

Transformer Summary

<u>Specifications</u>	<u>Costs</u>
Designator:	Splices: \$680.00
Description: 2.4/19.2 kV - 50 kVA	Installed Transformer: \$3000.00
Rated kVA: 50.0	Secondary Buss: \$673.33
Max Connected Load (kVA): 65.0	Total Transformer Site: <u>\$4353.33</u>

Load Information

Total Connected Load w/o diversity (kVA): 37.5	Number of Lots Loaded: 5
Total Connected Load w/ diversity (kVA): 37.5	Power Factor: 0.880
Diversity Factor: 1.000	Number of Splices: 1
Max Fault Current Line-to-Line (Amps): 4998.2	% Voltage Drop Design Load: 1.613
Max Fault Current Line-to-Neutral (Amps): 2783.1	

Secondary Summary

<u>Cable Description</u>	<u>Total Length (ft)</u>	<u>Approximate Cost</u>		
		<u>Cable</u>	<u>Trench</u>	<u>Conduit</u>
2-1x4/0 AL & 1-1x2/0 AL	257.6	\$399.87	\$273.46	\$0.00
	Cost Totals:	\$399.87	\$273.46	\$0.00

Service Buss Summary

<u>Lot</u>	<u>Service Cable</u>	<u>% Voltage Drop</u>		<u>Length (ft.)</u>		<u>Approx. Cost</u>	
		<u>Design Load</u>	<u>Flicker</u>	<u>Avail.</u>	<u>Req.</u>	<u>Cable</u>	<u>Trench</u>
L33	2-1x4/0 AL & 1-1x2/0 AL	1.650	1.899	226.3	85.5	\$132.74	\$115.42
L34	2-1x4/0 AL & 1-1x2/0 AL	1.650	1.899	226.3	87.2	\$135.31	\$117.66
L32	2-1x4/0 AL & 1-1x2/0 AL	1.812	2.593	160.9	76.7	\$119.08	\$103.55
L35	2-1x4/0 AL & 1-1x2/0 AL	2.341	3.302	94.1	79.0	\$122.69	\$106.68
L36	2-1x4/0 AL & 1-1x2/0 AL	2.341	3.302	94.1	70.5	\$109.42	\$95.15

Transformer Summary

<u>Specifications</u>	<u>Costs</u>
Designator:	Splices: \$1360.00
Description: 2.4/19.2 kV - 50 kVA	Installed Transformer: \$3000.00
Rated kVA: 50.0	Secondary Buss: \$1712.05
Max Connected Load (kVA): 65.0	Total Transformer Site: <u>\$6072.05</u>

Load Information

Total Connected Load w/o diversity (kVA): 45.0	Number of Lots Loaded: 6
Total Connected Load w/ diversity (kVA): 45.0	Power Factor: 0.880
Diversity Factor: 1.000	Number of Splices: 2
Max Fault Current Line-to-Line (Amps): 4935.3	% Voltage Drop Design Load: 1.935
Max Fault Current Line-to-Neutral (Amps): 2733.9	

Secondary Summary

<u>Cable Description</u>	<u>Total Length (ft)</u>	<u>Approximate Cost</u>		
		<u>Cable</u>	<u>Trench</u>	<u>Conduit</u>
2-1x4/0 AL & 1-1x2/0 AL	125.2	\$194.43	\$115.07	\$0.00
2-1x500 kcmil AL & 1-1x4/0 AL	295.5	\$1023.83	\$378.73	\$0.00
Cost Totals:		\$1218.26	\$493.79	\$0.00

Service Buss Summary

<u>Lot</u>	<u>Service Cable</u>	<u>% Voltage Drop</u>		<u>Length (ft.)</u>		<u>Approx. Cost</u>	
		<u>Design Load</u>	<u>Flicker</u>	<u>Avail.</u>	<u>Req.</u>	<u>Cable</u>	<u>Trench</u>
L4	2-1x4/0 AL & 1-1x2/0 AL	1.972	1.899	226.3	88.6	\$137.63	\$119.68
L5	2-1x4/0 AL & 1-1x2/0 AL	1.972	1.899	226.3	88.9	\$138.08	\$120.07
L6	2-1x4/0 AL & 1-1x2/0 AL	2.171	2.751	146.0	105.0	\$163.04	\$141.77
L3	2-1x4/0 AL & 1-1x2/0 AL	2.365	2.404	178.7	97.0	\$150.60	\$130.95
L2	2-1x4/0 AL & 1-1x2/0 AL	2.645	3.053	117.6	106.7	\$165.70	\$144.08
L1	2-1x500 kcmil AL & 1-1x4/0 AL	2.763	3.603	110.6	88.9	\$307.98	\$120.01

