USDA. FOREST SERVICE
COLUMBIA RIVER GORGE NATIONAL SCENIC AREA
902 WASCO AVENUE, SUITE 200 **Telephone:** 541-308-1700
HOOD RIVER, OR 97031 **Fax**: 541-386-1916

PROJECT REVIEW APPLICATION

Rev (2): Big Eddy – Knight Transmission Project – CD-11-10-G

DATE OF APPLICATION: DATE COMPLETE: 30-DAY NOTICE REQUIRED

APPLICANT(S)	**PROPERTY OWNERS**
Bonneville Power Administration	Multiple as shown in Wasco & Klickitat County Assessors offices.
Nathan Mullen, Project Manager	
MAILING ADDRESS	MAILING ADDRESS
PO Box 61409	
Vancouver, WA 98666-1409	
APPLICANT'S SIGNATURE AND DATE	PROPERTY OWNER'S SIGNATURE AND DATE
/s/ Nathan Mullen 3/6/12	
PHONE: 360-619-6302	PHONE:
E-MAIL: ndmullen@bpa.gov	E-MAIL:

LOCATION OF PROPERTY			**PROPERTY ADDRESS** (IF APPLICABLE)
TOWNSHIP:	RANGE:	SECTION:	
QUARTER SECTION:		TAX LOT:	
PARCEL SIZE (ACRES):			COUNTY:
EXISTING LAND USE:			STATE:

Application Checklist: the following is required to complete your application:

[x] Application form completed and signed
[x] Site Plan
[x] Key viewing areas checklist (attached)
[x] Names and addresses of adjacent property owners within 200 feet of parcel (see note)
[x] Any additional information as required:

Original application was submitted on September 30, 2011, and the Forest Service Consistency Determination CD_11_10_g was approved on November 22, 2011 are incorporated by reference and not included in the application.

See Attached Files:

- Photomaps (with Work Areas)
- Access Road Grading Plan
- Site Plan for Northern Wasco PUD Utility Line
- Site Plan for Klickitat PUD Utility Line

KEY VIEWING AREAS: Key viewing areas are important public viewpoints and areas that afford opportunities to view the Gorge scenery. Key viewing areas are listed below. Please check those sites which can be seen from your property.

[] Historic Columbia River Highway
[] Sandy River
[] Portland Women's Forum State Park
[] Crown Point
[] Rooster Rock State Park
[] Multnomah Falls
[] Larch Mountain
[x] Highway I-84, including rest stops
[] Bonneville Dam Visitor Centers
[] Sherrard Point on Larch Mountain
[x] Rowena Plateau/Nature Conservancy Viewpoint
[] Larch Mountain Road
[] Wyeth Bench Road
[] County Road 1230 (Old WA St. Route 14)
[x] Washington State Route 14
[] Washington State Route 142
[] Washington State Route 141
[] Cook-Underwood Road
[] Dog Mountain Trail
[] Beacon Rock
[] Cape Horn
[x] Columbia River
[] Pacific Crest Trail Oregon Highway 35

PROJECT SITE PLAN:
Please see photomap, grading plan, and utility line plan drawings that provide the following information:

[x] Applicant(s) name
[x] Location and width of existing and proposed roads, driveways, and trails
[x] Scale and north arrow
[x] Location and size of existing and proposed structures
[x] Boundaries of parcel with dimensions and size
[x] Location of existing and proposed services including wells or other water supplies, structures, power and telephone poles and lines and outdoor lighting.
[x] Significant terrain features or landforms
[x] Location and depth of all proposed grading and ditching
[x] Groupings and species of trees or other vegetation on the parcel
[x] Location and species of vegetation that would be removed or planted
[x] Water courses and bodies of water

ADJACENT PROPERTY OWNERS AND EXISTING LAND USE
ON ADJACENT PARCELS WITHIN 200 FEET OF PROJECT PROPERTY:

This requirement was completed in the original September 30, 2011 application.

TOWNSHIP, RANGE, SECTION, TAX LOT	NAME AND ADDRESS	EXISTING LAND USE

ACCESS ROAD CHANGE IN MILE 9

Access Roads
Existing roads to be repaired or maintained are identified as solid and dashed red lines respectively on the photomap sheets. As defined by BPA existing roads are travel routes used by BPA for the purpose of transmission line/tower inspection and maintenance. Dashed yellow lines are current federal access road easements. Existing roads shown in photomaps may not align with existing access road easements shown as dashed yellow lines because of land use changes over time resulting in access road relocations. Easements to be acquired are identified as solid blue lines that border the existing roads (the solid and dashed red lines on the photomap sheets).

Existing access road conditions vary greatly depending on their location within the gorge, adjacent terrain, annual use, and annual maintenance of the roads. Existing roads are currently accessible by a 4 wheel drive pick-up truck and have been accessed within the last year. Existing road repair/maintenance is required to return the roads to their original condition due to adjacent erosion issues and inadequate road surfacing to support tower construction activities and future maintenance of the transmission line.

New Road Construction within NSA:

The access roads described below are being relocated to fall within BPA transmission line right of way and are being reclassified as New Road Construction within the Scenic Gorge based on criteria defined classifying them to be outside the activities of Repair/Maintenance of Existing Roads. The locations shown in the photomaps (Solid Magenta Line) are providing access to towers 9/2 through 9/4 which are to be constructed off of existing access roads. Per the Scenic Gorge permitting requirements New Road Construction within the NSA would require grading plans defining the proposed work unless the construction activities fall under NSA exemptions. Exemptions to development of grading plans for New Road Construction within NSA are as follows:

- Cumulative Grading of 200 CY or Less
- Construction within Urban Land Use Classification
- Construction within Tribal Lands Classification

Please see the attached grading plans developed for the adjusted limits of these access roads as none of the Scenic Gorge exemptions applied. Access roads to towers 9/2 through 9/4 have been identified as New Road Construction within NSA have limits defined in the attached Photomaps and Grading Plan with specific details regarding the activities to be conducted by the contractor outlined in the Road Cross Section Typical Detail which can be reference in the original application document.

The Table below indentifies proposed Construction, Repair, and Maintenance items by sheet for the access roads. Construction details for each item are included in the original application.

Map Sheet	Construction	Repair	Mainteance	Route of Travel	Light Riprap	Culvert Install	Culvert Cleaning	Construct Ford	Water Bars	Drain Dips	Restore Ditch	Geotextile Fabric	Stocyard Fence Gate	Heavy Duty Gate	Vehicle Turnouts	Slope Stablization	Access Road Approach	Seed and Mulching
9	x	x	x		x		x	x		x		x	x		x		x	x

ADDITIONAL WORK AREAS

BPA's construction contractor, Wilson Construction, is requesting work sites outside of BPA's transmission Right of Way (ROW) within the National Scenic Area (NSA). These work sites are needed because there is not enough room within the ROW to complete the tower steel and wire installation. There are two different categories of work sites: steel assembly sites and wire pulling sites. Please see the attached photomaps for the number and approximate size of the following work sites.

