



JOSLIN - CARBIDE

TRANSMISSION IMPROVEMENTS PROJECT

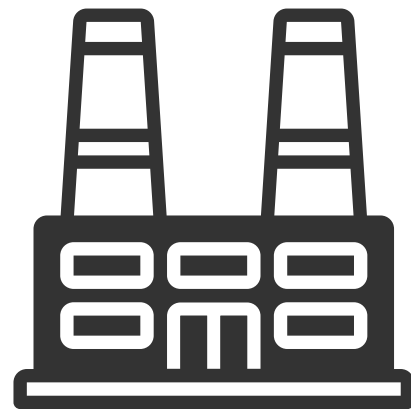
WELCOME TO OUR VIRTUAL OPEN HOUSE

As a result of the COVID-19 pandemic and social distancing recommendations made by the Centers for Disease Control and Prevention (CDC), AEP Ohio invites you to attend this virtual open house in order to minimize in-person contact. AEP Ohio remains committed to listening to your concerns and answering your questions, but we are also committed to keeping our customers and employees safe and healthy. We welcome your feedback via telephone and email as we strive to make the most informed decisions possible.

HOW THE SYSTEM WORKS

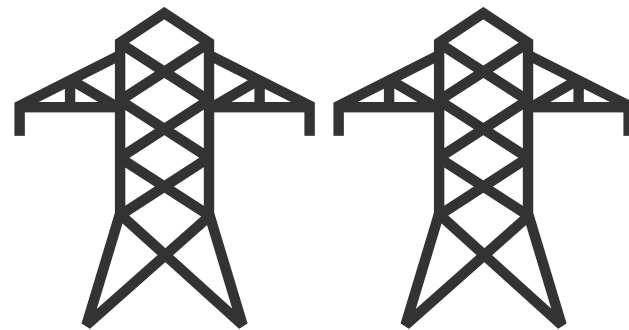
HIGH VOLTAGE

LOCAL TRANSMISSION >>



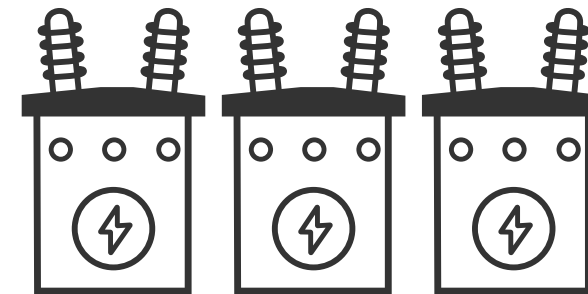
1) GENERATION STATIONS

Utilities produce electricity at coal, natural gas, nuclear, wind and hydro-electric power stations and then transports it long distances over transmission lines.



2) EHV TRANSMISSION

Extra High Voltage (EHV) electric transmission lines are generally 345 kilovolt (kV), 138 kV, and 69 kV on AEP Texas' system.



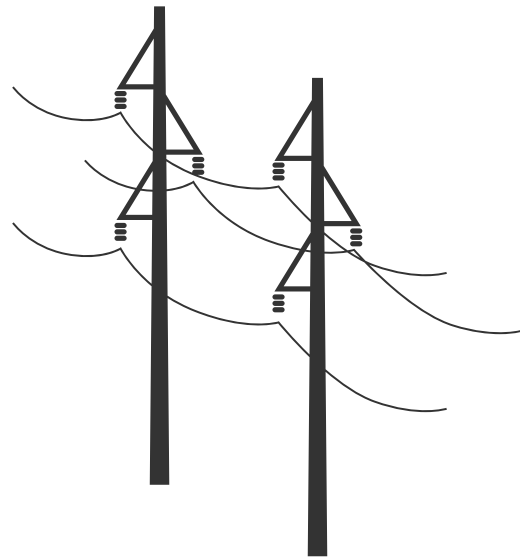
3) SUBSTATIONS

Substations direct the flow of electricity and either decrease or increase voltage levels for transport.

