



AVCON, INC.
Engineers & Planners

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March 16, 2018

Collier County Government
Growth Management Division
Building Review & Inspection
2800 N. Horseshoe Drive
Naples, FL 34104

RE: **Permit No.:** **PRBD2017051966901**
 Application No.: **PRBD20170519669**
 Job Site Address: **2005 Mainsail DR, Unit: BLDG**
 Airport: **Marco Island Executive Airport**
 Project: **New Terminal Facility and Associated Improvements**

Dear Sir:

In response to the comment dated 2/23/18 for the above-referenced permit, we remit the following:

ELECTRICAL REVIEW – Gregory Hamm

Miscellaneous Corrections #5

Miscellaneous Corrections: Overcurrent protection for transformer T-2 of panel MDP may be oversized and may not trip prior to damage occurring to the conductors. 2nd Review: Overcurrent protection for transformer T-2 of panel MDP appears to be oversized per 2011 NEC 450.3 and Table 450.3(B).

Response: The 50A breaker located in panel MDP is protecting the primary side of transformer T-2. The transformer has primary and secondary overcurrent protection. The code allows the primary breaker to be set at 250% of Full Load current (FLA). The FLA on the primary side of the 480V, 30KVA transformer is 36A. The 50A breaker puts us at 136% of the transformers primary FLA which is within code. The secondary is allowed to be protected with a breaker rated maximum 125% of FLA ($83A * 1.25 = 103A$). The 100A breaker puts us at 120% of FLA which is within code. The ampacity of the conductors are within allowable range.

Thank you.

Sincerely,

AVCON, INC.

A handwritten signature in blue ink, appearing to read "Zemp", written over a light blue grid background.

Zemp Pepper, P.E.
Project Manager