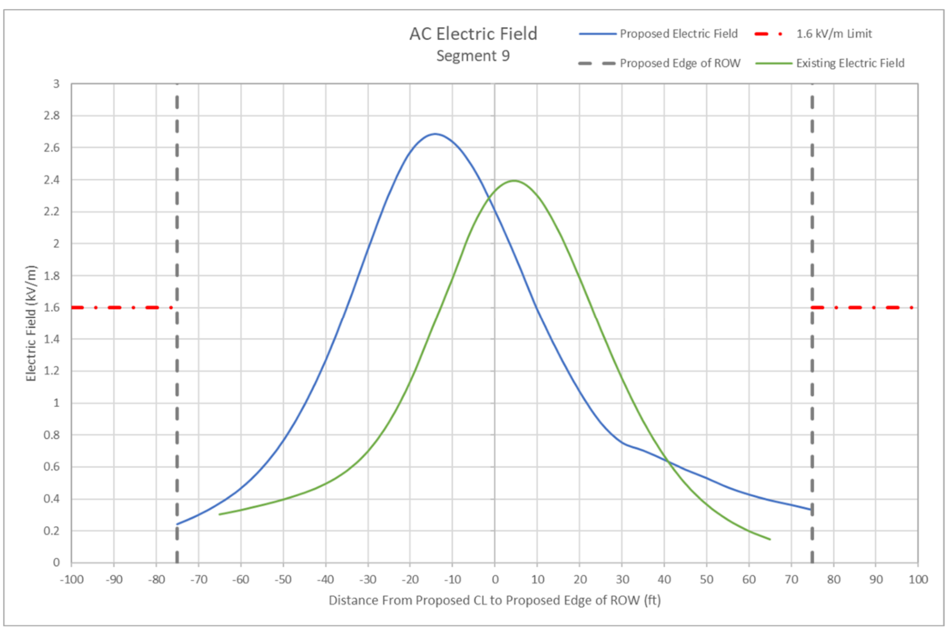
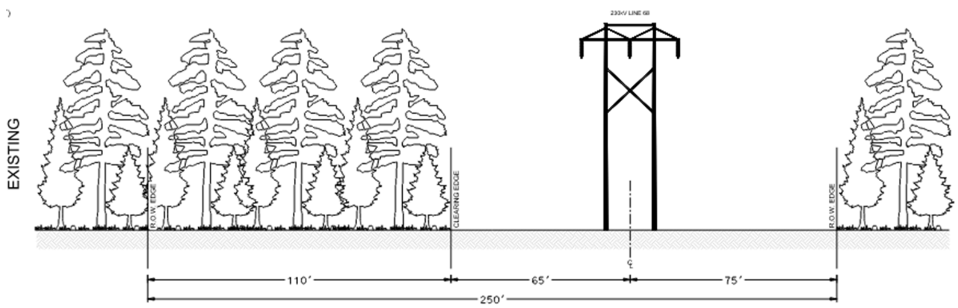


Graphical Calculated AC Electric Fields

APPENDIX B: MAGNETIC FIELD RESULTS – GRAPHICAL

The lines on the SCATE Project were analyzed to determine the maximum magnetic fields generated in each segment of the line. The figures below show the existing and proposed right-of-way (ROW) for each segment, as well as a graph depicting the existing and proposed magnetic fields, the ROW limit of 200 mG, and the proposed ROW boundary.

Magnetic Field Segment 1



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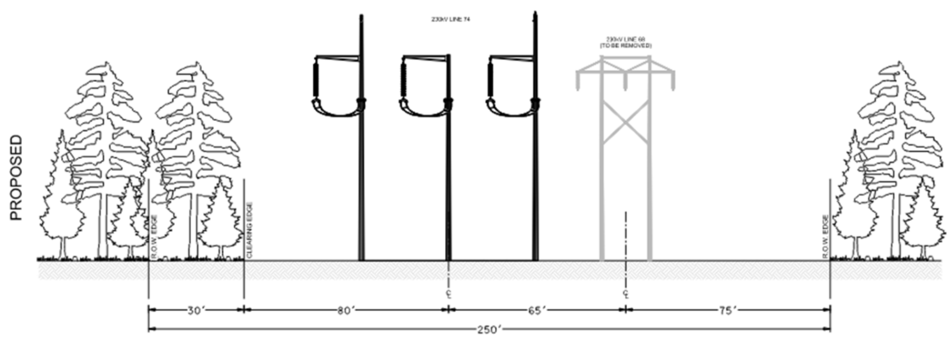

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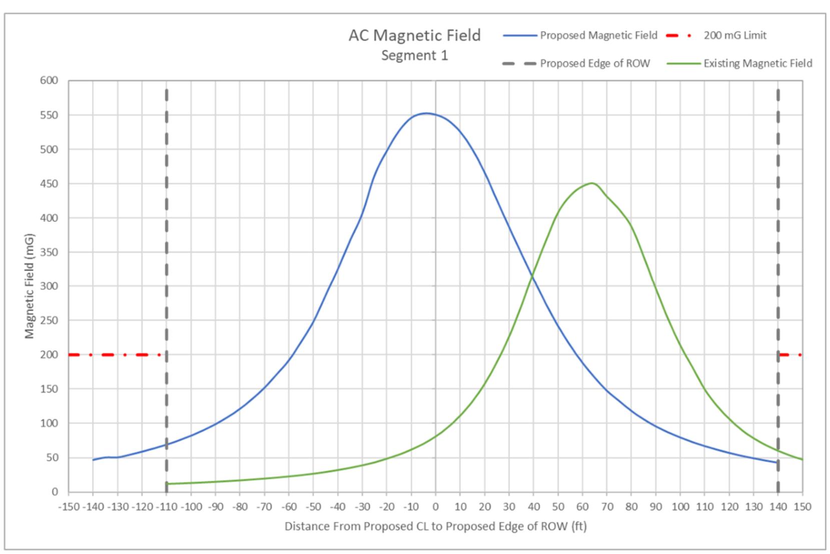
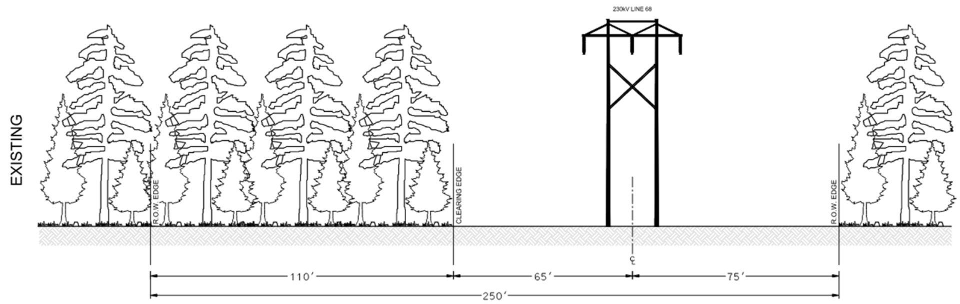


