

APPENDICES

to

“Seismic Characterization of Wind Turbine Sites in Kansas by the MASW Method”

Maps from Different Types of MASW Analyses

APPENDIX I

2-D Shear-Wave Velocity (V_s) Analysis

APPENDIX II

Side Scattering Analysis (SSA)

APPENDIX III

Surface-Wave Imaging by Attenuation (SIA)

APPENDIX IV

Bedrock ($500 \text{ m/sec} \leq V_s$) Topography

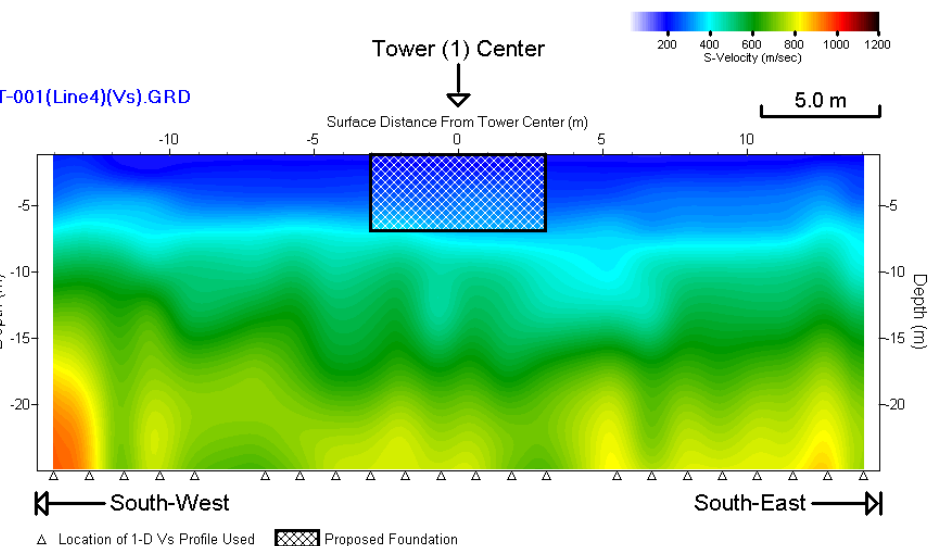
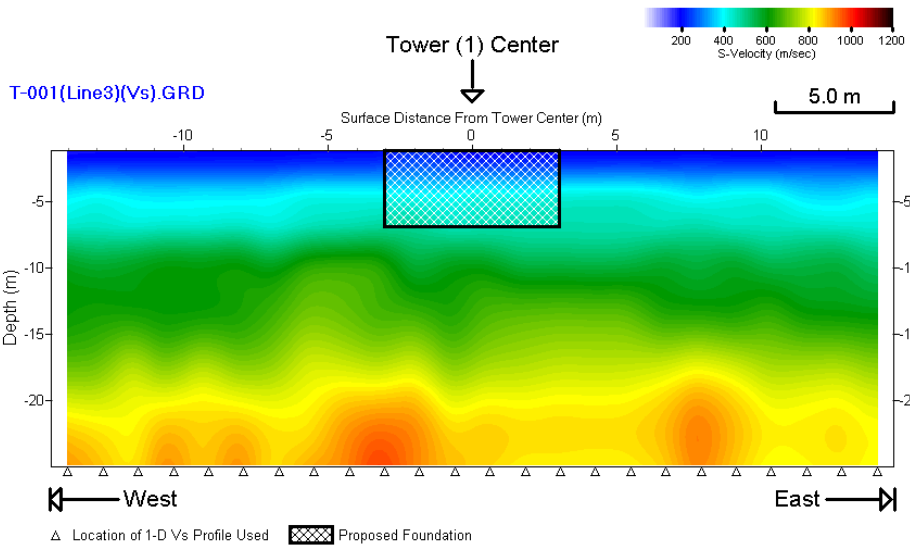
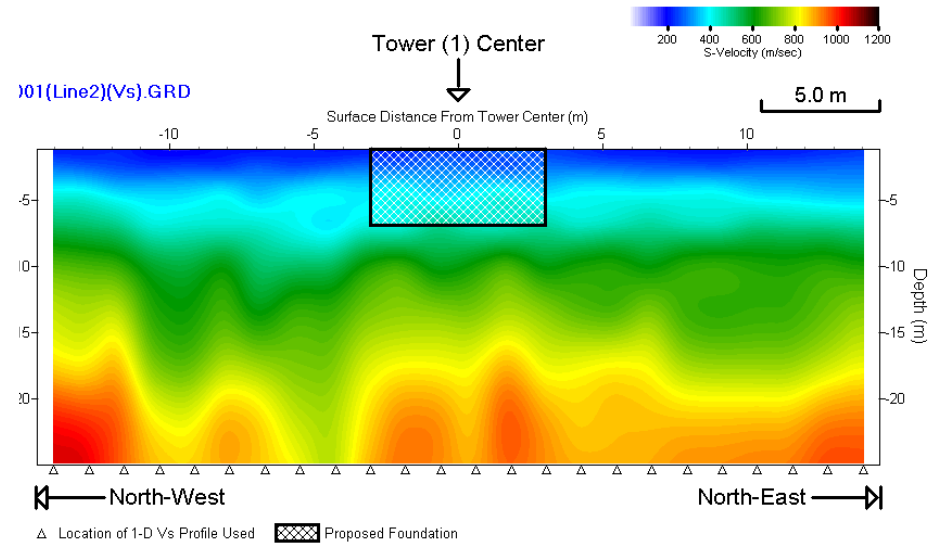
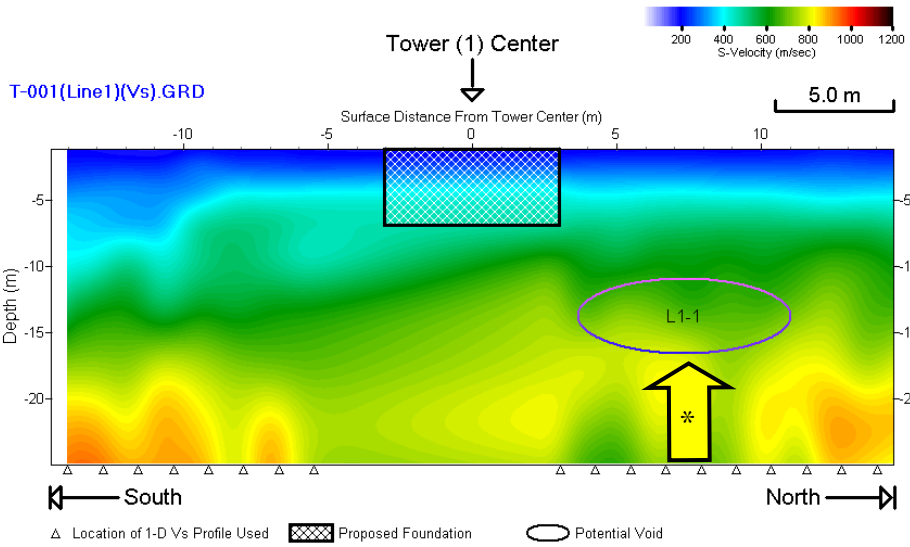
APPENDIX I

Elk River 10 Selected Sites

2-D Shear-Wave Velocity (V_s) Analysis

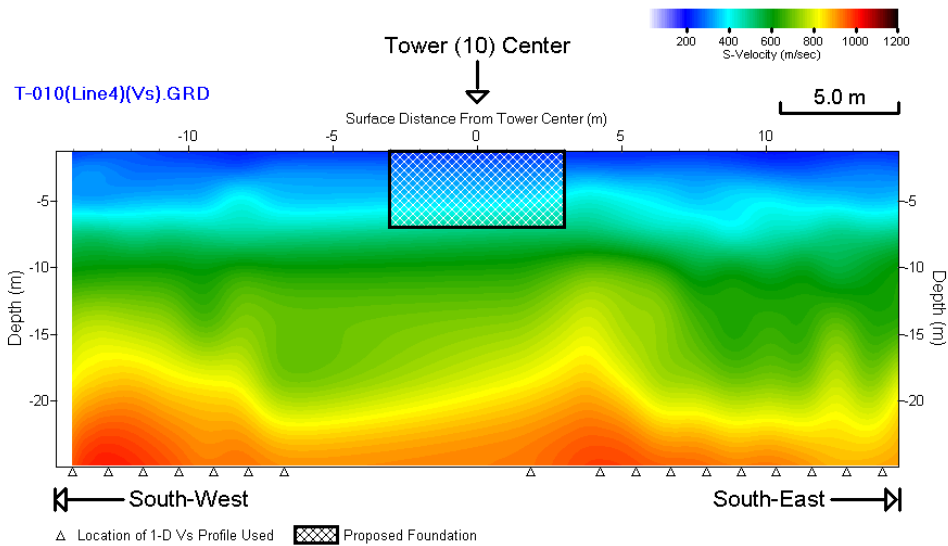
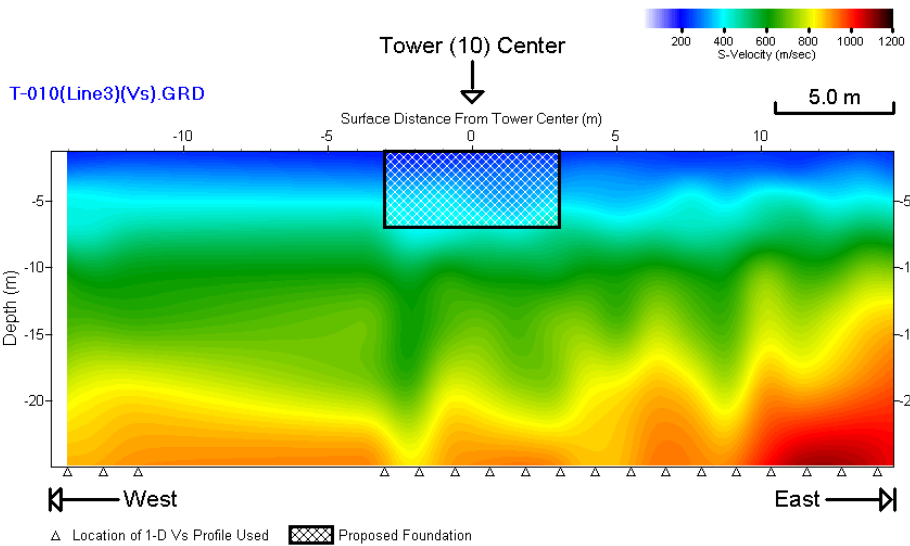
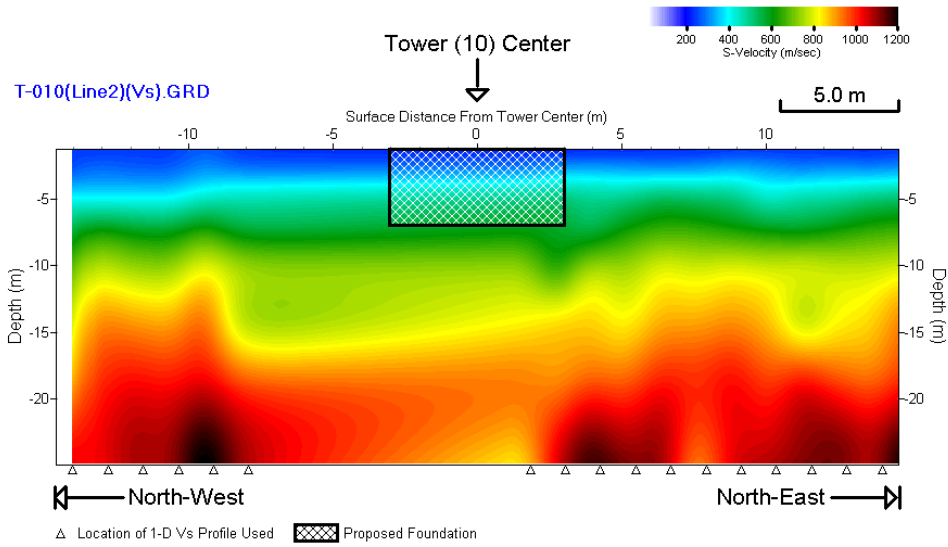
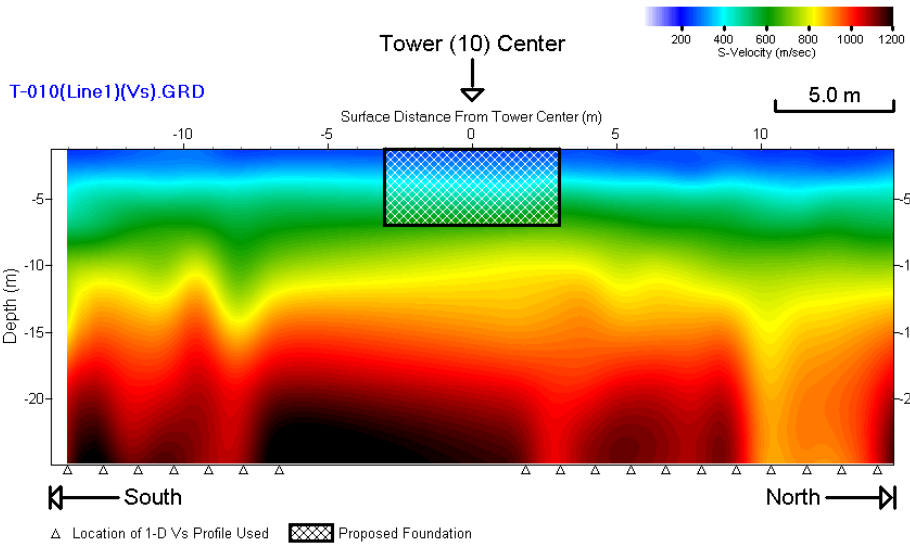
- T-001
- T-010
- T-017
- T-040
- T-046
- T-060
- T-064
- T-065
- T-066
- T-086

T-001

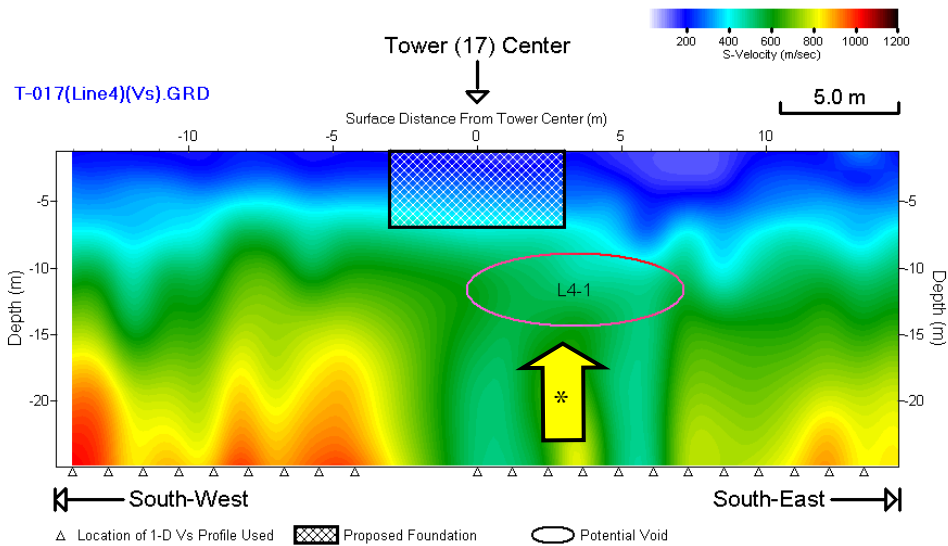
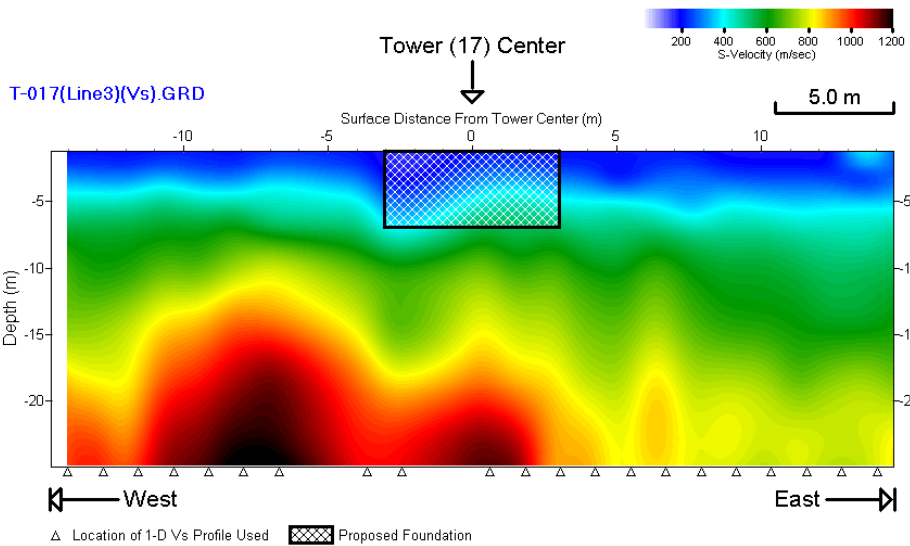
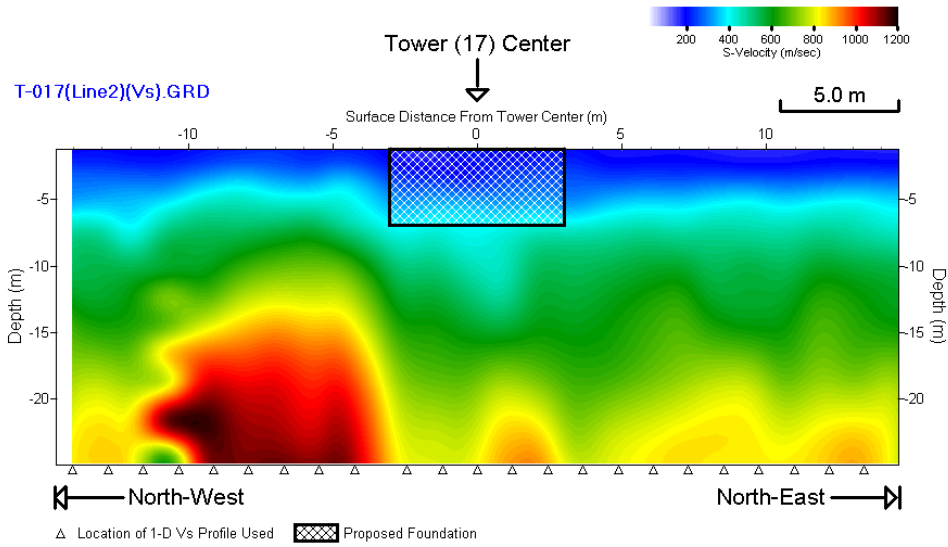
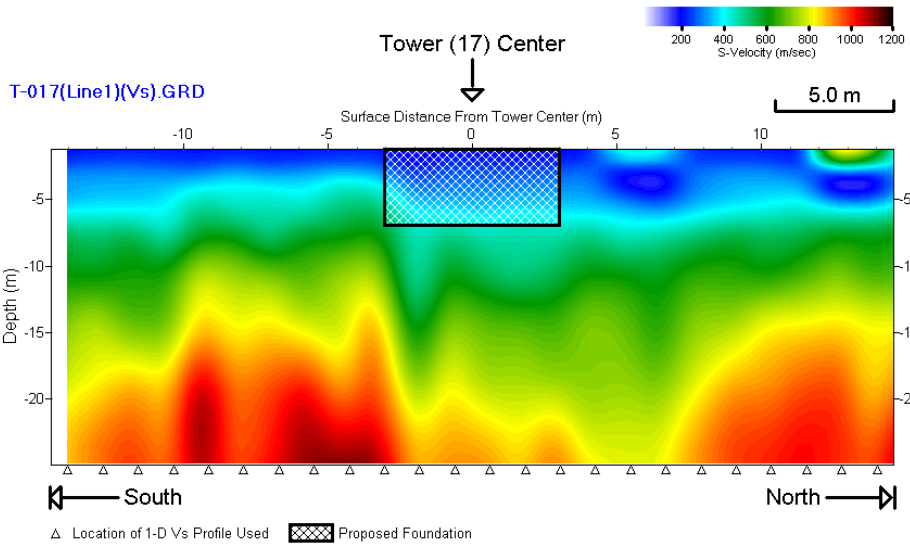


*Potential void or anomaly (see separate text file for coordinates)

