

WBI Energy Crossing/Encroachment Permit

WBI Energy (WBI) requires any party requesting to cross or encroach onto our easement to comply with the following conditions:

1. You will assume full responsibility for any and all damages caused by the construction, operation and maintenance of your facilities or the activities performed.
2. Your facilities will cross beneath our pipeline if at all possible.
3. At the point of crossing, a minimum separation of 12" will be maintained between your facilities and our pipeline.
4. If Horizontal Directional Drilling (HDD), a separation of 12" greater than the size of the largest reamer will be maintained.
5. If HDD, pipeline shall be exposed 24" on both sides of the proposed bore path, excavating to a depth 12" below our pipeline.
6. Excavation within 24" of our pipeline shall be performed by hand digging only.
7. Crossing angle shall be as near to 90° as possible.
8. Crossing shall be inspected by WBI personnel prior to backfill.
9. WBI Energy will be notified 48 hours prior to any excavation, grading, or drill that is planned to take place.

In addition to complying with conditions listed above, WBI requires more information regarding the potential crossing or encroachment to evaluate your project and the effects it may have on the safety of our facility. The more detailed information you can provide will help WBI evaluate any effect on our facility and expedite an approved crossing/encroachment permit. Please provide as much of the following data as possible for WBI review:

Company Name:	Company Representative:	Telephone:	Fax:	Email:
Aurora Wind Project, LLC	Justin Larson	913-544-5570	913-888-0390	jl Larson@tradewindenergy.com
Mailing Address:				
16105 West 113th Street Suite 105, Lenexa KS 66219				
Project Name: Aurora Wind Project, LLC		Anticipated construction start date:	Anticipated completion date:	
		October 2019	October 2020	
General scope of project:				
<p>Construction and operation of an overhead 345kV transmission line to include general construction vehicle movements associated with the placement of steel monopole structures and the stringing of conductor and communication wires.</p>				

Part 1. Type of Crossing or Encroachment

Pipeline crossing	Cable crossing	Overhead power crossing	Road or temporary access crossing	Encroachment
Construction method (HDD, open cut, plow):	Construction method (HDD, open cut, plow):	345kV Voltage of line:	Complete and attach Appendix A. Vehicle Description form **Required Appendix A.**	Describe encroachment (parking lot, subdivision, pond, trees, etc.)
Crossing position (above or below WBI pipeline):	Crossing position (above or below WBI pipeline):	Attach drawing showing the Location of power poles (not allowed on ROW) and minimum height of overhead line over the ROW. **Required drawing**	Attach cross section drawing showing grading, ditch cuts, and any sub-excavation **Required cross section**	
Proposed separation between facilities:	Proposed separation between facilities:		See crossing SE qtr S14 -T157-R95; ~870 feet west of 103rd Ave and 130' south of half section line.	If permanent road, complete a. and b.
Line material (steel, plastic, fiberglass, etc.):	Type of cable (electrical, telecomm, fiber optic, etc.):	a. Road surface:		
Cathodic protection type:	Cable cover (PVC, metal, Voltage (if electrical):	b. Reason for building road:		

Part 2. Drawings or Exhibits

Item A. and Item B. described below shall be submitted.

A. Plan view of crossing or encroachment

- Title block showing drawing number, revision number, and date
- North arrow
- Legal land description
- Existing buried facilities, road allowances, and ROW, including those belonging to WBI
- Angle of proposed crossing (crossing angle shall be as near to 90° as possible)
- Location of encroachment activity

B. Profile view of crossing or encroachment

- Depth of cover
- Dimensions (a minimum of 12" separation for crossings)
- Existing and proposed grade

For office use only:

Pipeline name: <i>McGregor-Tioga</i>	Stationing: <i>619+76</i>	TWP <i>157N</i>	RGE <i>95W</i>	Section <i>14</i>
County: <i>Williams</i>	State: <i>North Dakota</i>	ADDITIONAL APPROVAL NOTES: <i>Notify WBI Energy when construction starts</i>		
Approved by: <i>William Harley</i>	Date: <i>7/17/19</i>			

Appendix A. Vehicle Description Form

A. WHEELED VEHICLE		
Make/Model/Description of <u>heaviest wheeled vehicle</u> that will cross the pipeline:		
Axle Grouping	Weight per Axle Group	Tire Pressure
Front (Steering)	lbs	80-100 psig
Single (if necessary)	lbs	80-100 psig
Tandem (eg. 8 Wheel)	lbs	psig
Tri-Axle (eg. 12 Wheel)	lbs	psig
TOTAL VEHICLE WEIGHT (GVW)	135k lbs	
	(this number must be the total of all previous boxes)	
<p>Sketch of the equipment showing the tire configuration (use another page if necessary)</p> <p>Crossing the pipeline would likely be a Digger - 20,000 LBS Per Axel; Tandem Axel, Tracked Vehicle would be - 40,000 LBS, weight per square inch much less due to weight distribution. Attached is a spec for a GroveRT9100 rough terrain crane as it is the heaviest rubber tired equipment we might expect on the project. Also attached is a spec for a Soilmec SR-75 pressure digger. It is the heaviest tracked equipment we might expect on the project.</p>		

B. TRACKED VEHICLE				
Make/Model/Description of <u>heaviest tracked vehicle</u> that will cross the pipeline:				
Max Vehicle Weight	Make	Model	Track Length	Track Width
203klbs lbs	Soilmec	SR-75	18 ft	30 in