Osnovni podatki o modelu, Vhodni podatki - Konstrukcija

Datoteka: tower izračun.twp
Datum preračuna: 10.5.2021

Način preračuna: 3D model

[X] Teorija I-ga reda [ ] Modalna analiza [ ] Stabilnost

[ ] Teorija II-ga reda [ ] Seizmični preračun [ ] Faze gradnje

[ ] Nelinearen preračun

Velikost modela

Število vozlišč:	969
Število ploskovnih elementov:	775
Število grednih elementov	3
Število robnih elementov	656
Število osnovnih obtežnih primerov:	4
Število kombinacij obtežb:	26

Enote mer

Dolžina:	m [cm,mm]
Sila:	kN
Temperatura:	Celsius

Shema nivojev

Naziv	z [m]	h [m]
plošča	9.55	3.74
pritličje	5.82	5.82

Naziv	z [m]	h [m]
temelj	0.00	

Tabele materialov

No	Naziv materiala	E[kN/m2]	μ	γ[kN/m3]	αt[1/C]	Em[kN/m2]	μm
1	C 25/30	3.100e+7	0.20	25.00	1.000e-5	3.100e+7	0.20

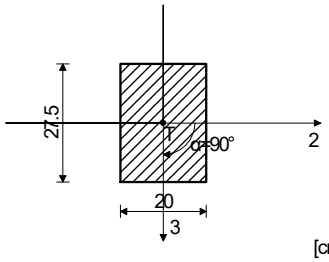
Seti plošč

No	d[m]	e[m]	Material	Tip preračuna	Ortotropija	E2[kN/m2]	G[kN/m2]	α
<1>	0.360	0.180	1	Tanka plošča	Izotropna			
<2>	0.200	0.100	1	Tanka plošča	Izotropna			

Seti gred

Set: 1 Prerez: b/d=20/27.5, Fiktivna ekscentričnost

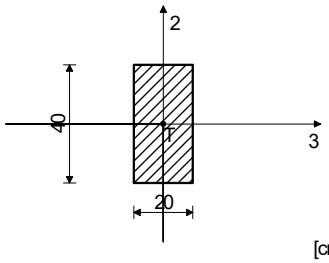
Mat.	A1	A2	A3	I1	I2	I3
1 - C 25/30	5.500e-2	4.583e-2	4.583e-2	4.052e-4	3.466e-4	1.833e-4



[cm]

Set: 2 Prerez: b/d=20/40, Fiktivna ekscentričnost

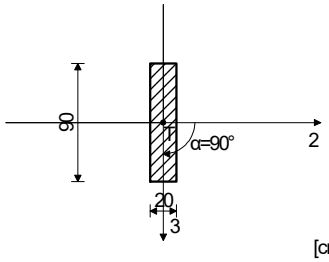
Mat.	A1	A2	A3	I1	I2	I3
1 - C 25/30	8.000e-2	6.667e-2	6.667e-2	7.324e-4	2.667e-4	1.067e-3



[cm]

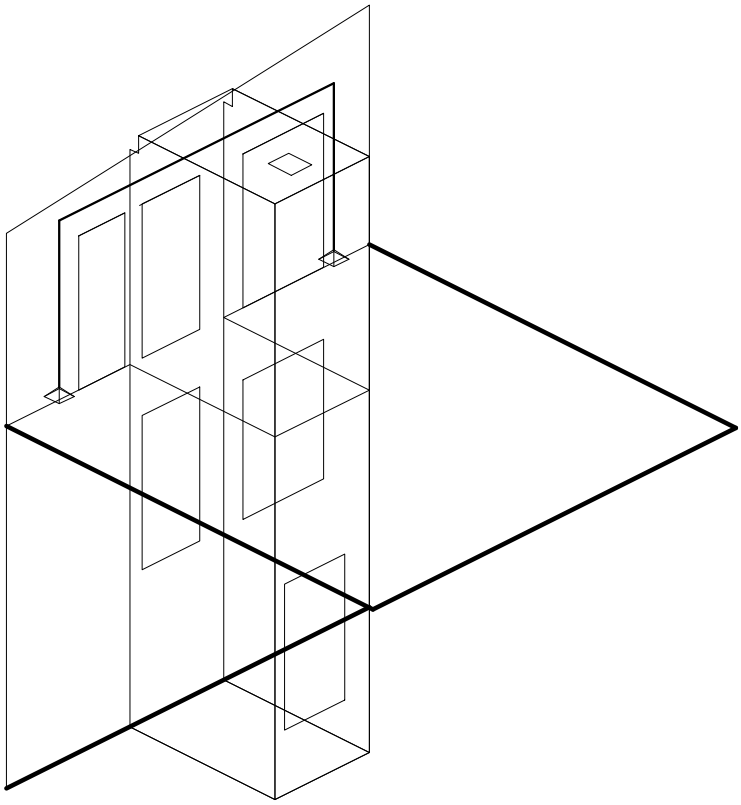
Set: 3 Prerez: b/d=20/90, Fiktivna ekscentričnost

Mat.	A1	A2	A3	I1	I2	I3
1 - C 25/30	1.800e-1	1.500e-1	1.500e-1	2.064e-3	1.215e-2	6.000e-4

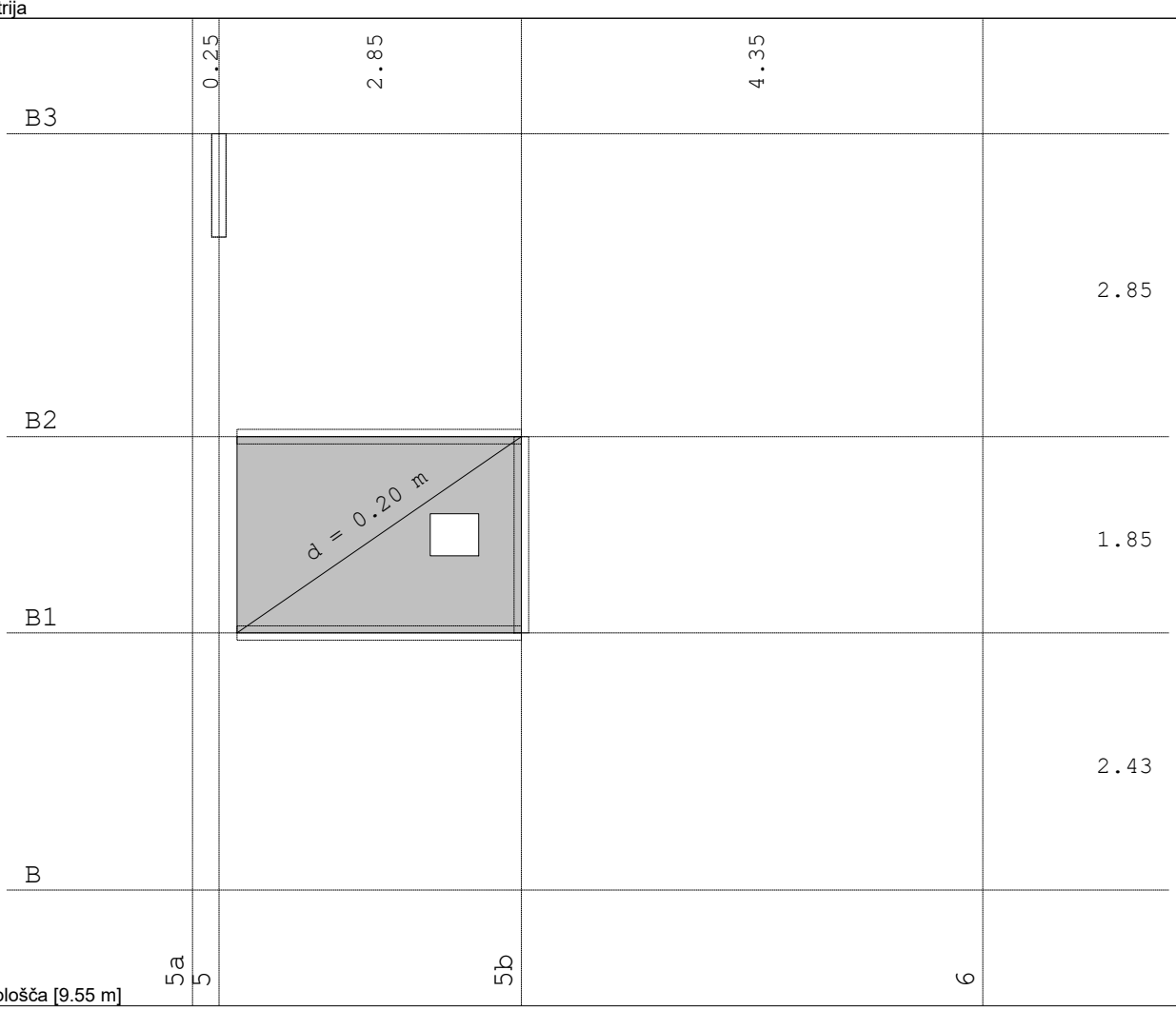


[cm]

Vhodni podatki - Konstrukcija

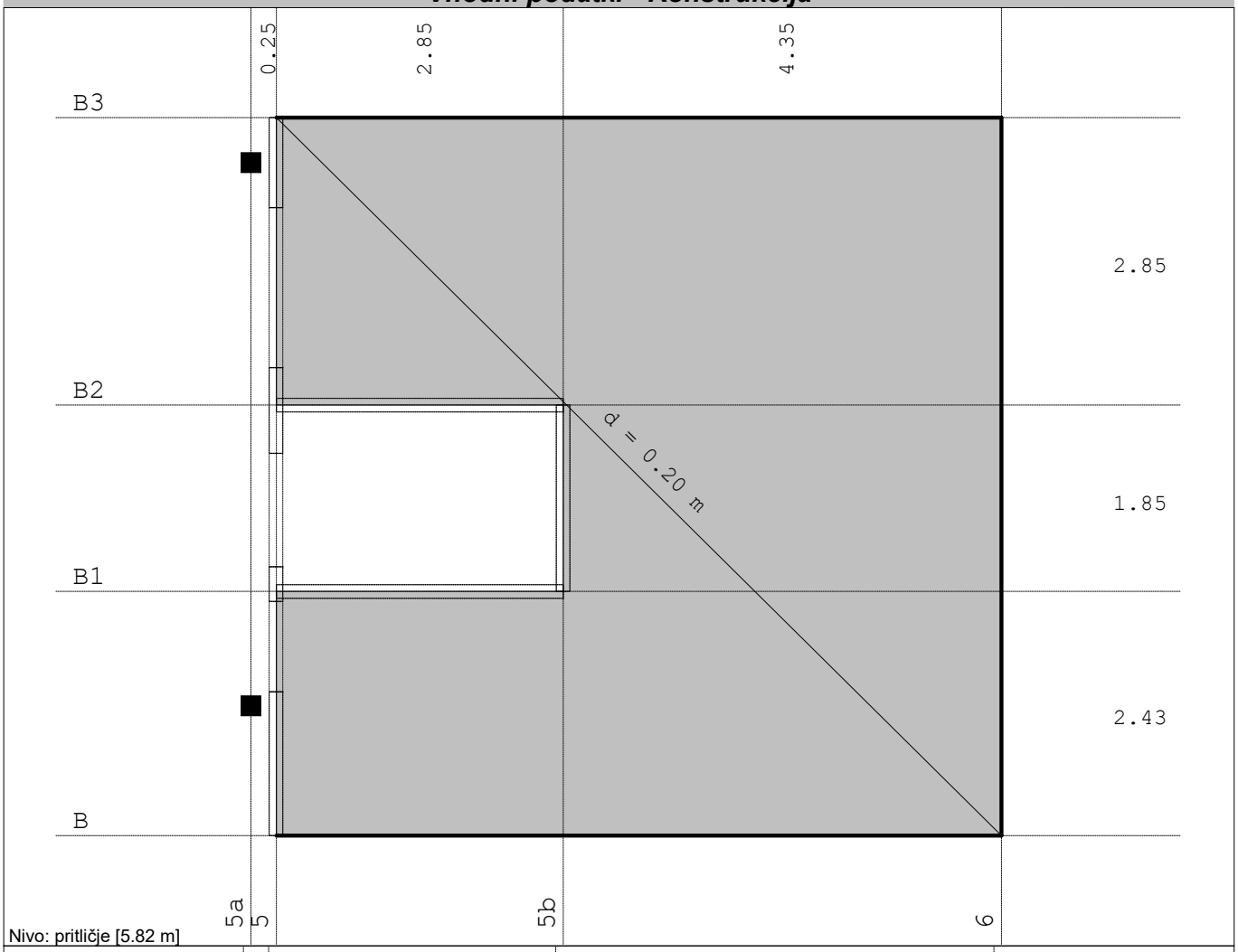


Izometrija

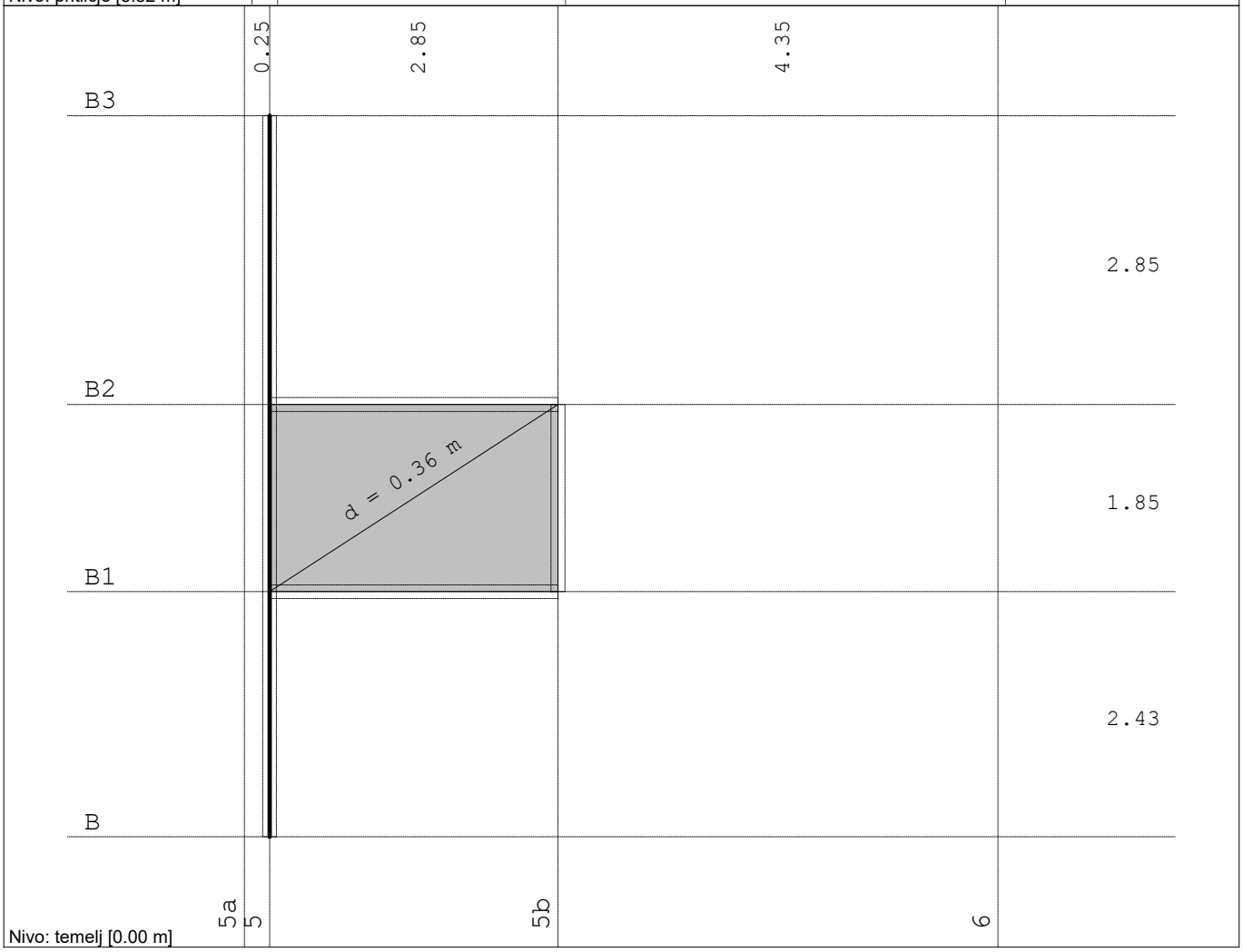


Nivo: plošča [9.55 m]