HOW THE SYSTEM WORKS

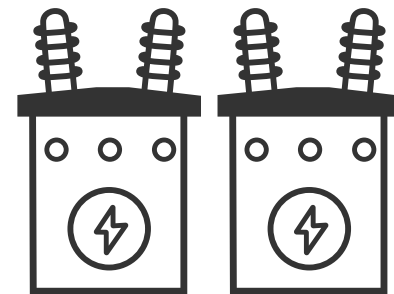
DISTRIBUTION >>

LOCAL TRANSMISSION



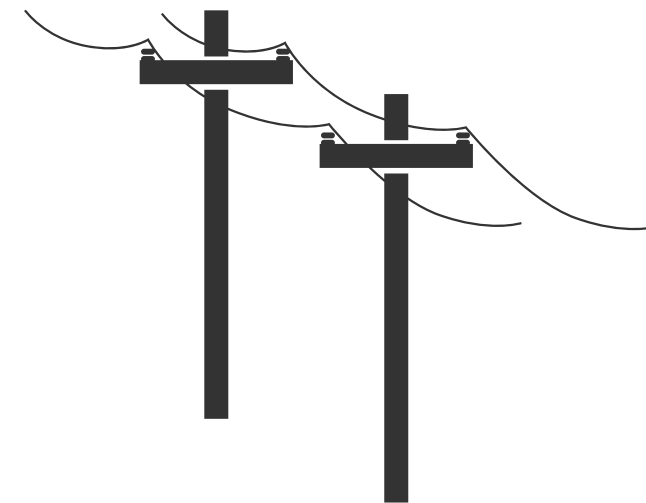
4) LOCAL TRANSMISSION

AEP Texas typically uses transmission lines to move power shorter distances - for example, to different parts of a city or county.



5) SUBSTATION

Substations transform 69 kV and 138 kV electricity into lower distribution level voltages such as 34.5 kV, 12 kV, or 7.2 kV.

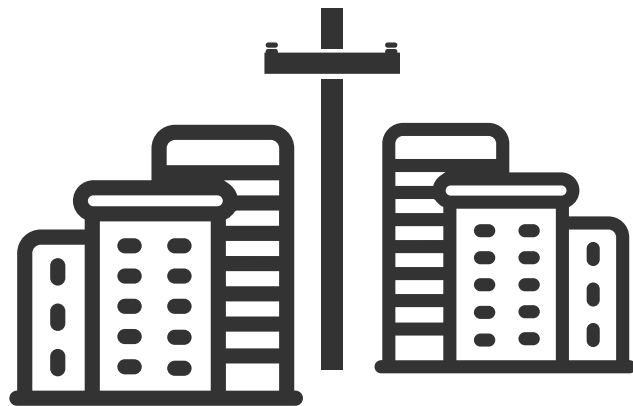


6) PRIMARY DISTRIBUTION

These main lines (also called circuits) connect substations to large parts of the community.

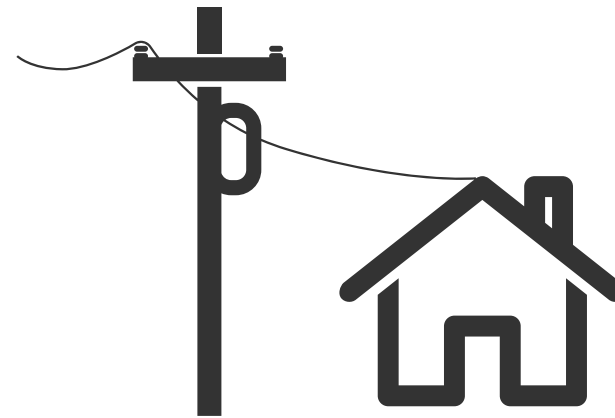
HOW THE SYSTEM WORKS

DISTRIBUTION



7) LATERAL DISTRIBUTION

These smaller capacity lines deliver electricity to neighborhoods and other smaller groups of customers.



8) INDIVIDUAL SERVICE

Smaller transformers step down voltage to levels customers can use. 120/240 volts is typical for an individual residence.

TO USE AN ANALOGY, ELECTRIC TRANSMISSION IS SIMILAR TO OUR NATIONAL ROAD SYSTEM. THREE KINDS OF POWER LINES EXIST BETWEEN POWER PLANTS AND HOMES AND BUSINESSES:

- Extra-high Voltage (EHV) lines are like electrical interstate highways.
- High-voltage local transmission lines are like four-lane roads.
- Distribution lines are like two-lane roads that eventually connect to your driveway.



