



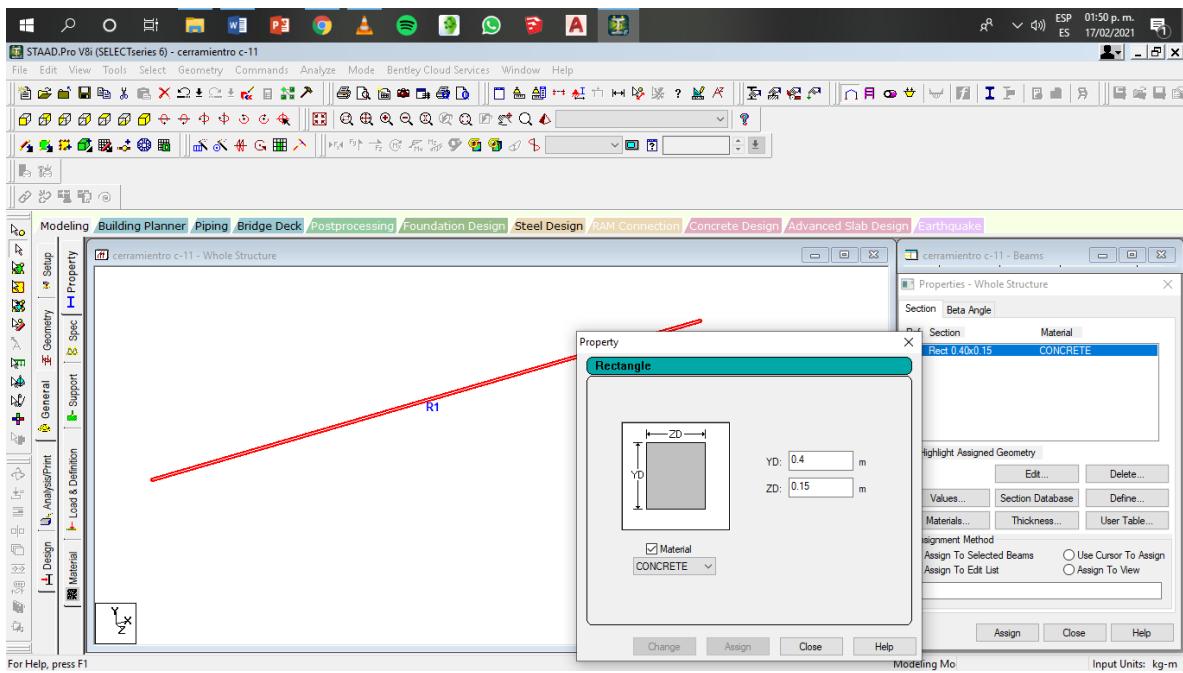
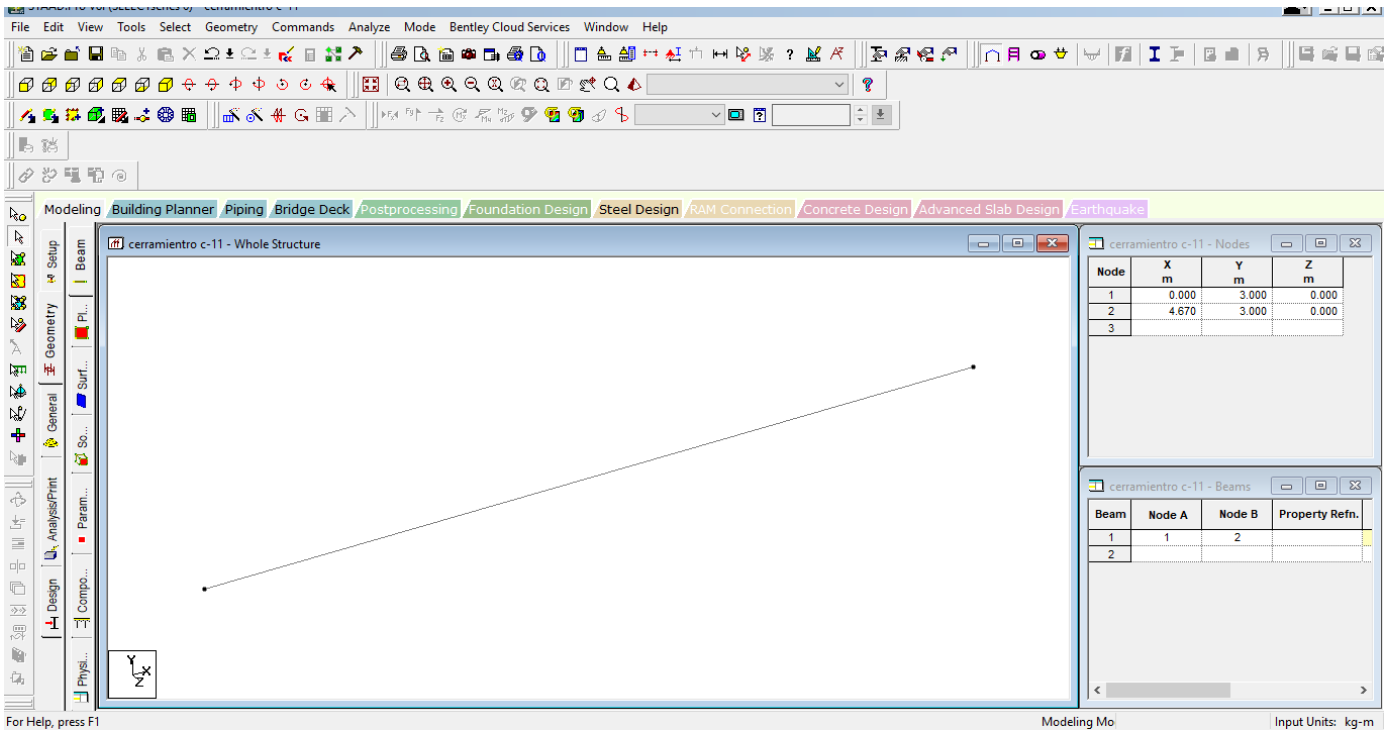
## Examen primera unidad

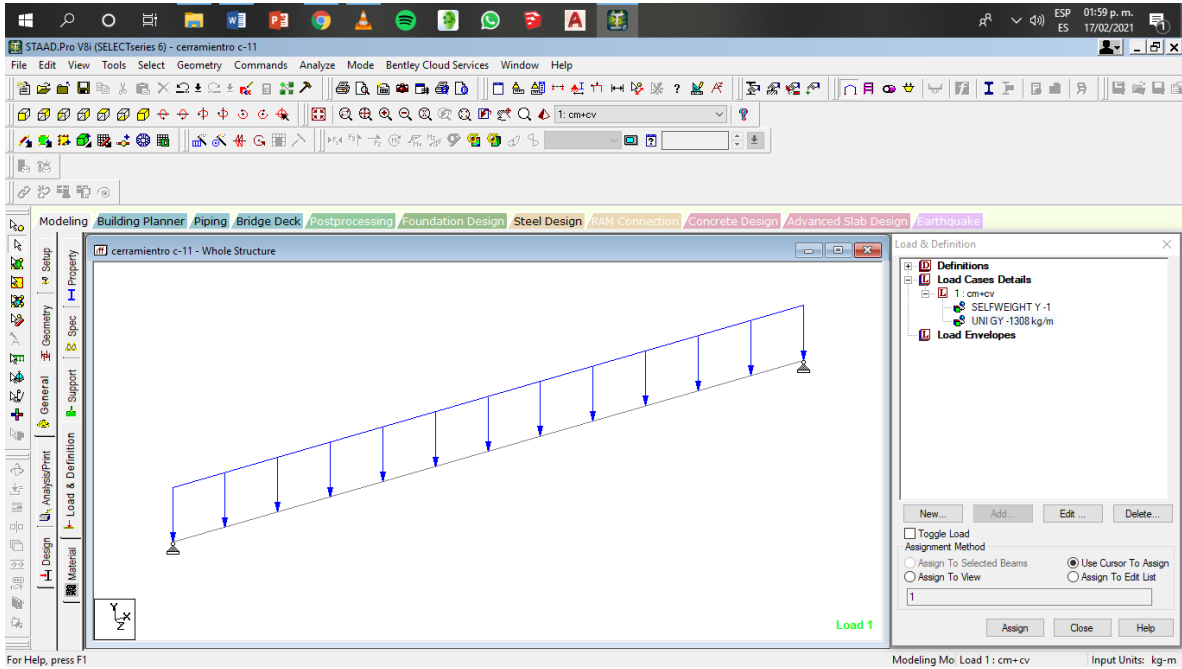
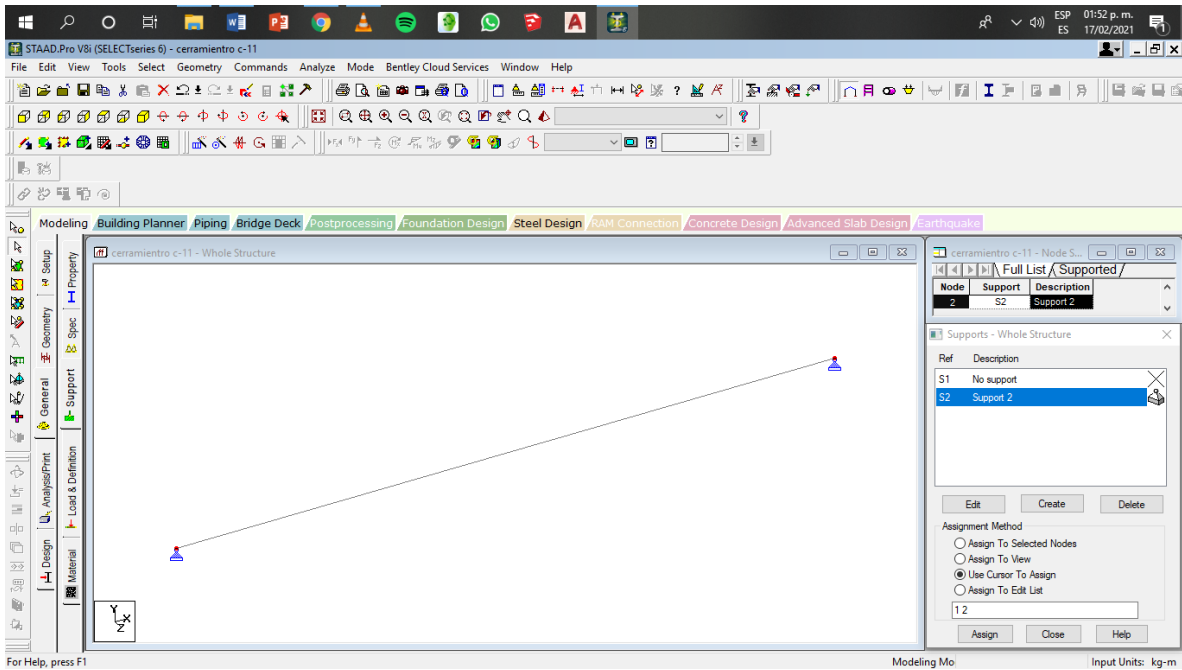
- Lic. Arquitectura
- 5to cuatrimestre
- Jorge Iván Sosa Guillén
- Pedro García López