T-010

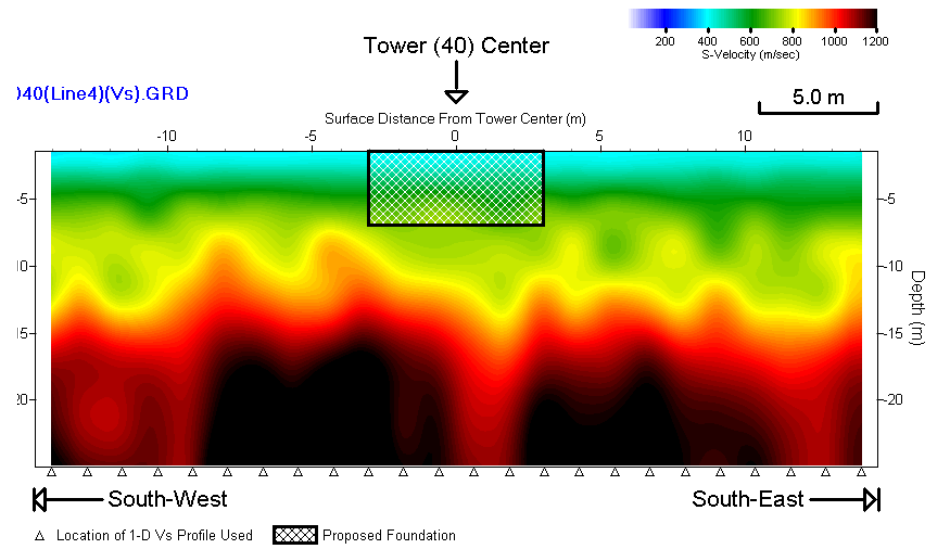
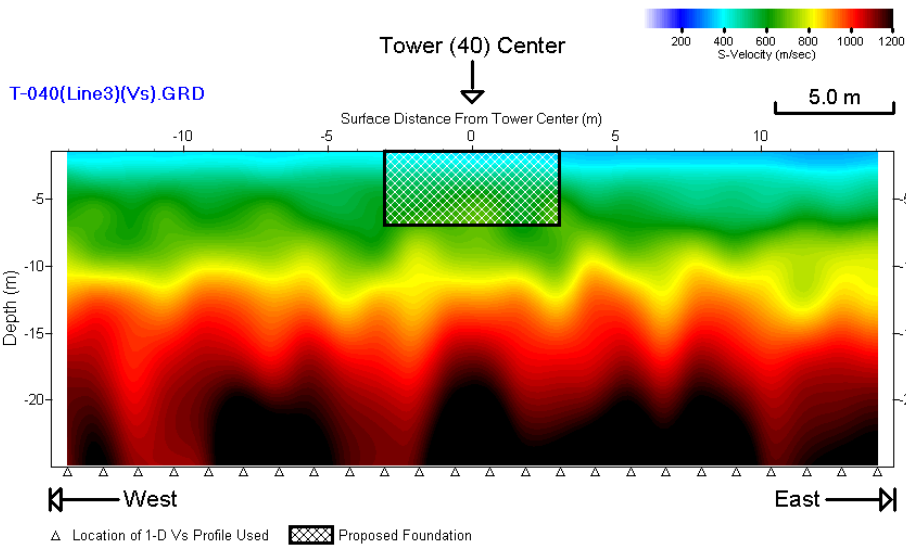
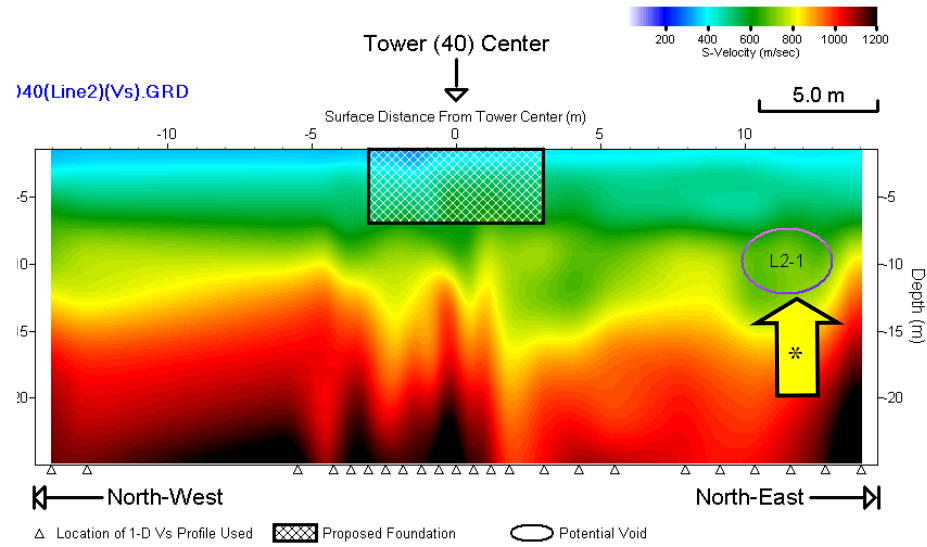
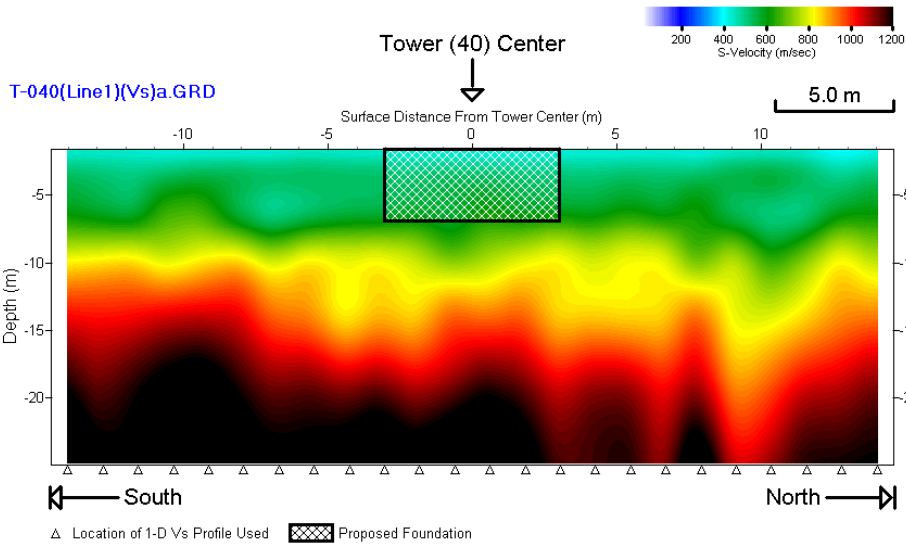


T-017



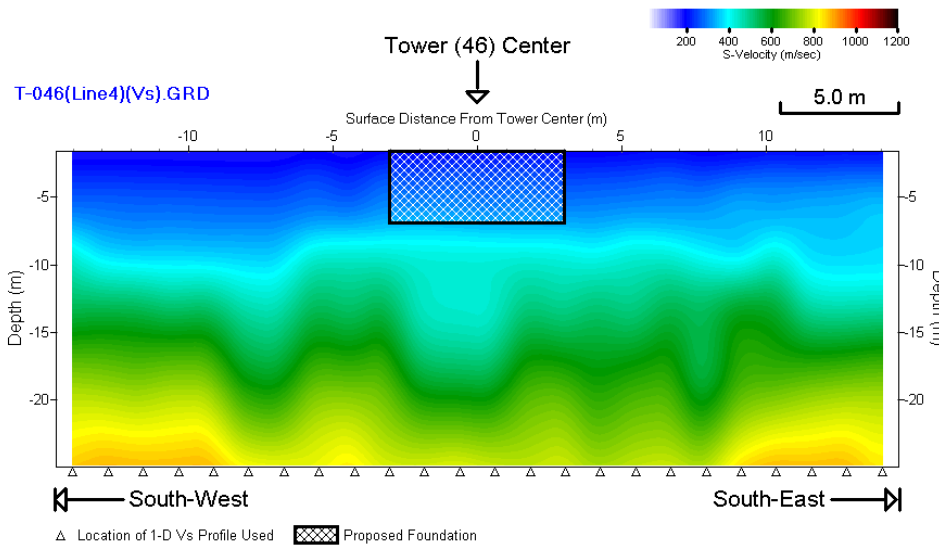
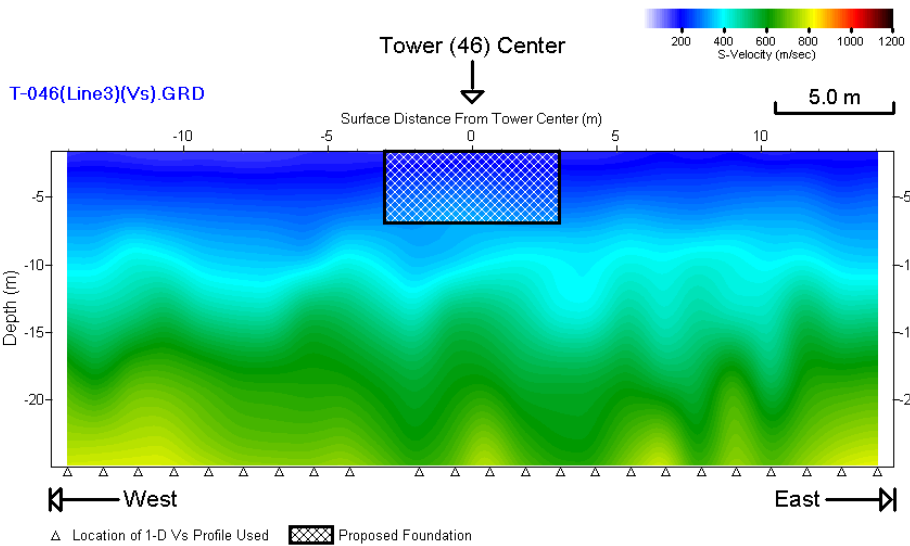
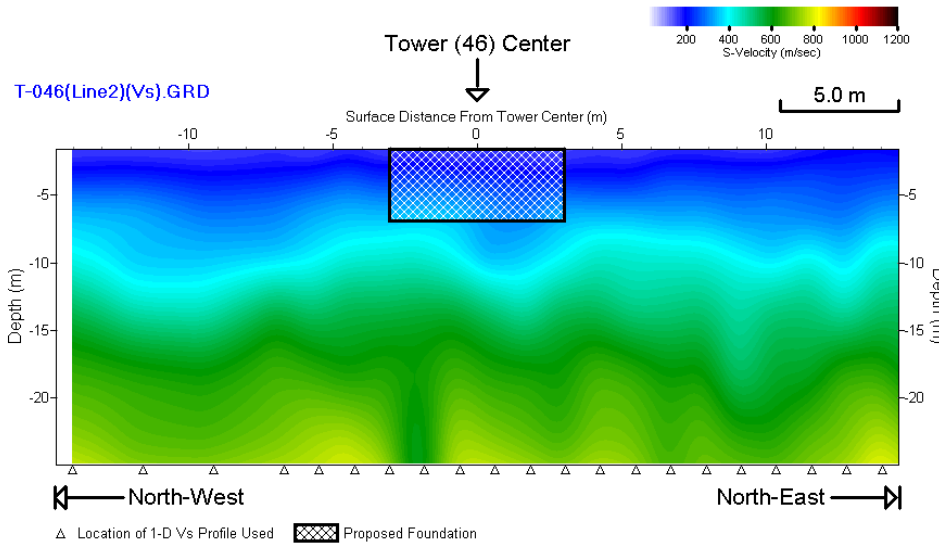
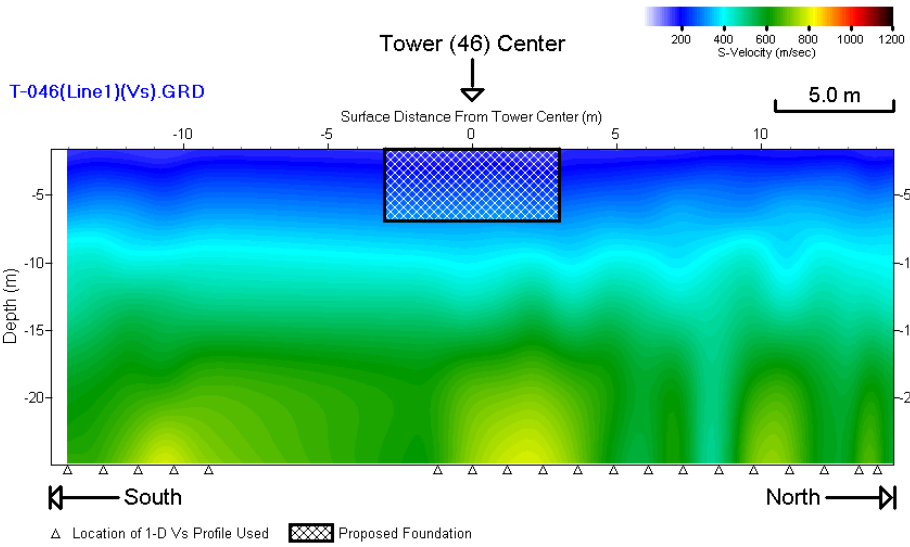
*Potential void or anomaly (see separate text file for coordinates)

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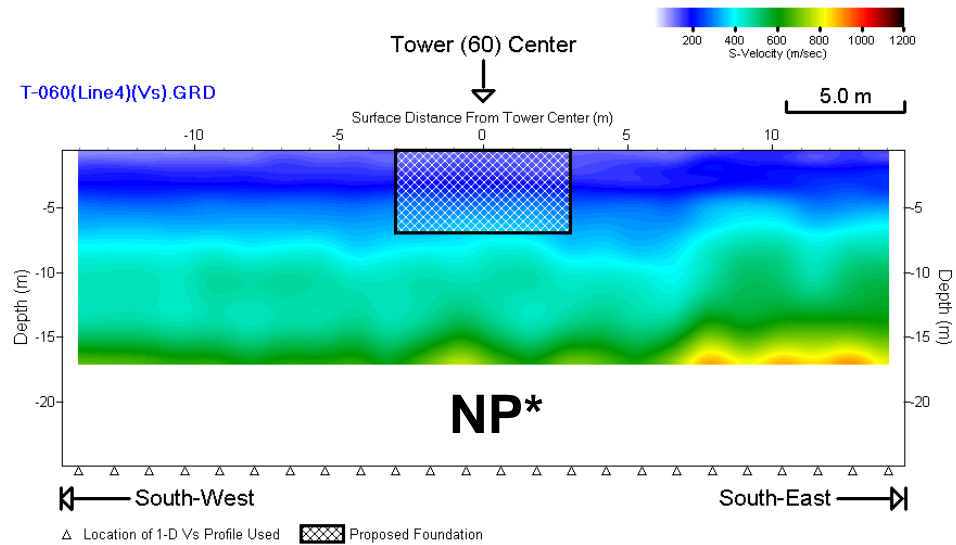
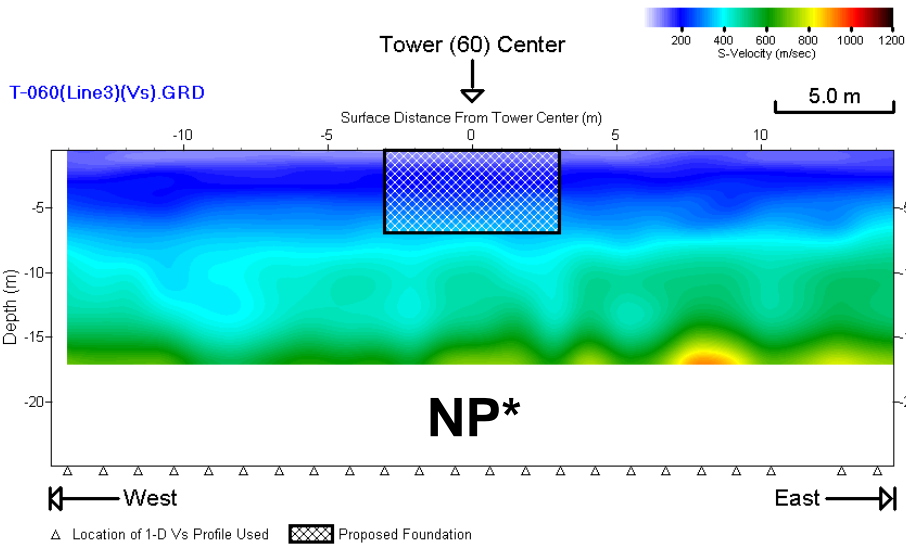
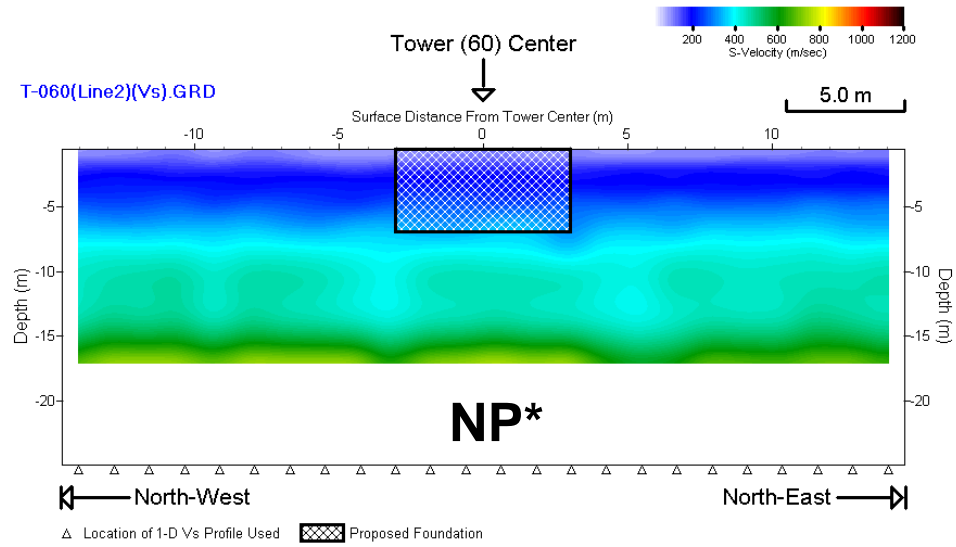
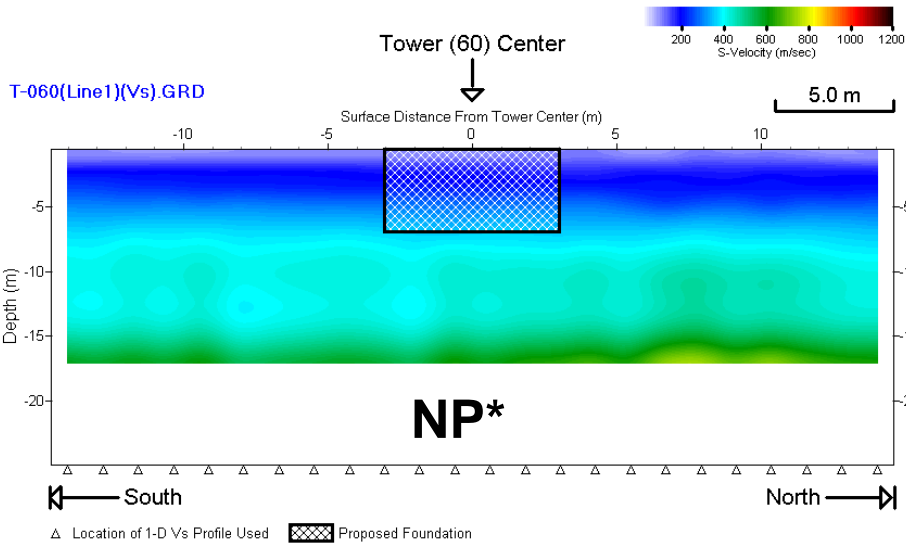


*Potential void (see separate text file for coordinates)

