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3 October 2018

Josh Smith
Planning Director
387 NE 3rd Street
Prineville, OR 97754

RE: Pacific Power Transmission Line Expansion Capacity Project

Dear Mr. Smith:

On behalf of Pacific Power, Camas, LLC. is submitting the City of Prineville Conditional Use Permit (CUP) for the expansion of are transmission lines to support local industrial customers. Contained in this package is the CUP and all other necessary supporting documentation.

We understand that the project will be reviewed before the Planning Commission on October 30, 2018. If you have any questions regarding the application, please do not hesitate to contact me at diane.barr@camasllc.com/541.261.4886 or john.aniello@pacificcorp.com/ 503.813.6630.

Sincerely,

Diane M. Barr
Principal

cc: John Aniello, Pacific Power

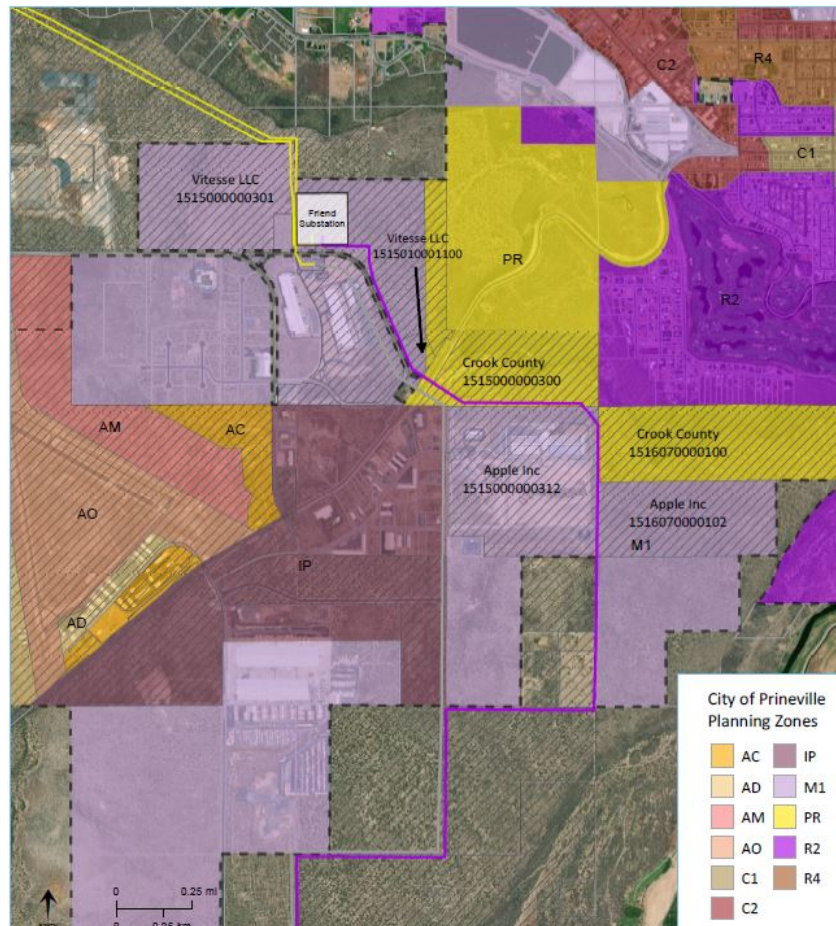
Enclosure: City of Prineville Condition Use Permit Application Package

Transmission Line Expansion Capacity Project

Crook County, Oregon

City of Prineville Conditional Use Permit Application

October 3, 2018



Prepared by:



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825 NE Multnomah Ave, #1700
Portland, OR 97232

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SUPPLEMENTAL INFORMATION

City of Prineville-Conditional Use Permit Application

Transmission Line Expansion Capacity Project

Applicant:

Pacific Power
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825 NE Multnomah, #1700
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Application Prepared by:

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Project Need:

Pacific Power has been requested to provide additional transmission capacity to a large industrial customer in Crook County. As a regulated public utility, Pacific Power is required to supply the requested electrical service. To support this load increase, new transmission lines with new structures will be engineered to run from the existing terminal substations; Friend and Ponderosa and from the future substations; Ochoco and Corral. The new transmission structures will be constructed so that they are capable of carrying multiple sets of lines (each set would consist of three separate conductors) allowing for future expansion. The proposed addition to the existing transmission line system will also serve the current and future community growth with reliable and redundant energy capacity as well as the local large industrial customers current and future expansion of facilities to the best of Pacific Power's understanding based on load growth forecasts.

Project Description:

Pacific Power has performed multiple engineering reviews to establish the most efficient manner in meeting the project need. Where feasible, transmission line segments have been collocated. **Exhibit A, Project Location** Figure 1 shows the full extent of the Crook County Transmission Line Expansion Capacity Project (Project) transmission lines and their substation interconnection. **Exhibit B-Site Plan** shows the portion of the project within the Prineville City limits being considered in this Conditional Use Application.

The portion of the project within the Prineville City limits is described as:

- **Phase I:** Projected for completion 2018 - A double circuit 230/115 kV transmission line crossing into the City of Prineville on the south side, east of Baldwin Road and terminates at Friend Substation. The Right of Way (ROW) corridor is approximately 80 feet wide. Towers will be approximately 100' in height. The length of the Corral-Friend transmission line, within City Limits, is approximately 9,248.69 feet with a ROW of 80 feet, approximately 739,895.20 square feet. This line has the ability to increase their capacity to a double circuit 230/230 kV transmission line in the future, without any new

construction, if need be.

- **Phase II:** Projected for completion mid 2019 - Two, triple circuit 230/230/115 kV transmission lines will connect Friend substation to a new substation called Ochoco. The two triple circuit lines are within the City of Prineville just as they exit the Friend Substation on the north side, after which they are within Crook County land jurisdiction. The Right of Way (ROW) corridor is approximately 140 feet wide. Towers will be approximately 110-140' feet in height. The length of the Friend-Ochoco transmission lines (Phase II) within City Limits is approximately 2,265.09 feet with a ROW of 140 feet, approximately 317,122.6 square feet The Phase II transmission line point of interconnection into Friend substation is solely dictated by Crook County siting requirements, which is currently being finalized. Therefore, the exact point of crossing into City of Prineville jurisdiction will be established based on Crook County siting requirements. The changes, if any, are expected to be minor. See **Exhibit B-Site Plan**.