PROJECT NEED & BENEFITS

WHY IS THE PROJECT IMPORTANT TO OUR COMMUNITY?

IMPROVES AREA RELIABILITY

The proposed project replaces aging infrastructure from 1970 with modern steel poles to meet current engineering and operational standards.

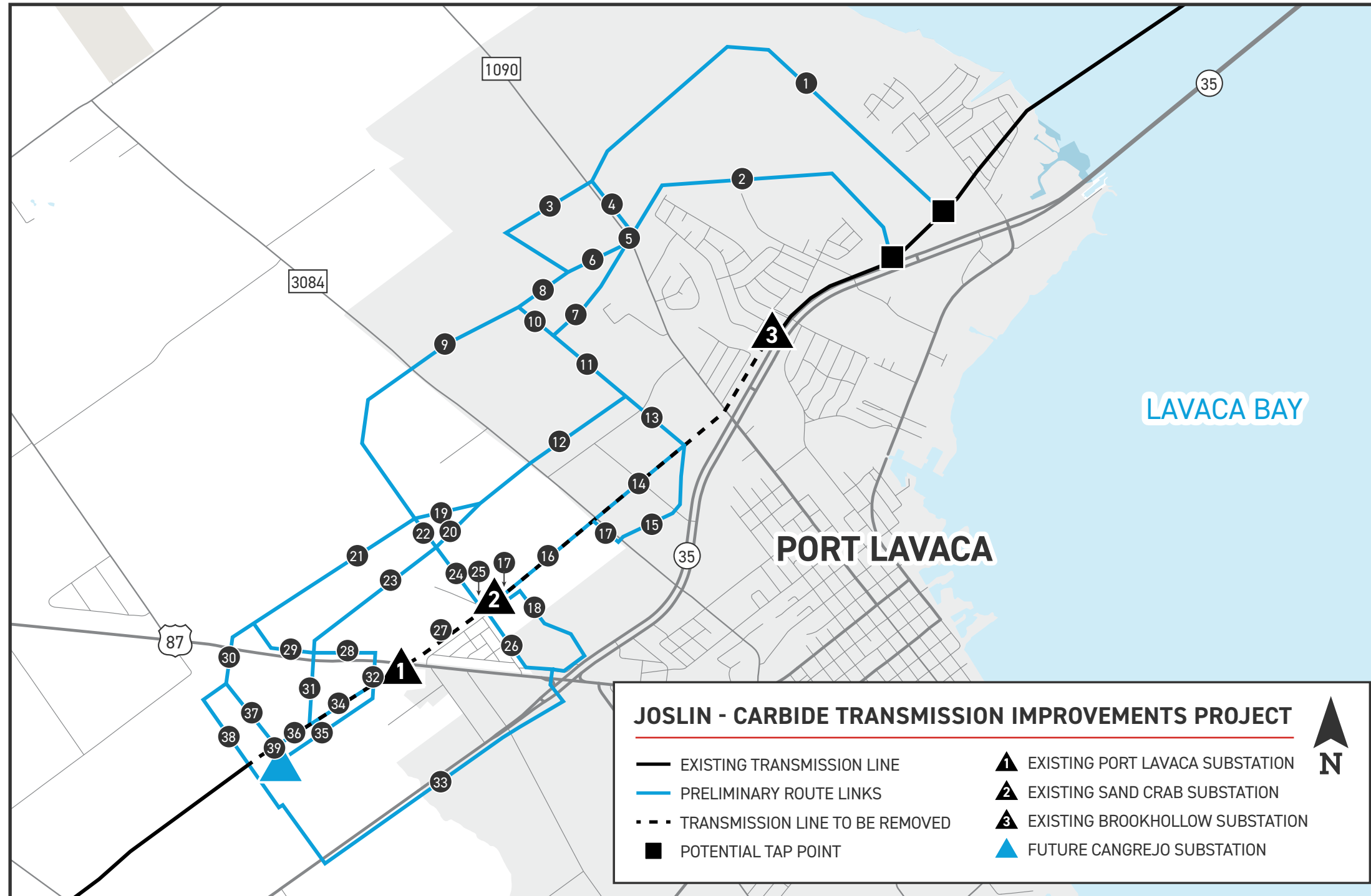
STRENGTHENS LOCAL GRID

The upgrades improve the operational performance of the power line and decrease the likelihood of larger, sustained community power outages.