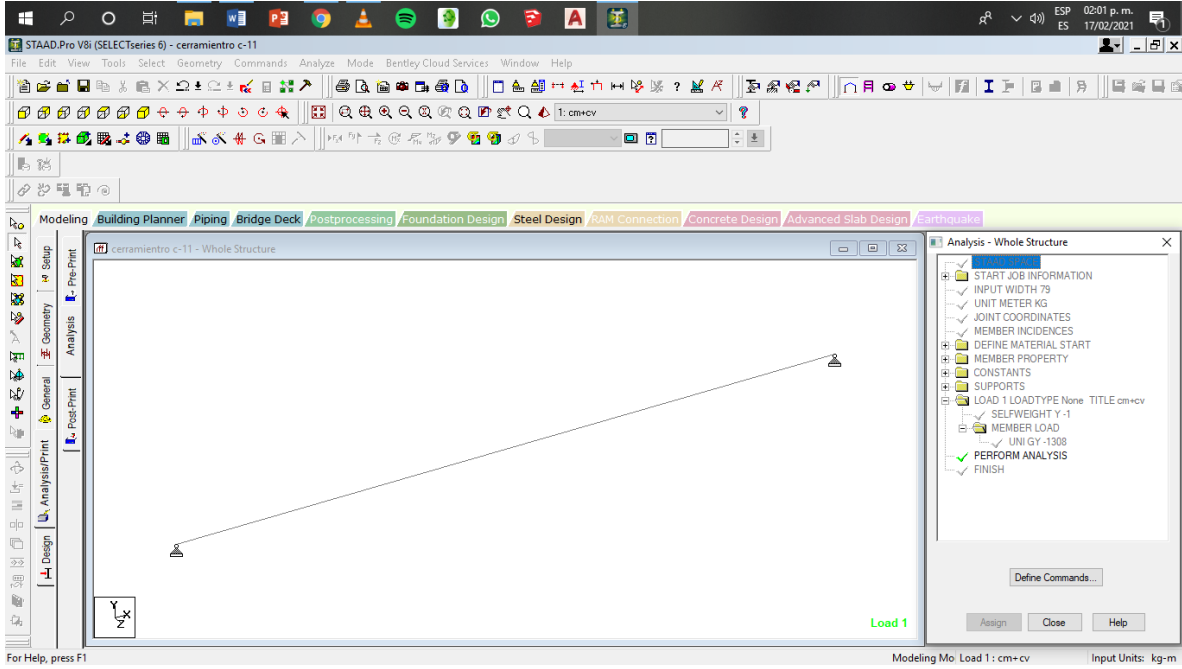
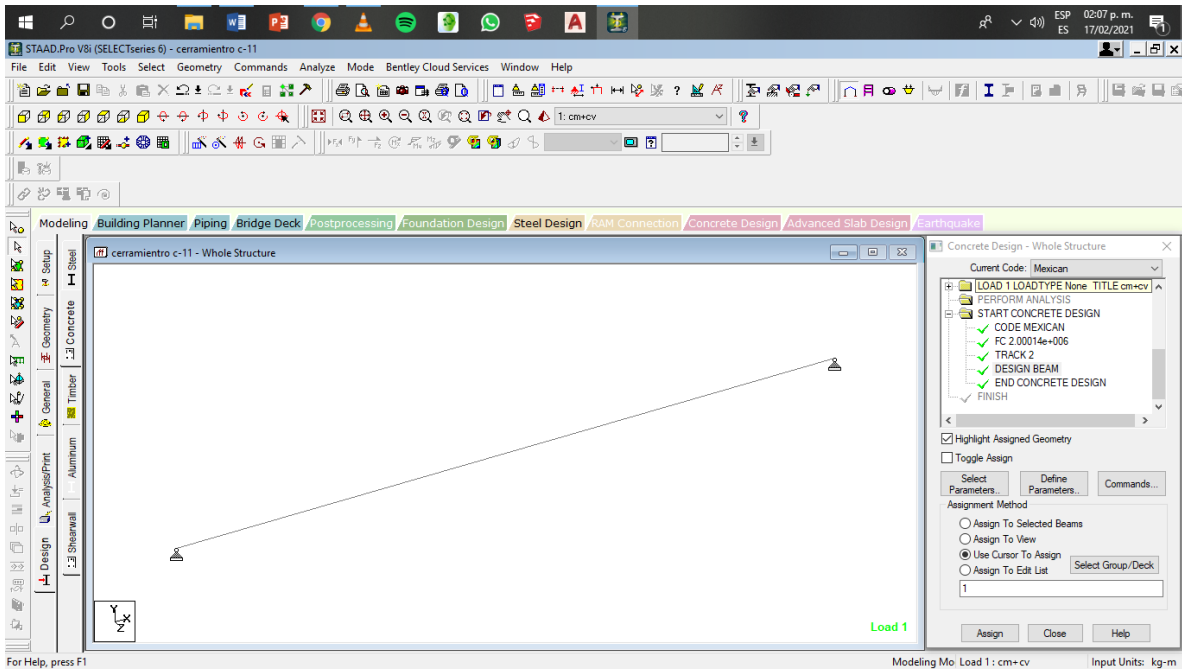
Análisis de estructuras

17/02/2021

# C - 11







STAAD.Pro V8i (SELECTseries 6) - cerramiento c-11

File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help

1:cm+cv

cerramiento c-11.anl - STAAD Output Viewer

File Edit View Help

Modeling

WARNING

\*\*\*WARNING - INSTABILITY AT JOINT

REQUIRED REINF. STEEL SUMMARY :

SECTION ( MM )	REINF STEEL (+VE/-VE) (SQ. MM )	MOMENTS (+VE/-VE) (KNS-MET )	LOAD (+VE/-VE)		
0.00	0.00/	0.00	0./	0.00	0/ 1
389.17	121.28/	0.00	12./	0.00	1/ 0
778.33	179.27/	0.00	22./	0.00	1/ 0
1167.50	247.35/	0.00	29./	0.00	1/ 0
1556.67	298.05/	0.00	35./	0.00	1/ 0
1945.83	329.40/	0.00	38./	0.00	1/ 0
2335.00	340.01/	0.00	39./	0.00	1/ 0
2724.17	329.40/	0.00	38./	0.00	1/ 0
3113.33	298.05/	0.00	35./	0.00	1/ 0
3502.50	247.35/	0.00	29./	0.00	1/ 0
3891.67	179.27/	0.00	22./	0.00	1/ 0
4280.83	121.28/	0.00	12./	0.00	1/ 0
4670.00	0.00/	0.00	0./	0.00	0/ 1

BEAM NO. 1 DESIGN RESULTS - SHEAR

AT START SUPPORT - Vu= 0.06 KN Vc= 0.00 KN Vs= 0.00 KN

Concrete Design - Whole Structure

Current Code: Mexican

- UNIT METER KG
- JOINT COORDINATES
- MEMBER INCIDENCES
- DEFINE MATERIAL START
- MEMBER PROPERTY
- CONSTANTS
- SUPPORTS
- LOAD 1 LOADTYPE None TITLE cm+cv
- PERFORM ANALYSIS
- START CONCR/FTF DESIGN

Highlight Assigned Geometry

Toggle Assign

Select Parameters Define Commands...

Assignment Method

Assign To Selected Beams

Assign To View

Use Cursor To Assign

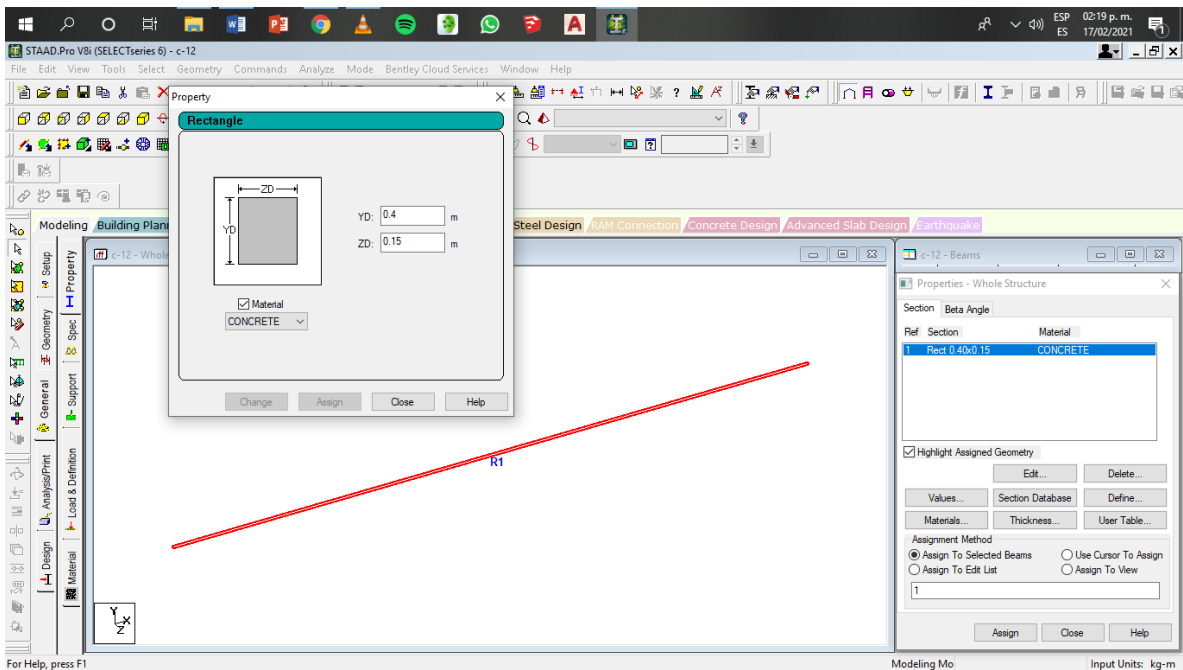
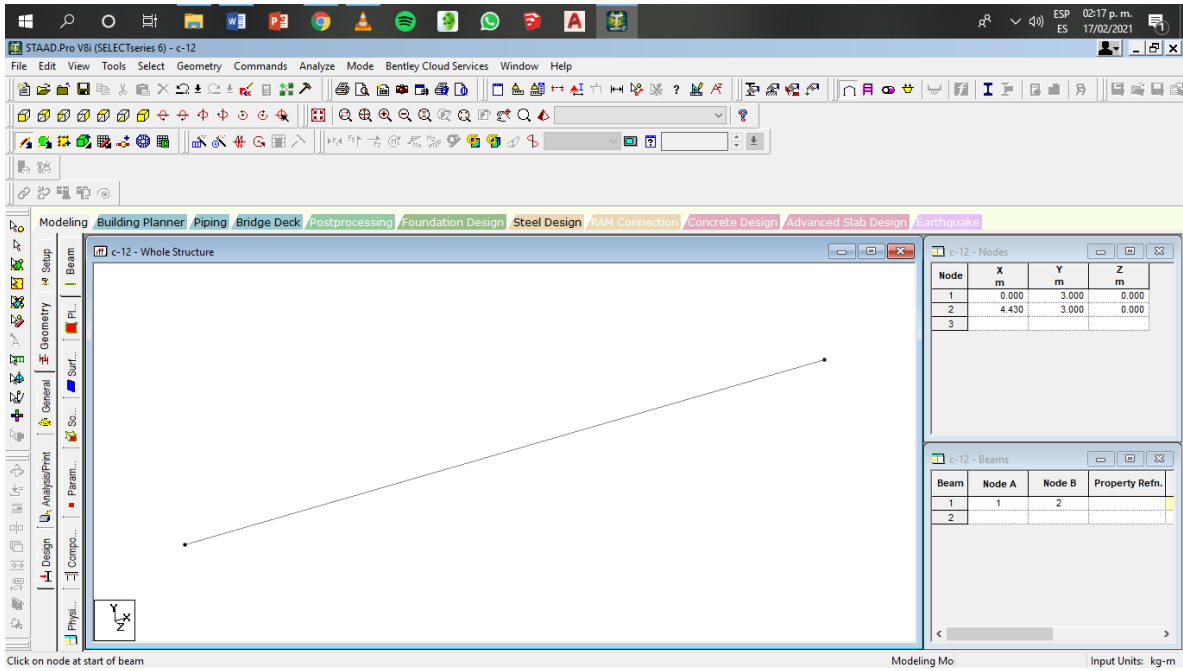
Assign To Edit List Select Group/Deck