Vhodni podatki - Konstrukcija

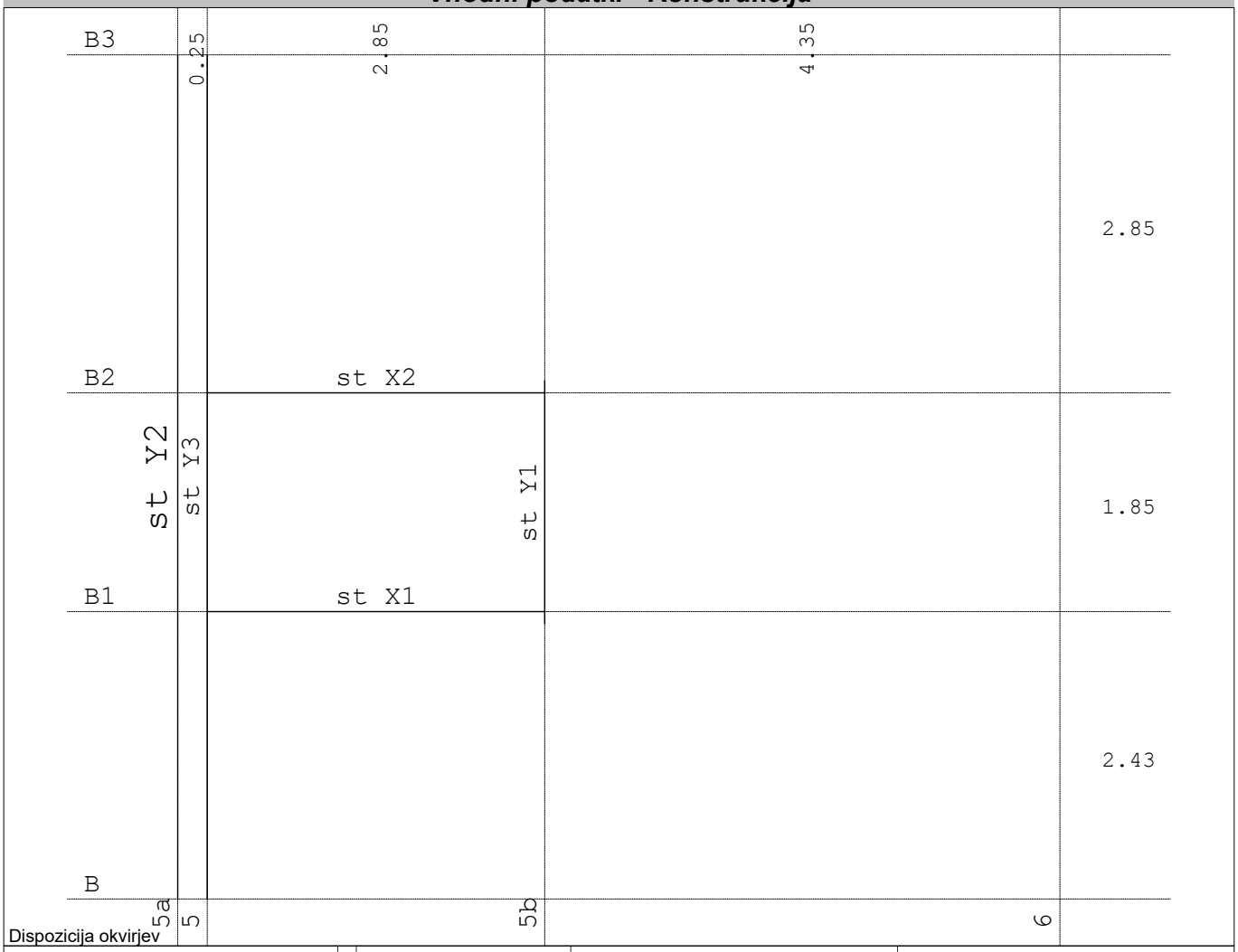


Nivo: pritličje [5.82 m]

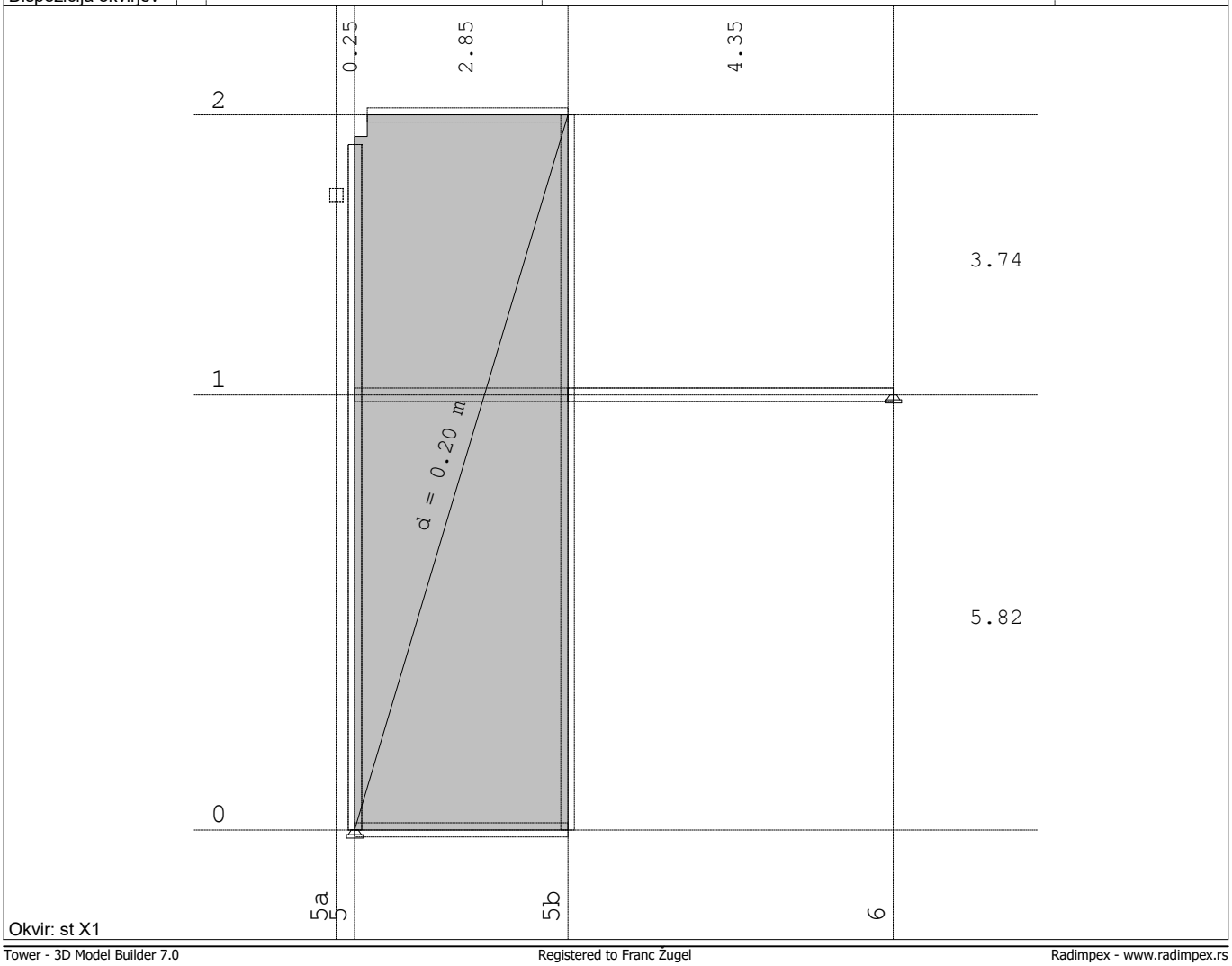


Nivo: temelj [0.00 m]