Total land area needed for the project is approximately 1,057,007.8 square feet.

Property Owner(s):

Apple, Inc.

Spas Lazarov
1 Infinite Loop
Cupertino, CA 95014
773-230-3866
slazrov@apple.com

Crook County

Anne Beier
300 NE Third Street
Prineville, OR 97754
541-416-3949

Vitesse LLC.

Bryce Dalley
1 Hacker Way
Menlo Park, CA 94025
503-758-2161
rbd@fb.com

Table 1- Property Information, provides the landowners and tax lot numbers within the City of Prineville affected by the Project. The landowners listed will have permanent easements established for both the ROW and access prior to the construction. Pacific Power is actively in the process of securing easements with all property owners. In the event one of the private landowners rescinds their current agreements to grant these easements, PacifiCorp can invoke their condemnation rights granted to public utilities under Oregon Revised Statutes (ORS) 772.210 Right of Entry and Condemnation of Lands for Construction of Service Facilities.

Pacific Power Crook County Electric Reliability Project
Table 1-Property Information within City Limits

Township	Range	Section	Tax Lot	Owner	Acres	Zoning
15 South	16 East	07	102	Apple Inc.	96.90	M1
15 South	15 East	00	312	Apple Inc.	154.40	M1
15 South	16 East	07	100	Crook County	1,773.76	PR
15 South	15 East	00	300	Crook County	136.03	PR
15 South	15 East	01	1100	Vitesse LLC.	83.32	M1
15 South	15 East	00	301	Vitesse LLC.	241.50	M1

Proposed Use:

Pacific Power is proposing to use the land within the Prineville City limits for new transmission lines and their required clearance corridors. The new transmission lines will interconnect new and existing substations that are in both the City of Prineville and Crook County.

Project Location:

Township: 15 South
 Range: 15 and 16 East
 Sections: 00, 01, and 07

The ROW will run along the northern and eastern end of tax lot 151500000301, cross 1515010001100, go through the southern end of 151500000312, cross the northeast corner of tax lot 151500000312 and follow its eastern side, while bordering the west side of tax lots 1516070000100, and 1516070000102. **Exhibit B, Site Plan.**

Zoning:

The proposed transmission lines are located in two zoning types: M1 (Light Industrial) and PR (Park Reserve). Compatibility with these zoning types are presented below. Refer to **Exhibit B-Site Plan** for Zoning for the affected parcels.

M1 (Light Industrial):

In accordance with City of Prineville City of Prineville Code (CPC) 153.060 the purpose of the Light Industrial M-1 Zone is to provide for a wide range of industrial uses but limiting or excluding those industrial uses which are generally not considered compatible with adjoining commercial or residential areas and which, in many cases, involve industrial uses which involve hazardous or nuisance creating conditions. Pacific Power proposes a "utility facility (major)".

The CPC defines a major utility facility to include:

"utility facilities ... owned or operated by a ... private company for the generation. transmission. distribution ... of its products ...and including ... power transmission lines including their poles or towers "

PR (Park Preserve):

In accordance with City of Prineville Code (CPC) 153.075 the purpose of the Open Space PR Zone is to protect and provide natural resources within the city and the surrounding urban area considered important for recreation, open space and quality of living amenities and to limit development in those areas considered environmentally sensitive that have been designated by the Urban Area Comprehensive Plan to have open space qualities.

Per the CPC, such proposed facilities are considered a Type II conditionally allowed use under M1 and PR zoning. However, the facilities will also be held to the standards of the Natural Features Overlay District (NFOD) for the Rimrock Scenic Area.

NFOD (Natural Features Overlay District):

In accordance with the CPC 155.080 the purpose of this section is to protect scenic rimrock and sloped areas from adverse visual impacts resulting from development on or above the face of the rimrock bluff and the slope below. The Prineville Comprehensive Plan recognizes the critical importance that the rimrock plays in defining community character and livability. This section also includes standards to protect development from rock fall, erosion and slide hazards.

Rimrock setback areas. The setback from the top-of-rimrock is incorporated into this Section from existing city and county (Ordinance 18, Section 4.210) regulations. Table 155.2 summarizes the top-of-rimrock and rimrock slope setbacks. The top-of-rimrock and rimrock slope setback areas are mapped on the Prineville Natural Features Inventory. The setback is shown below.

TABLE 155.2 (FROM STATUTE): RIMROCK SETBACK AREAS

Natural Feature	Location	Measured From	Distance
Top-of-Rimrock Setback Area			
Rimrock	Within entire UGB	Top-of-Rimrock cliff or significant break in slope (~25% slope)	200 feet
Rimrock Slope Setback Area			
Rimrock & Slope	Within entire UGB	Top-of-Rimrock cliff or significant break in slope (~25% slope)	500 feet

The Project falls into the Rimrock 200-foot setback criteria. No towers are designed within the Rimrock and Slope areas. The tower locations will be engineered to fall outside of the 200' Rimrock Setback requirement. If necessary, evidence of such will be provided to the City of Prineville upon final design survey.

155.070 Wildlife Habitat

In accordance with the CPC 155.070 the purpose of this section is to protect significant wildlife habitat areas associated with surface water features and their respective setback areas, within steeply sloped portions of the Barnes Butte scenic area, and within rimrock scenic areas. This section also includes standards to identify and mitigate impacts from development near inventoried raptor nesting sites.

Pacific Power, USFWS, and ODFW have agreed to Avian Protection Terms and Conditions for the

Ponderosa-Baldwin Transmission Line and the Ochoco-Friend Transmission Line. Pacific Power will continue to uphold this agreement for the portion of those lines that are within City Limits. See **Exhibit C, Avian Protection Terms and Conditions**. The transmission lines will be built to the Avian Powerline Interaction Committee (APLIC) standard. Pacific Power has established avian nesting restriction terms and conditions with Oregon Department Fish and Wildlife (ODFW) and US Fish and Wildlife (USFWS). See Attachment avian nesting survey requirements.

Zoning Resolution

Per the CPC, such proposed facilities will be subject to a Type III review by the Planning Commission, CPC 155.040 (C).

“Type III Procedure. In addition to its normal quasi-judicial review functions, the Planning Commission shall be responsible for reviewing appeals and referrals of Type II (Planning Director) decisions under Type III procedure (public hearing before Planning Commission with notice and right of appeal to City Council). Applications for planned unit developments and land divisions within the Barnes Butte primary and secondary scenic areas shall also be reviewed by the Planning Commission pursuant to § [155.090](#).”

