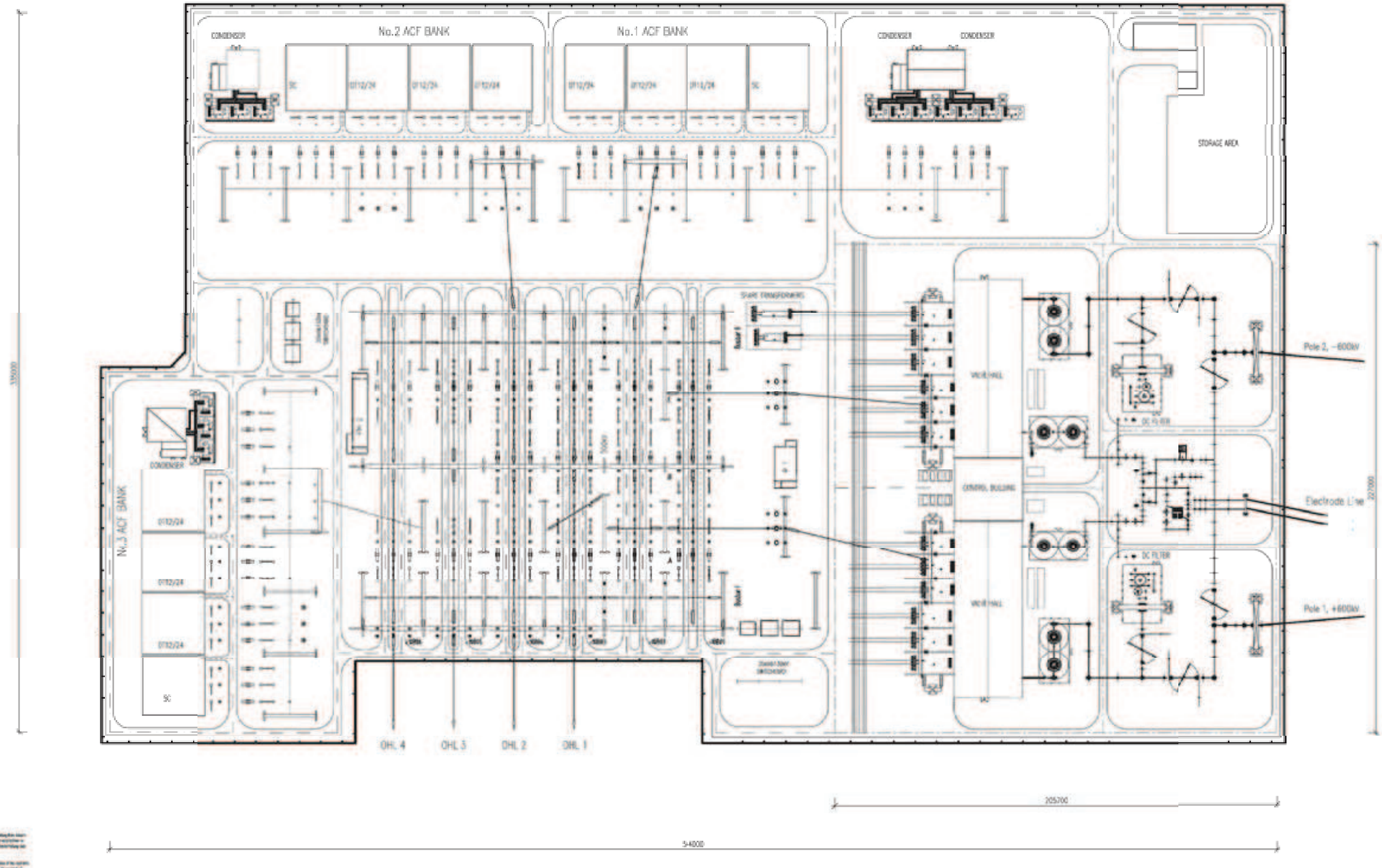


Figure 2.1-1: Converter Station General Layout

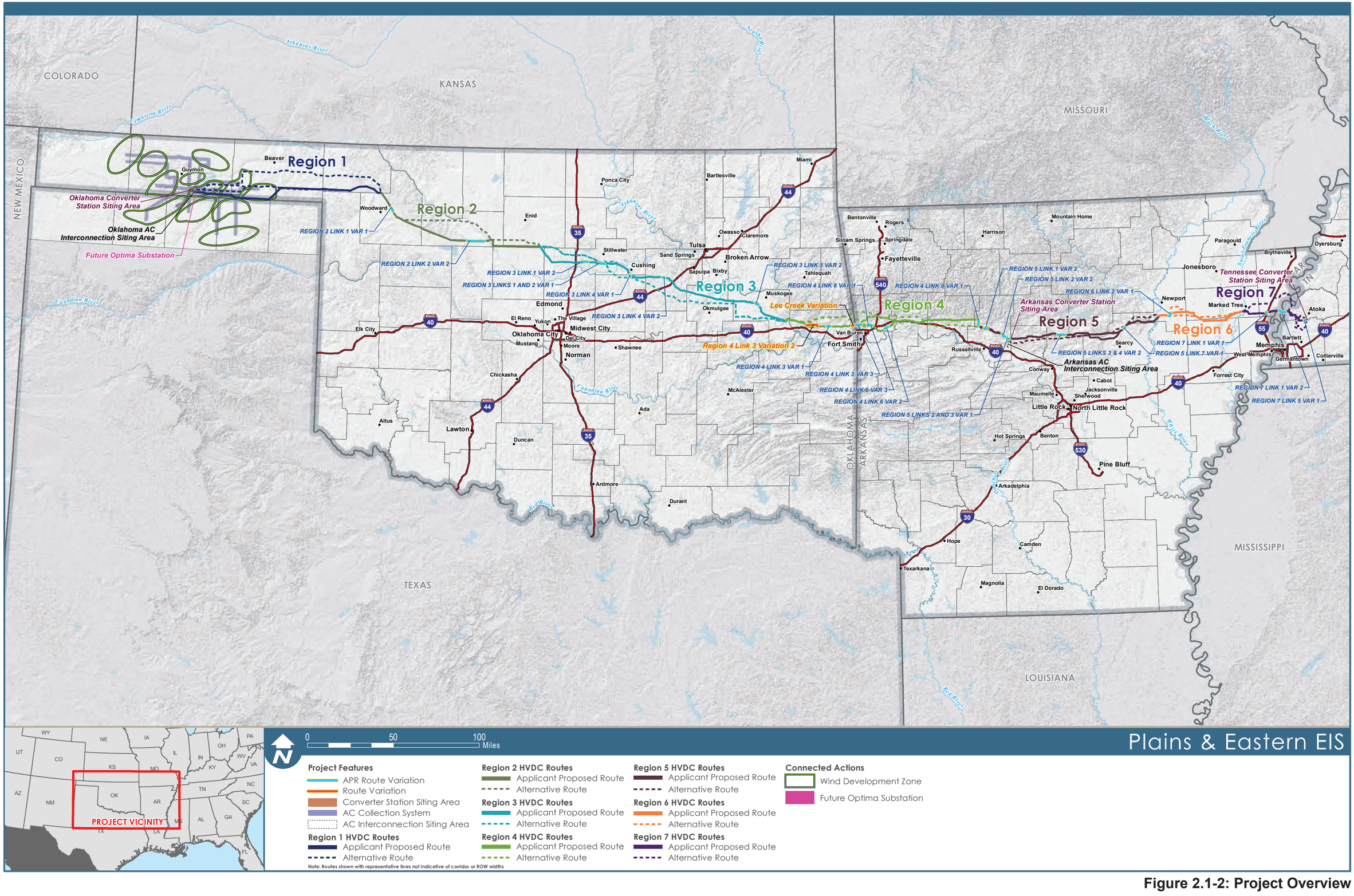
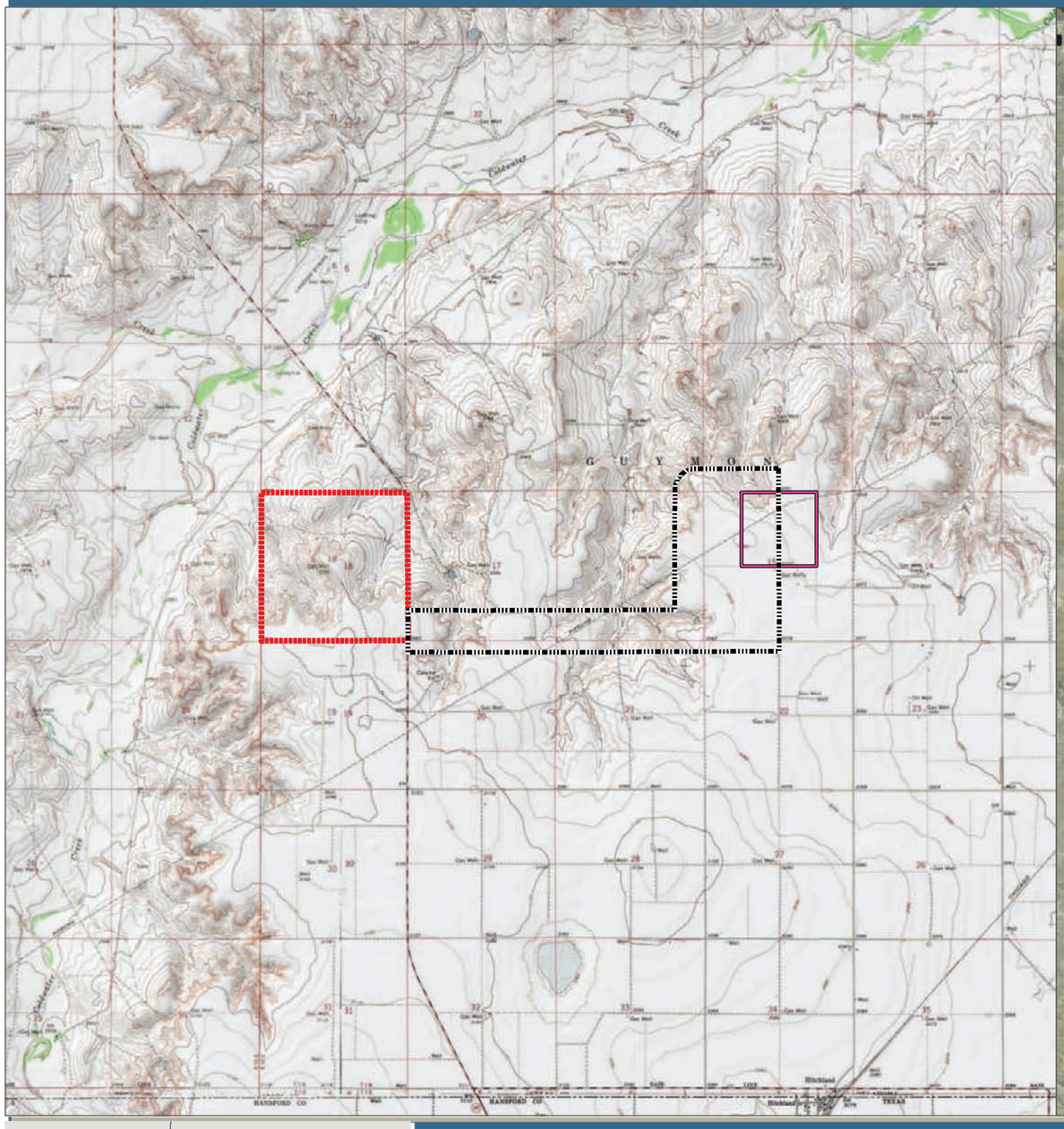


Figure 2.1-2: Project Overview



0 1 2 Miles

Plains & Eastern EIS

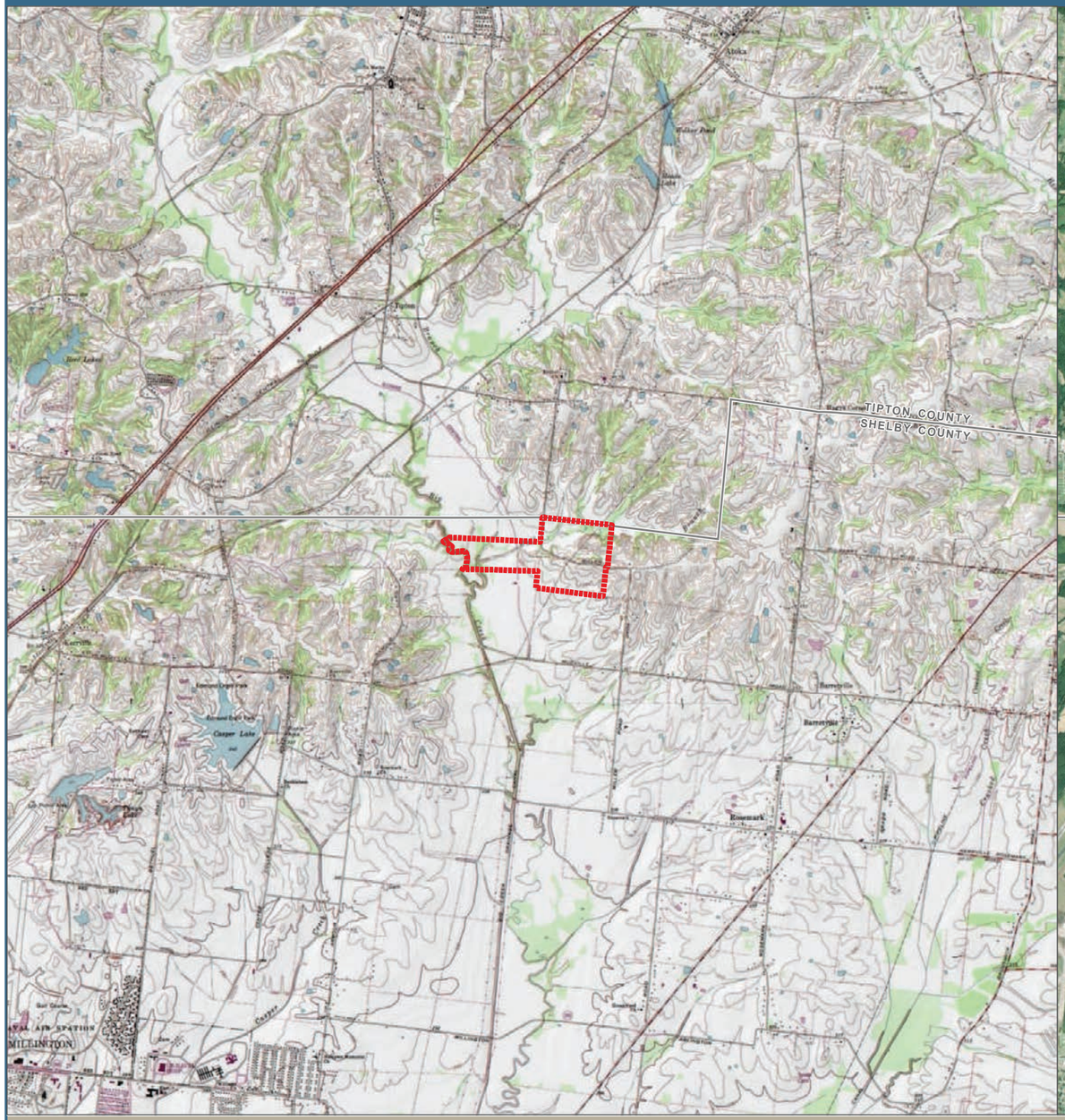
Project Features

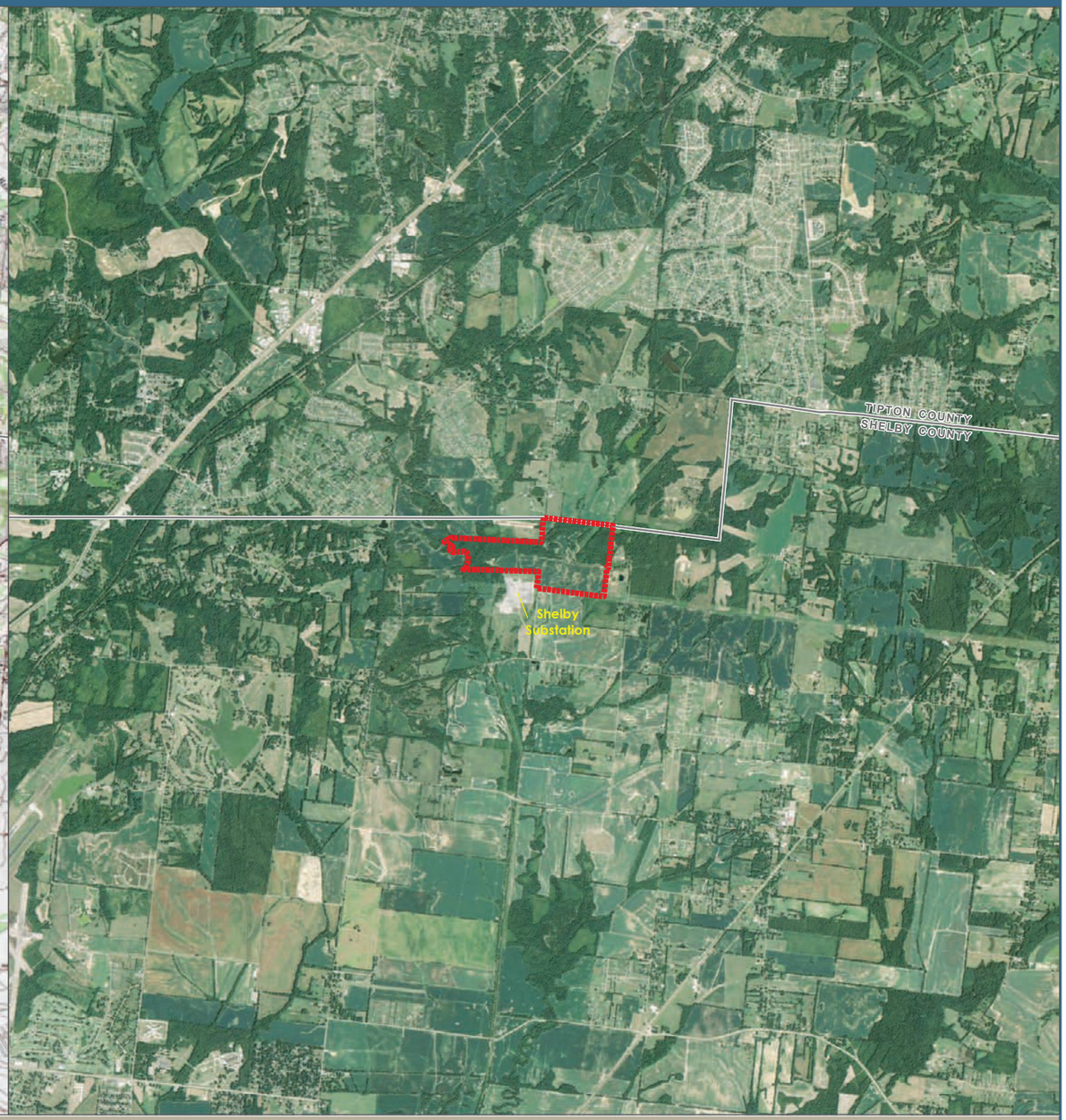
- AC Interconnection Siting Area
- Converter Station Siting Area
- Future Optima Substation

P:\5233_Plains_and_Eastern_FEIS\GIS\Layouts\FEIS\Chapter2\TexasCo_Converter.mxd Date Modified: 7/29/2015

Data Sources: US Topo Maps (USGS 2014b); Aerial Photography (NAIP 2013b)

Figure 2.1-3: Oklahoma Converter Station Siting Area Property Location and Aerial





0 1 2 Miles

Project Features

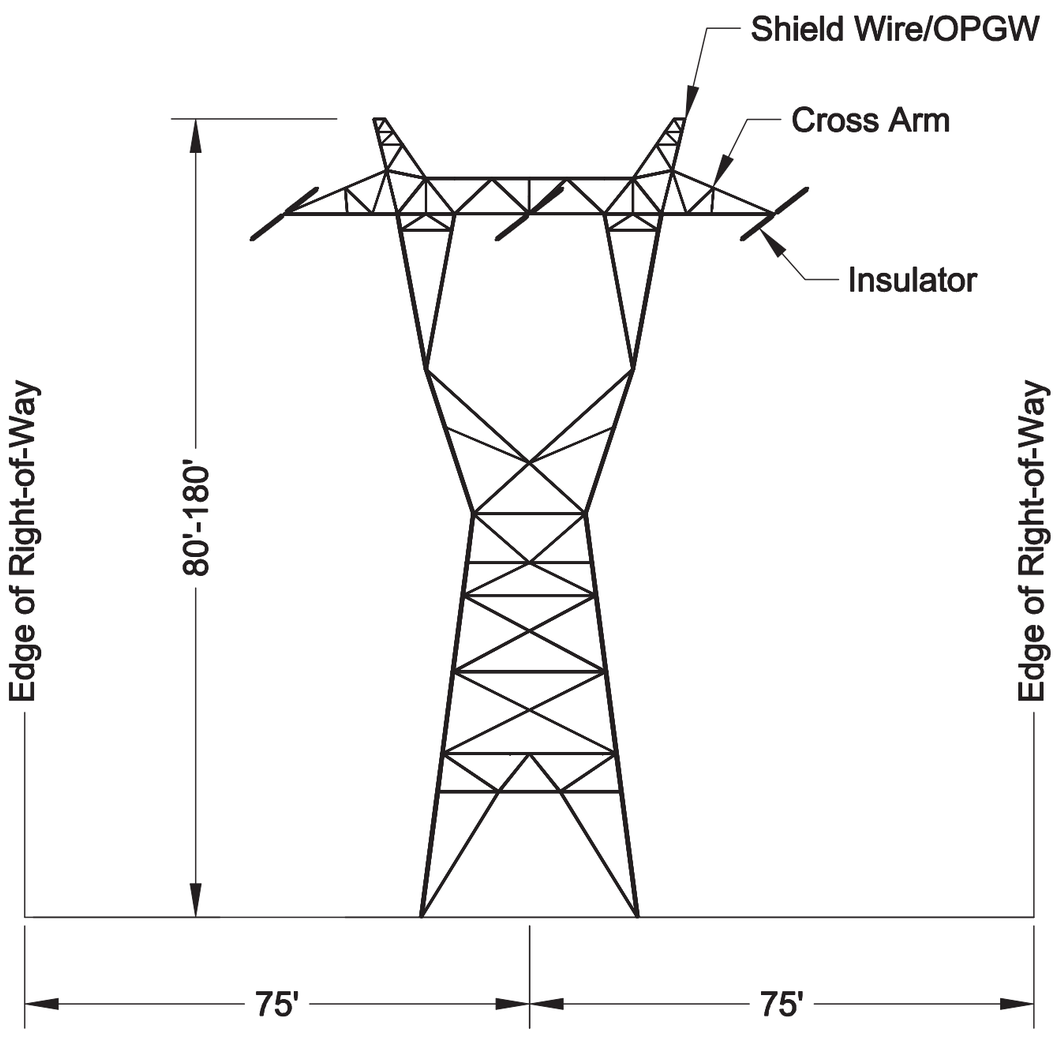
Converter Station Siting Area

Plains & Eastern EIS

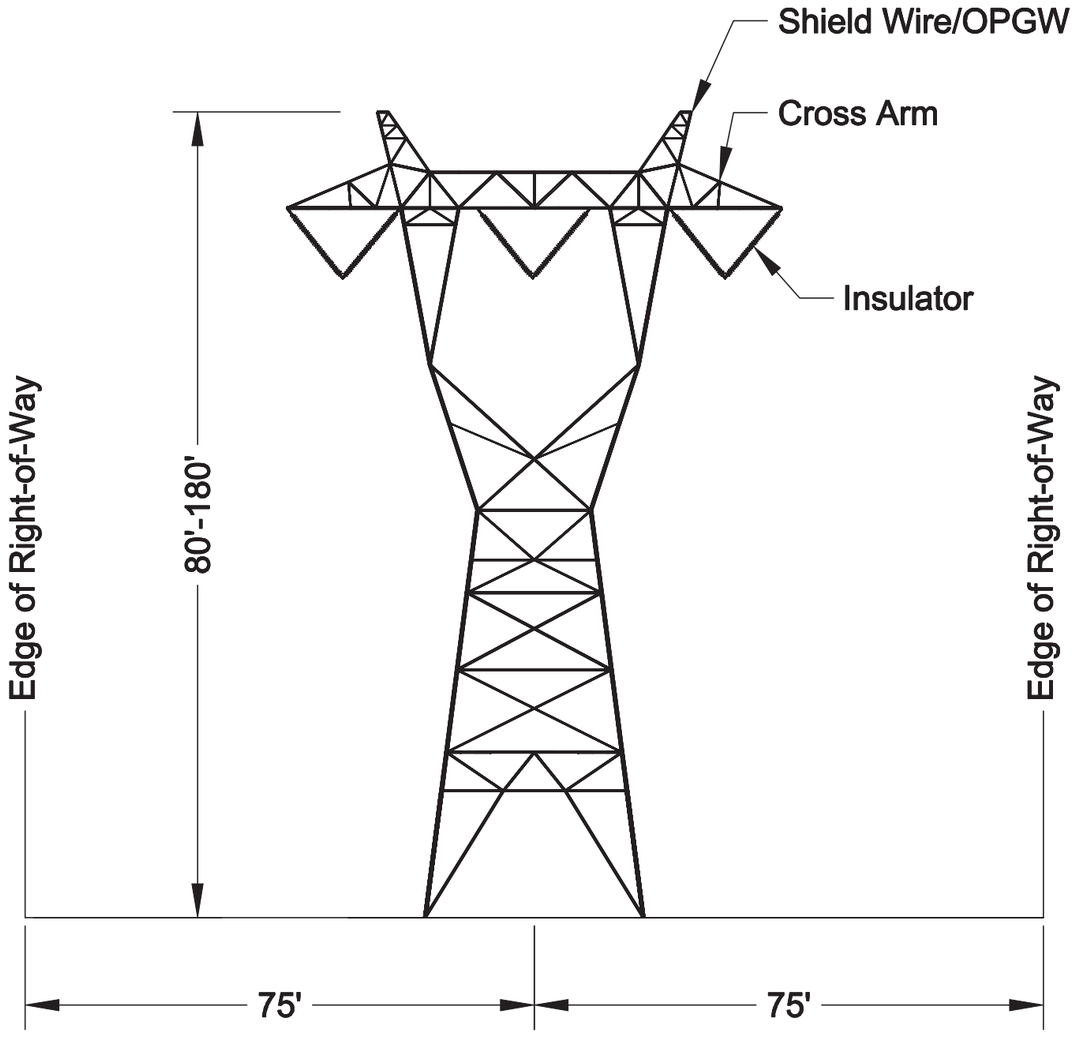
P:\6233_Plains_and_Eastern_FEIS\GIS\Layouts\FEIS\Chapter2\Shelby_Converter.mxd Date Modified: 7/22/2015

