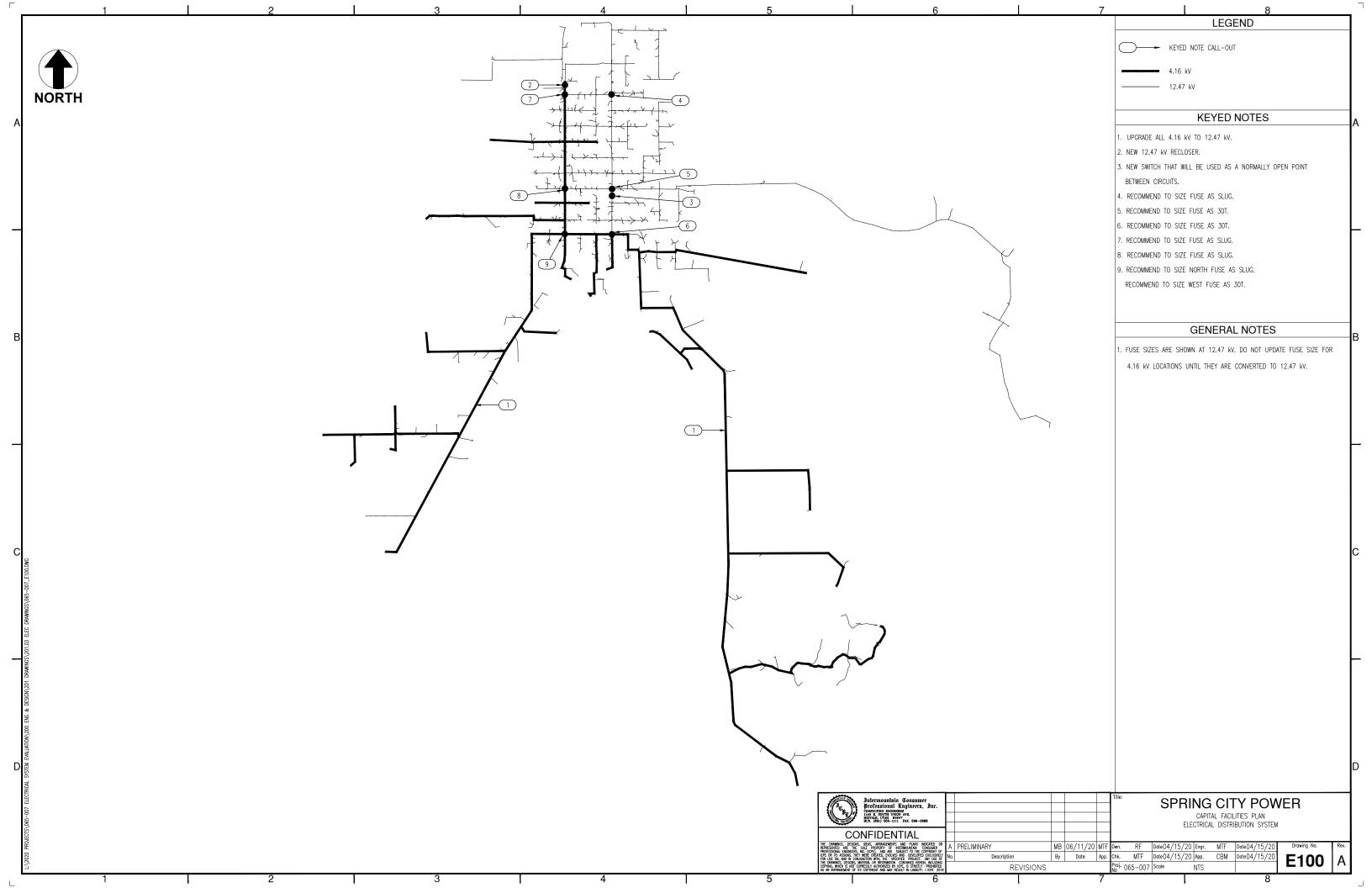
2020 Outage Cases	Comments/Results					
Base Case	Spring City is in the process of converting the 4.16 kV circuit to 12.47 kV. Once this is complete there will be two 12.47 kV circuits.					
	The 12.47 kV to 4.16 kV transformer is tapped to help improve voltage at 4.16 kV. As load is removed from the 4.16 kV circuit during the conversion, the voltage on the 4.16 kV circuit near the transformer should be monitored. When there is only a small amount of 4.16 kV load left on the transformer it may be possible to have overvoltage on the 4.16 kV circuit.					
	The model shows that voltage may be low at the end of the 4.16 kV line up Canal Canyon during peak load. The voltage is a little worse if generation is off. Spring City has indicated that they are not aware of voltage issues in Canal Canyon, but this is an area projected to grow in the near future.					
Base Case Proposed Solutions	Monitor the voltage on the 4.16 kV circuit as the conversion continues and remove the tap in the 12.47 kV to 4.16 kV transformer if necessary to stop overvoltage.					
	It is recommended to finish converting the 4.16 kV line up Canal Canyon to 12.47 kV before adding more load to it.					
No Generation	The load can all be fed from RMP.					
No Generation Proposed Solutions	None					
RMP Outage	Spring City only has one feed from the RMP Pine Creek substation. If RMP has an outage that prevents them from feeding Spring City then the power system will be downuntil RMP can fix the problem.					
RMP Outage Proposed Solutions	None. Spring City is not a large enough load to justify adding a second connection to RMP at this time.					
Loss of Transformer for 4.16 kV Circuit	Spring City has an extra transformer that can be used to replace the transformer. The 4.16 kV circuit will be out of service until the backup transformer is put into service.					
Loss of Transformer for 4.16 kV Circuit Proposed Solutions	The 4.16 kV circuit is in the process of being upgraded to 12.47 kV. Once the conversion is completed, the circuit will be able to be fed from more than one direction.					
Loss of 4.16 kV Circuit Recloser or Main Line	The 4.16 kV circuit will be out of service until the recloser or line is fixed.					
Loss of 4.16 kV Circuit Recloser or Main Line Proposed Solutions	The 4.16 kV circuit is in the process of being upgraded to 12.47 kV. Once the conversion is completed, the circuit will be able to be fed from more than one direction.					
Loss of 12.4 kV Recloser or Main Line	The 12.47 kV circuit will be out of service until the recloser or line is fixed.					
Loss of 12.4 kV Recloser or Main Line Proposed Solutions	The 4.16 kV circuit is in the process of being upgraded to 12.47 kV. Once the conversion is completed, the circuit will be able to be fed from more than one direction.					