T-046

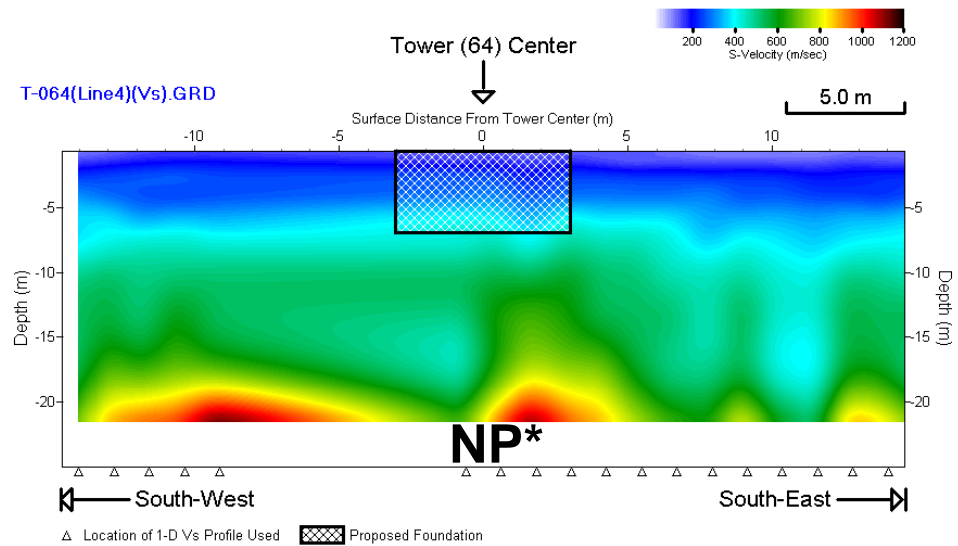
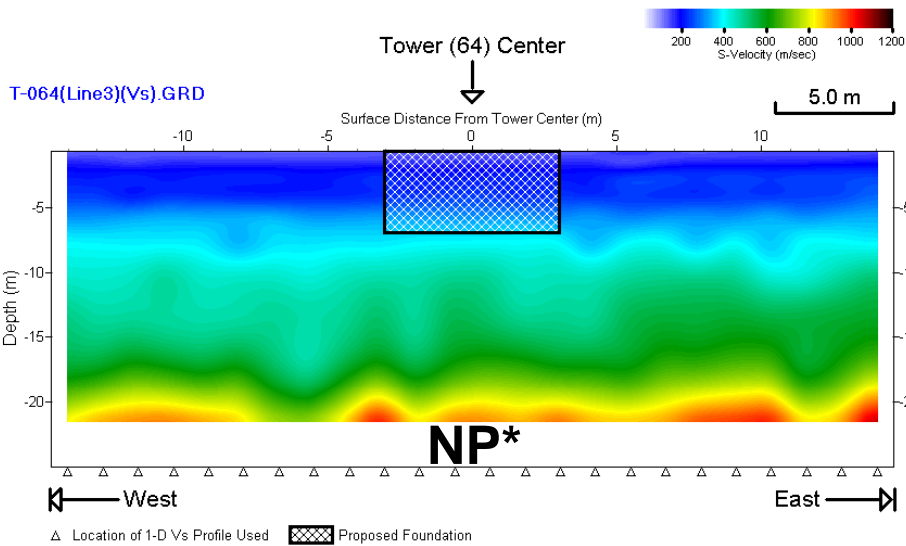
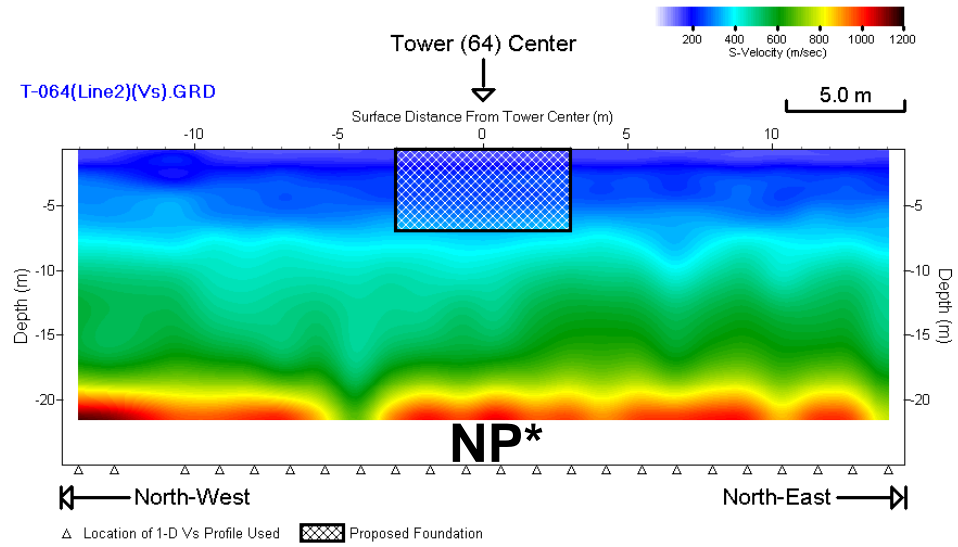
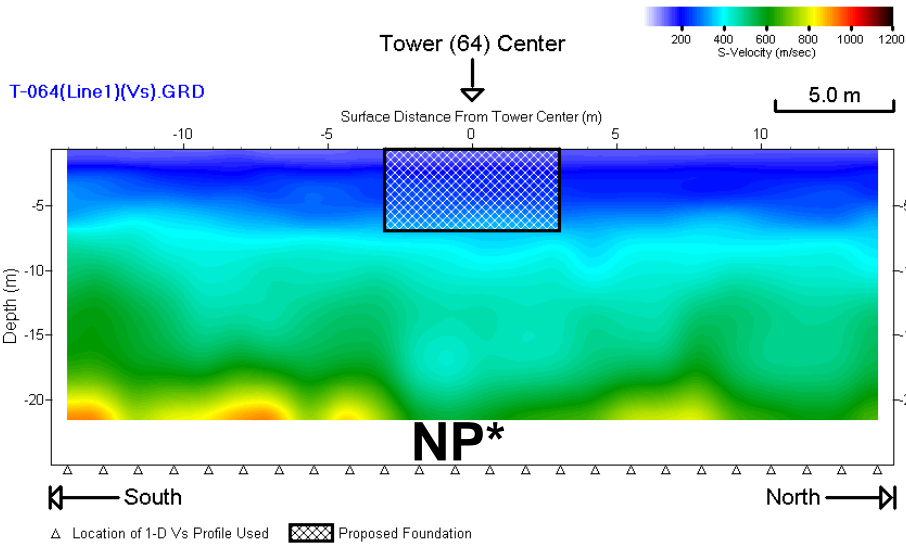


T-060



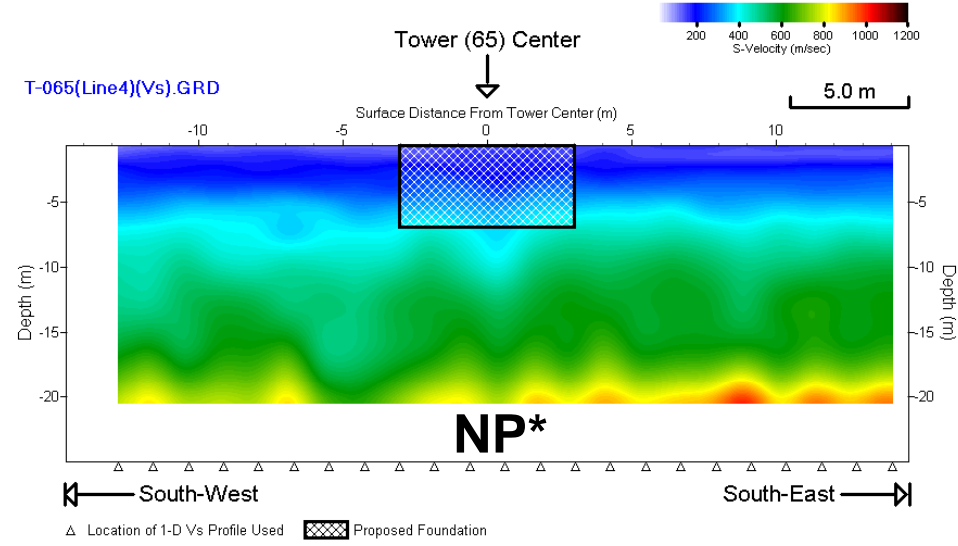
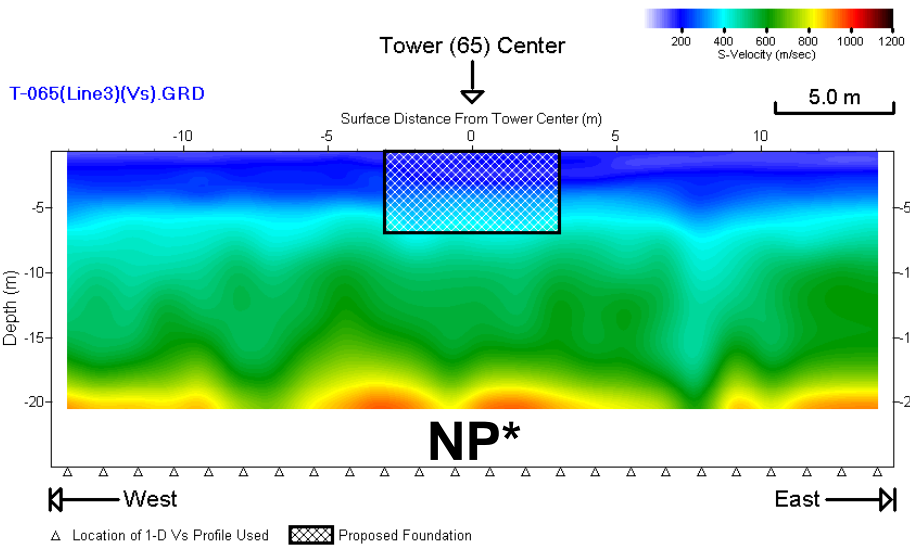
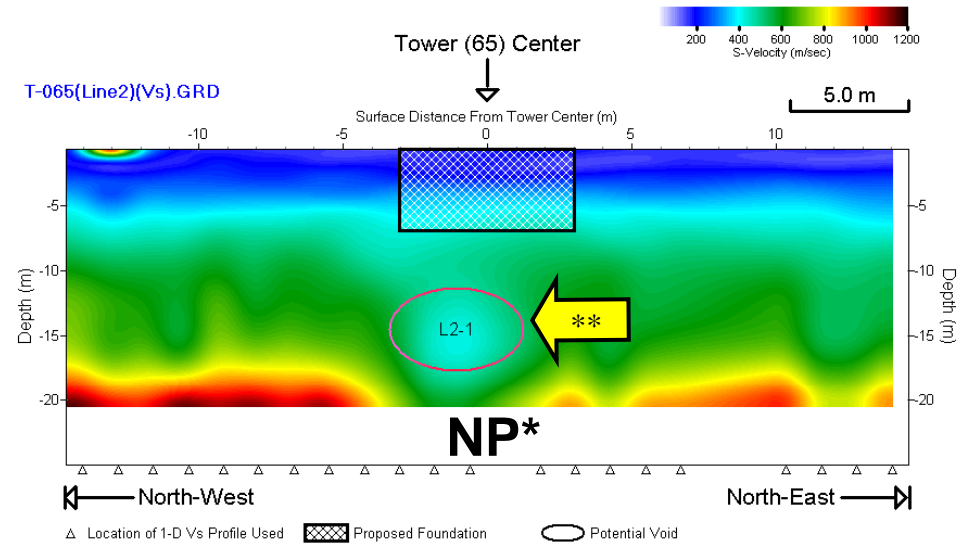
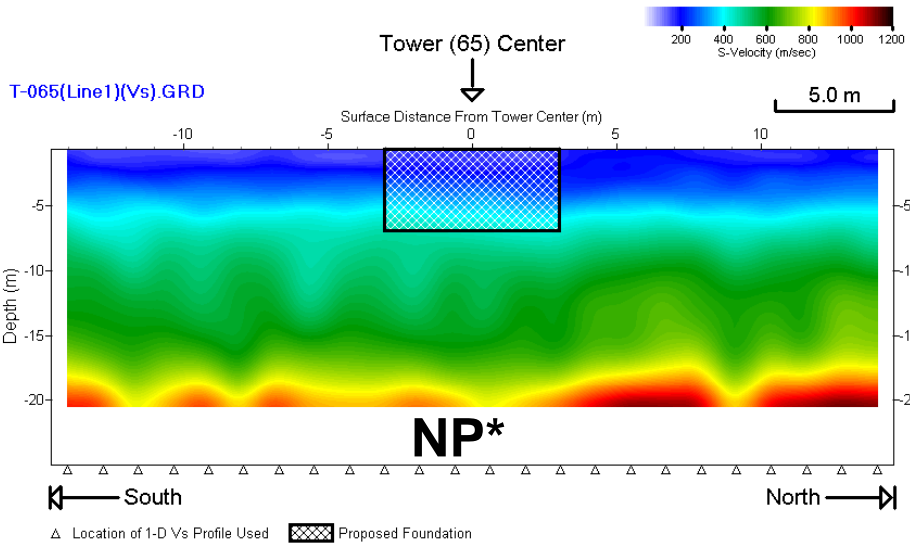
*Data not available due to insufficient penetration of surface waves

T-064



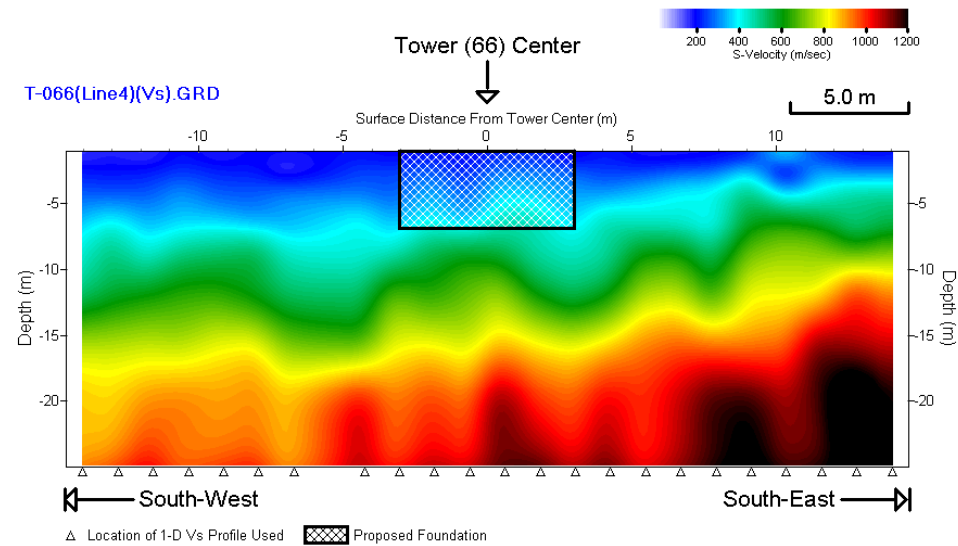
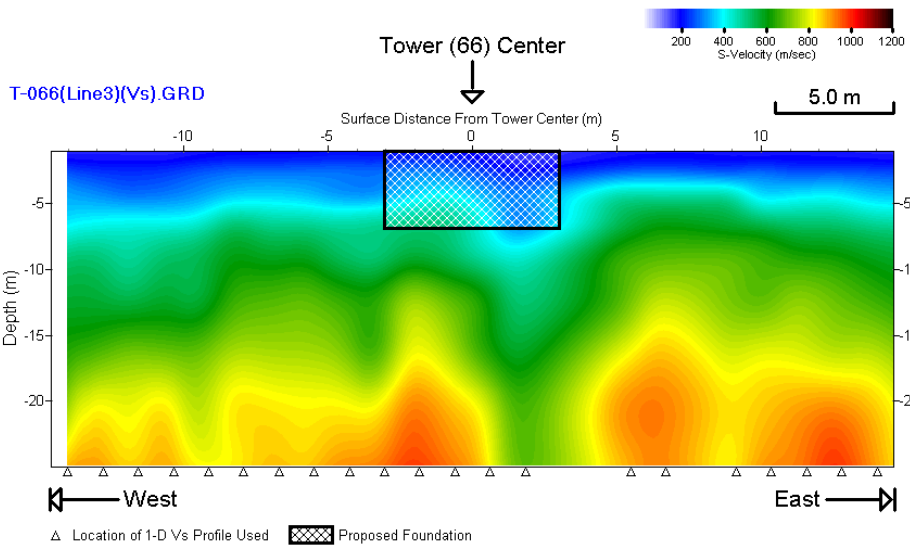
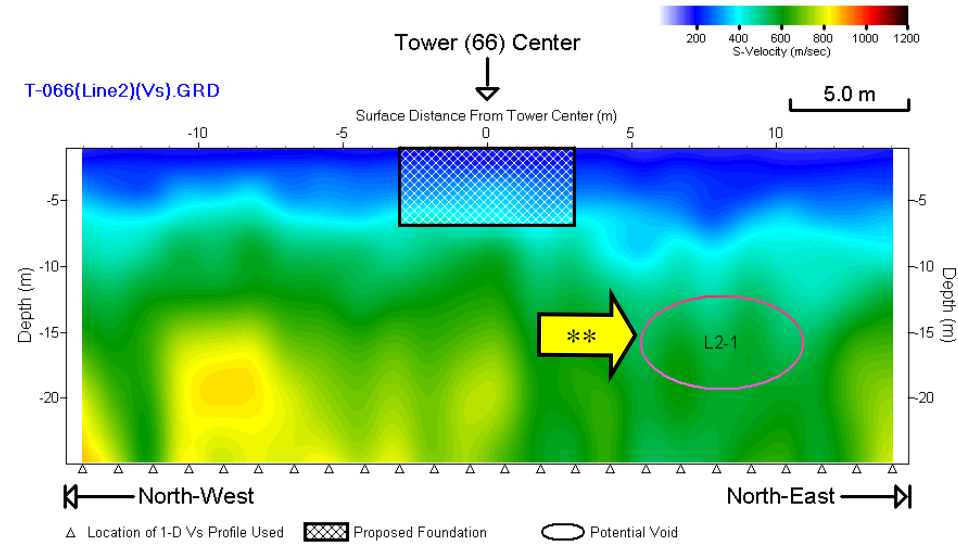
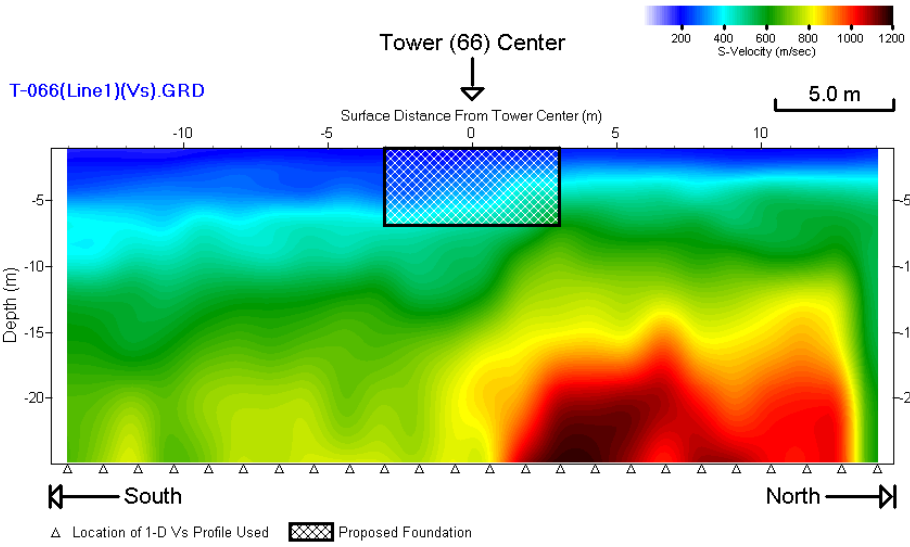
*Data not available due to insufficient penetration of surface waves