Work Areas #6, 7, and 8:

These are steel assembly sites where Wilson will store the individual pieces of tower steel and assemble them into small tower sections. These small tower sections will then be lifted into place with a big crane to assemble the tower in sections until the tower is completely erected. There will be no digging or ground disturbance in these areas and all the tower steel will be stored on blocks. All equipment will work over the existing terrain. The site will be vegetated, if needed, once the work is complete. The following equipment is expected, but not limited, to be used in the assembly sites:

- Pick-up and flatbed trucks to transport workers, materials, and tools,
- Water trucks to keep dust to a minimum and fire prevention,
- 200 Ton and smaller cranes to lift tower sections in place,
- Fork lifts for maneuvering steel,
- Crane trucks with man baskets for lifting small equipment working off the ground, and
- Air compressors to torque tower bolts.

Wilson construction must obtain permission from the landowner to use these steel assembly sites.

Work Area #10:

This is a wire pulling site where Wilson will setup their equipment to remove and install the groundwire, conductor, and fiber on the towers. This site needs to be located directly behind the towers so the wires can be pulled through the towers in a straight line. The wires must maintain a minimum slope of 2H:1V from were it attaches onto the tower down to the stringing equipment as it is installed. This means that the highest wire attachment location on the tower (groundwire) governs the pulling site. If the wire attachment is 100 feet above ground, the equipment must be located a minimum of 200 feet away from the tower. In general, a wire slope of 3H:1V is preferred because it provides an extra factor of safety. The site needs to be level so some grading will be required, but minimized as much as possible. The site will be contoured and vegetated once the work is complete. The following equipment is expected, but not limited, to be used in the pulling sites:

- Pick-up and flatbed trucks to transport workers, materials, and tools,
- Puller to pull wire through the tower from the wire reels,
- Tensioner to assist the puller to keep tension on the wires and off the ground,
- Tractor and trailer to transport the wire reels,
- Cat dozer to help anchor (snub) the wire during installation,
- Helicopter to fly nylon rope to each tower used to pull wire,
- Crane trucks with man baskets for lifting small equipment working off the ground, and
- Air compressor to install wire fittings.

Wilson construction must obtain permission from the landowner to use this wire pulling site and BPA is responsible for the cultural compliance before work begins.

NORTHERN WASCO PUD ULTILITY SERVICE

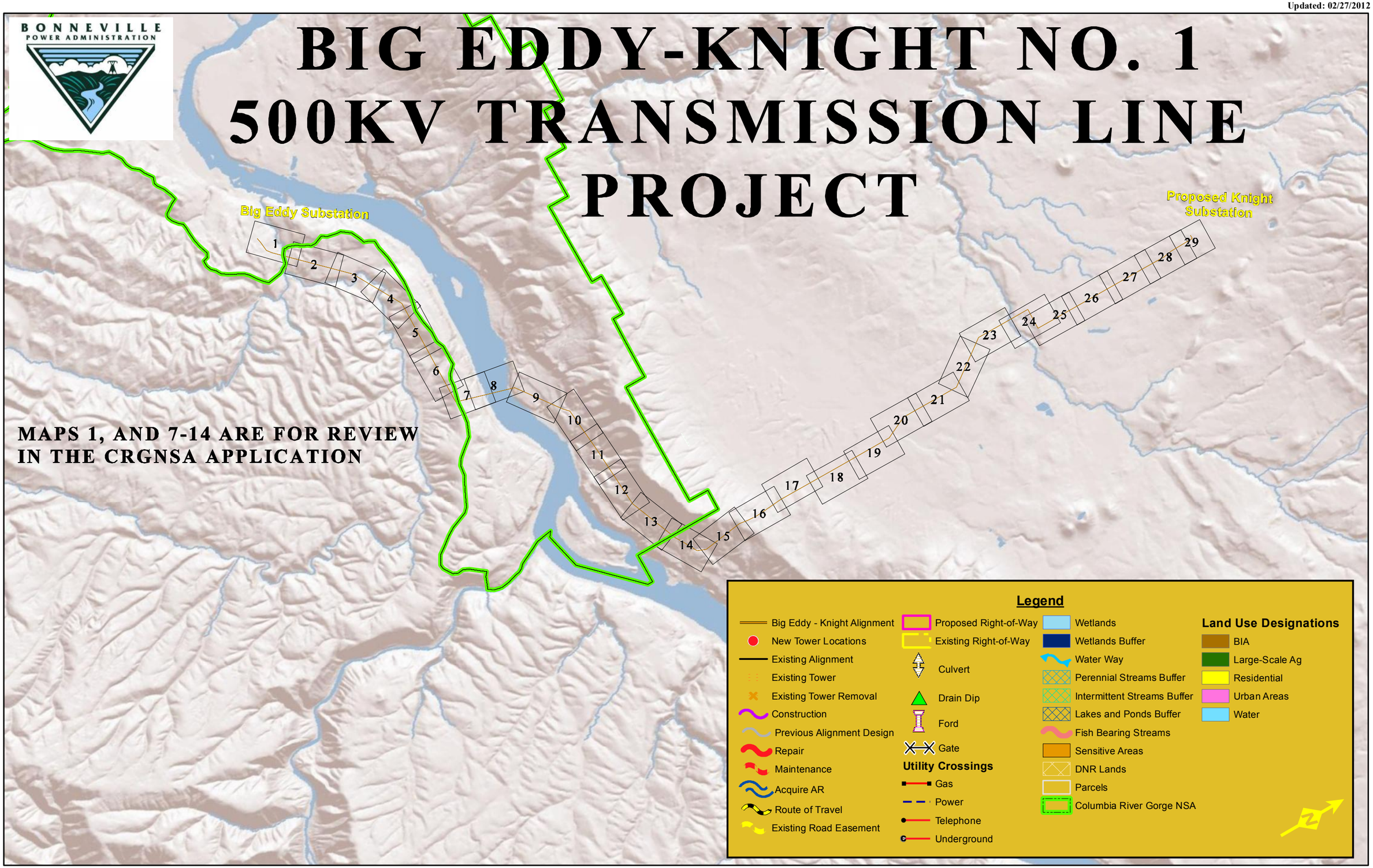
The new Big Eddy – Knight river crossing tower 7/5 on the Oregon side of the Columbia River will require new utility service to power the river crossing beacons. The existing 230-kV river crossing tower has utility service, but the new 500-kV river crossing tower 7/5 is further west in a new transmission ROW. Northern Wasco PUD has an existing utility line that runs east to west and crosses BPA's new transmission ROW. Northern Wasco PUD will install a single phase line extension to get power to new tower 7/5. Please see the attached site plan. One pole will be inset in the existing utility line tied to a short extension running north approximately 160 feet to a second pole. A third meter pole will be installed approximately 50 feet north that will tie into the new river crossing tower 7/5 approximately 40 feet away. The three new wood poles will be approximately 45 feet in length and will require line guys to help support the poles. The poles and line guys will be buried approximately 5-7 feet deep.

