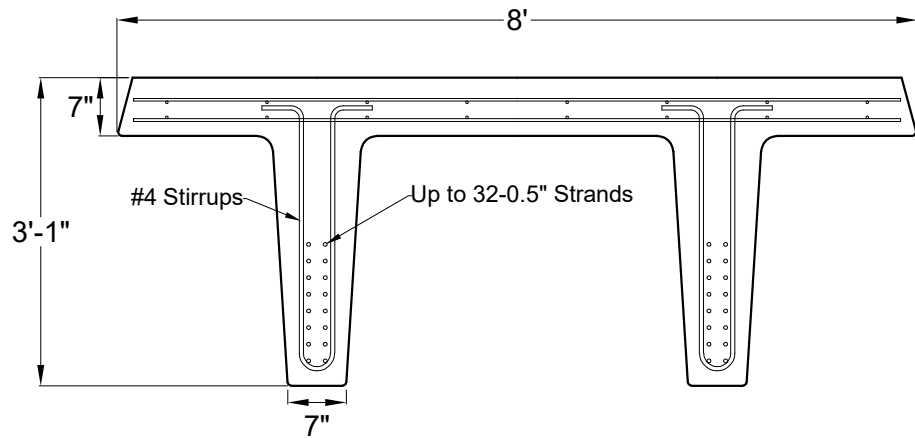


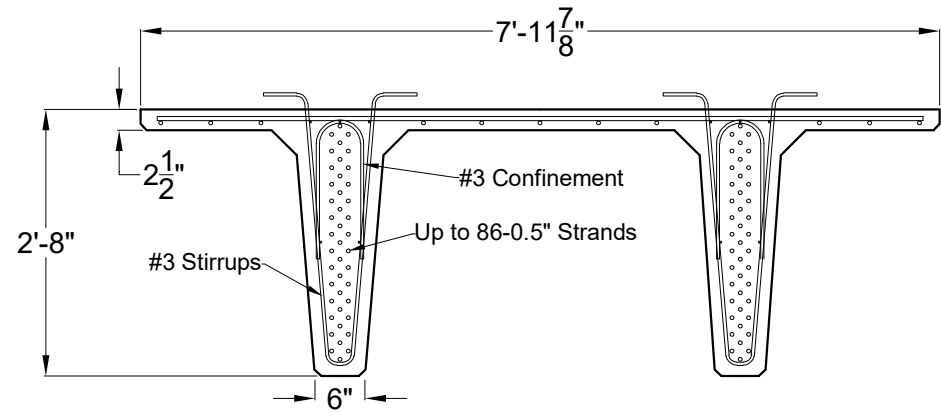
Comparison between Conventional Concrete and UHPC Designs		
Parameters	Conventional Concrete	UHPC
Concrete compressive strength at release (ksi)	8	10
Concrete compressive strength at service (ksi)	10	18
Specified Flexural Strength (ksi)	Unspecified	2
Flange width (ft)	10	10
Member depth (in.)	40	40
Weight (lb/ft)	1,936	920
# of bottom 0.6" strands	46	36
# of top 0.6" strands	4	14
Max design span (ft)	80	90
Bottom fiber stresses limit (ksi)	0.6	1
Bottom fiber stresses at Service III (ksi)	0.56	1
Ultimate moment demand (k.ft)	6,232	6,064
Moment capacity (k.ft)	7,482	6,074
Ultimate shear demand at critical section (kip)	330	258
Shear capacity at critical section (kip)	386*	311**
Camber at release (in.)	2	1.65
Live load deflection at midspan (in.)	-0.68	-1

*Stirrups provided are #4 @ 12"

**No stirrups used



Florida DT Section



Nebraska DT Section