2025 Outage Cases	Comments/Results				
	Load flows assume the following upgrades have occurred.				
Base Case	The 4.16 kV circuit has been converted to 12.47 kV. The 4.16 kV recloser has been replaced with a 12.47 kV recloser. A switch has been installed at 150 South 300 East. This switch is used as the new normally open point between the two circuits.				
Base Case Proposed Solutions	None				
No Generation	The load can all be fed from RMP.				
No Generation Proposed Solutions	None				
RMP Outage	Spring City only has one feed from the RMP Pine Creek substation. If RMP has an outage that prevents them from feeding Spring City then the power system will be downtil RMP can fix the problem.				
RMP Outage Proposed Solutions	None. Spring City is not a large enough load to justify adding a second connection to RMP at this time.				
Loss of 12.4 kV Circuit 1 Recloser or Main Line	Circuit 1 can be fed by circuit 2.				
Loss of 12.4 kV Circuit 1 Recloser or Main Line Proposed Solutions	None				
Loss of 12.4 kV Circuit 2 Recloser or Main Line	Circuit 2 can be fed by circuit 1.				
Loss of 12.4 kV Circuit 2 Recloser or Main Line Proposed Solutions	None				

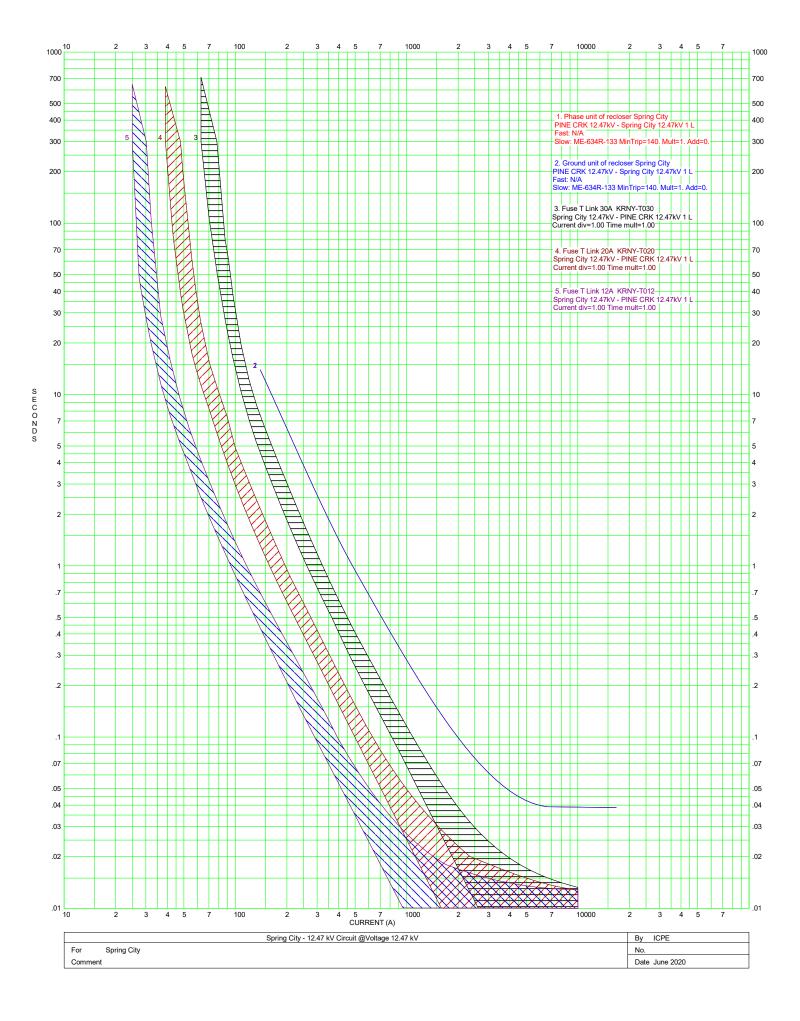