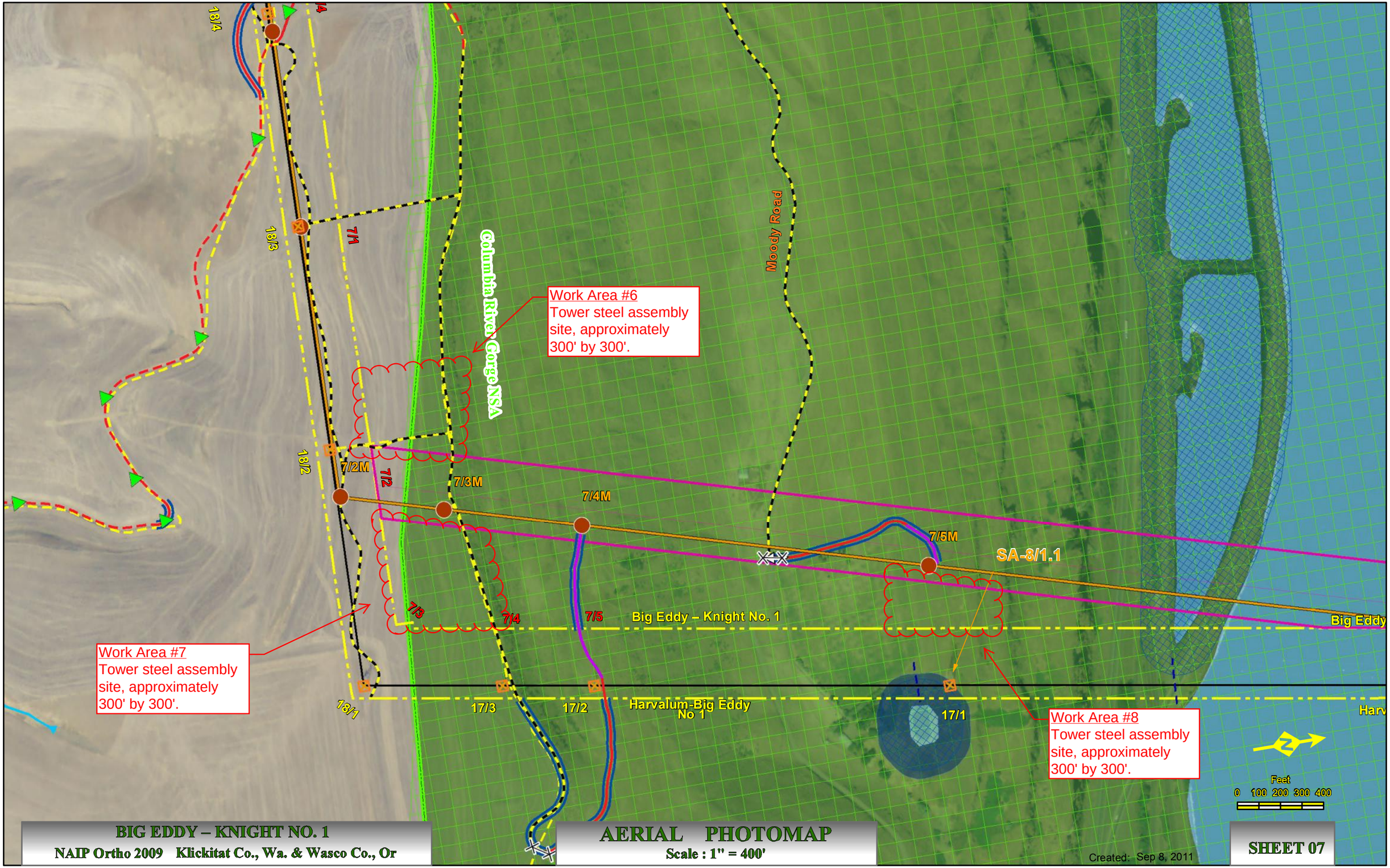
KLICKITAT PUD ULITILY SERVICE

The new Big Eddy – Knight river crossing tower 8/1 on the Washington side of the Columbia River also requires utility service to power the river crossing beacons. The existing 230-kV river crossing deadend tower has utility service and once removed the new tower 8/1 will be installed in the same location. The existing utility service can be used for the new lights; however a new meter pole must be installed between Klickitat PUD's existing pole and BPA's new tower 8/1. Please see the attaché site plan. The new pole will be approximately 45 feet in length and will require one line guy to support the pole. The pole and line guy will be buried approximately 5-7 feet deep.