In accordance to the MI and PR zoning, the request is submitted by a private company for the transmission of power between existing Pacific Power substations. The transmission of energy will require use of poles and wires. The project will not include any formal parking, landscaping, or signage features. The proposed action will have no adverse social, economic, physical or environmental impacts that cannot be minimized or reasonably mitigated.

Site Description:

The subject properties are relatively flat, not irrigated, and vegetated with sagebrush and juniper trees. The properties are currently occupied by electrical transmission lines, and an Apple Inc. data center. See Exhibit B, Site Plan.

Related Applications:

A separate land use review application has been submitted to Crook County Community Development in September 2017 for the southern connection from Ponderosa/Coral substations. Phase II, the connection between Friend and Ochoco substations comprising of two, triple circuit 230/230/115 kV line County application is currently under development and scheduled for Crook County submittal in October. All necessary approvals will be obtained prior to construction.

Project Alternatives:

The Project Alternatives were developed for Phase I: Corral to Friend. Phase II, Friend to Ochoco transmission line is dictated by the Crook County preferred location. Therefore, the interconnection in to Friend substation, the portion within the City of Prineville, is currently under routing alternatives with the County. Pacific Power considers that **Exhibit B, Site Plan**, to be a reasonable representation of the preferred interconnection point. Please refer to **Exhibit D**, for reference for Phase I alternative routes.

Phase I Alternative Project Routes

The Proposed routing was chosen based on reviewing the following criteria: (1) Engineering Feasibility; (2) Land Control; (3) Costs and (4) Environmental

All routes were assessed on these four factors.

Alternative Route 1:

The route was rejected due to its location on the Rimrock which would impact criteria (4) Environmental by being inside the designated 200-foot setback.

Alternative Route 2:

This route was rejected due to (1) the airport approach restricts transmission tower height. The proposed towers are estimated at 100'. This is not compatible with the airport approach. (2) The lack of ROW in this corridor is also a constraint. There is no remaining transmission line ROW available in this corridor due to the necessary 115 kV interconnection at Baldwin substation. Therefore, under impact criteria (1) Engineering Feasibility, the transmission line could not be located in this routing.

Alternatives Not Considered Outright

- 1) Buried Transmission Lines. Transmission lines that carry high voltage are not feasible for installing underground. The engineering constraints require extensive excavation, insulation, and fault protection. The costs can be ten times greater and their reliability is less than overhead lines.

Preferred Alternative:

The Proposed route was determined to best meet all four of the selection criteria listed above. While the other two alternatives are similar in their routing, the Proposed route presented the best option for meeting criteria's (1) and (4).

Project Design:

The transmission lines will be constructed on double and triple circuit steel towers. Each line type, consists of three separate wires for each transmission line voltage. These hang on each side of the pole. See **Exhibit E**, Typical Monopole Designs. The height will be established in the final design phase. Tower height and design is dependent upon topography changes and site conditions constraints. Typical height of a double circuit is 100 feet and typical height of a triple circuit is 110-140 feet. Tower height will also be dependent on the requirements of the City of Prineville Airport Master Plan. Poles will be below the level of the approach zone. The applicant agrees to a condition that it shall meet all Federal Aviation Administration standards and provide verification that the facilities are within compliance with FAA rules. The two 230/230/115 kV triple circuit ROW will be 140 feet in width and the 230/115 kV double circuit ROW will be 80 feet in width.

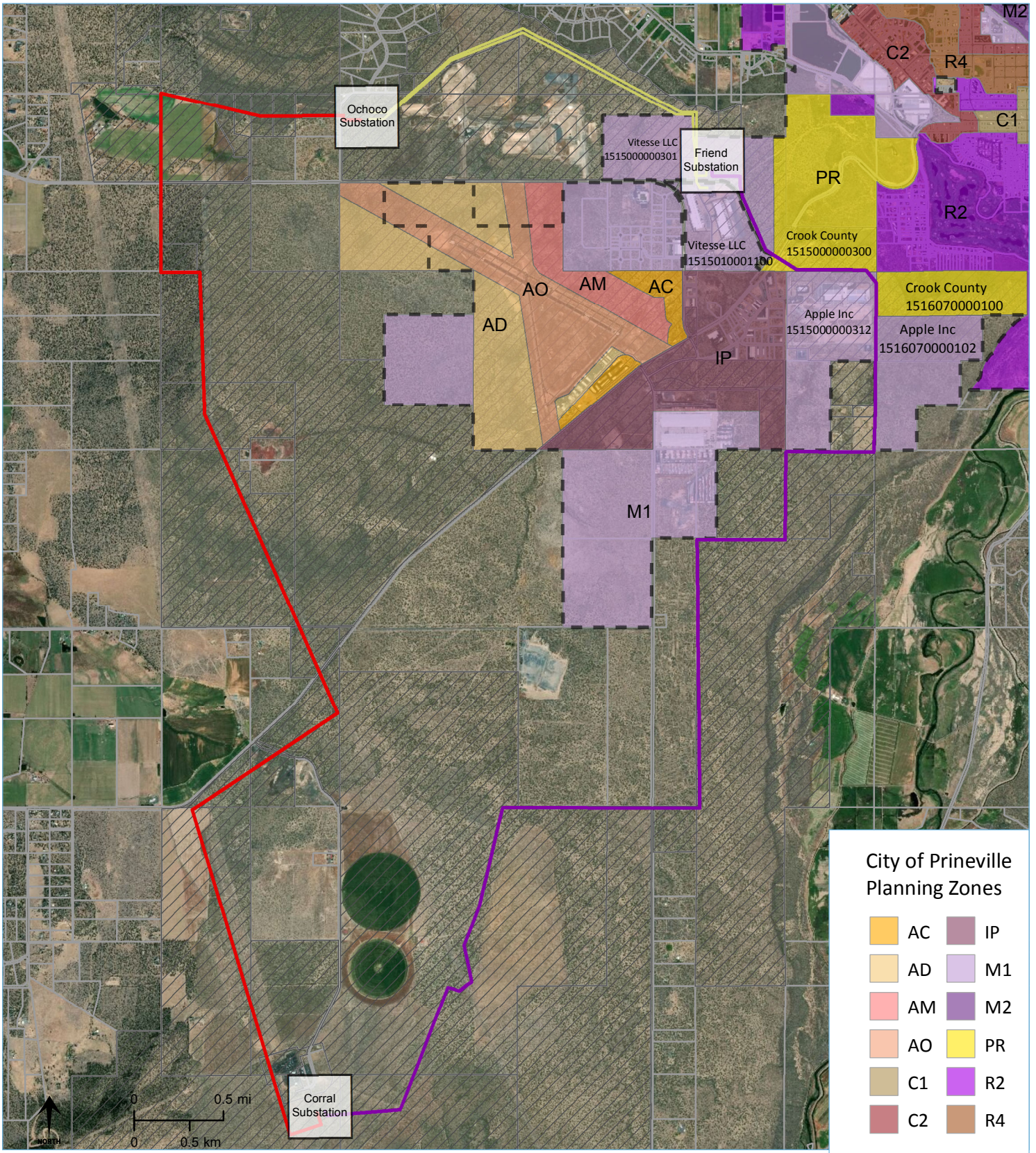
Visual simulations have been completed for the transmission lines. They are located in **Exhibit F** and **Exhibit G**.