Data Sources: US Topo Maps (USGS 2014b); Aerial Photography (NAIP 2012a)

Figure 2.1-4: Tennessee Converter Station Siting Area Property Location and Aerial



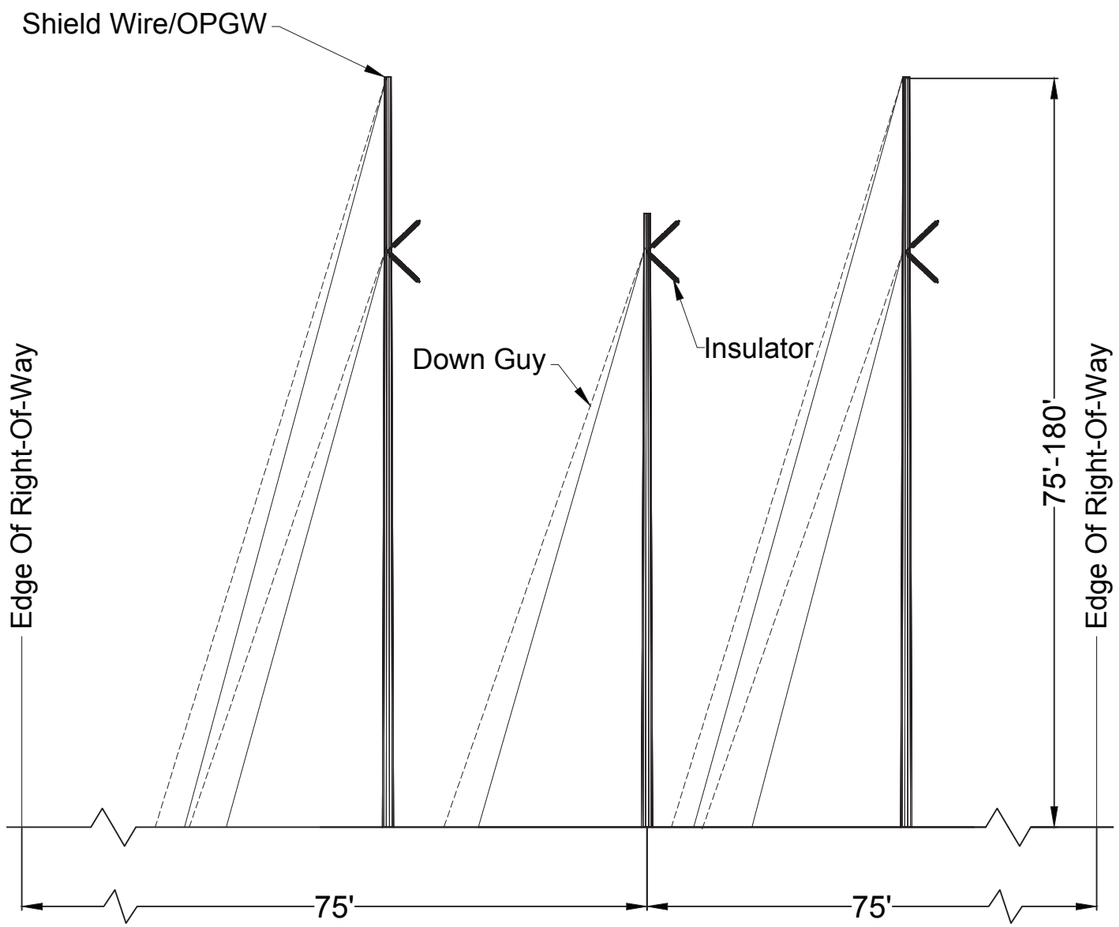
345kV Lattice Deadend



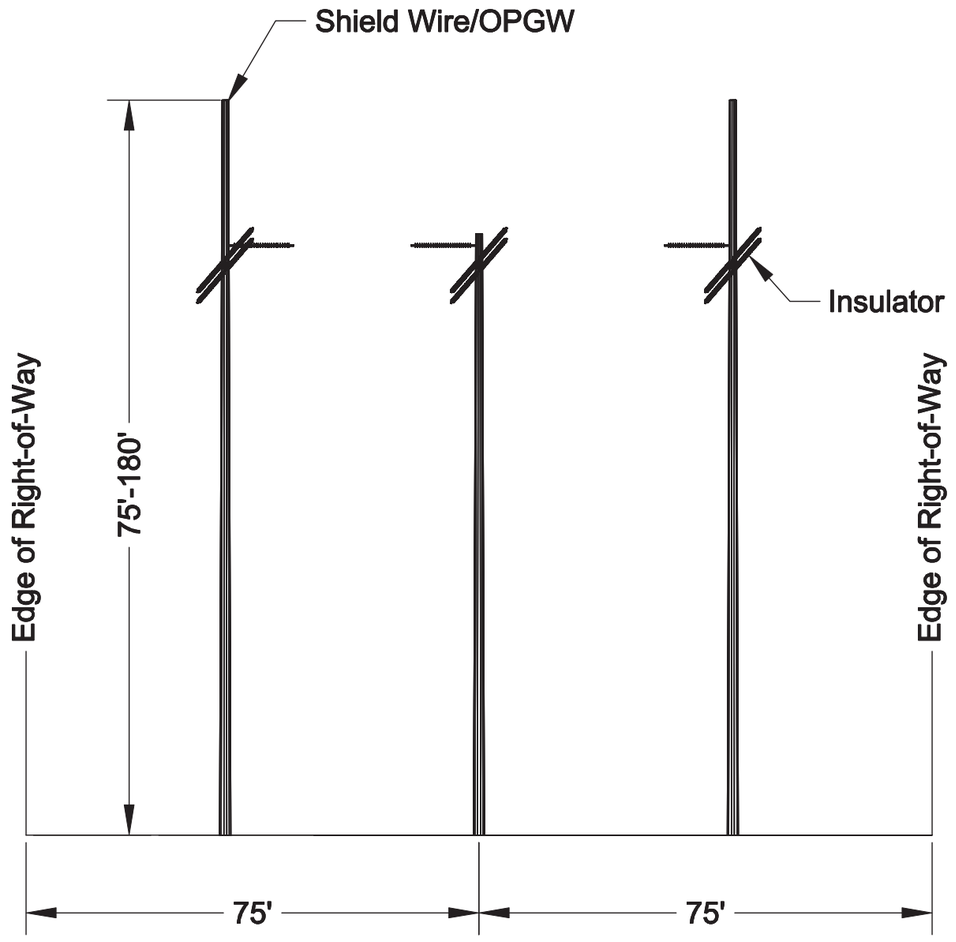
345kV Lattice V-string

Figure 2.1-5: 345kV Lattice Deadend and V-string

Note: Depending on structure height and line angle, guy easements may be required beyond the project 200 foot right-of-way.



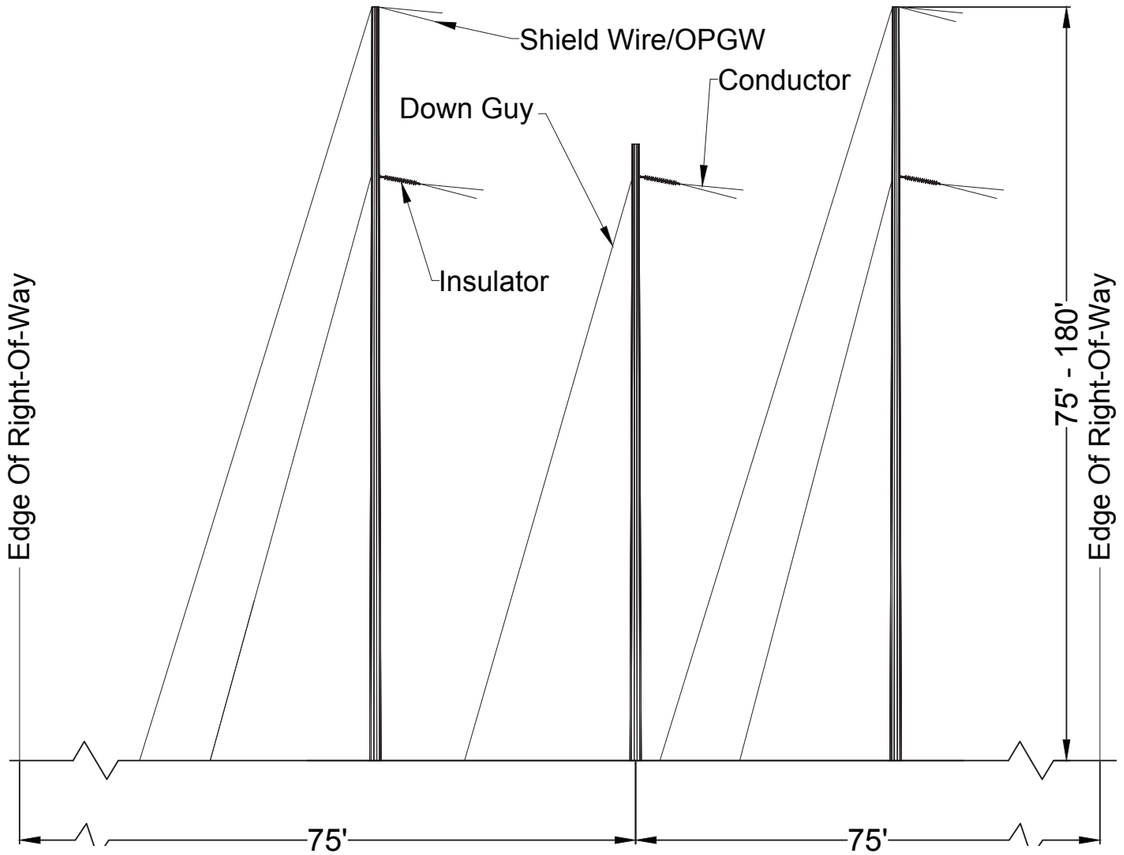
345kV 3-Pole Guyed Deadend



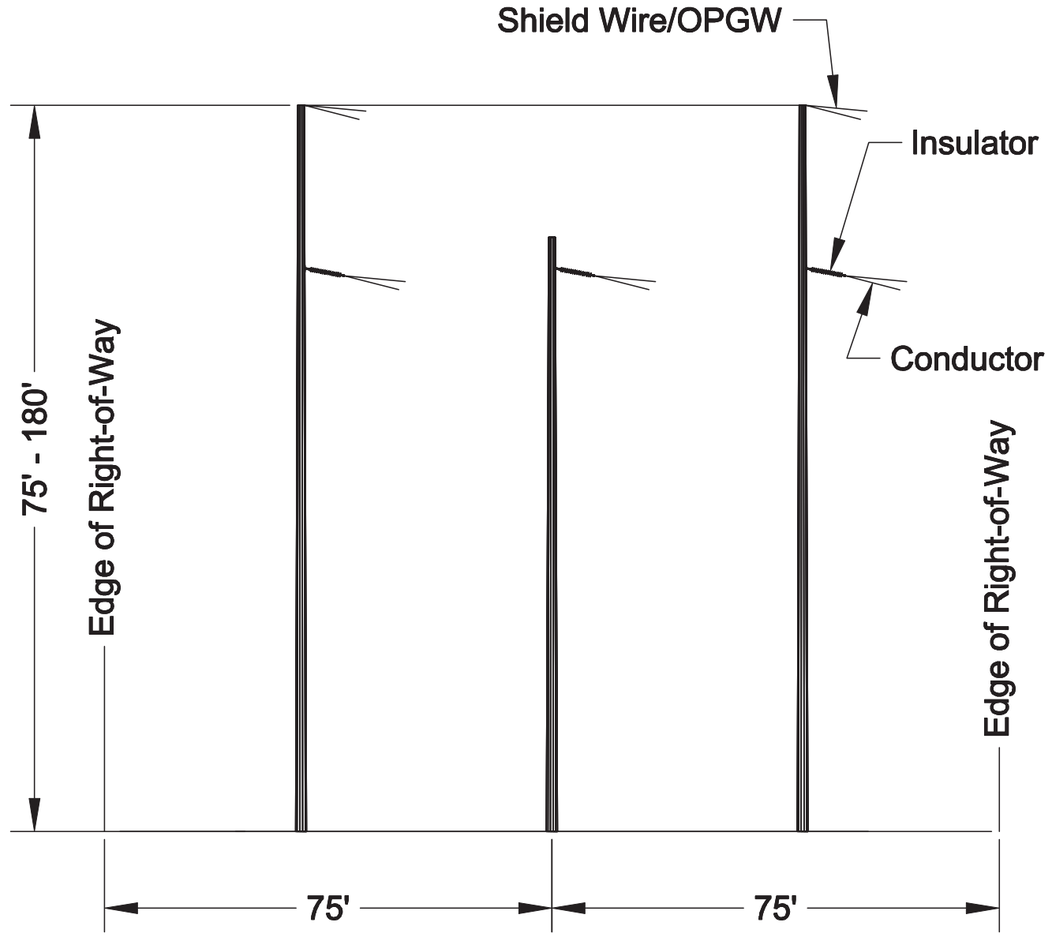
345kV 3-Pole Deadend

Figure 2.1-6: 345kV 3-Pole Guyed Deadend and Deadend

Note: Depending on structure height and line angle, guy easements may be required beyond the project 200 foot right-of-way.

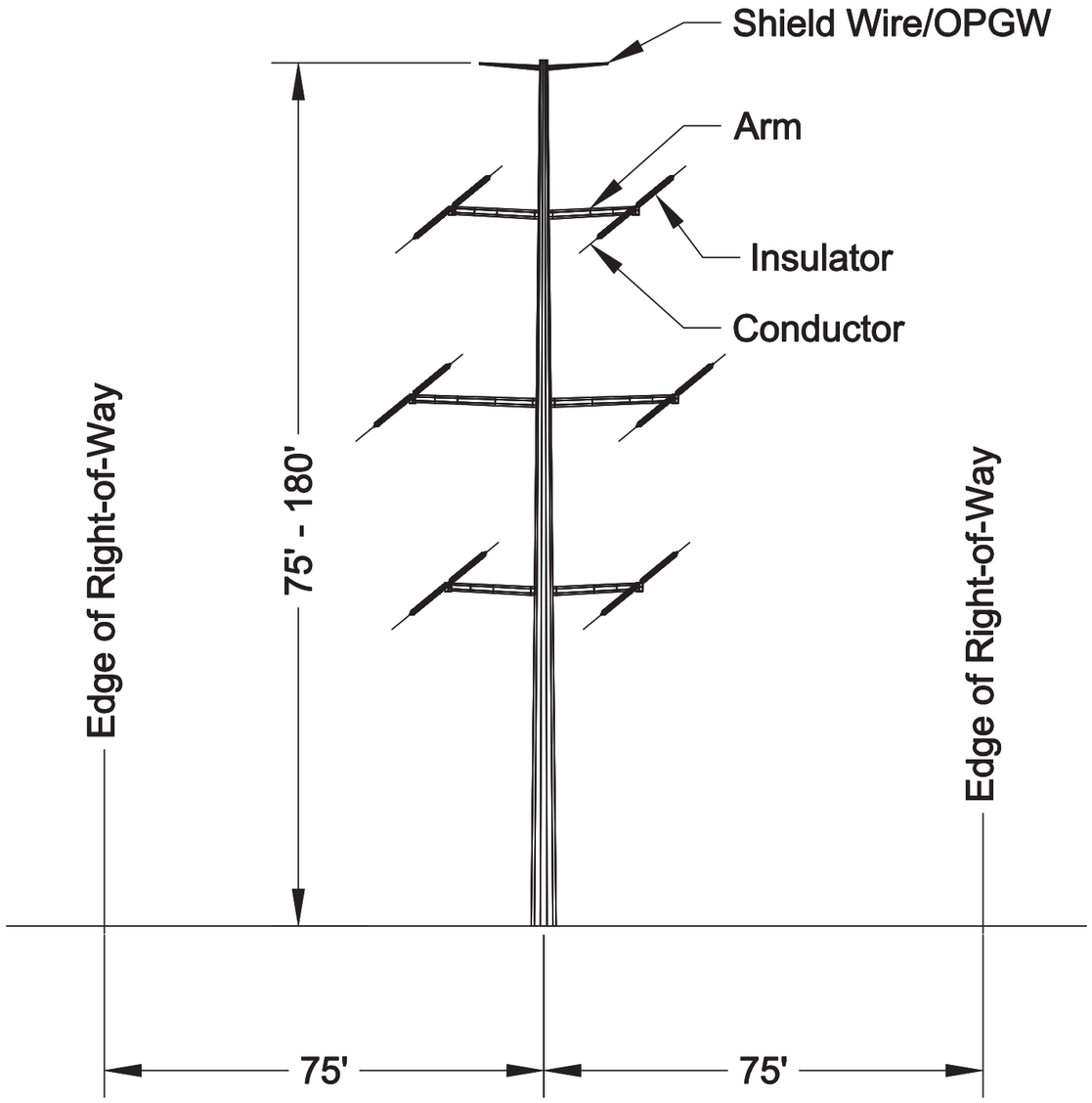


345kV 3-Pole Guyed Running Angle

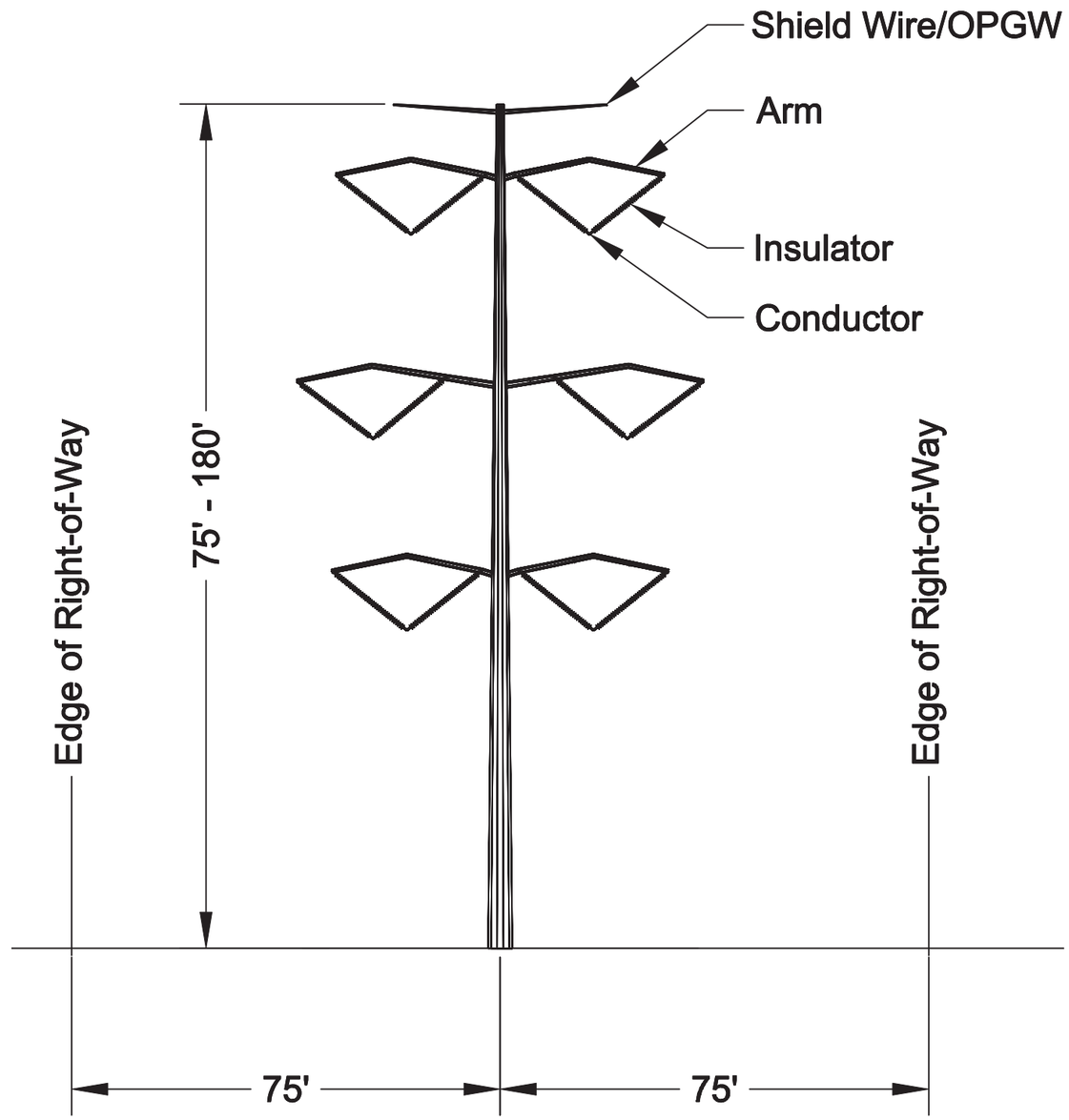


345kV 3-Pole Running Angle

Figure 2.1-7: 345kV 3-Pole Guyed Running Angle and Running Angle



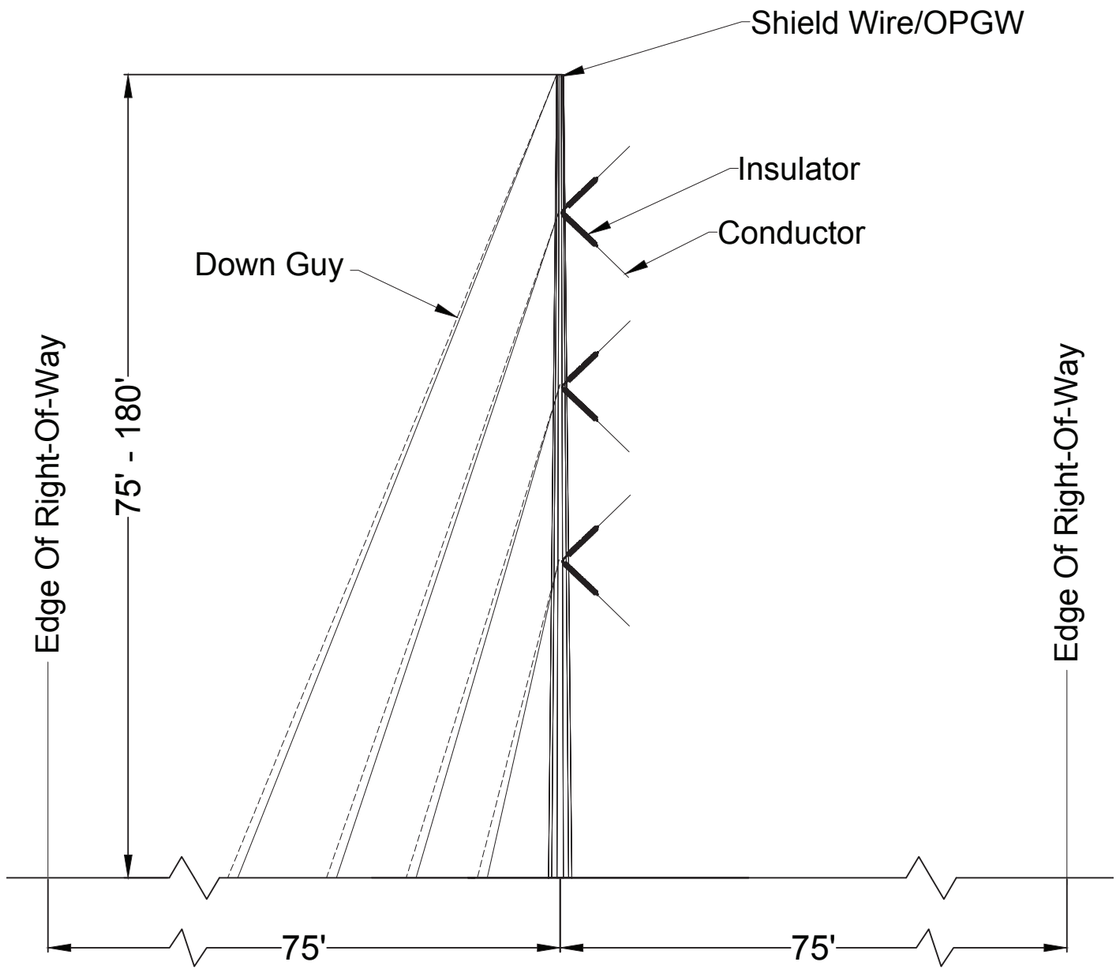
345kV Double Circuit Pole Deadend



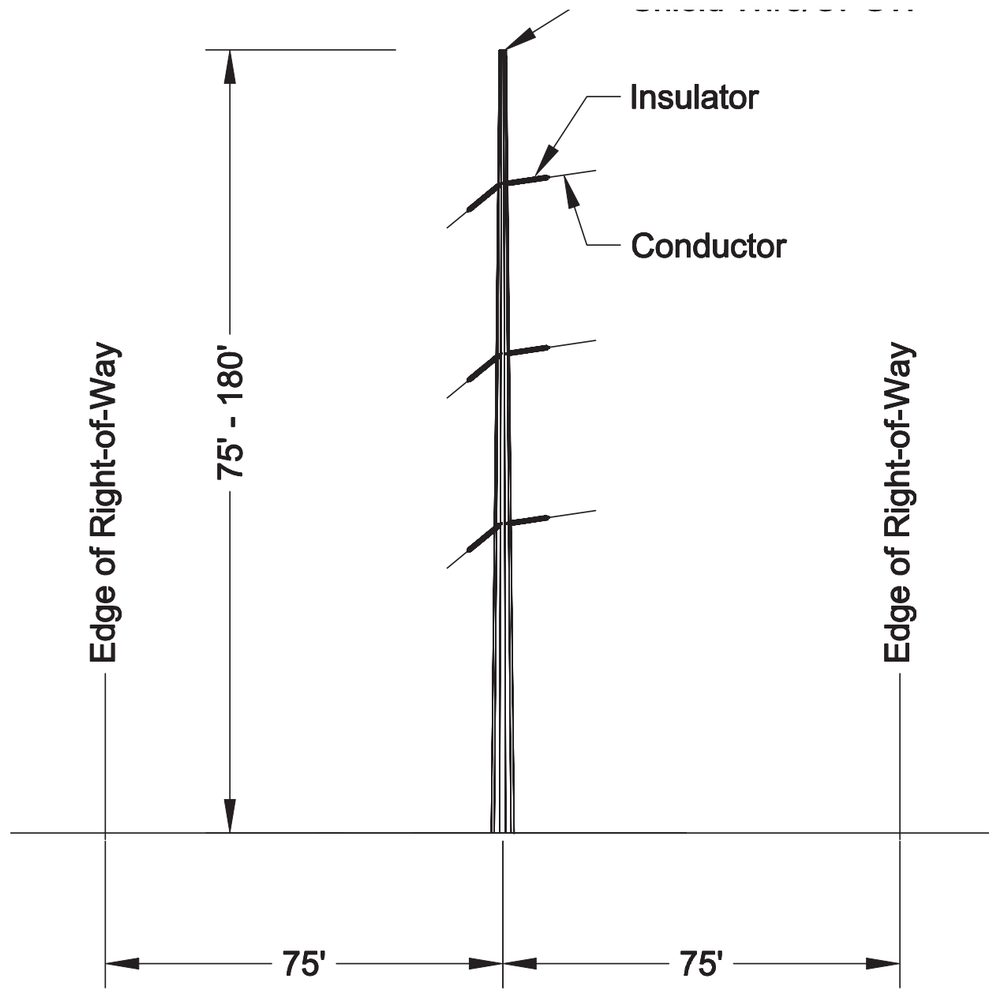
345kV Double Circuit Pole V-string

Figure 2.1-8: 345kV Double Circuit Pole Deadend and V-string

Note: Depending on structure height and line angle, guy easements may be required beyond the project 200 foot right-of-way.

