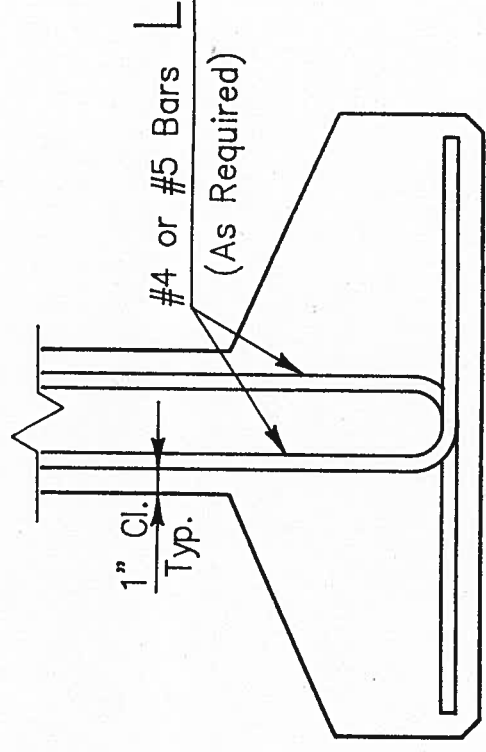
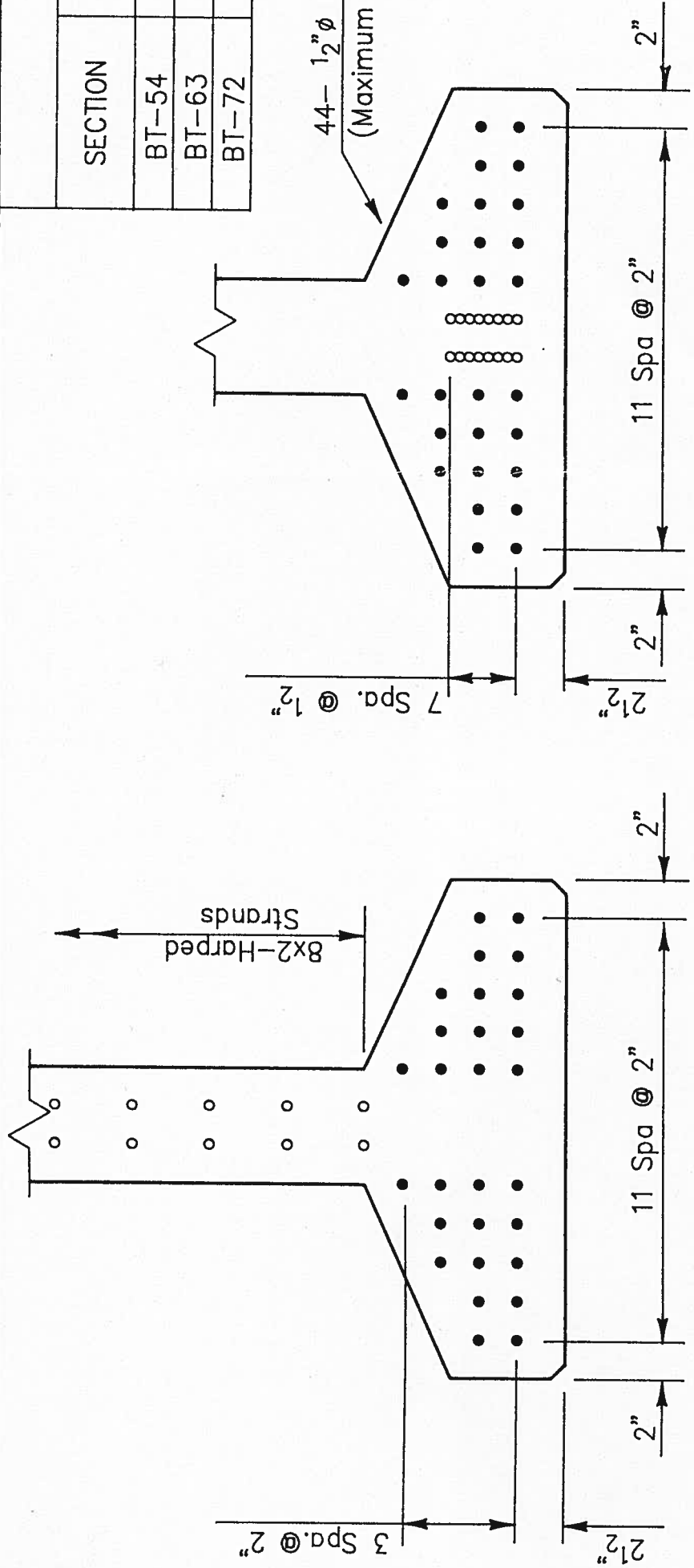