Transformer Summary

<u>Specifications</u>	<u>Costs</u>
Designator:	Splices: \$2040.00
Description: 2.4/19.2 kV - 50 kVA	Installed Transformer: \$3000.00
Rated kVA: 50.0	Secondary Buss: \$2050.15
Max Connected Load (kVA): 65.0	Total Transformer Site: <u>\$7090.15</u>

Load Information

Total Connected Load w/o diversity (kVA): 60.0	Number of Lots Loaded: 8
Total Connected Load w/ diversity (kVA): 60.0	Power Factor: 0.880
Diversity Factor: 1.000	Number of Splices: 3
Max Fault Current Line-to-Line (Amps): 5204.7	% Voltage Drop Design Load: 2.580
Max Fault Current Line-to-Neutral (Amps): 2948.1	

Secondary Summary

<u>Cable Description</u>	<u>Total Length (ft)</u>	<u>Approximate Cost</u>		
		<u>Cable</u>	<u>Trench</u>	<u>Conduit</u>
2-1x4/0 AL & 1-1x2/0 AL	115.7	\$179.65	\$51.29	\$77.21
2-1x500 kcmil AL & 1-1x4/0 AL	370.3	\$1282.66	\$459.34	\$0.00
Cost Totals:		\$1462.31	\$510.63	\$77.21

Service Buss Summary

<u>Lot</u>	<u>Service Cable</u>	<u>% Voltage Drop</u>		<u>Length (ft.)</u>		<u>Approx. Cost</u>	
		<u>Design Load</u>	<u>Flicker</u>	<u>Avail.</u>	<u>Req.</u>	<u>Cable</u>	<u>Trench</u>
L9	2-1x4/0 AL & 1-1x2/0 AL	2.617	1.899	226.3	75.7	\$117.50	\$102.17
L10	2-1x4/0 AL & 1-1x2/0 AL	2.617	1.899	226.3	81.1	\$125.98	\$109.55
L30	2-1x4/0 AL & 1-1x2/0 AL	3.005	2.650	155.6	93.3	\$144.80	\$125.91
L31	2-1x4/0 AL & 1-1x2/0 AL	3.005	2.650	155.6	84.6	\$131.30	\$114.18
L7	2-1x4/0 AL & 1-1x2/0 AL	3.067	2.869	134.9	80.0	\$124.26	\$108.05
L8	2-1x4/0 AL & 1-1x2/0 AL	3.067	2.869	134.9	77.4	\$120.17	\$104.49
L11	2-1x4/0 AL & 1-1x2/0 AL	3.100	2.945	127.7	78.2	\$121.37	\$105.54
L12	2-1x4/0 AL & 1-1x2/0 AL	3.100	2.945	127.7	78.9	\$122.49	\$106.51

Transformer Summary

<u>Specifications</u>	<u>Costs</u>
Designator:	Splices: \$2040.00
Description: 2.4/19.2 kV - 50 kVA	Installed Transformer: \$3000.00
Rated kVA: 50.0	Secondary Buss: \$2535.64
Max Connected Load (kVA): 65.0	Total Transformer Site: <u>\$7575.64</u>

Load Information

Total Connected Load w/o diversity (kVA):	60.0	Number of Lots Loaded:	8
Total Connected Load w/ diversity (kVA):	60.0	Power Factor:	0.880
Diversity Factor:	1.000	Number of Splices:	3
Max Fault Current Line-to-Line (Amps):	5162.3	% Voltage Drop Design Load:	2.580
Max Fault Current Line-to-Neutral (Amps):	2913.7		

Secondary Summary

<u>Cable Description</u>	<u>Total Length (ft)</u>	<u>Approximate Cost</u>		
		<u>Cable</u>	<u>Trench</u>	<u>Conduit</u>
2-1x4/0 AL & 1-1x2/0 AL	124.0	\$192.46	\$51.30	\$77.22
2-1x500 kcmil AL & 1-1x4/0 AL	452.3	\$1567.05	\$570.16	\$77.45
Cost Totals:		\$1759.51	\$621.46	\$154.67