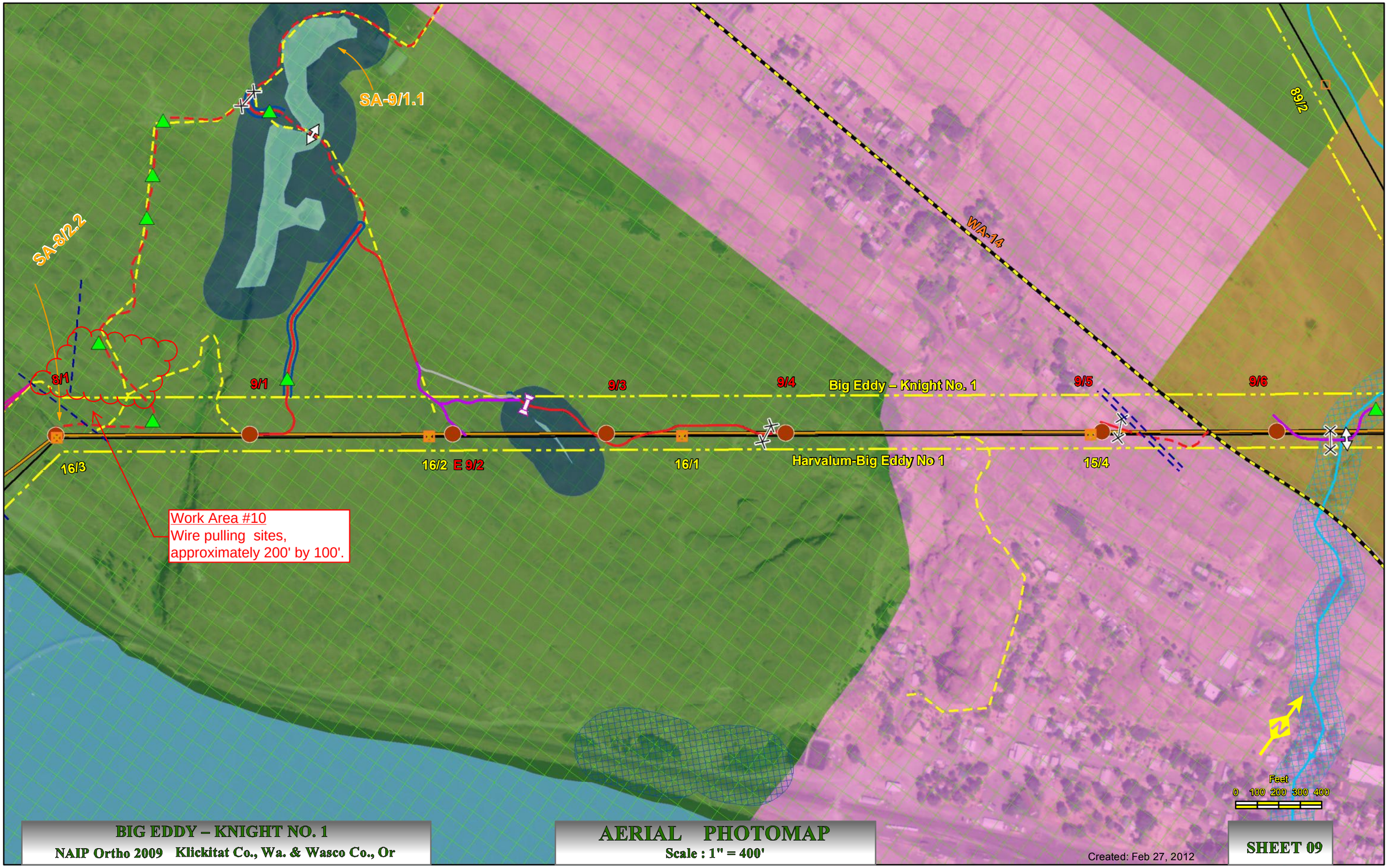
NOT FOR PUBLIC USE

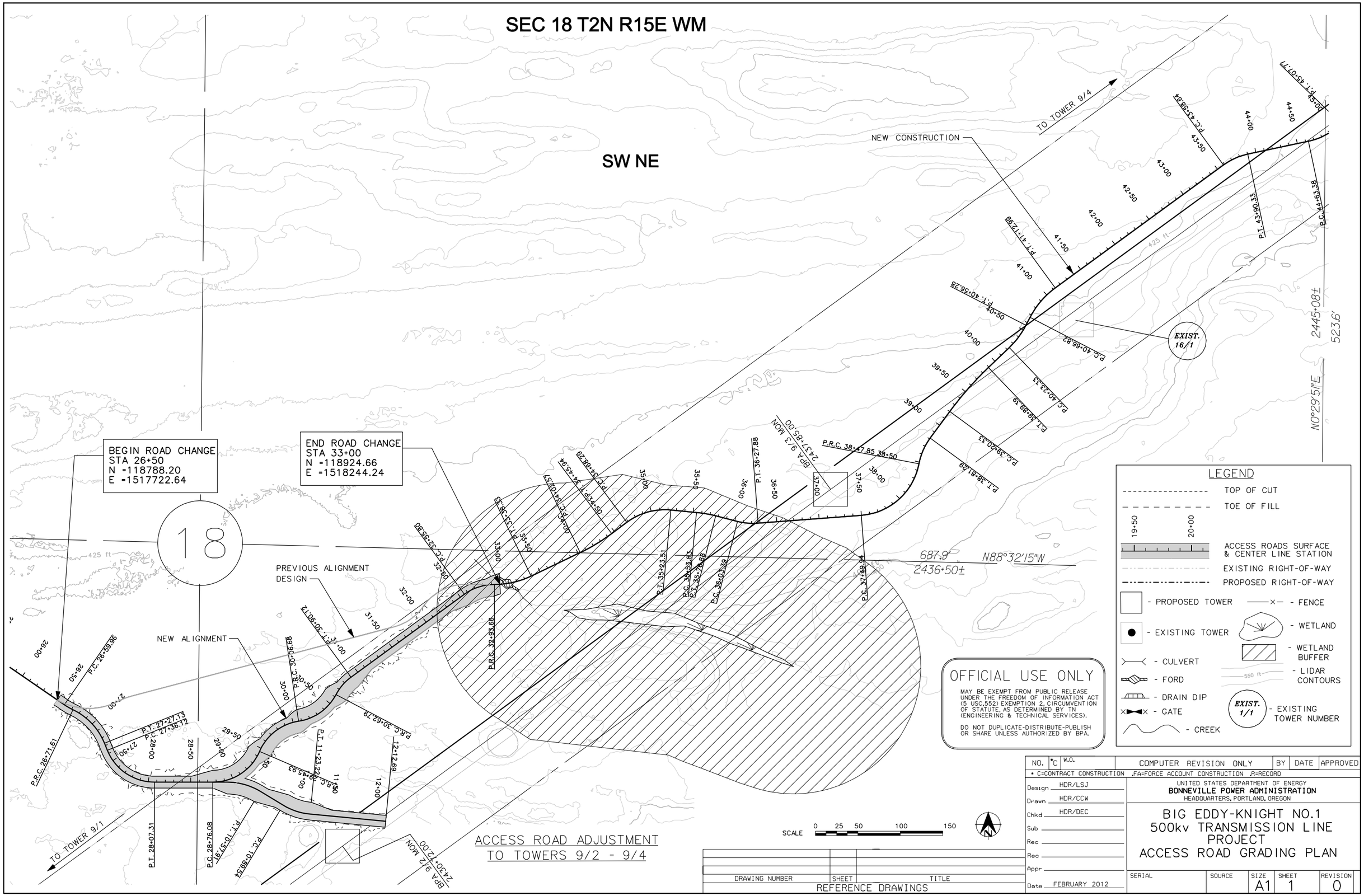
Updated: 02/27/2012




18/4
7/4
18/3
7/1
18/2
7/2M
7/2
7/3M
7/4M
7/5M
SA-8/1.1
Columbia River Gorge NSA
Moody Road
Work Area #6
Tower steel assembly site, approximately 300' by 300'.
7/3
7/4
7/5
Big Eddy – Knight No. 1
Big Eddy
Work Area #7
Tower steel assembly site, approximately 300' by 300'.
18/1
17/3
17/2
Harvalum-Big Eddy No 1
17/1
Work Area #8
Tower steel assembly site, approximately 300' by 300'.
Harv
N
Feet
0 100 200 300 400
BIG EDDY – KNIGHT NO. 1
NAIP Ortho 2009 Klickitat Co., Wa. & Wasco Co., Or
AERIAL PHOTOMAP
Scale : 1" = 400'
Created: Sep 8, 2011
SHEET 07

NOT FOR PUBLIC USE





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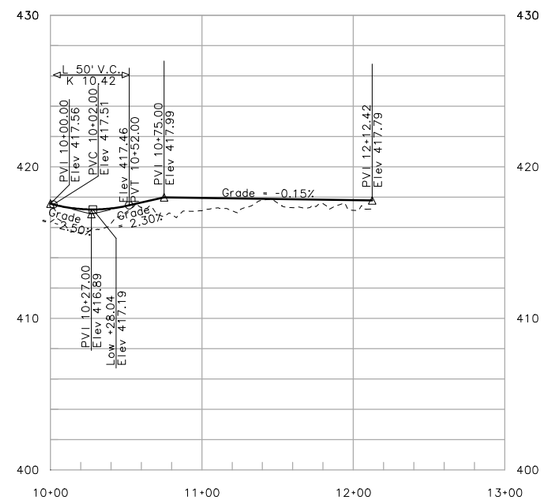

MILE 9 ROAD ADJUSTMENT PROFILE

(SEE SHEET 1 FOR MILE 9 ROAD ADJUSTMENT GRADING PLAN)

NOTES:

SPATIAL INFORMATION SHOWN ON PLANS LYING BEYOND THE BOUNDARIES OF LIDAR DATA CORRIDOR IS DERIVED FROM IMAGERY AVAILABLE ON THE PUBLIC DOMAIN THAT HAS BEEN EDGE MATCHED. VERTICAL ACCURACY FOR INFORMATION OUTSIDE THE LIDAR DATA CORRIDOR IS (+/-) 40'.

CONTRACTOR TO FIELD VERIFY ALL ELEVATION DATA REPRESENTED IN THE PLANS.