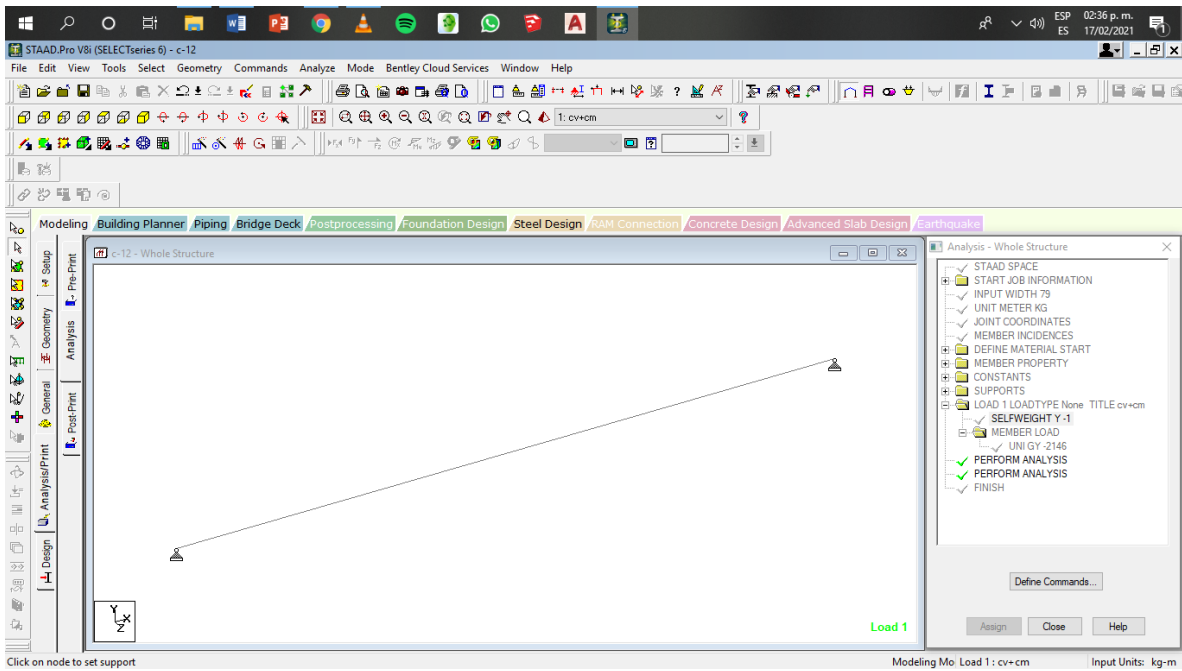
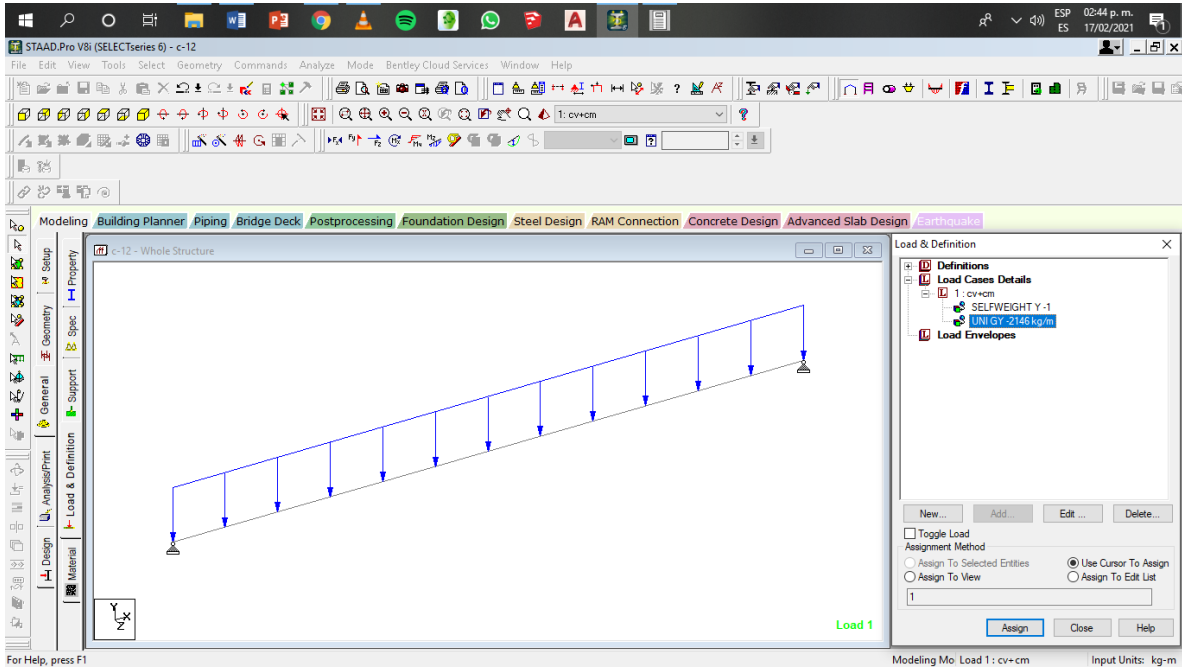
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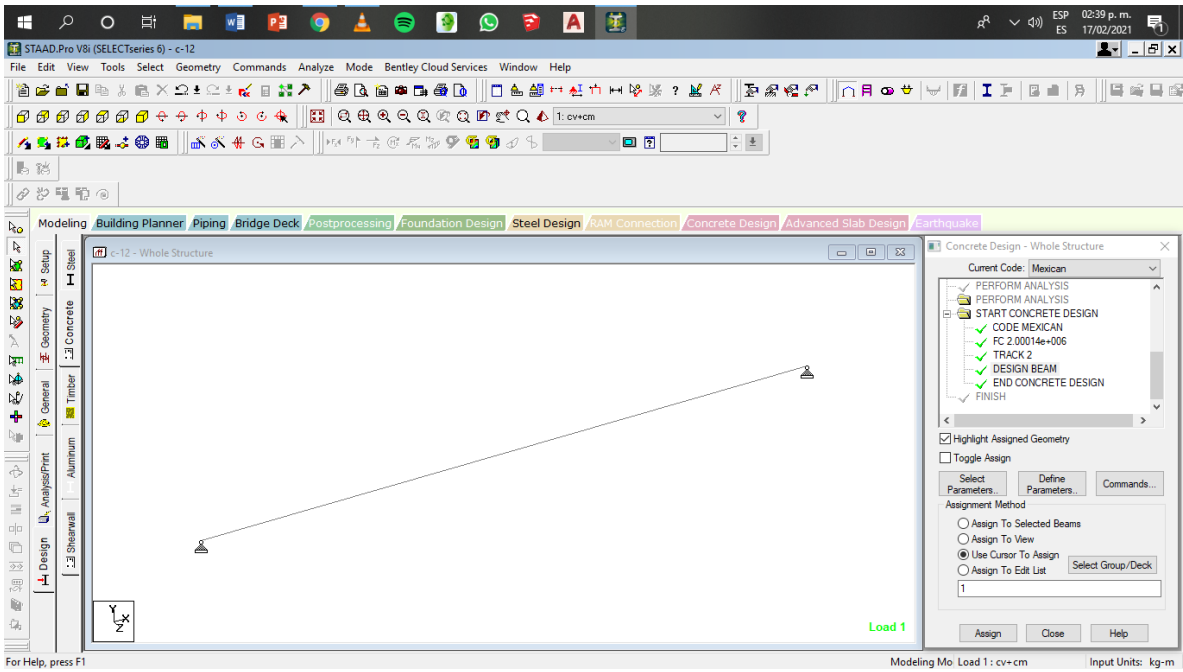
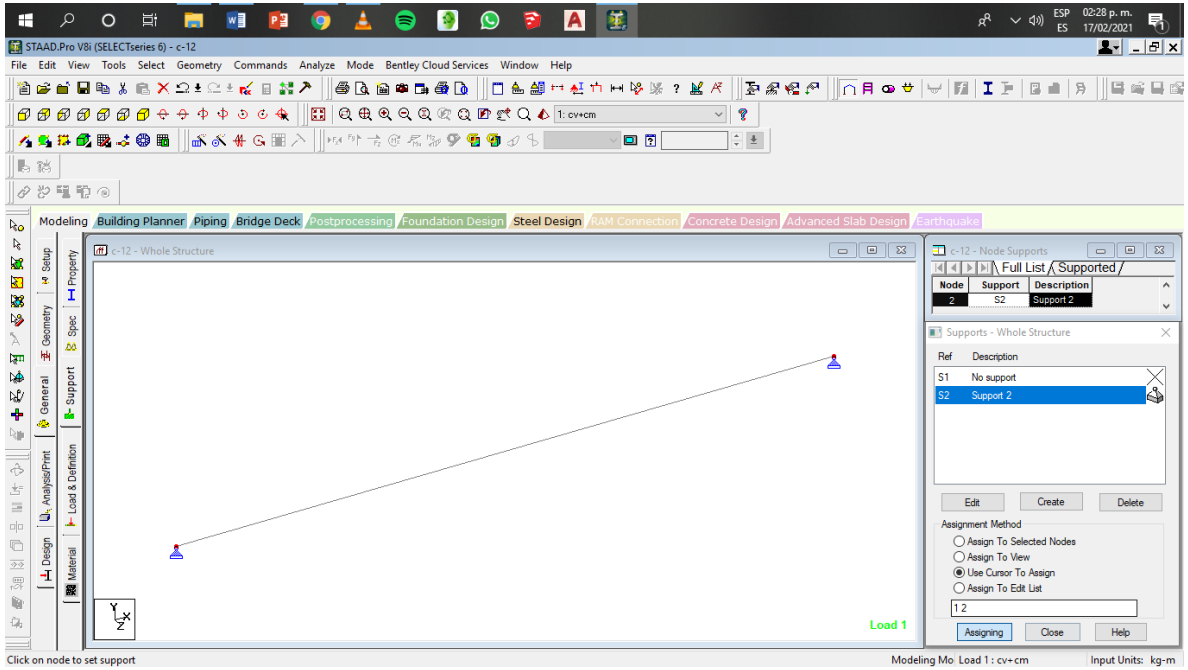
Assign Close Help

