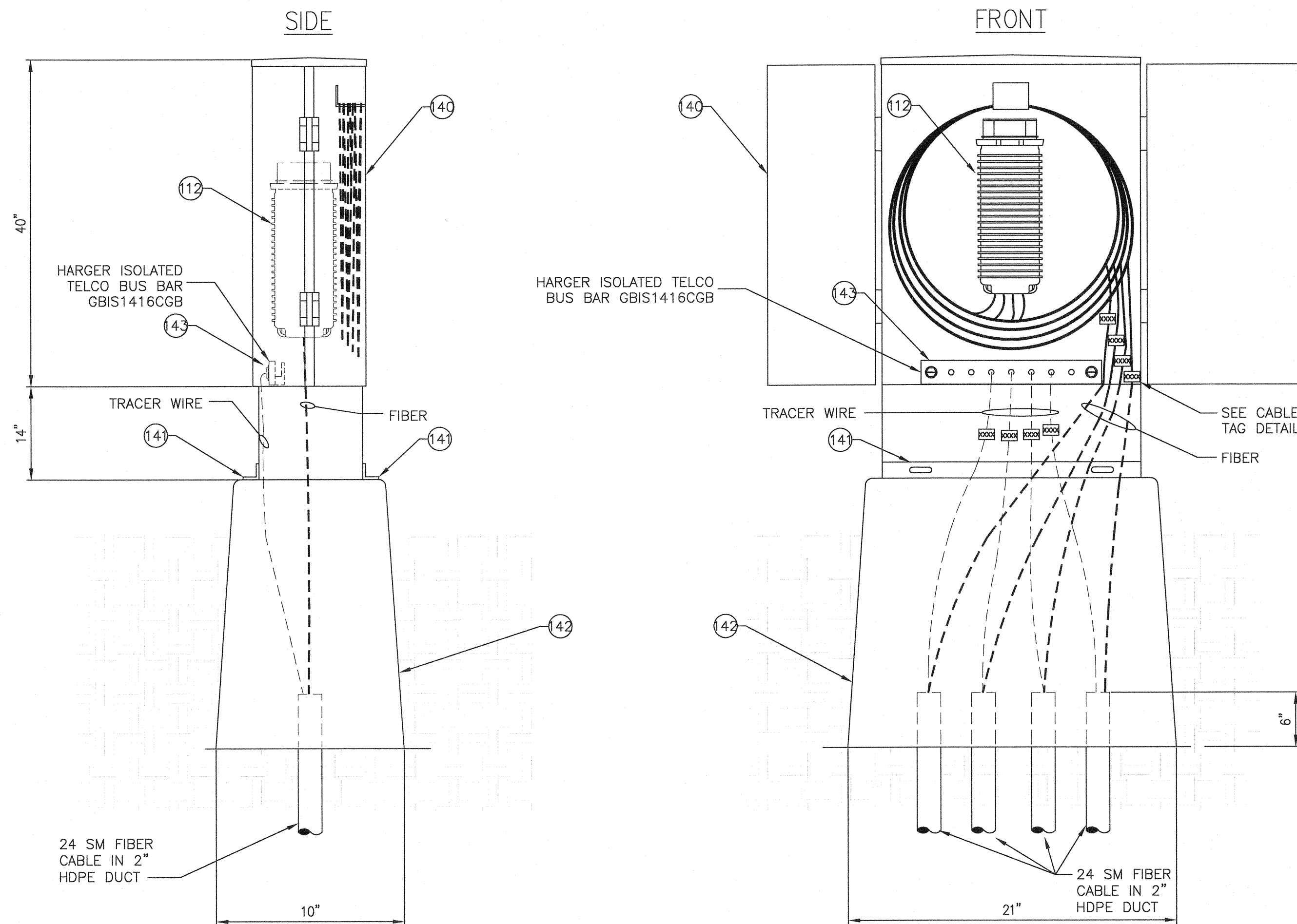




XXXXX
CABLE TAG DETAIL

SPLICE ENCLOSURE DETAIL
ABOVE GRADE 4-WAY
N.T.S.