T-065



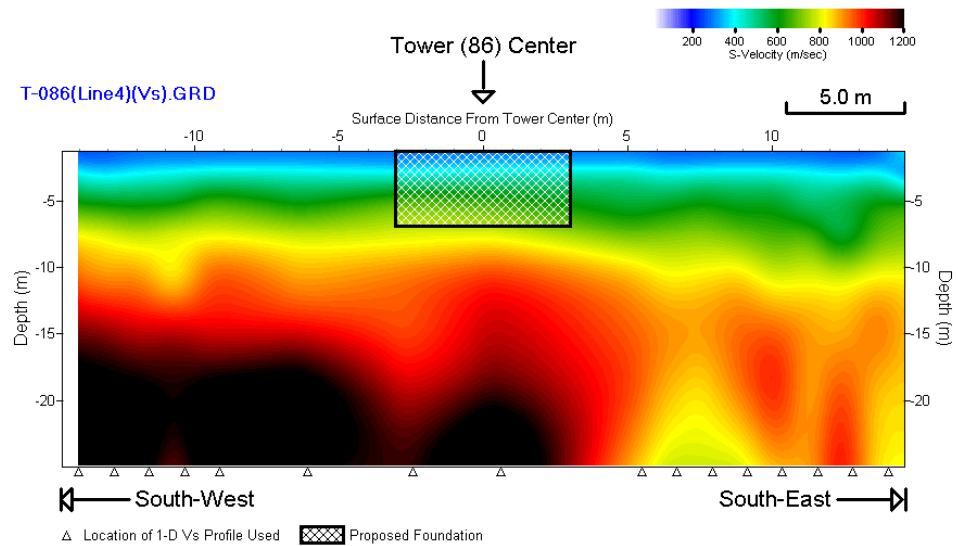
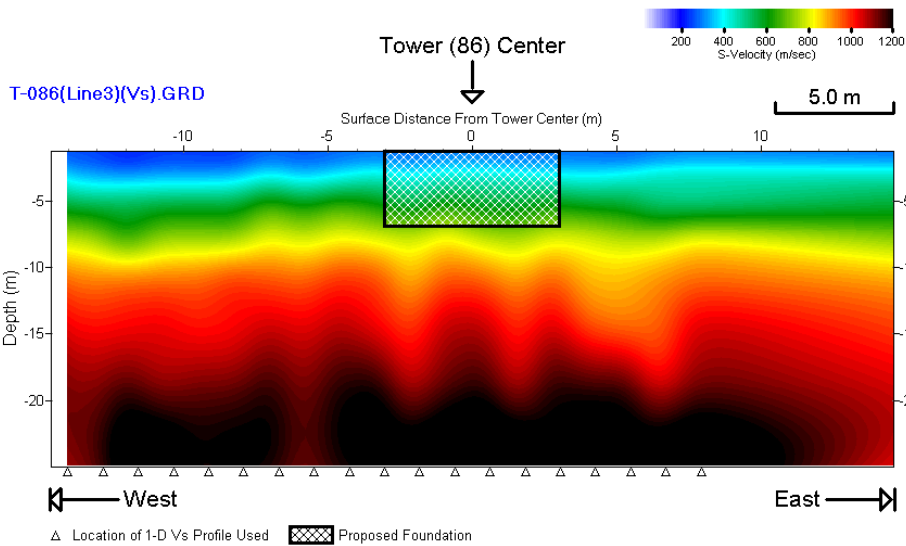
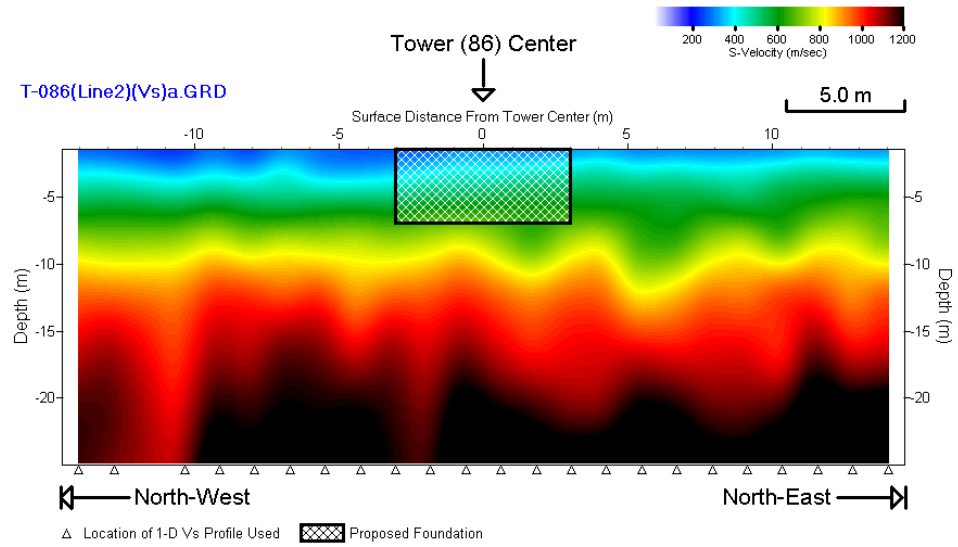
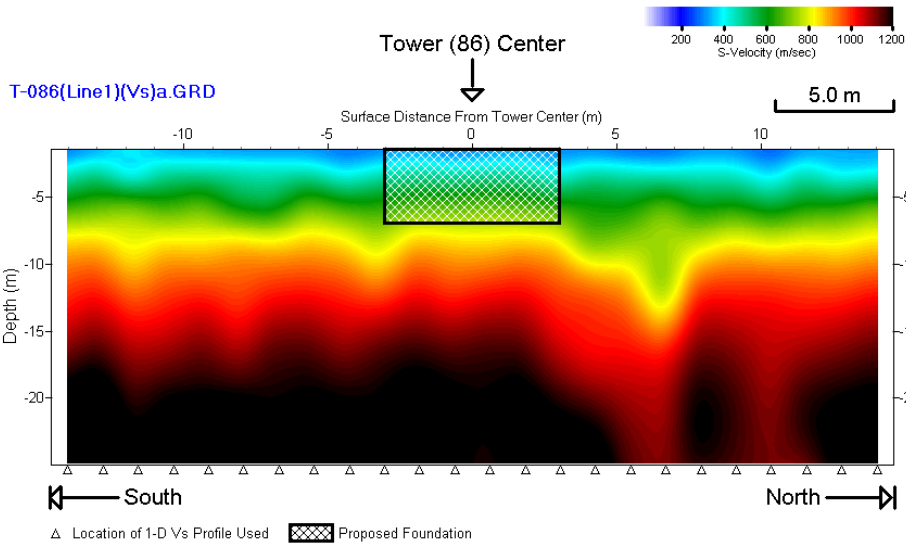
*Data not available due to insufficient penetration of surface waves **Potential void or anomaly (see separate text file for coordinates)

T-066



**Potential void or anomaly (see separate text file for coordinates)

T-086



APPENDIX II

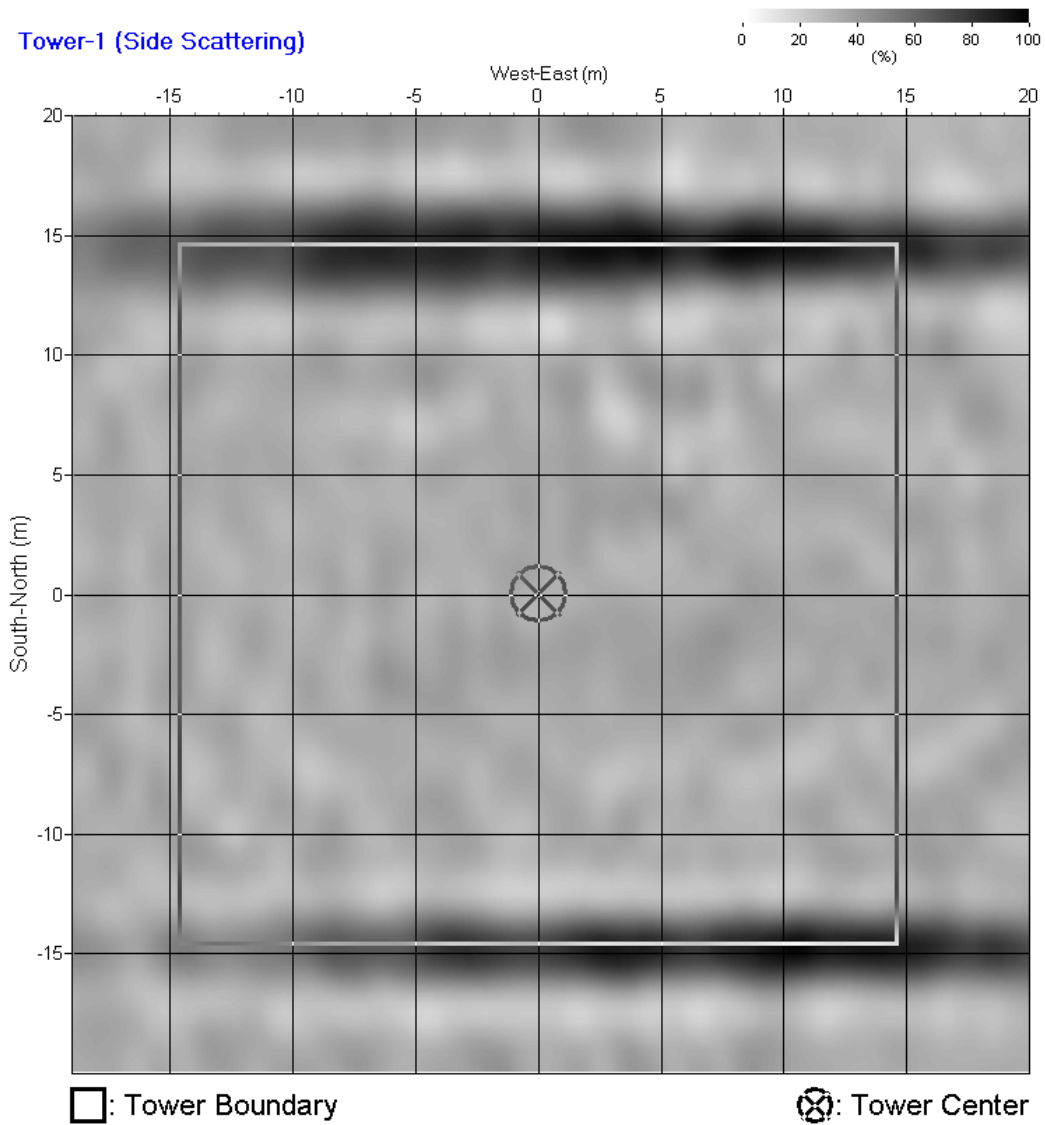
Elk River 10 Selected Sites

Side Scattering Analysis (SSA)

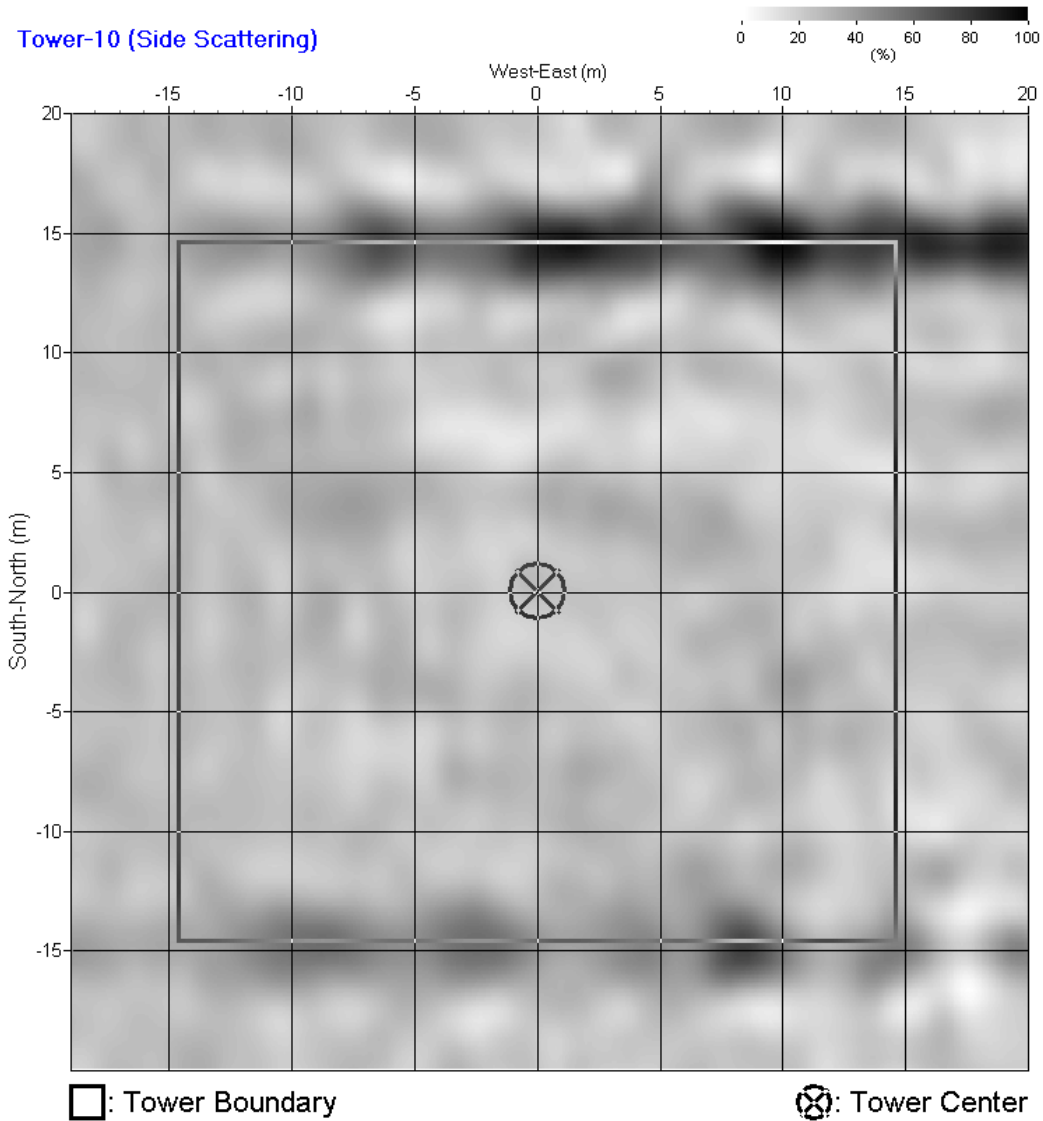
Sensitive Depth Range: 1 – 10 m

- T-001
- T-010
- T-017
- T-040
- T-046
- T-060
- T-064
- T-065
- T-066
- T-086

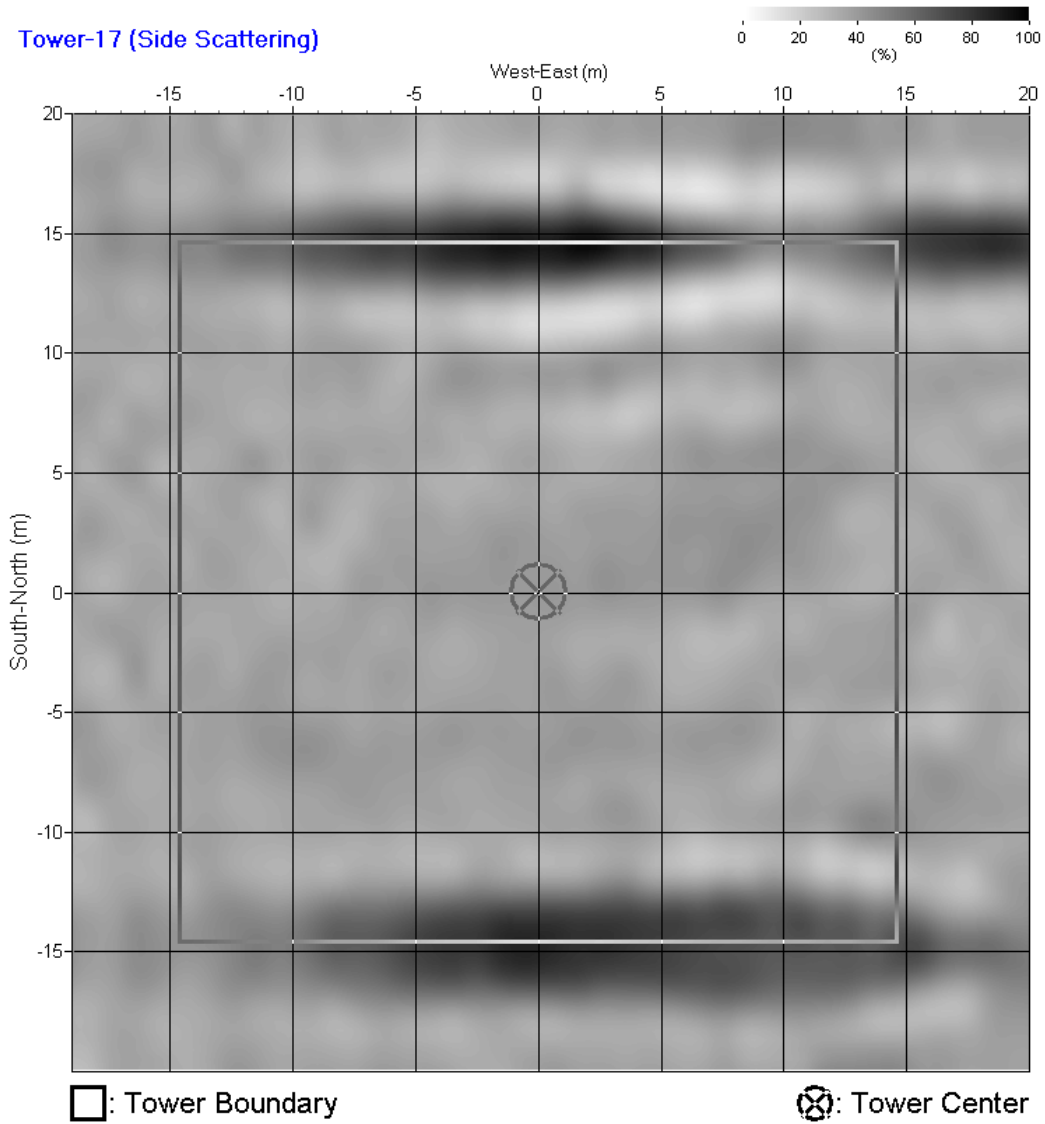
T-001



T-010

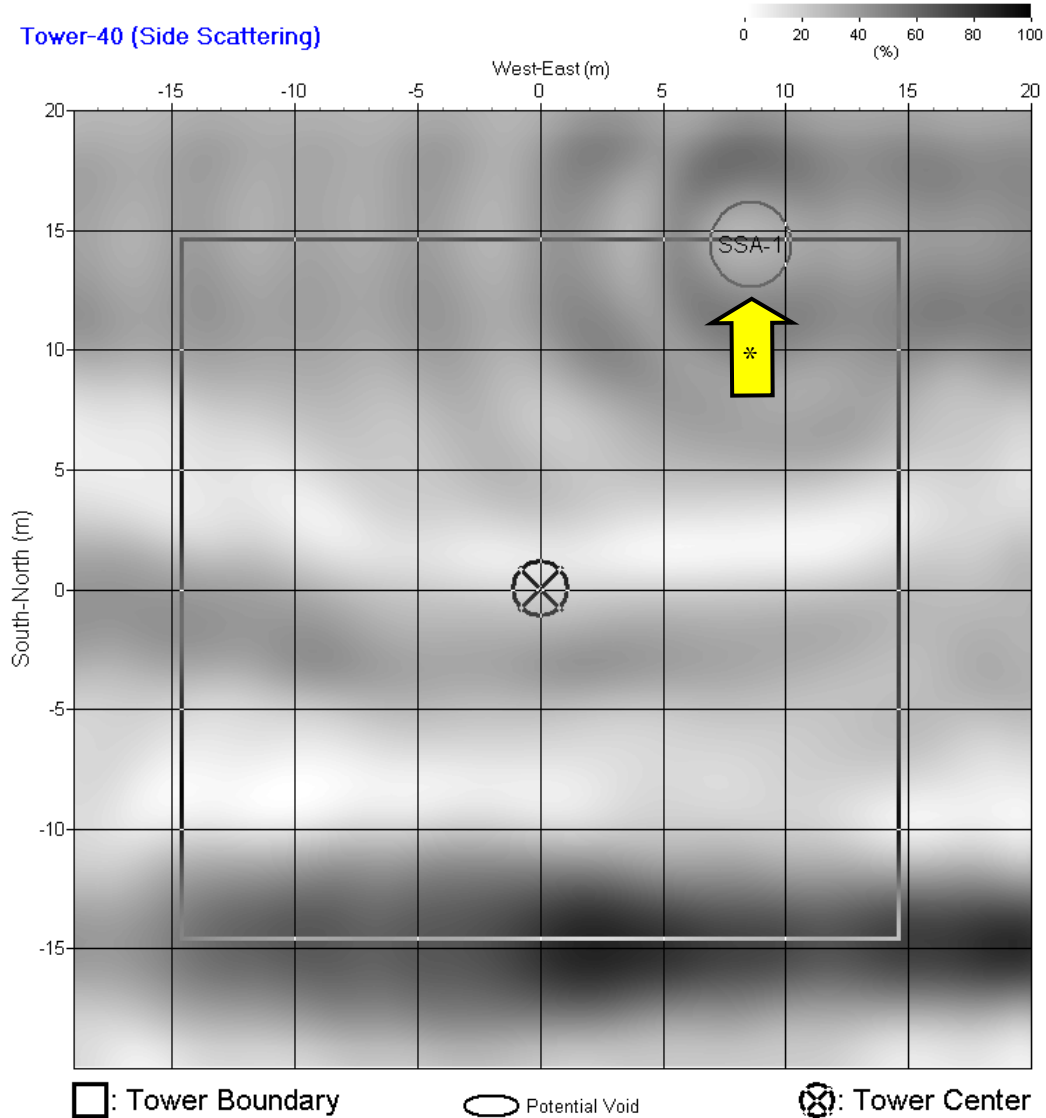


T-017



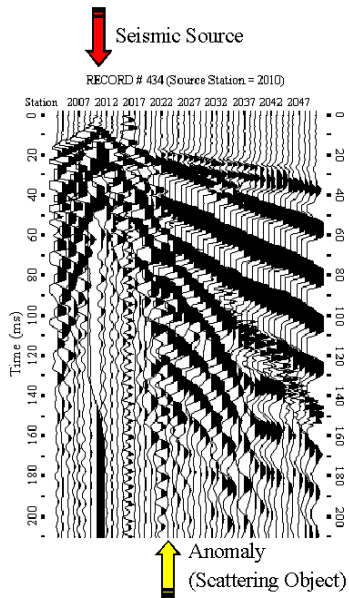
T-040⁺

Tower-40 (Side Scattering)