**SECTION PROPERTIES**

SECTION	A (in <sup>2</sup> )	I (in <sup>4</sup> )	Y <sub>b</sub> (in)	S <sub>b</sub> (in <sup>3</sup> )	S <sub>t</sub> (in <sup>3</sup> )	Wt. (plf)
BT-54	659	268,077	27.63	9,702	10,166	686
BT-63	713	392,638	32.12	12,224	12,715	743
BT-72	767	545,894	36.60	14,915	15,421	799



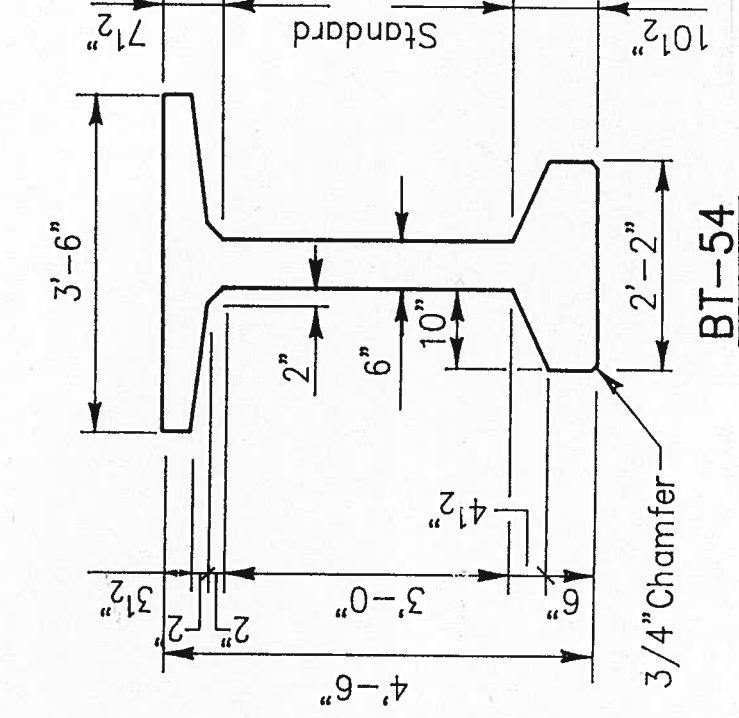
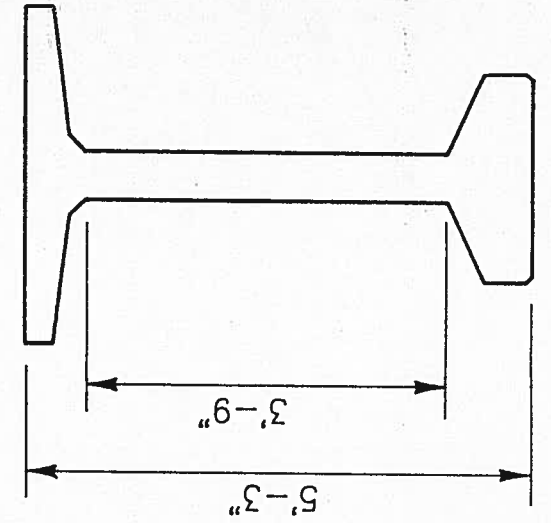
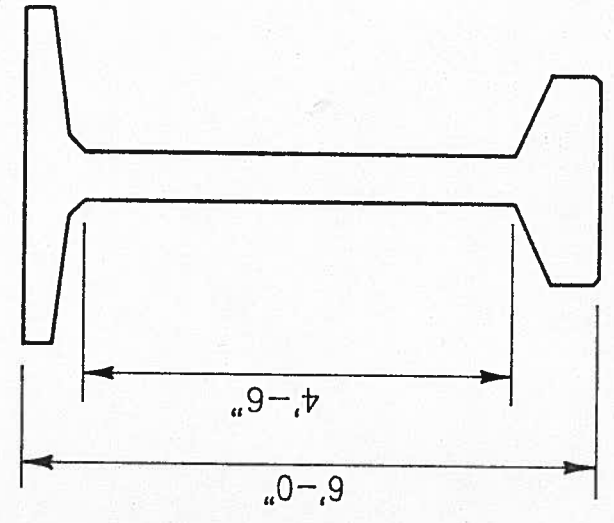
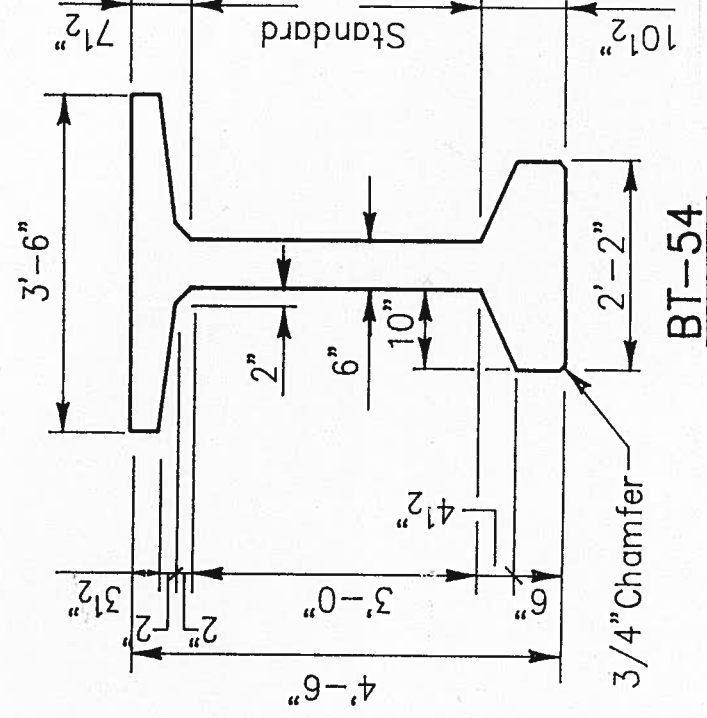
AT ENDS