0 25 50 100 150 FT
HORIZONTAL SCALE

0 5 10 15 FT
VERTICAL SCALE

DRAWING NUMBER	SHEET	TITLE

REFERENCE DRAWINGS

NO.	*C	W.O.	COMPUTER REVISION ONLY	BY	DATE	APPROVED

* C=CONTRACT CONSTRUCTION ,FA=FORCE ACCOUNT CONSTRUCTION ,R=RECORD

Design HDR/TBL
Drawn HDR/CCW
Chkd HDR/DEC
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Rec
Rec
Appr
Date JANUARY 2012

UNITED STATES DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
HEADQUARTERS, PORTLAND, OREGON

BIG EDDY-KNIGHT NO.1
500kv TRANSMISSION LINE
PROJECT
MILE 9 ROAD ADJUSTMENT
PROFILE

SERIAL	SOURCE	SIZE	SHEET	REVISION
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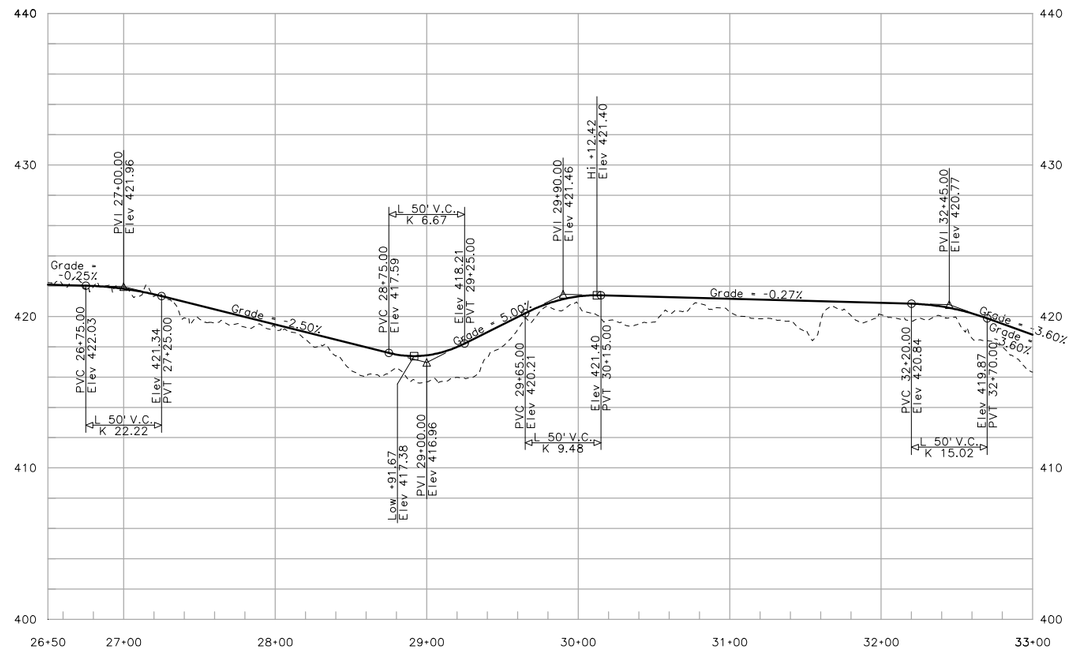

MILE 9 ROAD ADJUSTMENT PROFILE

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0 25 50 100 150 FT
HORIZONTAL SCALE

0 5 10 15 FT
VERTICAL SCALE

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UNITED STATES DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
HEADQUARTERS, PORTLAND, OREGON

BIG EDDY-KNIGHT NO.1
500kv TRANSMISSION LINE
PROJECT
MILE 9 ROAD ADJUSTMENT
PROFILE

SERIAL	SOURCE	SIZE	SHEET	REVISION
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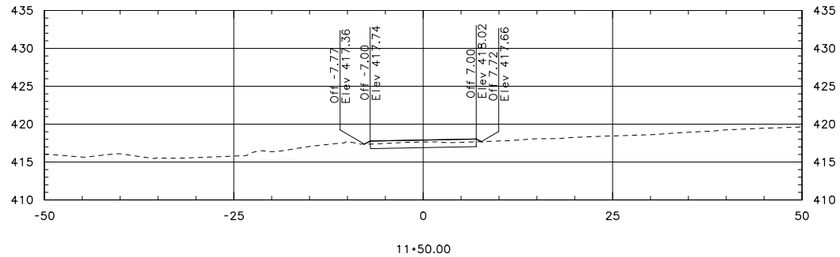

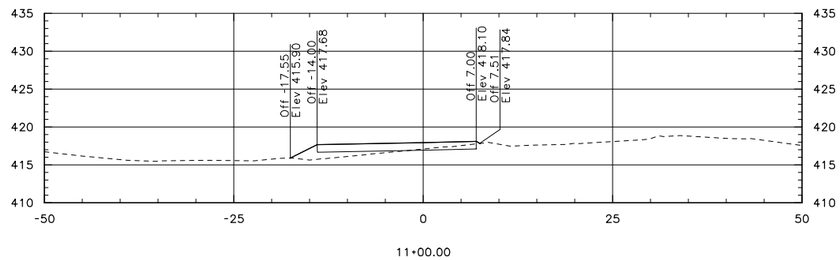

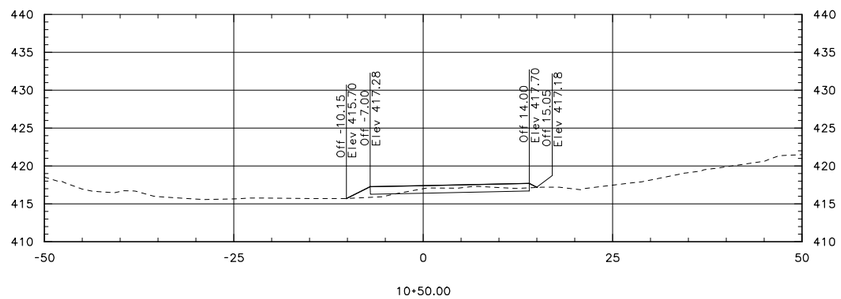

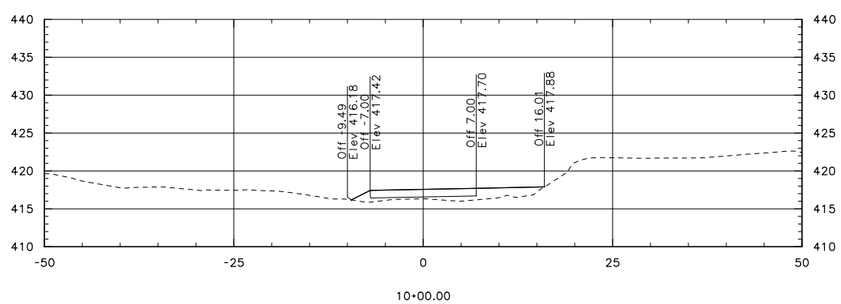

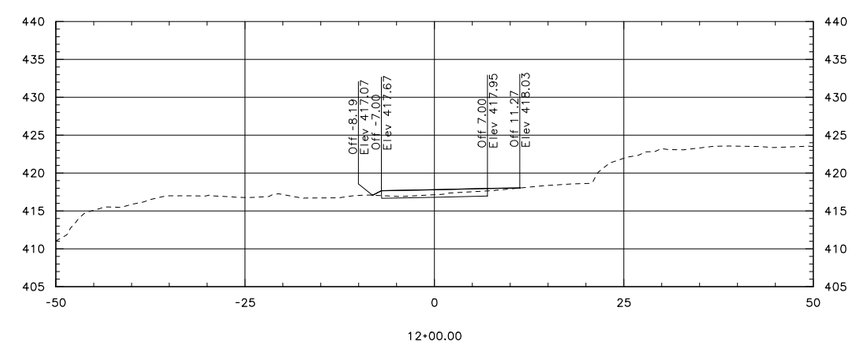

MILE 9 ROAD ADJUSTMENT CROSS SECTIONS

(SEE SHEET 1 FOR MILE 9 ROAD ADJUSTMENT GRADING PLAN)