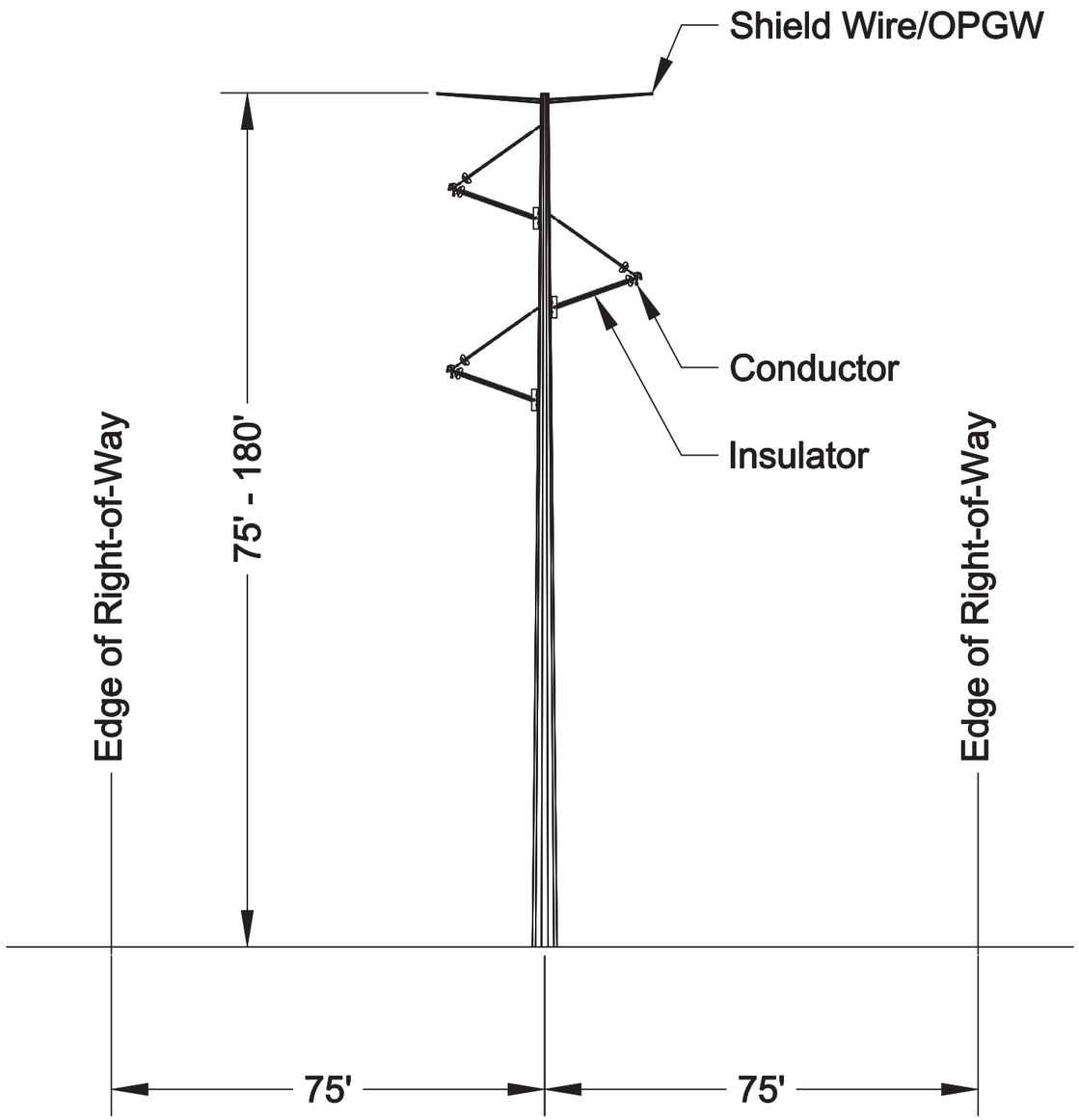


345kV Single Circuit Guyed Pole Deadend

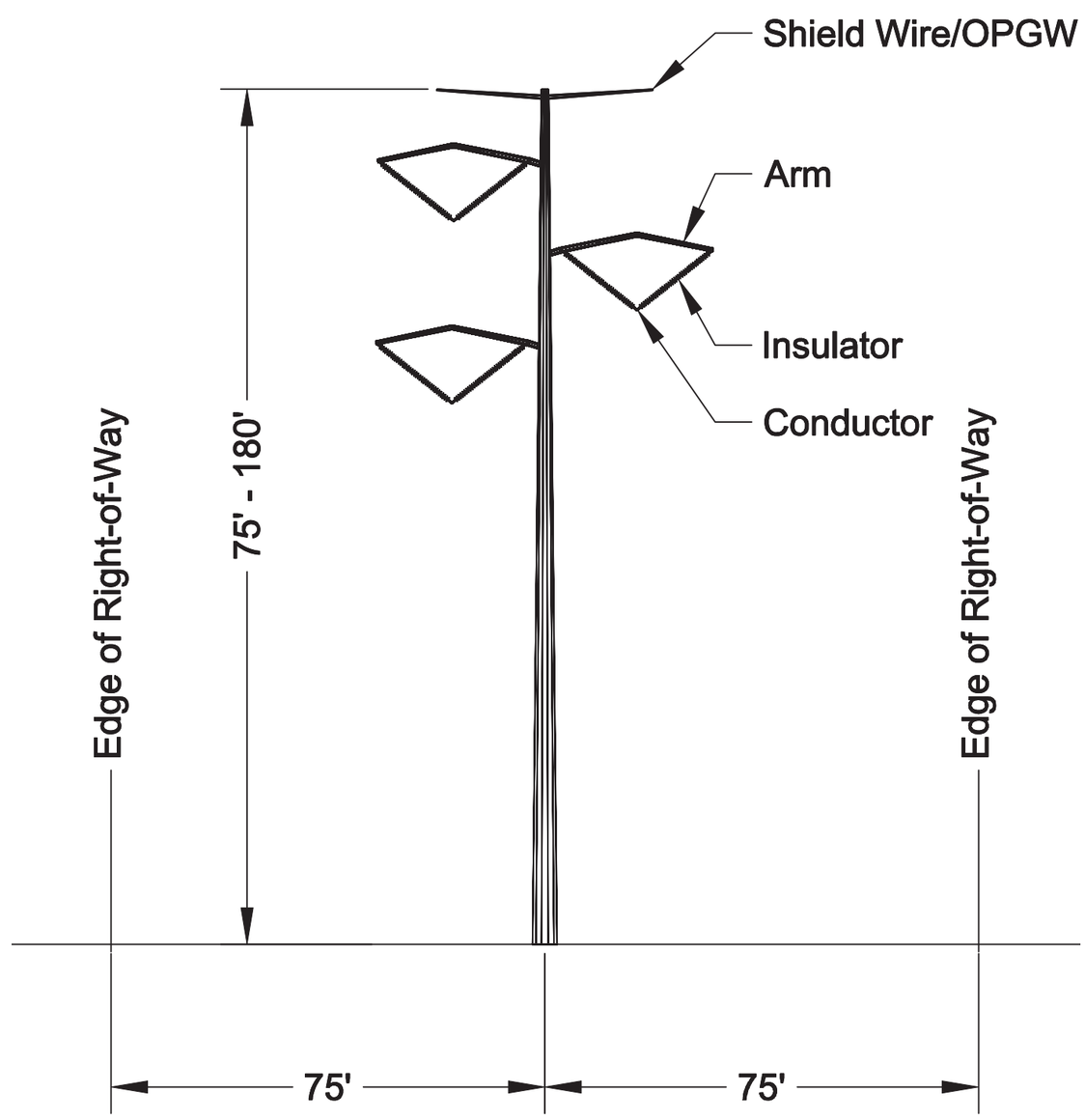


345kV Single Circuit Pole Deadend

Figure 2.1-9: 345kV Lattice Single Circuit Guyed Pole Deadend and Deadend

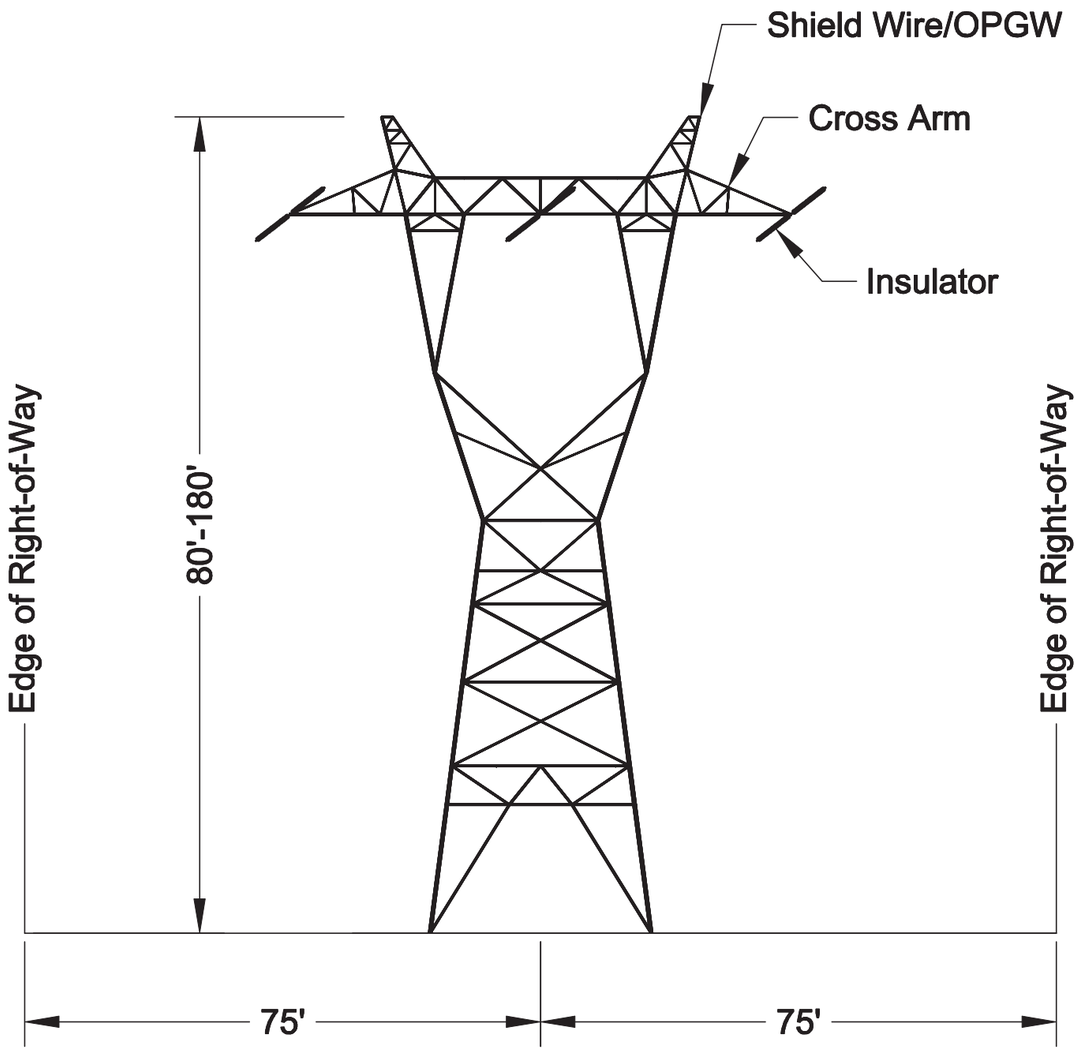


345kV Single Circuit Pole Braced Post

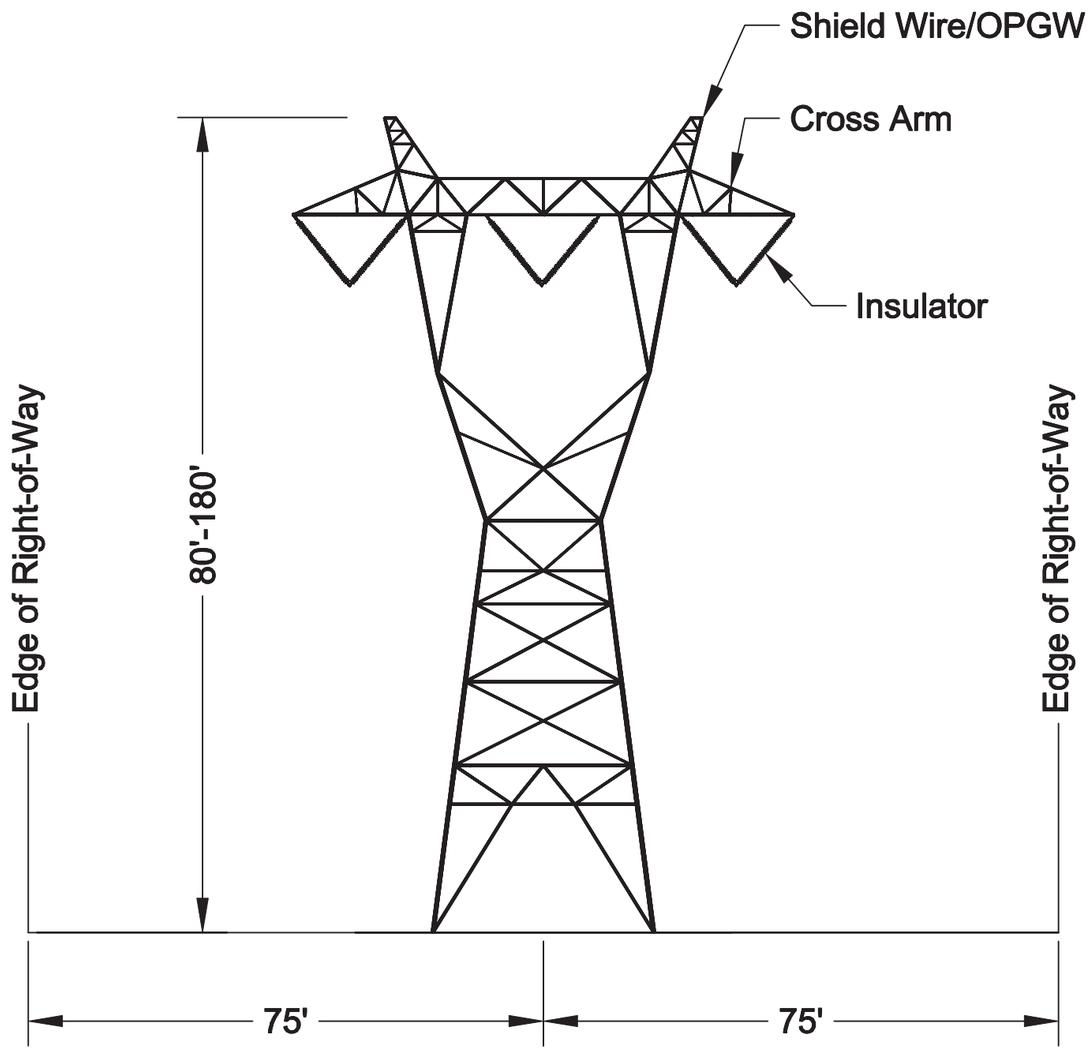


345kV Single Circuit Pole V-string

Figure 2.1-10: 345kV Lattice Single Circuit Pole Braced Post and V-string



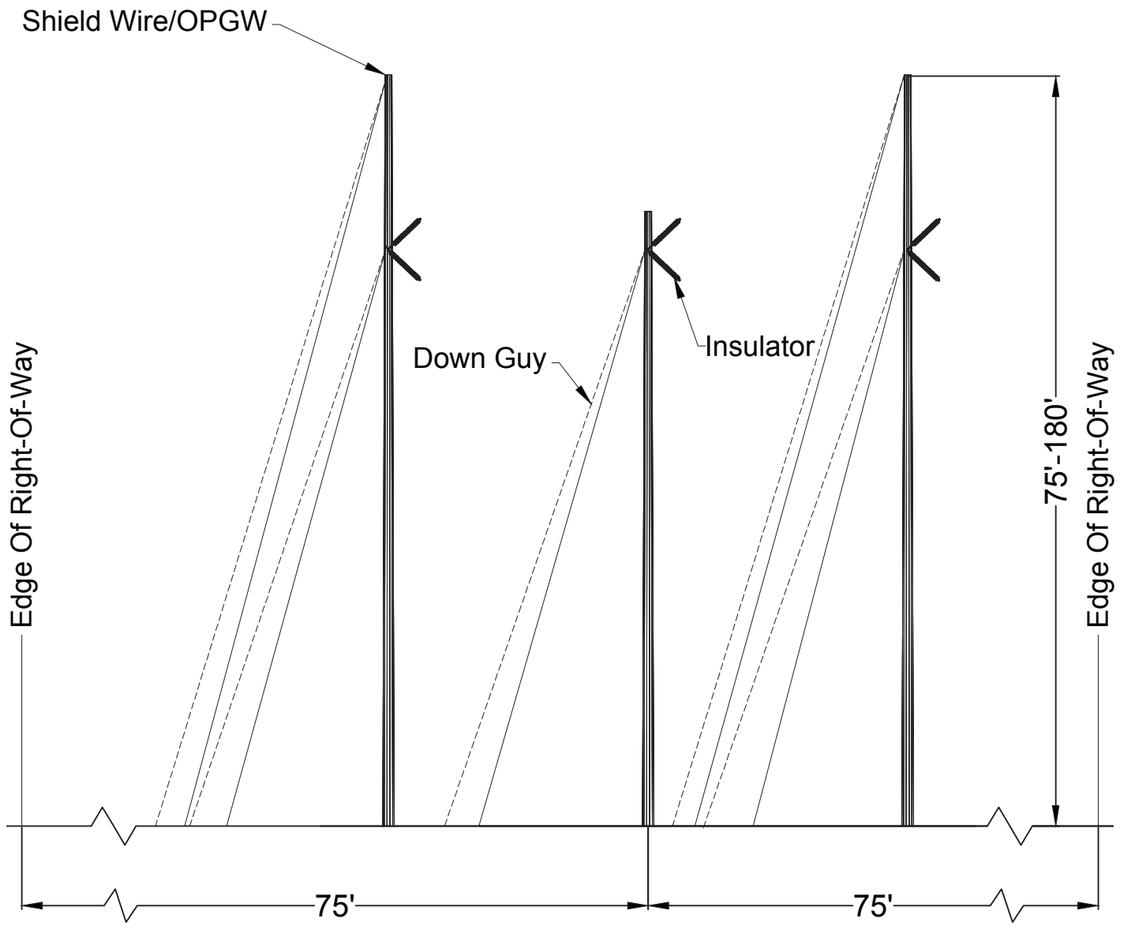
500kV Lattice Deadend



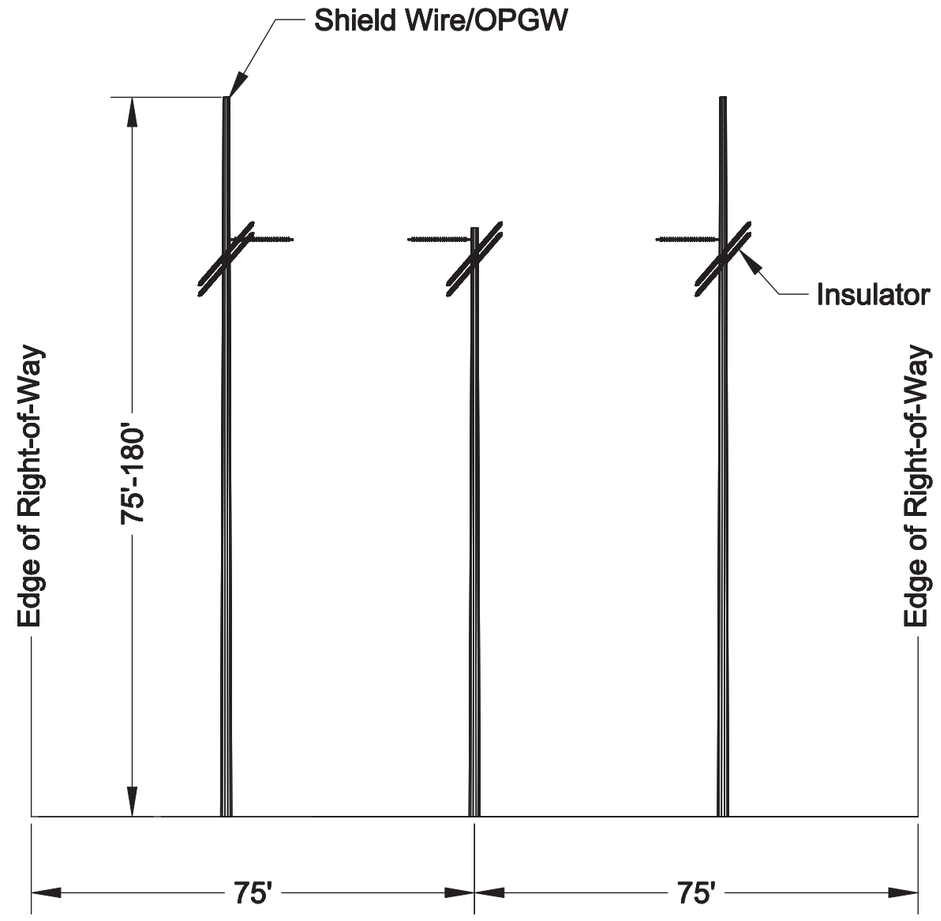
500kV Lattice V-string

Figure 2.1-11: 500kV Lattice Deadend and V-string

Note: Depending on structure height and line angle, guy easements may be required beyond the project 200 foot right-of-way.