Service Buss Summary

<u>Lot</u>	<u>Service Cable</u>	<u>% Voltage Drop</u>		<u>Length (ft.)</u>		<u>Approx. Cost</u>	
		<u>Design Load</u>	<u>Flicker</u>	<u>Avail.</u>	<u>Req.</u>	<u>Cable</u>	<u>Trench</u>
L14	2-1x4/0 AL & 1-1x2/0 AL	2.617	1.899	226.3	77.6	\$120.53	\$104.81
L15	2-1x4/0 AL & 1-1x2/0 AL	2.617	1.899	226.3	79.8	\$123.82	\$107.67
L16	2-1x4/0 AL & 1-1x2/0 AL	2.896	3.202	103.5	74.9	\$116.27	\$101.10
L13	2-1x4/0 AL & 1-1x2/0 AL	2.993	2.378	181.2	81.1	\$125.97	\$109.54
L26	2-1x4/0 AL & 1-1x2/0 AL	3.045	2.737	147.3	79.9	\$124.00	\$107.83
L27	2-1x4/0 AL & 1-1x2/0 AL	3.045	2.737	147.3	83.8	\$130.12	\$113.15
L28	2-1x4/0 AL & 1-1x2/0 AL	3.317	3.130	110.3	91.3	\$141.74	\$123.25
L29	2-1x4/0 AL & 1-1x2/0 AL	3.317	3.130	110.3	90.7	\$140.75	\$122.39

Transformer Summary

<u>Specifications</u>	<u>Costs</u>
Designator:	Splices: \$2720.00
Description: 2.4/19.2 kV - 75 kVA	Installed Transformer: \$2900.00
Rated kVA: 75.0	Secondary Buss: \$2471.78
Max Connected Load (kVA): 98.0	Total Transformer Site: <u>\$8091.77</u>

Load Information

Total Connected Load w/o diversity (kVA): 67.5	Number of Lots Loaded: 9
Total Connected Load w/ diversity (kVA): 67.5	Power Factor: 0.880
Diversity Factor: 1.000	Number of Splices: 4
Max Fault Current Line-to-Line (Amps): 6405.7	% Voltage Drop Design Load: 2.024
Max Fault Current Line-to-Neutral (Amps): 3353.1	

Secondary Summary

<u>Cable Description</u>	<u>Total Length (ft)</u>	<u>Approximate Cost</u>		
		<u>Cable</u>	<u>Trench</u>	<u>Conduit</u>
2-1x4/0 AL & 1-1x2/0 AL	30.0	\$46.58	\$6.75	\$0.00
2-1x500 kcmil AL & 1-1x4/0 AL	510.8	\$1769.42	\$649.03	\$0.00
Cost Totals:		\$1816.00	\$655.78	\$0.00

Service Buss Summary

<u>Lot</u>	<u>Service Cable</u>	<u>% Voltage Drop</u>		<u>Length (ft.)</u>		<u>Approx. Cost</u>	
		<u>Design Load</u>	<u>Flicker</u>	<u>Avail.</u>	<u>Req.</u>	<u>Cable</u>	<u>Trench</u>
L20	2-1x4/0 AL & 1-1x2/0 AL	2.061	1.342	278.8	79.5	\$123.44	\$107.34
L21	2-1x4/0 AL & 1-1x2/0 AL	2.061	1.342	278.8	82.1	\$127.45	\$110.83
L19	2-1x4/0 AL & 1-1x2/0 AL	2.369	1.717	243.4	81.2	\$126.08	\$109.64
L17	2-1x4/0 AL & 1-1x2/0 AL	2.700	2.484	171.1	89.7	\$139.25	\$121.08
L18	2-1x4/0 AL & 1-1x2/0 AL	2.700	2.484	171.1	82.1	\$127.53	\$110.90
L22	2-1x4/0 AL & 1-1x2/0 AL	2.908	2.208	197.2	82.7	\$128.45	\$111.69
L23	2-1x4/0 AL & 1-1x2/0 AL	2.908	2.208	197.2	82.0	\$127.32	\$110.71
L24	2-1x4/0 AL & 1-1x2/0 AL	3.293	3.101	113.0	62.0	\$96.20	\$83.65
L25	2-1x4/0 AL & 1-1x2/0 AL	3.293	3.101	113.0	73.5	\$114.04	\$99.16