Vhodni podatki - Konstrukcija

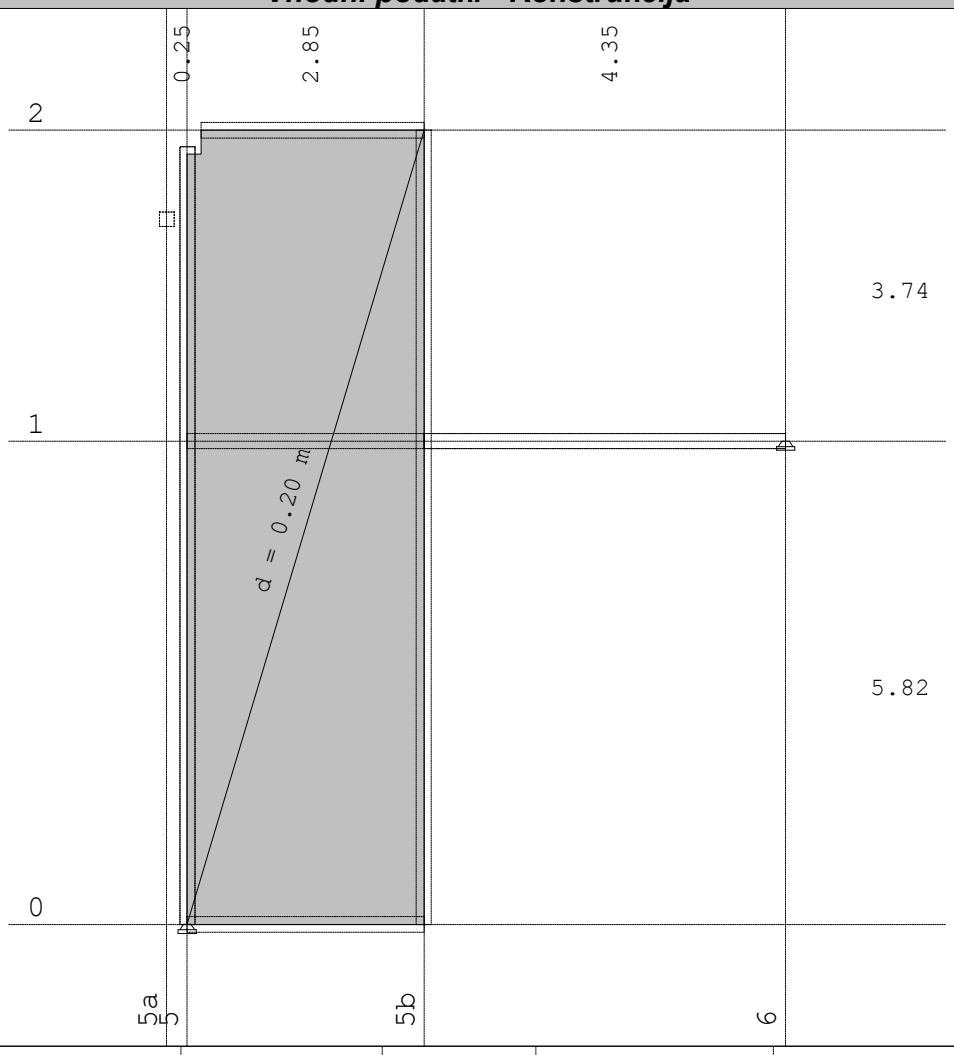


Dispozicija okvirjev

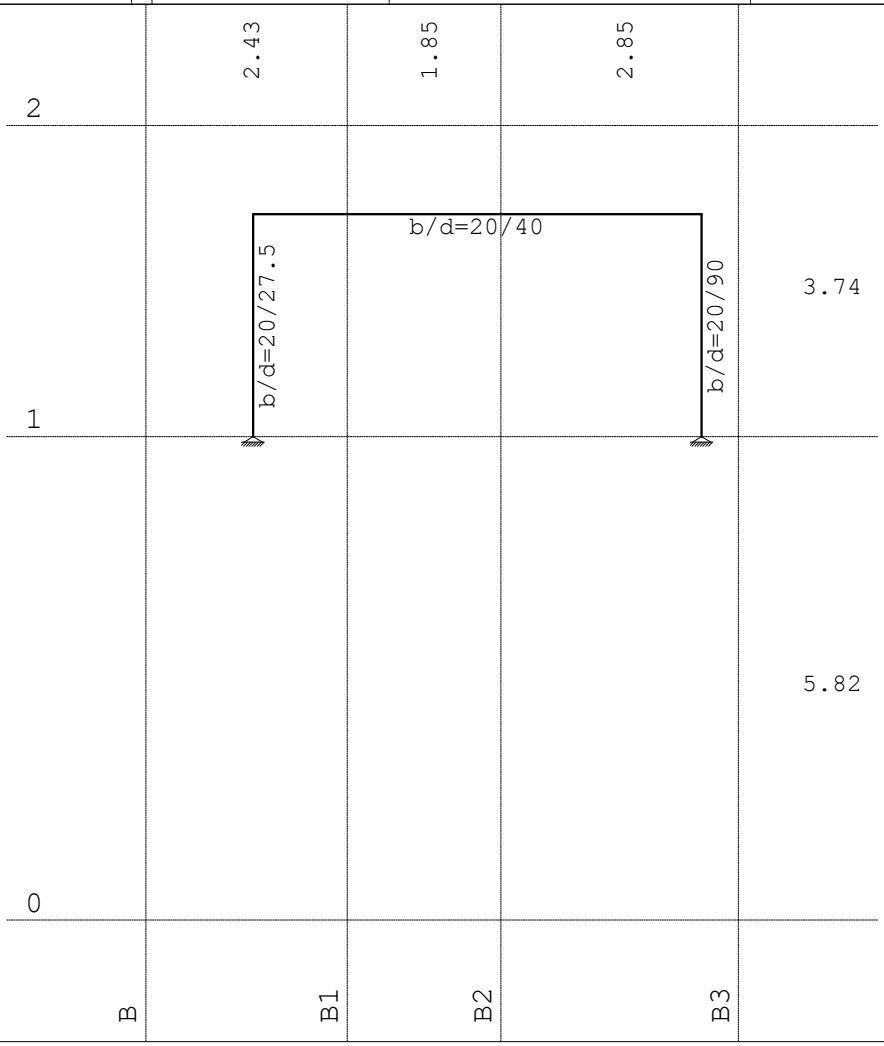


Okvir: st X1

Vhodni podatki - Konstrukcija

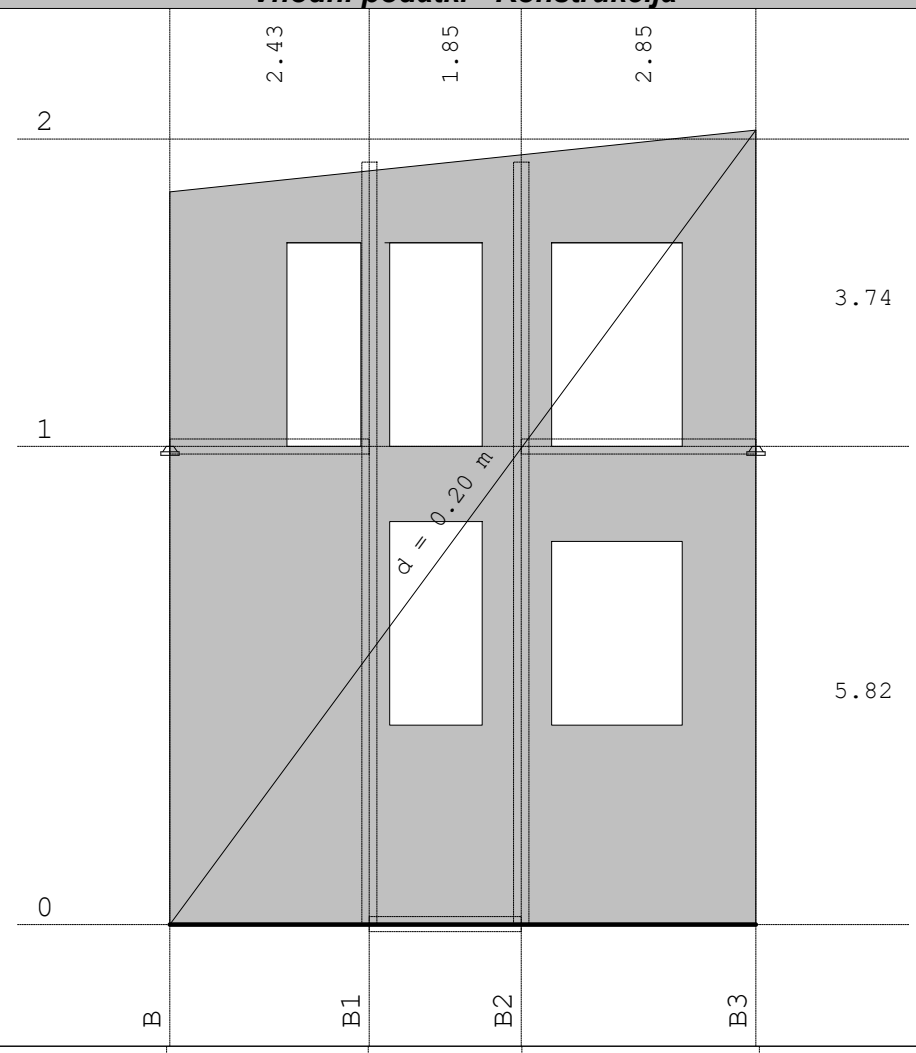


Okvir: st X2

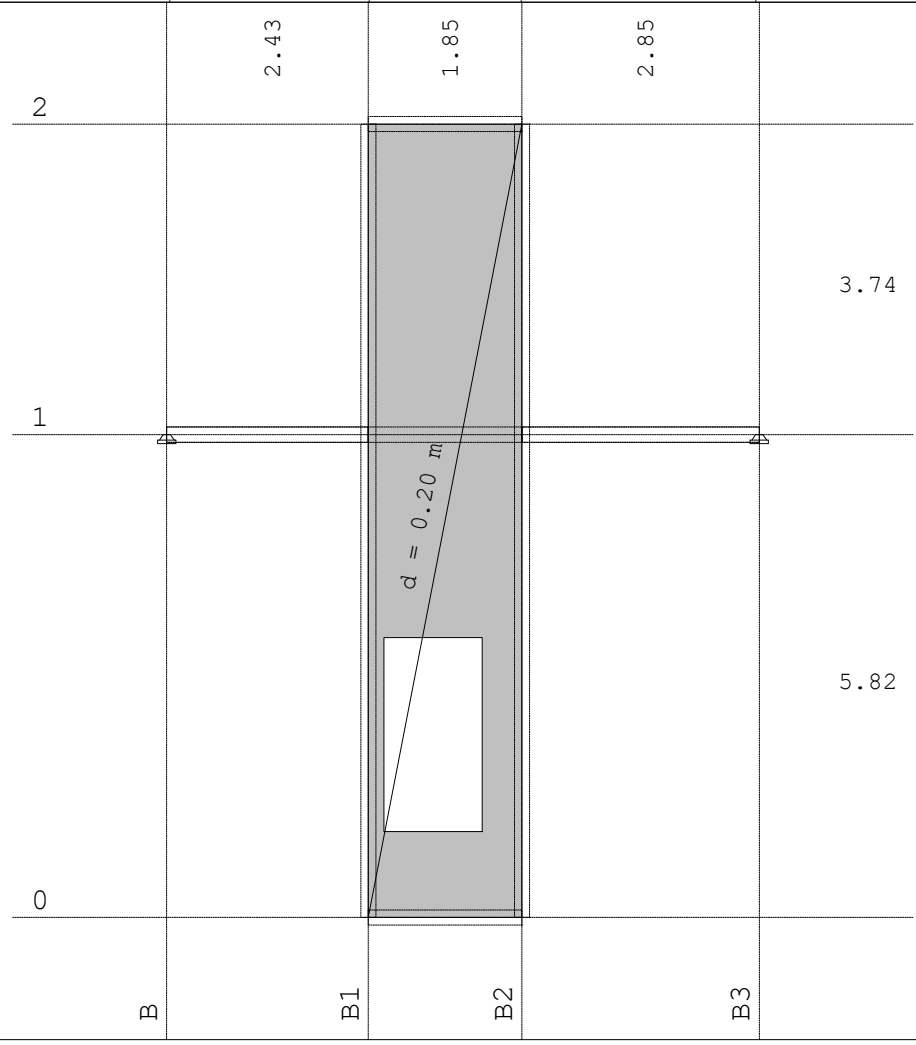


Okvir: st Y2

Vhodni podatki - Konstrukcija



Okvir: st Y3

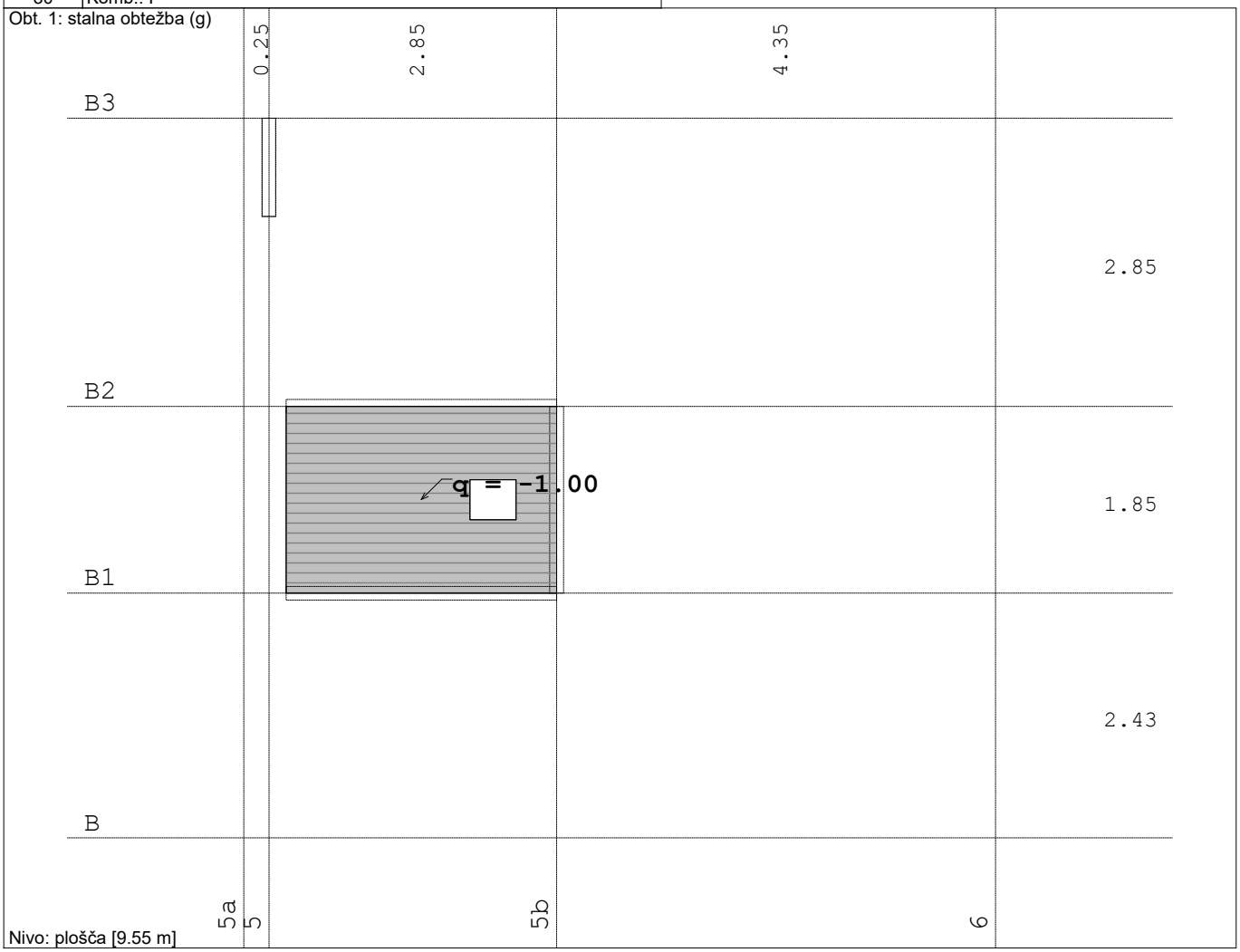


Okvir: st Y1

Vhodni podatki - Obtežba

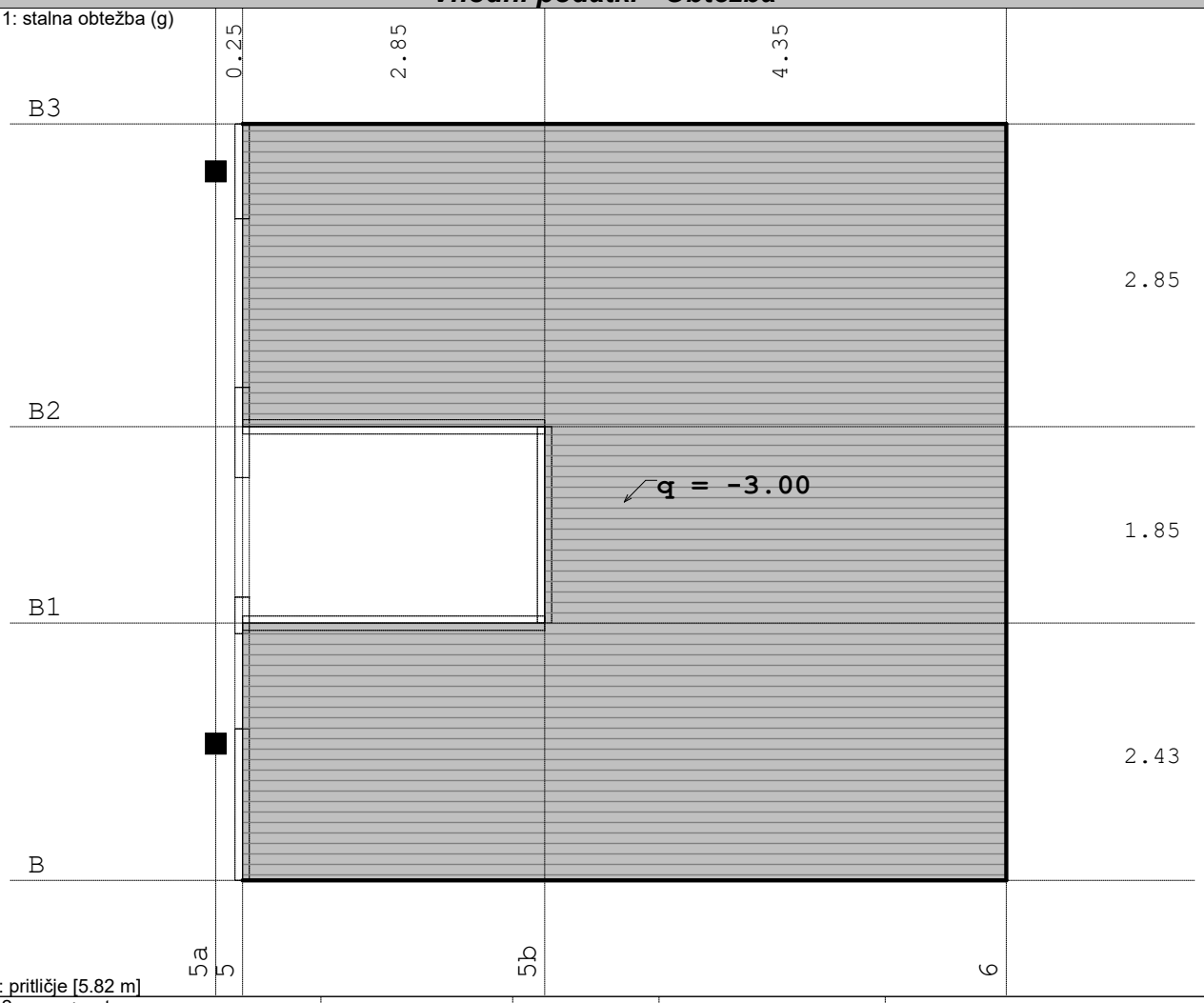
Lista obtežnih primerov	
LC	Naziv
1	stalna obtežba (g)
2	sneg + veter
3	koristna obtežba plošče pritličja
4	vplivi od dvigala
5	Komb.: 1.35xI+1.5xII+1.05xIII+1.5xIV
6	Komb.: 1.35xI+0.75xII+1.5xIII+1.5xIV
7	Komb.: I+1.5xII+1.05xIII+1.5xIV
8	Komb.: I+0.75xII+1.5xIII+1.5xIV
9	Komb.: 1.35xI+0.75xII+1.05xIII+1.5xIV
10	Komb.: 1.35xI+1.5xIII+1.5xIV
11	Komb.: 1.35xI+1.5xII+1.5xIV
12	Komb.: I+0.75xII+1.05xIII+1.5xIV
13	Komb.: I+1.5xIII+1.5xIV
14	Komb.: I+1.5xII+1.5xIV
15	Komb.: 1.35xI+1.05xIII+1.5xIV
16	Komb.: 1.35xI+1.5xII+1.05xIII
17	Komb.: 1.35xI+0.75xII+1.5xIV
18	Komb.: 1.35xI+0.75xII+1.5xIII
19	Komb.: I+1.05xIII+1.5xIV
20	Komb.: I+1.5xII+1.05xIII
21	Komb.: I+0.75xII+1.5xIV
22	Komb.: I+0.75xII+1.5xIII
23	Komb.: 1.35xI+1.5xIV
24	Komb.: 1.35xI+1.5xIII
25	Komb.: 1.35xI+1.5xII
26	Komb.: I+1.5xIV
27	Komb.: I+1.5xIII
28	Komb.: I+1.5xII
29	Komb.: 1.35xI
30	Komb.: I

Obt. 1: stalna obtežba (g)



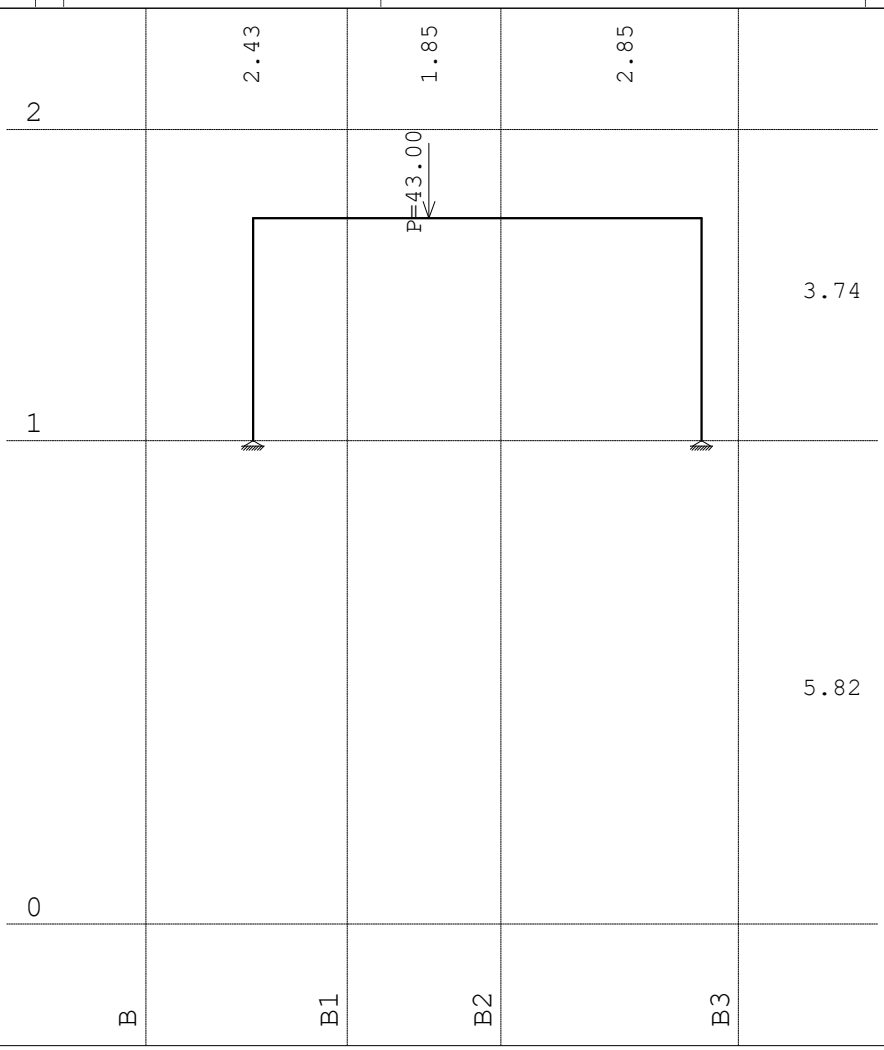
Vhodni podatki - Obtežba

Obt. 1: stalna obtežba (g)