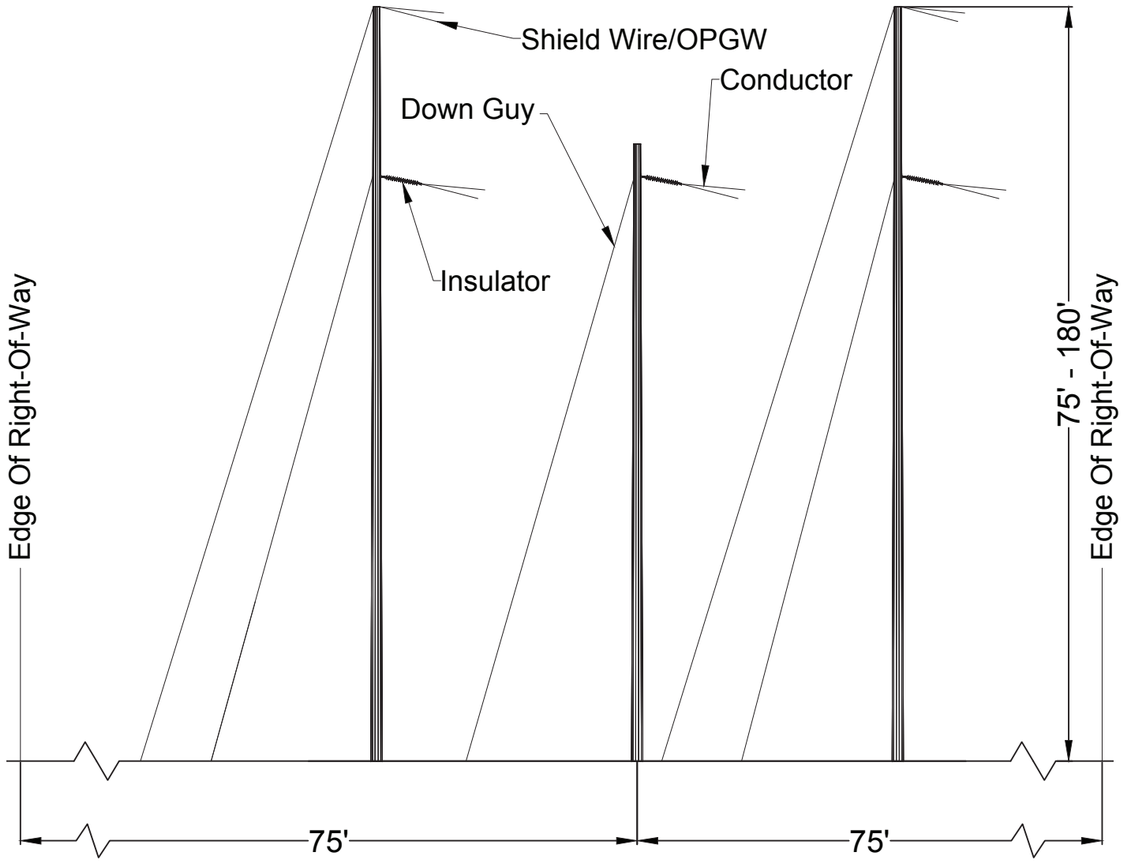
500kV 3-Pole Guyed Deadend



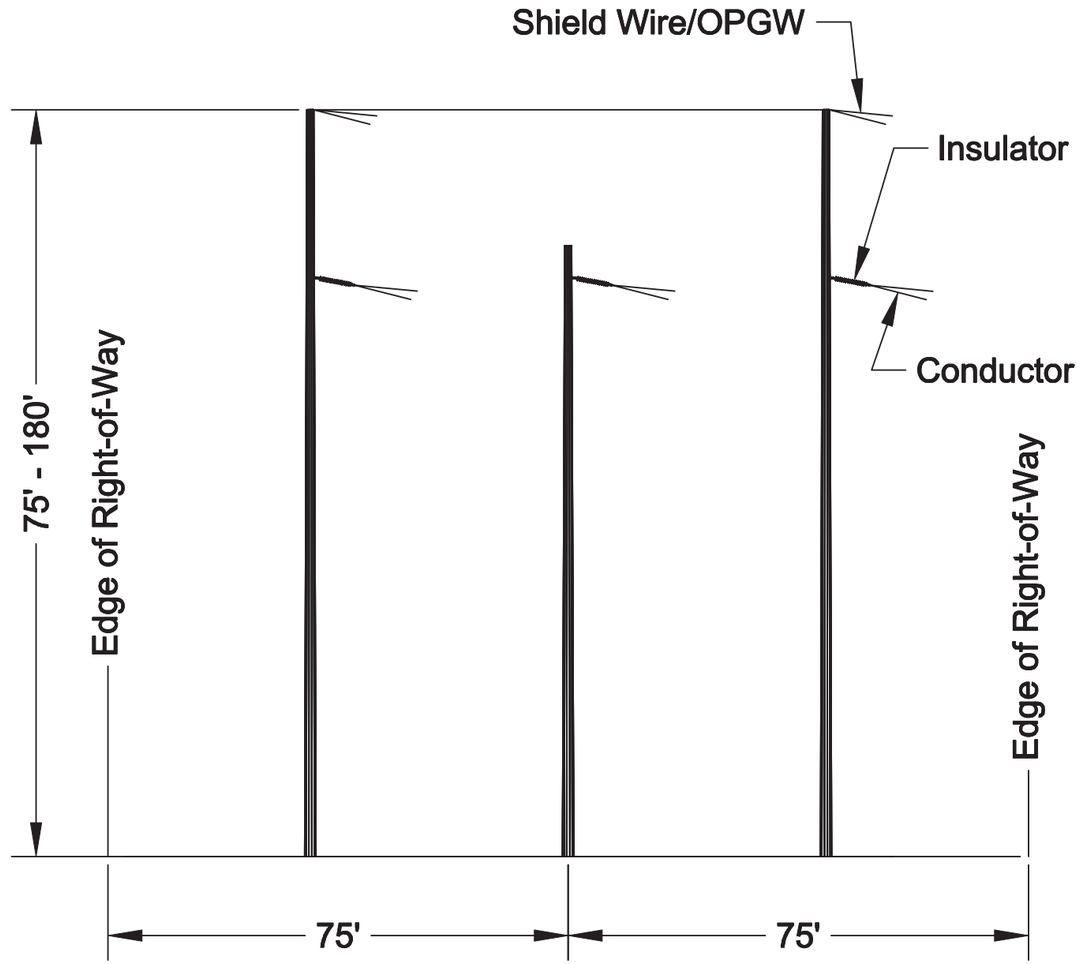
500kV 3-Pole Deadend

Figure 2.1-12: 500kV 3-Pole Guyed Deadend and Deadend

Note: Depending on structure height and line angle, guy easements may be required beyond the project 200 foot right-of-way.

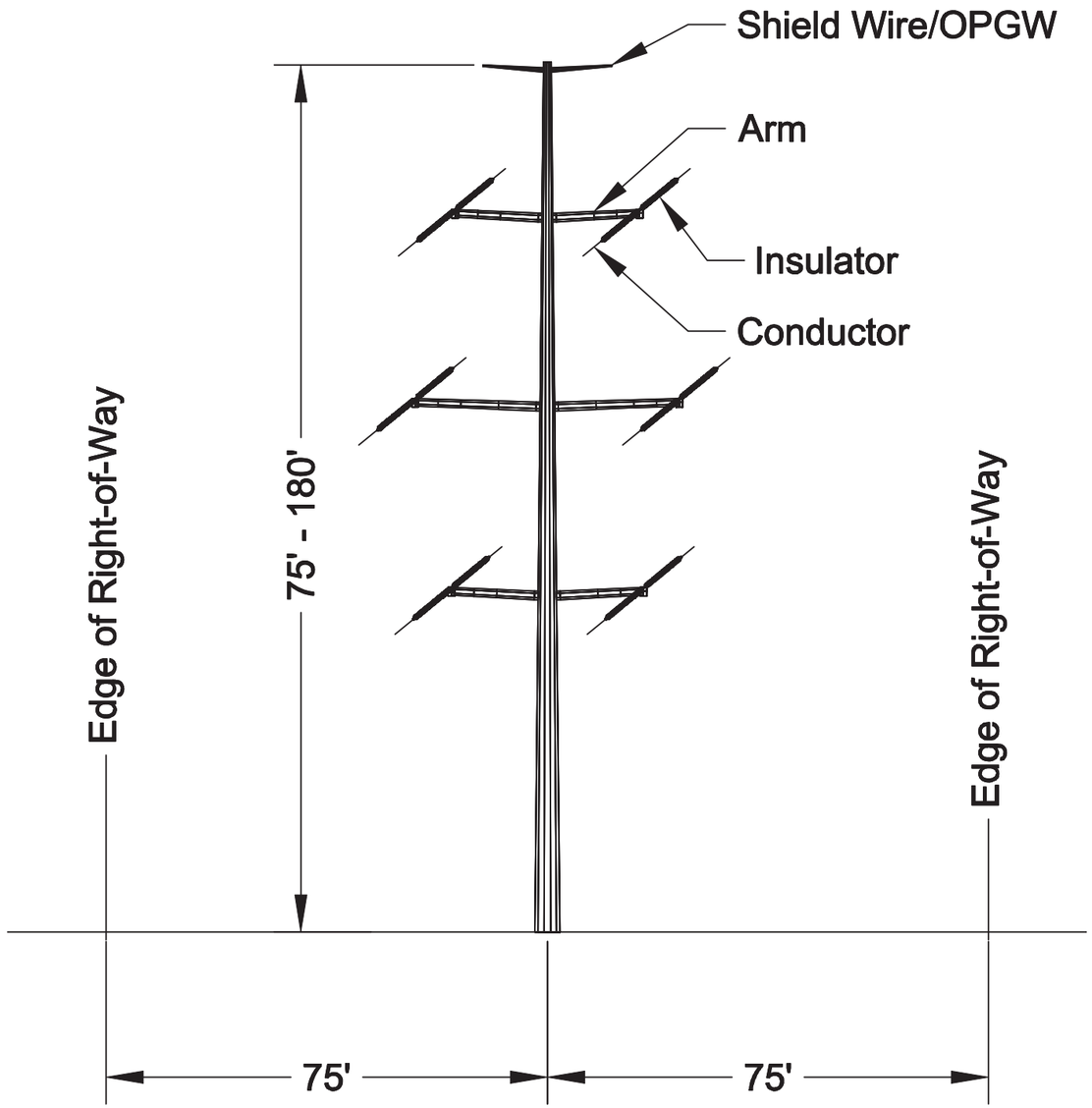


500kV 3-Pole Guyed Running Angle

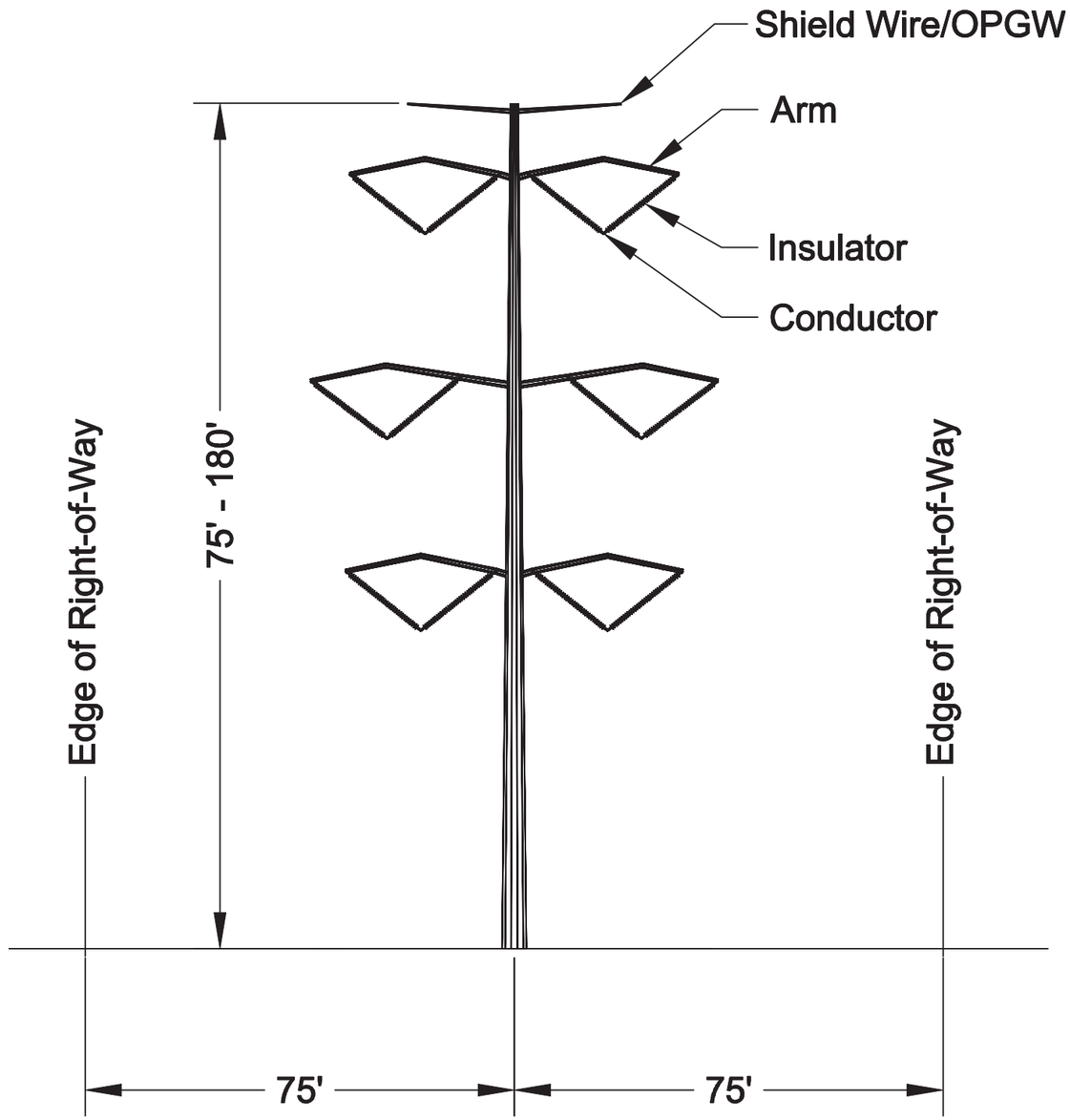


500kV 3-Pole Running Angle

Figure 2.1-13: 500kV 3-Pole Guyed Running Angle and Running Angle



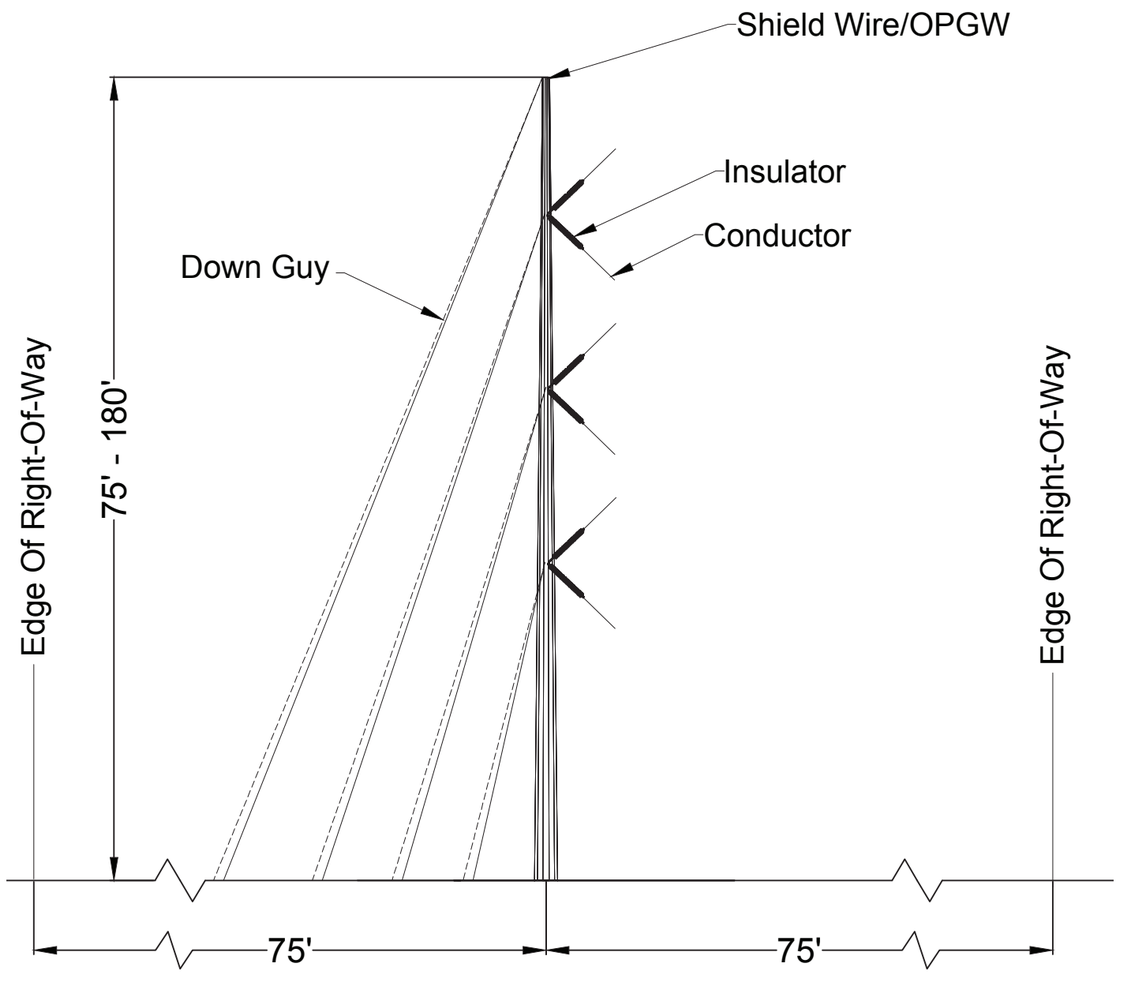
500kV Double Circuit Pole Deadend



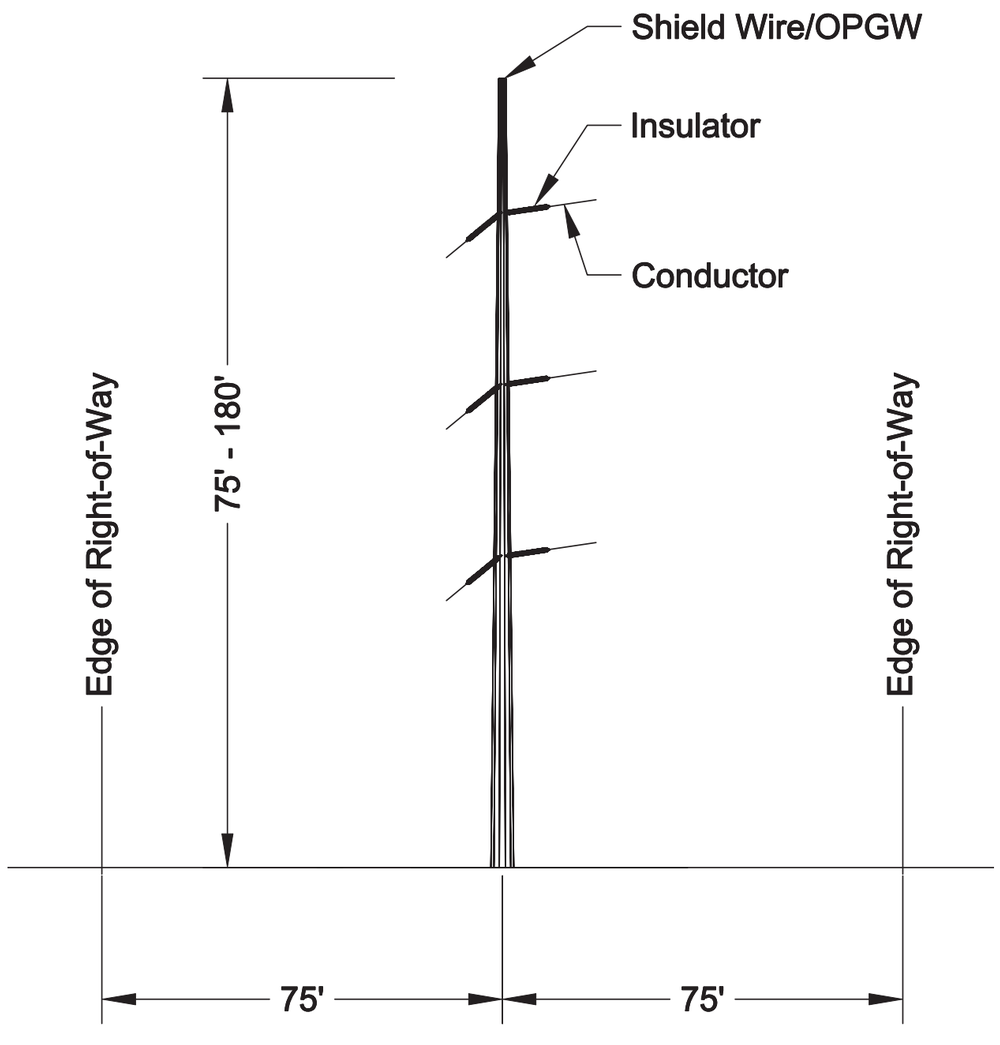
500kV Double Circuit Pole V-string

Figure 2.1-14: 500kV Double Circuit Pole Deadend and V-string

Note: Depending on structure height and line angle, guy easements may be required beyond the project 200 foot right-of-way.

