

**CIV102F Quiz # 7: Friday AM October 30, 2020**  
**Truss Deflections**

All horizontal and vertical members in the truss shown below consist of square HSS members with the designation HSS 89x89x9.5. What is the smallest square HSS member that could be chosen for the diagonals (members DB and EC) such that the vertical deflection at point E is less than 3.5 mm? Use the method of virtual work. Ignore the self-weight of the truss.  $E = 200\,000\text{MPa}$ .