Mo Load 1: cm+cv Input Units: kg-m

# c-12









STAAD.Pro V8i (SELECTseries 6) - c-12

File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help

1: cv+cm

c-12.lan1 - STAAD Output Viewer

File Edit View Help

Modeling

WARNING

\*\*\*WARNING - INSTABILITY AT JOINT

\*\*\*WARNING - CONSECUTIVE ANALYSIS

Cracked Moment of Inertia Iz at above location =0.31842E+09 mm^4

REQUIRED REINF. STEEL SUMMARY :

SECTION ( MM )	REINF STEEL (+VE/-VE) (SQ. MM )	MOMENTS (+VE/-VE) (KNS-MET )	LOAD (+VE/-VE)		
0.00	0.00/	0.00	0./	0.00	0/ 1
369.17	145.71/	0.00	17./	0.00	1/ 0
738.33	276.93/	0.00	31./	0.00	1/ 0
1107.50	388.89/	0.00	41./	0.00	1/ 0
1476.67	475.75/	0.00	49./	0.00	1/ 0
1845.83	531.28/	0.00	54./	0.00	1/ 0
2215.00	550.46/	0.00	55./	0.00	1/ 0
2584.17	531.28/	0.00	54./	0.00	1/ 0
2953.33	475.75/	0.00	49./	0.00	1/ 0
3322.50	388.89/	0.00	41./	0.00	1/ 0
3691.67	276.93/	0.00	31./	0.00	1/ 0
4060.83	145.71/	0.00	17./	0.00	1/ 0
4430.00	0.00/	0.00	0./	0.00	1/ 0

BEAM NO. 1 DESIGN RESULTS - SHEAR

Concrete Design - Whole Structure

Current Code: Mexican

- UNIT METER KG
- JOINT COORDINATES
- MEMBER INCIDENCES
- DEFINE MATERIAL START
- MEMBER PROPERTY
- CONSTANTS
- SUPPORTS
- LOAD 1 LOADTYPE None TITLE cv+cm
- PERFORM ANALYSIS
- PERFORM ANALYSIS

Highlight Assigned Geometry

Toggle Assign

Select Parameters... Define Parameters... Commands...

Assignment Method

Assign To Selected Beams

Assign To View

Use Cursor To Assign

Assign To Edit List

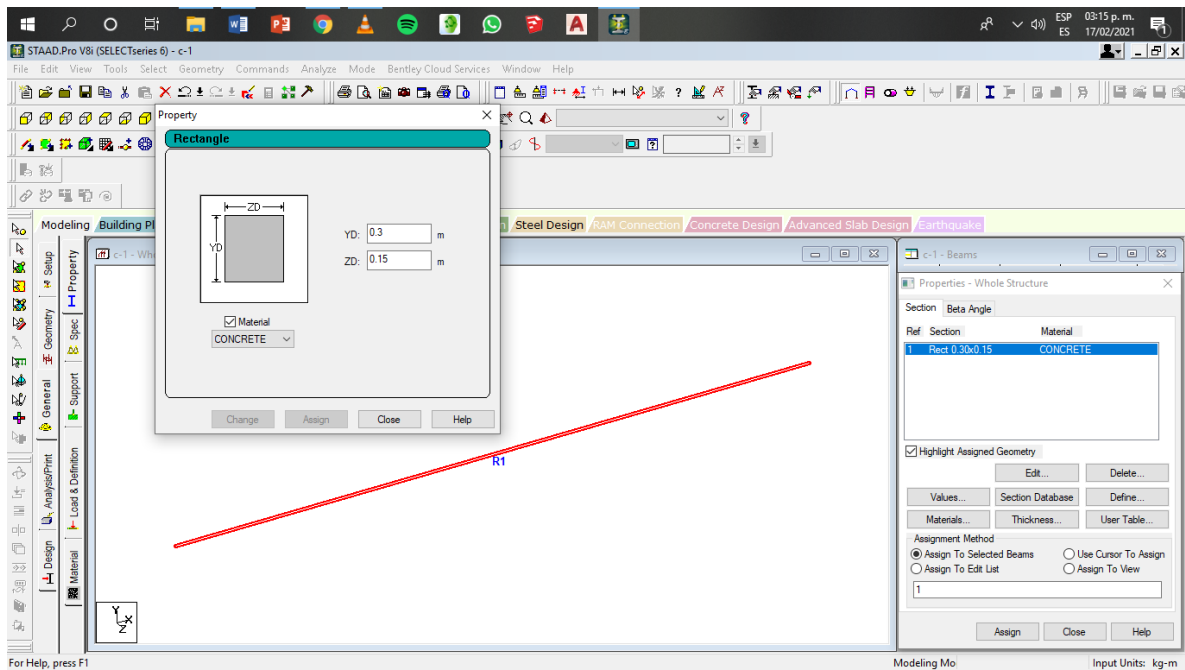
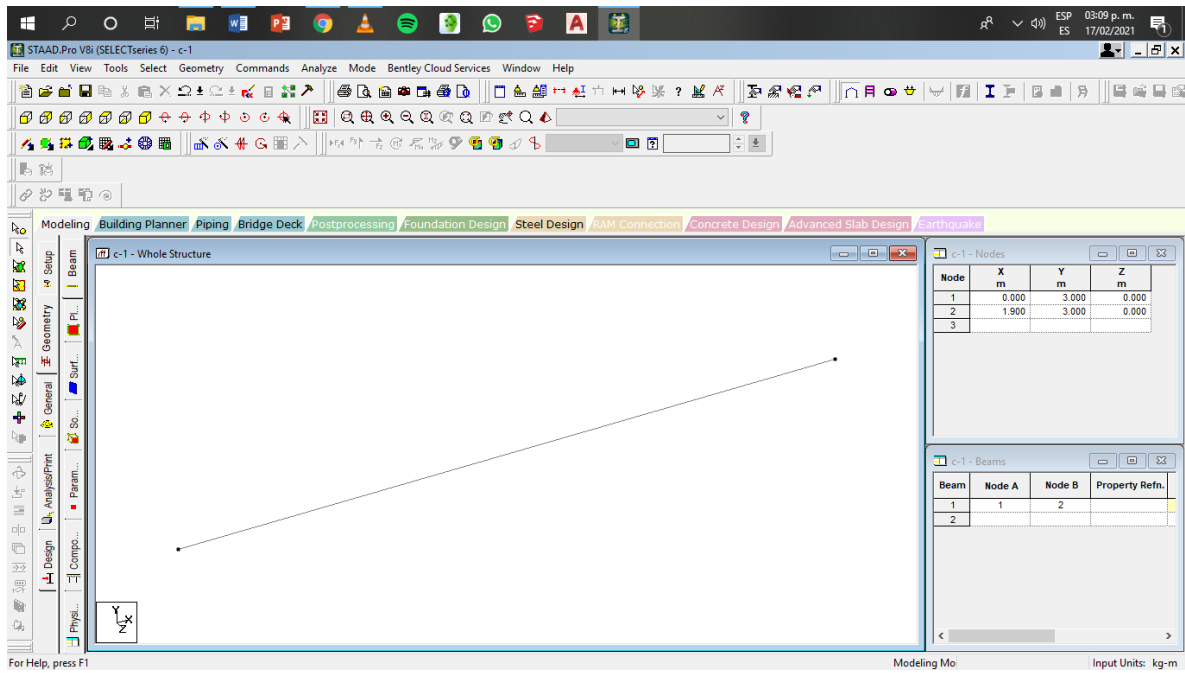
Select Group/Desktop