Nivo: pritličje [5.82 m]

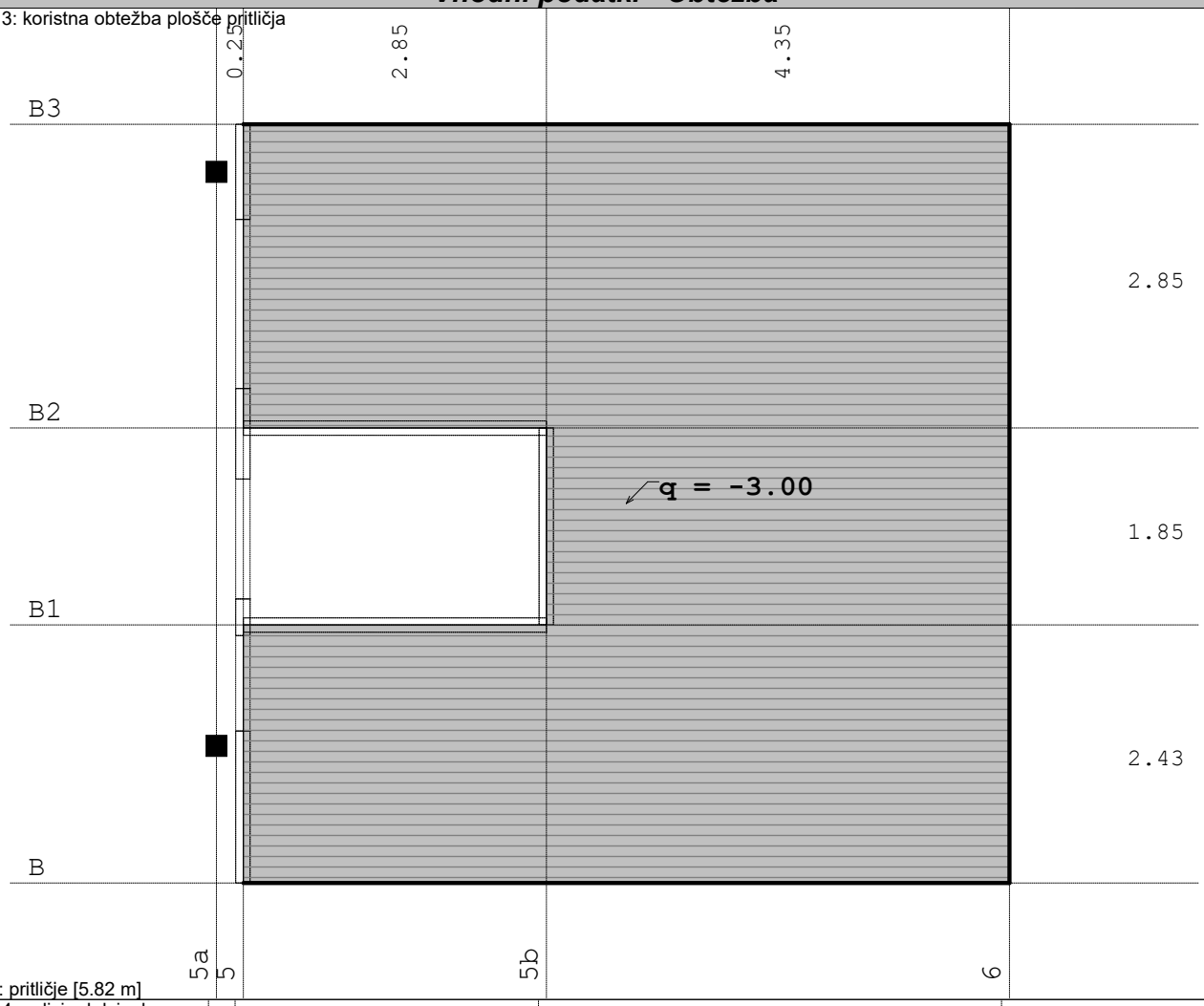
Obt. 2: sneg + veter



Okvir: st Y2

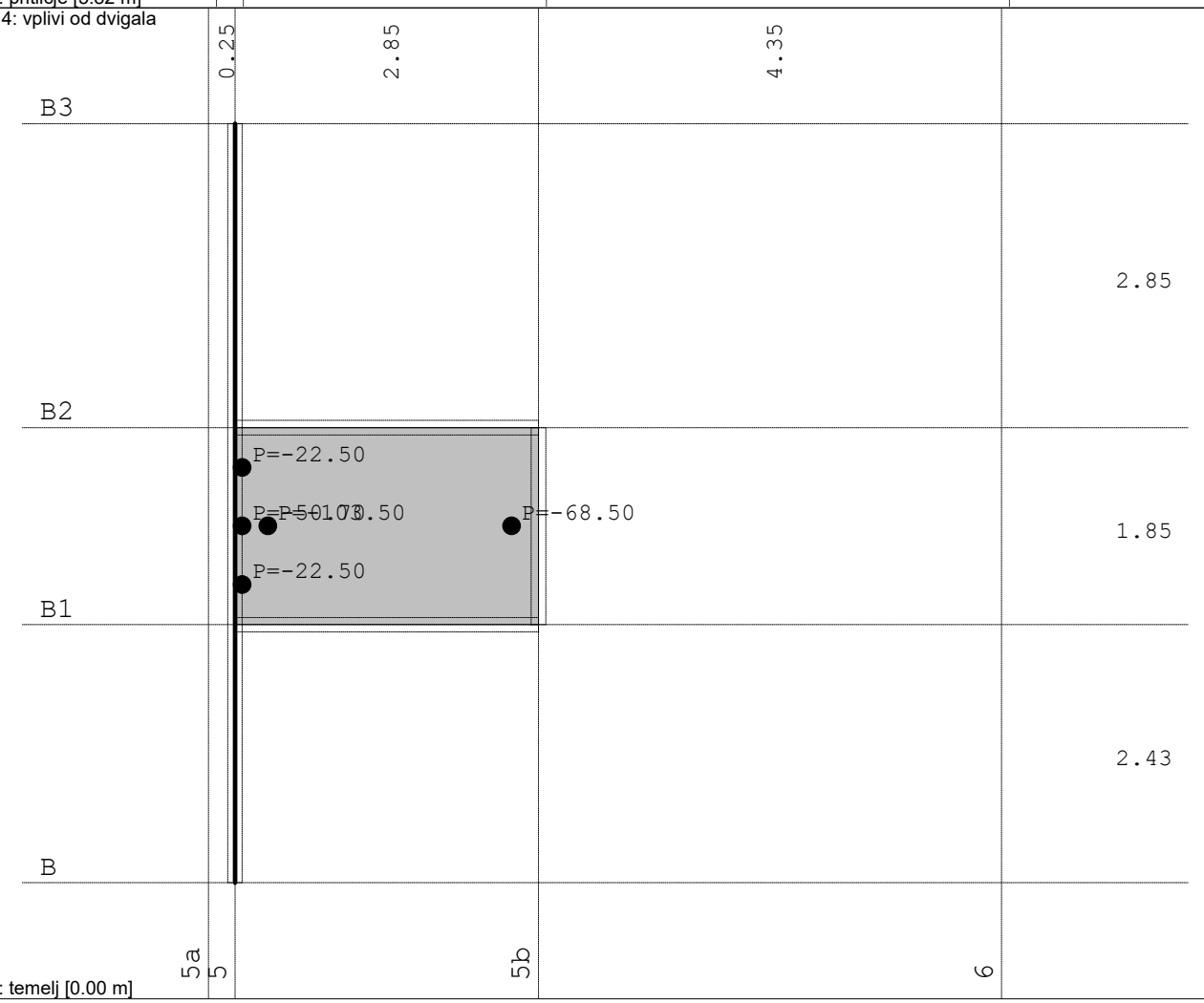
Vhodni podatki - Obtežba

Obt. 3: koristna obtežba plošče pritličja



Nivo: pritličje [5.82 m]

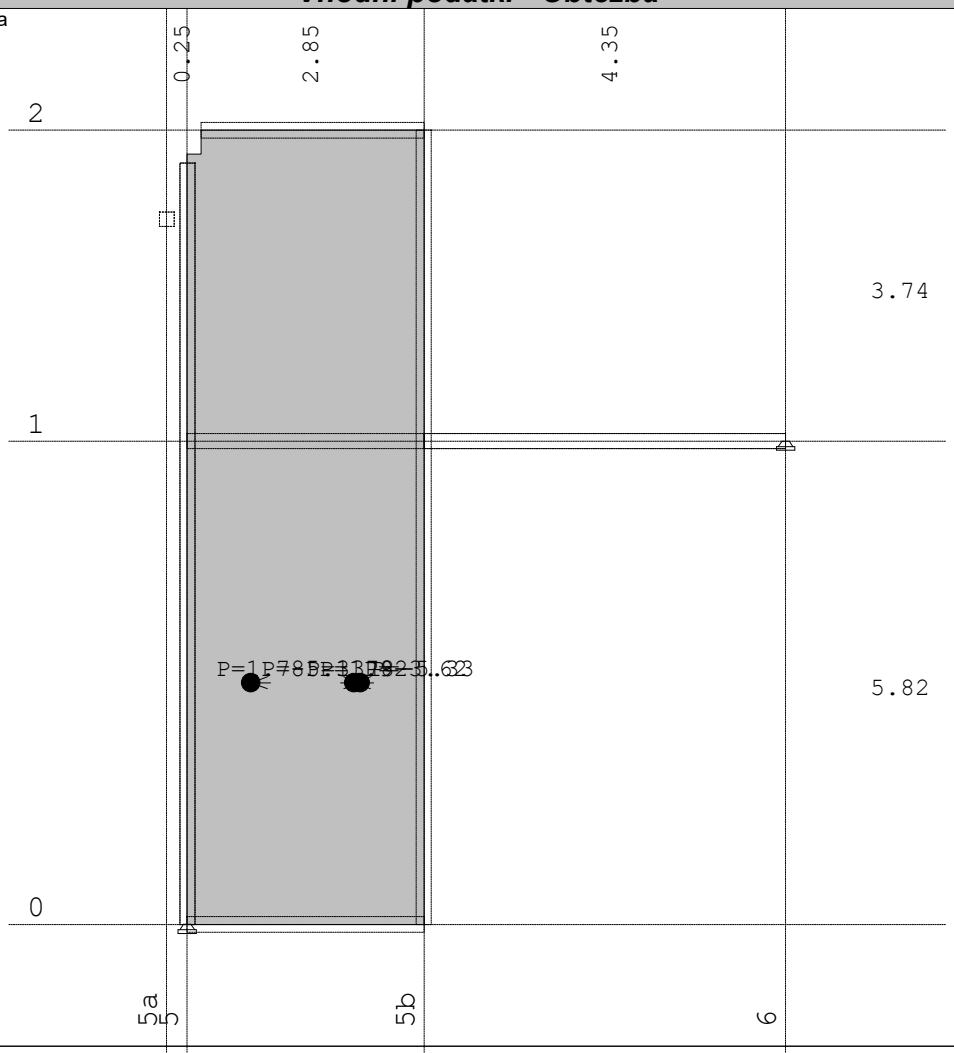
Obt. 4: vplivi od dvigala



Nivo: temelj [0.00 m]