Service / Lot Summary

Lot: L1	Heat Pump Size (Tons): 5.0
Load per Meter(kVA): 7.5	Residence Size (Square feet): 2500.00
Total Load(kVA): 7.5	Residence Type: Single Family
Power Factor - Design Load: 0.880	Design Type: AC-Gas Range &
Power Factor - Flicker: 0.700	Line-to-Line Fault Current (Amps): 3495.2
Number of Meters: 1	Line-to-Neutral Fault Current (Amps): 1583.4

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	45.0
% Voltage Drop Design Load:	1.935
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		7.5	87.3	0.119	0.550
2	2-1x500 kcmil AL & 1-1x4/0		15.0	102.9	0.280	0.648
3	2-1x500 kcmil AL & 1-1x4/0		22.5	105.4	0.430	0.664
Total % Voltage Drop to Service Stub:					2.763	3.603

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x500 kcmil AL & 1-1x4/0 AL	88.9	3,117.6	110.6

Service / Lot Summary

	Lot: L2	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3381.4
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1584.5

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	45.0
% Voltage Drop Design Load:	1.935
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		15.0	102.9	0.280	0.648
2	2-1x500 kcmil AL & 1-1x4/0		22.5	105.4	0.430	0.664
Total % Voltage Drop to Service Stub:					2.645	3.053

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	106.7	1,760.6	117.6

Service / Lot Summary

	Lot: L3	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 4113.5
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2069.5

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	45.0
% Voltage Drop Design Load:	1.935
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		22.5	105.4	0.430	0.664
Total % Voltage Drop to Service Stub:					2.365	2.404

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	97.0	1,873.6	178.7

Service / Lot Summary

	Lot: L4	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 4935.3
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2733.9

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	45.0
% Voltage Drop Design Load:	1.935
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
Total % Voltage Drop to Service Stub:					1.972	1.899

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	88.6	2,032.3	226.3

Service / Lot Summary

	Lot: L5	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 4929.7
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2729.5

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	45.0
% Voltage Drop Design Load:	1.935
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
Total % Voltage Drop to Service Stub:					1.972	1.899

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	88.9	2,032.3	226.3

Service / Lot Summary

	Lot: L6	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3562.1
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1773.9

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	45.0
% Voltage Drop Design Load:	1.935
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x4/0 AL & 1-1x2/0 AL		7.5	95.2	0.236	1.010
Total % Voltage Drop to Service Stub:					2.171	2.751

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	105.0	1,952.0	146.0

Service / Lot Summary

	Lot: L7	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3824.3
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1851.1

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		15.0	179.1	0.487	1.129
Total % Voltage Drop to Service Stub:					3.067	2.869

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	80.0	1,589.7	134.9

Service / Lot Summary

	Lot: L8	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3855.7
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1869.8

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		15.0	179.1	0.487	1.129
Total % Voltage Drop to Service Stub:					3.067	2.869

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	77.4	1,589.7	134.9

Service / Lot Summary

	Lot: L9	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 5204.7
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2948.1

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
Total % Voltage Drop to Service Stub:					2.617	1.899

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	75.7	1,771.5	226.3

Service / Lot Summary

	Lot: L10	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 5087.7
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2853.9

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
Total % Voltage Drop to Service Stub:					2.617	1.899

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	81.1	1,771.5	226.3

Service / Lot Summary

	Lot: L11	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3770.9
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1814.0

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		15.0	191.1	0.519	1.205
Total % Voltage Drop to Service Stub:					3.100	2.945

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	78.2	1,576.5	127.7

Service / Lot Summary

	Lot: L12	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3762.6
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1809.1

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		15.0	191.1	0.519	1.205
Total % Voltage Drop to Service Stub:					3.100	2.945

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	78.9	1,576.5	127.7

Service / Lot Summary

	Lot: L13	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 4377.2
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2244.6

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		22.5	101.2	0.413	0.638
Total % Voltage Drop to Service Stub:					2.993	2.378

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	81.1	1,619.8	181.2

Service / Lot Summary

	Lot: L14	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 5162.3
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2913.7

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
Total % Voltage Drop to Service Stub:					2.617	1.899

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	77.6	1,771.5	226.3

Service / Lot Summary

	Lot: L15	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 5117.0
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2877.3

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
Total % Voltage Drop to Service Stub:					2.617	1.899

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	79.8	1,771.5	226.3

Service / Lot Summary

	Lot: L16	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3568.0
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1680.0

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		7.5	231.9	0.315	1.461
Total % Voltage Drop to Service Stub:					2.896	3.202

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	74.9	1,659.1	103.5

Service / Lot Summary

	Lot: L17	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 4131.1
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1834.3