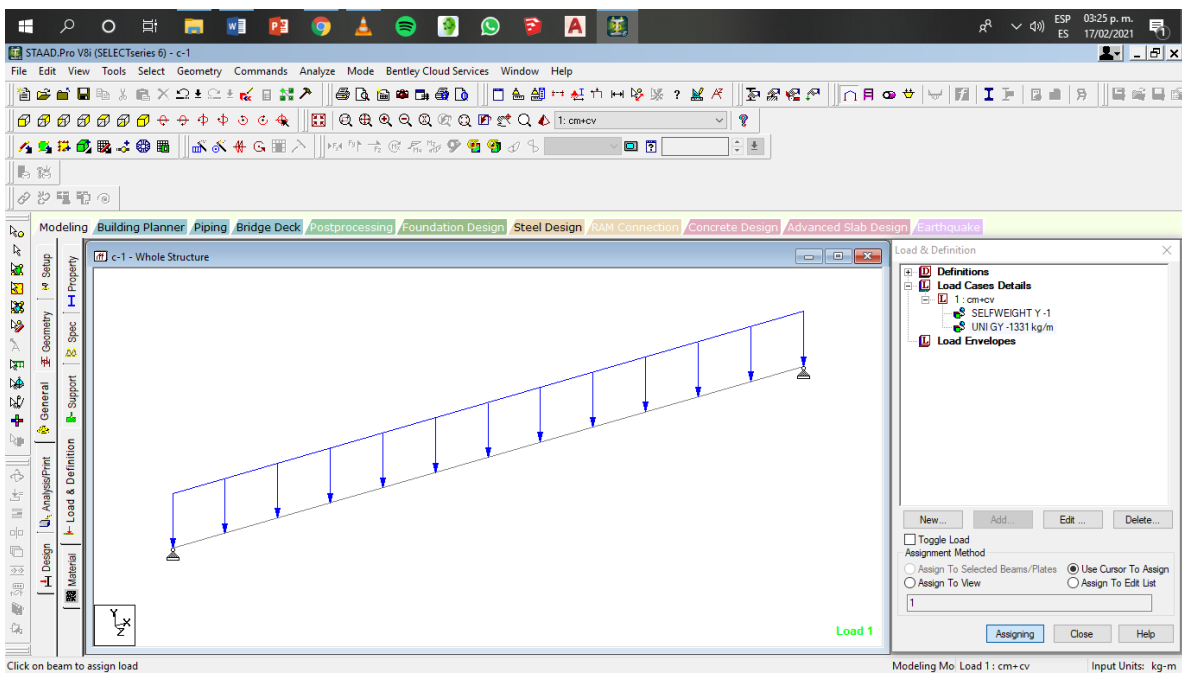
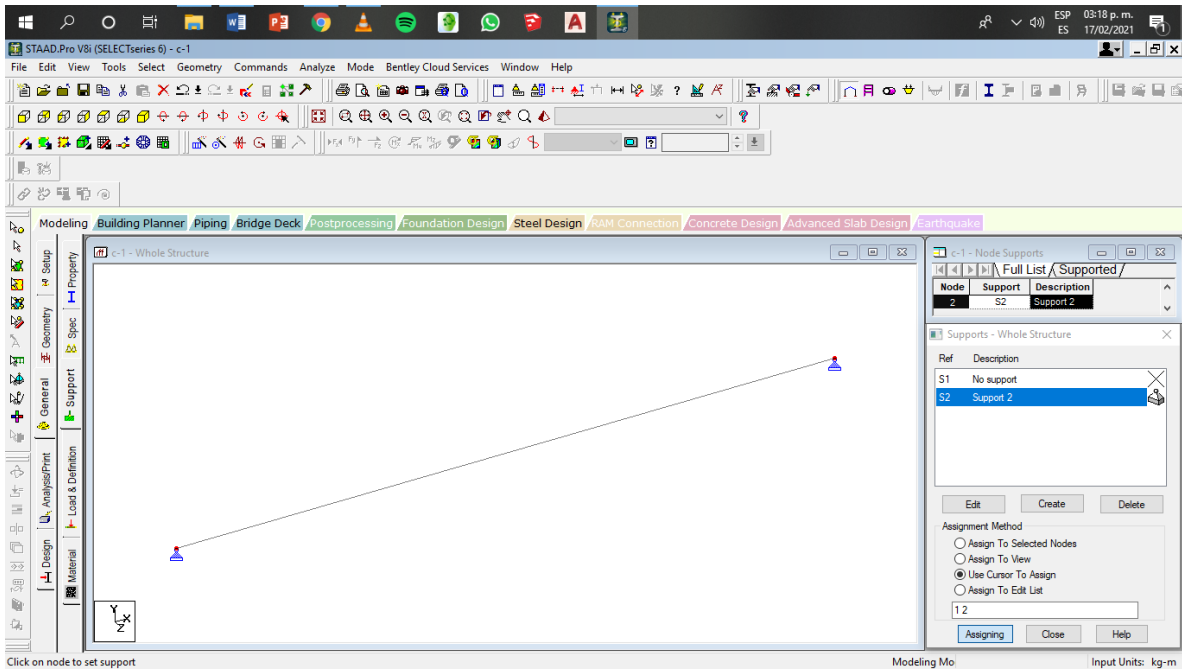
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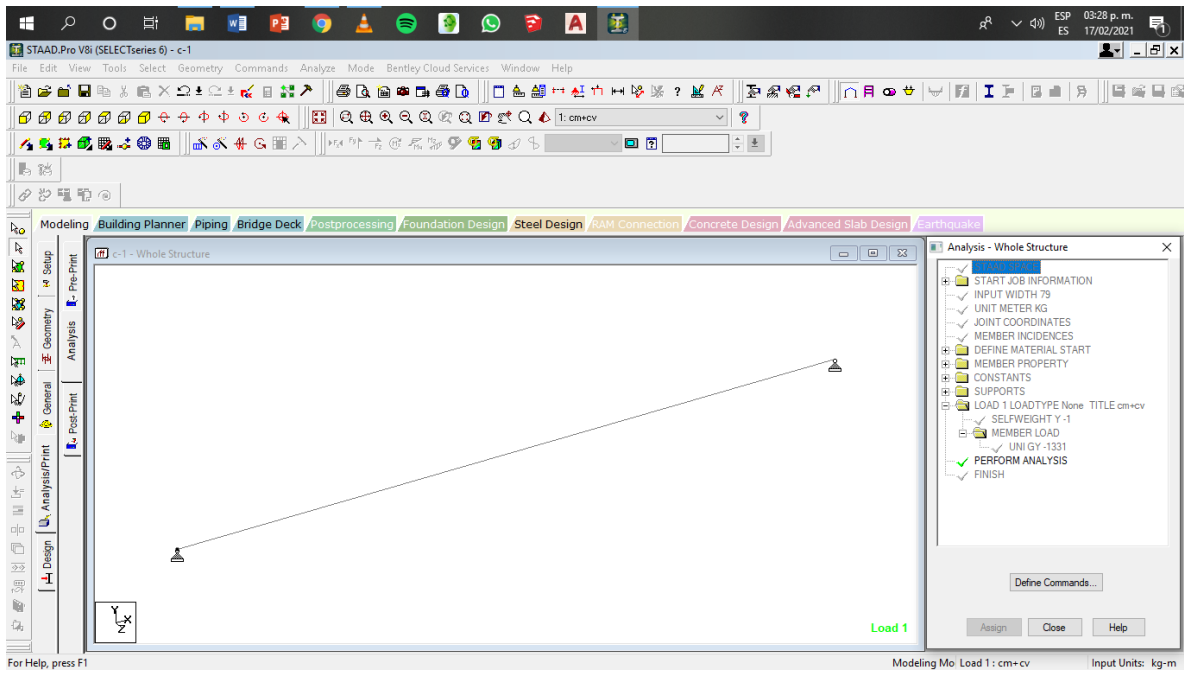
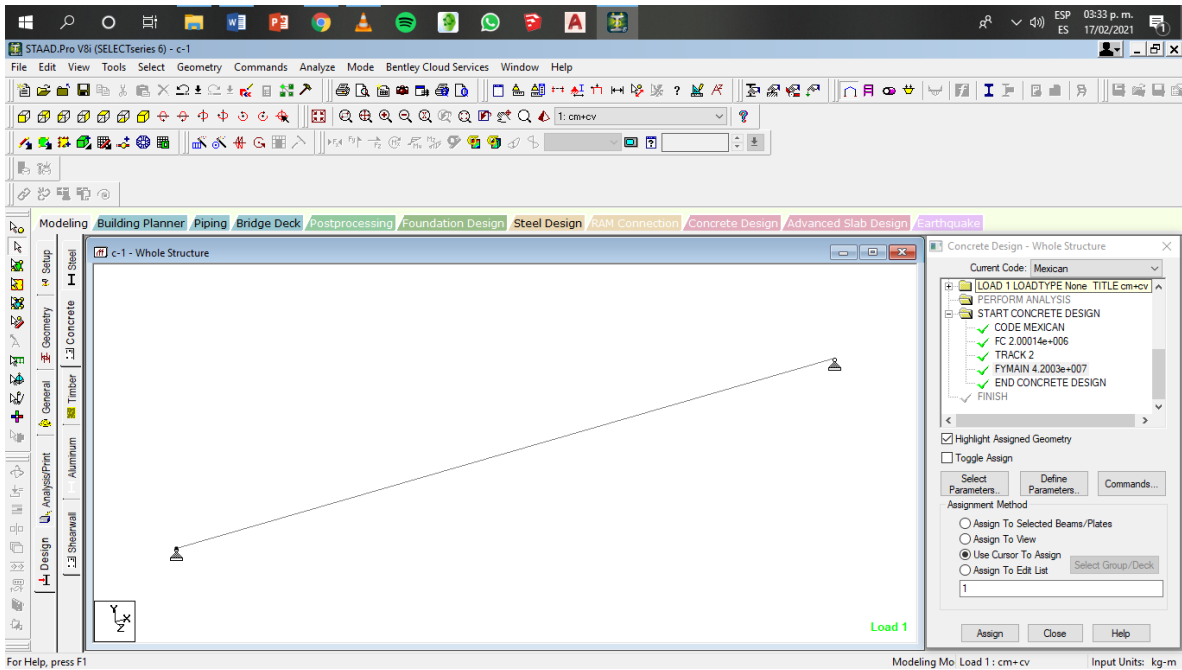
Assign Close Help

Mo Load 1: cv+cm Input Units: kg-m

c-1







STAAD.Pro V8i (SELECTSeries 6) - c-1

File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help

c-1.lnl - STAAD Output Viewer

File Edit View Help

WARNING

\*\*\*WARNING - INSTABILITY AT JOINT

\*\*\*NOTE\*\* STAAD DETECTS INSTABILITIES AS EXCESSIVE LOSS OF SIGNIFICANT DIGITS DURING DECOMPOSITION. WHEN SIGNIFICANT DIGITS LOST IS GREATER THAN 16 STAAD PRINTS A SINGULARITY NOTICE.

THE ABOVE CONDITIONS COULD ALSO BE CAUSED BY VERY STIFF OR VERY SOFT ELEMENTS AS WELL AS TRUE SINGULARITIES.

32. START CONCRETE DESIGN  
33. CODE MEXICAN  
34. FC 2.00014E+006 ALL  
35. TRACK 2 ALL  
36. FYNAIN 4.2003E+007 ALL  
37. END CONCRETE DESIGN  
38. FINISH

\*\*\*\*\* END OF THE STAAD.Pro RUN \*\*\*\*\*

\*\*\*\* DRTE= FEB 17,2021 TIME= 15:36:25 \*\*\*\*

-----< PAGE 2 Ends Here >-----

STAAD SPACE -- PAGE NO.

