

February 13th 2012 to February 18, 2012

Merrisart Wind Farm to Ellendale 230KV Project

1 No. Guy and anchors installation

$$323 \text{ Total} \quad \begin{matrix} \#21 & \#22 & \#22 \\ 163 & 43 & 1 = 194 \end{matrix}$$

$$323 / 194 = .6006 \text{ or } 60\%$$

1 W Wire String 230KV 954 MCM ACSR

3/8 EHS shield wire

$$156819 \text{ ft.} \quad \begin{matrix} \#21 & \#22 \\ 18,743 & 9,327 = 28,070 \text{ ft.} \end{matrix}$$

$$156819 / 28,070 = .1790 = 18\%$$

1 W.B. OPBW wire CC 59/465

$$156740 \text{ ft Total} \quad \begin{matrix} \#21 & \#22 \\ 15,865 & 19,036 = 34,901 \end{matrix}$$

$$156740 / 34,901 = .2227 \text{ } 22\%$$

Kenneth W. Laker ^{HDR} 2/18/12

INSPECTOR'S WEEKLY REPORT

Line: Merricourt Wind Farm to Ellendale 230KV Project

Period: February 13th 2012 to February 18th 2012 Contractor: BRINK

Inspector: Kenneth W. Fisher General Foreman: Seth Scott

Weather Conditions: Temp. 6° to 36° Workmen Total: 21 to 19

Progress:

1. ~~anchors~~ anchors installation of 3-pole structures, 83(5); 71(16); 67(20); Total 31 installed.
2. Gates Built _____
3. Material Hauled 25 cu yds of crushed Rock used this week STR. 67 & 59
4. Structures Framed same as Number 6 ground and aerial Framed.
5. Digging 3-Pole Structures; 71-67-59
6. Structures Set 3-Pole Structure 1-T.230.15; 1-T.230.V.P; 1-T.230.F 3.60 miles
7. Sock Line Pulled 213-212 to 184-183 19,000 ft = 5200 = 3.6036
8. Wire Strung Same as Number 7
9. Wire Sagged & Clipped 213-212 to 199-199 9,300 ft = 5200 = 1.7665 1.77 miles
10. ~~OPGW~~ OPGW Pulled from 216 to 187 = 19,036 ft = 5200 ft = 3.6053 3.60 miles

Comments:

Progress has been Good this week. crew dug set & Framed 3-3 Pole Structures and installed 31 anchors, also has installed 3.60 miles of sock line, also sagged clipped plus installed Ultraviolet Dampers where need. Sag 1.77 miles on all wires. The Contractor has OPGW and shield wire change with conductor wire complete from Ellendale sub to crossing Pleasant Lake to Structure 199. OPGW to Structure 187.

TRANSMISSION LINE CONSTRUCTION

RECORD OF CONTRACTORS TIME & EQUIPMENT

PROJECT Merricourt Wind Farm to Ellen Dale REPORTED BY Kenneth W. Fisher
 2330 Hwy Project

DATE February
Monday 13th 2012
Tuesday 14th 2012
Wednesday 15th 2012

Brink Contractor		TRAILS & LANDINGS	POLE & MATERIAL HAULING	HOLE DIGGING	STRUCTURE FRAMING (Ground)	STRUCTURE SETTING	STRUCTURE FRAMING (Aerial)	ANCHOR INSTALLATION	CONDUCTOR HAUL, STRING, SAG, CLIP	CLEAN-UP WORK	LOST TIME DUE TO ADVERSE WEATHER	TOTAL HOURS
MEN	NO.											
FOREMAN <u>General</u>	1											33
FOREMAN	1						1					33
FOREMAN	2							2				66
LINEMEN	1							1				33
LINEMEN												
LINEMEN <u>Appr</u>	3							3				99
LINEMEN <u>Appr</u>	4						2+1=3	1				110
LINEMEN												
EQUIP. OPERATORS	1			*				*1				33
EQUIP. OPERATORS	3							3				99
EQUIP. OPERATORS												
GROUNDMEN	1			*				*1				33
GROUNDMEN												
GROUNDMEN	3						1+1=2	1				77
GROUNDMEN												
<u>Mechanic</u>	1											33
TOTAL MEN	21											649

added 2-men to aerial Framing crew 2-15-12
 #1=6 2 #1

EQUIPMENT ON JOB (List on Monday and note only changes during week.)

- | | | |
|---|---|--|
| <u>2 2Ton Pickups</u> | <u>3 Tractor w Flat bed Trailer with two steel wire stands on each w/Basket</u> | |
| <u>2 1Ton Pickups</u> | <u>1 Truck w Tension of hand line</u> | <u>1 Series 800 National crane</u> |
| <u>3 3/4 Ton Pickups</u> | <u>1 3 drum puller w/roacht</u> | <u>1 high reach with basket</u> |
| <u>600 Texoma Hwy digger</u> | <u>1 Idem pulled with 24 coast of on Trailer used for static wire</u> | <u>1 John Deer backhoe</u> |
| <u>500 Texoma Hwy digger</u> | <u>1 Truck with 2 steel stands on Trailer</u> | <u>1 Pole Truck with trailer</u> |
| <u>Series 1800 40Ton Crane</u> | <u>1 Truck with 2 Tony wire stands used for OPB wire</u> | <u>1 Simon Telelect crane with auger</u> |
| <u>Series 1300 30Ton Crane</u> | <u>1 Truck with Tension and stand</u> | <u>1 Mechanic Truck</u> |
| <u>National crane w auger mounted on Flat bed Truck</u> | <u>Cart loader w/Basket</u> | |
| <u>Air compressor w 4 Tanks</u> | <u>1-10 cu yd dump Truck</u> | <u>Dynamometer</u> |
| <u>air compressor w 2 Tanks</u> | <u>1.5 cu yd Rock Truck</u> | |