Access:

Access will be from existing public roads and from established roads for accessing the Houston-Ponderosa Transmission line ROW. Any new roads necessary for construction will be temporary and removed after construction is complete. There are no anticipated permanent new access roads proposed for this project.

Exhibit A
Project Location

Pacific Power Transmission Line Expansion Capacity Project- Overview



City of Prineville Planning Zones

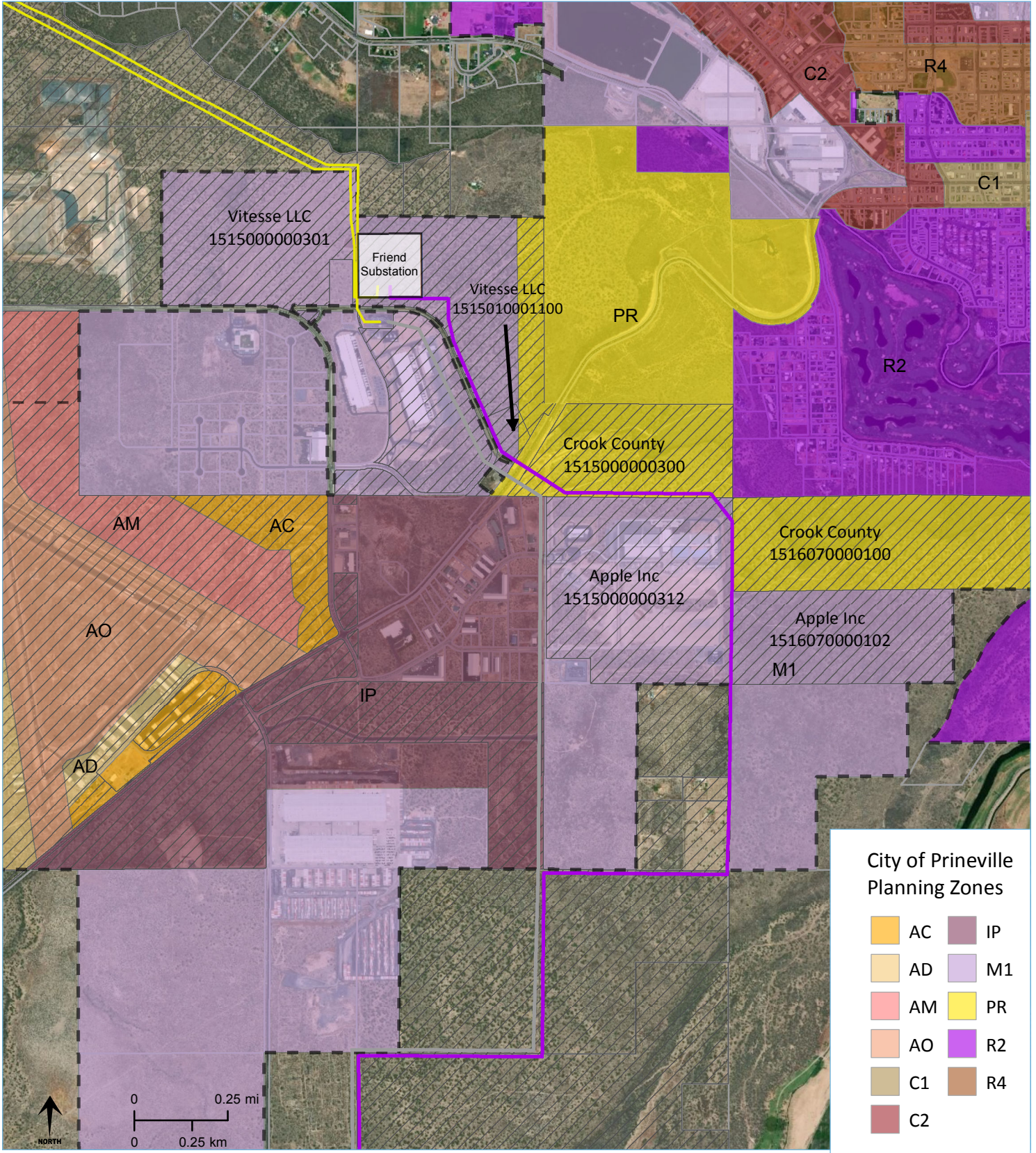
- AC
- AD
- AM
- AO
- C1
- C2
- IP
- M1
- M2
- PR
- R2
- R4



- Prineville City Limits
- Taxlots intersecting Transmission Lines
- Corral to Friend, 230 kV Double Circuit, Phase I
- Friend to Ochoco, (2) 230 kV Triple Circuit, Phase II
- Ochoco to Corral, 230 kV Double Circuit

Exhibit B
Site Plan

Pacific Power Transmission Line Expansion Capacity Project- Site Plan



City of Prineville Planning Zones

- AC
- AD
- AM
- AO
- C1
- C2
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- M1
- PR
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- R4



- Prineville City Limits
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- Existing Ponderosa-Prineville 115 kV
- Corral to Friend, 230 kV Double Circuit, Phase I
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- Ochoco to Corral, 230 kV Double Circuit

Exhibit C
Avian Protection Terms and Conditions

Avian Protection Terms and Conditions

Pacific Power, USFWS, and ODFW have agreed to the following terms and conditions for constructing transmission lines and substations affiliated with the 2017-2019 Transmission Line Expansion Capacity Project. The actions include construction of substations: Corral and Ochoco as well as the transmission lines that connect from Corral substation to Friend substation, Friend substation to Ochoco substation and Ochoco substation to Corral Substation. See Figure 1. The activities are divided into two categories: (1) Avian Disturbance Avoidance and (2) Line Construction Standards

Avian Disturbance Avoidance

The following activities **are subject to** these Terms and Conditions:

- Vegetation removal with motorized (two cycle and single cycle) equipment
- Drilling or use of augers
- Jackhammering
- Concrete pouring
- Excavation of tower foundations

The following activities **are not subject to** these Terms and Conditions:

- Driving the Right of Way (all vehicle types)
- Transmission line stringing, pulling, tensioning.
- Fence removal, reconstruction, or installation of a wire fence including T-posts and rock jacks. This activity would not include the use of an auger for the placement of posts.