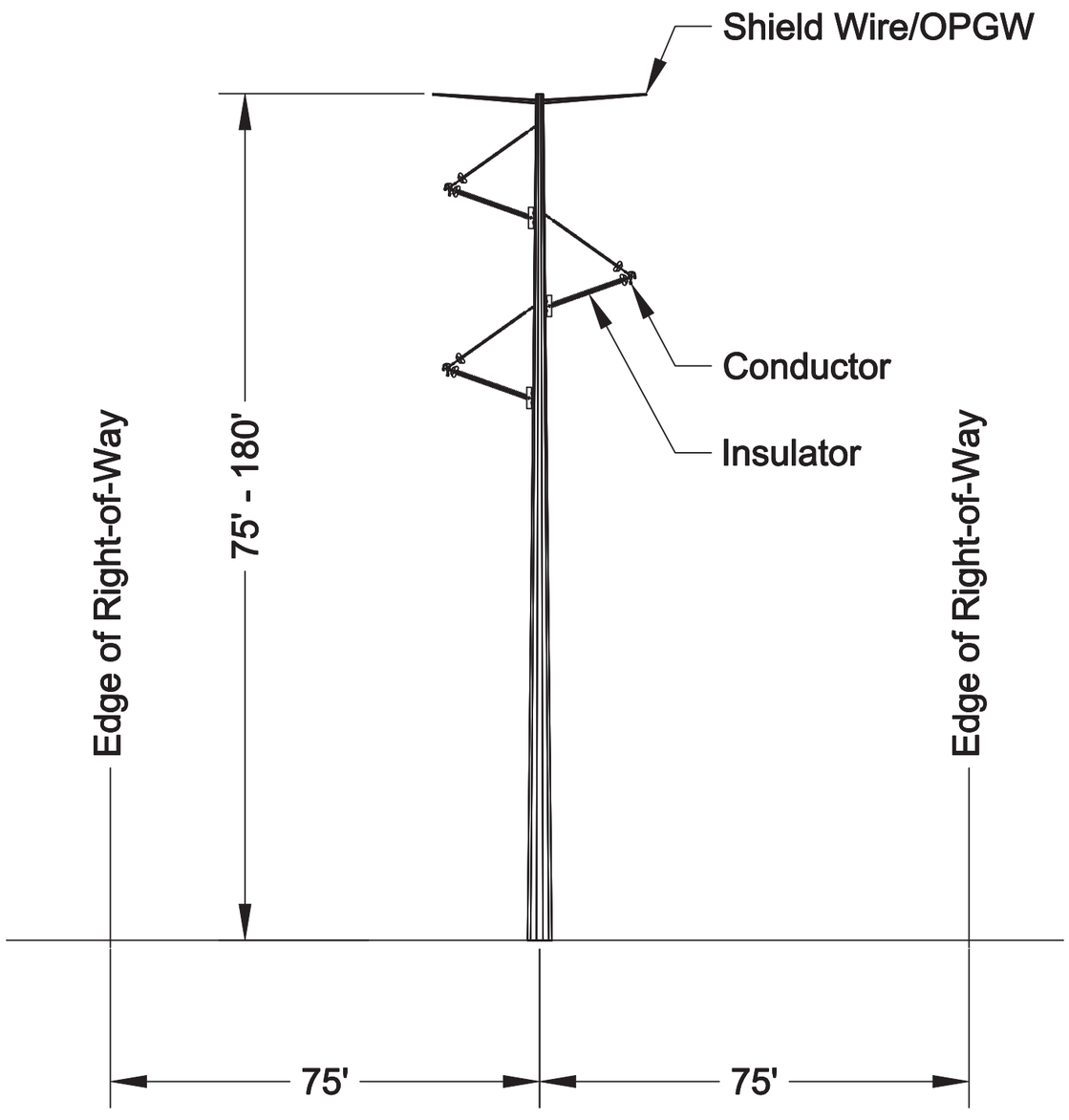


500kV Single Circuit Guyed Pole Deadend

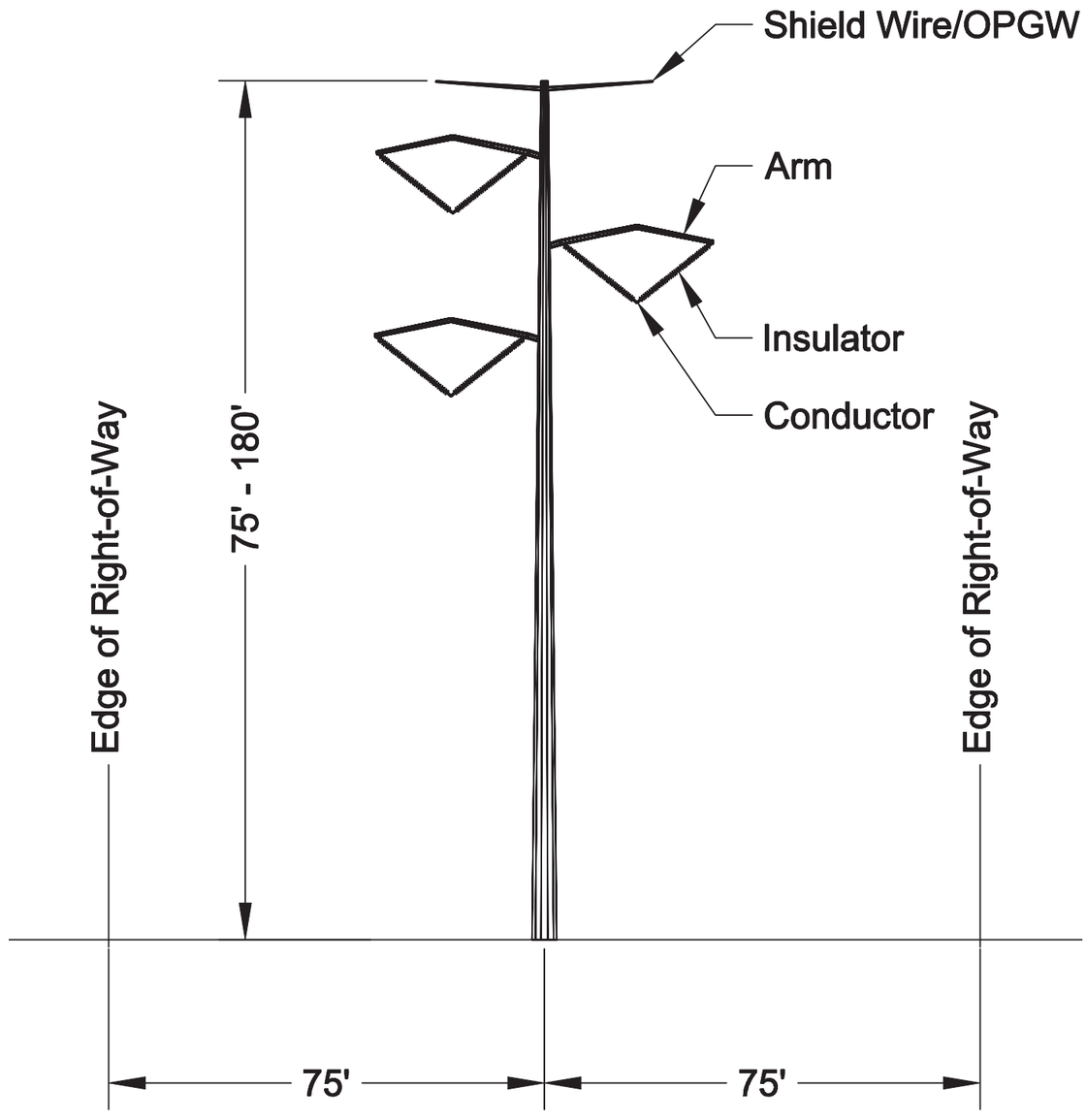


500kV Single Circuit Pole Deadend

Figure 2.1-15: 500kV Lattice Single Circuit Guyed Pole Deadend and Deadend



500kV Single Circuit Pole Braced Post



500kV Single Circuit Pole V-string

Figure 2.1-16: 500kV Single Circuit Pole Braced Post and V-string

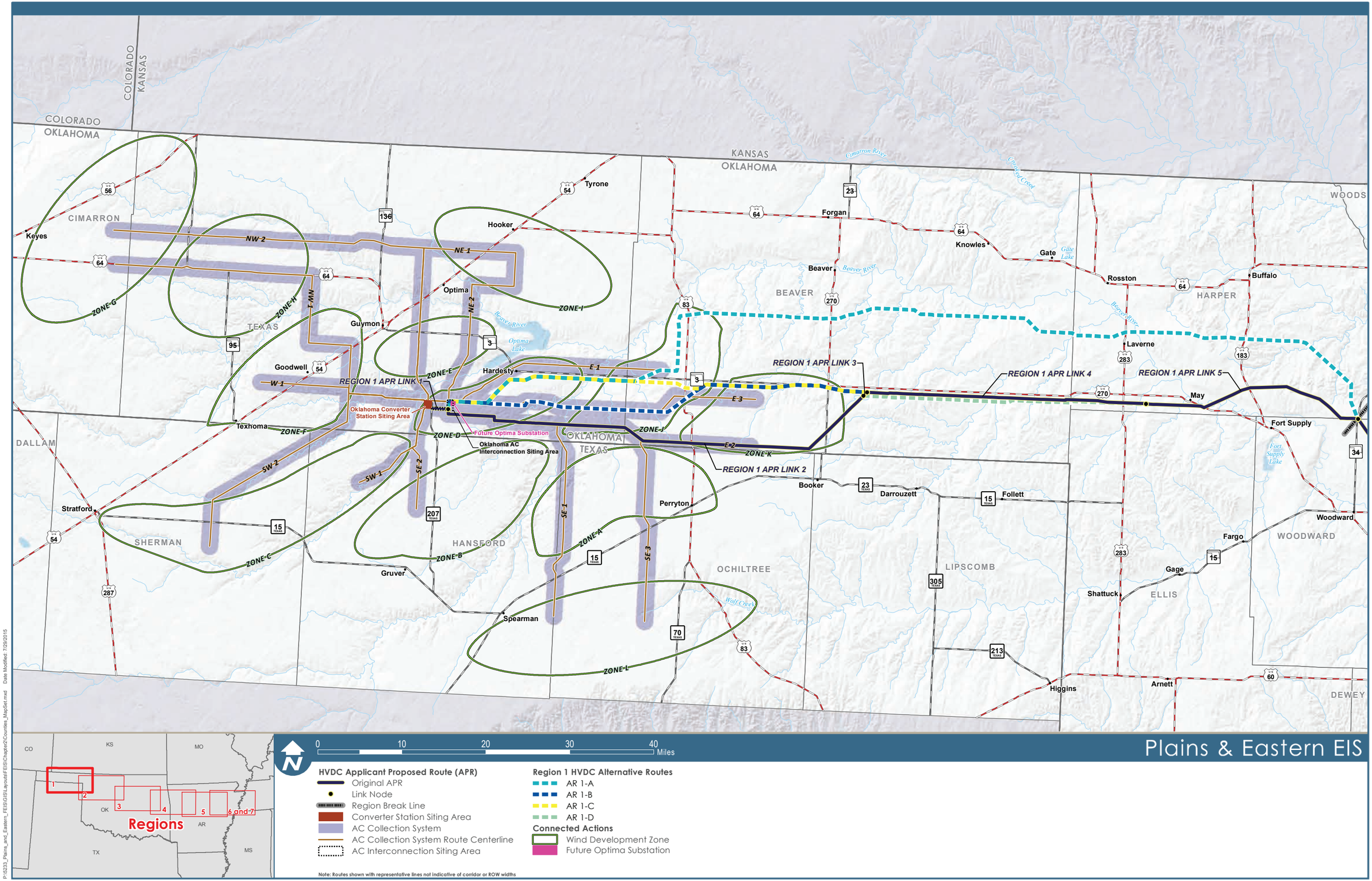


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Figure 2.1-17a: Counties Crossed by Project Features