SUPPORTS ECONOMIC DEVELOPMENT

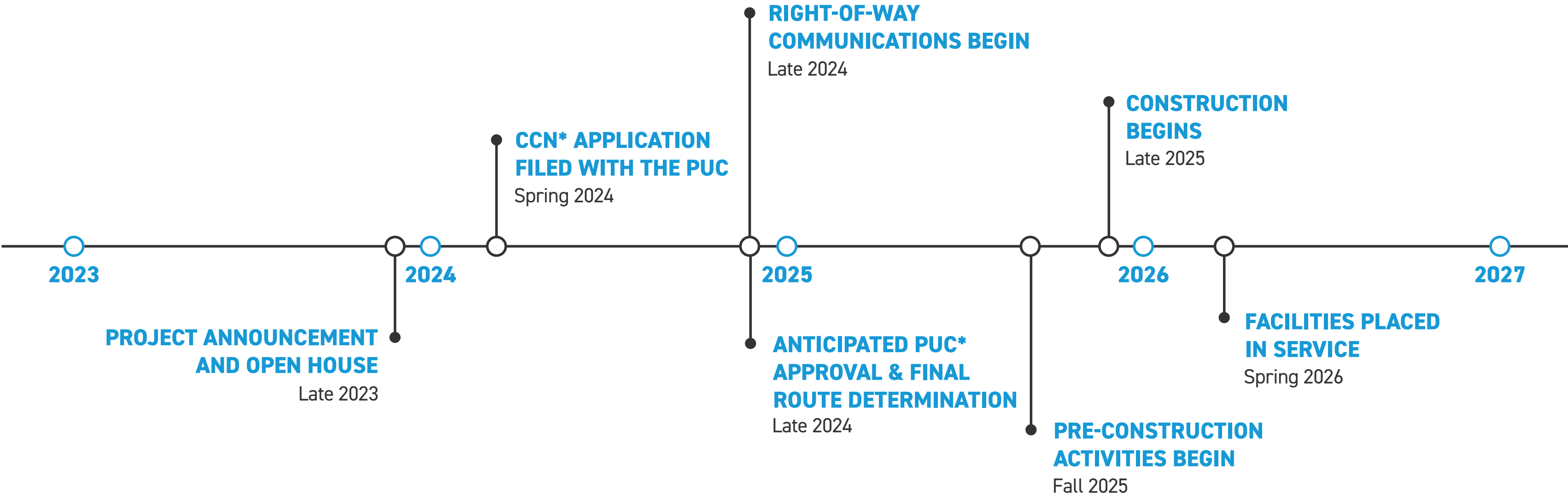
The transmission improvements on this line provide and support additional capacity for future growth and development in the area.