BETWEEN HARP POINTS

STRAND PATTERNS

SUGGESTED STIRRUPS

SUGGESTED END ZONE REINFORCEMENT

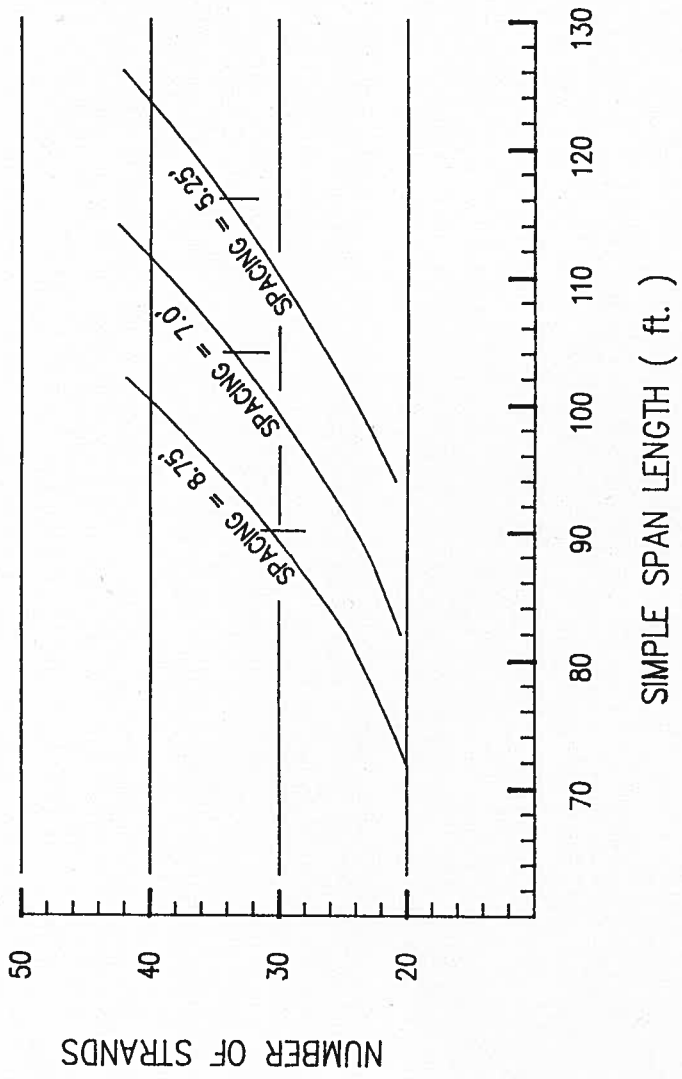


BT-54

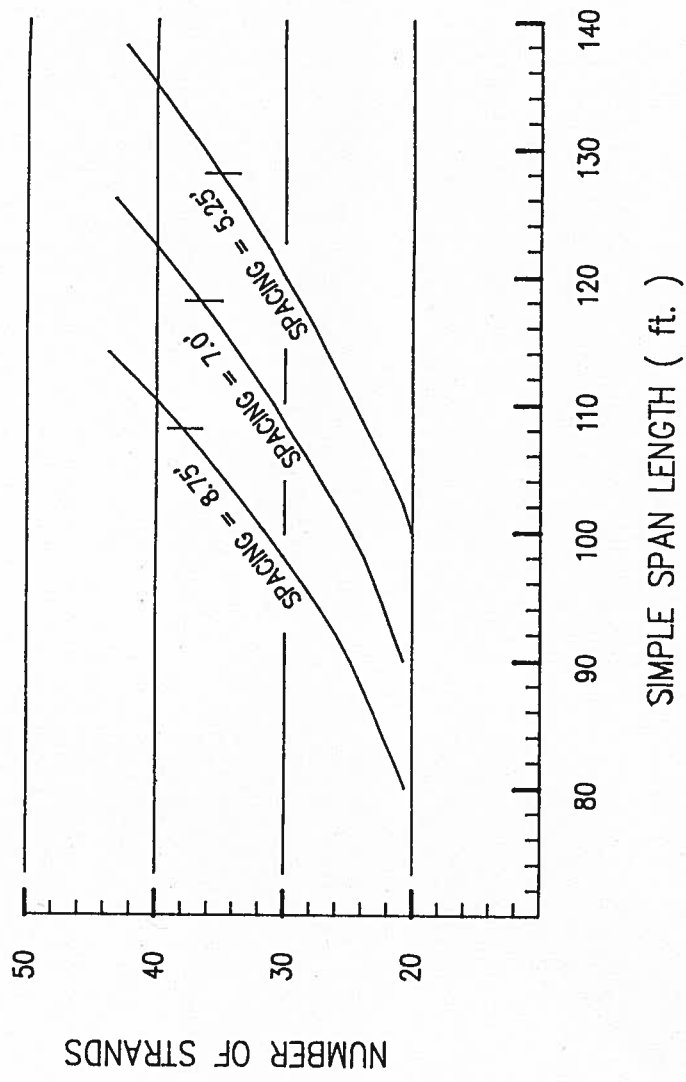