Proposed Magnetic Field Graphical Results

Magnetic Field Segment 2



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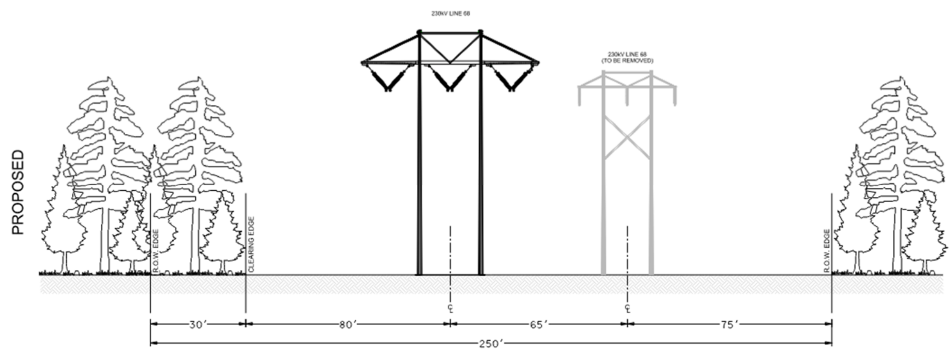

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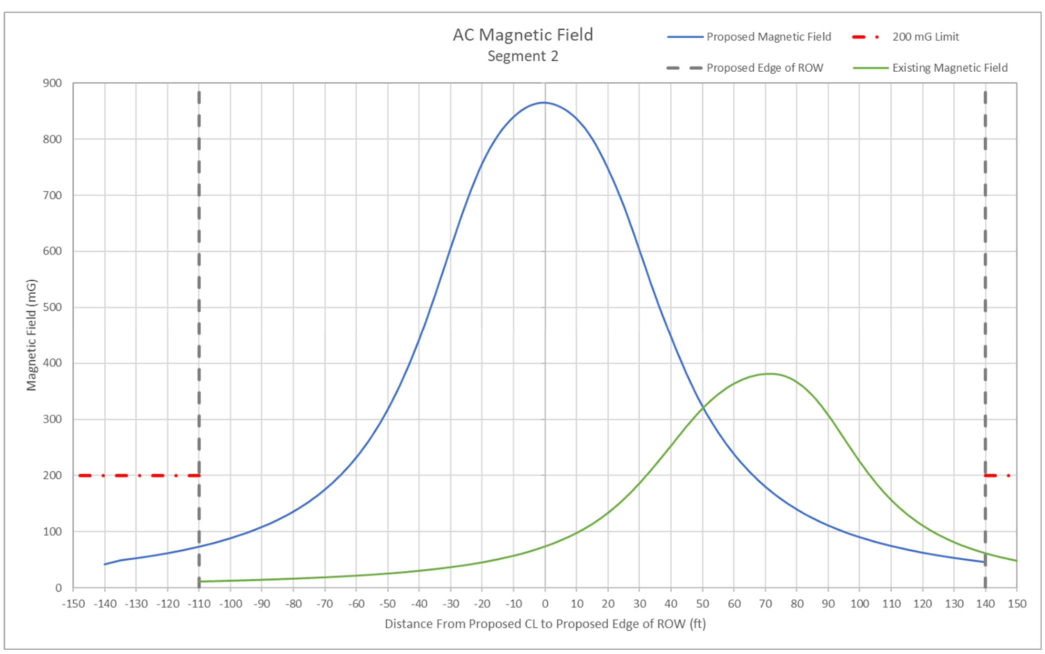
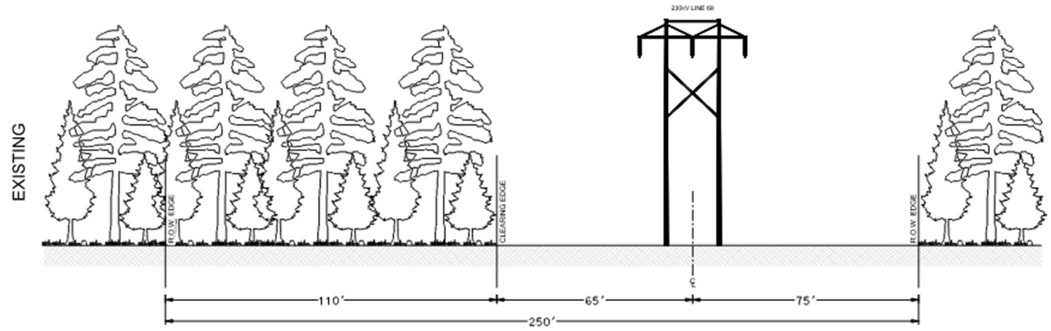
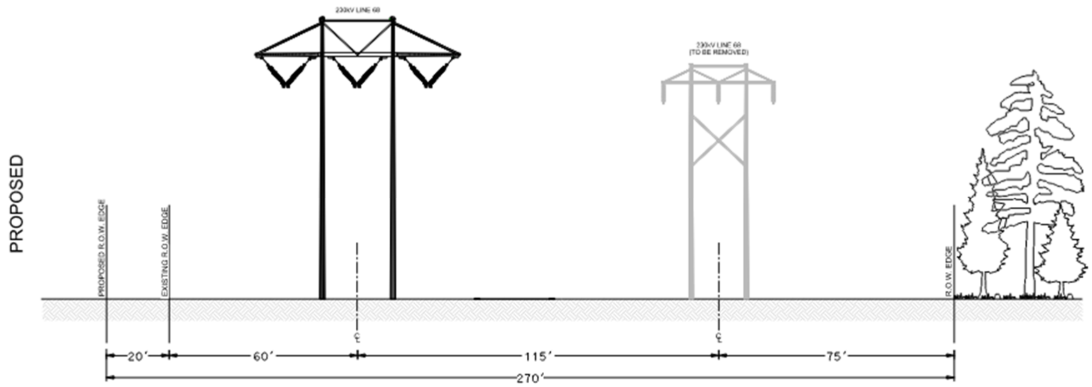


