GENERAL NOTES :

These notes are for fabrication tolerances for precast prestressed concrete members as shown on Standard Drawing No. E 707-BPBF-01 for box beams and on Standard Drawing No. E 707-BPBF-02 for I-beams.

1. Tolerances shown are maximum permissible varations from the dimensions shown on the plans or shop drawings. Tolerances are not to be considered cumulative. Longitudinal tolerances are based on design length. Casting length shall be adjusted to compensate for shrinkage and plastic flow.

2. Beams whose dimensions exceed the tolerances shown on Standard Drawing E 707-BPBF-01 or -02 will be rejected for shipment and erection.

3. For 7-wire strands, the following wire breaks will be permitted to remain on the prestressed concrete casting bed under the following conditions.

   Bed having:

   Fewer than 20 strands, no wire breaks permitted.
   20 through 39 strands, 1 wire break permitted.
   40 through 59 strands, 2 wire breaks permitted.
   60 or more strands, 3 wire breaks permitted.

4. The occurrence of more than the permissible number of wire breaks in a particular strand pattern, as shown above, or the occurrence of more than one broken wire in an individual strand, will require that the strand or strands be removed and replaced. All wire breaks which may occur shall be located. The ends shall be tied to the strand with wire to preclude the possibility of raveling during the vibration of the concrete.

5. Variation of camber shall not be more than 1" on one span nor more than $\frac{1}{2}$" between adjacent beams to be measured at time of erection. Camber deviation from design camber shall not be more than ±50% if plan camber is 2" or greater or $\pm\frac{1}{2}$" if plan camber is less than 1".

6. A beam with a curb to be poured in the field shall have curb reinforcement located longitudinally within $\frac{3}{4}$" of the locations shown on the plans.

7. Length of beam tolerance shall be checked after the final curing phase and within three days prior to shipping.

8. Horizontal alignment tolerance shall be checked immediately after removal of forms and strand release and prior to removal from bed.

9. End stirrup bars shall not be more than 2" from the end of the beam.

10. At concrete bearing area, deviation from plane surface when tested in all directions of the plane surface with a steel straightedge shall not be more than $\pm\frac{1}{16}$".

11. Mild reinforcing steel concrete cover tolerance shall be $-\frac{1}{8}$" to $+\frac{3}{8}$".

12. Center of gravity of prestressing strand group tolerance shall be $\pm\frac{1}{4}$" and longitudinal position of handling devices ±6".

INDIANA DEPARTMENT OF TRANSPORTATION

FABRICATION TOLERANCES
GENERAL NOTES

MAY 2000

STANDARD DRAWING NO. **E 707-BPBF-03**

ANTHONY L. UREMOVICH REGISTERED No. 18095 STATE OF INDIANA PROFESSIONAL ENGINEER

DESIGN STANDARDS ENGINEER

/s/ Anthony L. Uremovich 5-01-00
DESIGN STANDARDS ENGINEER DATE

/s/ Firooz Zandi 5-01-00
CHIEF HIGHWAY ENGINEER DATE