

South Dakota Science and Technology Authority/
Sanford Underground Research Facility Lead, South Dakota

Oro Hondo Drive Replacement & Motor Rebuild

Addendum 3

Issued October 20, 2017

It was brought to our attention that errors and discrepancies exist within the VFD specification document which affect the requirements of the project. Following are corrections and clarifications that address these issues.

Appendix A.

SECTION 262923 – VARIABLE FREQUENCY CONTROLLERS

1.8.C

Should read “...humidity around the **building**...”

2.1.D.4

Explanation: The 150% current overload rating is a ONE MINUTE overload rating typical for constant torque drives in starting high inertia loads. The does not imply the drive must be rated for 150% of full load.

2.1.D.7.f

Altitude should be **4950 feet** asl, which is the elevation at the fan site. This is consistent with parameter given in 1.8.A.

2.1.D.7.g

Ambient temperature range (operating): -30 to +110 degrees Fahrenheit (-34 to +43 degrees Celsius). (Consistent with 1.8.B NOAA data for the Lead area.)

2.1.D.7.h

Storage temperature range: -30 to +158 degrees Fahrenheit (-34 to +70 degrees Celsius) (158 degrees F assumes potential storage in enclosed space during hottest recorded ambient temperature.)

2.1.D.14

Section should be omitted. Refer to the following notes for clarification:

- 1.) Existing Gilbert motor operated switch may be used for disconnect/lock-out device unless contractor determines this switch is insufficient.
- 2.) Contractor/drive supplier is responsible for determining appropriate AIC based on existing supply transformer ratings and conductor properties.

2.1.D.15

Omit line item "a".

Revise line item "b" to: "Provide appropriate VFD enclosure suitable to the environment and capable of maintaining ambient temperature rating of the drive in accordance with manufacturers requirements."

2.2.A.1

Refer to RFI response #12 of the Q&A for detail.

2.2.C

Omit line item. Not applicable.

2.2.D

18-pulse drive is not a "requirement." Total Harmonic Distortion limits are required as indicated.

2.3

Omit section. Not required in this application.

3.2.C

Omit line item. Appropriate VFD mounting to be determined by contractor.

3.2.F

Omit line item. Only applies to ancillary equipment is required to support the VFD.

3.2.I

Ground and bond controller in accordance with NEC requirements.

3.2.J

Controls installer shall provide all wiring and conduit associated with the control signals into and out of the VFD to the SURF PLC I/O cabinet. SURF shall perform terminations in PLC I/O cabinet.

3.3.C

Perform power quality analysis per warranty manufacturer requirements and section 2 of this specification document.

3.6.B

Clarification: THD testing and verification apply to the line-side connection of the VFD.

3.6.C

Omit line item. Not applicable to this project.