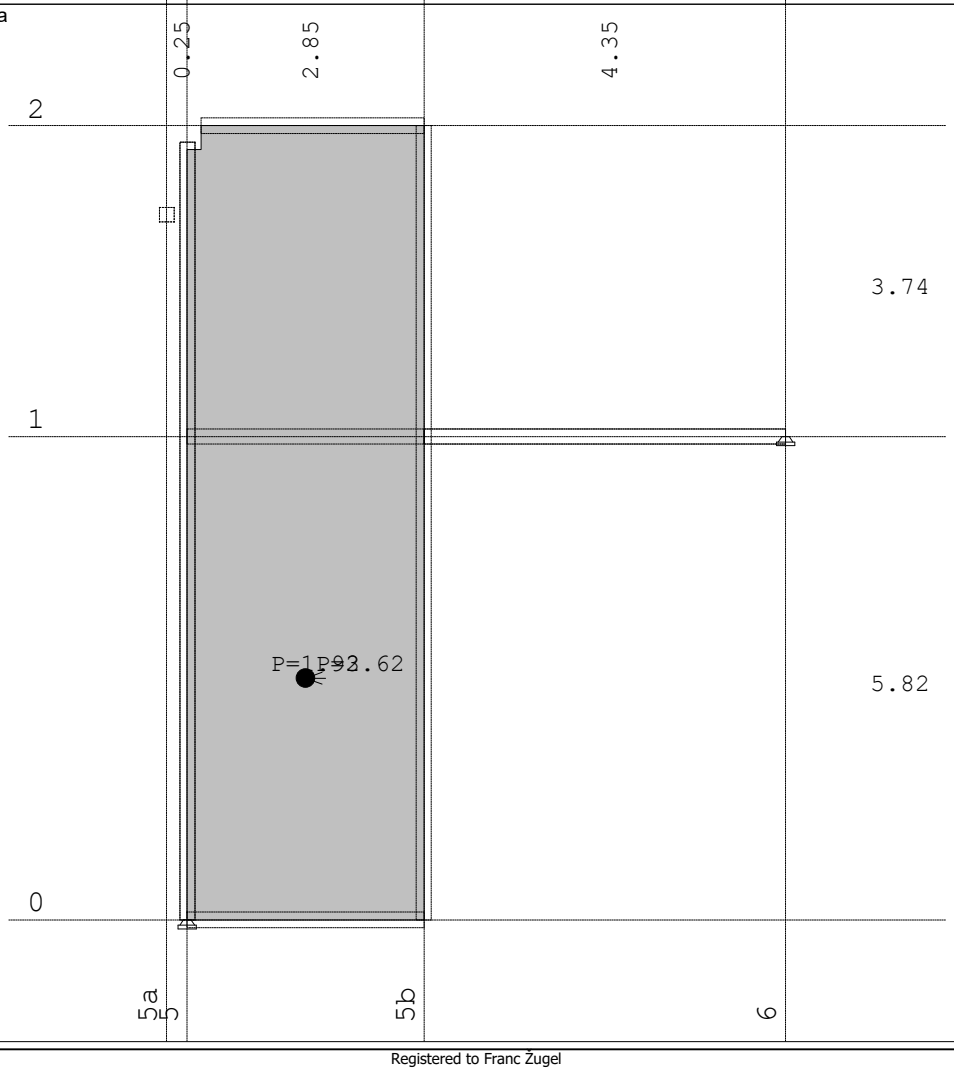
Vhodni podatki - Obtežba

Obt. 4: vplivi od dvigala



Okvir: st X1

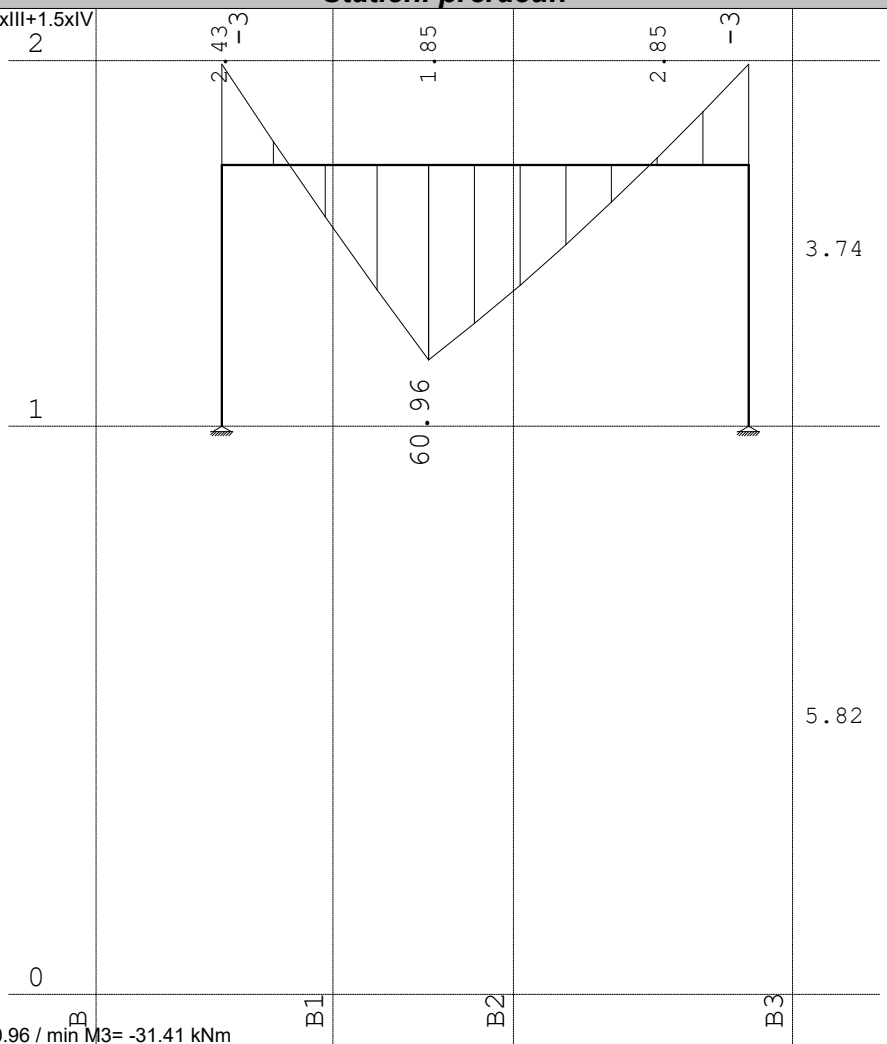
Obt. 4: vplivi od dvigala



Okvir: st X2

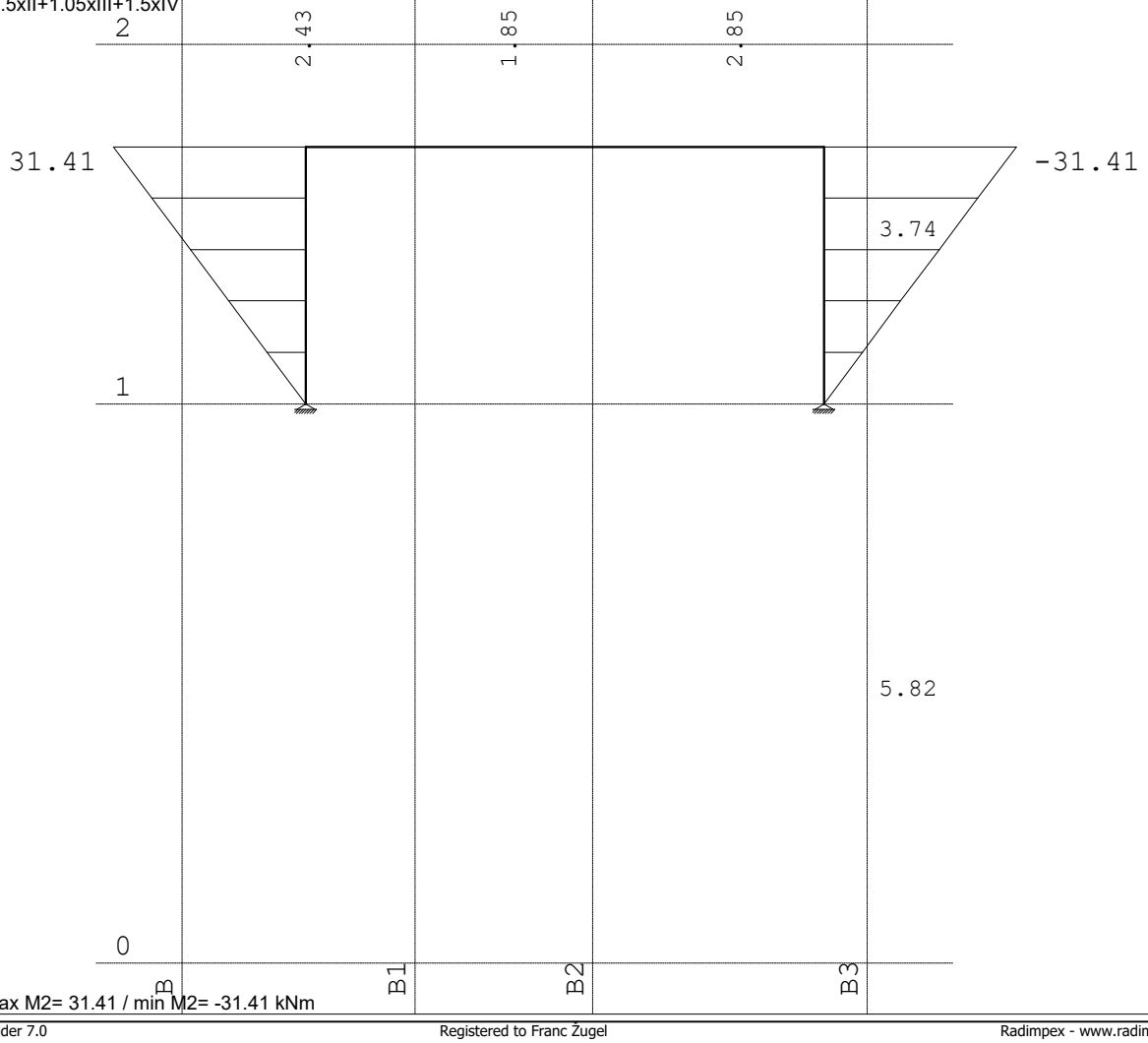
Statični preračun

Obt. 5: 1.35xI+1.5xII+1.05xIII+1.5xIV



Okvir: st Y2
Vplivi v gredi: max M3= 60.96 / min M3= -31.41 kNm

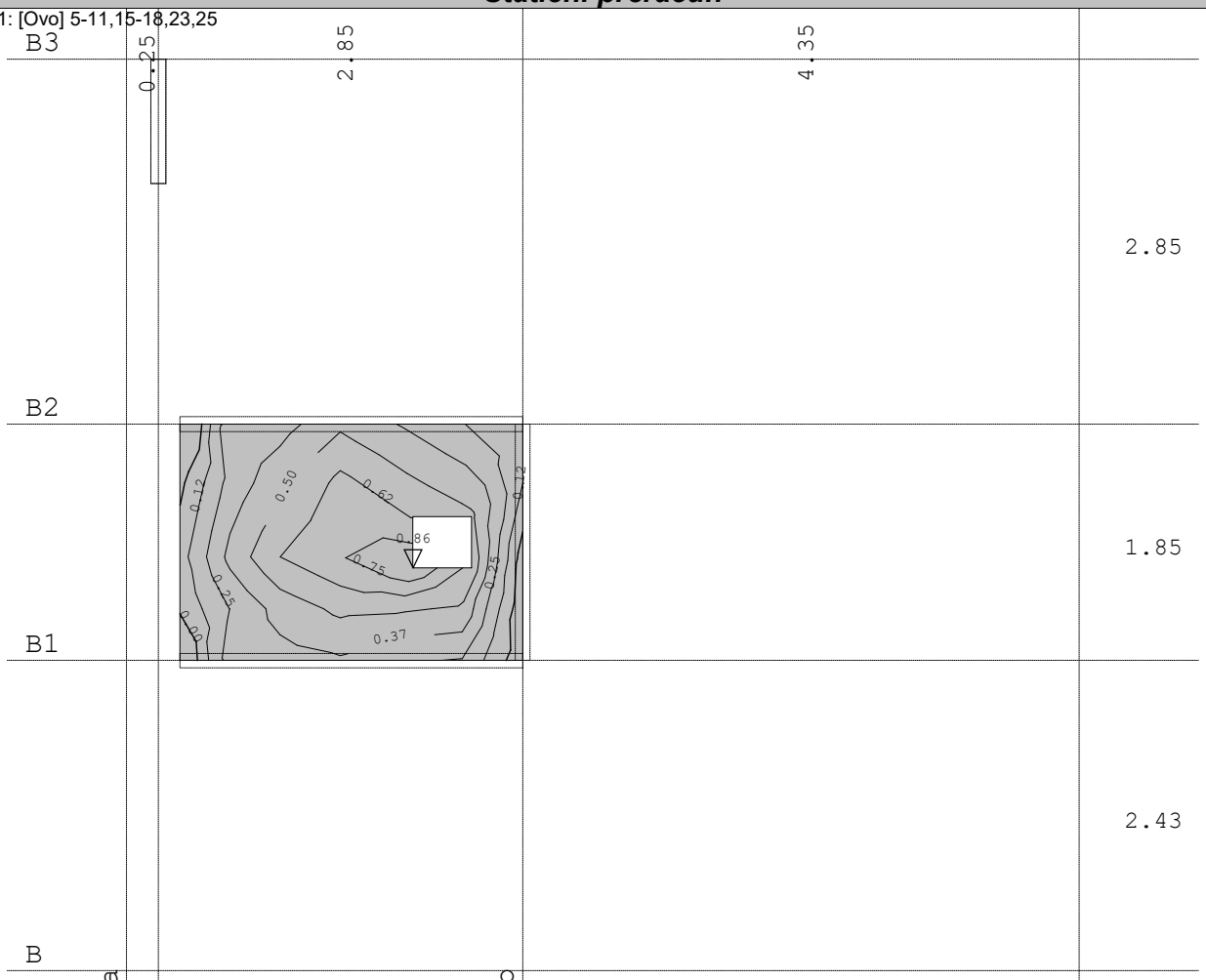
Obt. 5: 1.35xI+1.5xII+1.05xIII+1.5xIV



Okvir: st Y2
Vplivi v gredi: max M2= 31.41 / min M2= -31.41 kNm

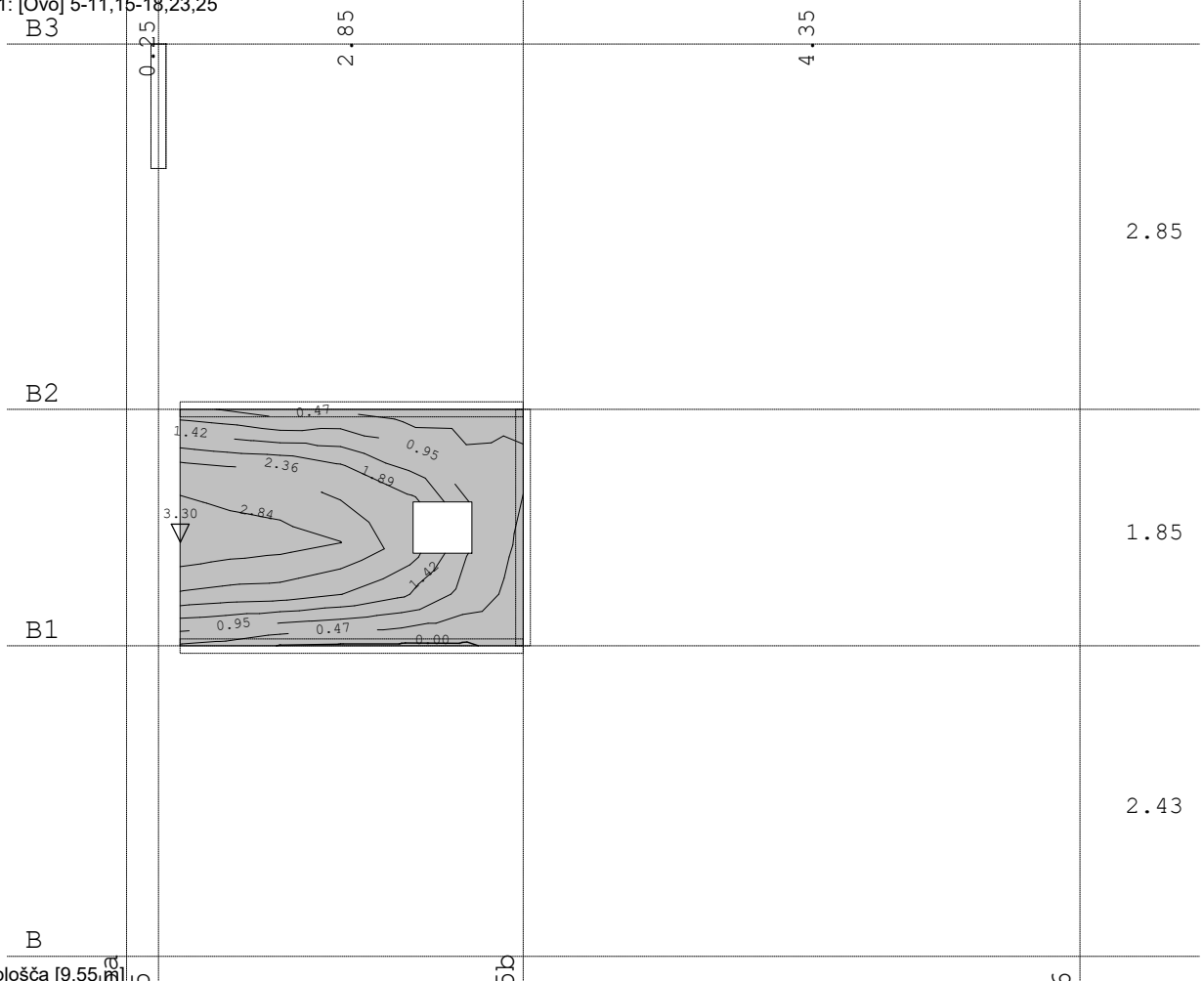
Statični preračun

Obt. 31: [Ovo] 5-11,15-18,23,25



Nivo: plošča [9.55 m]
Vplivi v plošči: max Mx= 0.86 / min Mx= 0.00 kNm/m

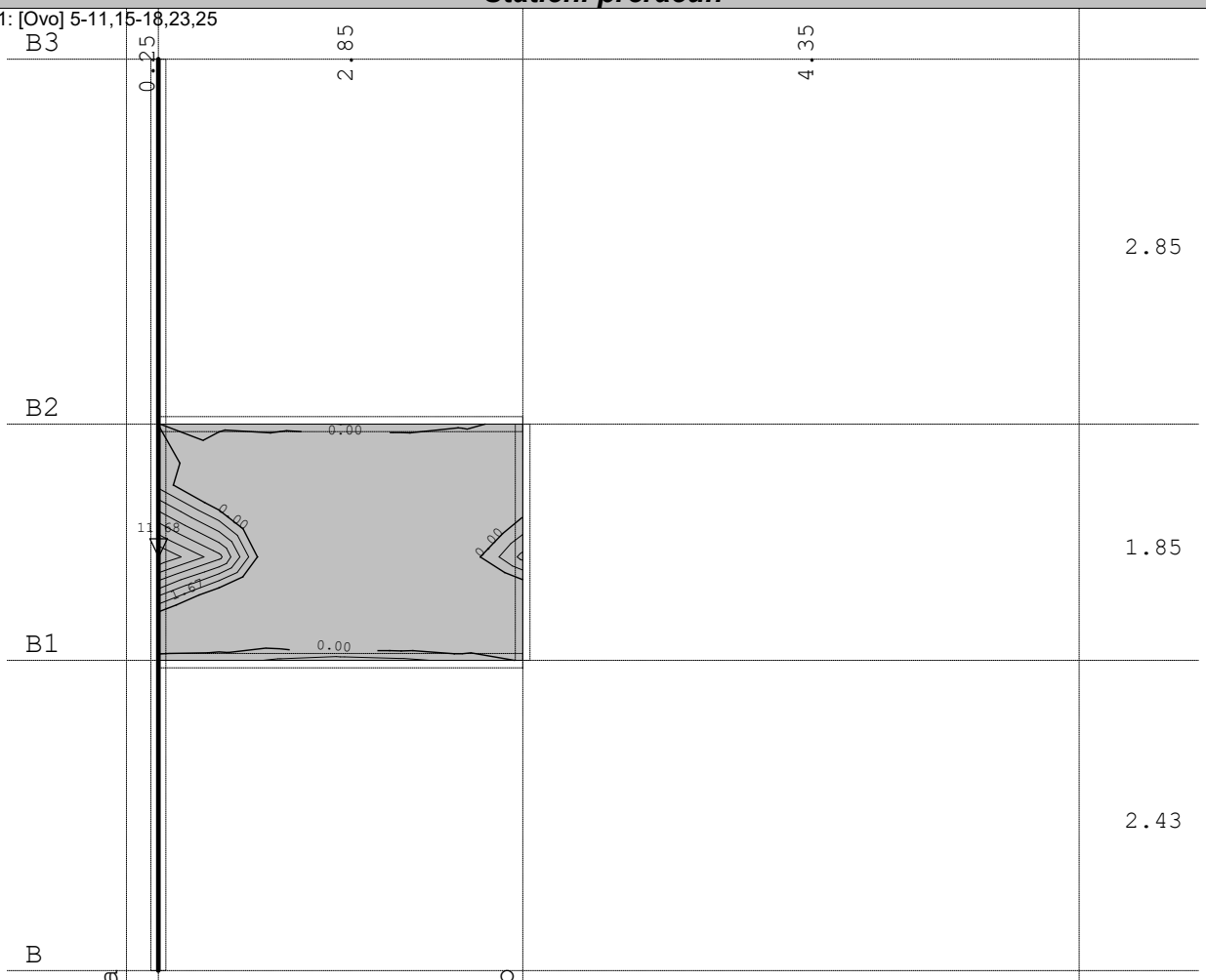