PROJECT MAP



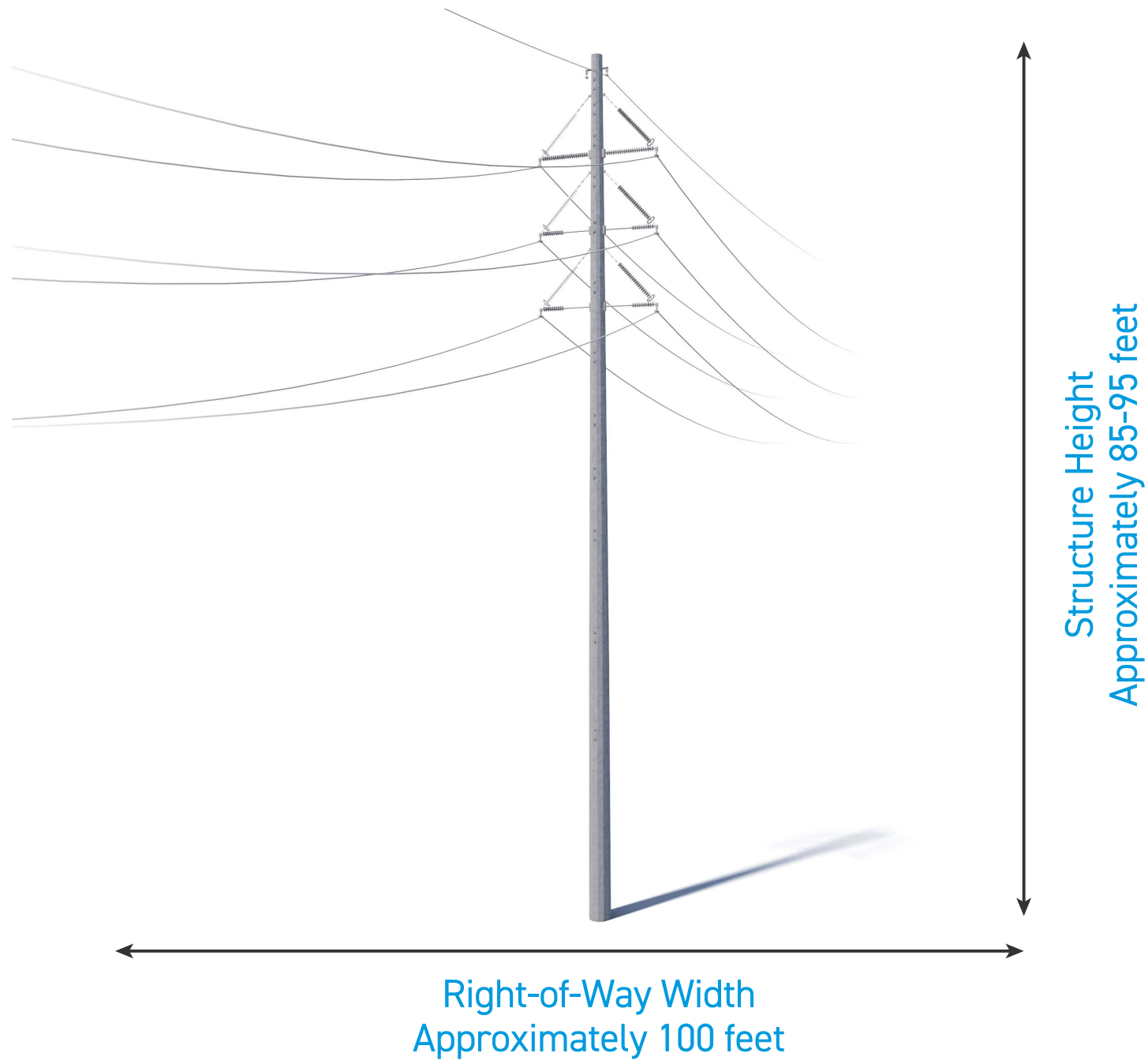


PROJECT SCHEDULE



CCN: Certificate of Convenience and Necessity; PUC: Public Utility Commission of Texas
**Timeline Subject to Change.

PROPOSED STRUCTURES



AEP Texas crews plan to install single steel poles on this project.

Typical Structure Height: [Approximately 85-95 feet](#)

Typical Distance Between Structures: [Approximately 600 feet](#)

Typical Right-of-Way Width: [Approximately 100 feet](#)

*Exact structure, height, and right-of-way requirements may vary.



AGENCIES CONTACTED

FEDERAL

- Department of Defense Military Aviation and Installation Assurance Siting Clearinghouse
- Federal Aviation Administration
- Federal Emergency Management Agency
- National Park Service
- Natural Resources Conservation Service
- United States Army Corps of Engineers
- United States Environmental Protection Agency

LOCAL

- Calhoun County Officials
- Calhoun County Independent School District
- Calhoun County Historical Commission
- Calhoun County-Port Lavaca Airport
- City of Port Lavaca

STATE

- Railroad Commission of Texas
- Texas Commission on Environmental Quality
- Texas Department of Transportation (TxDOT)
- TxDOT, Aviation Division
- TxDOT, Environmental Affairs Division
- TxDOT, Planning & Programming
- TxDOT, District Engineer
- Texas General Land Office
- Texas Historical Commission
- Texas Parks and Wildlife Department
- Texas Water Development Board

ADDITIONAL ORGANIZATIONS

- Coastal Bend Council of Governments
- Native Prairies Association of Texas
- Texas Agricultural Land Trust
- Texas Land Conservancy
- Texas Land Trust Council
- The Nature Conservancy of Texas



TRANSMISSION ROUTING PROCESS

ENVIRONMENTAL ASSESSMENT & ROUTING STUDY:

DEFINE STUDY AREA

- Based on the end points for the transmission line
- Large enough for an adequate number of geographically diverse routes