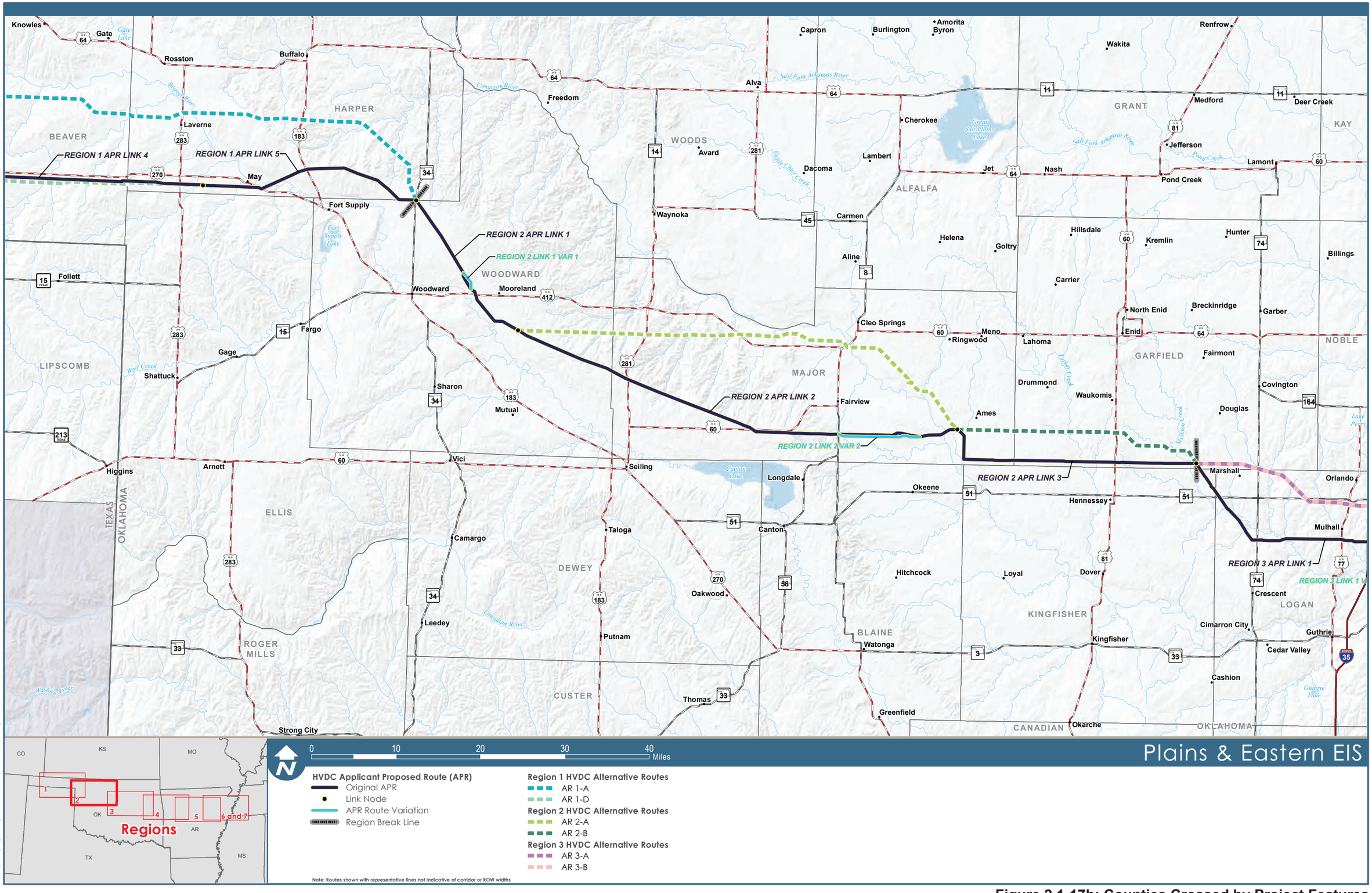


Figure 2.1-17b: Counties Crossed by Project Features

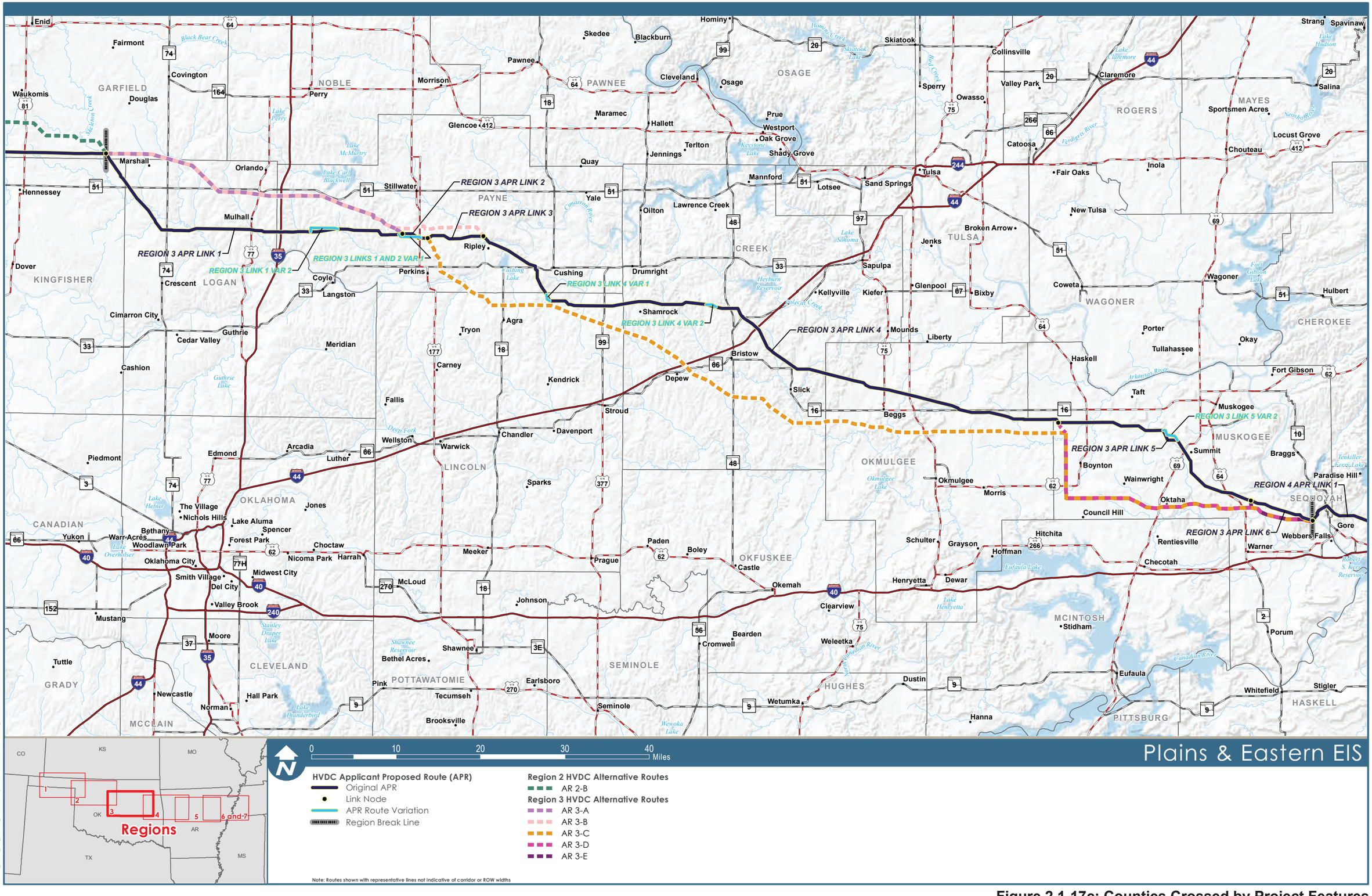


Figure 2.1-17c: Counties Crossed by Project Features

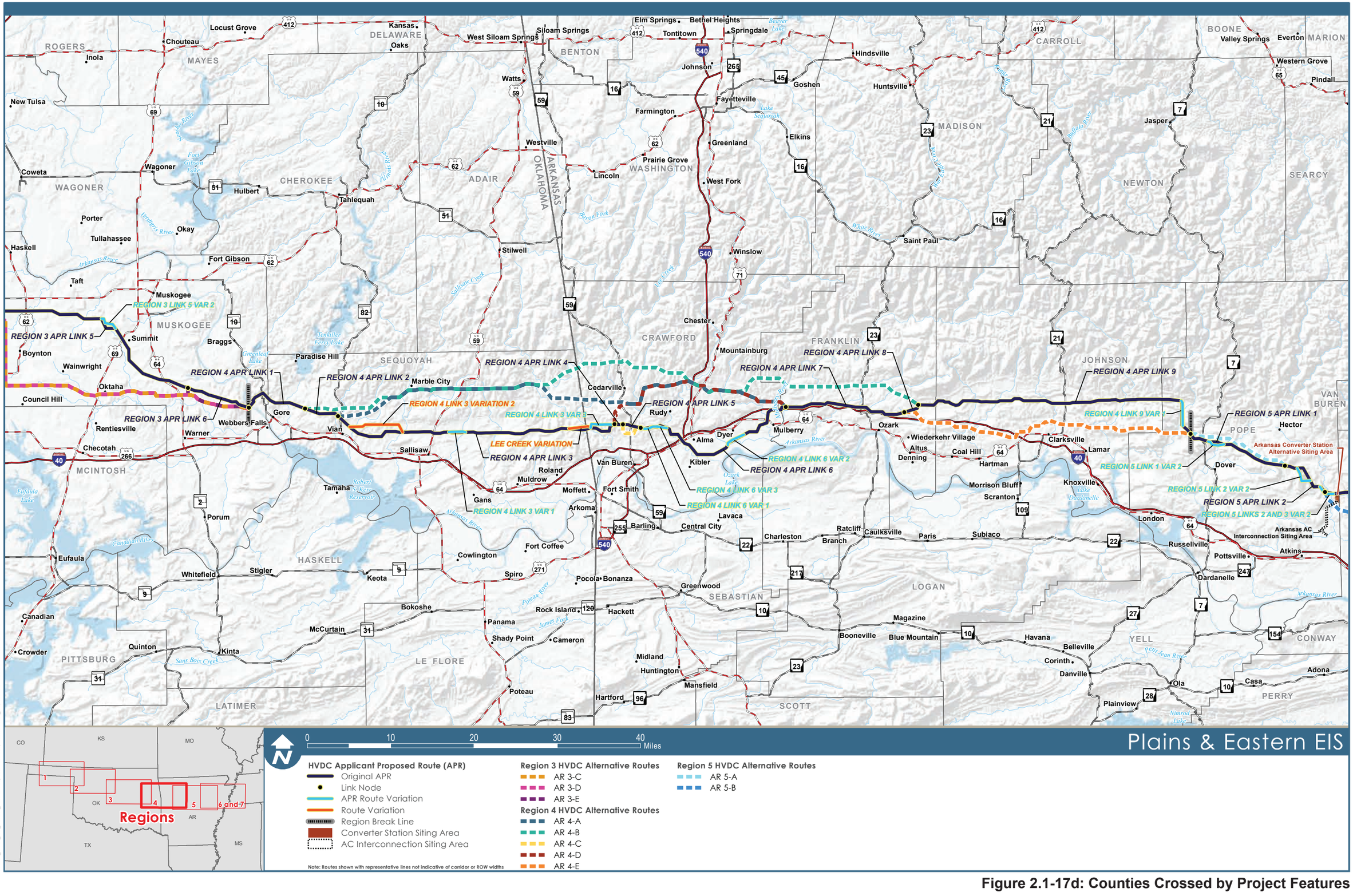


Figure 2.1-17d: Counties Crossed by Project Features

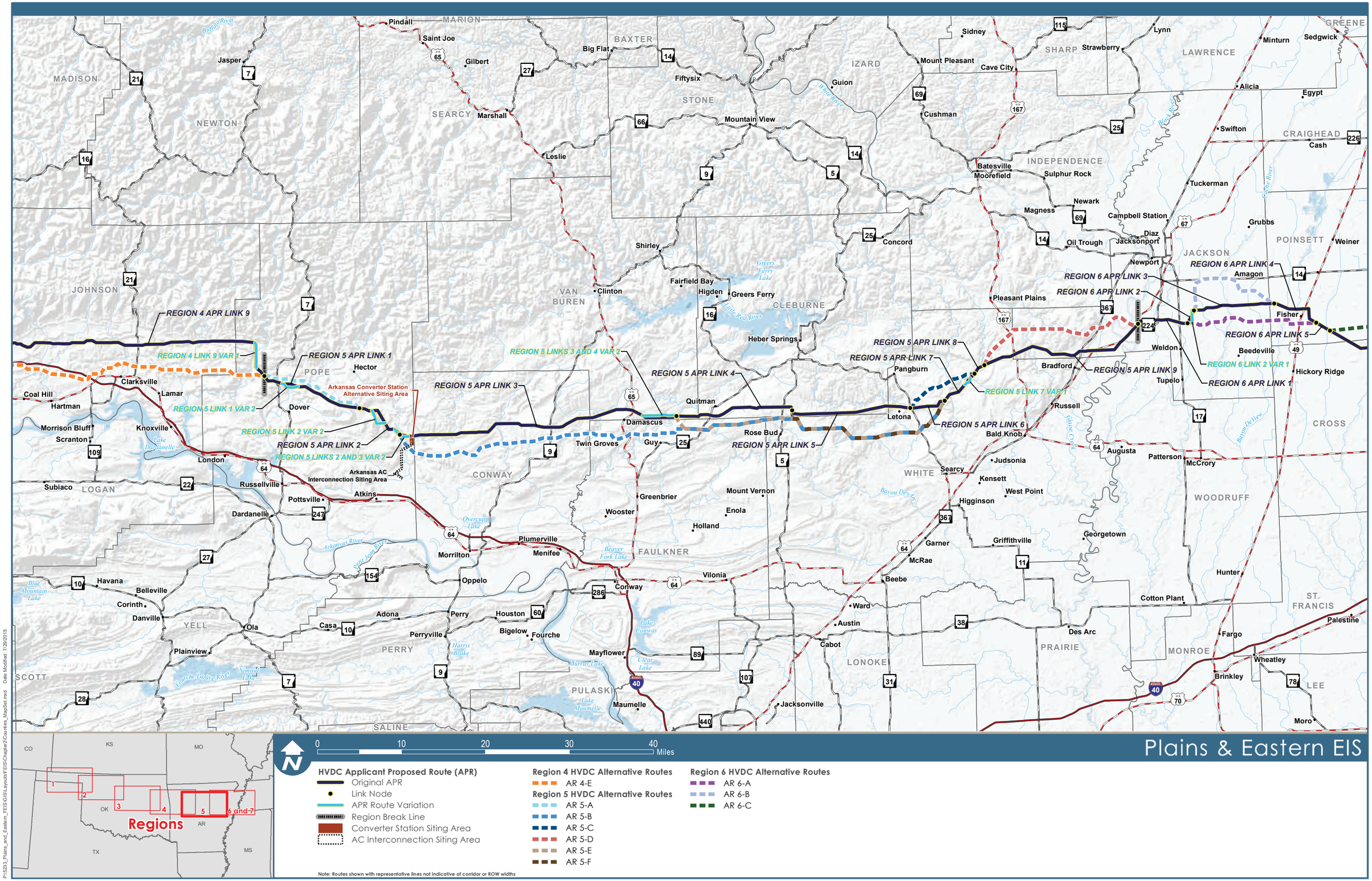


Figure 2.1-17e: Counties Crossed by Project Features

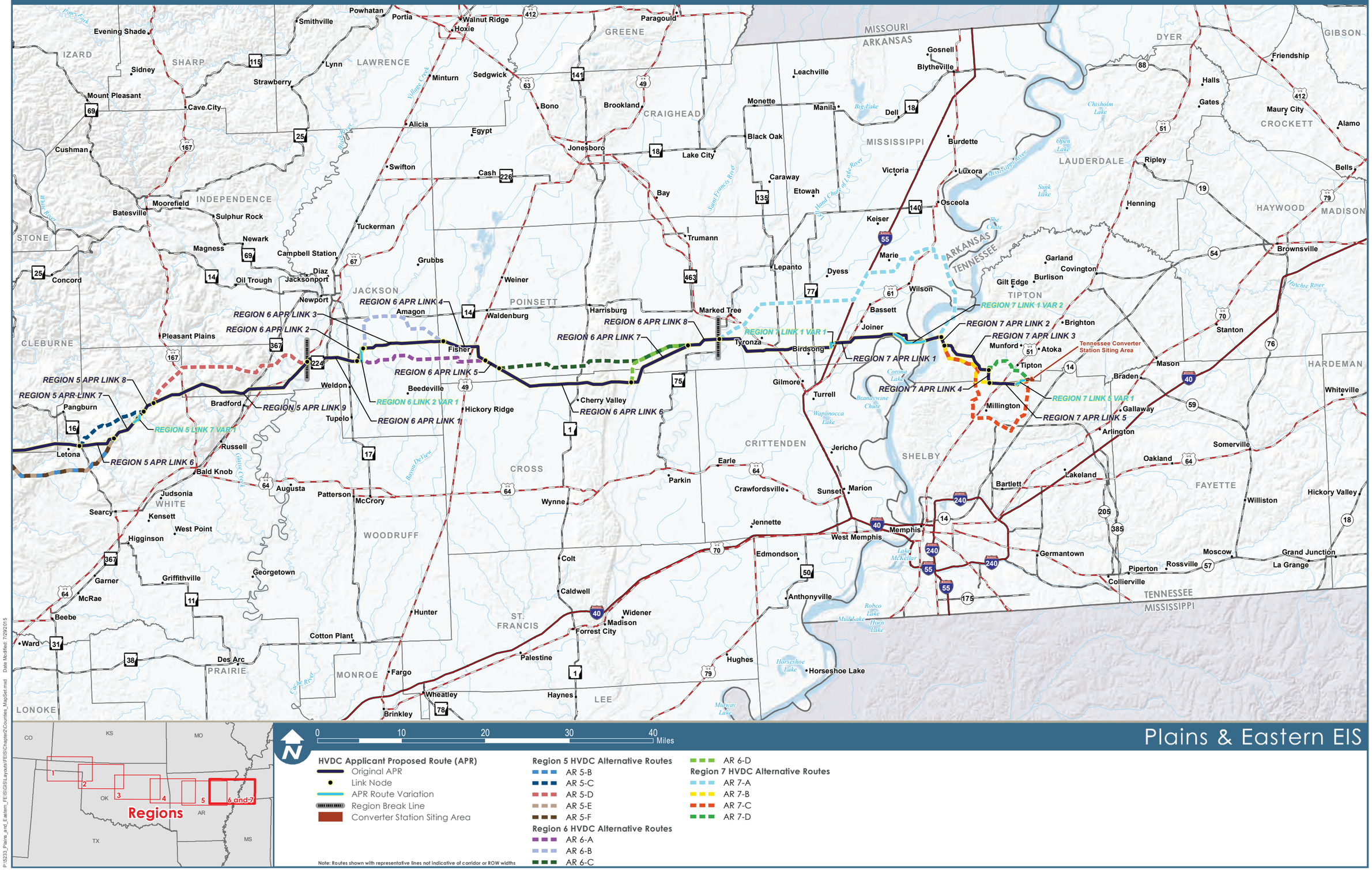


Figure 2.1-17f: Counties Crossed by Project Features

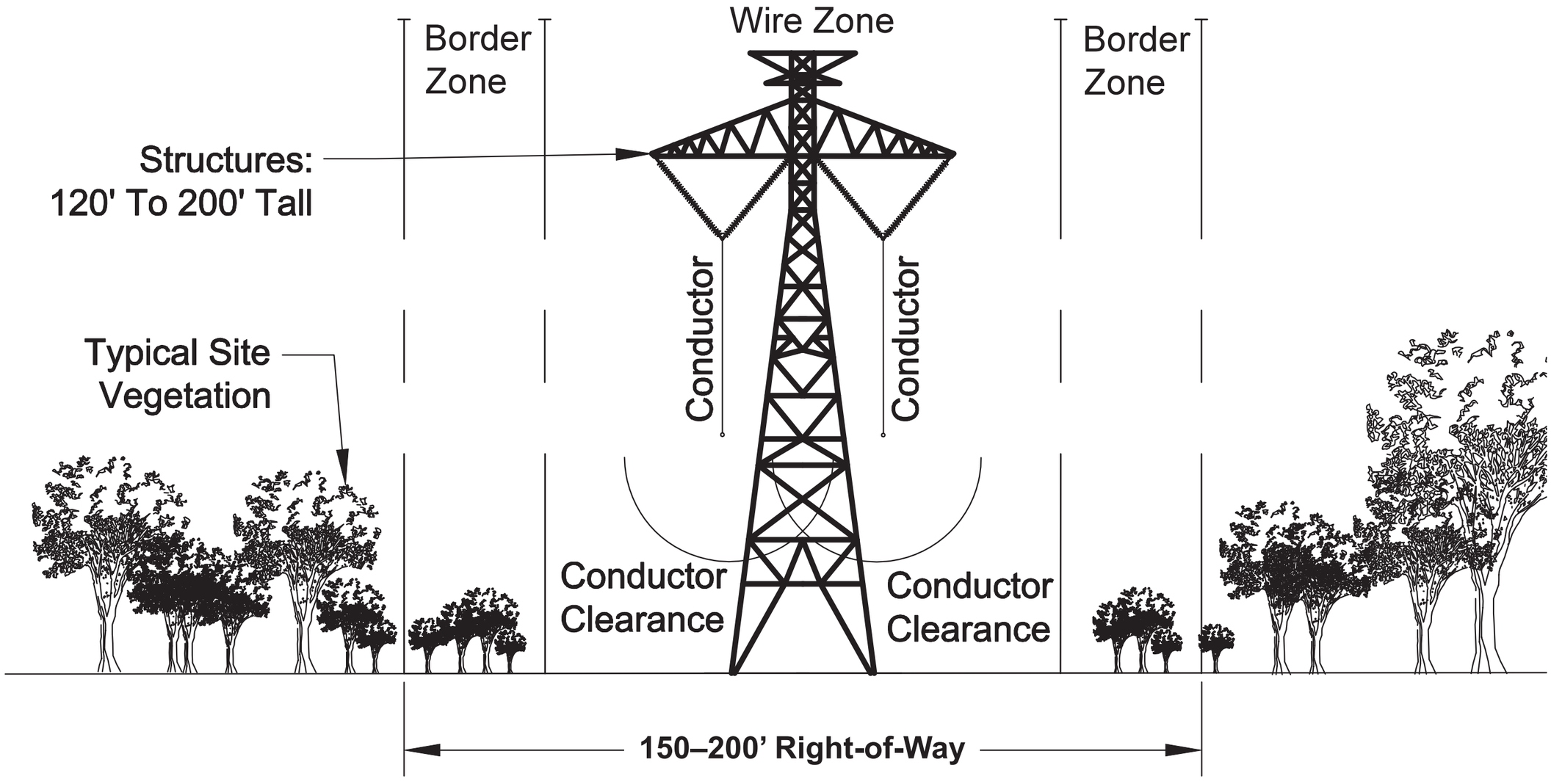
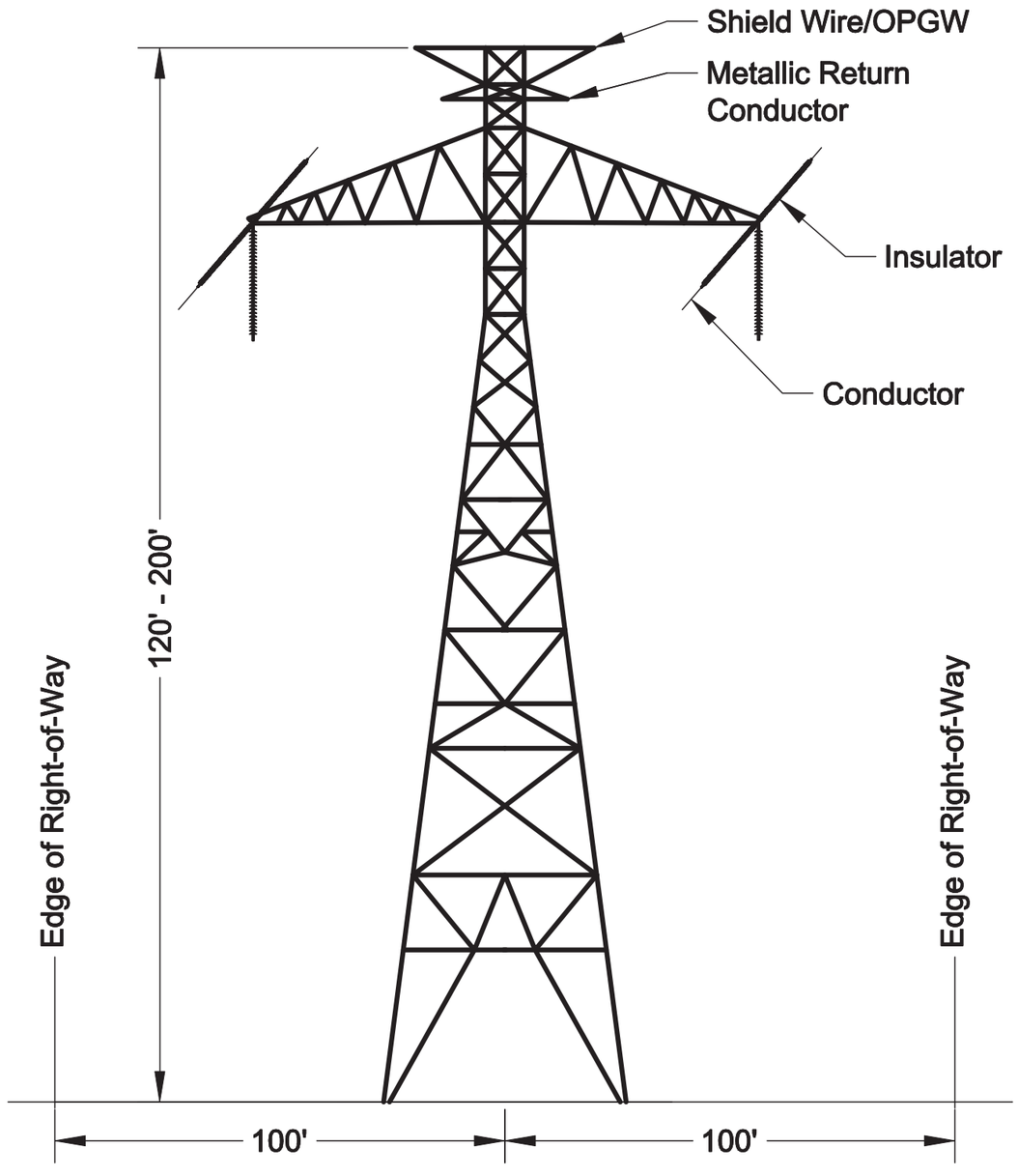
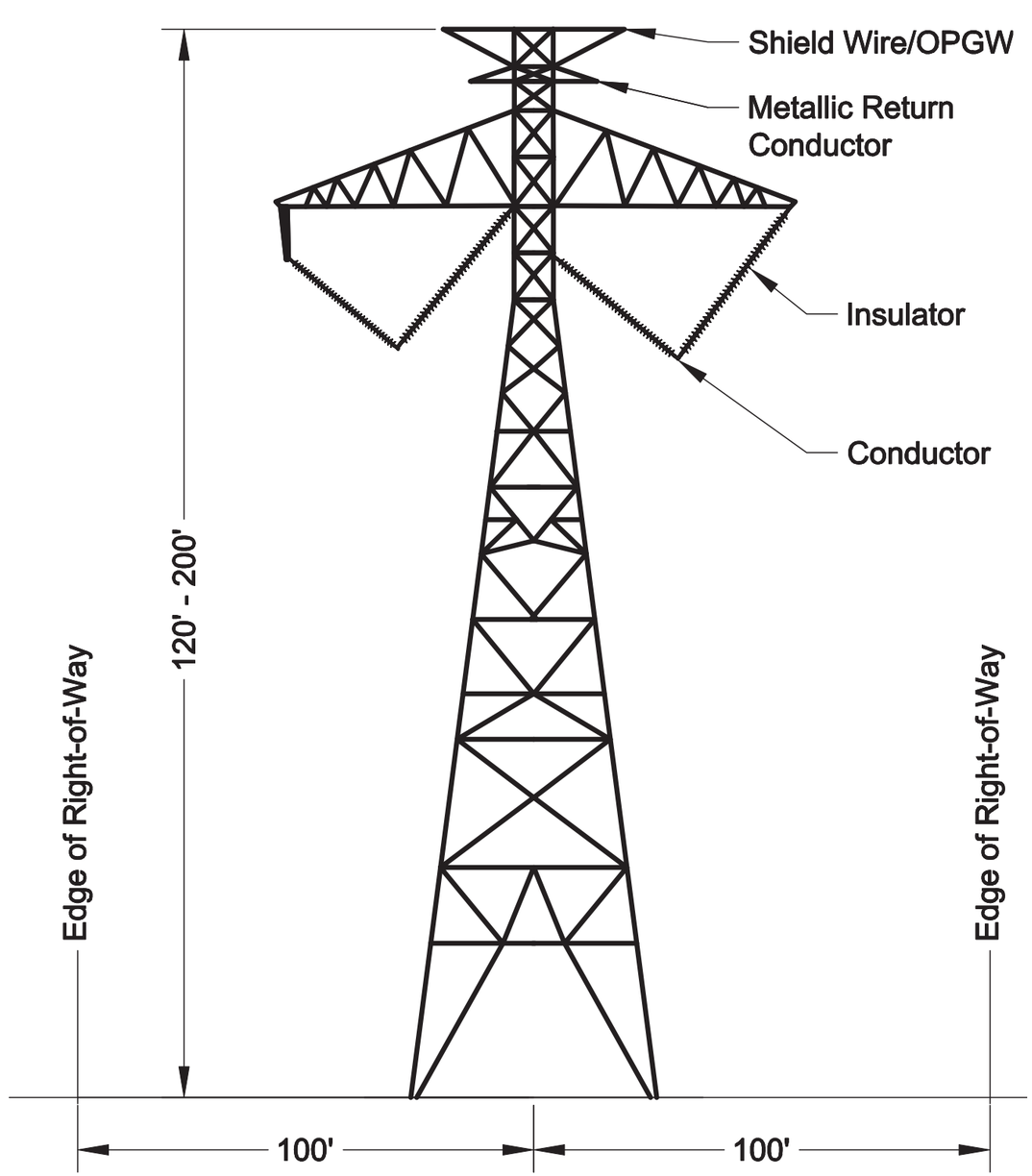


Figure 2.1-18: HVDC ROW Limits

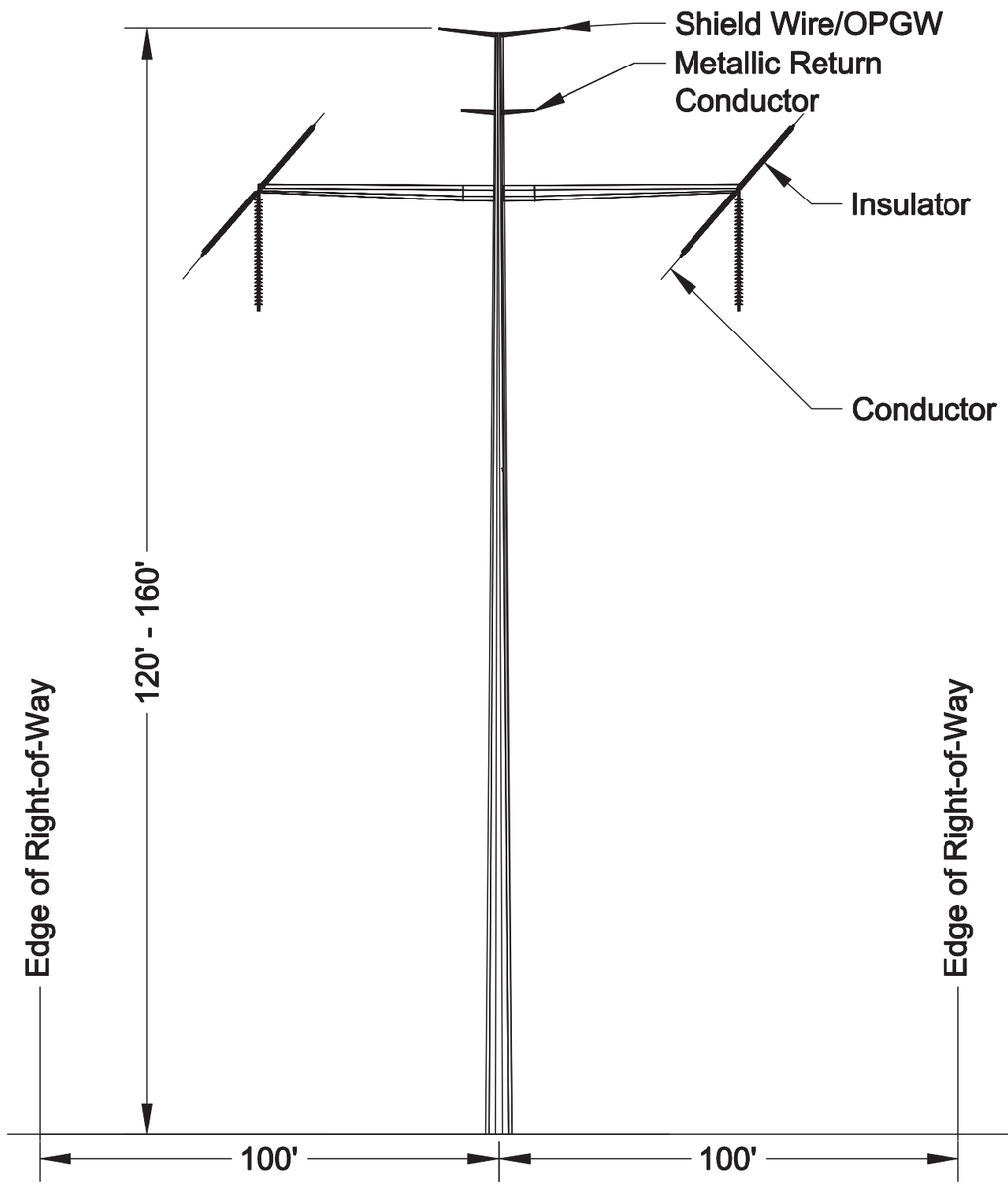


600kV Lattice Deadend

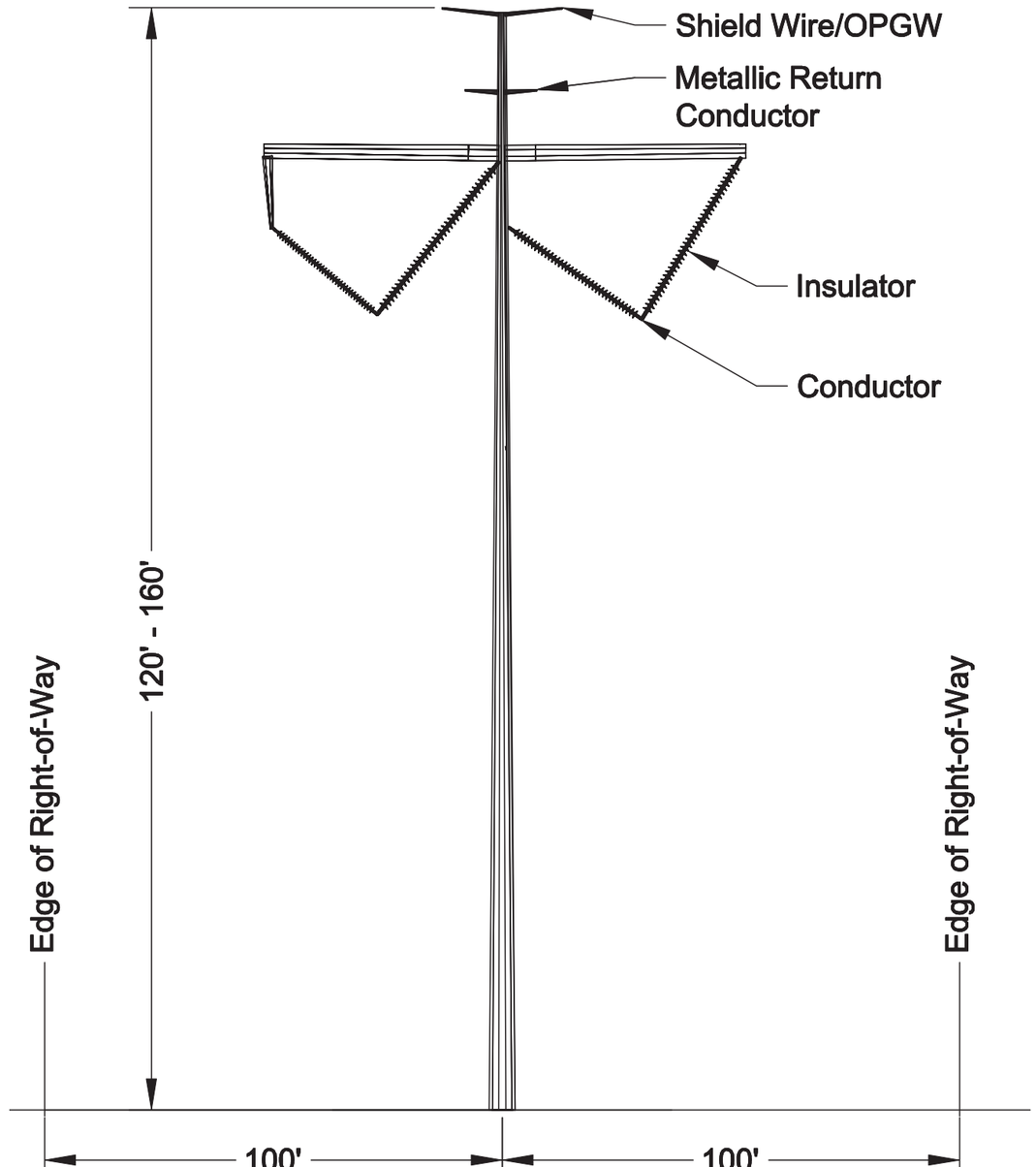


600kV Lattice Running Angle

Figure 2.1-19: 600kV Lattice Deadend and Running Angle

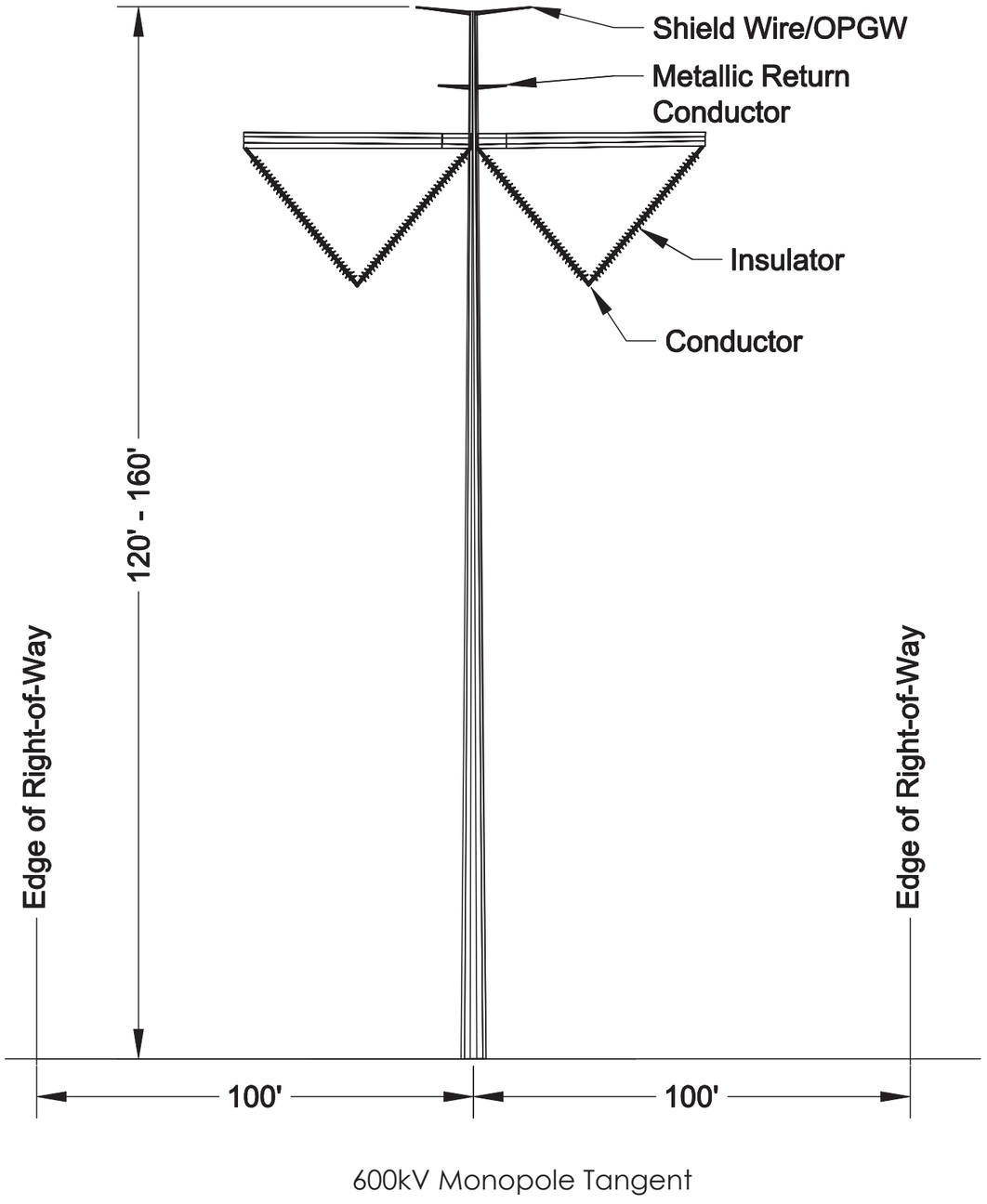


600kV Monopole Deadend



600kV Monopole Running Angle

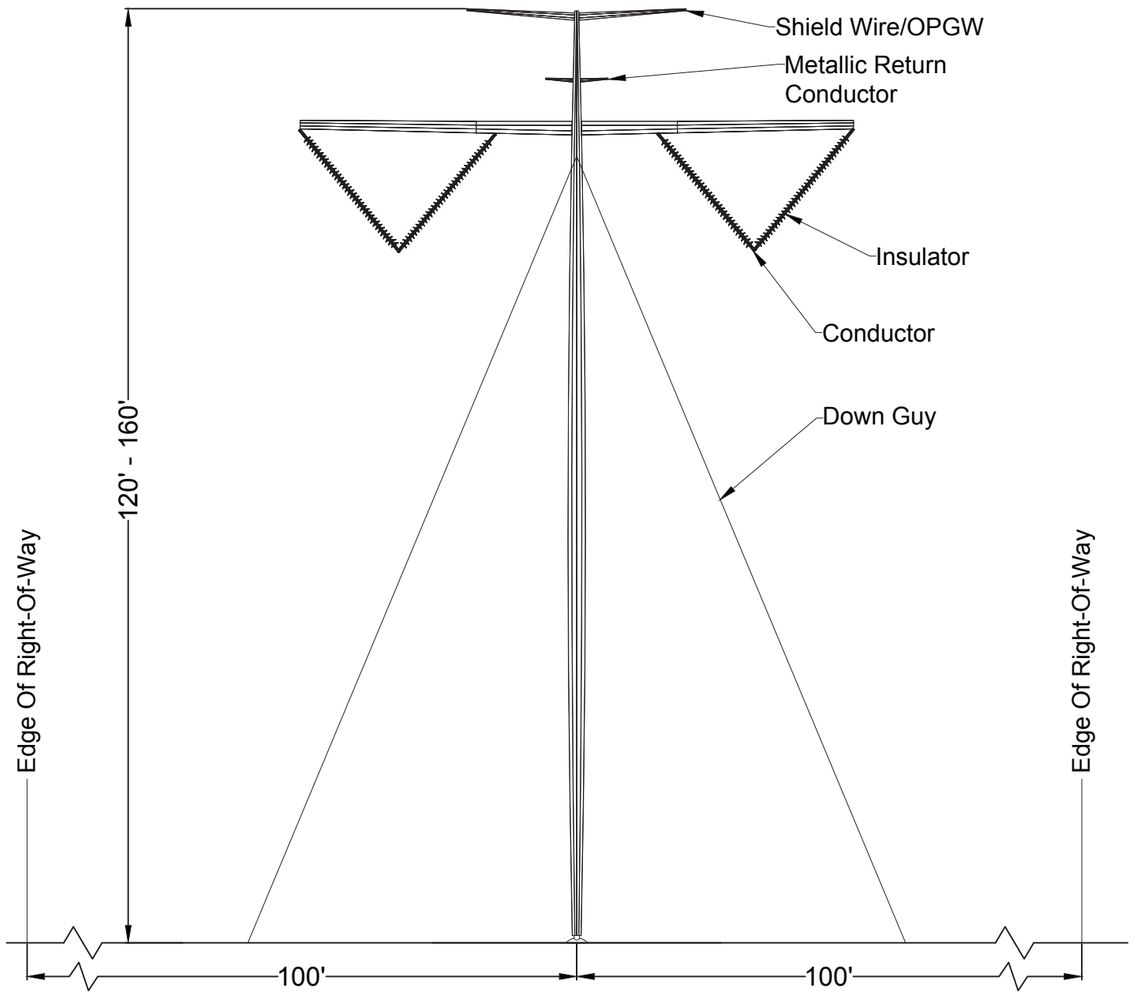
Figure 2.1-20: 600kV Monopole Deadend and Running Angle