Proposed Magnetic Field Graphical Results

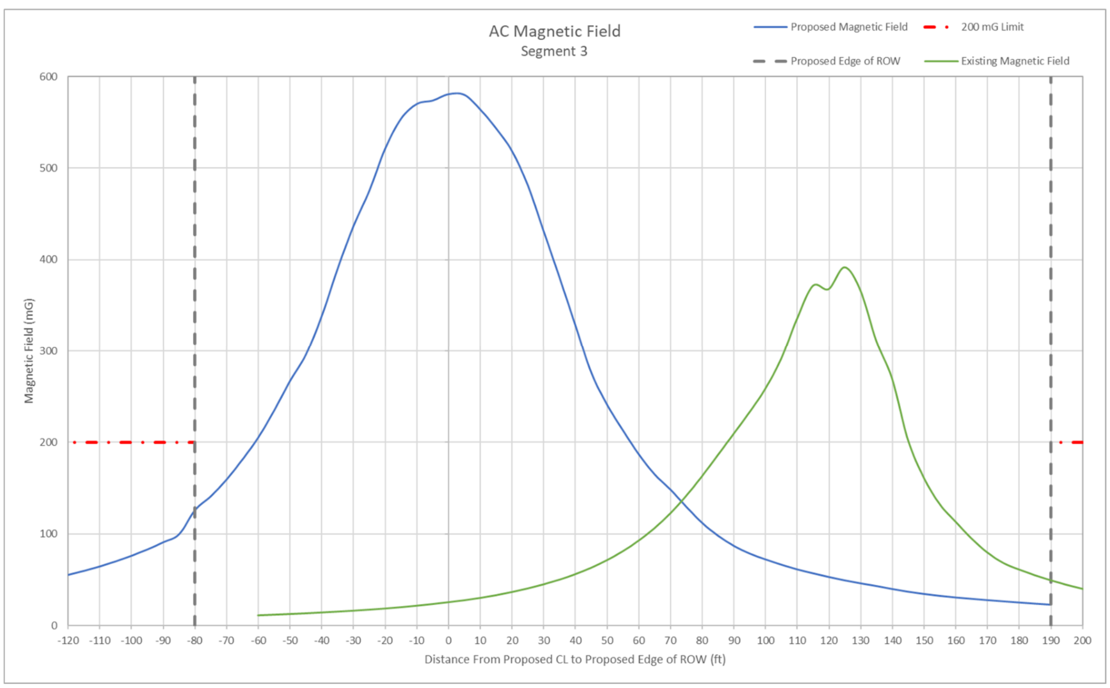
Magnetic Field Segment 3



Existing X-Section

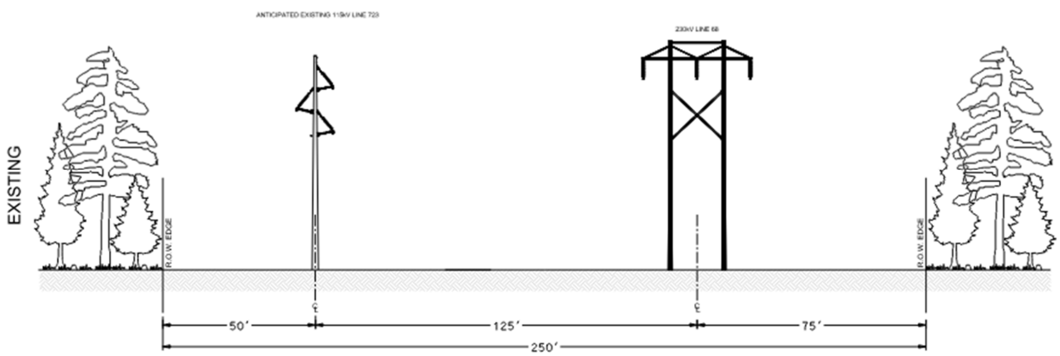


Proposed X-Section



Proposed Magnetic Field Graphical Results

Magnetic Field Segment 4



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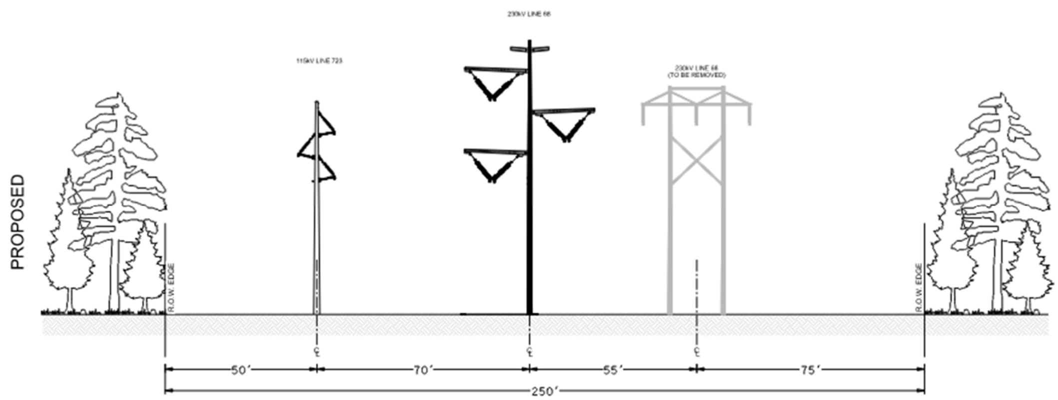

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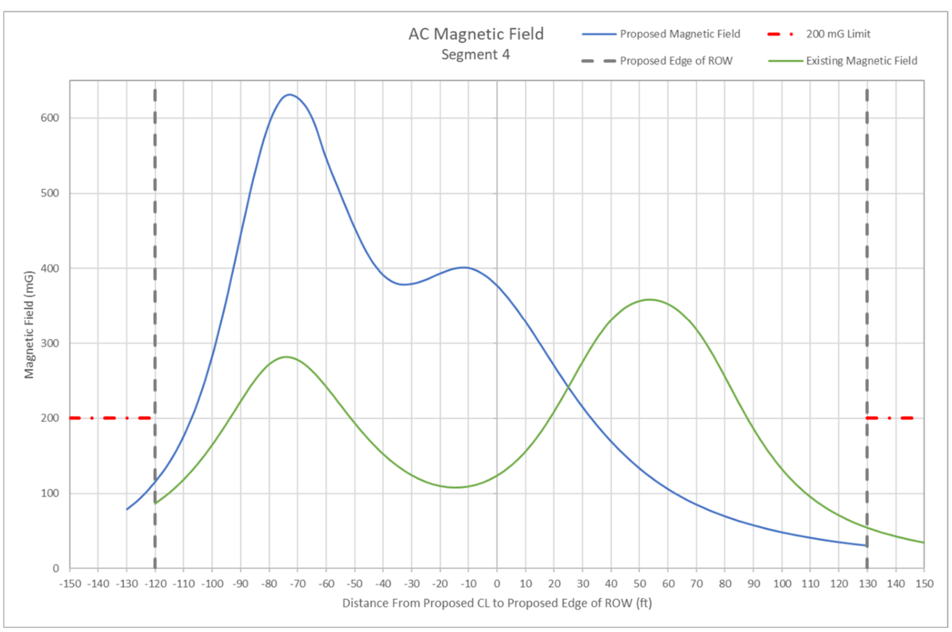
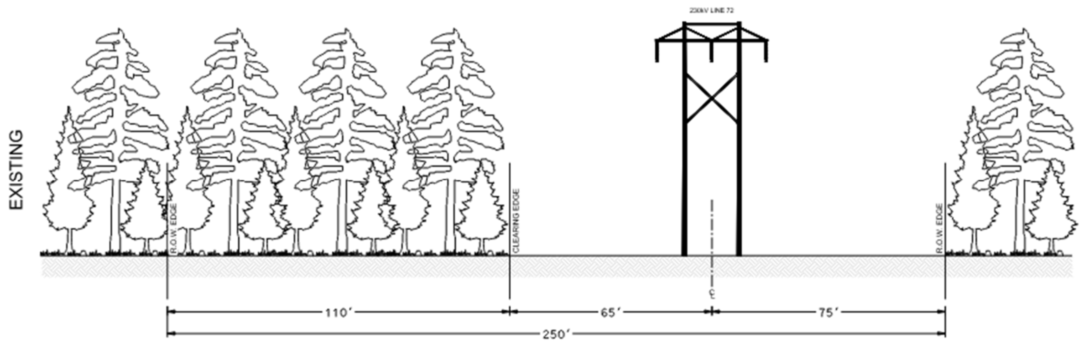