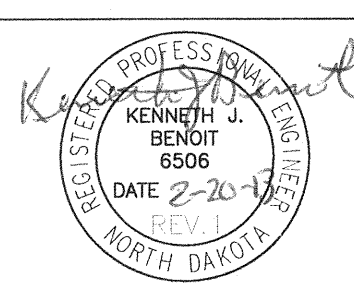
NOTES:

1. A MINIMUM OF 50 FEET OF EACH CABLE MUST BE LEFT AT THE SPLICE ENCLOSURE.
2. REFER TO DRAWINGS E-SD-30 AND E-SD-31 FOR CABINET LAYOUT DETAILS.
3. ALL TRACER WIRES TO TERMINATE TO ELECTRICALLY ISOLATED BUS BAR. LABEL BUS BAR "TRACER WIRES ONLY - DO NOT GROUND".
4. ALL FIBERS AND TRACER WIRES MUST BE LABELED WITHIN 12" OF TERMINATION WITH CABLE/WIRE DESTINATION.

BILL OF MATERIALS - FIBER OPTIC SPLICE, 4-WAY, ABOVE GRADE					
ITEM	QUANTITY	UNIT	DESCRIPTION	MANUFACTURER	CATALOG
63	4	FT	2" HDPE CONDUIT 90 DEGREE ELBOW, 24" RADIUS		
112	1	EA	SPLICE CLOSURE, FIBER OPTIC, 8" I.D. x 25"	TYCO	FOSC-450-B6-4-24-0-BOV
140	1	EA	BURIED PADMOUNT SPLICE CABINET, 2 STAKES (MS1342), 2 RECESSED PADMOUNT BRACKETS, (BA12)	EMERSON	OPFOBD7
141	1	EA	SURFACE MOUNTING KIT W/ 2 BRACKETS	EMERSON	PADMT200300
142	1	EA	SINGLE PHASE GROUND SLEEVE	NORDIC	GS-30-18-30-MG-21X10
143	1	EA	ISOLATION BUS BAR	HARGER	GBIS1416CGB



A	BNK	RJG	CSF	8/16/11	85% DELIVERABLE
B	BNK	CSF	CSF	9/20/11	90% DELIVERABLE
O	BNK	CSF	JLM	10/4/11	ISSUED FOR CONSTRUCTION
1	NJG	RJG	RJG	12/3/12	CONSTRUCTION REVISIONS, NO CHANGES
NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION

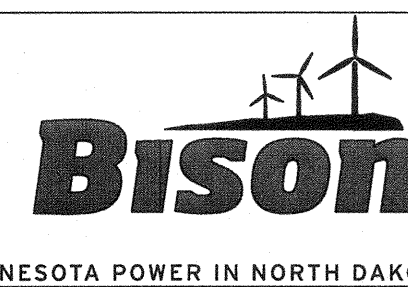


CLIENT	8/16/11	9/20/11	10/4/11				
BID							
CONSTRUCTION							
PERMITTING							
RELEASED TO/FOR	A	B	C	0	1	2	3
	DATE RELEASED						



Project Office:
BARR ENGINEERING CO.
4700 WEST 77TH STREET
MINNEAPOLIS, MN.
55435-4803
Ph: 1-800-632-2277
Fax: (952) 832-2601
www.barr.com

Scale	N.T.S.
Date	08/16/11
Drawn	BNK
Checked	CSF
Designed	RJG
Approved	JLM



A WIND ENERGY INITIATIVE OF MINNESOTA POWER IN NORTH DAKOTA

BISON 3 WIND PROJECT MORTON & OLIVER COUNTIES, NORTH DAKOTA		BARR PROJECT No. 34/33-1006	
COLLECTOR SYSTEM ABOVE GRADE FIBER OPTIC SPLICE (4-WAY)		CLIENT PROJECT No.	
DWG. No. E-FS-32	REV. No. 1		