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 75 kVA Padmount
Total Load (kVA):	67.5
% Voltage Drop Design Load:	2.024
% Voltage Drop Flicker:	1.183

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		15.0	121.7	0.331	0.767
2	2-1x500 kcmil AL & 1-1x4/0		22.5	69.8	0.346	0.440
Total % Voltage Drop to Service Stub:					2.700	2.484

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	89.7	1,738.2	171.1

Service / Lot Summary

	Lot: L18	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 4238.0
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1887.9

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 75 kVA Padmount
Total Load (kVA):	67.5
% Voltage Drop Design Load:	2.024
% Voltage Drop Flicker:	1.183

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		15.0	121.7	0.331	0.767
2	2-1x500 kcmil AL & 1-1x4/0		22.5	69.8	0.346	0.440
Total % Voltage Drop to Service Stub:					2.700	2.484

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	82.1	1,738.2	171.1

Service / Lot Summary

	Lot: L19	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 5486.5
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2656.2

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 75 kVA Padmount
Total Load (kVA):	67.5
% Voltage Drop Design Load:	2.024
% Voltage Drop Flicker:	1.183

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		22.5	69.8	0.346	0.440
Total % Voltage Drop to Service Stub:					2.369	1.717

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	81.2	1,871.9	243.4

Service / Lot Summary

	Lot: L20	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 6405.7
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 3353.1

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 75 kVA Padmount
Total Load (kVA):	67.5
% Voltage Drop Design Load:	2.024
% Voltage Drop Flicker:	1.183

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
Total % Voltage Drop to Service Stub:					2.061	1.342

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	79.5	1,996.6	278.8

Service / Lot Summary

	Lot: L21	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 6321.1
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 3294.6

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 75 kVA Padmount
Total Load (kVA):	67.5
% Voltage Drop Design Load:	2.024
% Voltage Drop Flicker:	1.183

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
Total % Voltage Drop to Service Stub:					2.061	1.342

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	82.1	1,996.6	278.8

Service / Lot Summary

	Lot: L22	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 4600.6
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2099.1

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 75 kVA Padmount
Total Load (kVA):	67.5
% Voltage Drop Design Load:	2.024
% Voltage Drop Flicker:	1.183

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		30.0	147.6	0.884	0.931
Total % Voltage Drop to Service Stub:					2.908	2.208

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	82.7	1,654.3	197.2

Service / Lot Summary

	Lot: L23	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 4613.0
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2105.7

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 75 kVA Padmount
Total Load (kVA):	67.5
% Voltage Drop Design Load:	2.024
% Voltage Drop Flicker:	1.183

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		30.0	147.6	0.884	0.931
Total % Voltage Drop to Service Stub:					2.908	2.208

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	82.0	1,654.3	197.2

Service / Lot Summary

	Lot: L24	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3813.6
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1639.2

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 75 kVA Padmount
Total Load (kVA):	67.5
% Voltage Drop Design Load:	2.024
% Voltage Drop Flicker:	1.183

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		15.0	141.7	0.385	0.893
2	2-1x500 kcmil AL & 1-1x4/0		30.0	147.6	0.884	0.931
Total % Voltage Drop to Service Stub:					3.293	3.101

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	62.0	1,498.6	113.0

Service / Lot Summary

	Lot: L25	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3683.1
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1578.3

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 75 kVA Padmount
Total Load (kVA):	67.5
% Voltage Drop Design Load:	2.024
% Voltage Drop Flicker:	1.183

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		15.0	141.7	0.385	0.893
2	2-1x500 kcmil AL & 1-1x4/0		30.0	147.6	0.884	0.931
Total % Voltage Drop to Service Stub:					3.293	3.101

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	73.5	1,498.6	113.0

Service / Lot Summary

	Lot: L26	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3855.4
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1962.3

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x4/0 AL & 1-1x2/0 AL		15.0	33.0	0.163	0.350
2	2-1x4/0 AL & 1-1x2/0 AL		15.0	61.0	0.302	0.647
Total % Voltage Drop to Service Stub:					3.045	2.737

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	79.9	1,598.6	147.3

Service / Lot Summary

	Lot: L27	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3808.6
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1931.7

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x4/0 AL & 1-1x2/0 AL		15.0	33.0	0.163	0.350
2	2-1x4/0 AL & 1-1x2/0 AL		15.0	61.0	0.302	0.647
Total % Voltage Drop to Service Stub:					3.045	2.737