Proposed Magnetic Field Graphical Results

Magnetic Field Segment 5



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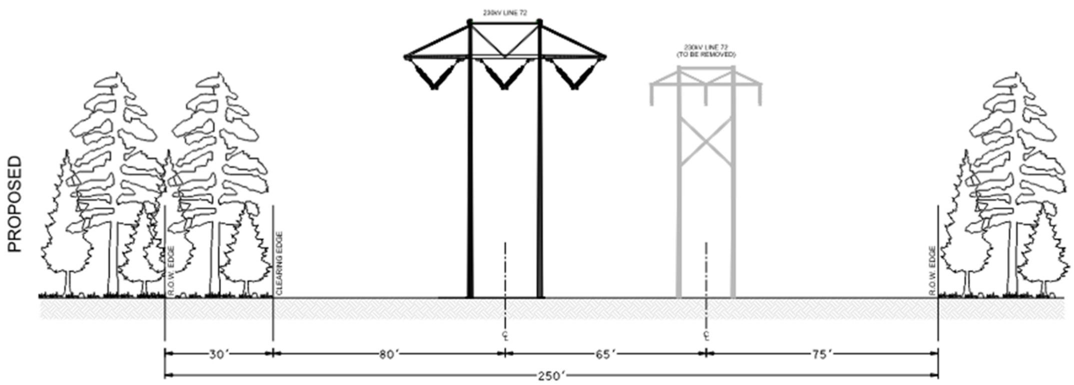

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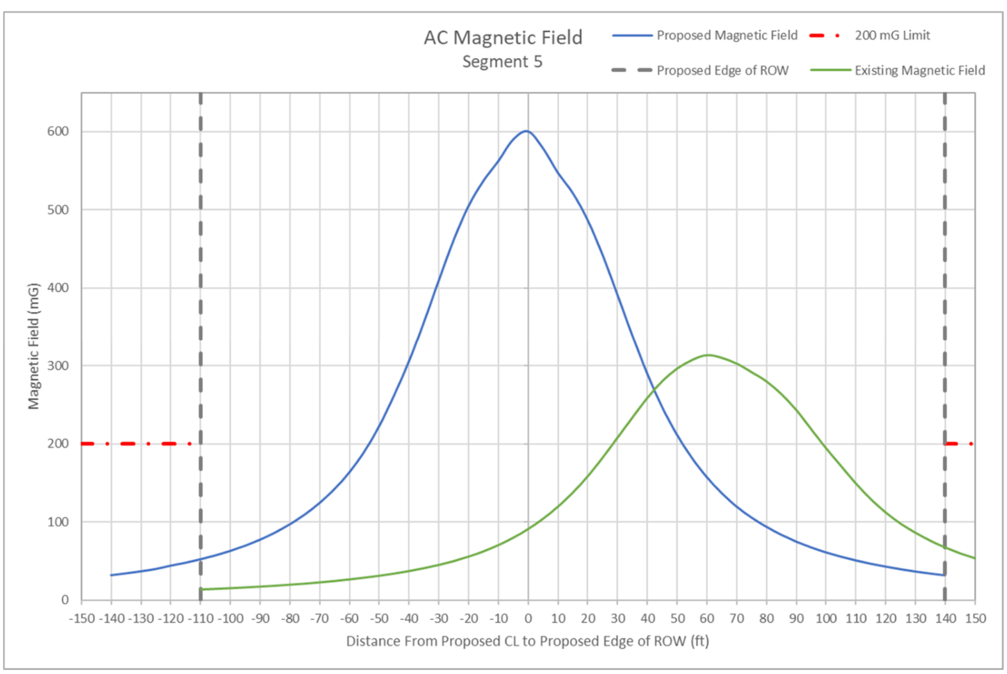
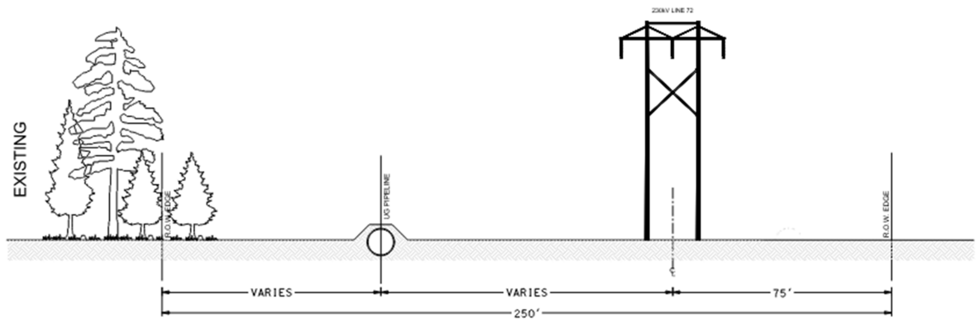


Proposed Magnetic Field Graphical Results

Magnetic Field Segment 6



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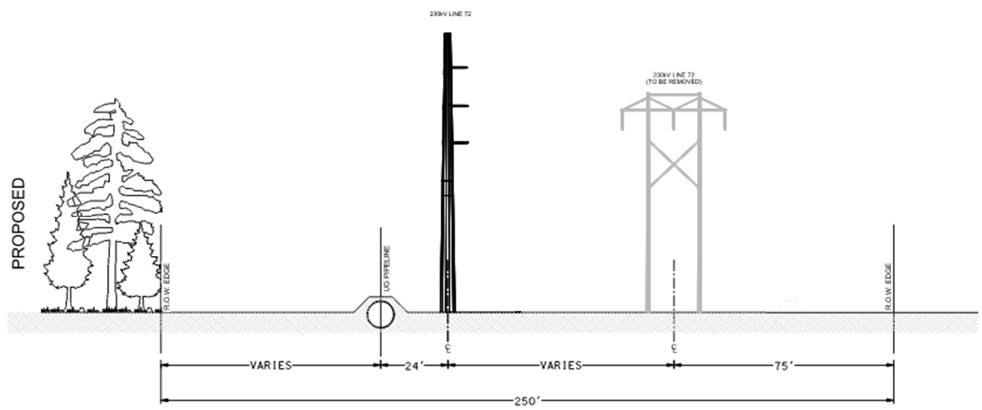