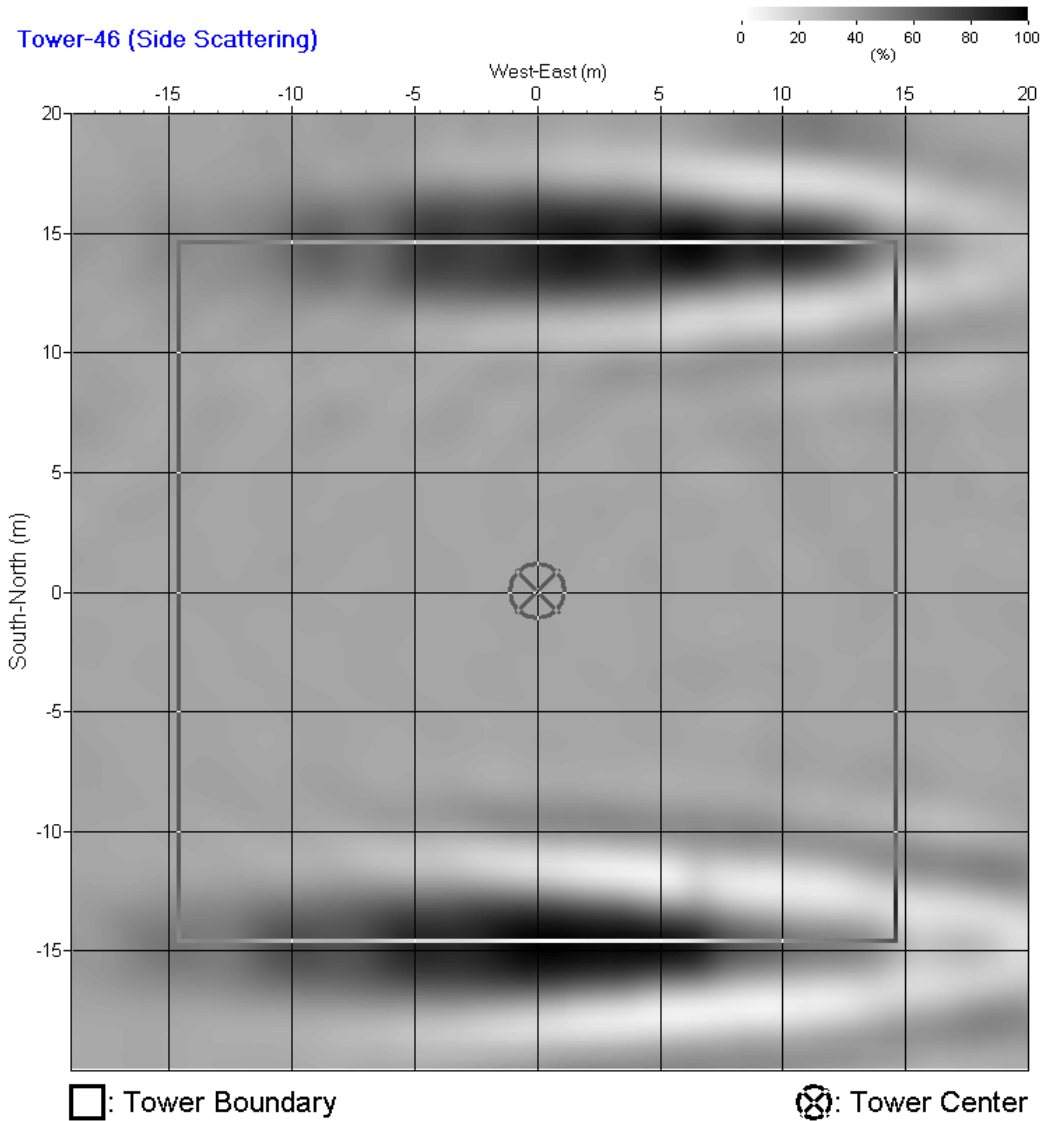
⁺ Potential void (SSA-1) identified is also correlated with the scattering feature observed in the corresponding part (within Line2) of the seismic line as illustrated on the left of SSA image.

Shot Gather (Line 2)

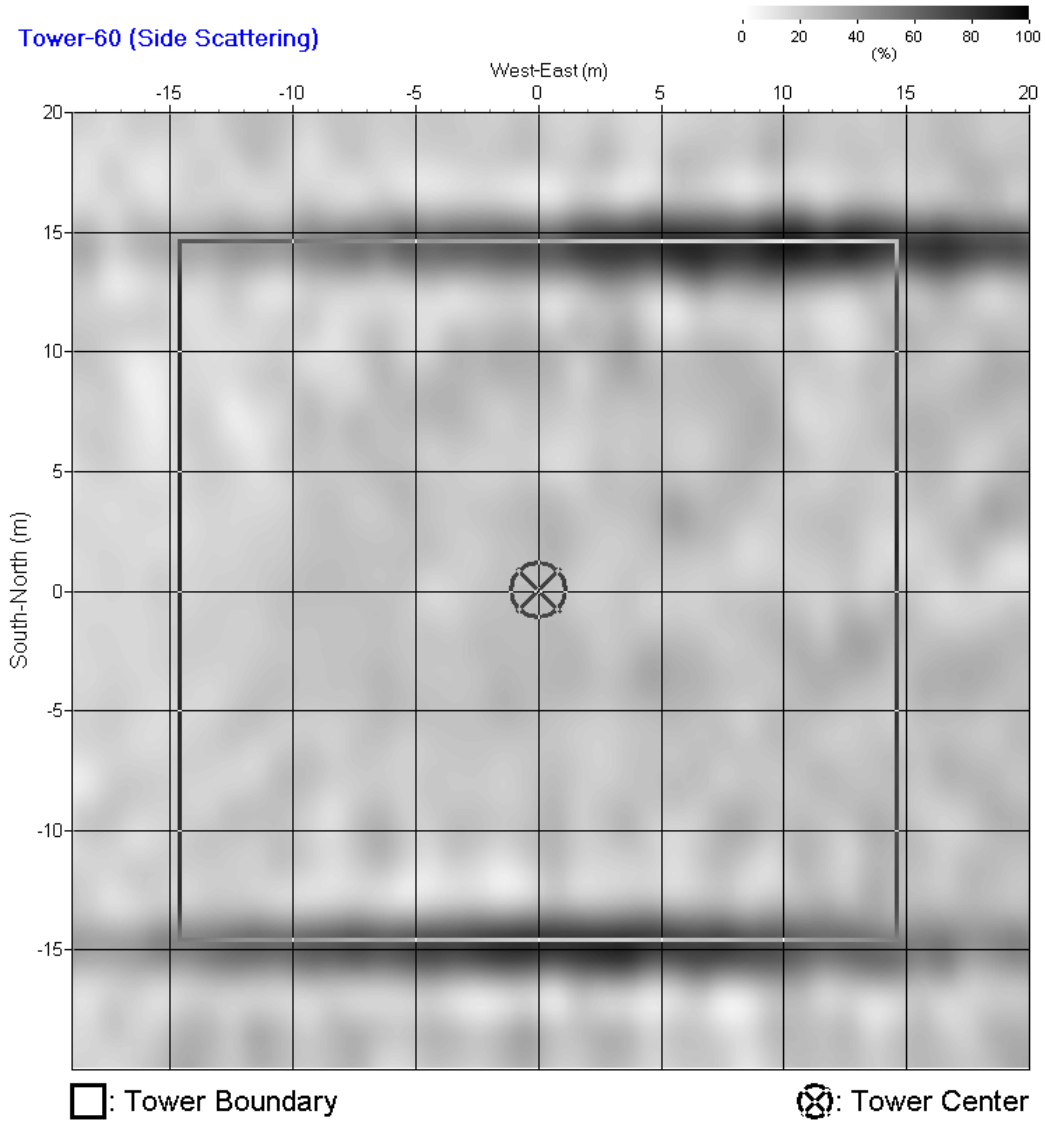


*Potential void or anomaly (see separate text file for coordinates)