600kV Monopole Tangent

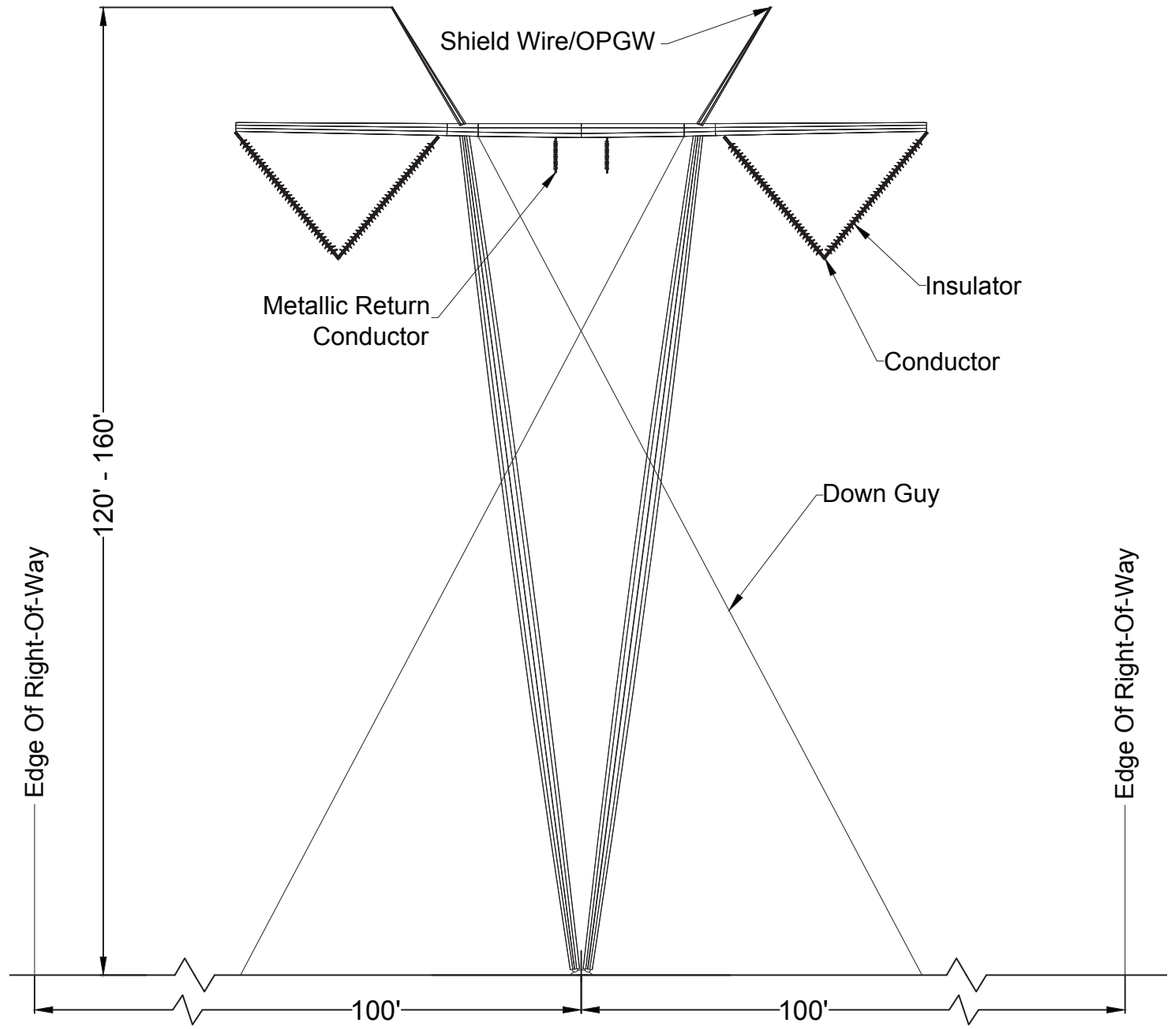
Figure 2.1-21: 600kV Monopole Tangent

Note: Depending on structure height and line angle, guy easements may be required beyond the project 200 foot right-of-way.



600kV Guyed Mast Tubular Tangent

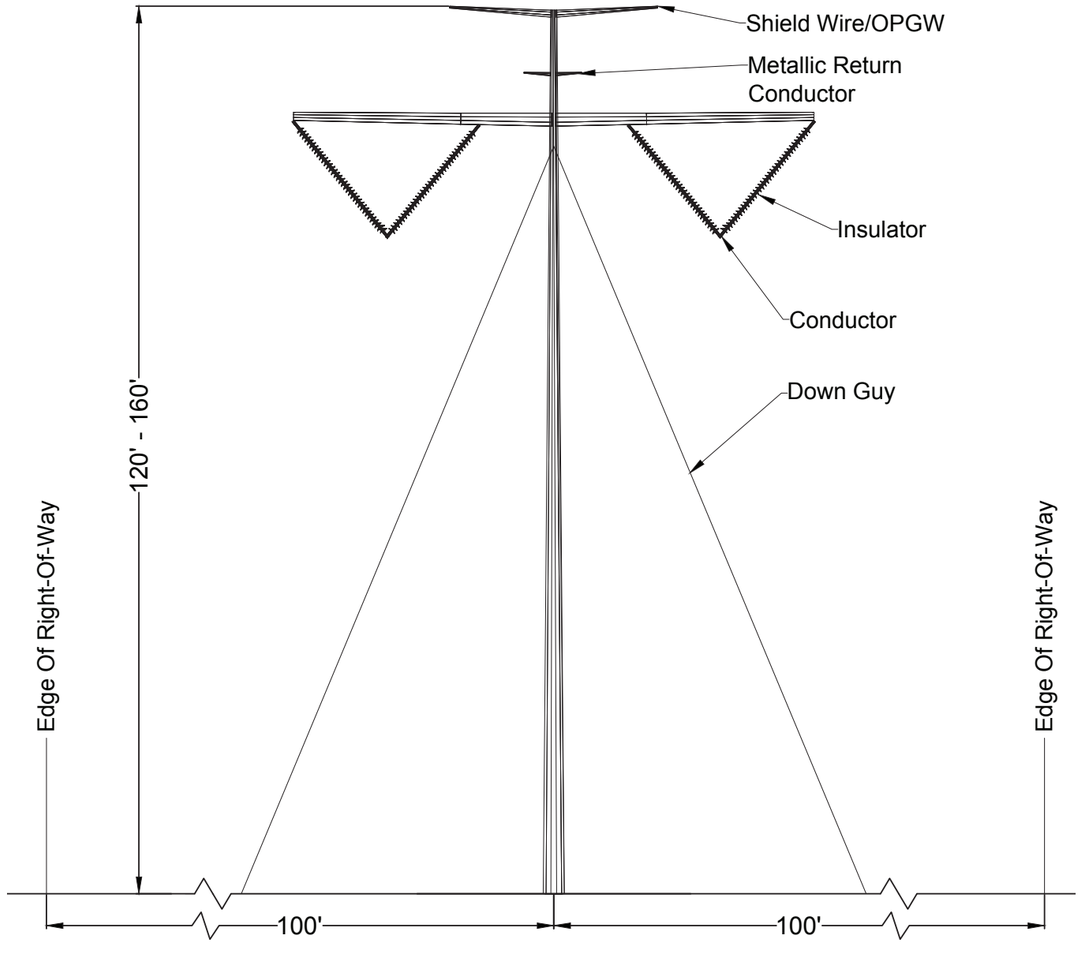
Note: Depending on structure height and line angle, guy easements may be required beyond the project 200 foot right-of-way.



600kV Guyed V-tube Tangent

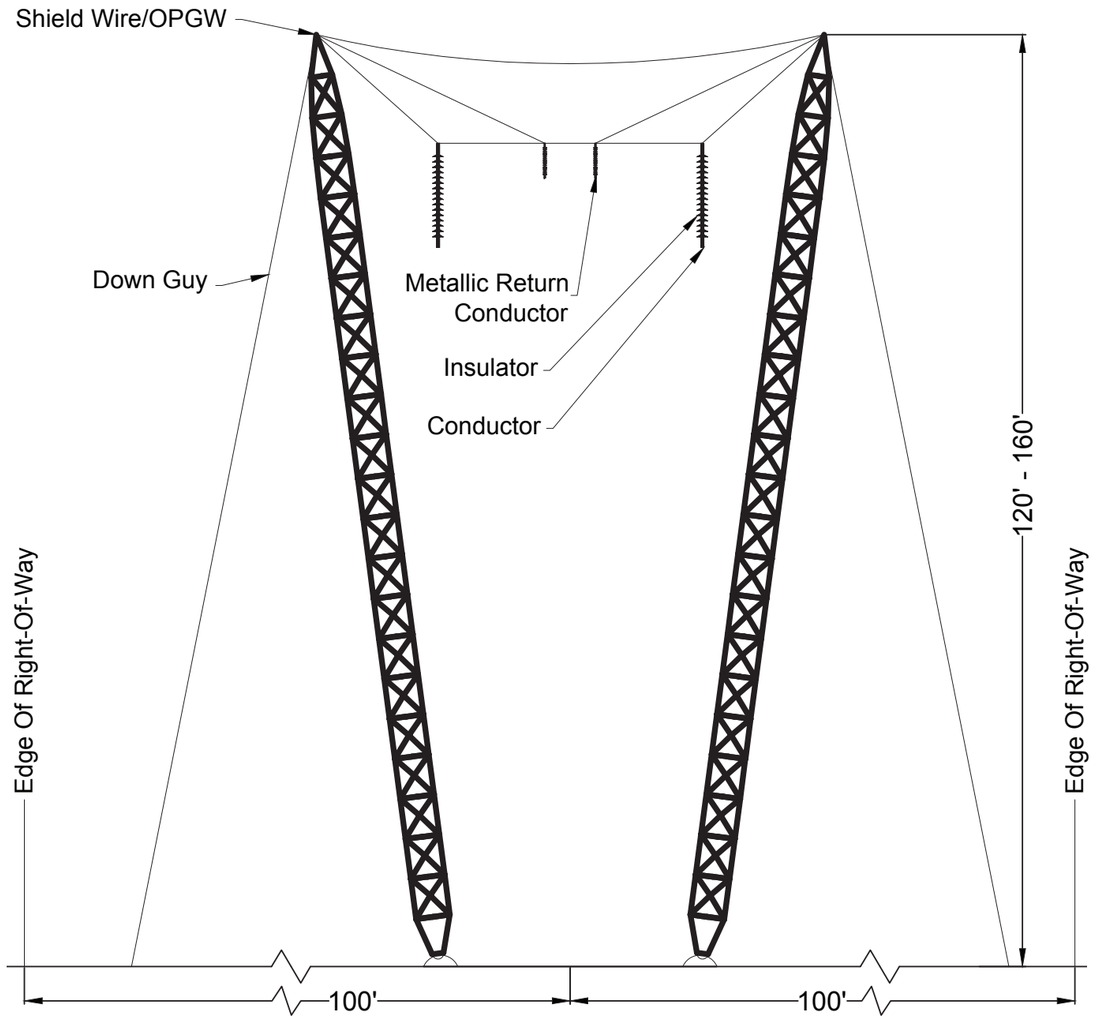
Figure 2.1-22: 600kV Guyed Mast Tubular Tangent and Guyed V-tube Tangent

Note: Depending on structure height and line angle, guy easements may be required beyond the project 200 foot right-of-way.



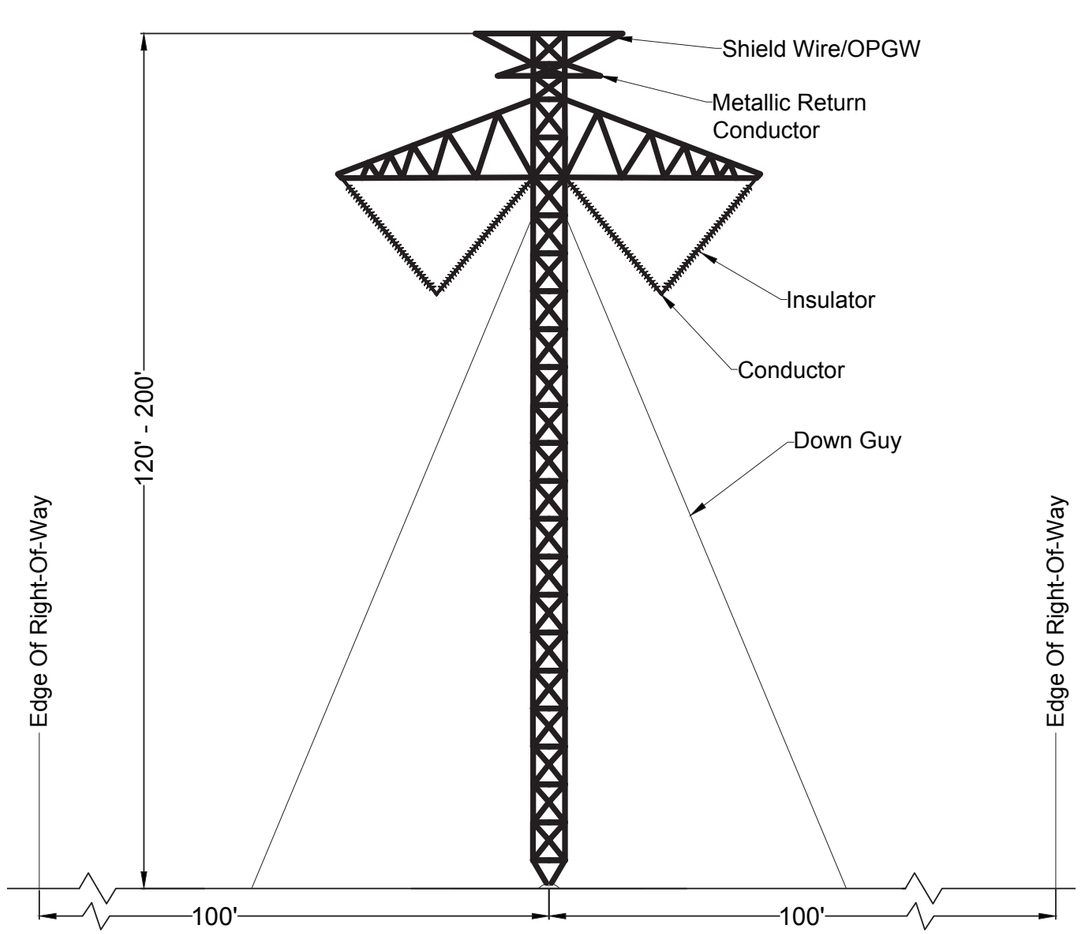
600kV Guyed Monopole Tangent

Note: Depending on structure height and line angle, guy easements may be required beyond the project 200 foot right-of-way.