BT-63

BT-72

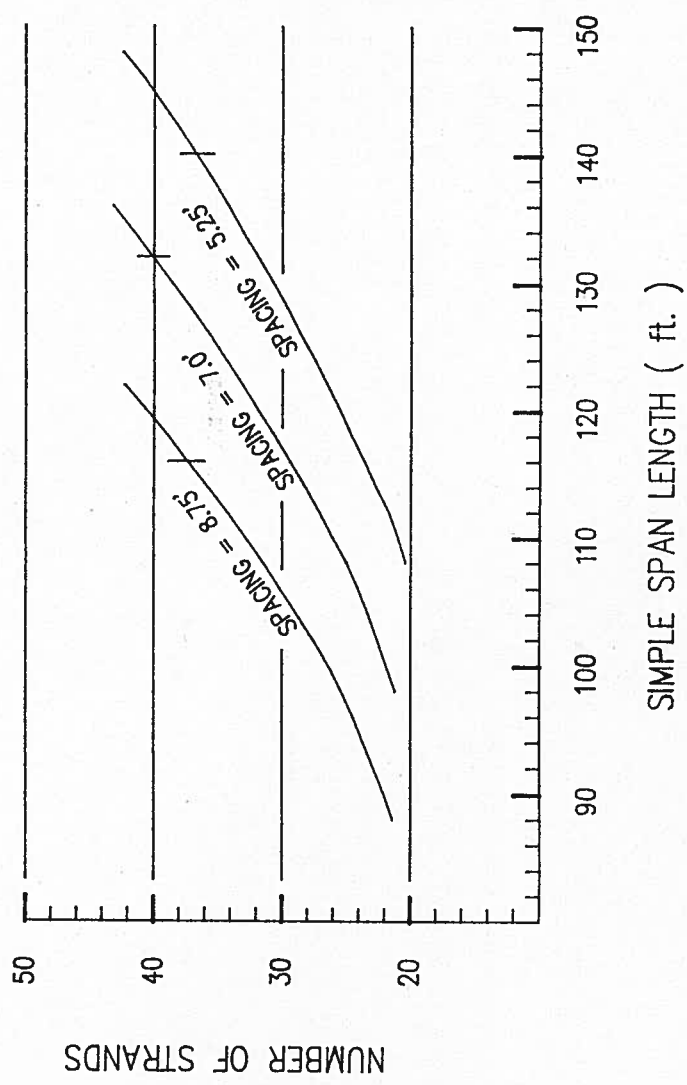
**Prestressed Concrete Bulb-Tee Beams  
For Highway Bridge Spans To 150 Feet**  
Prestressed Concrete Institute, Chicago, IL.