0 10 20 40 60 FT

SCALE

DRAWING NUMBER	SHEET	TITLE

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NO.	*C	W.O.	COMPUTER REVISION ONLY	BY	DATE	APPROVED

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UNITED STATES DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
HEADQUARTERS, PORTLAND, OREGON

BIG EDDY-KNIGHT NO.1
500kv TRANSMISSION LINE
PROJECT
MILE 9 ROAD ADJUSTMENT
STA 10+00 TO 12+00 SECTIONS

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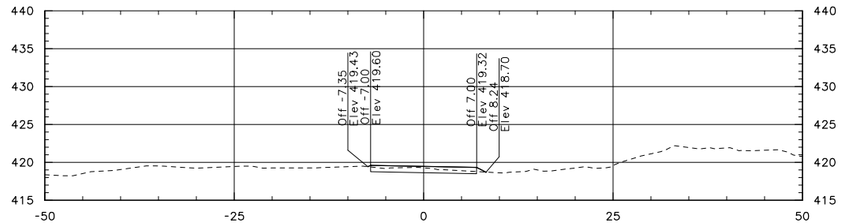

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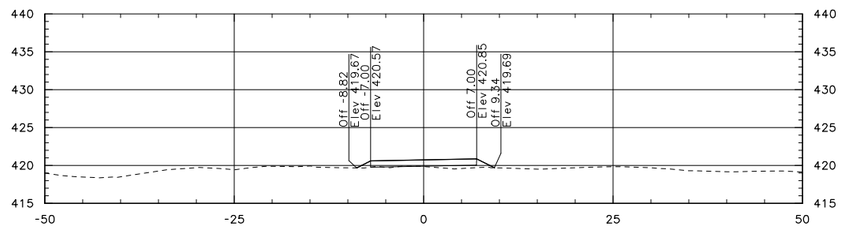

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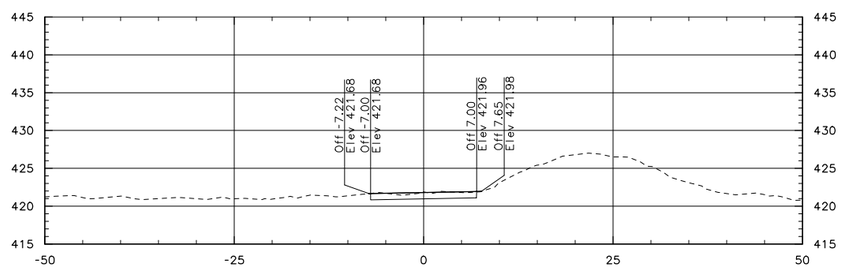

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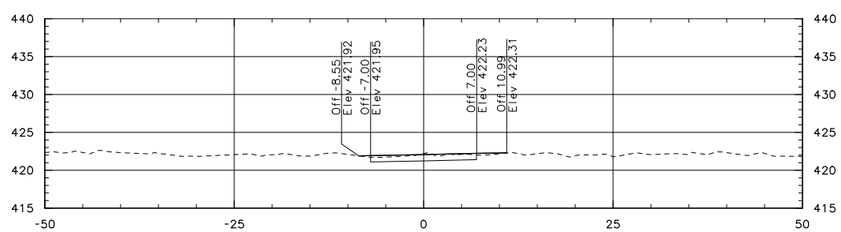

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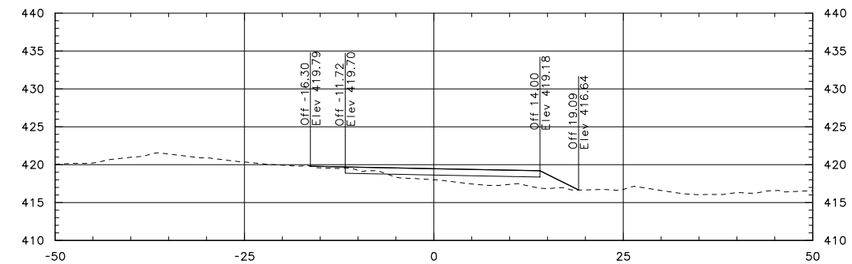

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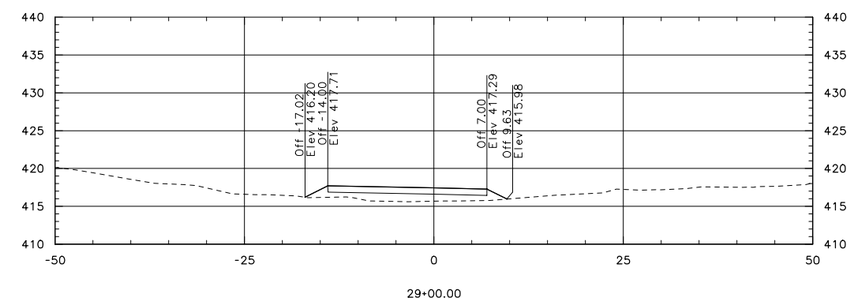

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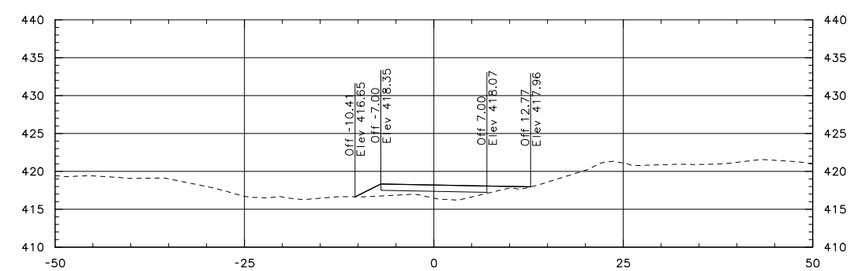

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MILE 9 ROAD ADJUSTMENT CROSS SECTIONS (1 OF 2)

(SEE SHEET 1 FOR MILE 9 ROAD ADJUSTMENT GRADING PLAN)

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SCALE

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UNITED STATES DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
HEADQUARTERS, PORTLAND, OREGON

BIG EDDY-KNIGHT NO.1
500kv TRANSMISSION LINE
PROJECT
MILE 9 ROAD ADJUSTMENT
STA 26+50 TO 29+50 SECTIONS

SERIAL	SOURCE	SIZE	SHEET	REVISION
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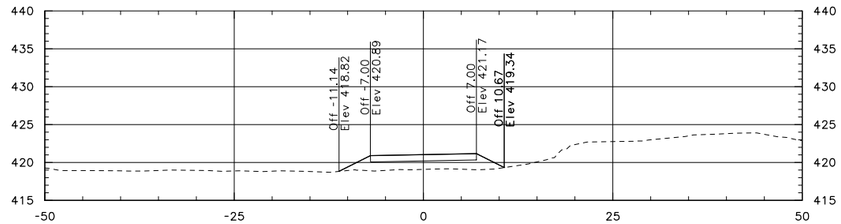