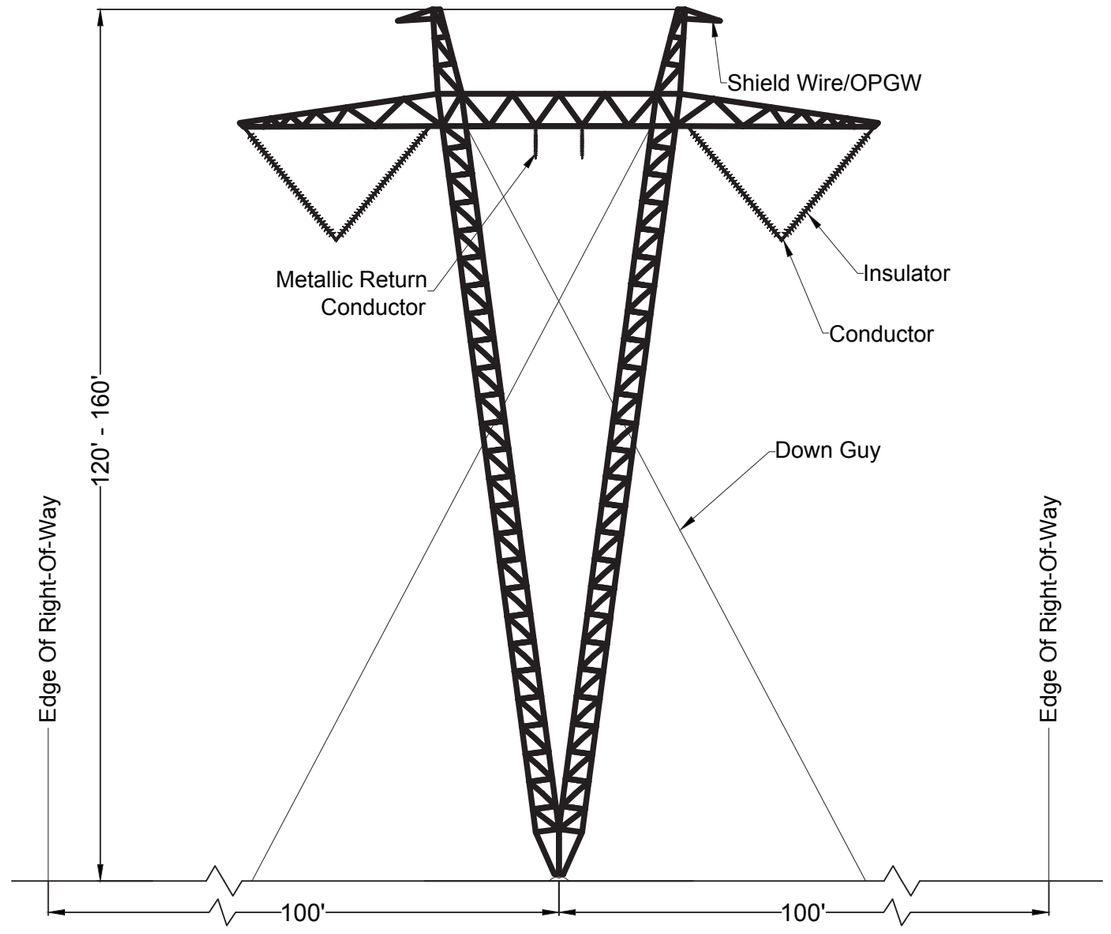


600kV Guyed Chainette Tangent

Figure 2.1-23: 600kV Guyed Monopole Tangent and Guyed Chainette Tangent

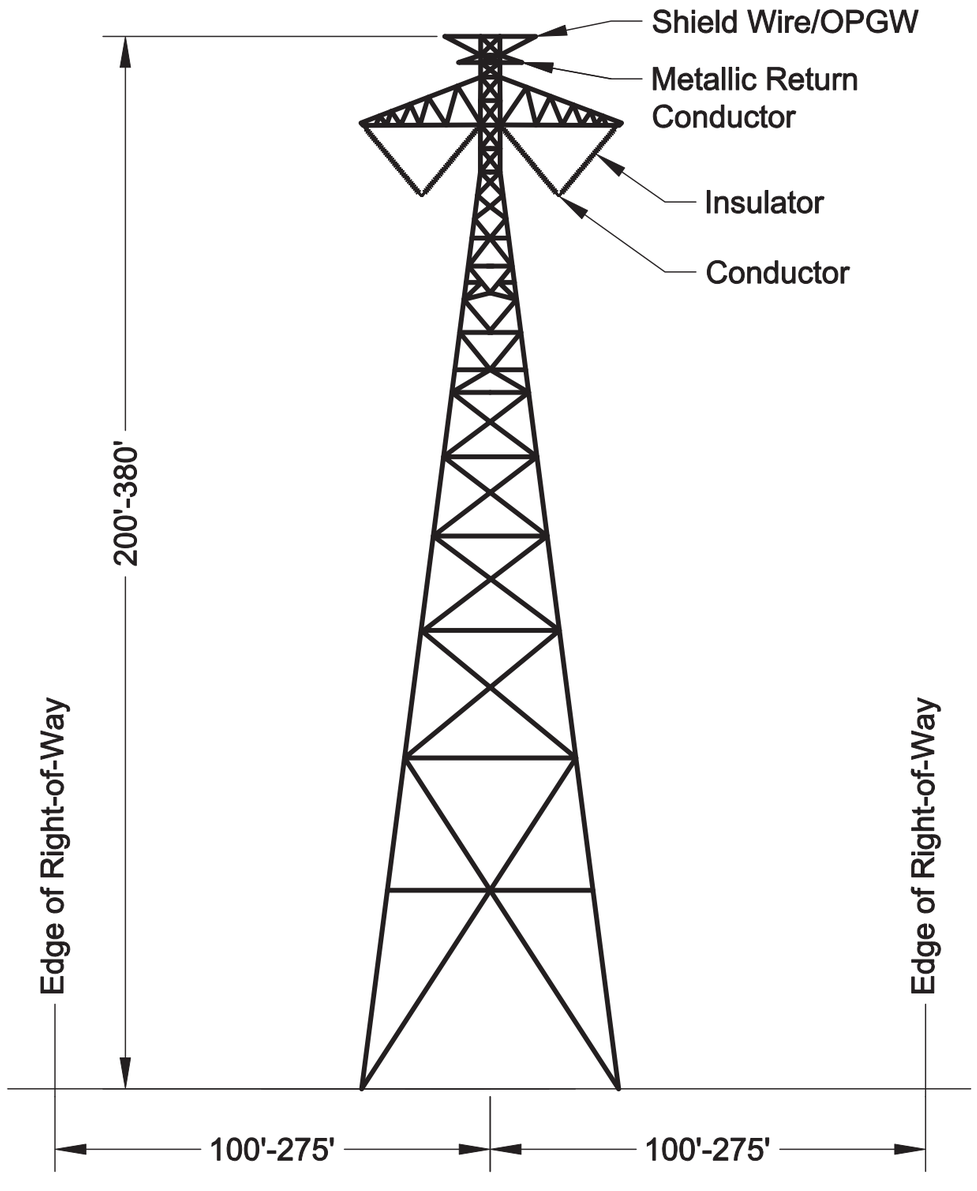


600kV Guyed Mast Lattice Tangent



600kV Guyed V-lattice Tangent

Figure 2.1-24: 600kV Guyed Mast Lattice Tangent and Guyed V-lattice Tangent



600kV Lattice Crossing Structure

Figure 2.1-25: 600kV Lattice Crossing Structure

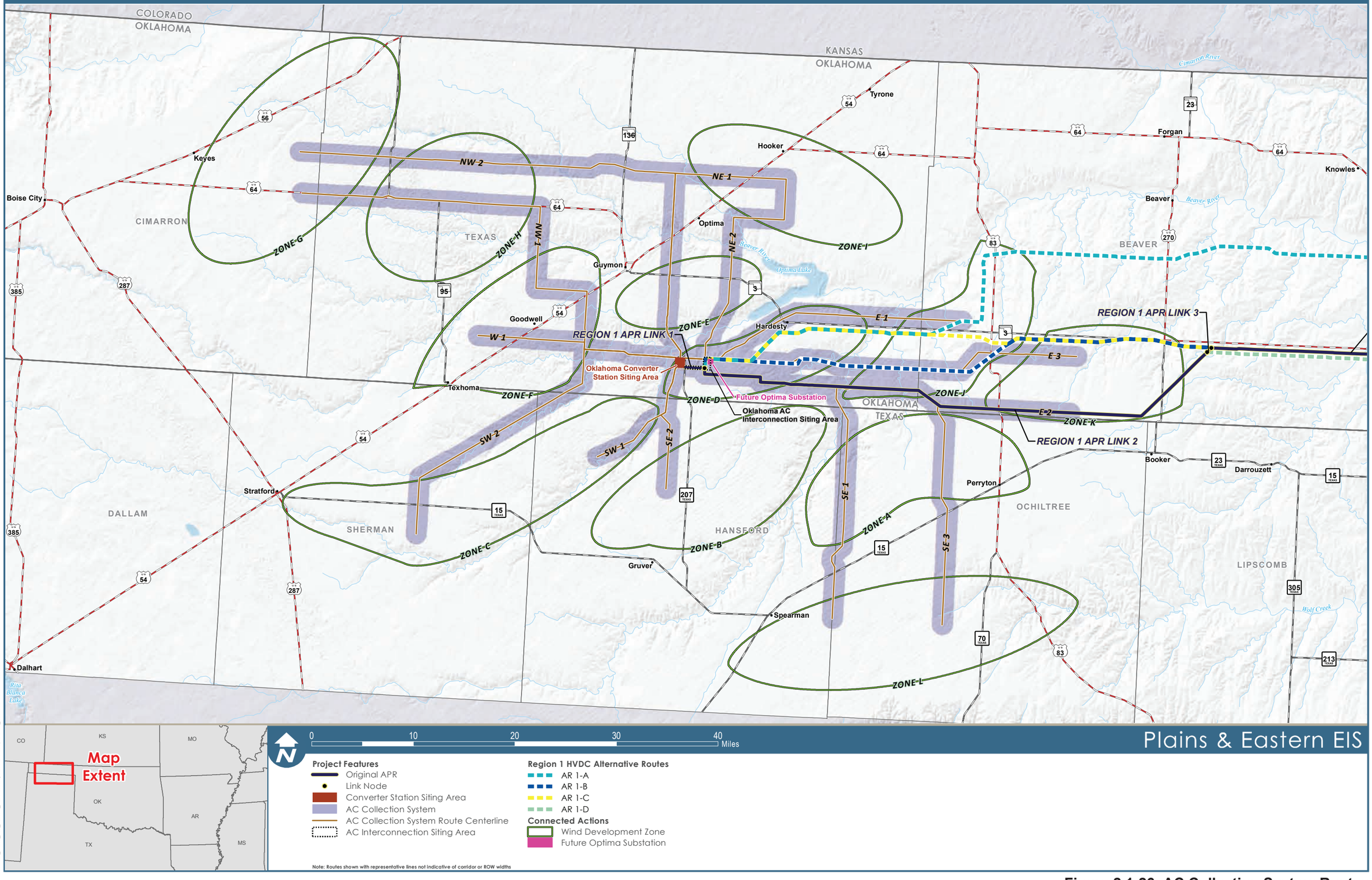


Figure 2.1-26: AC Collection System Routes

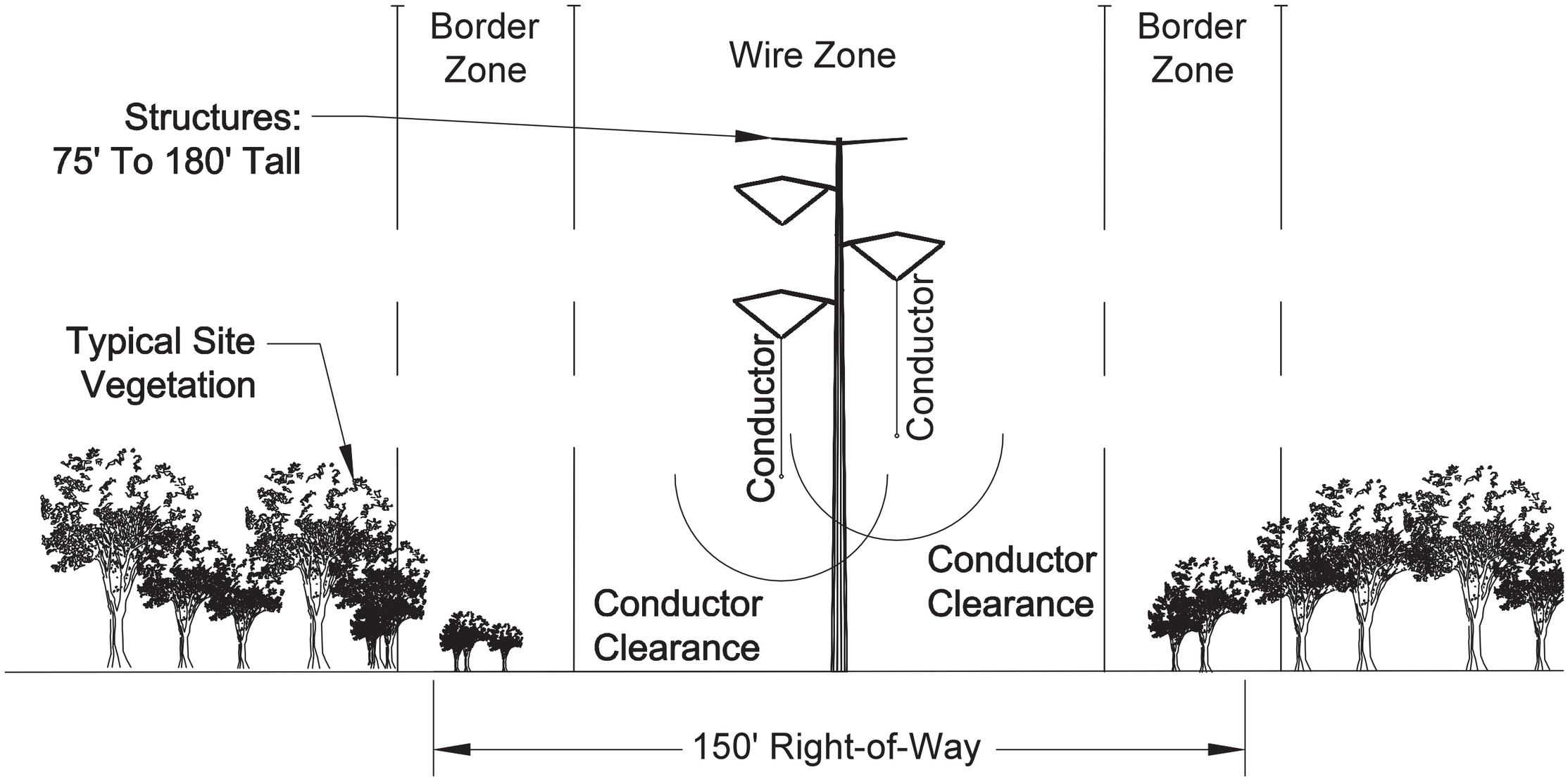
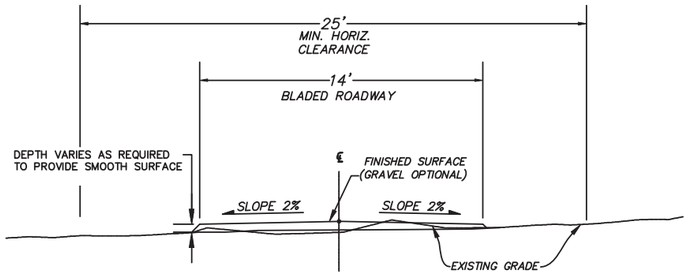
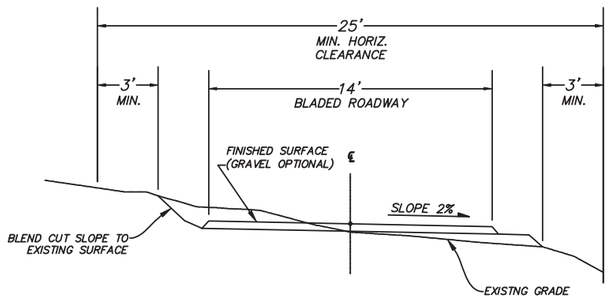


Figure 2.1-27: AC ROW Limits



TYPICAL SECTION ON FLAT GROUND

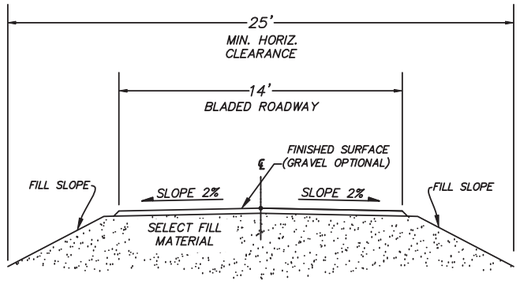


TYPICAL 'OUTSLOPE' SECTION

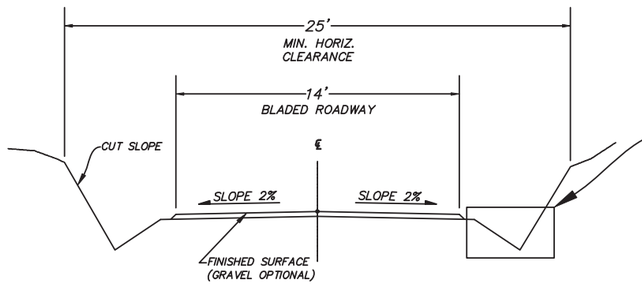
NOTE:
PROVIDE OUTSLOPE ON ROADS. WITH GRADES AS STEEP AS 20% IN THE SAME DIRECTION AS THE SURROUNDING TOPOGRAPHY SO THAT THE UPHILL EDGE OF THE ROAD IS HIGHER THAN THE DOWNHILL EDGE.

AVOID OUTSLOPED ROADS WHERE THEY WOULD DIRECT RUNOFF ONTO ERODIBLE FILL, EMBANKMENTS, OR WHERE THEY COULD CAUSE OFF-CAMBER CURVES.

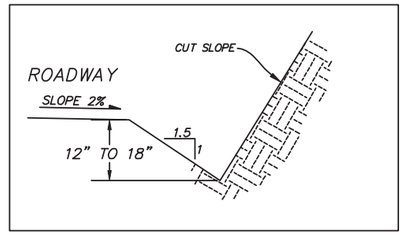
PROVIDE "INSLOPED" ROAD SECTION WITH ROADSIDE DITCH ON GRADES STEEPER THAN 20%.



TYPICAL FILL SECTION

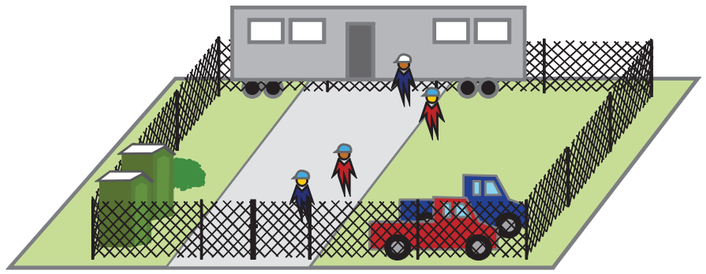


TYPICAL THROUGH-CUT SECTION

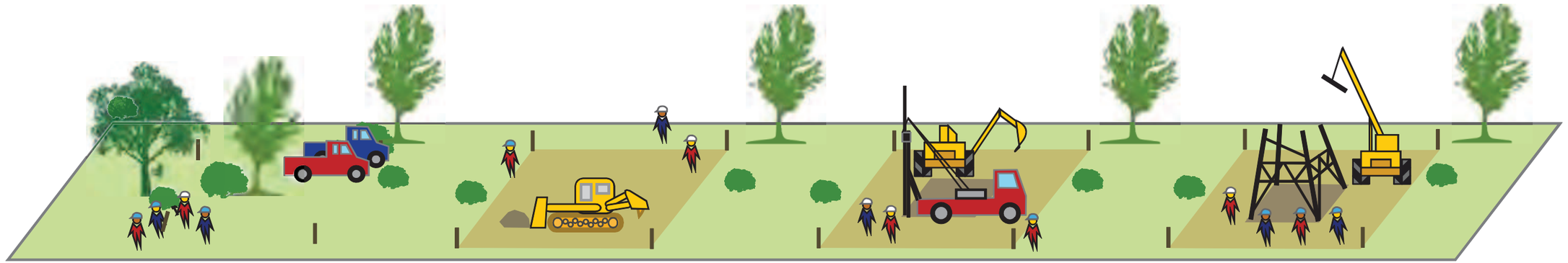


TYPICAL DITCH SECTION

Figure 2.1-28: Typical Access Roads



Preparation of Multi-use Construction Yards

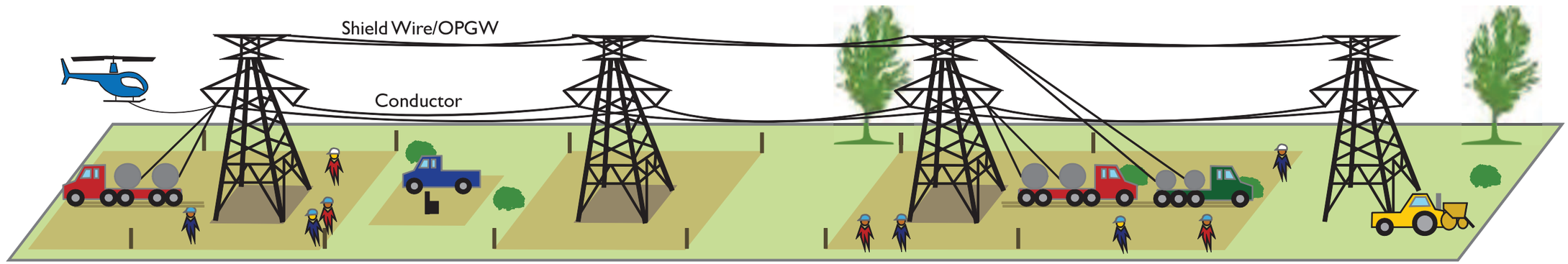


Preparation of the Right-of-Way

Clearing and Grading

Foundation Excavation and Installation

Structure Assembly and Erection



Tensioning Site

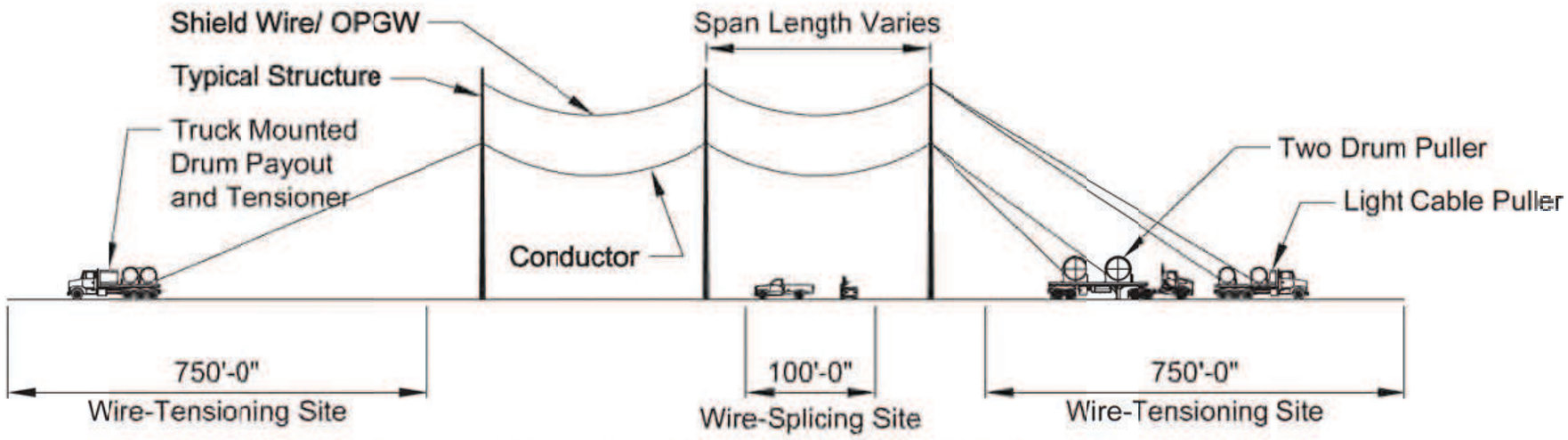
Wire-Splicing

Pulling Site

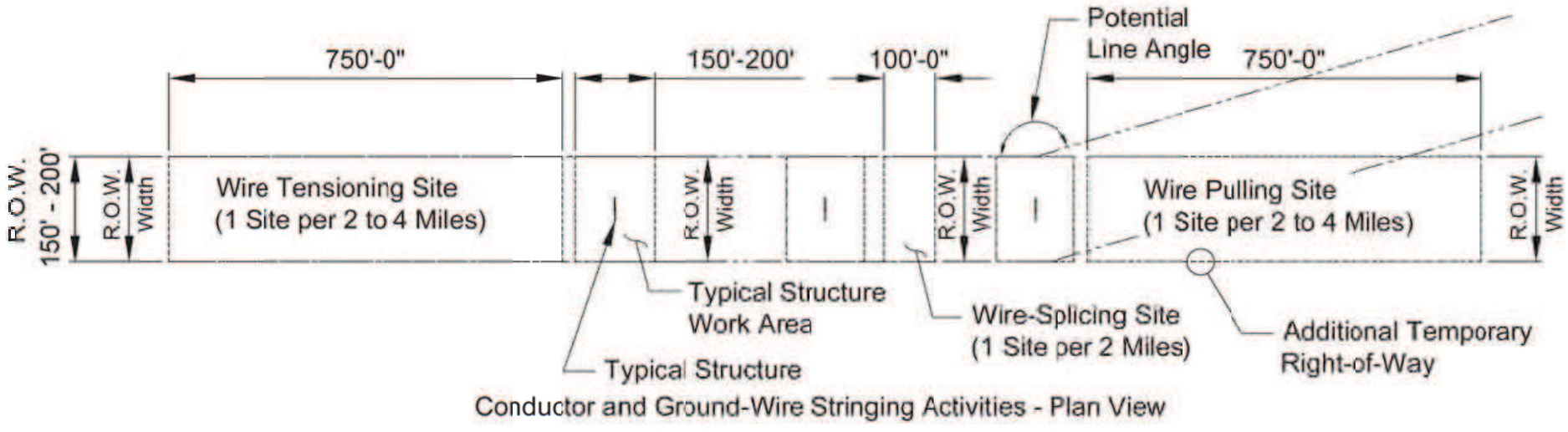
Conductor Stringing

Cleanup and Site Reclamation

Figure 2.1-29: HVDC Transmission Line Construction Sequence



Conductor and Ground-Wire Stringing Activities - Profile View

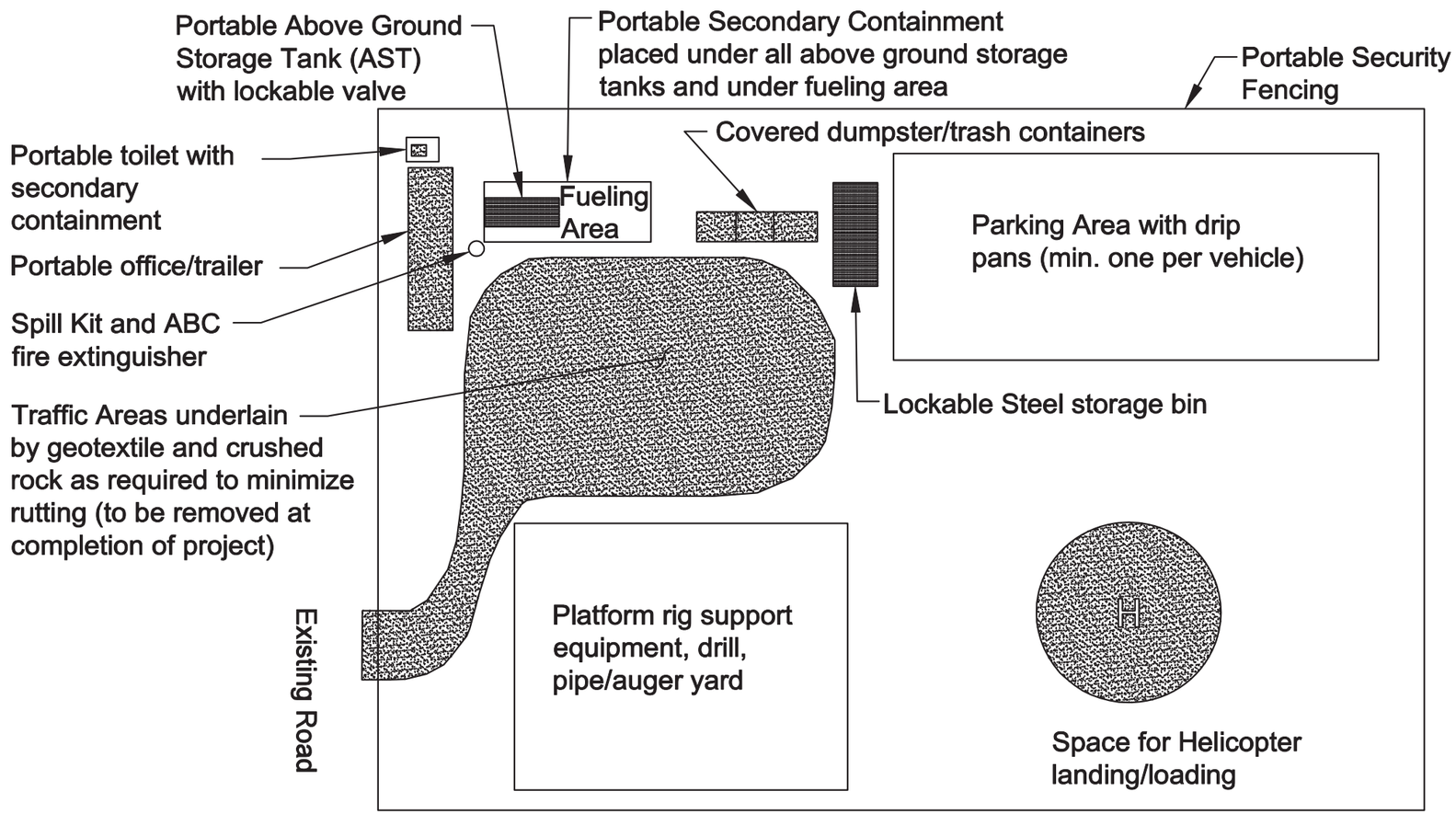


Conductor and Ground-Wire Stringing Activities - Plan View

***Vehicles and Construction Equipment Not to Scale**

Figure 2.1-30: Conductor and Ground-wire Stringing Activities

Typical Multi-Use Construction Yard
Schematic Plan (Not To Scale)



Notes:

- Individual, Multi-Use Areas may be arranged differently but all sites will typically include areas designated for field office, crew parking and sanitation, waste management, fueling area, material storage, and equipment storage.
- Fuel trucks, maintenance trucks and construction crews will be based in Multi-Use Areas.
- Vehicle wash stations may be located at multi use yards.
- Multi-Use Areas can also be used as fly yards (landing areas for helicopters) when needed for assembly and
- erection of tower sections prior to transport to final structure location. Staging areas will be reclaimed unless otherwise directed by landowner by removing all element from the site, raking, repairing ruts and seeding disturbed areas.

Figure 2.1-31: Multi-use Construction Yard

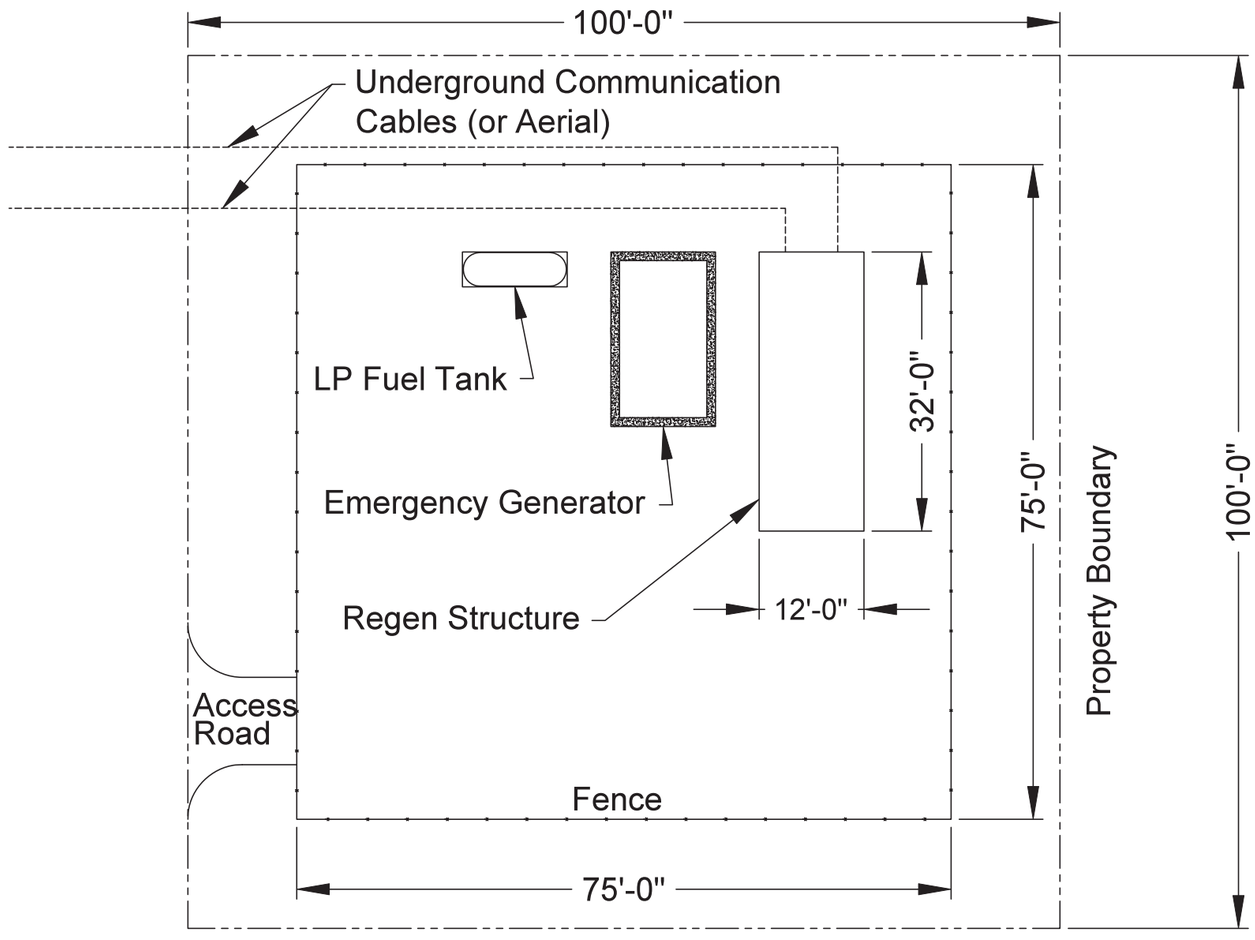


Figure 2.1-32: Regeneration Station