BT-54



BT-63

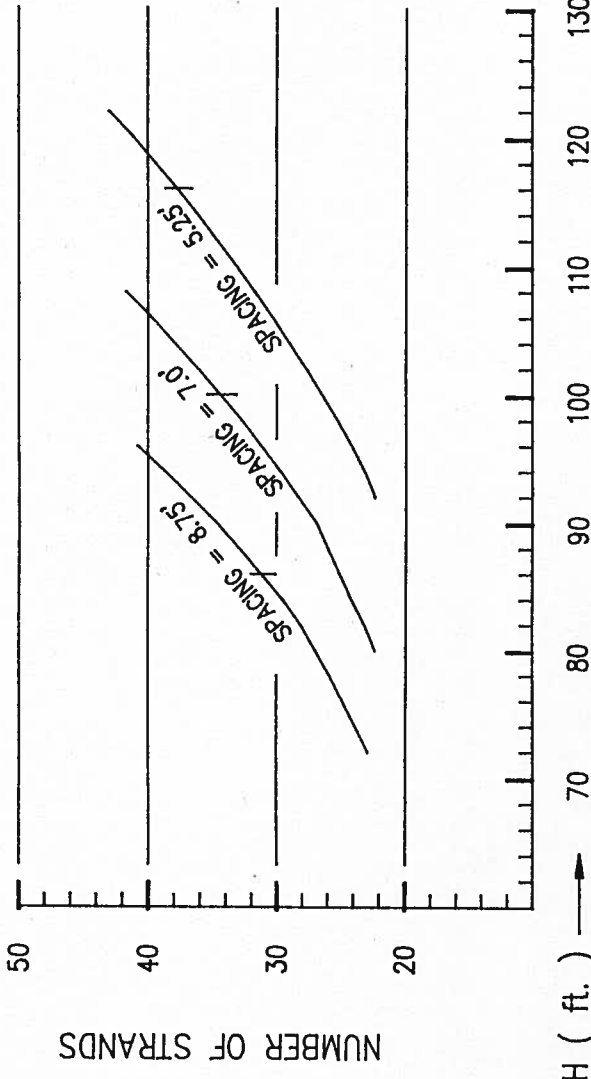


BT-72

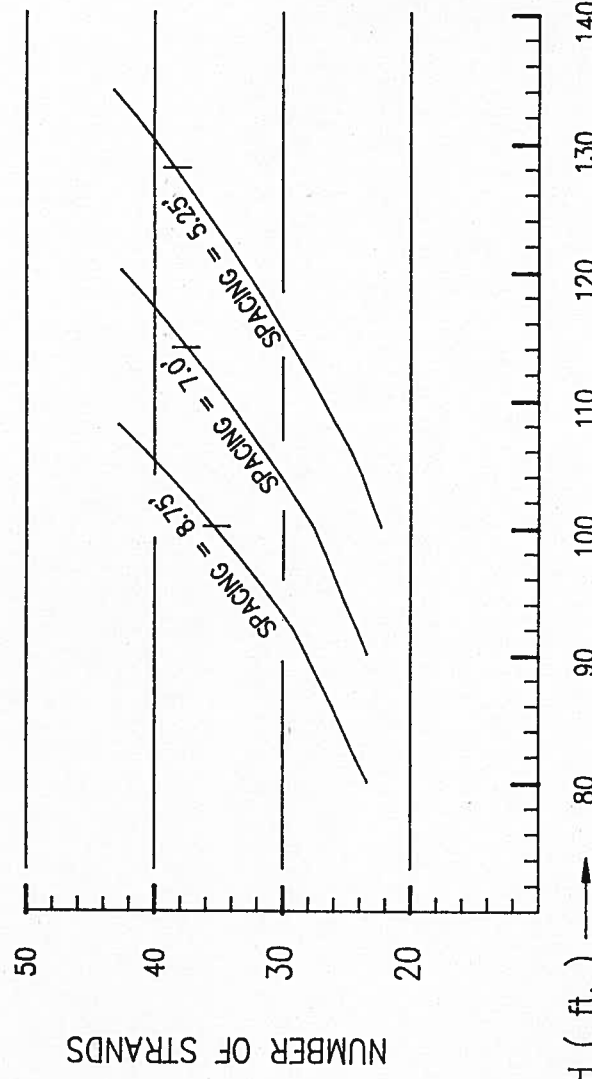
**STRAND REQUIREMENTS FOR  
HS20-44 LOADING**