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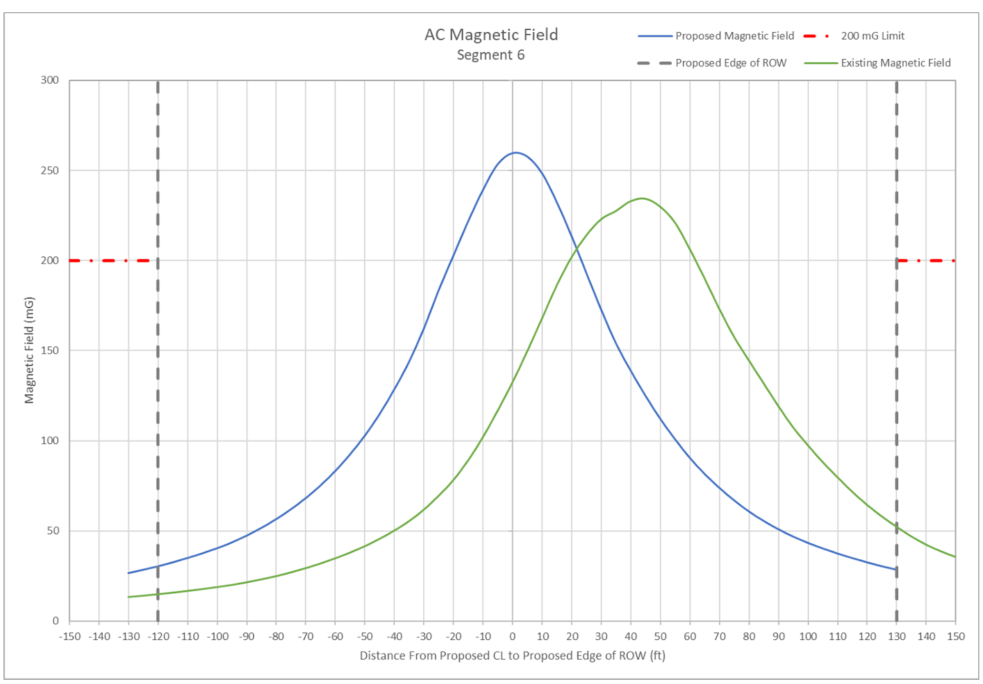
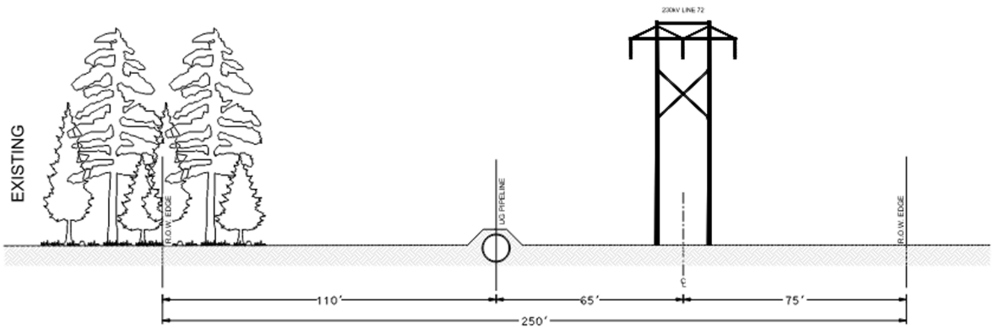


Proposed Magnetic Field Graphical Results

Magnetic Field Segment 7



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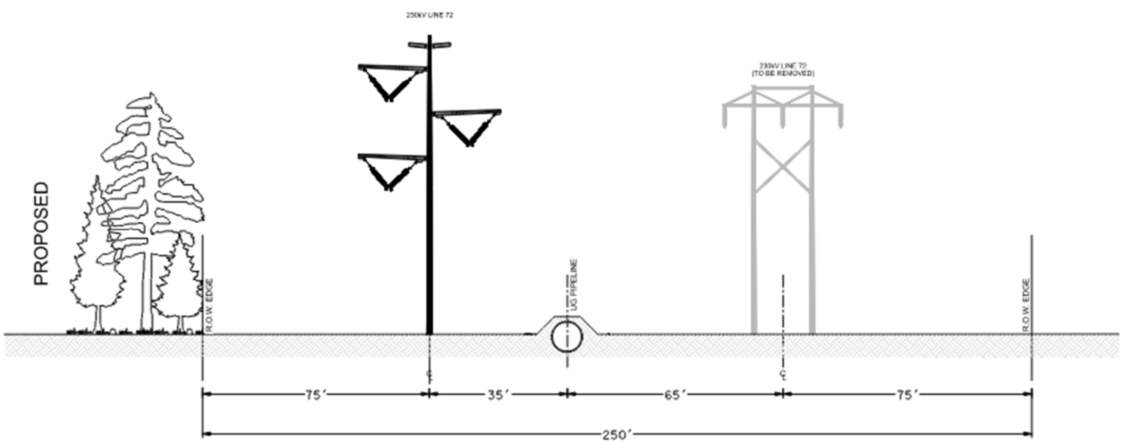
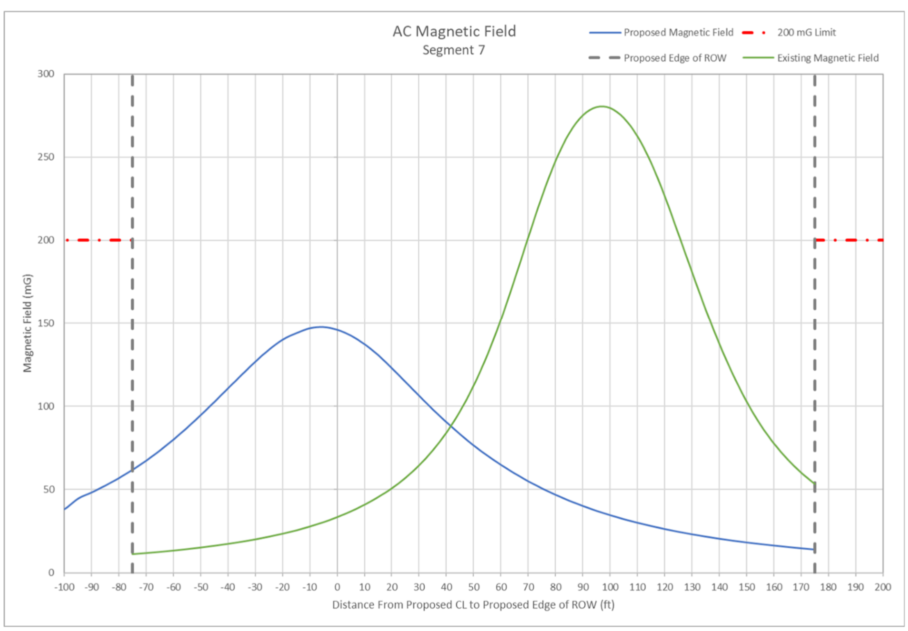
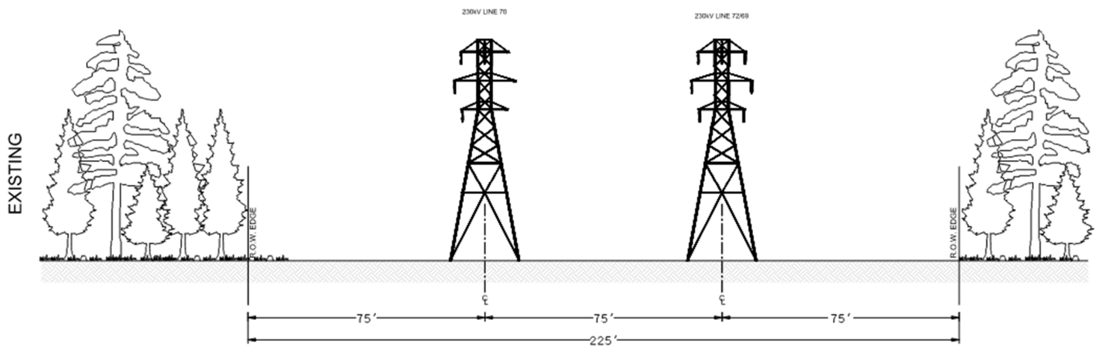