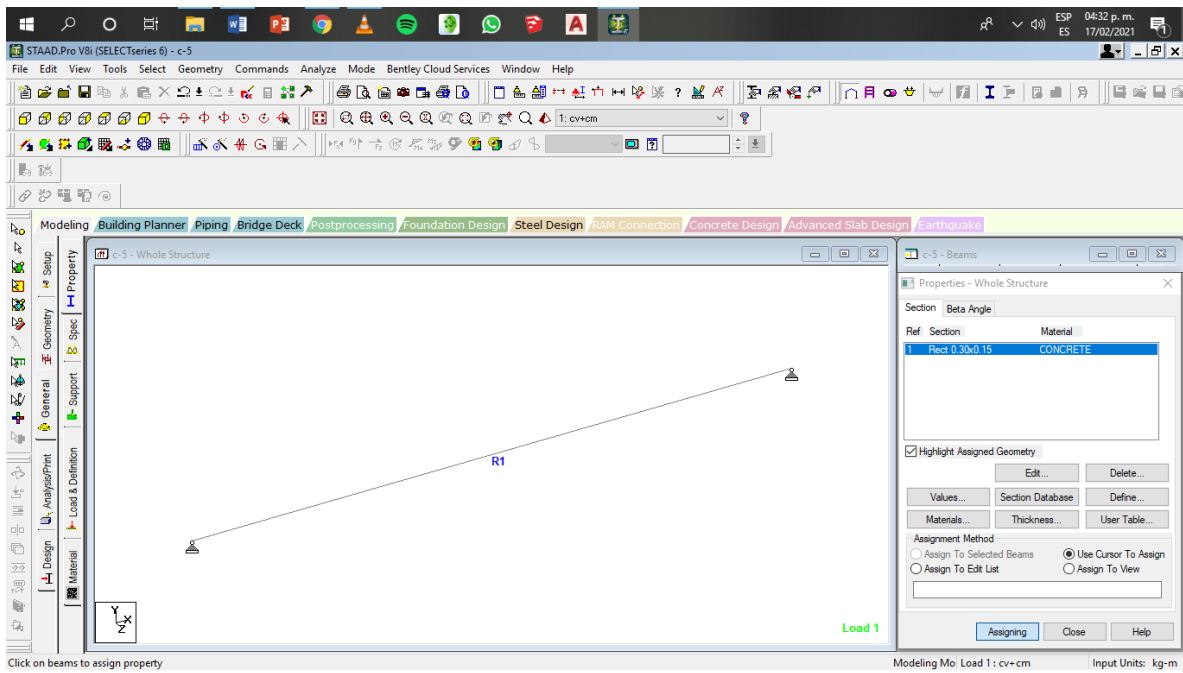
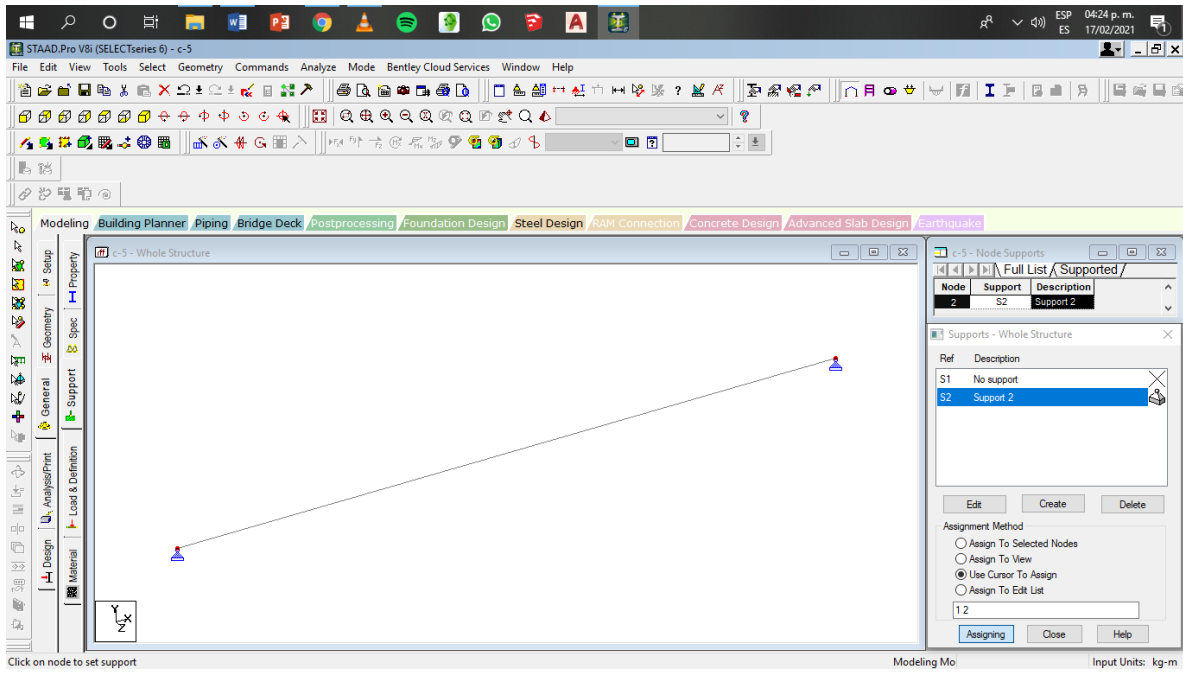
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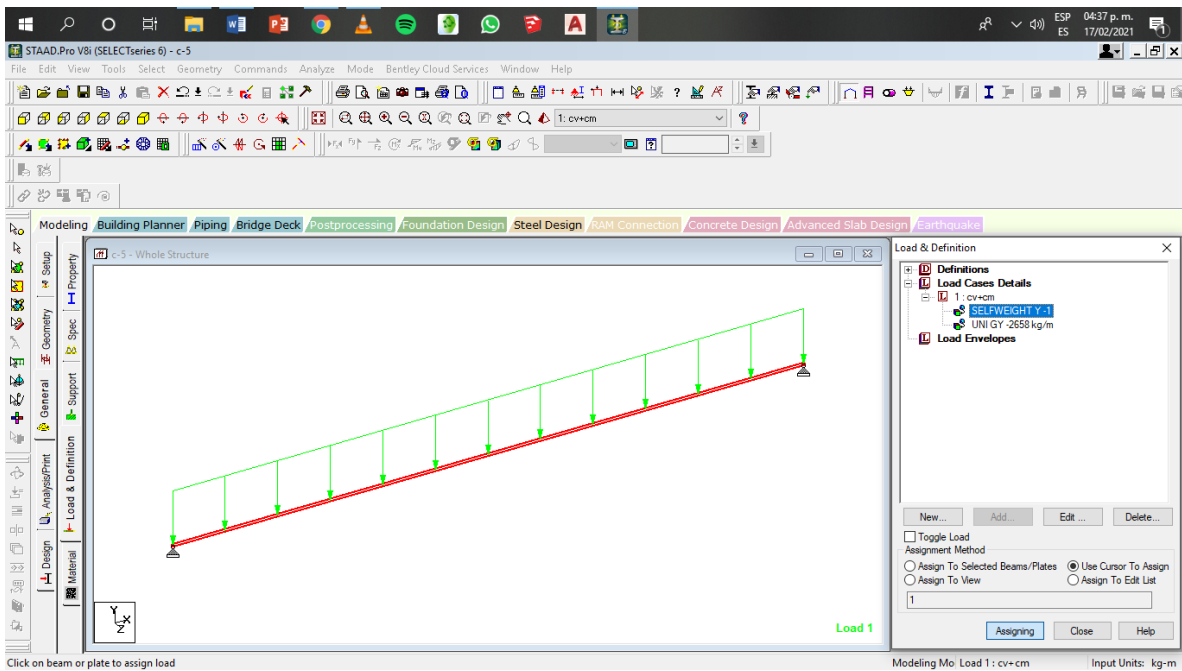
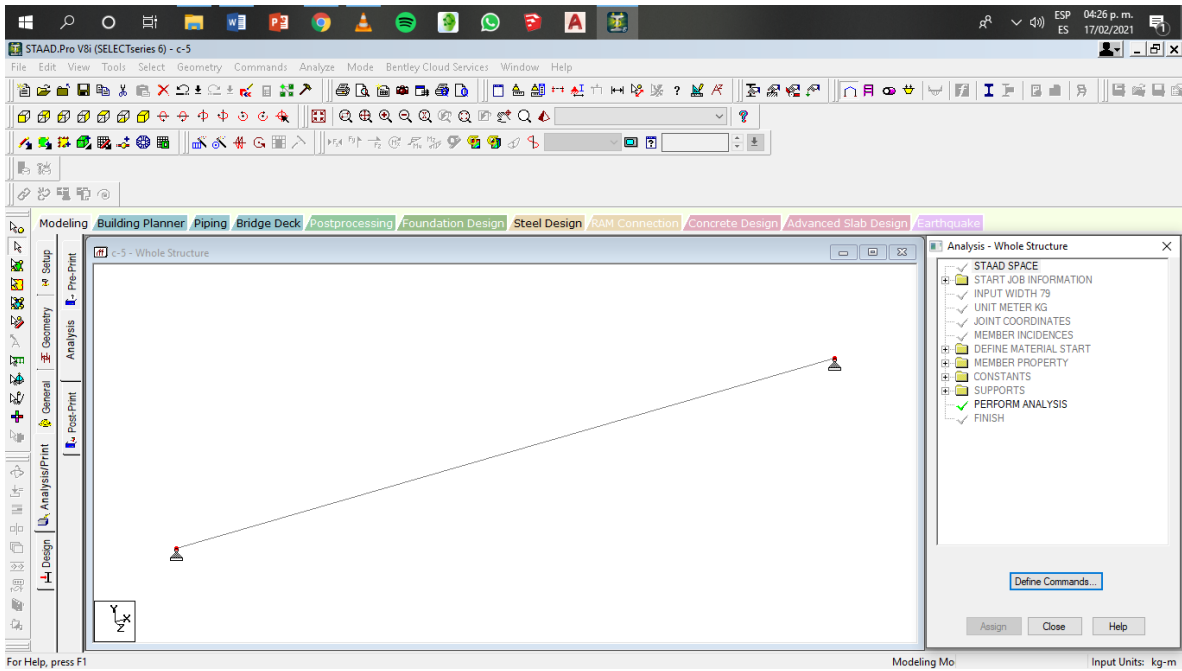
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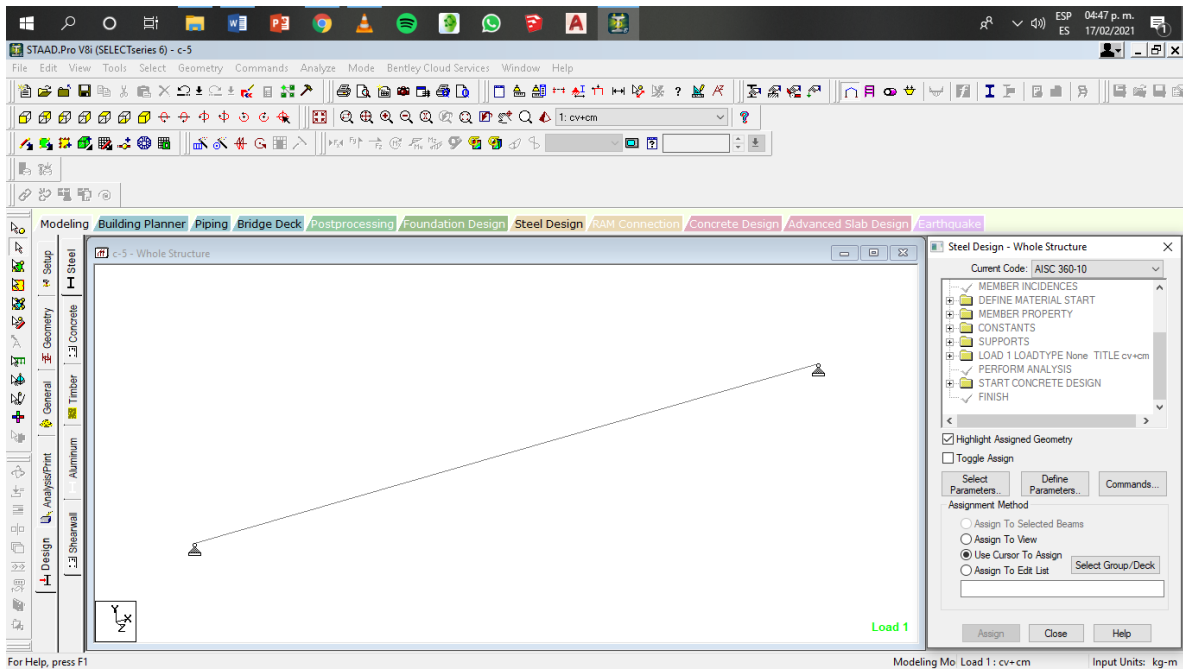
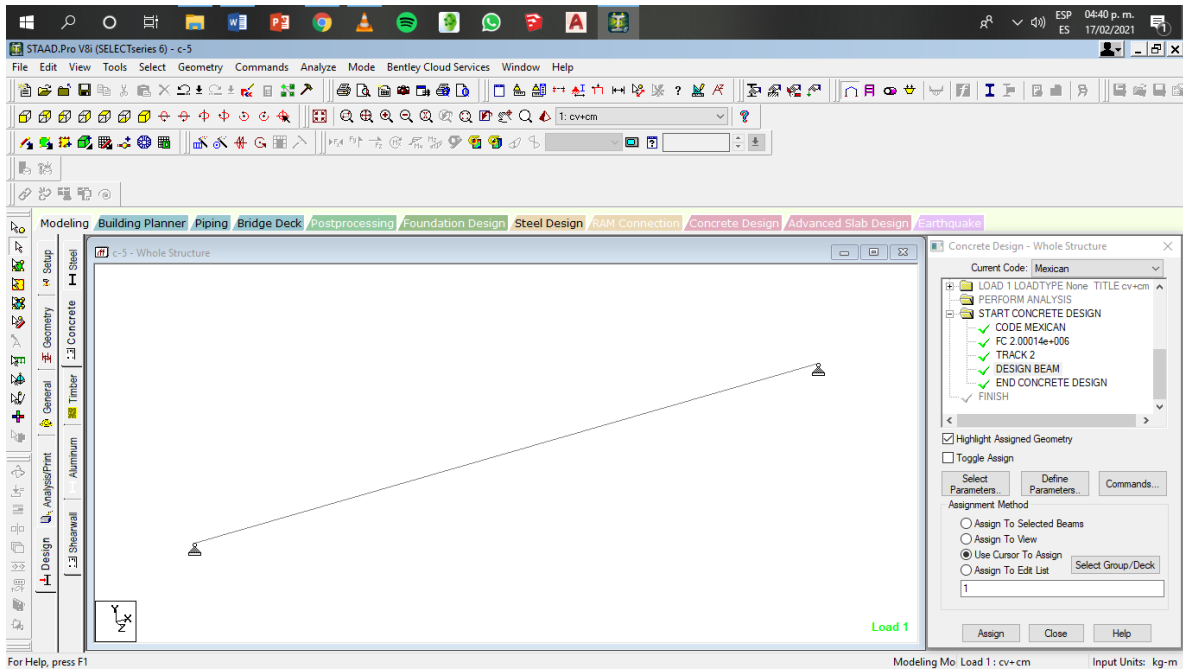
Modeling Mo. Load 1: cm+cv Input Units: kg-m