Pacific Power Transmission Line Expansion Capacity Project- Overview

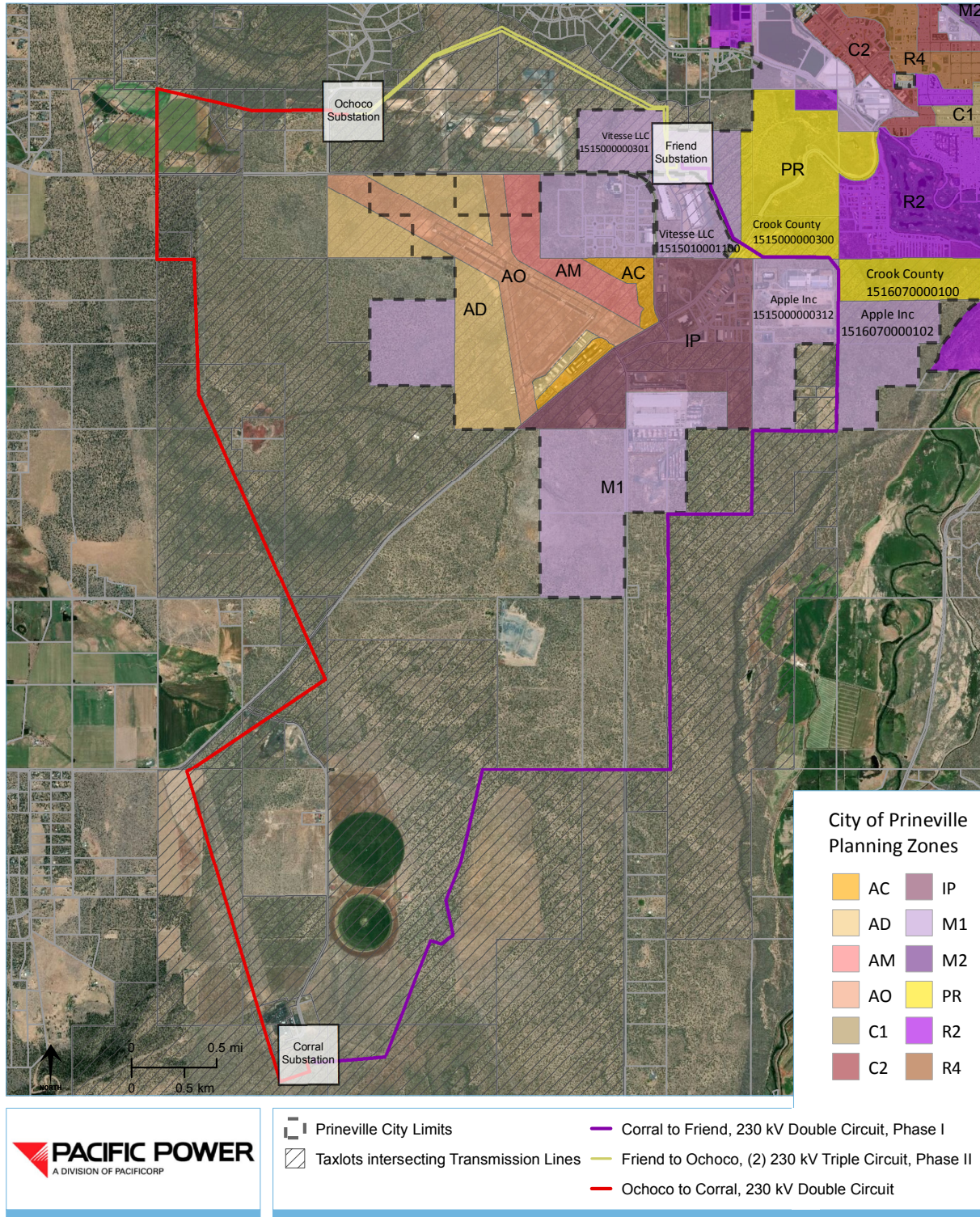


Figure 1-Transmission Line Expansion Capacity Project

Avian Disturbance Avoidance and Minimization Measures

Pre-Construction Vegetation Clearing Requirements:

Preconstruction vegetation removal **will occur** per the terms below:

Shrub and Trees < 15ft tall: September 1-March 31st

Trees > 15' tall: September 1- January 15th

Definition of Vegetation Clearing: Removing trees, shrubs, and tall grasses to stubs (e.g., mowing with brush-hog), but leaving low grasses, roots, and soil intact until the onset of construction.

The Ponderosa-Baldwin Transmission Project (PBTP) will conduct pre-construction shrub and tree vegetation clearing activities prior onset of the nesting season for migratory birds. Clearing vegetation prior the nesting season will help discourage nesting in the project area, and reduce construction schedule delays. The tower foundations (footings) and their surrounding areas will be cleared of shrubs and trees. The area should only extend as far as necessary for the tower foundation and construction equipment access, typically less than 30 feet from the foundation base. Only necessary vegetation will be removed, retaining grasses and small plants where practical. If new access roads are required, only vegetation in the prescribed roadway will be removed.