Proposed X-Section



Proposed Magnetic Field Graphical Results

Magnetic Field Segment 8



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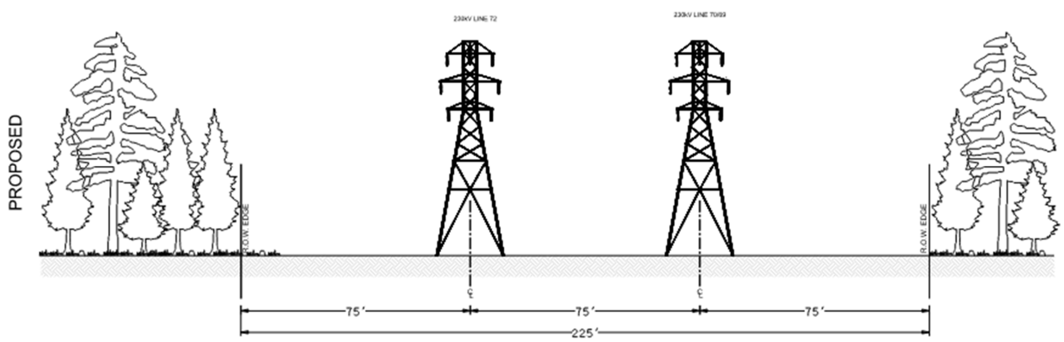
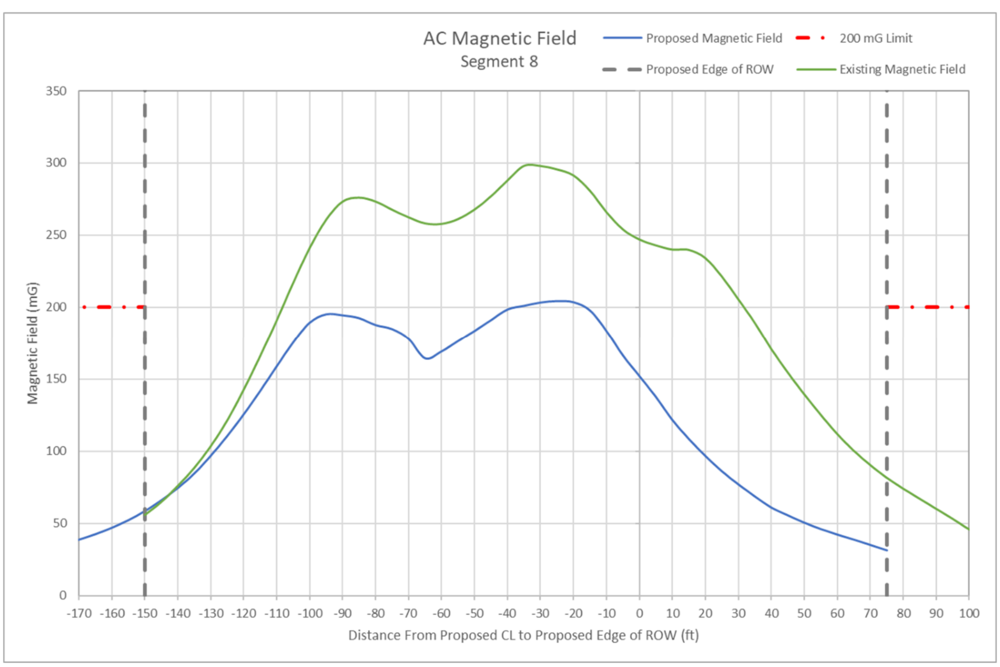
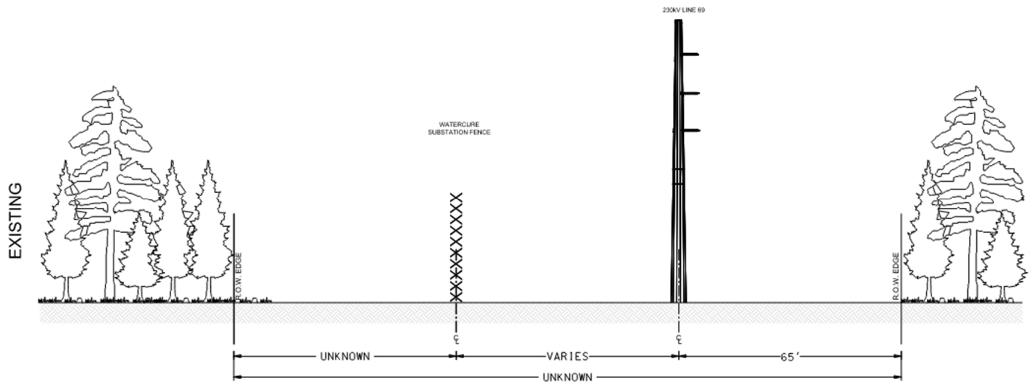


Proposed X-Section

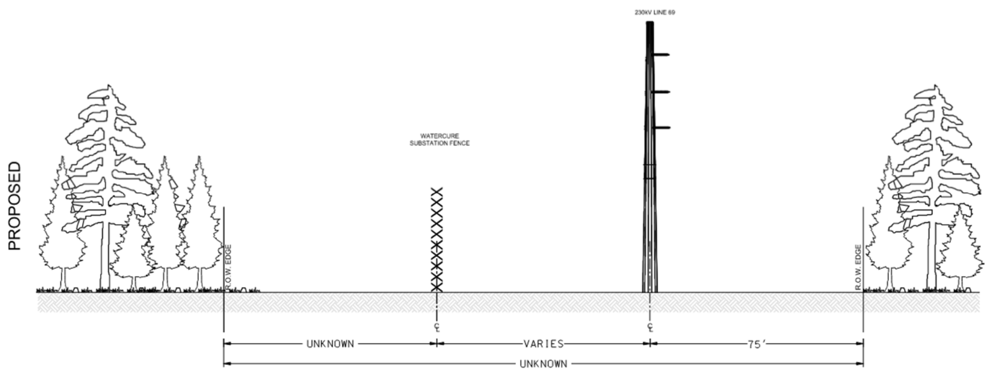


Proposed Magnetic Field Graphical Results

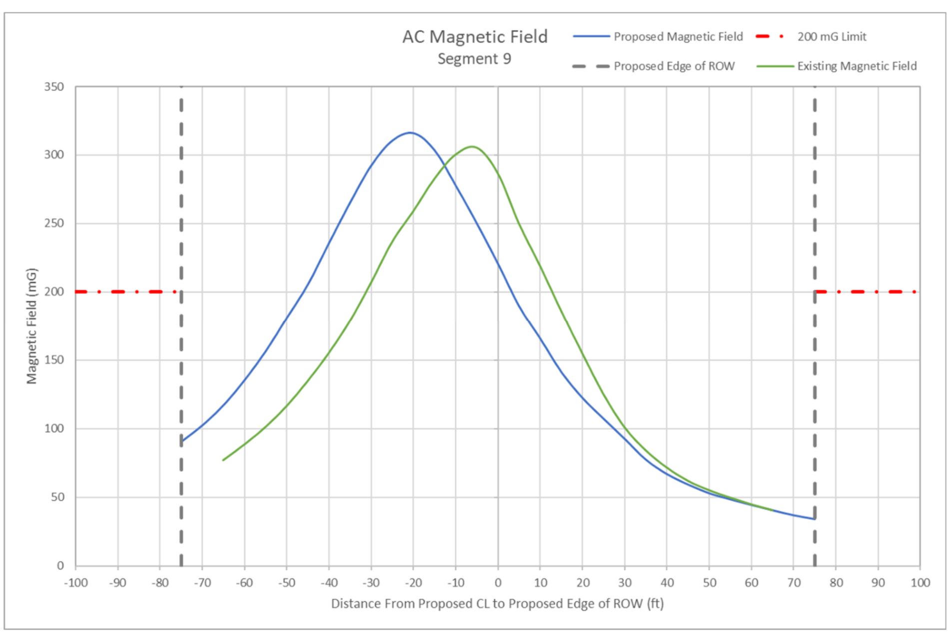
Magnetic Field Segment 9



Existing X-Section



Proposed X-Section



Proposed Magnetic Field Graphical Results

APPENDIX C: EMF RESULTS – SUMMARY

The results shown below in Table C indicates the calculated electric field and magnetic field at a point 1 m (3.28 ft) above ground at the edge of ROW location identified as the "Extent of EMF Calculations" on the provided cross section figures. Refer to Appendix A for additional information.

