

THIS MEMO HAS EXPIRED

February 2, 2001

MEMORANDUM NO: 01-01

TO: DISTRICT CONSTRUCTION ENGINEERS

FROM: Greg Xanders, State Construction Engineer

COPIES: C. Goodman, L. Sessions

SUBJECT: PATCHING EXTERNAL TENDON POST-TENSIONING DUCTS

As a result of recent inspections of segmental bridges all over Florida, significant occurrences of tendon corrosion have been revealed. There are a number of causes for this corrosion and one of these is moisture and air that come in contact with bare tendons by passing through very small holes in the plastic ducts that surround the tendons. The holes are needed to correct isolated voids in ducts due to incomplete grout penetration. The voids are filled with grout through the small holes in the duct; however, the holes are rarely if ever patched. Heretofore these holes were considered to be too small to be a corrosion concern but that is no longer the case.

For all future projects, the specification will include a method for permanently patching these holes. However, for projects that are currently underway this memorandum is notification to all Projects Engineers ***that all holes in external plastic tendon ducts that exist for any reason must be permanently patched.***

A standard patching method is being developed at this time; however, in the interim, the Engineer of Record should be consulted with regard to recommending an acceptable patching method. Patching methods should be discussed with the duct producer/manufacturer to be certain that patching materials and methods are compatible with the duct material.

If further discussion of this matter is desired, contact Steven Plotkin of my office at (850) 414-4155 or 994-4155 sc.

GX/sp