**Prestressed Concrete Bulb-Tee Beams  
For Highway Bridge Spans To 150 Feet**

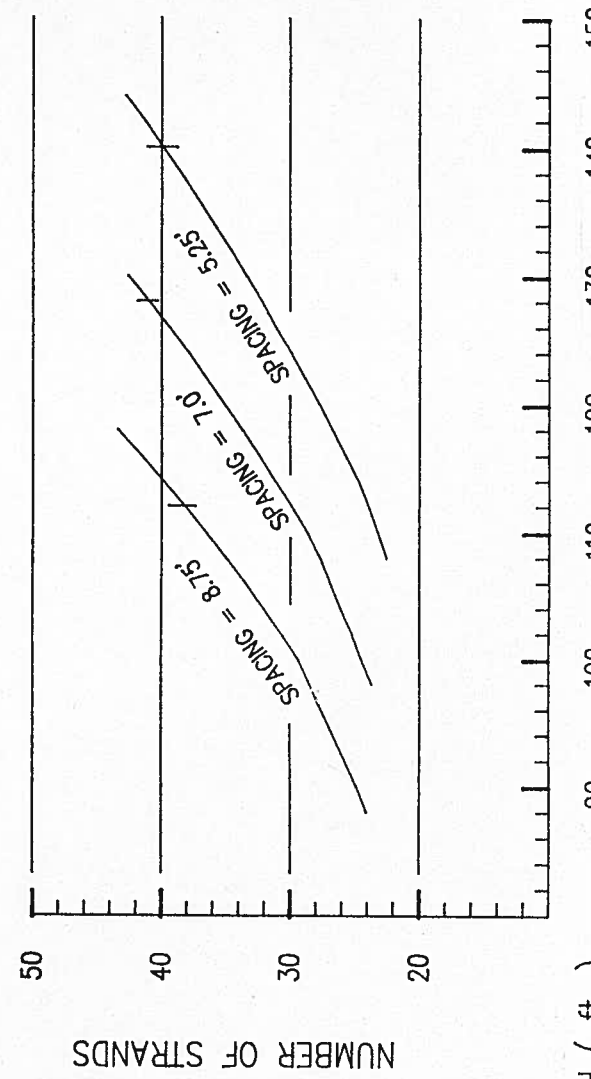
Prestressed Concrete Institute, Chicago, IL.



**BT-54**



**BT-63**



**BT-72**

**NOTES:**

1. THE INFORMATION PRESENTED ON THESE DRAWINGS IS BASED ON SIMPLE SPAN PRETENSIONED CONCRETE GIRDERS. THE INFORMATION IS FOR GUIDANCE ONLY. THE STRAND AND REINFORCEMENT PATTERNS ARE BASED ON 1" CLEAR COVER. LOCAL CRITERIA MAY BE DIFFERENT THEREBY ALTERING THE STRAND PATTERN.
2. DESIGN IN ACCORDANCE WITH AASHTO WITH UNIT CONCRETE WEIGHT OF 150 P.C.F.; CHARTS BASED ON S/5.5 LIVE LOAD PLUS IMPACT. 23 PSF FUTURE WEARING SURFACE, BARRIER RAILS AND DIAPHRAGMS INCLUDED.
3. THE CHARTS ARE BASED ON 3,500 PSI DECK CONCRETE AND A GIRDER CONCRETE OF 6,000 PSI; CONCRETE STRENGTH AT STRESS TRANSFER EQUALS 4,500 PSI. SPAN LENGTHS TO THE RIGHT OF THE VERTICAL MARK WILL REQUIRE TRANSFER AND/OR 28 DAY STRENGTHS GREATER THAN 4,500 AND 6,000 PSI, RESPECTIVELY. ALLOWABLE TENSILE STRESS IN THE PRE-COMPRESSED TENSILE ZONE = 465 PSI.
4. SLAB THICKNESSES USED FOR DESIGN:
 

GIRDER SPACING	SLAB 'T' FOR WEIGHT	SLAB 'T' FOR PROPERTIES
8.75'	9"	8"
7.00'	8"	7"
5.25'	8"	7"
5. THE STRAND IS 1/2" DIAMETER, GRADE 270 WITH LOW RELAXATION PROPERTIES. INITIAL STRESSING EQUALS 75% OF ULTIMATE.

**STRAND REQUIREMENTS FOR HS25-44 LOADING**

**Prestressed Concrete Bulb-Tee Beams For Highway Bridge Spans To 150 Feet**

Prestressed Concrete Institute, Chicago, IL.