Table C - Calculated Maximum EMF at Proposed ROW Edge

EMF Segment	Electric Field @ ROW edge (kV/m)			Magnetic Field @ ROW edge (mG)		
	Left	*Max*	*Right*	*Left*	*Max*	*Right*
1	*0.116*	*2.974*	*0.027*	*69.320*	*552.126*	*42.970*
2	*0.332*	*4.186*	*0.153*	*73.591*	*865.357*	*46.308*
3	*0.782*	*2.765*	*0.082*	*126.212*	*580.651*	*22.868*
4	*0.282*	*2.911*	*0.186*	*116.268*	*627.555*	*30.758*
5	*0.232*	*3.170*	*0.148*	*52.677*	*600.442*	*32.130*
6	*0.091*	*2.264*	*0.087*	*30.557*	*259.557*	*28.587*
7	*0.343*	*1.070*	*0.076*	*61.890*	*147.464*	*13.996*
8	*0.202*	*2.741*	*0.04*	*58.471*	*204.469*	*31.307*
9	*0.242*	*2.682*	*0.332*	*90.624*	*316.119*	*34.141*

In addition to the results shown above, the electric field was calculated at various heights above ground for the proposed configuration to determine the minimum required clearance at road crossings, encroachments, micro-reroutes, etc. In addition to the edge of ROW electric field limits, electric field values at road crossings were limited to 7.0 kV/m.

A summary of electric field values along proposed centerline at road crossings can be seen below.

- Neils Creek Rd – 0.058 kV/m
- Clymo Rd – 0.135 kV/m
- Shults Rd – 0.261 kV/m
- Brasted District Rd – 0.348 kV/m
- Wessels Hill Rd – 0.132 kV/m
- Mackey Rd – 0.252 kV/m
- Loucks Pond Rd – 0.271 kV/m
- Dyer Rd – 0.335 kV/m
- County Rt 70A – 0.072 kV/m
- Interstate 86 – 0.261 kV/m
- Nipher Rd – 0.276 kV/m
- Chamberlain Rd / Alisson Ln - 0.218 kV/m
- Campbell Creek – 0.120 kV/m
- Cochrane Rd – 1.906 kV/m
- Knight Settlement Rd – 0.075 kV/m
- Moore Rd – 0.818 kV/m
- Bath Cameron Rd – 0.161 kV/m

- Davenport Hill Rd – 0.322 kV/m
- Wagner Hill Rd – 1.259 kV/m
- Nash Rd – 0.714 kV/m
- Babcock Hallow Rd – 0.307 kV/m
- Mail Rte Rd – 0.071 kV/m
- County Rd 12 – 0.112 kV/m
- Grove St – 0.355 kV/m
- County Rd 125 – 0.319 kV/m
- Interstate 86 – 0.296 kV/m
- State Route 415 – 0.299 kV/m
- Eckles Rd – 0.375 kV/m
- McNutt Run Rd – 0.14 kV/m
- Stony Rdg Rd – 0.257 kV/m
- Taft Rd – 0.180 kV/m
- Meads Creek Rd – 0.273 kV/m
- Dry Run Rd – 0.121 kV/m
- W Hill Rd – 0.524 kV/m
- Hornby Rd – 0.317 kV/m
- Roloson Rd – 0.118 kV/m
- Dyke Rd – 0.188 kV/m
- Pine Hill Rd / Taft Rd– 0.330 kV/m
- Wilson Hollow Rd – 0.967 kV/m
- Kerrick Hollow Rd – 0.235 kV/m
- State Route 414 – 0.041 kV/m
- Townley Hill Rd – 0.332 kV/m
- Breed Hollow Rd – 0.202 kV/m
- Hibbard Rd – 0.098 kV/m
- Chambers Rd – 0.082 kV/m
- Murphy Hill Rd – 0.099 kV/m
- Mary Rd – 0.261 kV/m
- Prospect Hill Rd – 0.303 kV/m
- Watkins Rd – 0.936 kV/m
- Middle Rd – 0.225 kV/m
- Ridge Rd – 0.495 kV/m
- Johnson Rd – 0.765 kV/m
- Veteran Hill Rd – 0.191 kV/m
- NY-13 Scenic – 0.354 kV/m
- Old Sullivanville Rd – 0.548 kV/m
- Hill Vale Rd – 0.272 kV/m
- Breesport Rd – 0.229 kV/m
- E Franklin St – 0.146 kV/m
- Moss Hill Rd – 0.255 kV/m
- Kiser Rd – 0.267 kV/m
- Lattabrook Rd – 0.123 kV/m
- Haines Rd – 0.242 kV/m
- Cross Rd – 0.238 kV/m
- Crane Rd – 1.004 kV/m

- Tuttle Ave – 0.398 kV/m
- Interstate 86 – 0.802 kV/m

A summary table and images of electric and magnetic field values at encroachments can be seen below.

Table D – Electric and Magnetic Field Values at Encroachments

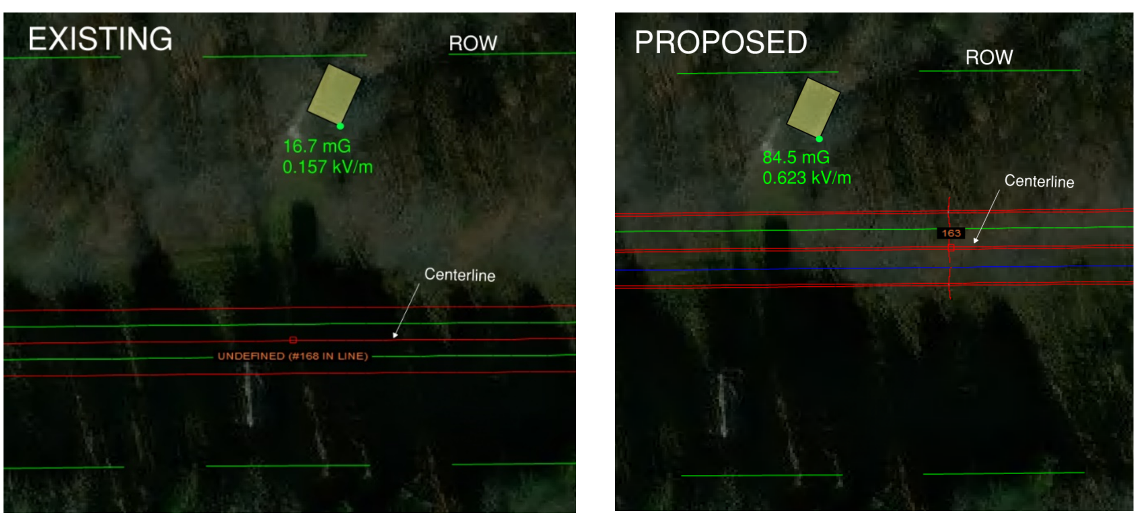
Encroachment Address	Existing Electric Field (kV/m)	Proposed Electric Field (kV/m)	Existing Magnetic Field (mG)	Proposed Magnetic Field (mG)
3675 Co Rd 6	*0.104*	*0.331*	*11.8*	*43.0*
3815 Clymo Rd	*0.095*	*0.769*	*16.8*	*127.3*
6540 Davenport Hill Rd	*0.079*	*0.450*	*12.1*	*67.6*
4906 Colonial Cir (4951 St Rte 415)	*0.674*	*0.266*	*57.7*	*45.8*
4852 County Rte 17	*0.157*	*0.623*	*16.7*	*84.5*
4896 Taft Rd	*0.081*	*0.387*	*12.5*	*55.9*
848 Breed Hollow Rd	*0.153*	*0.506*	*20.6*	*72.1*
1 Sawdey Rd	*0.110*	*0.386*	*12.3*	*47.0*