Trees greater than 15 feet in height will be removed between September 1 and January 14th. Trees less than 15 feet in height and shrubs will be removed between September 1 - March 31st. Therefore, small trees and shrubs can continue to be removed until March 31st. Trees greater than 15 feet in height are preferred nesting sites for great horned owls typically between January 15 through July 31 (J. Cordova, USFWS, pers. comm., November 9, 2017). **All vegetation slash material must be removed offsite to an approved location to discourage birds nesting in the slash. As an alternative to removing offsite, vegetation slash can be chipped in place and must be done prior to March 31st.**

Pre-Construction Nest Surveys:

Pre-construction nest surveys are required for all construction activities per the following:

April 1 to August 31:

Non-Raptors

Distance: 50' within project disturbance area

Timing: 1-week (or less) prior to ground disturbance

Validity: 7 days

Raptors (excluding eagles)

Distance: 0.25-mile radius

Timing: 2-weeks prior (or less), conduct raptor nest survey

Validity: 14 days

If general construction is to occur during the bird nesting season for the region (April 1 – August 31), PBTP Environmental Monitor will conduct pre-construction ground surveys for nesting migratory bird species (non-raptors), per USFWS recommendations (J. Cordova, USFWS, pers. comm., November 9, 2017). Nest surveys for non-raptor species will be conducted within 50 feet of all project disturbance areas, including the transmission

line alignment, and access roads. Surveys will be conducted no more than one week prior to construction activity, and surveys will be valid for 7 days.

PBTP Environmental Monitored (or qualified substitute) will conduct pre-construction raptor nest surveys within 0.25-mile of the project area, and surveys will be conducted no more than two weeks prior to the start of construction activities. Appendix A-Raptor Protection Zone show the work areas restricted. Any work in this area requires Pre-Construction Raptor Nest Surveys. Coordination with USFWS and ODFW is required prior to performing the nesting surveys.

Disturbance Buffers for Active Nests:

If nesting birds are present, construction activities will be restricted per the following terms:

Non-Raptors Active Nests: 30' Radius Avoidance Buffer, until fledged.

Raptors: 0.25 Mile radius, until fledged.

Environmental Monitor (EM): EM will monitor the progress of all active raptor and non-raptor nests recorded during surveys during construction activities.

If active migratory bird nests are detected during pre-construction surveys, PBTP will implement and maintain disturbance buffers around the nests until eggs hatch or are abandoned, and any young have fledged and left the nest and are no longer vulnerable to disturbance. Nests of non-raptor migratory birds will receive 30-foot radius buffers. Construction activities will typically be prohibited within the buffers until nests are fledged. Any exceptions to this, requires ODFW and USFWS prior approval.

If active raptor nests are detected during pre-construction surveys, PBTP will implement and maintain disturbance buffers around nests until eggs have hatched or are abandoned, and any young have fledged, left the nest, and are no longer vulnerable to disturbance. Typical construction buffers for activities are shown in Appendix B. Construction activities within the buffer will typically be prohibited. In cases where smaller buffers or restricted work authorizations might be appropriate, PBTP will coordinate with the USFWS and ODFW to decrease buffer sizes and/or to allow restricted construction activities. Project vehicles will be permitted within buffers on paved public roads. Most light traffic by rubber-tired vehicles will be permitted to pass through the buffer on existing unpaved access roads, if needed, and as determined by the on-site Environmental Monitor.

Nest Monitoring:

PBTP Environmental Monitor will monitor the progress of all active raptor and non-raptor nests recorded during 50' buffer surveys and 0.25 raptor buffer surveys. The biologist will monitor for signs of stress and altered behavior of nesting adults or chicks, and construction will be halted if the EM determines that the nest is being adversely affected. See Appendix A and B for the buffer areas.

Coordination with USFWS and ODFW during Construction:

PBTP will coordinate with the USFWS and ODFW regarding all raptor and non-raptor construction issues. When deemed necessary, PBTP will submit waiver requests to the USFWS for reduced buffer sizes, or to allow light traffic or other forms of modified construction activities within the buffer.

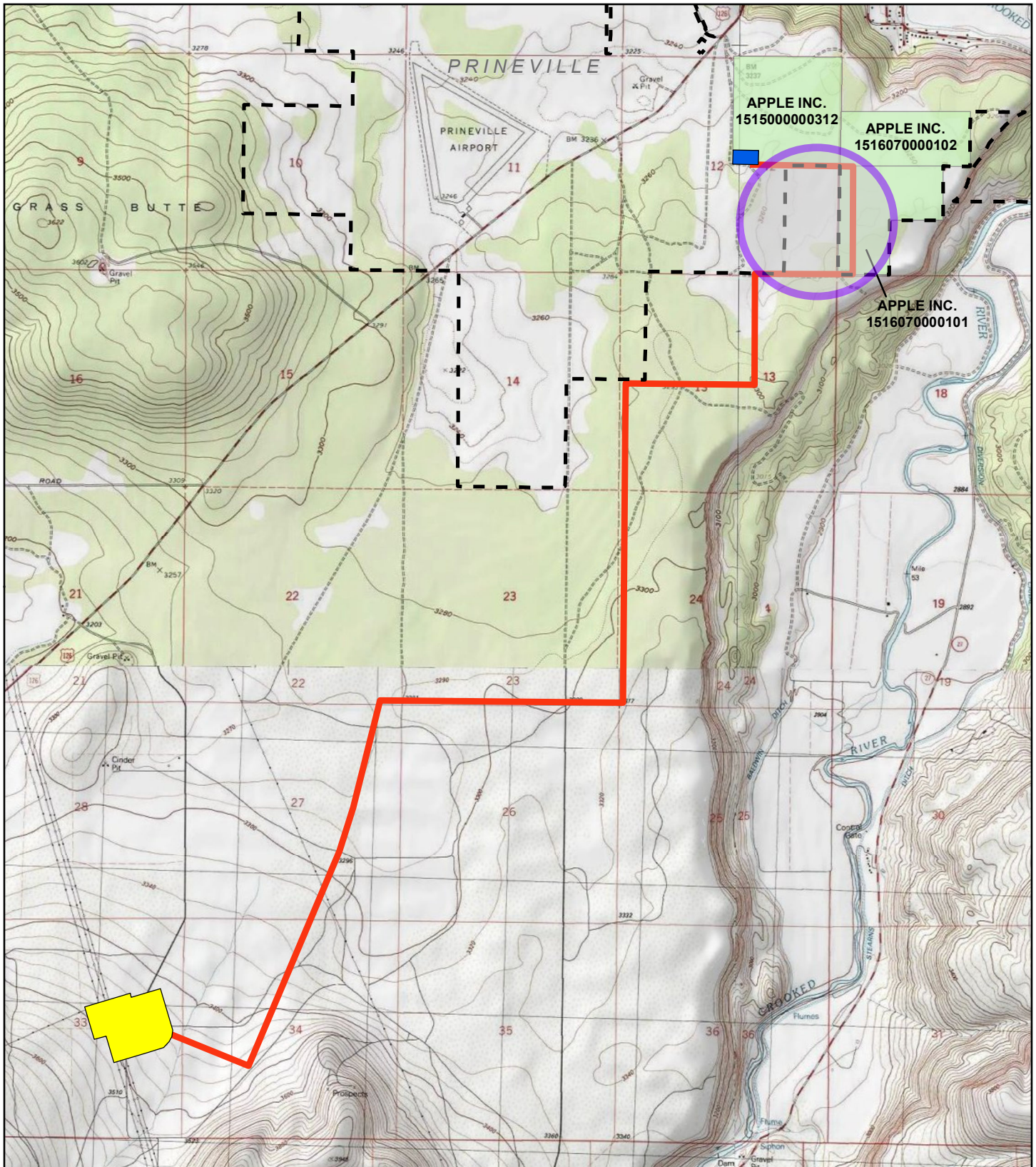
Line Construction Standards

- Bird diverters located on the ground wire (top wire) of the double circuit (115/230kV) monopole and triple circuit will be installed.

