1. Provide materials and workmanship in accordance with specifications Publication 408.

2. Provide threaded steel inserts in accordance with ASTM designation A 29, Grade 12L1, with a minimum tensile strength of 80 ksi, with a carbon range of 0.15 - 0.20%.

3. Provide galvanized ASTM A 307 Grade A cap screws and washers conforming to Section 1105 of Publication 408.

4. Provide welded connection between the steel insert and the strut equal to or greater than the strength of the ASTM A 307 Grade A cap screw.

5. Accurately set anchor assembly at template to the correct elevation and alignment, and brace securely against displacement before the surrounding concrete is placed.

6. Use the installation procedure and type of inserts, whether closed bottom or open bottom, in accordance with the manufacturer's recommendations. Take care to keep the inside of the insert clean.

7. Provide threaded rod assemblies.

8. Provide thread for screws and steel inserts conforming to Section 1105 of Publication 408.

9. Provide the anchor assemblies as an alternate to cast-in-place anchor bolts or sleeve anchor assemblies for the following locations, at no additional cost to the Department:
   - Attaching base plates for guide rail to concrete.
   - Attaching base plates for fence, pedestrian railing, protective hurricane and debris railing posts to concrete decks of pedestrians.

10. Use gusset brackets or other approved method when attaching aluminum base plate to post to concrete, to prevent electrolytic reaction between the two types of metal being used.

11. Provide install bolts on design drawings.

12. Bolt diameter indicated on the drawings is nominal or basic bolt diameter.
STEEL WIRE
(TYPICAL)

STRUT WIRE
(TYP.)

ELEVATION

PLAN

A

A

INCORPORATES CAP SCREWS AND WASHERS

SHEET 2 OF 3

BC-734M

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
STANDARD ANCHOR SYSTEMS

NOTES

1. FOR NOTES, SEE SHEET 1.

TYPE C INSERT ASSEMBLY
(INCLUDES CAP SCREWS AND WASHERS)

SECTION A-A

TYPE D INSERT ASSEMBLY
(INCLUDES CAP SCREWS AND WASHERS)

SECTION B-B

CHIEF BRIDGE ENGINEER
RECOMMENDED

BUREAU OF PROJECT DELIVERY
DIRECTOR, BUR. OF PROJECT DELIVERY

AUG. 4, 2017

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1. Set anchor assembly by template to the correct elevation and alignment, and brace security against displacement before the surrounding concrete is placed.

2. The use of a back up nut or plate, as shown in detail 2 or 3, will facilitate setting of anchor bolts to their correct elevation. The threaded length of anchor bolts depends on the method of installation chosen by the contractor.

3. Template thickness = base or base plate thickness