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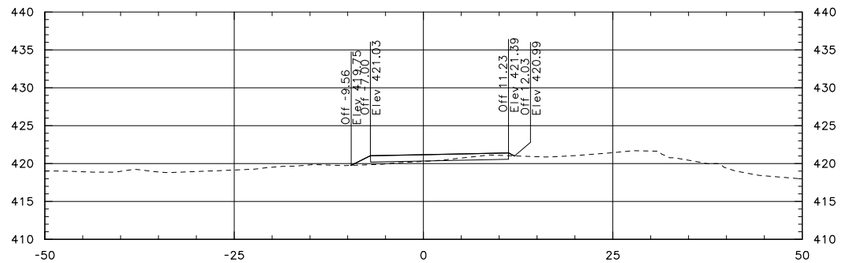

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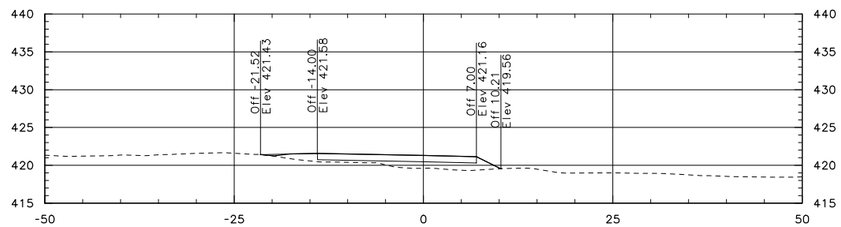

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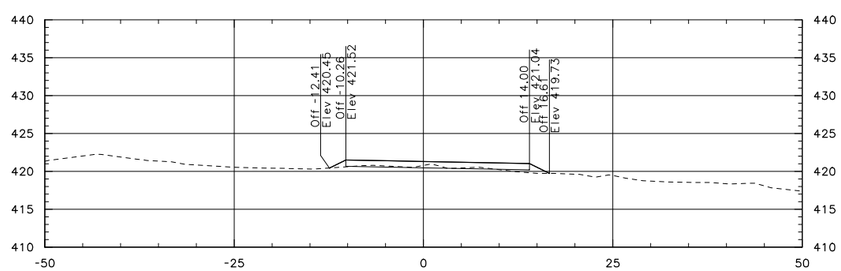

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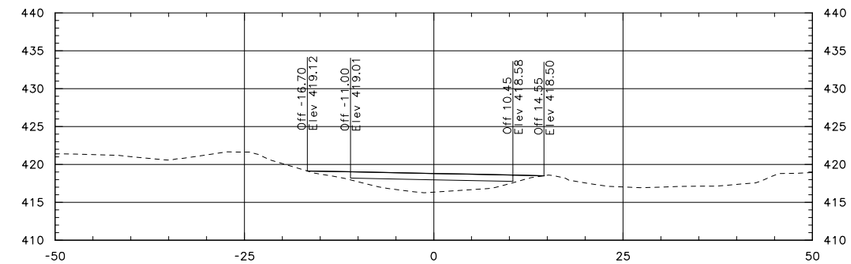

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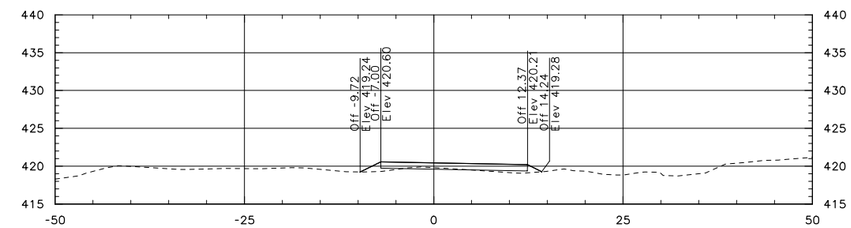

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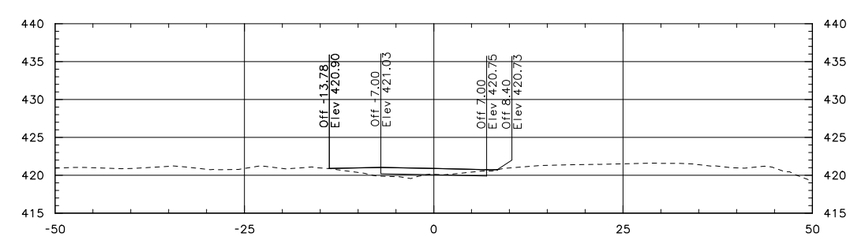

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MILE 9 ROAD ADJUSTMENT CROSS SECTIONS (2 OF 2)

(SEE SHEET 1 FOR MILE 9 ROAD ADJUSTMENT GRADING PLAN)