Obt. 31: [Ovo] 5-11,15-18,23,25



Nivo: plošča [9.55 m]
Vplivi v plošči: max My= 3.30 / min My= 0.00 kNm/m

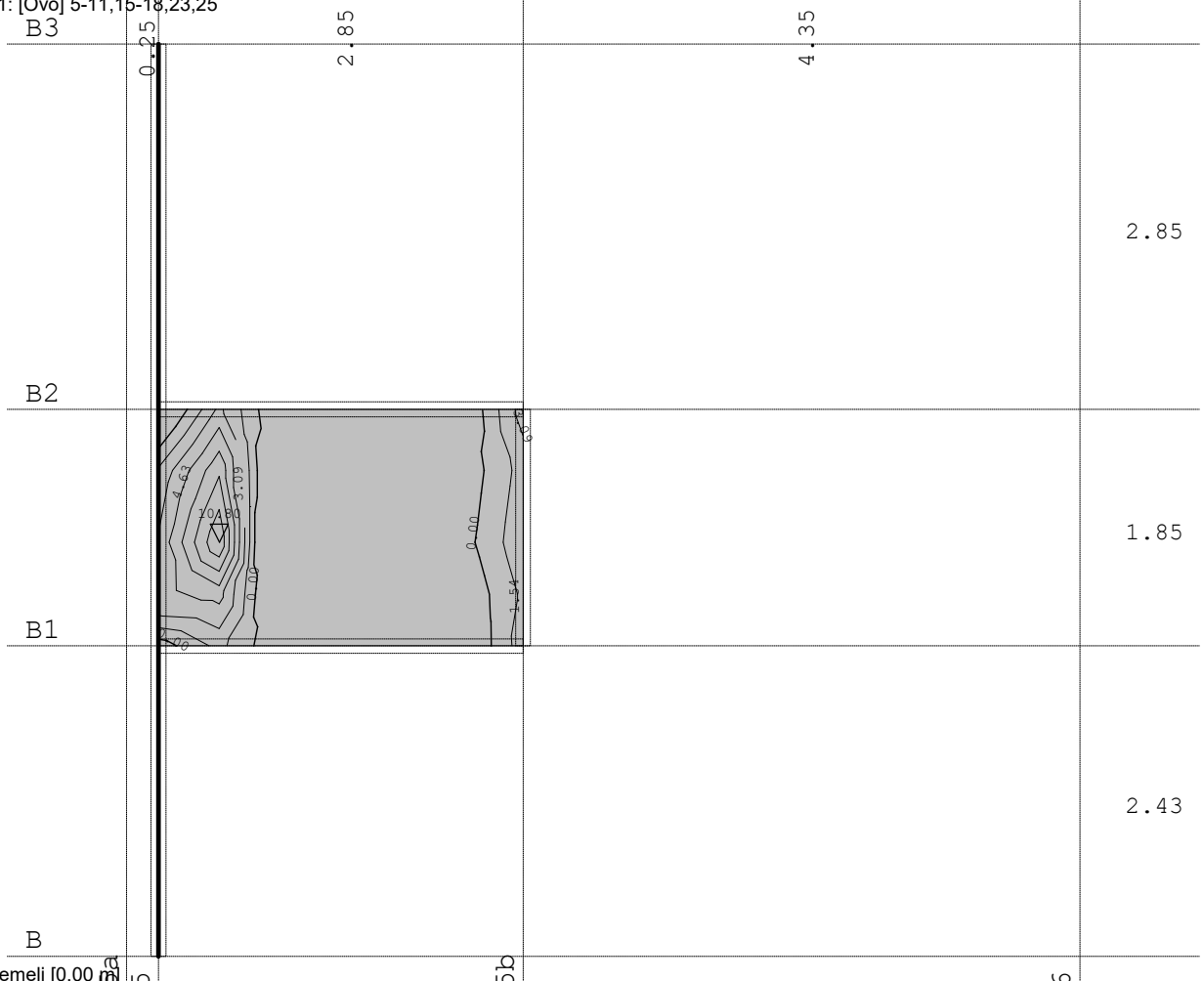
Statični preračun

Obt. 31: [Ovo] 5-11,15-18,23,25



Nivo: temelj [0.00 m]
Vplivi v plošči: max My= 11.68 / min My= 0.00 kNm/m

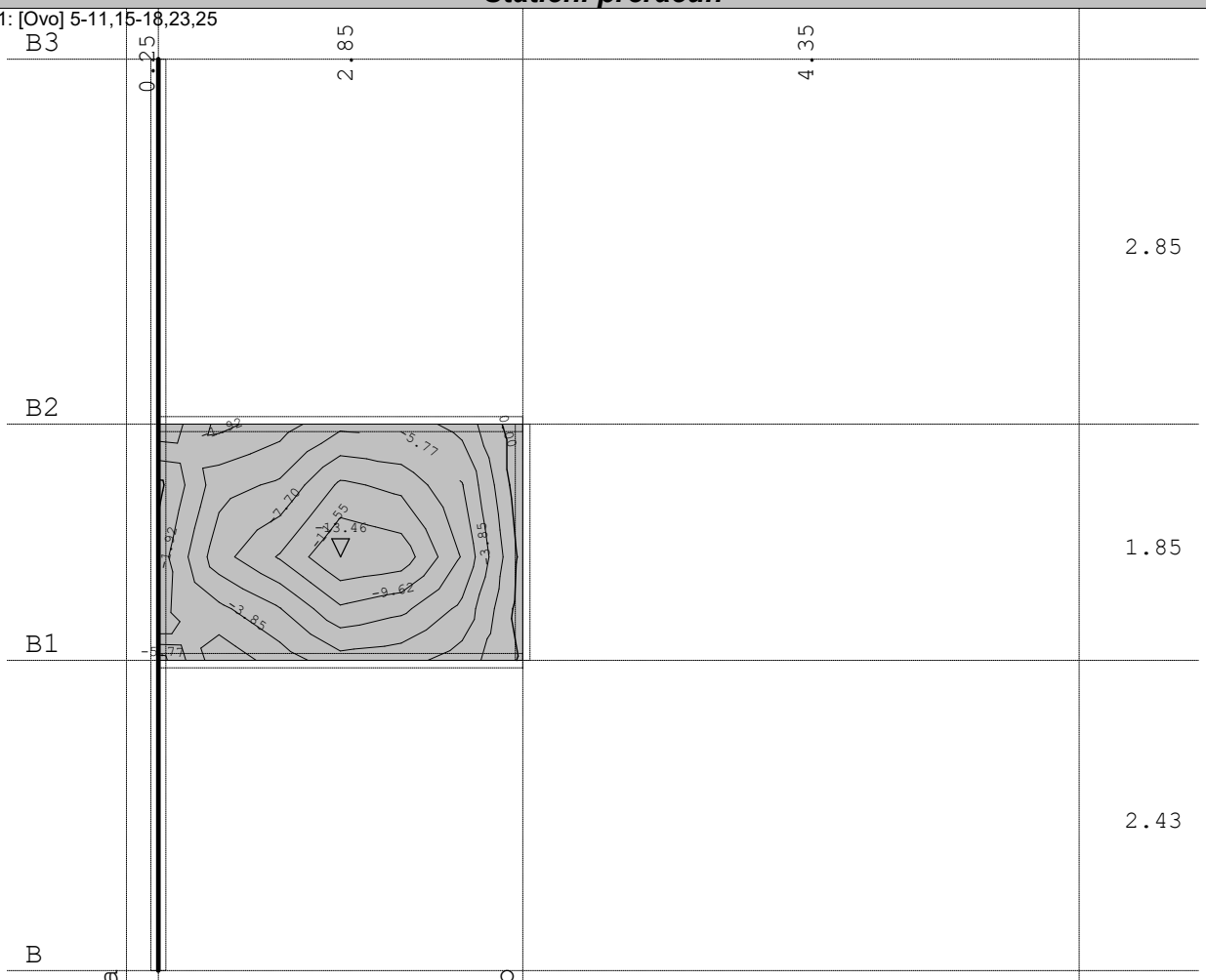
Obt. 31: [Ovo] 5-11,15-18,23,25



Nivo: temelj [0.00 m]
Vplivi v plošči: max Mx= 10.80 / min Mx= 0.00 kNm/m

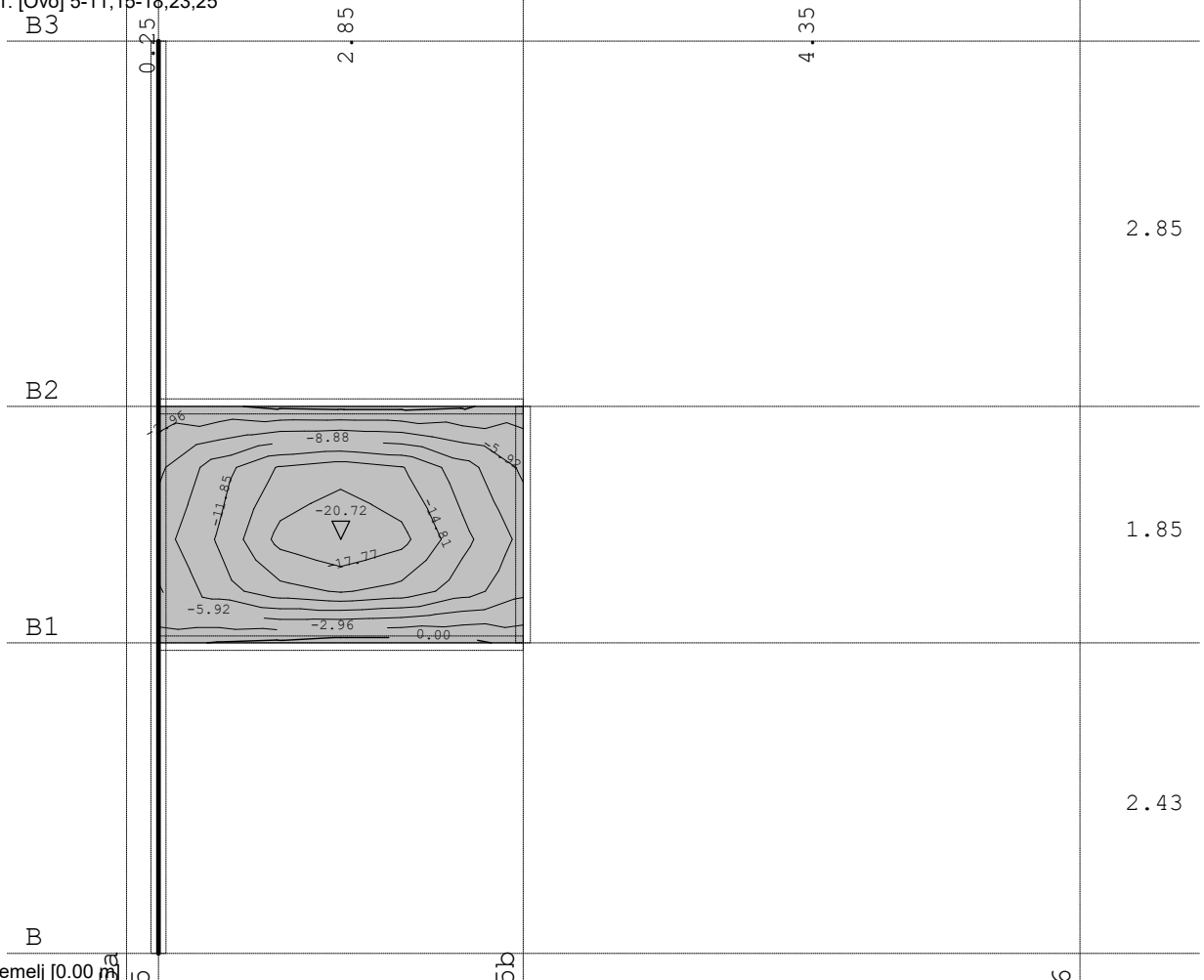
Statični preračun

Obt. 31: [Ovo] 5-11,15-18,23,25



Nivo: temelj [0.00 m]
Vplivi v plošči: max Mx= 0.00 / min Mx= -13.46 kNm/m

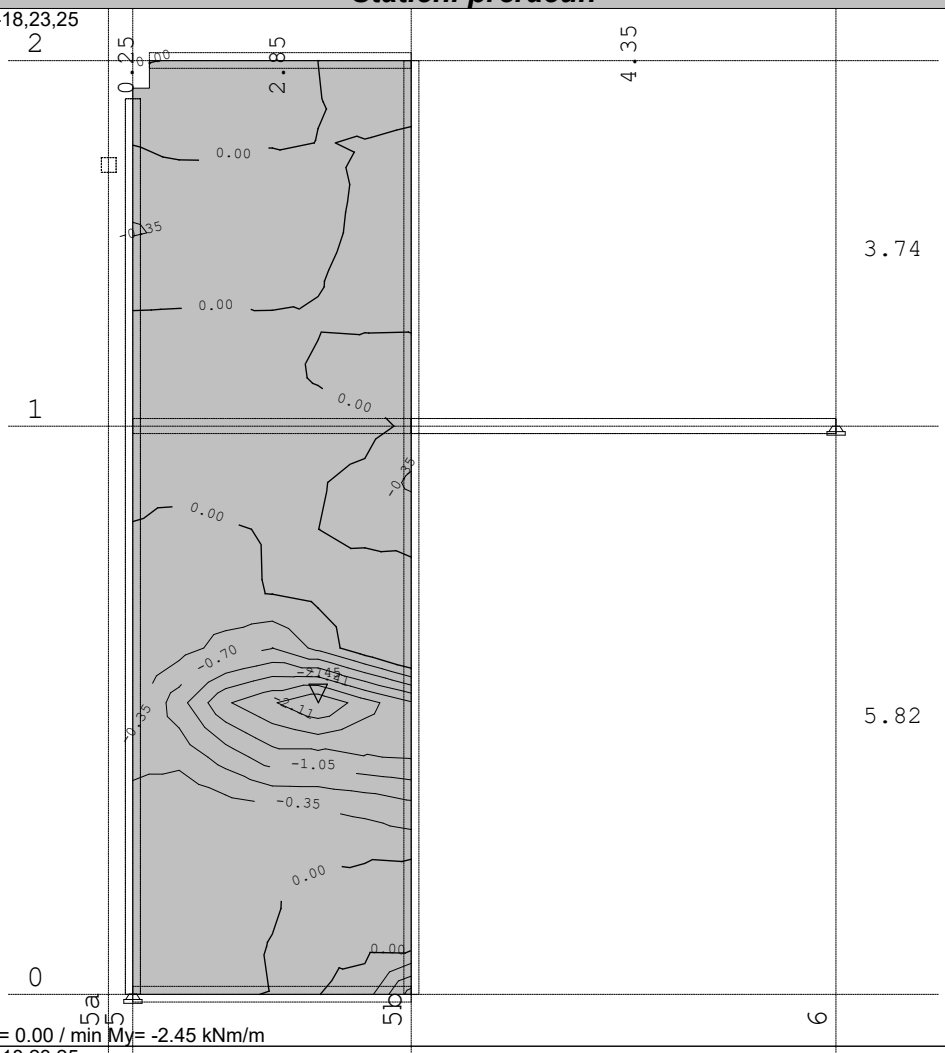
Obt. 31: [Ovo] 5-11,15-18,23,25



Nivo: temelj [0.00 m]