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	83.8	1,598.6	147.3

Service / Lot Summary

	Lot: L28	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3465.2
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1626.8

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		15.0	33.1	0.090	0.209
2	2-1x500 kcmil AL & 1-1x4/0		15.0	86.2	0.234	0.543
3	2-1x500 kcmil AL & 1-1x4/0		22.5	101.2	0.413	0.638
Total % Voltage Drop to Service Stub:					3.317	3.130

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	91.3	1,488.7	110.3

Service / Lot Summary

	Lot: L29	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3471.5
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1630.3

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x500 kcmil AL & 1-1x4/0		15.0	33.1	0.090	0.209
2	2-1x500 kcmil AL & 1-1x4/0		15.0	86.2	0.234	0.543
3	2-1x500 kcmil AL & 1-1x4/0		22.5	101.2	0.413	0.638
Total % Voltage Drop to Service Stub:					3.317	3.130

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	90.7	1,488.7	110.3

Service / Lot Summary

	Lot: L30	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3794.5
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1922.6

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x4/0 AL & 1-1x2/0 AL		15.0	33.0	0.163	0.350
2	2-1x4/0 AL & 1-1x2/0 AL		15.0	52.7	0.261	0.559
Total % Voltage Drop to Service Stub:					3.005	2.650

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	93.3	1,615.1	155.6

Service / Lot Summary

	Lot: L31	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3898.5
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1990.7

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	60.0
% Voltage Drop Design Load:	2.580
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x4/0 AL & 1-1x2/0 AL		15.0	33.0	0.163	0.350
2	2-1x4/0 AL & 1-1x2/0 AL		15.0	52.7	0.261	0.559
Total % Voltage Drop to Service Stub:					3.005	2.650

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	84.6	1,615.1	155.6

Service / Lot Summary

	Lot: L32	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 4068.3
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2104.4

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	37.5
% Voltage Drop Design Load:	1.613
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x4/0 AL & 1-1x2/0 AL		7.5	80.3	0.199	0.852
Total % Voltage Drop to Service Stub:					1.812	2.593

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	76.7	2,097.3	160.9

Service / Lot Summary

	Lot: L33	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 4998.2
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2783.1

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	37.5
% Voltage Drop Design Load:	1.613
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
Total % Voltage Drop to Service Stub:					1.650	1.899

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	85.5	2,162.7	226.3

Service / Lot Summary

	Lot: L34	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 4964.9
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 2757.0

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	37.5
% Voltage Drop Design Load:	1.613
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
Total % Voltage Drop to Service Stub:					1.650	1.899

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	87.2	2,162.7	226.3

Service / Lot Summary

	Lot: L35	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3313.9
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1620.8

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	37.5
% Voltage Drop Design Load:	1.613
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x4/0 AL & 1-1x2/0 AL		15.0	147.2	0.728	1.562
Total % Voltage Drop to Service Stub:					2.341	3.302

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	79.0	1,883.2	94.1

Service / Lot Summary

	Lot: L36	Heat Pump Size (Tons): 5.0
Load per Meter(kVA):	7.5	Residence Size (Square feet): 2500.00
Total Load(kVA):	7.5	Residence Type: Single Family
Power Factor - Design Load:	0.880	Design Type: AC-Gas Range &
Power Factor - Flicker:	0.700	Line-to-Line Fault Current (Amps): 3391.6
Number of Meters: 1		Line-to-Neutral Fault Current (Amps): 1668.1

Transformer Summary

Designator:	
Transformer Description:	2.4/19.2 kV - 50 kVA Padmount
Total Load (kVA):	37.5
% Voltage Drop Design Load:	1.613
% Voltage Drop Flicker:	1.740

Voltage Drop Determination / Cable Segment Detail

<u>Segment #</u>	<u>Description</u>	<u>RDX</u>	<u>Load (kVA)</u>	<u>Length (ft.)</u>	<u>% Voltage Drop</u>	
					<u>Design Load</u>	<u>Flicker</u>
1	2-1x4/0 AL & 1-1x2/0 AL		15.0	147.2	0.728	1.562
Total % Voltage Drop to Service Stub:					2.341	3.302

Service Determination

<u>Service Cable</u>	<u>Service Length (ft.)</u>	<u>Max. Service Lengths (ft.)</u>	
		<u>Design Load</u>	<u>Flicker</u>
2-1x4/0 AL & 1-1x2/0 AL	70.5	1,883.2	94.1