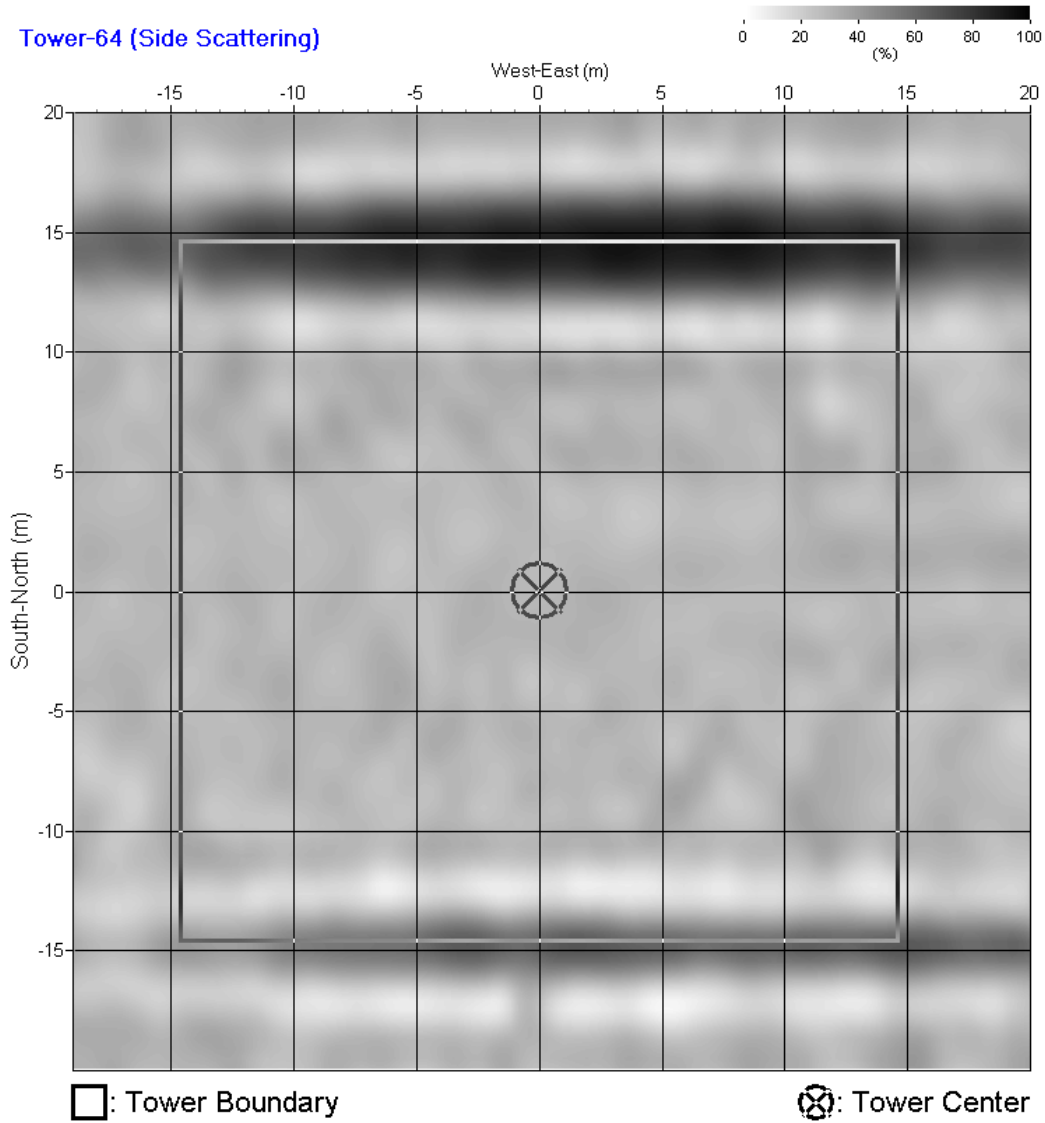
T-046



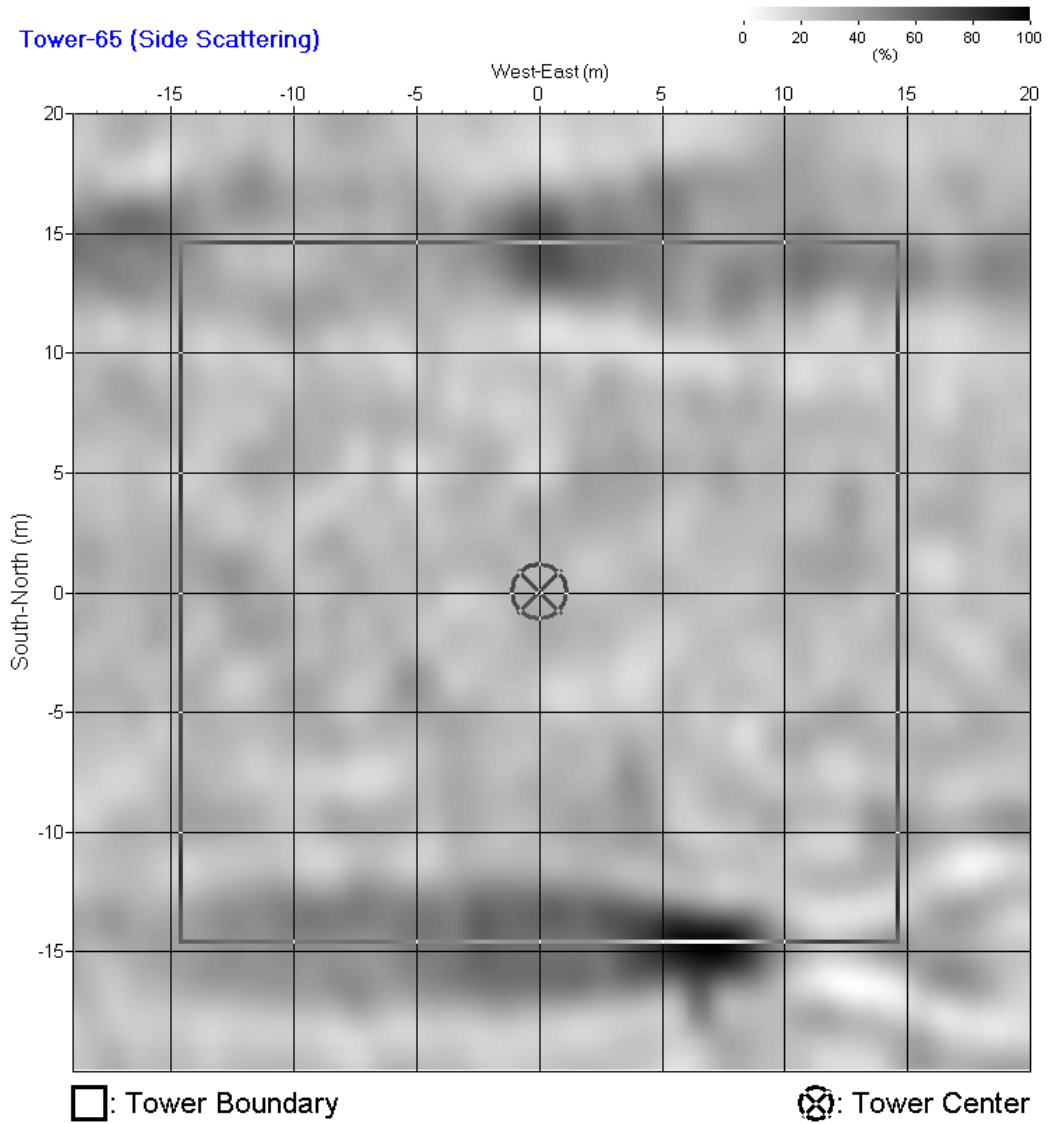
T-060



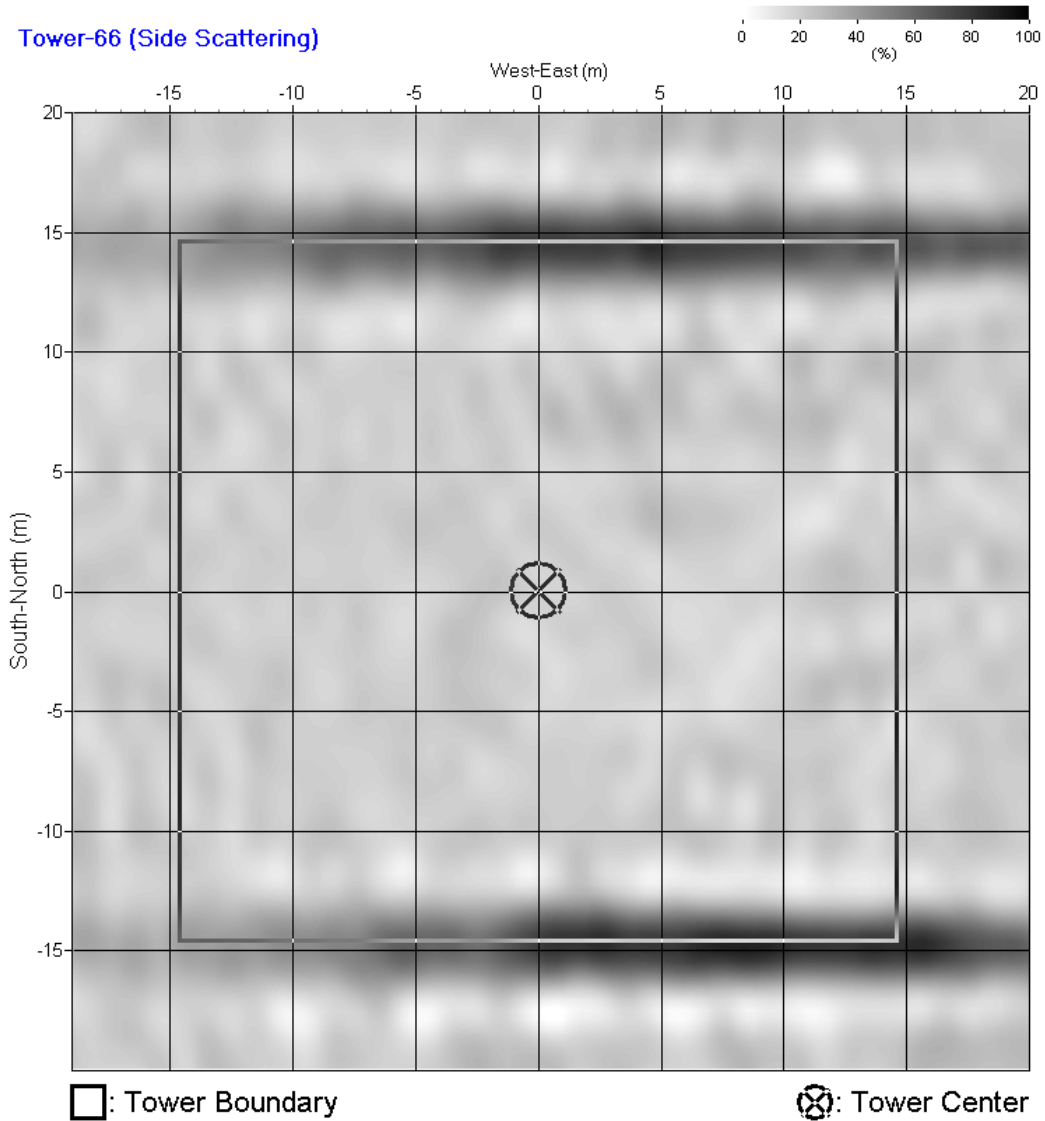
T-064



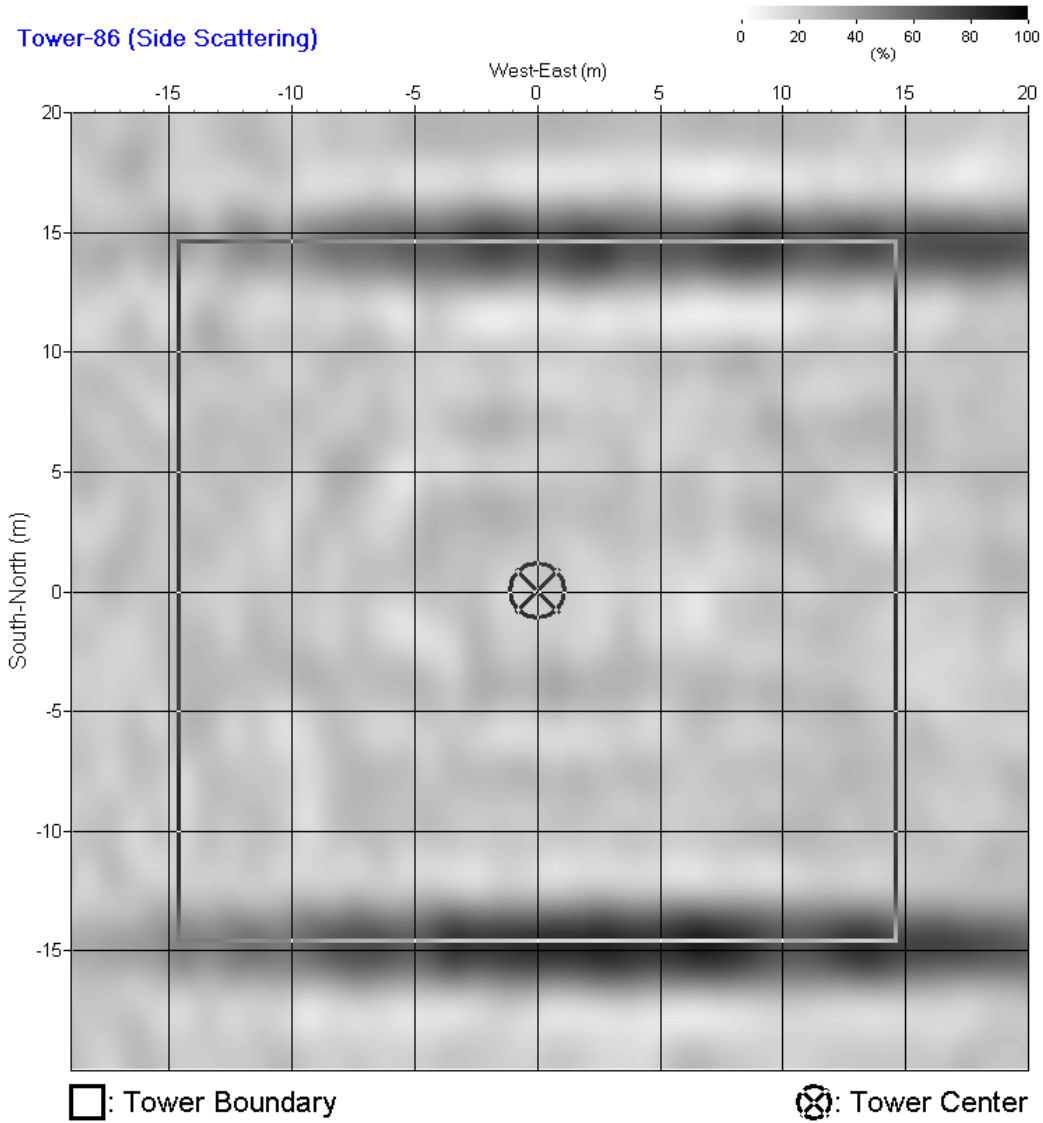
T-065



T-066



T-086



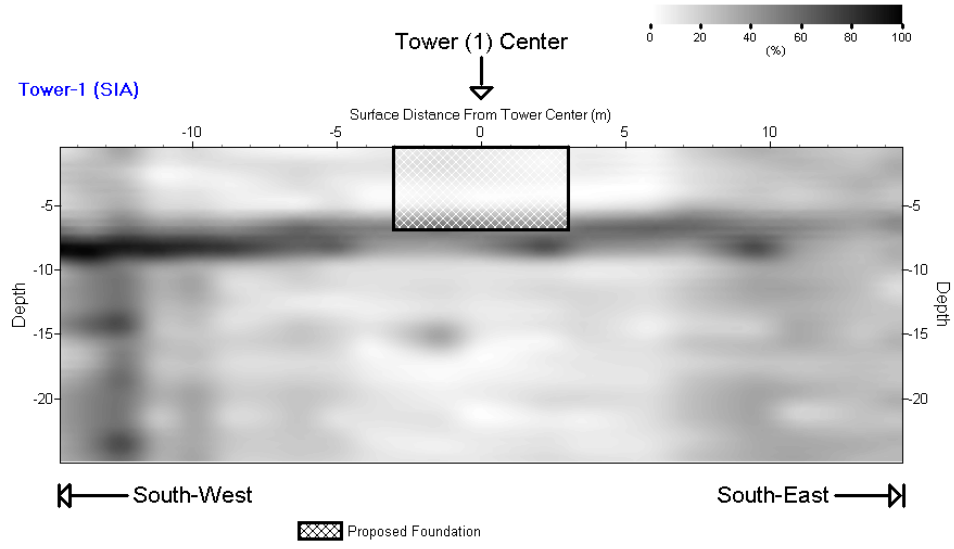
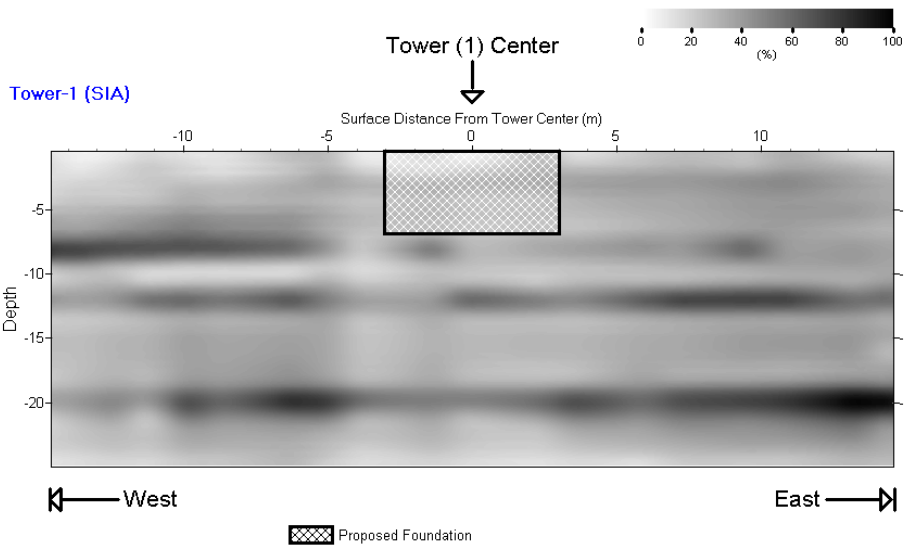
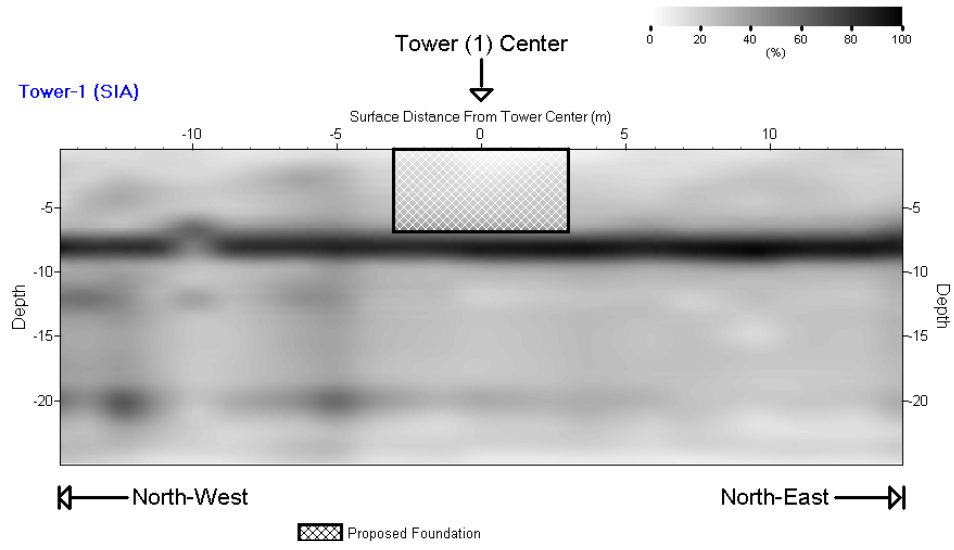
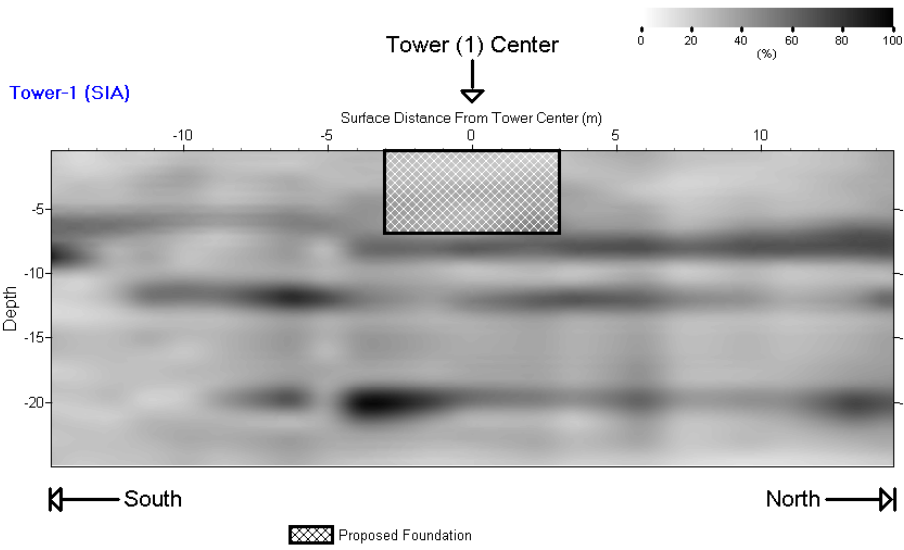
APPENDIX III

Elk River 10 Selected Sites

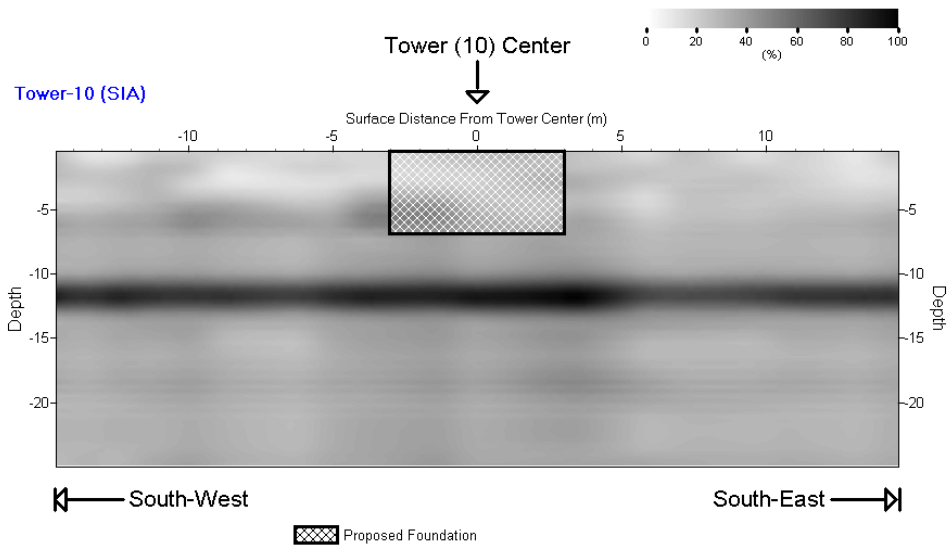
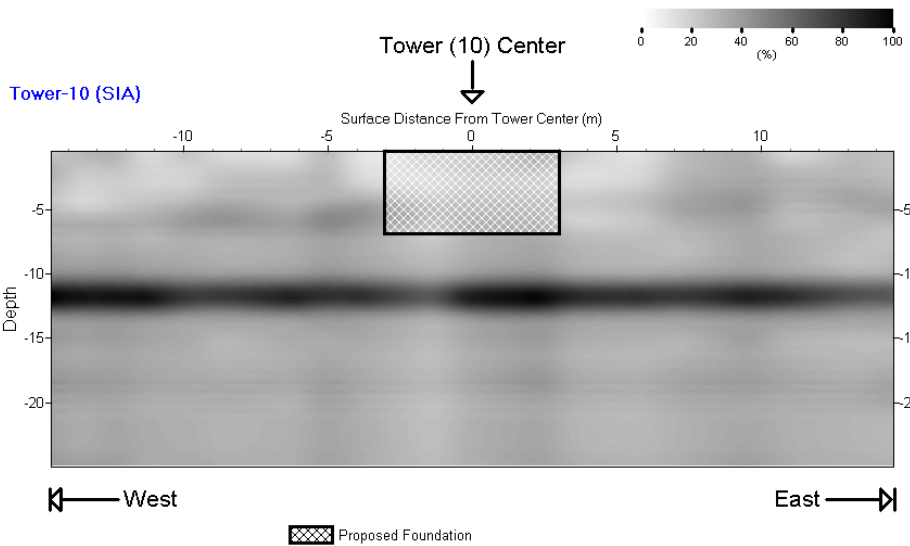
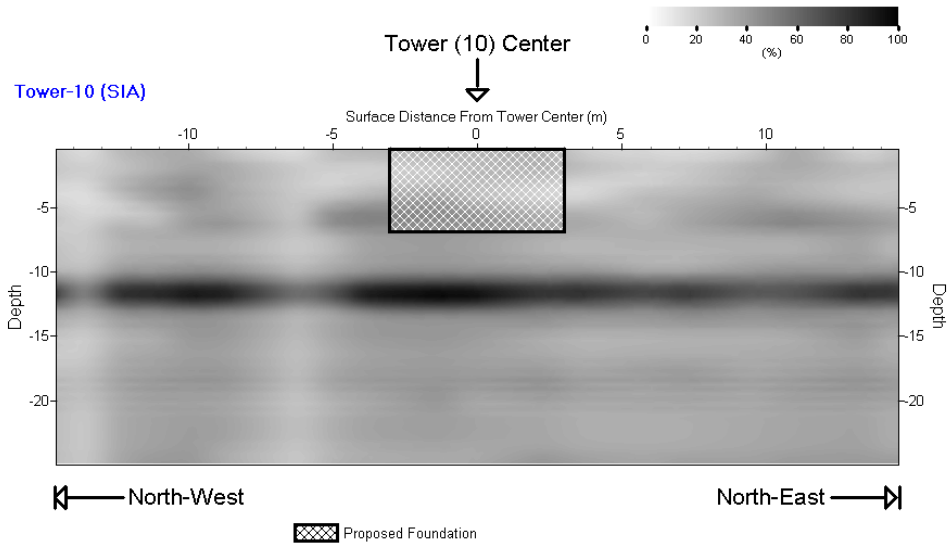
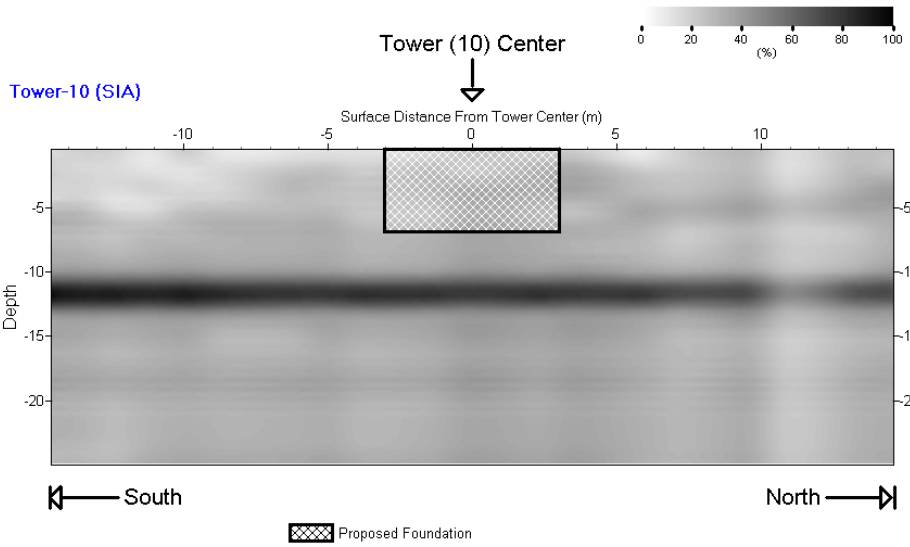
Surface-Wave Imaging by Attenuation (SIA)

- T-001
- T-010
- T-017
- T-040
- T-046
- T-060
- T-064
- T-065
- T-066
- T-086

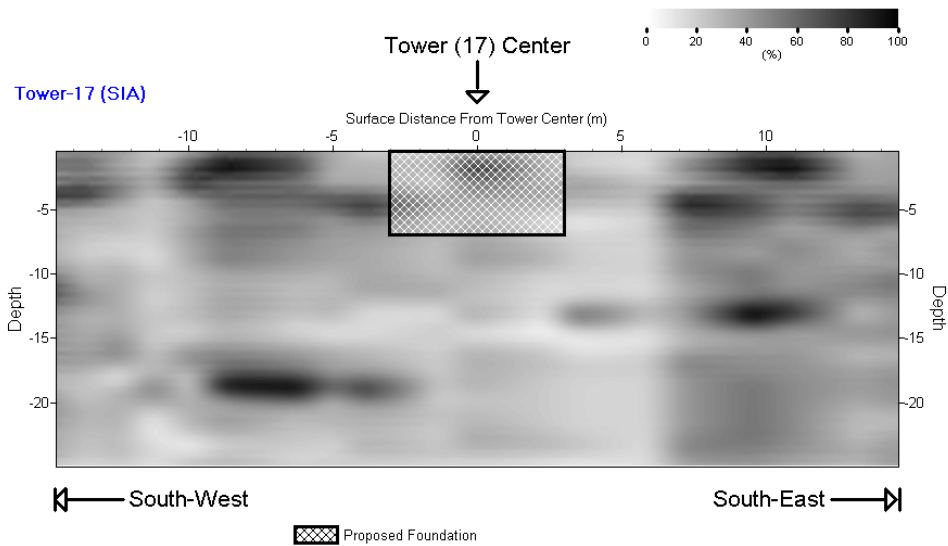
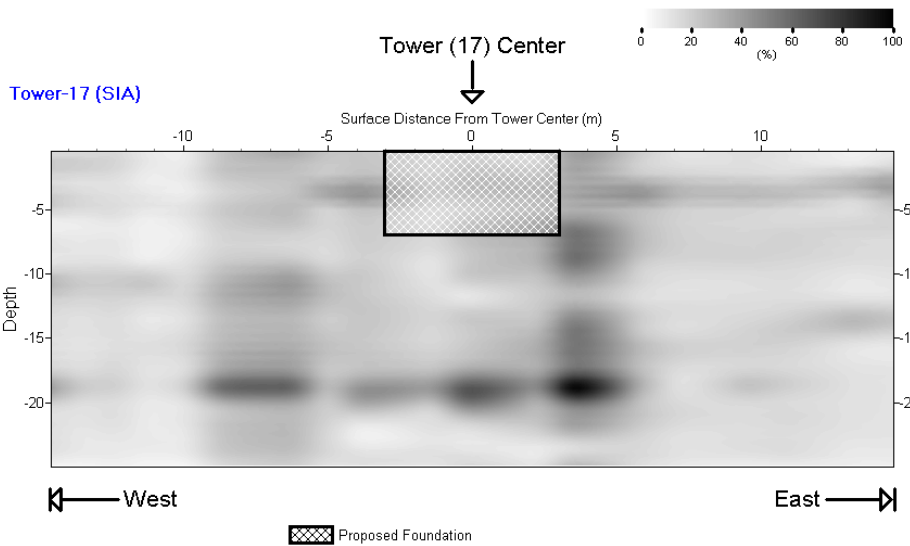
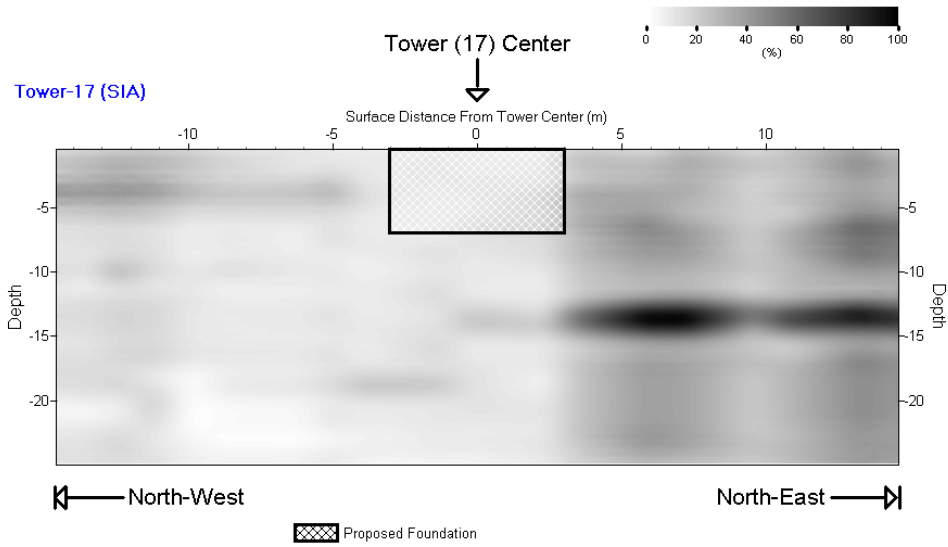
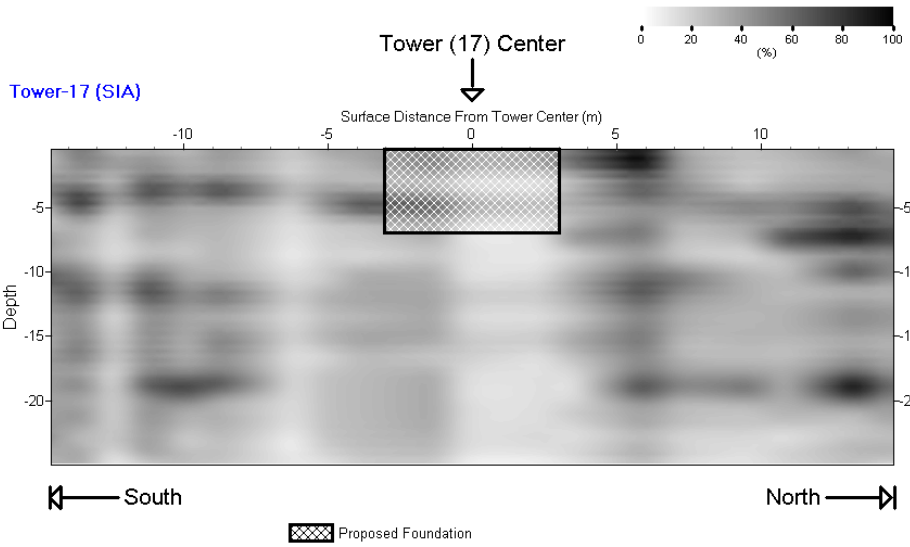
T-001



