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Mr. Patrick Fletcher, CPPB
Florence County Procurement Director
180 N Irby St, MSC-R, Moom B-5
Florence, SC 29501

RE: Roof Analysis Report For Florence County Public Service Building

Patrick:

This letter will serve as a Roof Analysis Report for the Public Service Building located on Irby St, Florence South Carolina. This document shall be divided into the following sections: 1. Existing Conditions, 2. Recommendations, and 3. Budgets. Additionally attached to this document is a roof field report including a photo log.

Existing Construction

The existing facility is 3 story building with a roof this is approximately 65' x 113', for a total of 7,345 square feet. There are lower roof areas that are not part of this report.



The roof system has 2 roofs. The original roof is a structural concrete deck with a multi ply asphalt roof system. The second roof is a ballasted TPO single ply membrane over a recover board.

The ballasted single ply is not adhered and most of the ballast is no longer on the roof, approximately 10% of the ballast is left.

Recommendations

The existing single ply membrane and recovery board must be entirely removed. The existing built up roof may be able to be repairs/restored but the core test indicated that the membrane was very brittle and had little tensile strength.

The base course of action would be to completely remove both roofs assemblies to the existing concrete deck. This would allow for the installation of new roof insulation and a multi-ply modified bitumen roof system.

Additionally the consideration for the amount of insulation needs to be reviewed. Currently there is no above deck insulation. An evaluation would take place to determine how much insulation is necessary to meet the current IBC. Note the budgets are based on new insulation to the existing code and there are no reductions reflecting any below deck insulation.

Budgets

The budget for this project includes complete removal of the existing roof assemblies, installation of a minimum of 4" of roof insulation (R20), a cover board, and a 3 ply cold applied modified bitumen roof and new associated sheet metal.

Estimated cost is \$165,000.

I trust that you will find this information complete. Thank you for the opportunity to assist you with this project. If you have any questions regarding this report, please contact me at (843) 676-5589 or via email at pharper@tremcoinc.com.

Sincerely,



Philip A. Harper, PE, RRC



Overview



Overview



Overview



Overview



Overview



Close up of Core Cut



Close up of Roof Core



Overview