Appendix A: Raptor Projection Zone

Appendix B: Non-raptor Construction Buffer Zone

Appendix A-Raptor Protection Zone



<p>Proposed Ponderosa-Baldwin 115kV Transmission Line</p> <p>Ponderosa BPA</p> <p>Baldwin Road SY</p> <p>City of Prineville Municipal Boundary</p>	<p>Parcels</p> <p>Raptor Protection Zone</p>	<p>N</p> <p>0 0.25 0.5 Miles</p> <p>0 0.5 1 Kilometers</p>	<p>Ponderosa-Baldwin 115kV Transmission Line Proposed Route</p> <p>Appendix A: Raptor Protection Zone</p> <p>PACIFIC POWER A DIVISION OF PACIFICORP</p>
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Appendix B: Non-Raptor Construction Buffer Zone

Typical Construction Buffer Zones:

Work can occur if the nest is outside the 30' buffer zone. The EM will monitor the nest.

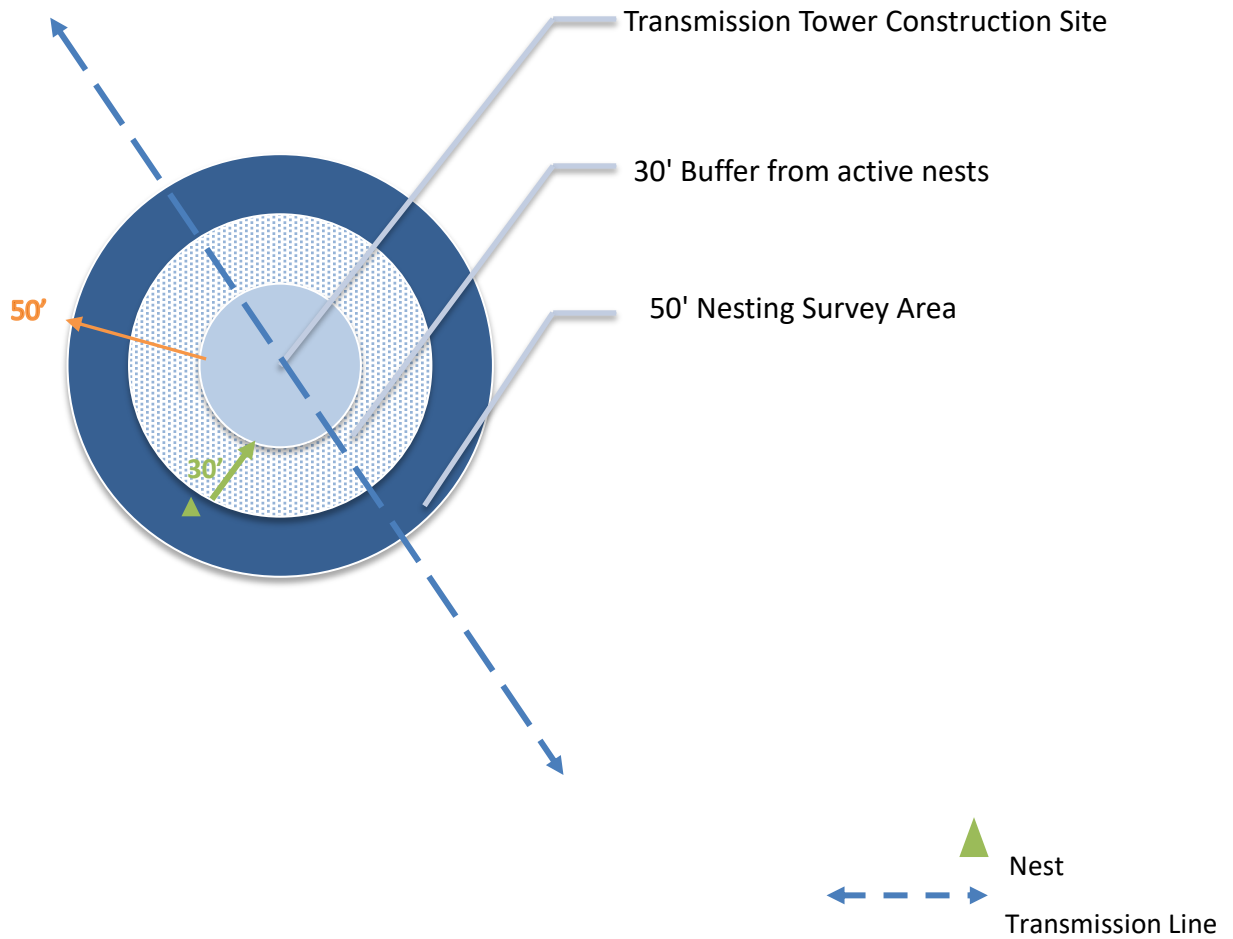
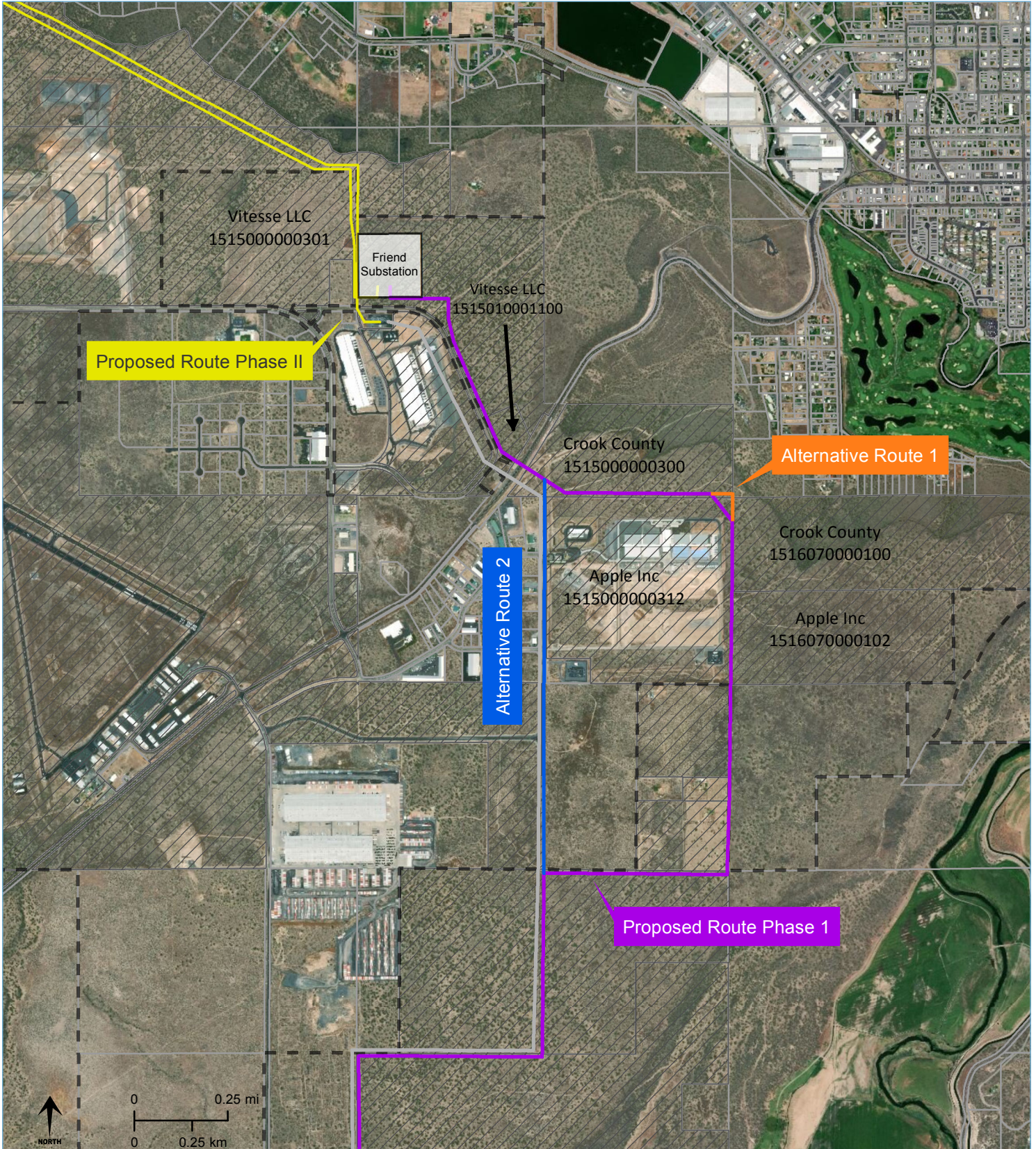