0 10 20 40 60 FT

SCALE

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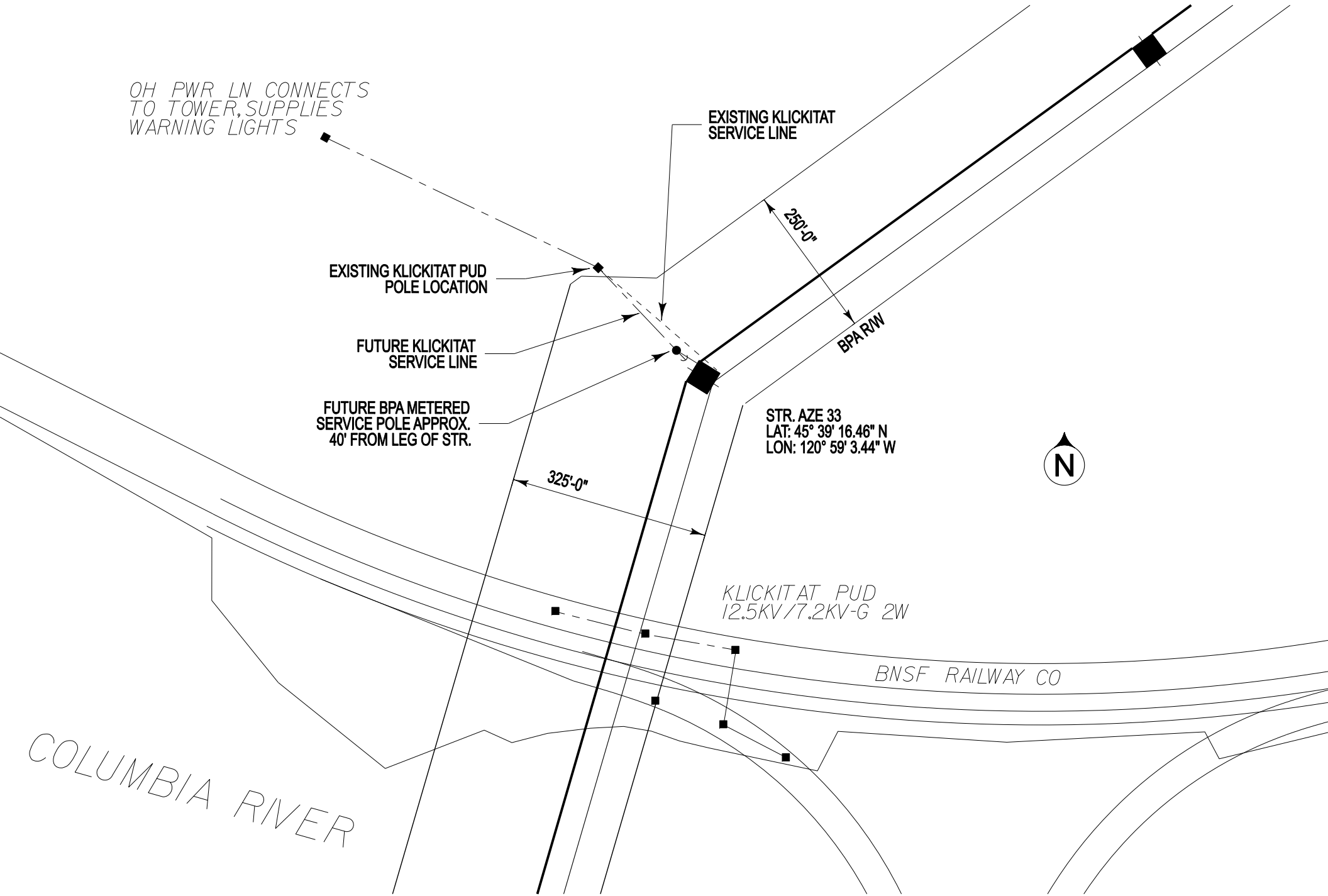
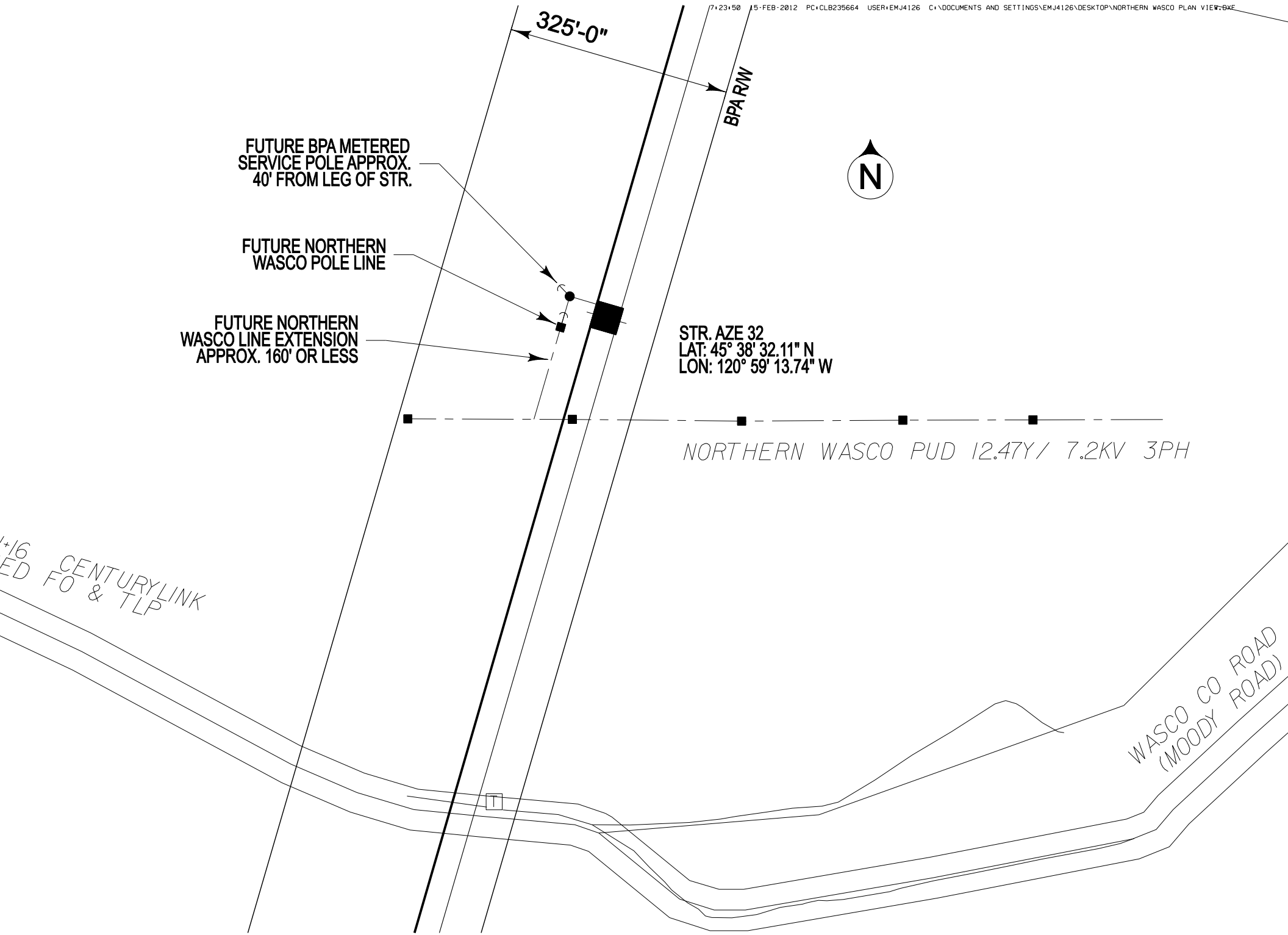
BONNEVILLE POWER ADMINISTRATION
HEADQUARTERS, PORTLAND, OREGON

BIG EDDY-KNIGHT NO.1
500kv TRANSMISSION LINE
PROJECT
MILE 9 ROAD ADJUSTMENT
STA 30+00 TO 33+00 SECTIONS

SERIAL	SOURCE	SIZE	SHEET	REVISION
		A1	6	0


OH PWR LN CONNECTS
TO TOWER, SUPPLIES
WARNING LIGHTS
EXISTING KLICKITAT
SERVICE LINE
250'-0"
EXISTING KLICKITAT PUD
POLE LOCATION
FUTURE KLICKITAT
SERVICE LINE
BPA R/W
FUTURE BPA METERED
SERVICE POLE APPROX.
40' FROM LEG OF STR.
STR. AZE 33
LAT: 45° 39' 16.46" N
LON: 120° 59' 3.44" W
N
325'-0"
KLICKITAT PUD
12.5KV/7.2KV-G 2W
BNSF RAILWAY CO
COLUMBIA RIVER


325'-0"
BPA R/W
N
FUTURE BPA METERED SERVICE POLE APPROX. 40' FROM LEG OF STR.
FUTURE NORTHERN WASCO POLE LINE
FUTURE NORTHERN WASCO LINE EXTENSION APPROX. 160' OR LESS
STR. AZE 32
LAT: 45° 38' 32.11" N
LON: 120° 59' 13.74" W
NORTHERN WASCO PUD 12.47Y/ 7.2KV 3PH
CENTURYLINK
FO & TLP
WASCO CO ROAD
(MOODY ROAD)