Vplivi v plošči: max My= 0.00 / min My= -20.72 kNm/m

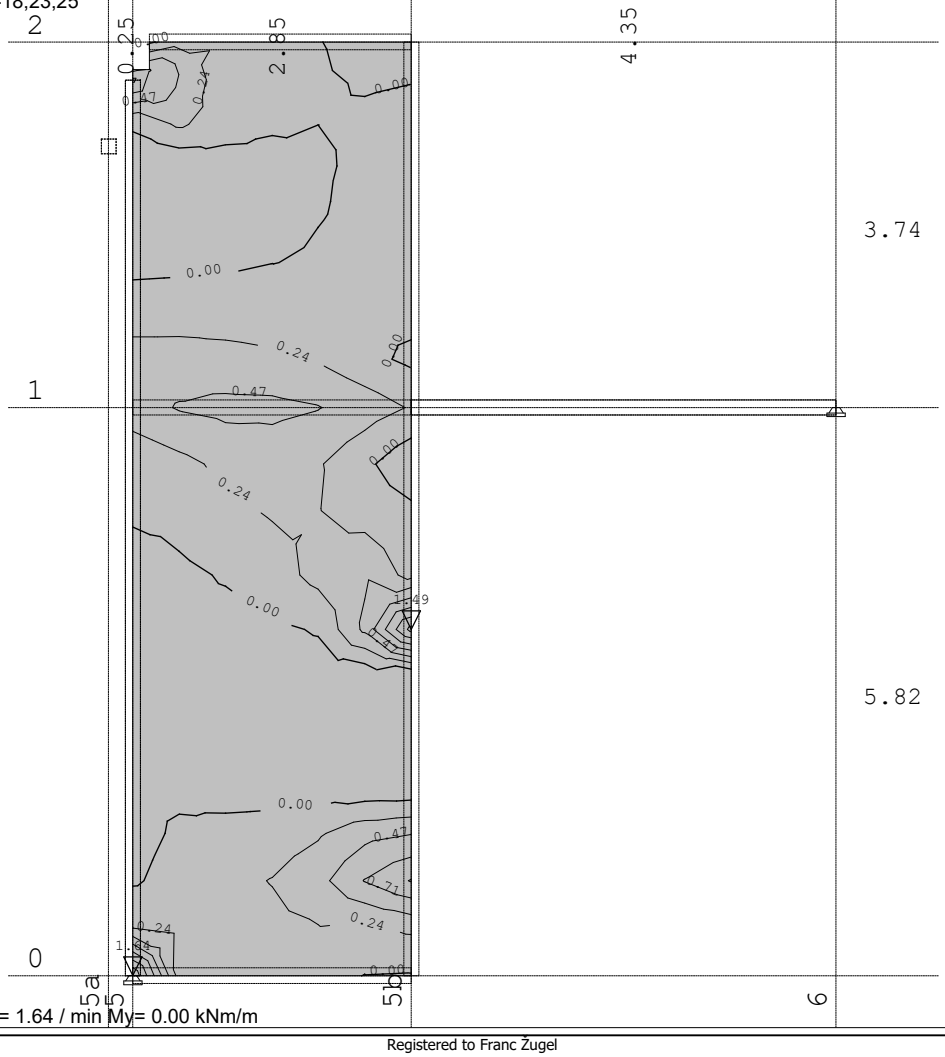
Statični preračun

Obt. 31: [Ovo] 5-11,15-18,23,25



Okvir: st X1
Vplivi v plošči: max My= 0.00 / min My= -2.45 kNm/m

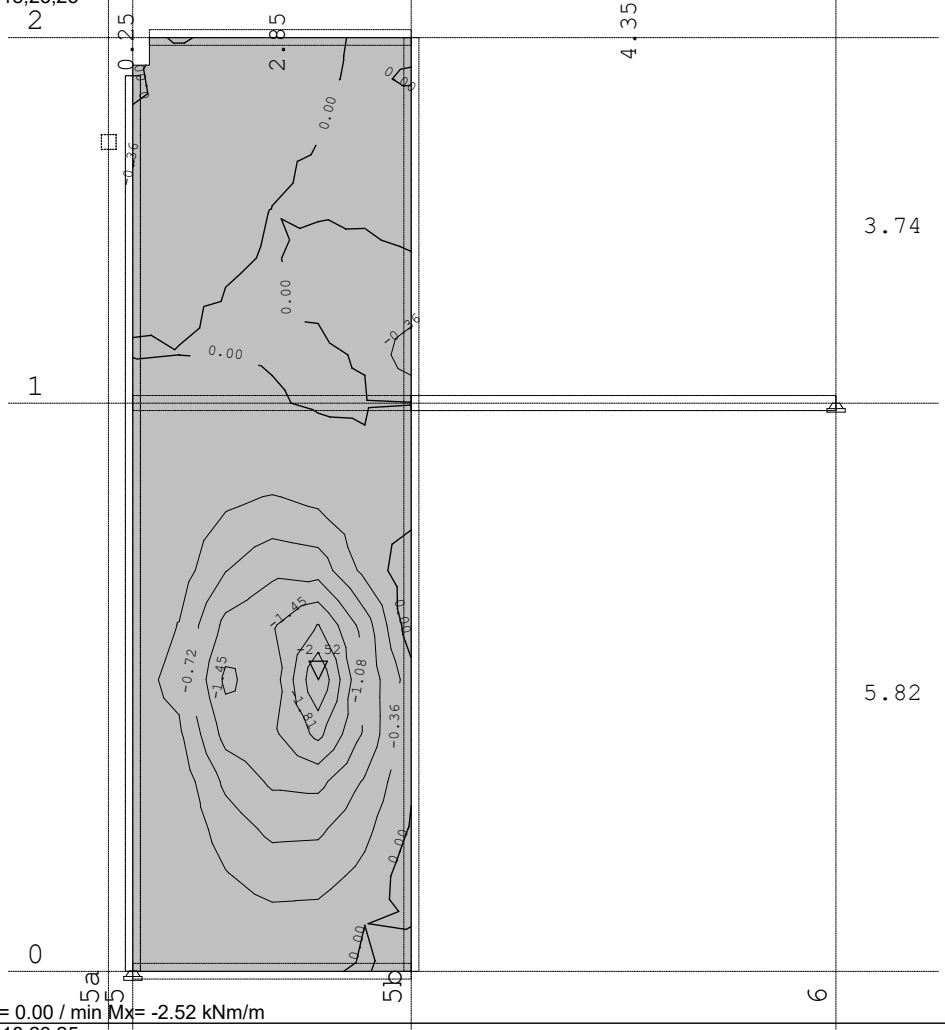
Obt. 31: [Ovo] 5-11,15-18,23,25



Okvir: st X1
Vplivi v plošči: max My= 1.64 / min My= 0.00 kNm/m

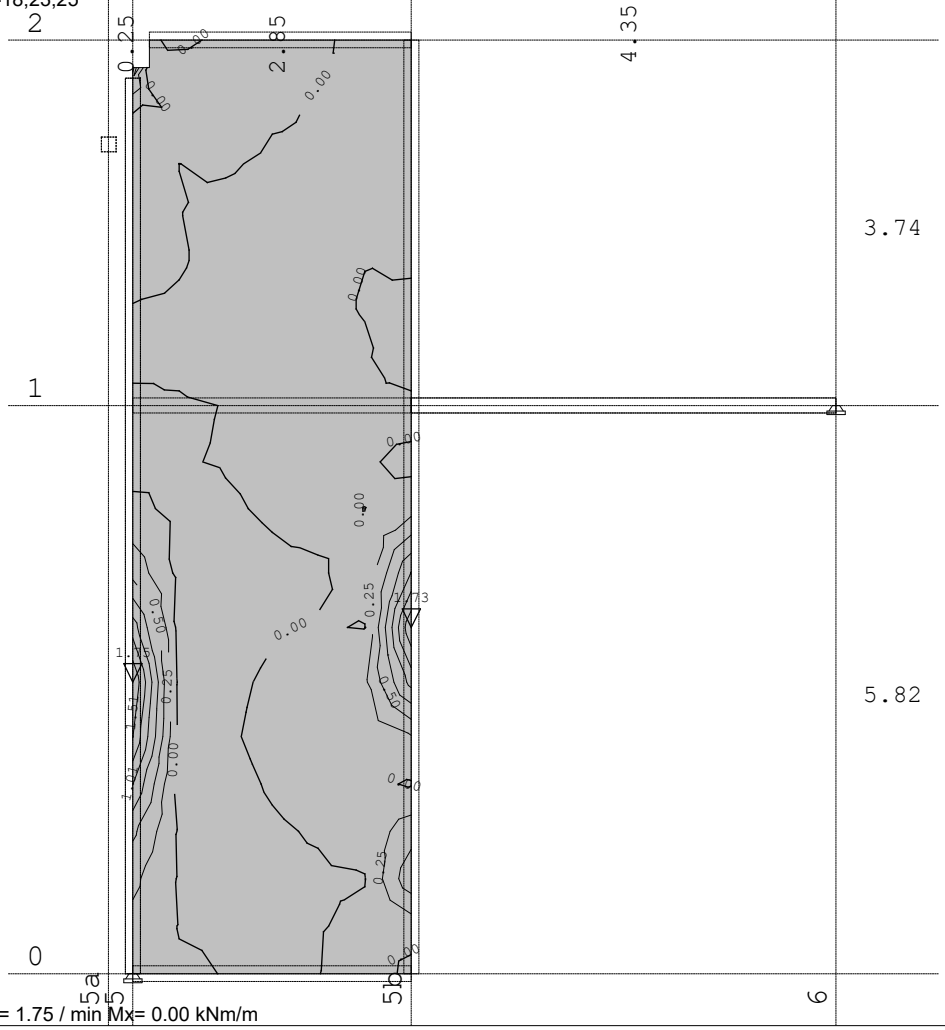
Statični preračun

Obt. 31: [Ovo] 5-11,15-18,23,25



Okvir: st X1
Vplivi v plošči: max Mx= 0.00 / min Mx= -2.52 kNm/m

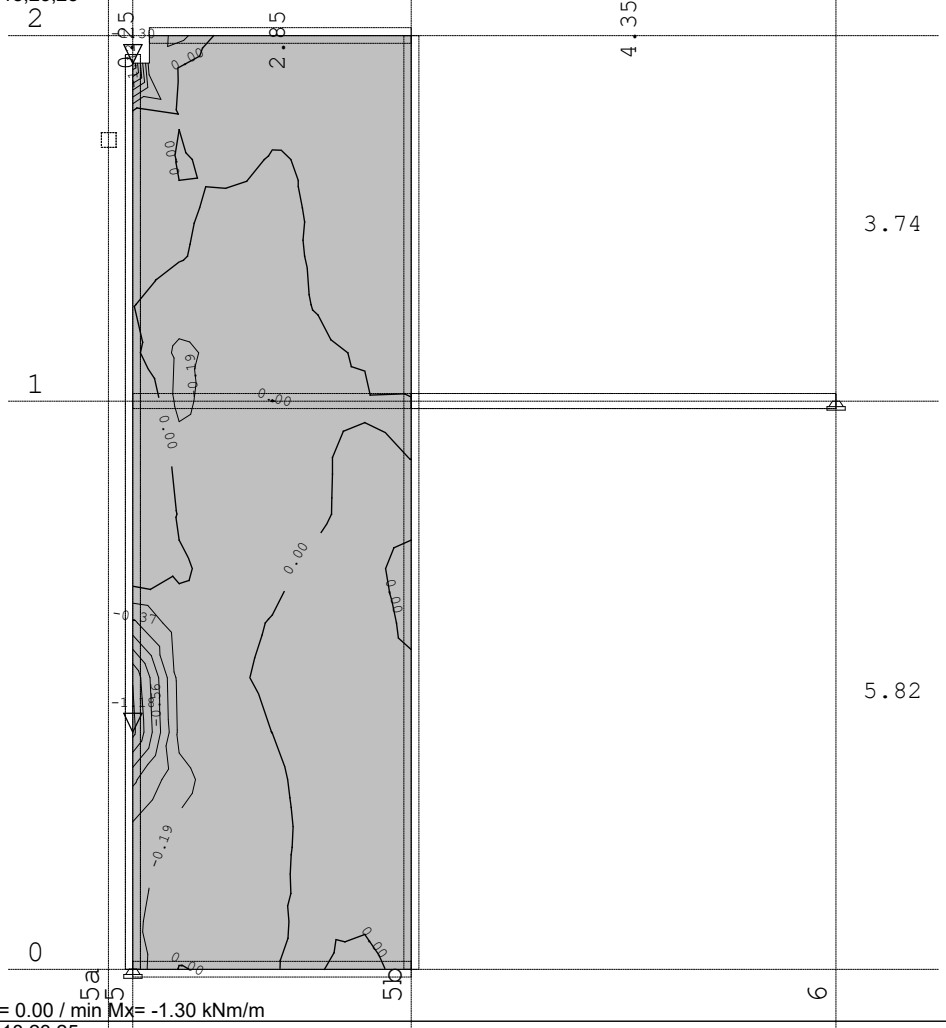
Obt. 31: [Ovo] 5-11,15-18,23,25



Okvir: st X1
Vplivi v plošči: max Mx= 1.75 / min Mx= 0.00 kNm/m

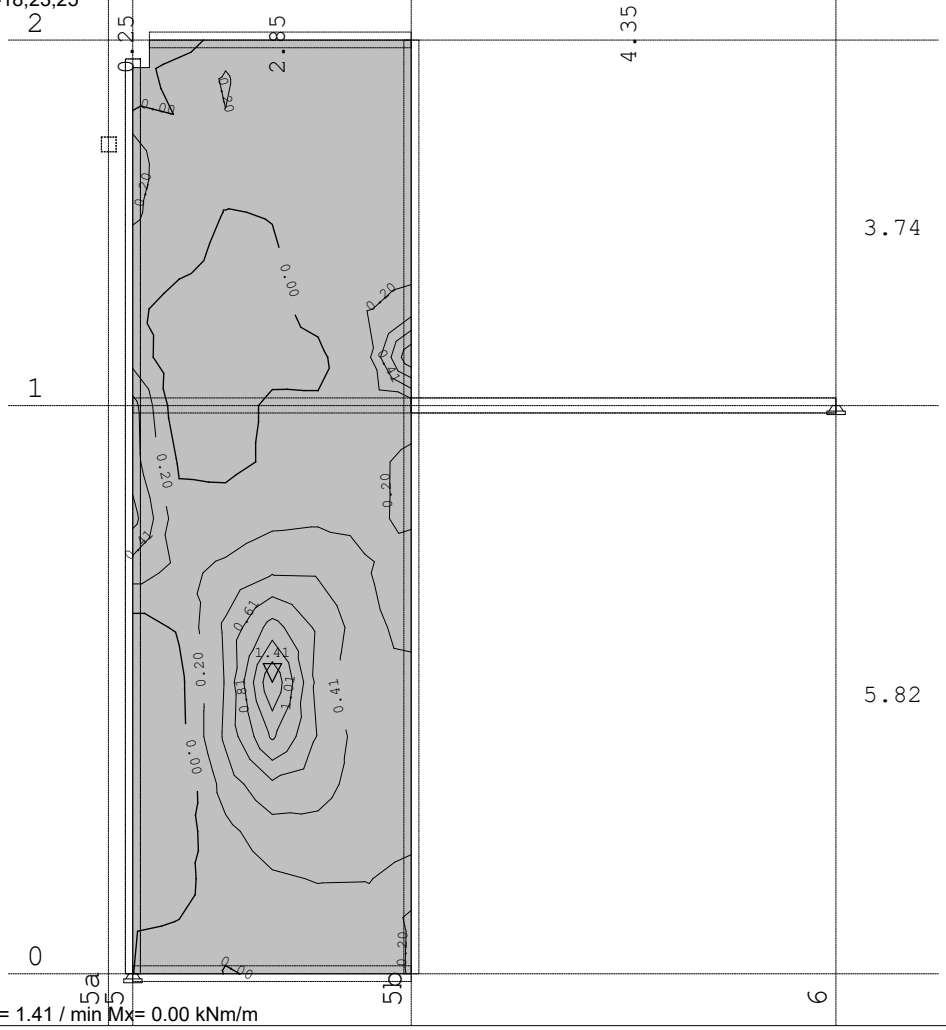
Statični preračun