IDENTIFY ROUTING CONSTRAINTS

- Obtain aerial photos of the study area
- Request information from federal, state, and local agencies
- Gather information regarding natural, cultural, and human resources
- Gather data from published literature and on-ground inspection
- Gather property boundary information from public records
- Identify potential constraint areas such as communities, subdivisions, airports
- Identify environmental and land-use constraints
- Identify compatible routing opportunities such as existing utility corridors

ESTABLISH ALTERNATIVE ROUTES:

INVITE PUBLIC INVOLVEMENT

- Notify landowners of project and open house meetings
- Provide maps showing potential preliminary routing links
- Hold open house meetings to describe the project and solicit input
- Evaluate input from open house meeting attendees and comment cards
- Respond to inquiries
- Evaluate any additional input from the public, local officials, and agencies
- Revise preliminary routing links as necessary
- Produce alternative routes using retained links for final review

EVALUATE ALTERNATIVE ROUTES CONSIDERING FACTORS SUCH AS:

- Environment
- Compatible Easements
- Parks & Recreational Areas
- Engineering Constraints
- Land Use
- Apparent Property Boundaries
- Historical & Archaeological Lines
- Cost

SELECT ALTERNATIVE ROUTES FOR FILING



TRANSMISSION LINE PROJECT REVIEW PROCESS

A transmission addition is determined necessary for service reliability or connection of new load/generation.

TRANSMISSION ROUTING PROCESS:

ENVIRONMENTAL ASSESSMENT AND ROUTING STUDY

- Define study area
- Identify routing link constraints

ESTABLISH PRELIMINARY ROUTING LINKS

- Invite public involvement (tonight's Open House)
- Finalize links, develop routes

SELECT ALTERNATIVE ROUTES FOR FILING

PUC APPROVAL PROCESS:

AEP TEXAS FILES APPLICATION AT PUC

- Direct mail notice of application to landowners, local public officials, and electric utilities
- Publication of notice in local newspaper
- 45-Days intervention period

IF NO HEARING IS REQUESTED

- Application approved administratively 180 days

IF HEARING IS REQUESTED

- Application processed within 180 days
- Hearing be administrative law judge (ALJ)
- ALJ makes recommendation to PUC

PUC MAKES THE FINAL DECISION:

- Approve or deny application
- If approved, decides location of approved route



ENVIRONMENTAL & LAND USE CRITERIA FOR TRANSMISSION LINE EVALUATION

LAND USE

- Length of alternative route
- Number of habitable structures¹ within 300 feet of route centerline
- Length of route parallel and adjacent to existing transmission line right-of-way (ROW)
- Length of route parallel and adjacent to other existing ROW (roadways, highways, railways, canals, etc.)
- Length of route parallel and adjacent to apparent property lines²
- Sum of evaluation criteria 3, 4, and 5
- Percent of evaluation criteria 3, 4, and 5
- Length of route across parks/recreational areas³
- Number of additional parks/recreational areas³ within 1,000 feet of route centerline
- Length of route across cropland
- Length of route across pasture/rangeland
- Length of route across land irrigated by traveling systems (rolling or pivot type)
- Length of route parallel to existing pipeline ROW <500 feet from route centerline
- Number of irrigation/drainage canal crossings
- Number of pipeline crossings⁴
- Number of transmission line crossings
- Number of Interstate, United States (US), and State Highway crossings
- Number of farm-to-market (FM) road crossings
- Number of railroad crossings
- Number of Federal Aviation Administration (FAA)-registered airports⁵ with at least one runway more than 3,200 feet in length located within 20,000 feet of route centerline
- Number of FAA-registered airports⁵ having no runway more than 3,200 feet in length located within 10,000 feet of route centerline
- Number of private airstrips within 10,000 feet of route centerline
- Number of heliports within 5,000 feet of route centerline
- Number of commercial amplitude modulation radio (AM radio) transmitters within 10,000 feet of route centerline
- Number of frequency modulation radio (FM radio) transmitters, microwave towers, and other electronic installations within 2,000 feet of route centerline
- Number of recorded water wells within 200 feet of route centerline
- Number of recorded oil and gas wells within 200 feet of route centerline