APPENDICES

- System Map
 Fuse TCC Curves
- 3. Load Flow Studies
- 4. Model Input Data

APPENDIX 1 – SYSTEM MAP										

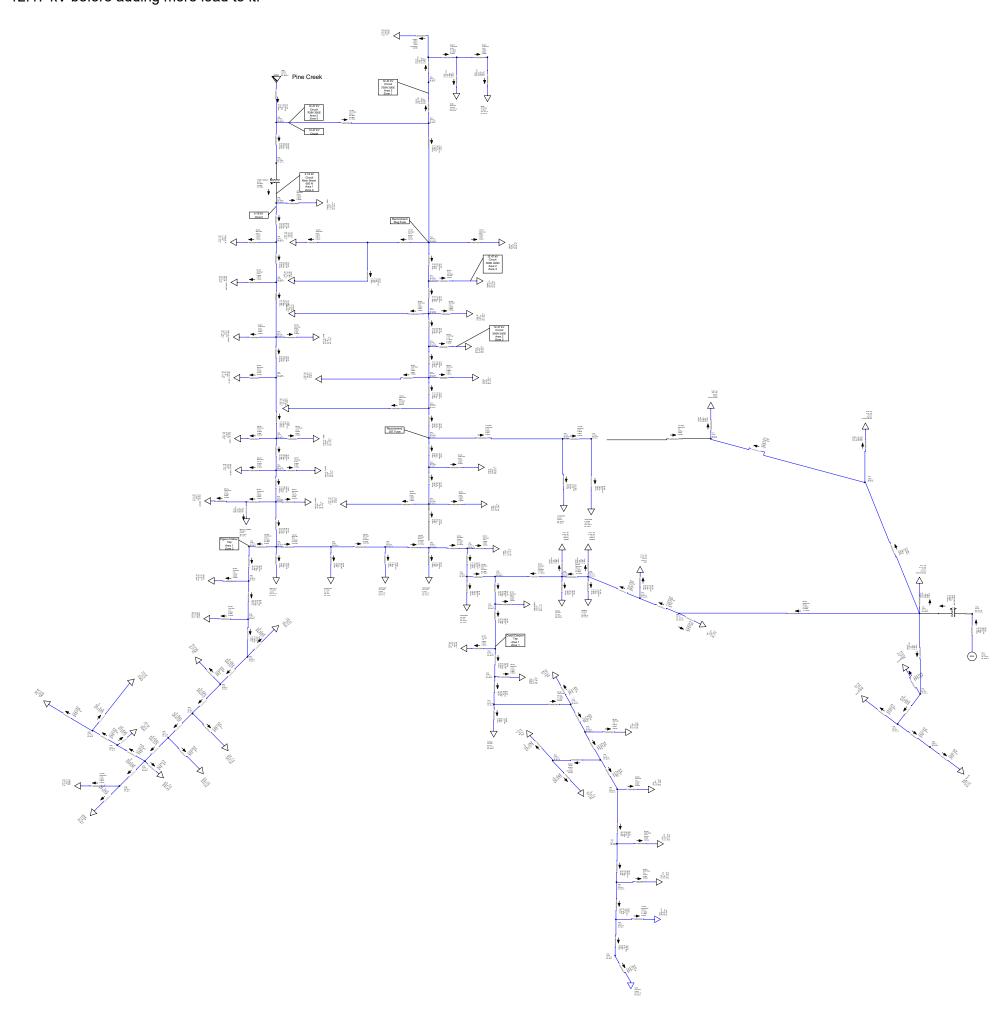


APPENDIX 2 – FUSE TCC CURVES							



APPENDIX 3 – LOAD FLOW STUDIES						

- 1. Spring City is in the process of converting its 4.16 kV circuit to 12.47 kV. Once this is complete there will be two 12.47 kV circuits. It is anticipated that the conversion will be completed in the next five years.
- 2. The 12.47 kV to 4.16 kV transformer is tapped to help improve voltage at 4.16 kV. As load is removed from the 4.16 kV circuit during the conversion, the voltage on the 4.16 kV circuit near the transformer should be monitored. When there is only a small amount of 4.16 kV load left on the transformer it may be possible to have overvoltage on the 4.16 kV circuit. Remove the tap on the transformer if necessary.
- 3. The model shows that voltage can be low at the end of the 4.16 kV line up Canal Canyon during peak load. The voltage is a little worse if generation is off. It is recommended to finish converting the 4.16 kV line up Canal Canyon to 12.47 kV before adding more load to it.



1. No issues. The load can all be fed from RMP.

