Irina Tokar Senior Project Manager City of Fort Lauderdale 100 N. Andrews Avenue Fort Lauderdale, FL 33301

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September 11, 2013

Dear Irina:

American Underwater Contractors, Inc has completed the underwater survey for the Regulatory Beach Buoy Systems. In summary, AUC found 35 existing anchor points—all in fair to good condition (2 anchor points we can rehab by capturing underneath the worn area a new anchor shackle, bringing the anchor to good condition, usable for another 5 to 10 years). Twenty-one of these 35 anchor points did not have a buoy or down line system attached.

There were 22 positions that no anchor (and therefore no buoy and down line system) could be found. It is our belief and experience that the GPS numbers (that the City has) have been recorded incorrectly. The City should see if there are any other GPS numbers available that may need to be searched.

AUC recommends completely eliminating the anchor shackles which eliminates them as potential failure points. We can attach the down line directly to the anchor head which would result in less maintenance and cost. This will mean a savings of \$41.30 per system (deducted from our contract price-see July 30th email)

We also strongly recommend going with the City's Marine staff suggestion of using the spectra loop they can rig and provide to use to attach the down line to the buoy. This eliminates another failure point with hardware and will save the City \$ 87.43 per unit in hardware cost (deducted from our contract price—same July email)

Also, the Rolyan buoy should definitely be the 980R which the City has used in the past and is 80" overall length instead of 61". The 61" buoys will not meet United States

Coast Guard specifications for 36" exposure above the water in your ocean conditions. The 980R 80" tall buoy will function properly with all language and symbols visible and 36" of buoy exposure above water even after normal marine growth has attached to the buoy and down line assembly. This buoy does cost \$ 112.00 more per unit (with freight) than the smaller buoy but is needed and necessary.

These improvements will result in a much better quality finished product and should still result in a savings over the current per unit price. We need to order the buoys as soon as possible as there is a 4-6 week lead time before the buoys arrive.

Please let me know the quantity of buoys and the City's final decision as soon as possible.

Best regards,

David

David Foster American Underwater Contractors, Inc.