NOTES: (Include these Notes with details shown on Dwg. No. 6.2.19)

- 1. ALL STRUCTURAL STEEL FOR UTILITY SUPPORTS SHALL CONFORM TO AASHTO M 270 GRADE 36. ALL STRUCTURAL STEEL AND FASTENERS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH AASHTO M 111 AND M 232.
- 2. 3" Ø THREADED INSERTS FOR 3" Ø H.S. BOLTS SHALL BE CAST INTO THE PRECAST BEAMS BY THE FABRICATOR AND SHALL PROVIDE A MINIMUM NOMINAL TENSILE RESISTANCE OF 6.0 KIPS AND A MINIMUM NOMINAL SHEAR RESISTANCE OF 6.0 KIPS IN 3000 PSI CONCRETE.

(The Designer shall determine the required insert capacities if S > 12')

- 3. THE UTILITY SUPPORT ANGLE SHALL BE ERECTED WITH THE LONG LEG VERTICAL.
- 4. INSERTS SHALL BE POSITIONED TO AVOID INTERFERENCE WITH PRESTRESSING STRANDS.

NOTES: (These Notes are for details shown on Dwg. No. 6.2.19)

- 1. The type of utility shown is conceptual and shall be modified to accommodate the actual type.
- 2. For S < 6'-6" use  $L5x3\frac{1}{2}x\frac{1}{2}$ For  $6'-6" \le S \le 12'-0"$  use  $L6x4x\frac{1}{8}$ For S > 12'-0" to be designed by Designer
- 3. Maximum utility support spacing = 11'-6" and the maximum total utility weight = 250 lbs/ft. If either of these limits is exceeded, the Designer shall design the support angle.
- 4. The preferred dimension from the bottom of the beam to the bottom of the connection angle is 4". However, if more vertical clearance is required due to the size of the utility, this dimension can be reduced to  $\frac{3}{4}$ ".
- 5. If more horizontal clearance is required, use a coped WT section with a bolt on both sides of the stem in place of the connection angle.



UTILITY SUPPORT NOTES

PRECAST CONCRETE BOX BEAMS

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