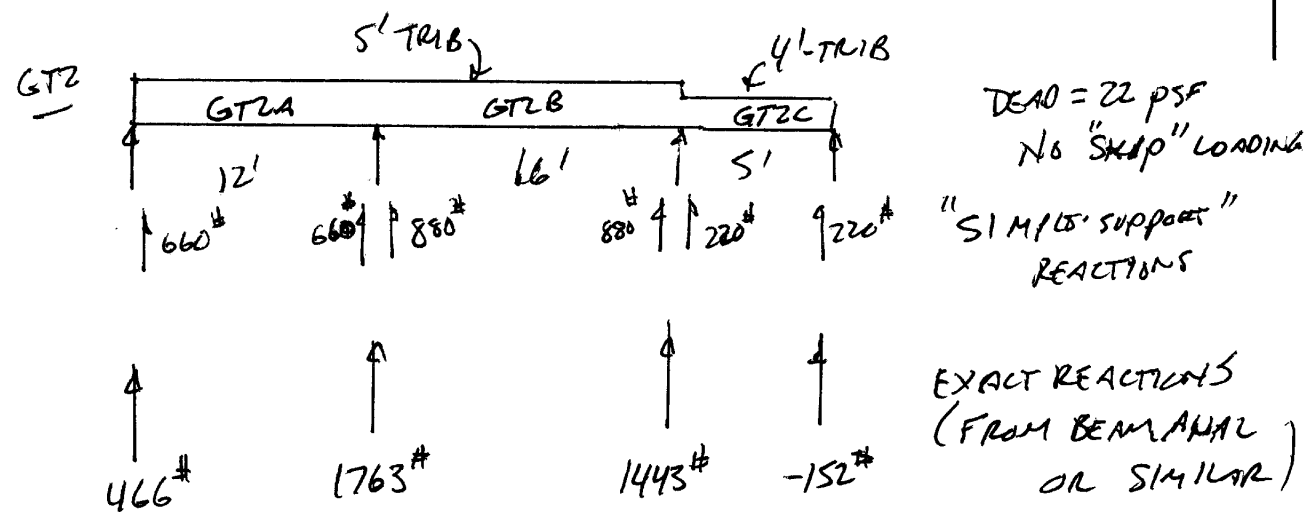


GT2A	12	5				
660	12.0	660	0	0	0	0
466		1763				
GT2B	16	5				
880	16.0	880	0	0	0	0
1763		1443				
GT2C	L1	L2	L3	DEAD LOAD TRIB	CONC LOADS	
220	5	5.0	220	4	0	0
1443			-152			



1) INSTEAD OF GOING TO BEAMANAL WORKSHEET AND MANUALLY INPUTTING SPAN LENGTHS AND LOADS, LINK THE CELLS IN BEAMANAL TO THE GT! AND BH! WORKSHEETS.

WE COULD LINK TO THE DATA! WORKSHEET BUT THERE IS NO APPARENT ADVANTAGE IN DOING SO.

2) ADD FORMULAS TO BEAMANAL TO CALCULATE THE "SCALING RATIOS" AT EACH REACTION, AND DISPLAY THIS RESULT AT THE APPROPRIATE CELLS ON GT! OR BH!

3) THE RATIOS ARE THUS:

- SUPPORT 1: 0.706
- 2: 1.145
- 3: 1.312
- 4: -0.691

CHECK: @ SUPPORT 2, $(660 + 880)(1.145) = 1763 \# = 1763 \#$ OK

4) AT EACH REACTION ON GT! WORKSHEET (OR BH!), HAVE A CELL DISPLAY THE CORRESPONDING SCALING RATIO - FOR EXAMPLE, AT SUPPORT 2 IT IS 1.145

5) MANUALLY ENTER (INPUT) 1.145 INTO AN ADJACENT CELL WHICH IS THEN THE PRECEDENT CELL FOR FOLLOWING CELLS TO COMPUTE THE ACTUAL REACTIONS AND SHEAR DIAGRAM, MOMENT DIAGRAM FOR THE MULTI-SPAN GIRDER TRUSS (OR BEAM) - AND FOR ALL LOADS.

6) THE REASON FOR STEP 5) IS TO AVOID A CIRCULAR REFERENCE, THEN YOU CAN PROCEED DOWN THE WORKSHEET(S) AND DO THE SAME PROCEDURE FOR ANY OTHER MULTI-SPAN SITUATIONS.

THE BIG ADVANTAGE TO THIS IS YOU ONLY HAVE TO HAVE ONE COPY OF BEAMANAL IN YOUR DESIGN WORKBOOK, AND KEEP THE EXCEL FILE SIZE REASONABLE.

THE "SLIGHT" DISADVANTAGE - WE ARE USING ONLY THE DEAD LOADS TO SCALE THE REACTIONS, SO THE RESULTS MAY BE SOMEWHAT INACCURATE, AND AS FAR AS DEFLECTIONS GO, YOU PROBABLY WANT TO INPUT Δ FROM THE RESULTS OF BEAMANAL, APPROXIMATING FOR FLOOR AND/OR ROOF LIVE BASED ON PROPORTION FROM Δ DEAD.