For Help, press F1

c-5









STAAD.Pro V8i (SELECTseries 6) - c-5

File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help

c-5.anl - STAAD Output Viewer

File Edit View Help

WARNING

\*\*\*WARNING - INSTABILITY AT JOINT

REQUIRED REINF. STEEL SUMMARY :

SECTION ( MM )	REINF STEEL(+VE/-VE) (SQ. MM )	MOMENTS (+VE/-VE) (KNS-MET )	LOAD(+VE/-VE)			
0.00	0.00/	0.00	0./	0.00	0/	1
277.50	135.29/	0.00	11./	0.00	1/	0
555.00	260.67/	0.00	21./	0.00	1/	0
832.50	371.51/	0.00	28./	0.00	1/	0
1110.00	461.06/	0.00	33./	0.00	1/	0
1387.50	520.60/	0.00	37./	0.00	1/	0
1665.00	541.68/	0.00	38./	0.00	1/	0
1942.50	520.60/	0.00	37./	0.00	1/	0
2220.00	461.06/	0.00	33./	0.00	1/	0
2497.50	371.51/	0.00	28./	0.00	1/	0
2775.00	260.67/	0.00	21./	0.00	1/	0
3052.50	135.29/	0.00	11./	0.00	1/	0
3330.00	0.00/	0.00	0./	0.00	0/	1

BEAM NO. 1 DESIGN RESULTS - SHEAR

AT START SUPPORT -  $V_u = 0.08$  KN  $V_c = 0.00$  KN  $V_s = 0.00$  KN

NOTES

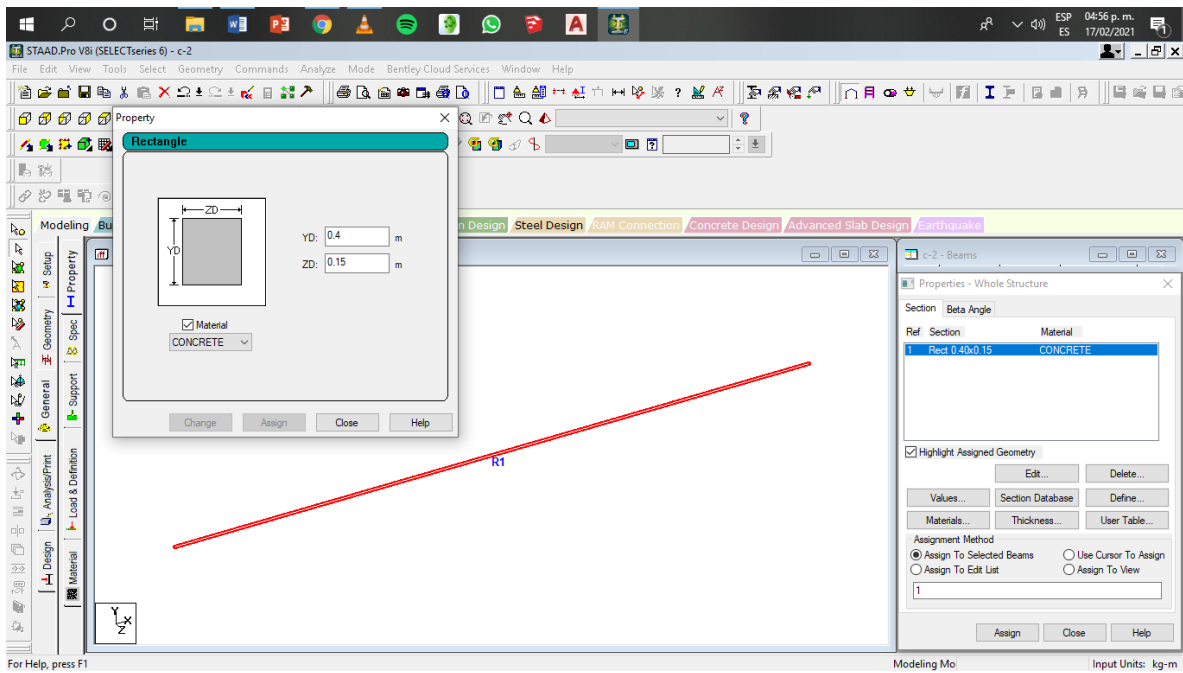
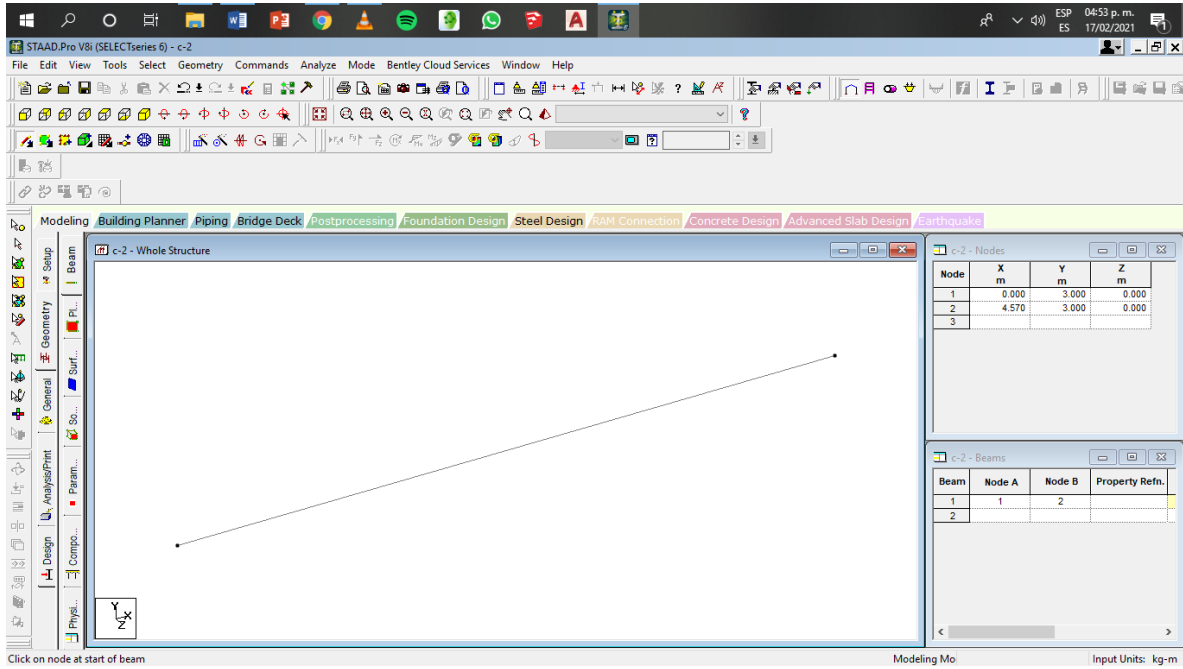
RESULTS