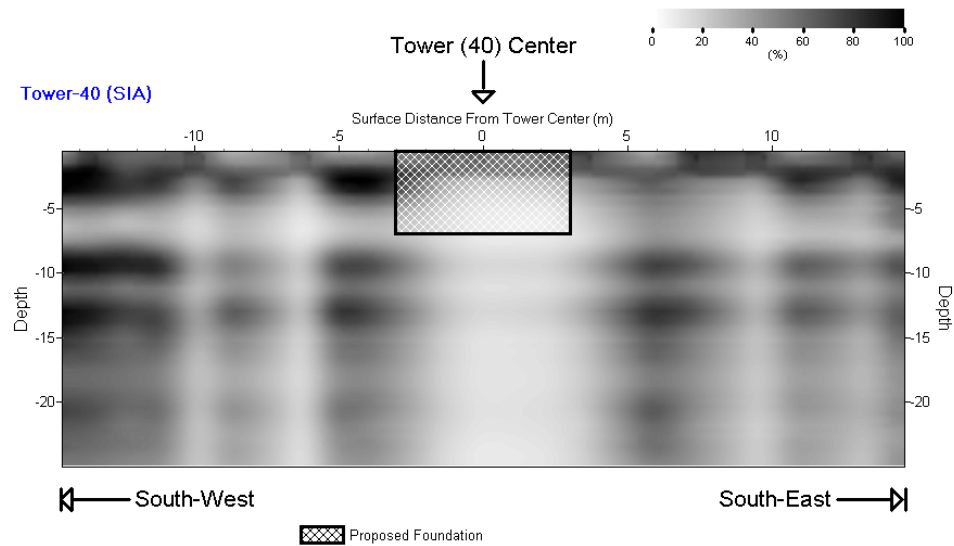
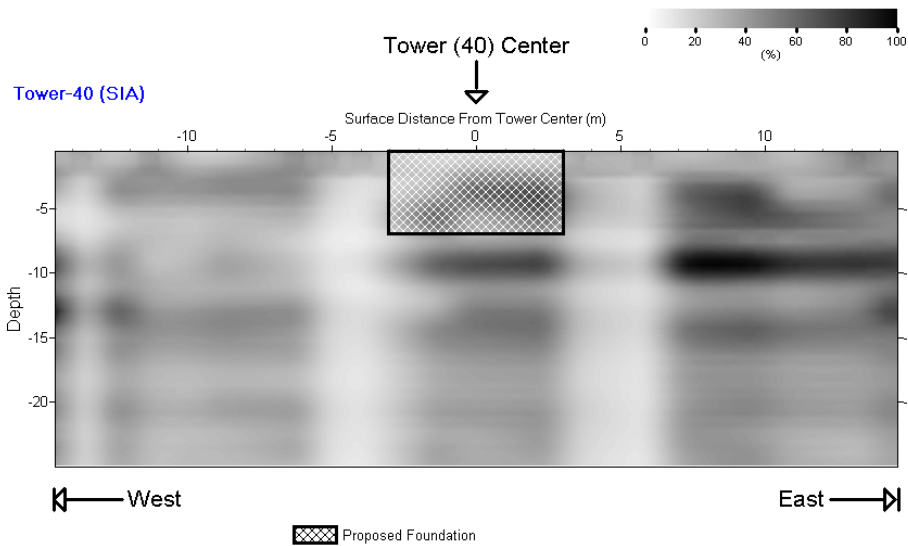
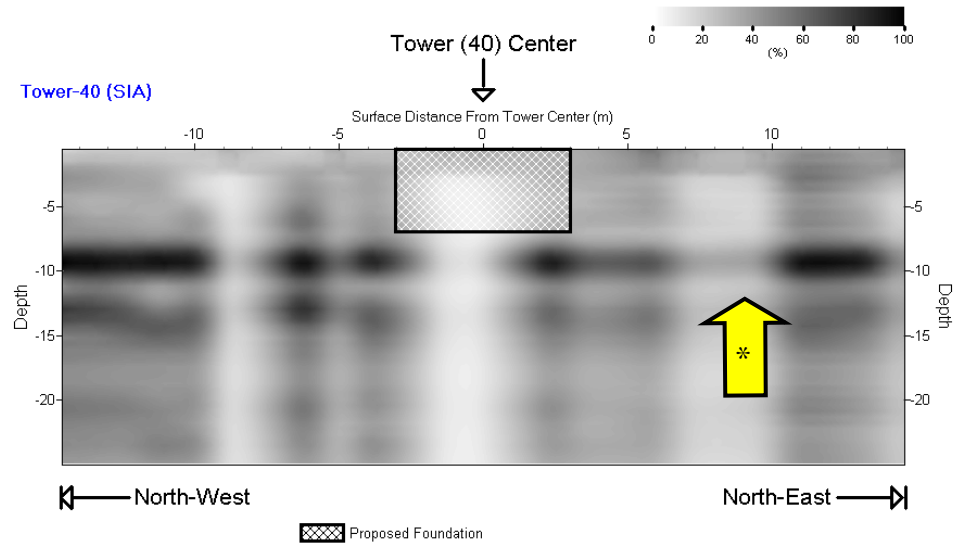
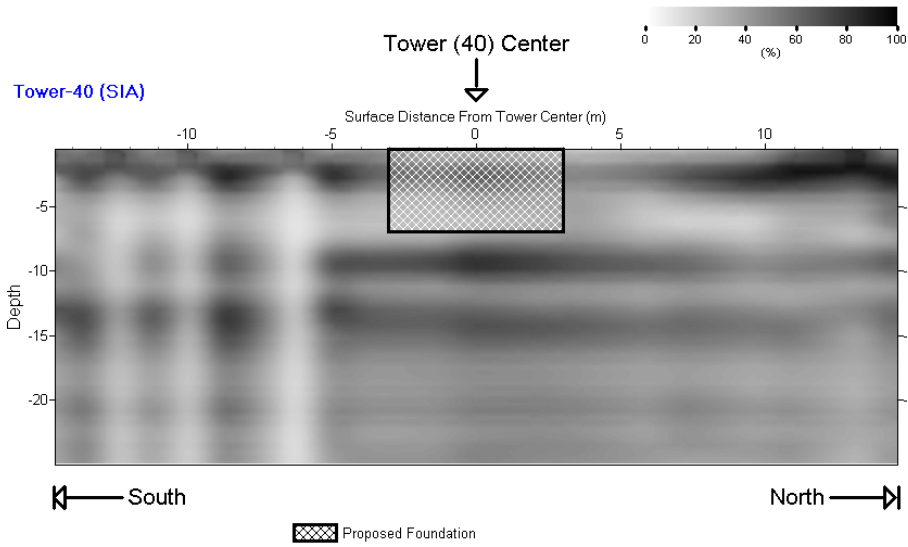
T-010



T-017

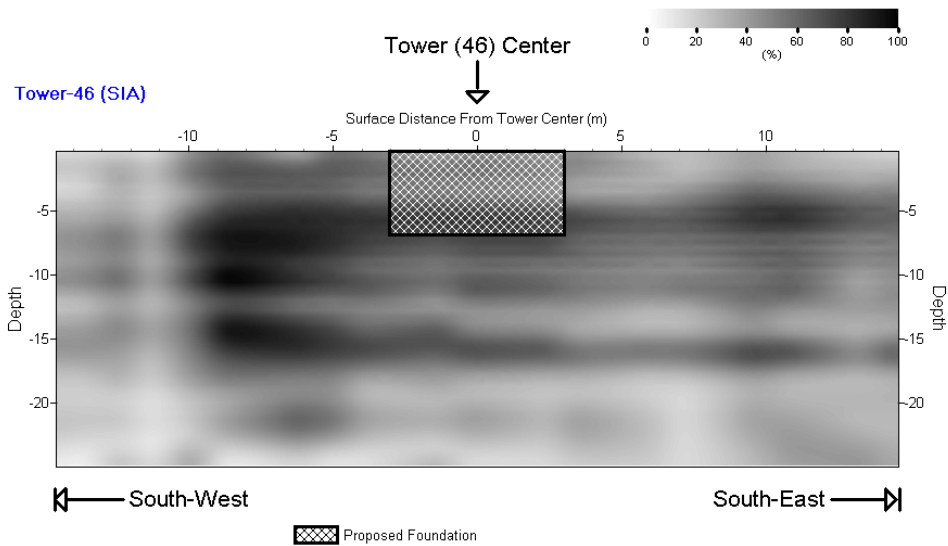
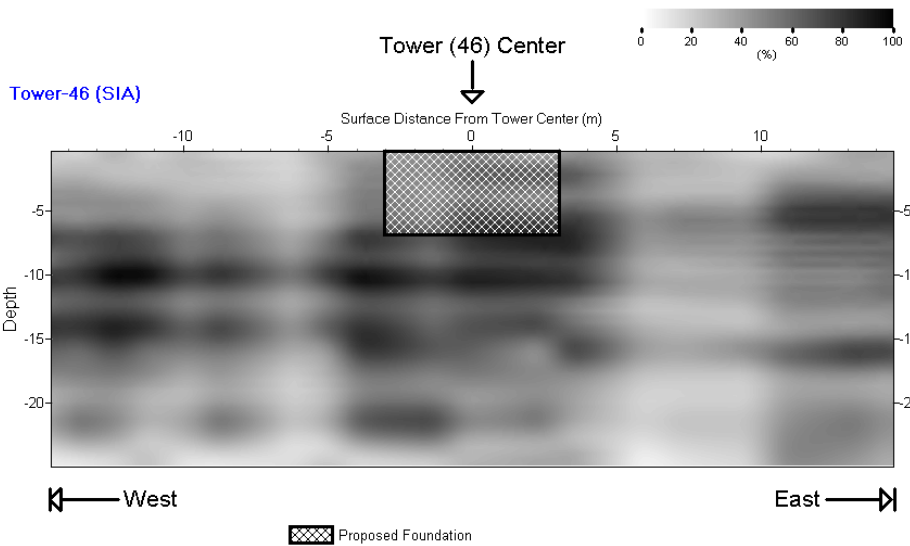
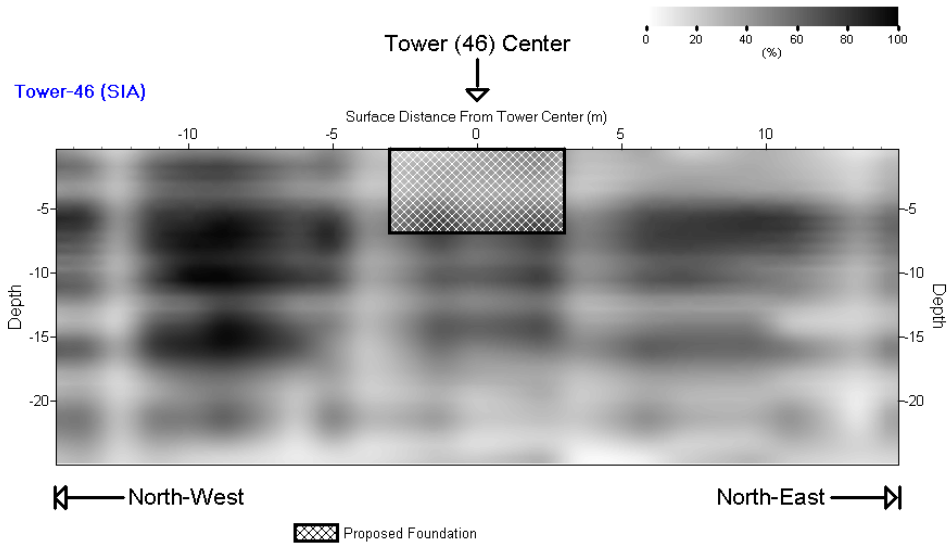
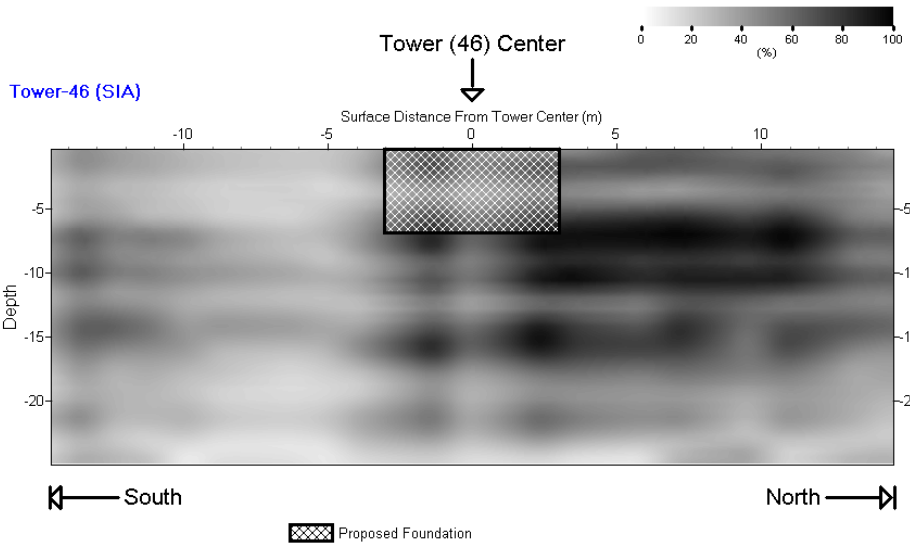


T-040

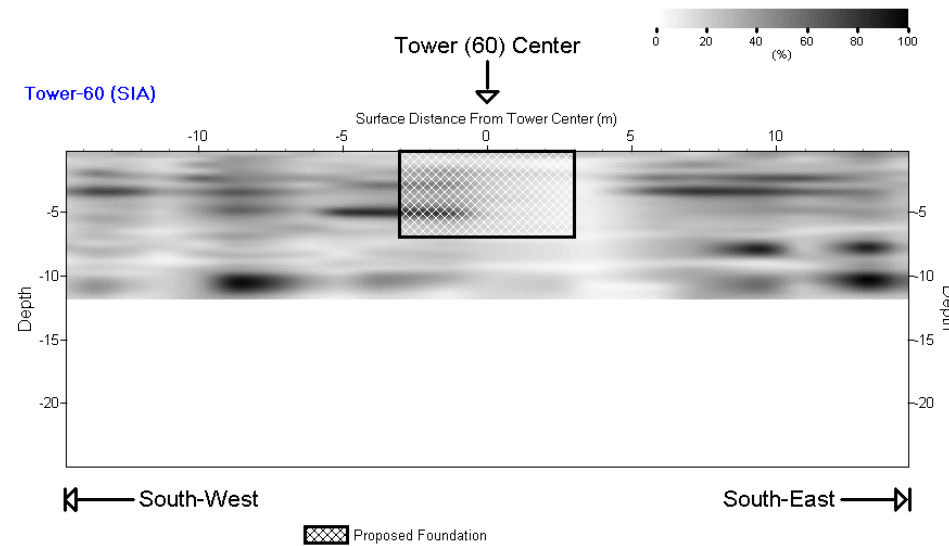
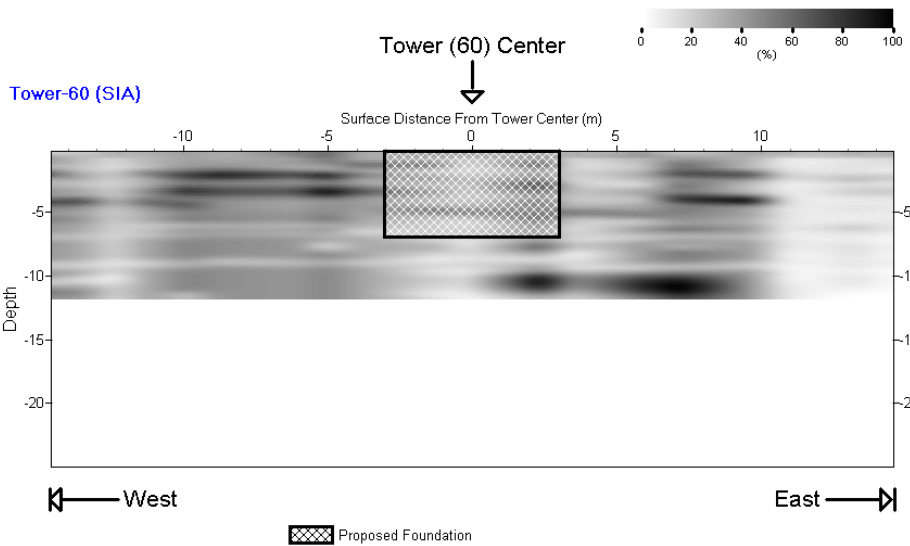
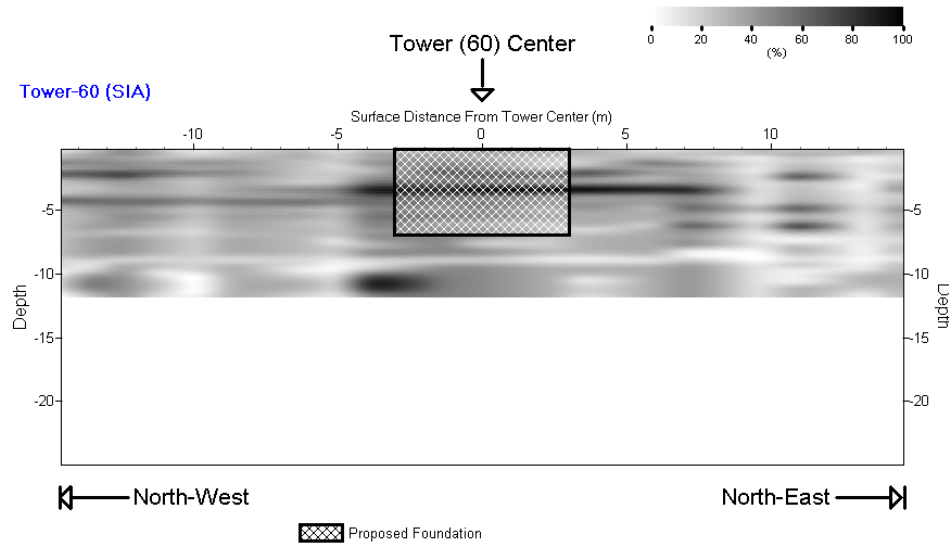
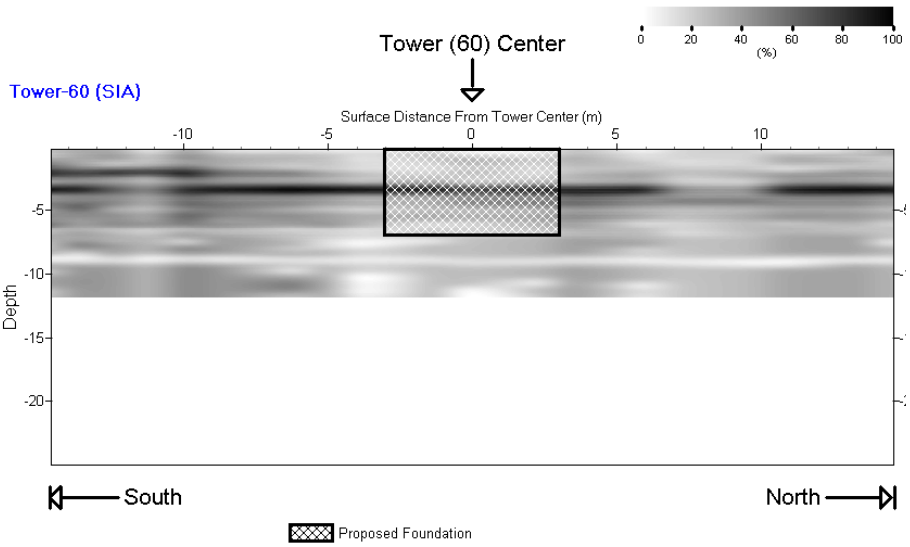


*This is the approximate surface location of the anomaly interpreted on SSA and 2-D Vs images.