- ¹Single-family and multi-family dwellings, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, places of worship, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerline of a transmission project of 230 kV or less.
- ²Apparent property boundaries created by existing roads, highways, or railroad ROWs are not “double-counted” in the length of route parallel to apparent property boundaries criteria.
- ³Defined as parks and recreational areas owned by a governmental body or an organized group, club, or place of worship within 1,000 feet of the centerline of the Project.
- ⁴Pipelines 8 inches diameter or greater.
- ⁵As listed in the Chart Supplement South Central US
- ⁶One-half mile, unobstructed. Lengths of route within the foreground visual zone of Interstate, US, and State Highway criteria are not “double-counted” in the lengths of route within the foreground visual zone of FM roads criteria.
- ⁷One-half mile, unobstructed. Lengths of route within the foreground visual zone of parks/recreational areas may overlap with the total lengths of route within the foreground visual zone of Interstate, US, and State Highway criteria and/or with the total lengths of route within the foreground visual zone of FM roads criteria.
Note: All measurements are shown in miles unless noted otherwise.



ENVIRONMENTAL & LAND USE CRITERIA FOR TRANSMISSION LINE EVALUATION

AESTHETICS

Estimated length of route within foreground visual zone⁶ of Interstate, US, and State Highways

Estimated length of route within foreground visual zone⁶ of FM roads

Estimated length of route within foreground visual zone^{6,7} of parks/recreational areas³

ECOLOGY

Length of route across upland woodlands/brushlands

Length of route across bottomland/riparian woodlands

Length of route across National Wetland Inventory-mapped wetlands

Length of route across known critical habitat of federally listed threatened or endangered species

Length of route across open water (lakes, ponds, etc.)

Number of stream crossings

Number of river crossings

Length of route parallel (within 100 feet) to streams or rivers

Length of route across 100-year floodplains

CULTURAL RESOURCES

Number of cemeteries within 1,000 feet of route

Number of recorded archeological and historic resources crossed by route

Number of additional recorded archeological and historic resources within 1,000 feet of route

Number of National Register of Historic Places (NRHP)-listed or determined-eligible resources crossed by route

Number of additional NRHP-listed or determined-eligible resources within 1,000 feet of route

Length of route across areas of high archeological site potential

¹Single-family and multi-family dwellings, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, places of worship, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerline of a transmission project of 230 kV or less.

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RIGHT-OF-WAY

AEP TEXAS HAS TWO KEY PHILOSOPHIES THAT PERTAIN TO POWER LINE RIGHTS-OF-WAY:



1 Routes should cause the least possible disturbance to people and the environment.



2 Property owners should be fairly compensated for any land rights that must be acquired.



RIGHT-OF-WAY

AEP Texas studies the land and, wherever possible, proposes routes that reduce impacts on property owners. AEP Texas reaches out to landowners in the following ways:

TO GAIN RIGHT-OF-ENTRY TO BEGIN:

- Environmental assessments
- Appraisal work
- Land surveying, soil boring and below grade study
- Cultural and historic resource reviews

TO SECURE RIGHT-OF-WAY AND COMMUNICATE:

- Landowner compensation
- Terms and conditions of easement
- Width of the right-of-way

TO OUTLINE AEP TEXAS' CONSTRUCTION PROCESS WITH A SPECIFIC FOCUS ON:

- Property restoration
- Damage mitigation as appropriate

VEGETATION MANAGEMENT



THE GOALS OF AEP TEXAS' VEGETATION MANAGEMENT PROGRAM ARE TO:

- Protect our system and minimize outages
- Minimize any adverse environmental impacts
- Ensure compliance with all applicable laws and regulations
- Perform our work as safely as possible
- Maintain a positive relationship with land owners and the public

WHAT IS VEGETATION MANAGEMENT?

The practice of controlling the growth of trees and other woody stemmed vegetation in line corridors and around substations, while maintaining respect for the environment.