Existing and Proposed EMF Values at 3675 Co Rd 6

Existing and Proposed EMF Values at 3815 Clymo Rd

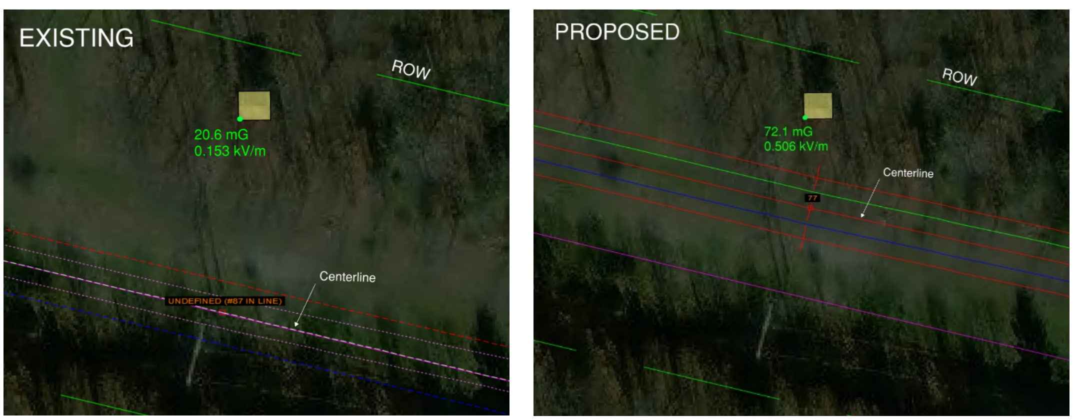
Existing and Proposed EMF Values at 6540 Davenport Hill Rd

Existing and Proposed EMF Values at 4906 Colonial Cir (Tracked as 4951 St Rte 415)

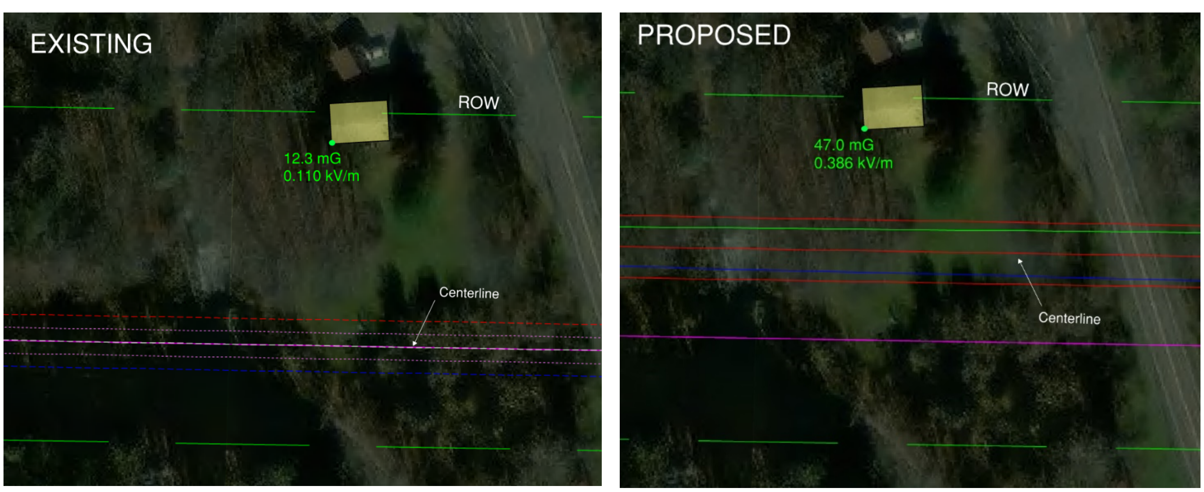


Existing and Proposed EMF Values at 4852 County Rte 17

Existing and Proposed EMF Values at 4896 Taft Rd



Existing and Proposed EMF Values at 848 Breed Hollow Rd



Existing and Proposed EMF Values at 1 Sawdey Rd

APPENDIX D: EMF RESULTS – PLAN VIEW OF THE MAGNETIC FIELD CONTOUR OUTPUT FROM PLS CADD

REV	DESCRIPTION	DATE	BY	CK	APP
0-0B	ISSUED FOR PERMITTING	03/2025	CSA/DAS	ADR/DAS	ZRH/DAS
0-0A	ISSUED FOR APPROVAL	03/2025	CSA/DAS	ADR/DAS	ZRH/DAS

LOGO
DASHIELL

INFO
Dashiell
2908 Marketplace Dr.
Fitchburg, WI 53719
(800) 292-1478

ANSI D 3/6/2025

50 0 50 100 150 200'
1" = 100'

PE STAMP

AVANGRID ENGINEERING
CONFIDENTIAL, PROPRIETARY and **TRADE SECRET INFORMATION**
Property of AVANGRID

NYSEG
An Avangrid company

REV	DESCRIPTION	DATE	BY	CK	APP

LINE 74 EMF DRAWING

SHEET 1 OF 1

L74 STEUBEN COUNTY, NY

BY	CSA/DAS	SCALE: 1" = 100'	FILE: L74 EMF REPORT.dwg
CK	ADR/DAS	NO. SK-001	REV 0-0B
APP	ZRH/DAS		
DATE:	03/2025		

50 0 50 100 150 200'
1" = 100'

REV	DESCRIPTION	DATE	BY	CK	APP
0-0B	ISSUED FOR PERMITTING	03/2025	CSA/DAS	ADR/DAS	ARH/DAS
0-0A	ISSUED FOR APPROVAL	03/2025	CSA/DAS	ADR/DAS	ZRH/DAS

LOGO
DASHIELL

INFO
Dashiell
2908 Marketplace Dr.
Fitchburg, WI 53719
(800) 292-1478

ANSI D 3/6/2025

PE STAMP

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REV	DESCRIPTION	DATE	BY	CK	APP

LINE 68 EMF DRAWING

SHEET 1 OF 5

L68 STEUBEN COUNTY, NY

BY	CSA/DAS	SCALE: 1" = 100'	FILE: L68 EMF REPORT.dwg
CK	ADR/DAS	NO. SK-001	REV 0-0B
APP	ZRH/DAS		
DATE:	03/2025		