Exhibit D
Alternative Routes

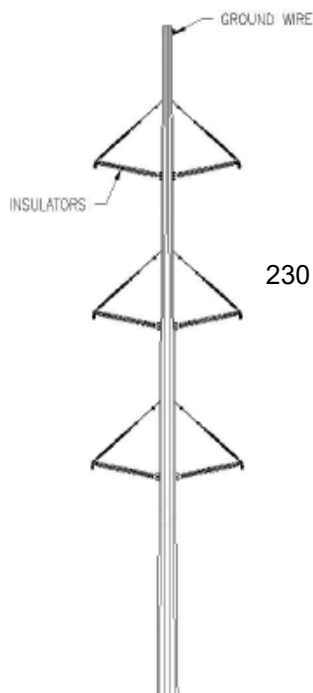
Alternative Routes Transmission Line Expansion Capacity Project



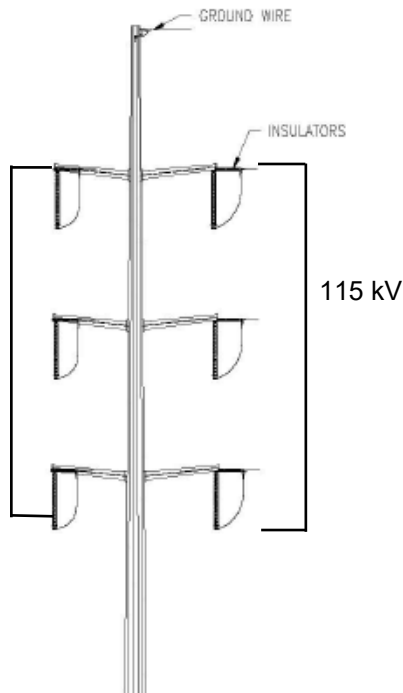
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- Ochoco to Corral, 230 kV Double Circuit

Exhibit E
Typical Monopole Designs

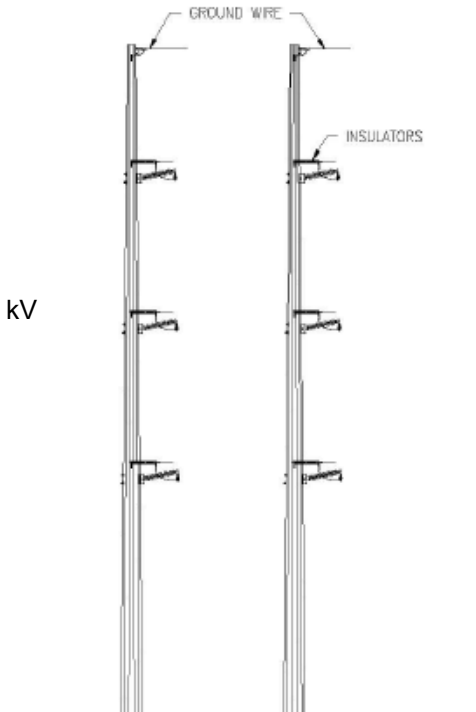
Double Circuit Monopole Design



DOUBLE CIRCUIT
BRACED POST TANGENT



DOUBLE CIRCUIT
SINGLE POLE DEADEND



DOUBLE CIRCUIT
TWO POLE DEADEND

Triple Circuit Monopole Design