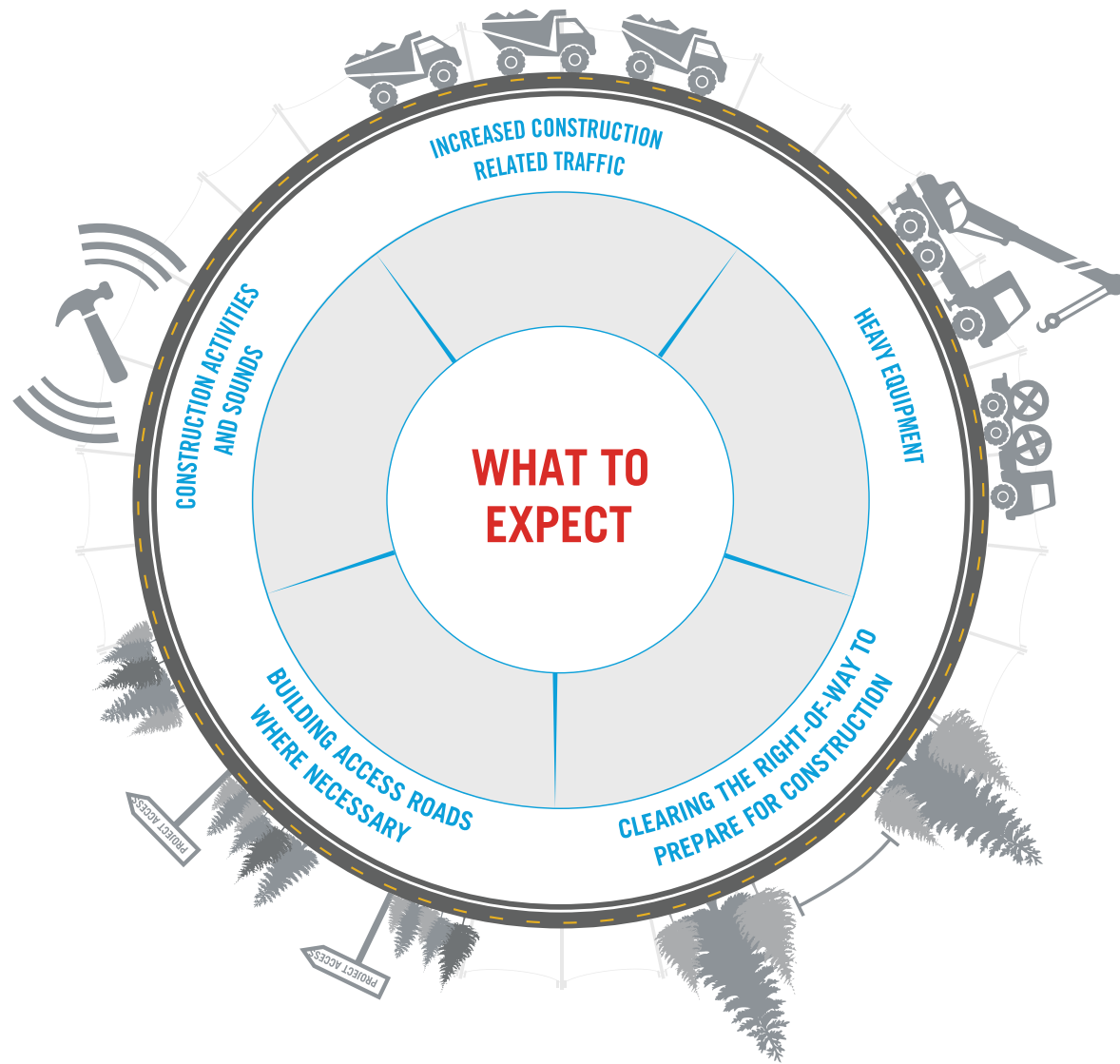
WHY IS IT DONE?



To minimize power outages caused by trees and other plants coming into contact with power lines.



CONSTRUCTION PROCESS



AEP Texas understands the work related to transmission grid improvements can sometimes be an inconvenience. That's why we make every effort during the construction process to be respectful of the environment and our neighbors, while safely working to ensure reliable electric service.

AEP Texas plans to work with individual property owners throughout the construction process. Team members will provide details of upcoming work and listen to customer feedback on how we can lessen the impact of our work. In the event damages should occur during the construction process, we will work to restore property as close to its original state as possible.



JOSLIN - CARBIDE

TRANSMISSION IMPROVEMENTS PROJECT

THANK YOU!

Thank you for visiting the project virtual open house. For more information and project updates please visit the project website, or contact us with any additional questions.



**REPLAY
OPEN HOUSE**



**DOWNLOAD
SLIDE DECK**



CONTACT US



**VISIT PROJECT
WEBSITE**