Appendix 3-C
Typical Drawings
Notes:
- Cross arm configuration and/or pole top arrangement may vary.
- Pole structure diameter is approximately 7-9 inches at pole structure tip. Pole structure diameter at base will vary.

Figure 3C-1
Typical Existing 69kV Wood Pole Structures
45 to 75 feet

Notes:
- Cross arm configuration and/or pole top arrangement may vary.
- Pole structure diameter is approximately 7-9 inches at pole structure tip. Pole structure diameter at base will vary.

Figure 3C-2
Typical Existing 69kV Wood Tangent H-Frame
Pole Structure
Figure 3C-3
Typical Existing 69kV Wood Dead End H-Frame Pole Structure

Notes:
- Cross arm configuration and/or pole top arrangement may vary.
- Pole structure diameter is approximately 7-9 inches at pole structure tip. Pole structure diameter at base will vary.

75 feet
Notes:
- Cross arm configuration and/or pole top arrangement may vary.
- Pole structure diameter is approximately 7-9 inches at pole structure tip. Pole structure diameter at base will vary.

Figure 3C-4
Typical Existing 69kV Wood Dead End
3-Pole Structure
Figure 3C-5
Typical Existing 69kV Steel Lattice Structure

Note:
- Structure is approximately 22-29 feet wide at base and 5 feet wide at top.
Notes:
- Pole foundations will be direct-embed.
- The number of levels of distribution underbuild will vary.
- Distribution cross arm length and spacing may vary.
- Communications attachments may also be present.
- Pole structure diameter is approximately 20-30 inches at ground level and 8-14 inches at pole structure tip.

Figure 3C-6
Typical Proposed 69kV Steel Tangent
Single-Circuit Pole Structure
Notes:
- Pole foundations will be direct-embed.
- The number of levels of distribution underbuild will vary.
- Distribution cross arm length and spacing may vary.
- Communications attachments may also be present.
- Pole structure diameter is approximately 20-30 inches at ground level and 8-14 inches at pole structure tip.
Notes:
- Pier foundations will be used.
- Steel arms are typically used for dead end poles.
- The number of levels of distribution underbuild will vary.
- Distribution cross arm length and spacing may vary.
- Communications attachments may also be present.
- Pole structure diameter is unknown, subject to the design of the pole structure manufacturer.
Figure 3C-9
Modified 69kV Steel Dead End 3-Way
Pole Structure

Notes:
- Pier foundations will be used.
- The number of levels of distribution underbuild will vary.
- Distribution cross arm length and spacing may vary.
- Communications attachments may also be present.
- Pole structure diameter is unknown, subject to the design of the pole structure manufacturer.
Notes:
- Pole foundations will be direct-embed.
- Distribution cross arm length and spacing may vary.
- Communications attachments may also be present.
- Pole structure diameter is approximately 20-30 inches at ground level and 10-14 inches at pole structure tip.
Notes:
- Pole foundations will be direct-embed.
- Distribution cross arm length and spacing may vary.
- Communications attachments may also be present.
- Pole structure diameter is approximately 20-30 inches at ground level and 10-14 inches at pole structure tip.
Notes:
- Pier foundations will be used.
- Distribution cross arm length and spacing may vary.
- Pole structure diameter is unknown, subject to the design of the pole structure manufacturer.
Notes:
- Pole foundations will be direct-embed.
- Distribution cross arm length and spacing may vary.
- Communications attachments may also be present.
- Pole structure diameter is unknown, subject to the design of the pole structure manufacturer.
Notes:
- Pole foundations will be direct-embed.
- Distribution cross arm length and spacing may vary.
- Communications attachments may also be present.
- Pole structure diameter is approximately 20-30 inches at ground level and 8-14 inches at pole structure tip.
Figure 3C-15
Typical 69kV Underground Vault
Figure 3C-16
Typical 69kV Underground Duct Bank
Figure 3C-18
Typical Guard Structure - 2