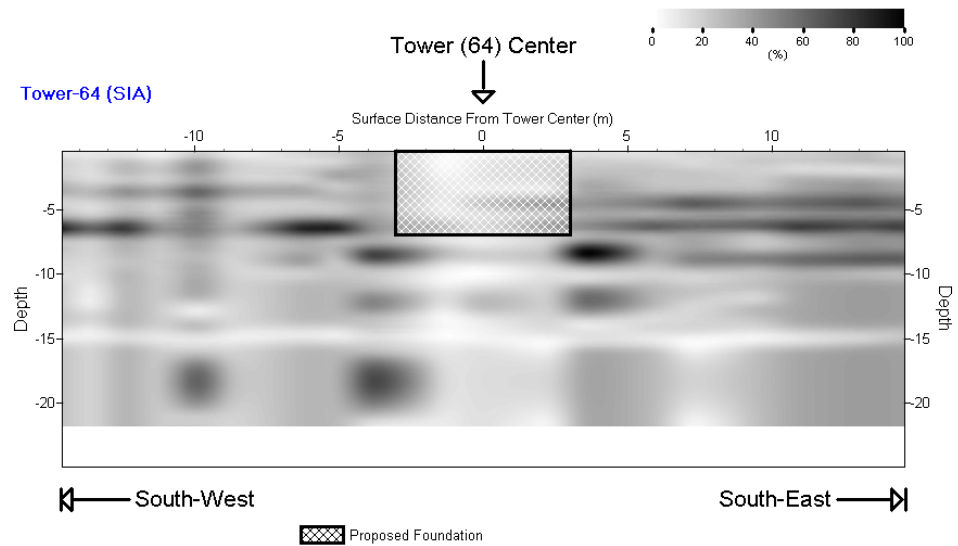
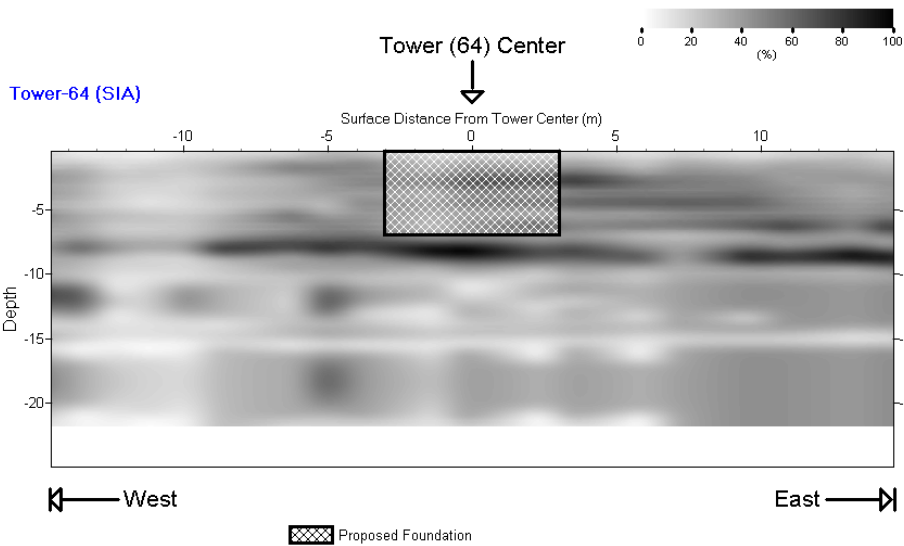
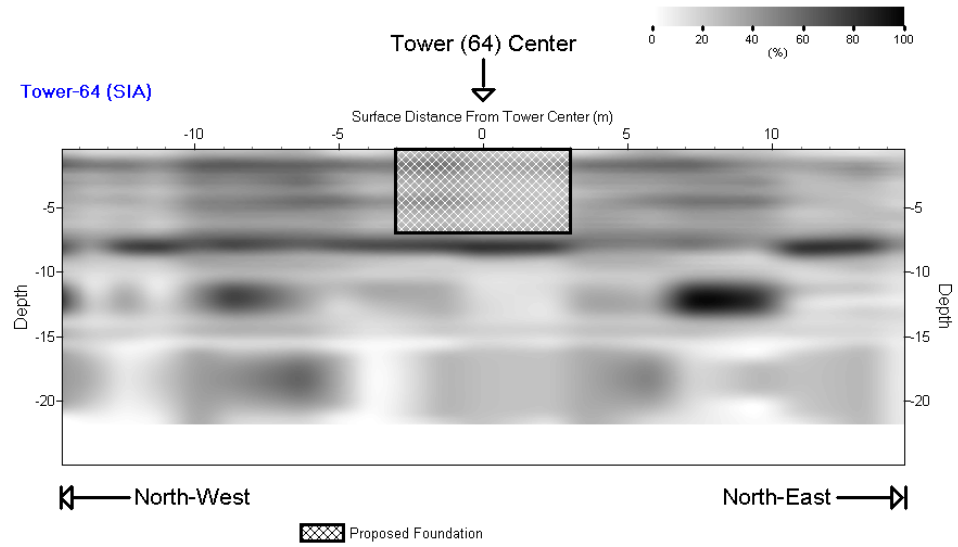
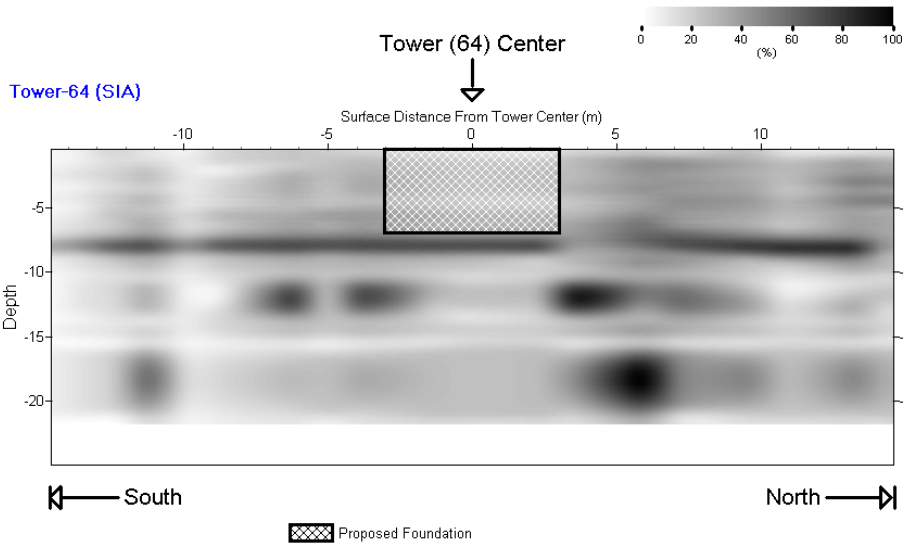
T-046



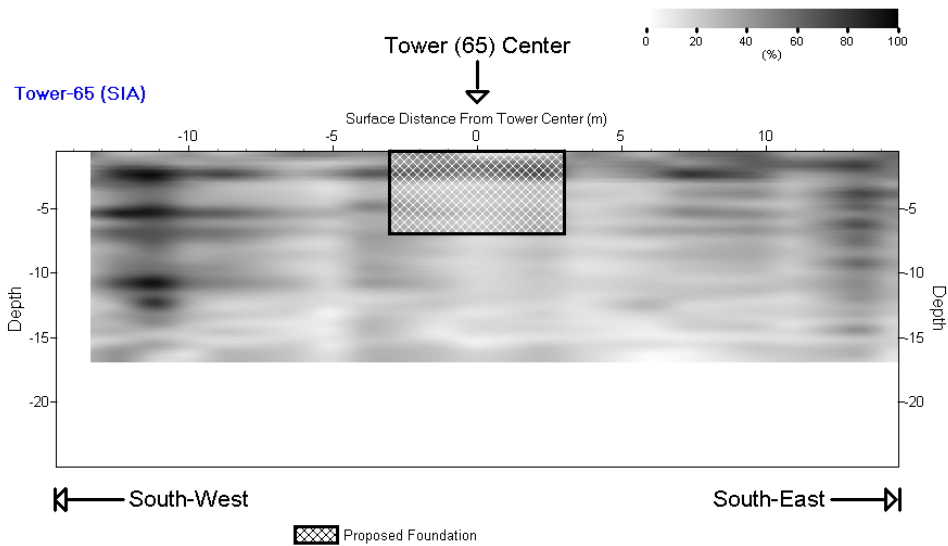
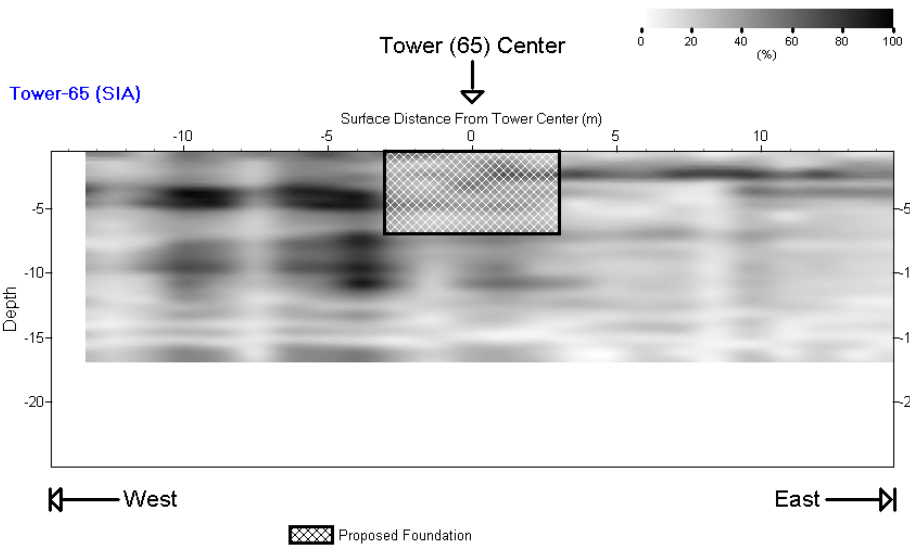
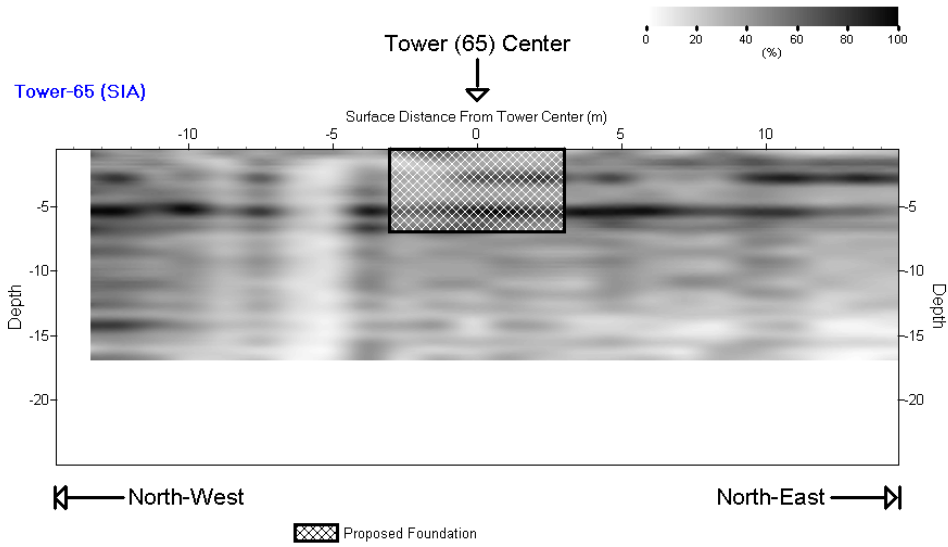
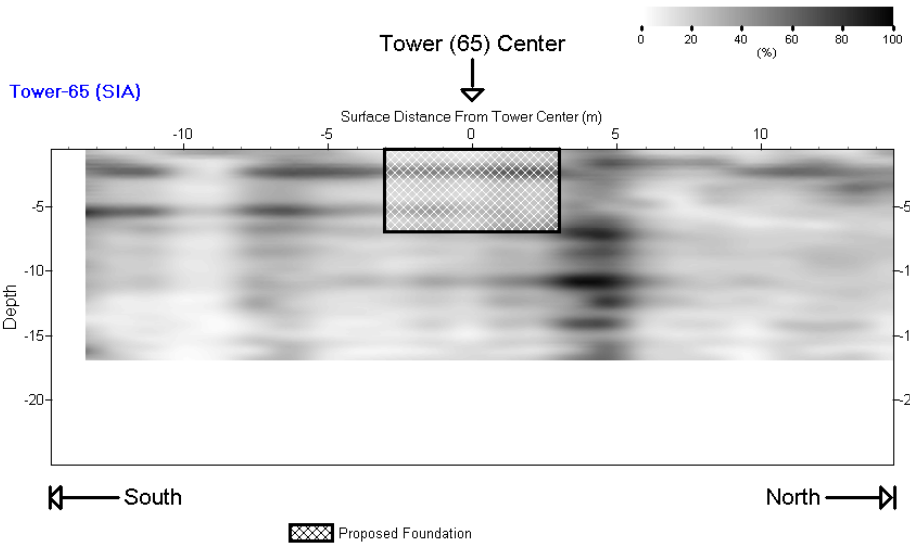
T-060



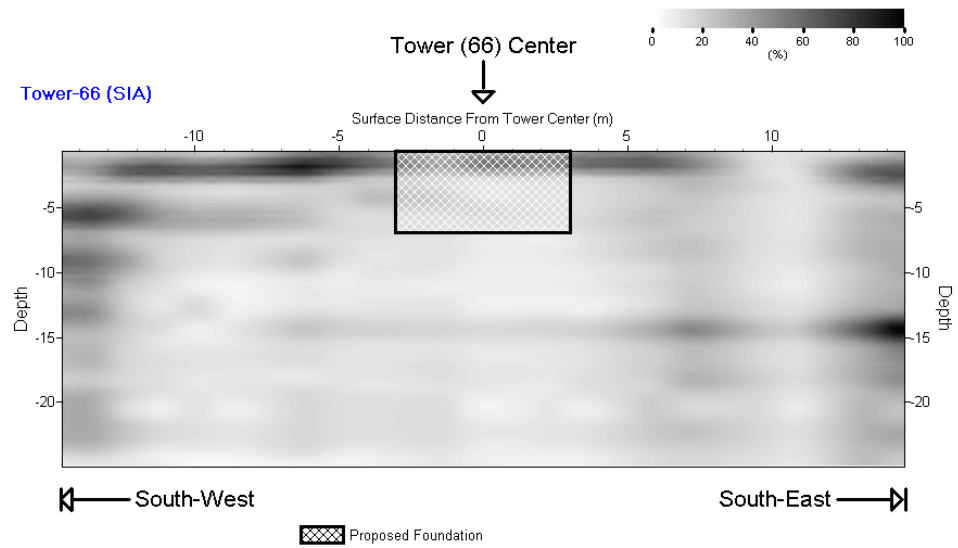
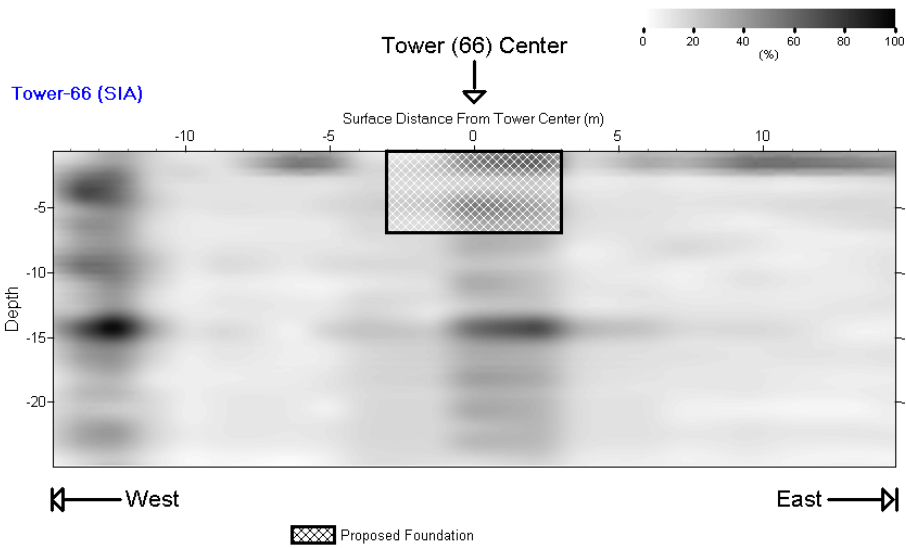
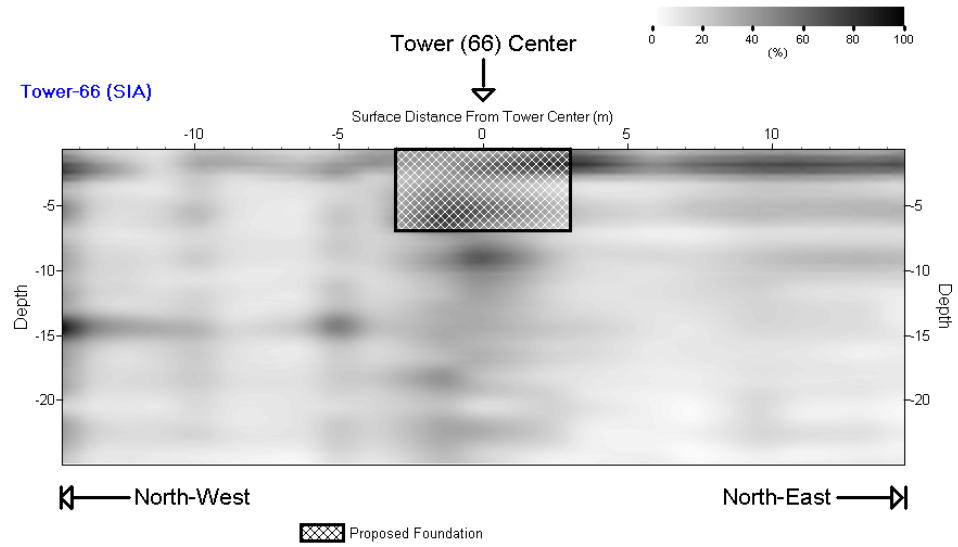
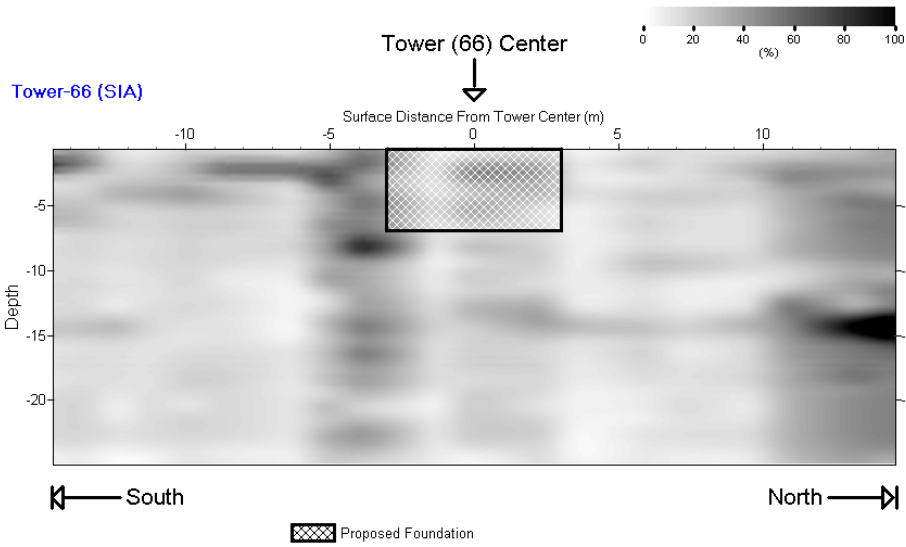
T-064



T-065



T-066



T-086

