



**Bridge Factors Factual Report Attachment 33 – Email from Mr. Alan Phipps of FIGG to
Mr. Dan Walsh of NTSB dated July 12, 2018**

Miami, FL

HWY18MH009

(2 pages)

Walsh Daniel

Subject: Tension/Compression Members in Main Span

From: Phipps, Alan [REDACTED]

Sent: Thursday, July 12, 2018 12:49 PM

To: Walsh Daniel [REDACTED]

Subject: RE: Tension/Compression Members in Main Span

Dan:

The truss is designed as a prestressed concrete element. As such, prestressing steel is used in members subject to tension forces to limit the net tension in the member under full design loads. Loads that the truss was designed for that were not applied at the time include pedestrian live load, wind loads and thermal loads, which would result tension in certain members. The compression provided by the prestressing counteracts the tension from the loads.

Hope this helps.

Thanks,

Alan