WEATHER CONDITIONS (Indicate above approx. time lost due to adverse weather.)

clear cool wind 5 to 12 mph	Temp 61° to 24°	2-13-12
Mostly cloudy wind 5 to 12 mph	Temp 24° to 32°	2-14-12
overcast cool windy 5 to 20 mph	Temp 34° to 34°	2-15-12

TRANSMISSION LINE CONSTRUCTION

RECORD OF CONTRACTORS TIME & EQUIPMENT

PROJECT Marricourt Wind Farm to Elkendale REPORTED BY Kenneth W. Fisher
220KV Project

DATE Thursday 16, 2012
Friday 17, 2012
Saturday 18, 2012

Brink Contractor
 MEN NO.

MEN	NO.	TRAILS & LANDINGS	POLE & MATERIAL HAULING	HOLE DIGGING	STRUCTURE FRAMING (Ground)	STRUCTURE SETTING	STRUCTURE FRAMING (Aerial)	ANCHOR INSTALLATION	CONDUCTOR HAUL, STRING, SAG, CLIP	CLEAN-UP WORK	LOST TIME DUE TO ADVERSE WEATHER	TOTAL HOURS
FOREMAN <u>General</u>	1											33
FOREMAN												
FOREMAN	2					1		1				66
LINEMEN	1							1				33
LINEMEN												
LINEMEN <u>Appr</u>	3							3				99
LINEMEN <u>Appr</u>	3					3						99
LINEMEN <u>Appr</u>												
EQUIP. OPERATORS	1			*			*1					33
EQUIP. OPERATORS	3							3				99
EQUIP. OPERATORS												
GROUNDMEN	1			*			*1					33
GROUNDMEN												
GROUNDMEN	3					2		1				99
GROUNDMEN												
<u>Mechanic</u>	1											33
TOTAL MEN	19					6	2	9				627

EQUIPMENT ON JOB (List on Monday and note only changes during week.)

WEATHER CONDITIONS (Indicate above approx. time lost due to adverse weather.)

<u>overcast wind 5 to 15 mph</u>	<u>Temp 19° to 36°</u>	<u>2-16-12</u>
<u>overcast cool wind 5 to 15 mph</u>	<u>Temp 17° to 30°</u>	<u>2-17-12</u>
<u>light overcast cool wind 5 to 15 mph</u>	<u>Temp 18° to 36°</u>	<u>2-18-12</u>

DAILY RECORD OF CONTRACTORS WORK

2-16-12, 2-17-12, 2-18-12

STAND NO.	DIGGING-FT.		POLES SET	STRUCTURE FRAMED	ANCHORS INSTALLED	AERIAL MARKER	FENCE GATES
	EARTH	ROCK					
<i>67</i>				<i>T-230 JP</i>	<i>6 anchors installed</i>		<i>2-16-12</i>
				<i>T-230 JP</i>	<i>7 anchors installed</i>		<i>2-17-12</i>
				<i>T-230 JP</i>	<i>5 anchors installed</i>		<i>2-18-12</i>
<i>2-16-12</i> <i>2-19-12</i> <i>59</i>	<i>11.0</i>	<i>5 cu yds</i>	<i>1-90ct-2</i>	<i>T-230-F</i>	<i>Ground Framed</i>		
<i>59</i>	<i>22.0</i>	<i>10 cu yds</i>	<i>2-90ct-3</i>	<i>T-230-F</i>	<i>Ground Framed</i>		
	<i>Total</i>	<i>15 cu yds</i>	<i>crushed Rock use for the 3 holes at str 59</i>				
		<i>110 cu yds</i>					
	<i>Total used this week was (25 cu yds) of crushed rock</i>						

PROGRESS OF CONDUCTOR STRINGING, SAGGING, CLIPPING *Pulled in one phase of conductor from 199-198 to 212-213. * Then sagged 3-conductor - shield wire phase from 199-198 to 212. Sagged other from 216 to 182 with Dynamometer * by Three wires return with ropes sag in Sec's*

2-17-12 * Start clipping in structure from 212 to 199-198. also installed vibration dampers and spiral dampers ^{on} wire called for on conductor wire, shield wire, and O.P.W. wires. Finished on Saturday 2-18-12. (2 men crewed 3 men per crew w/cranes ^{with} blocks)

2-18-12 Pulled in static wire and hard line from between 199-198 to 184-183.

GENERAL REMARKS (Include R/W, Material, Inspection Decisions)

2 men installing anchors listed above.

** 6 men work on ground framing 3-pole structures and spiral framing that are listed above. They also dig the poles.*

2 men worked on the wire span wire from 212-213 to 184-183

** Saturday 2-18-12 crew went to help with the pulling of hard line and conductor wire in from 199-198 to 184-183.*