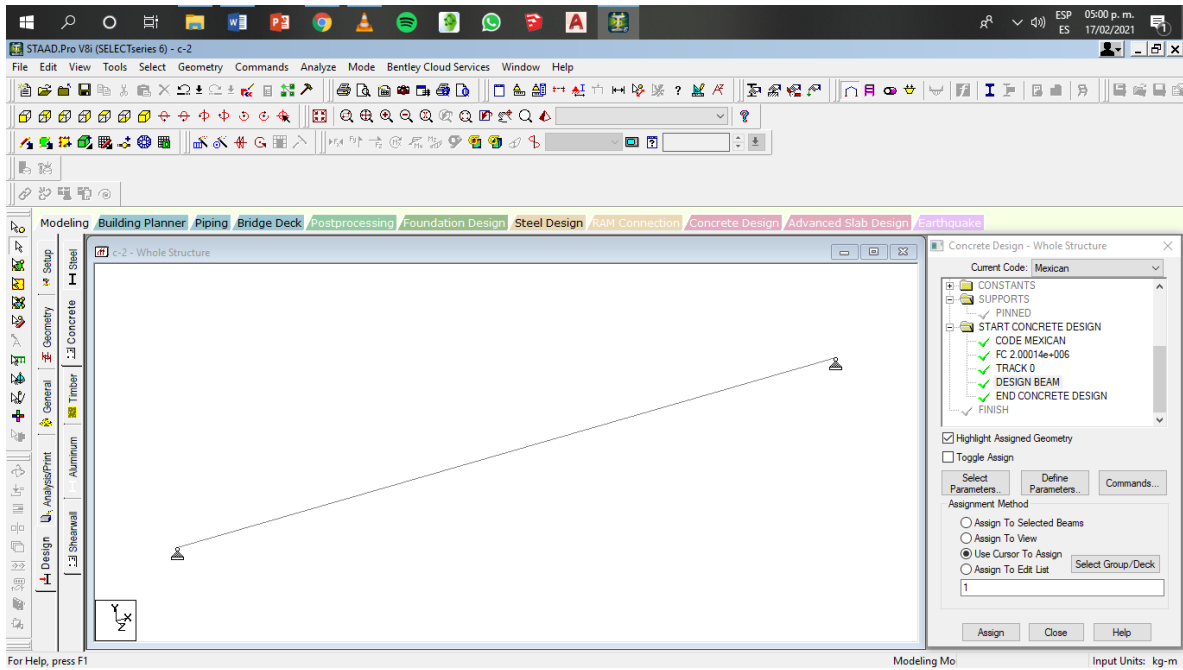
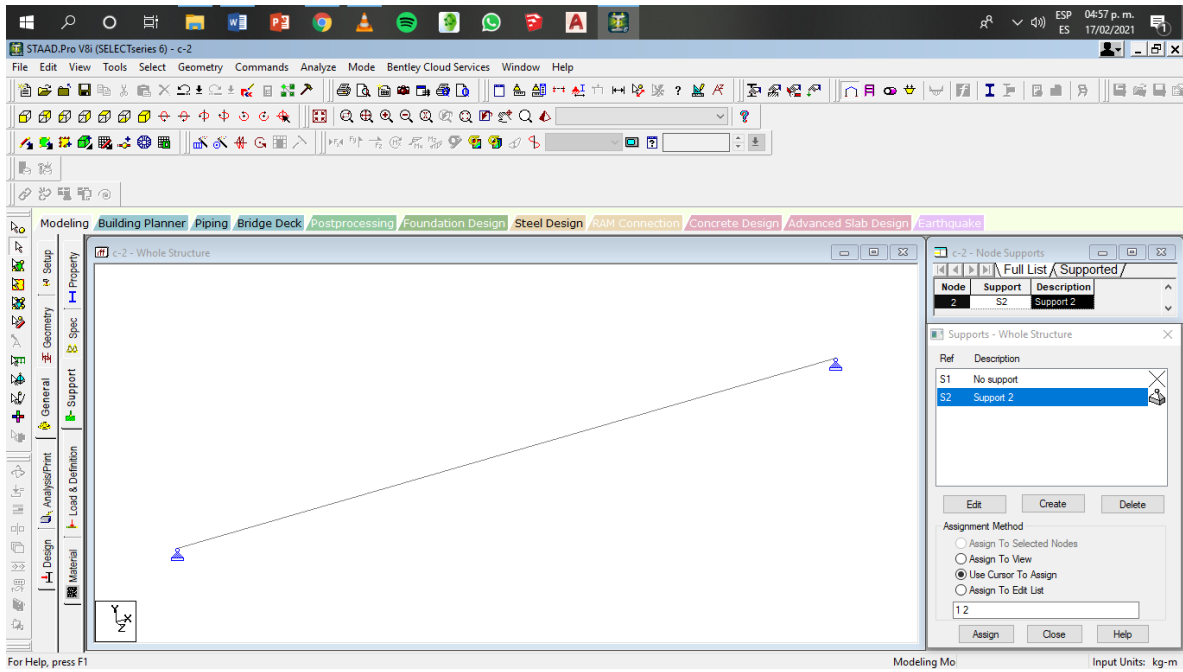
Total Page: 4 NUM

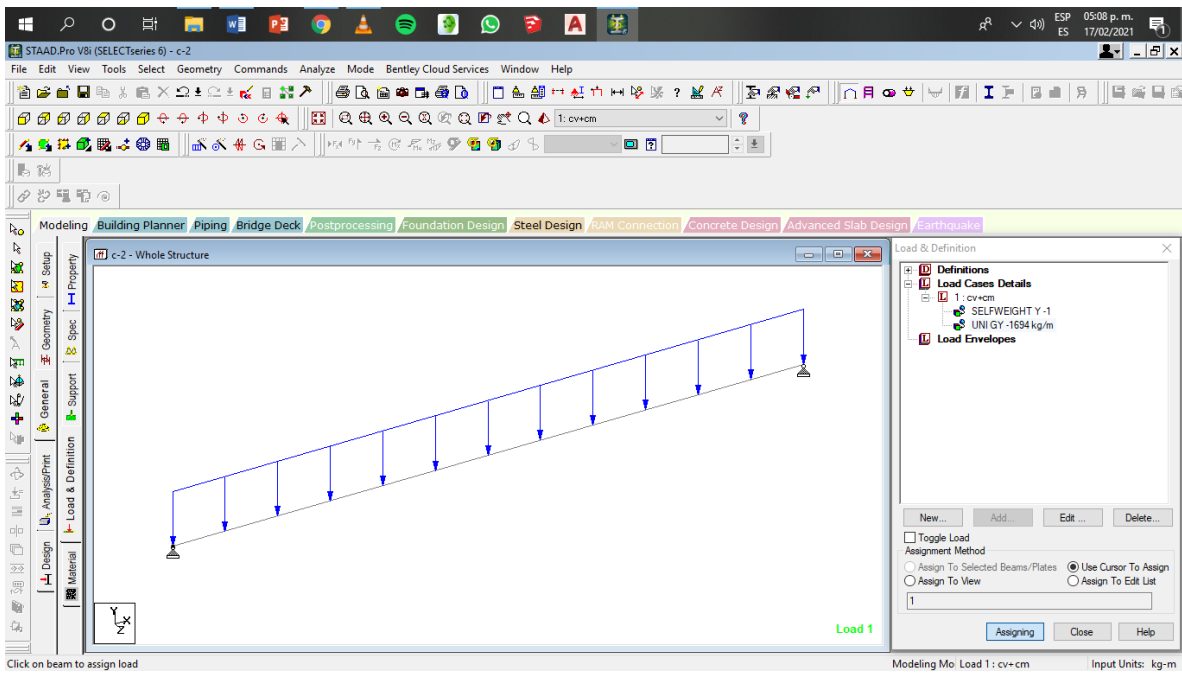
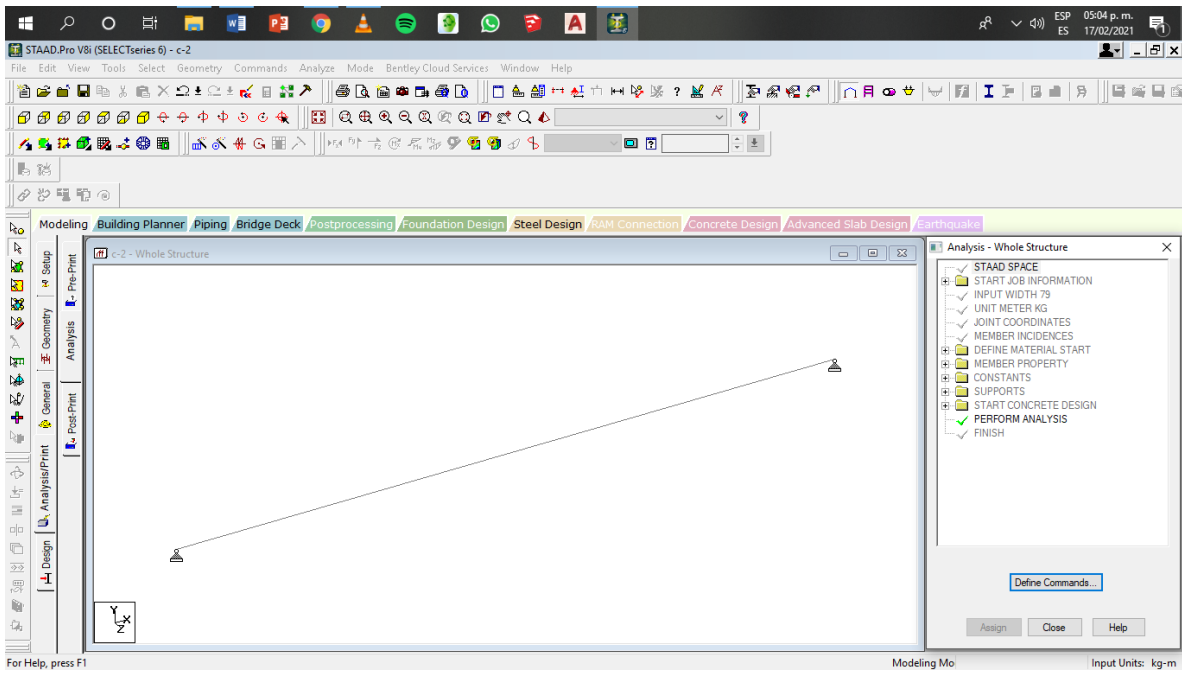
Modeling Mo. Load 1: cv+cm Input Units: kg-m

For Help, press F1

c-2







STAAD.Pro V8i (SELECTseries 6) - c-2

File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help

c-2.lni - STAAD Output Viewer

File Edit View Help

WARNING

\*\*WARNING - UNEXPECTED COMMAND

12. ISOTROPIC CONCRETE  
13. E 2.21467E+009  
14. POISSON 0.17  
15. DENSITY 2402.62  
16. ALPHA 1E-005  
17. DAMP 0.05  
18. TYPE CONCRETE  
19. STRENGTH FCU 2.81228E+006  
20. END DEFINE MATERIAL  
21. MEMBER PROPERTY  
22. 1 PRIS YD 0.4 ZD 0.2  
23. CONSTANTS  
24. MATERIAL CONCRETE ALL  
25. SUPPORTS  
26. 1 2 PINNED  
27. LOAD 1 LOADTYPE NONE TITLE CV+CM  
28. SELFWEIGHT Y -1 LIST ALL  
29. MEMBER LOAD  
30. 1 UNI GY -1694  
31. START CONCRETE DESIGN

-----< PAGE 1 Ends Here >-----

STAAD SPACE -- PAGE NO.

\*\*WARNING - UNEXPECTED COMMAND IN LOAD DATA  
CHECK SPELLING AND ORDER OF DATA IN CASE NO. 1

ERROR

Total Page: 2 INUM

Modeling Mo. Load 1: cv+cm Input Units: kg-m

For Help, press F1