Obt. 31: [Ovo] 5-11,15-18,23,25



Okvir: st X2
Vplivi v plošči: max Mx= 0.00 / min Mx= -1.30 kNm/m

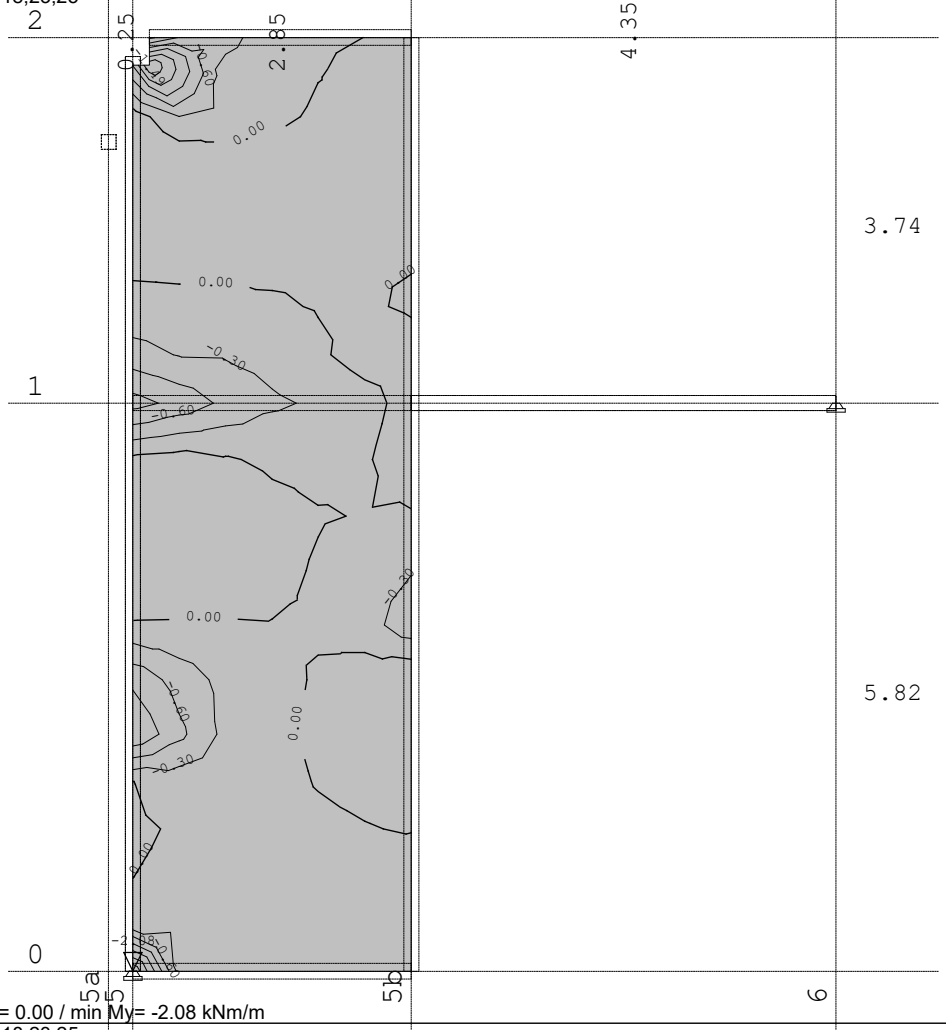
Obt. 31: [Ovo] 5-11,15-18,23,25



Okvir: st X2
Vplivi v plošči: max Mx= 1.41 / min Mx= 0.00 kNm/m

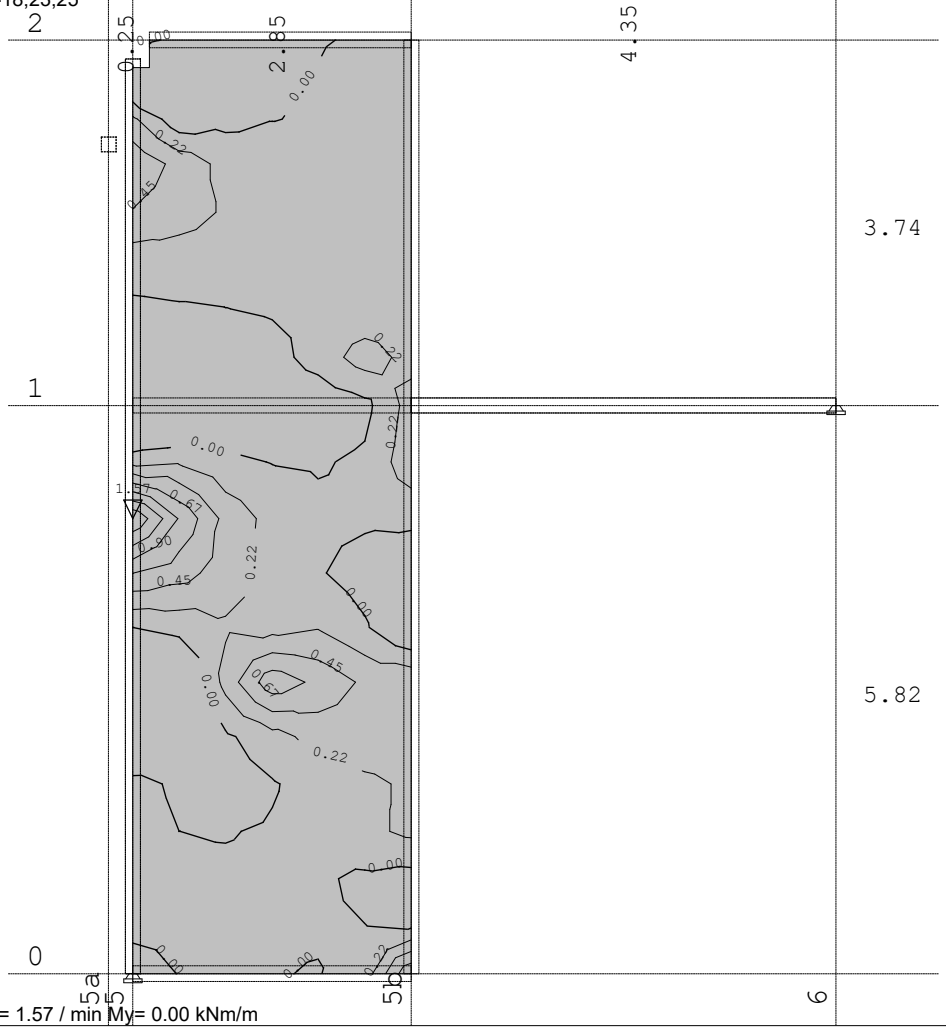
Statični preračun

Obt. 31: [Ovo] 5-11,15-18,23,25



Okvir: st X2
Vplivi v plošči: max My= 0.00 / min My= -2.08 kNm/m

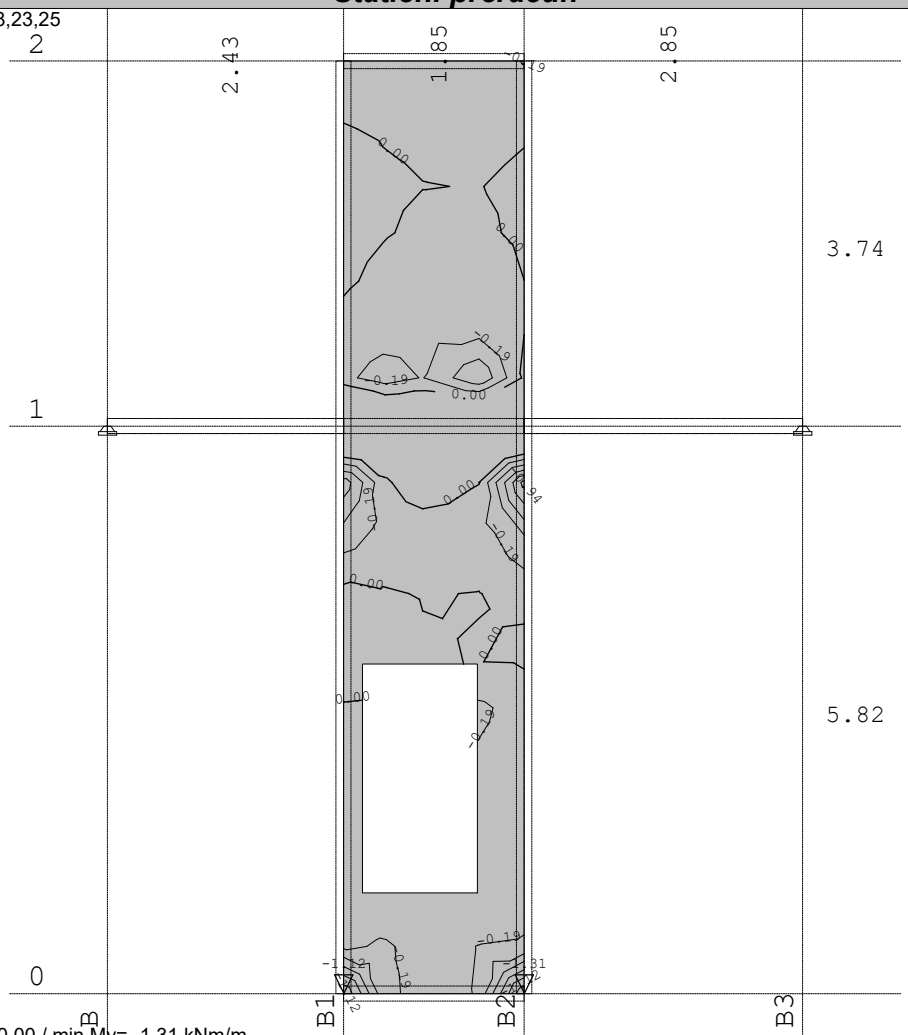
Obt. 31: [Ovo] 5-11,15-18,23,25



Okvir: st X2
Vplivi v plošči: max My= 1.57 / min My= 0.00 kNm/m

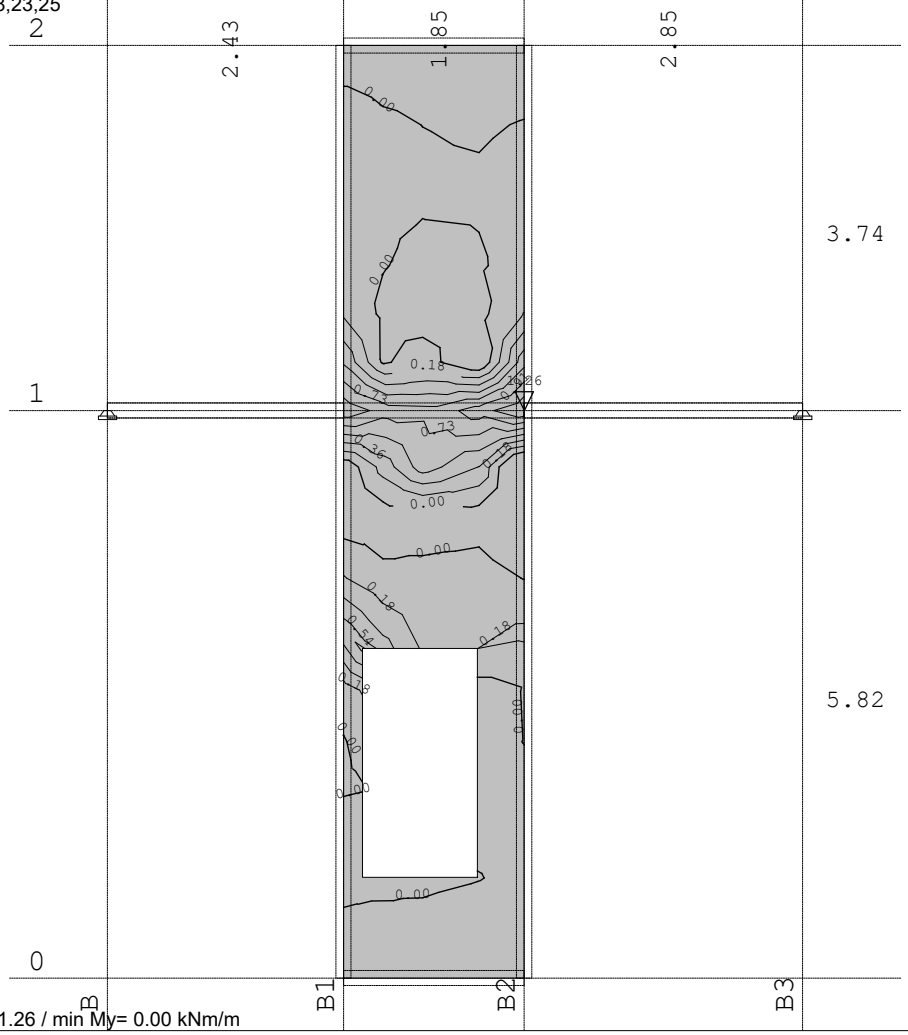
Statični preračun

Obt. 31: [Ovo] 5-11,15-18,23,25



Okvir: st Y1
Vplivi v plošči: max My= 0.00 / min My= -1.31 kNm/m

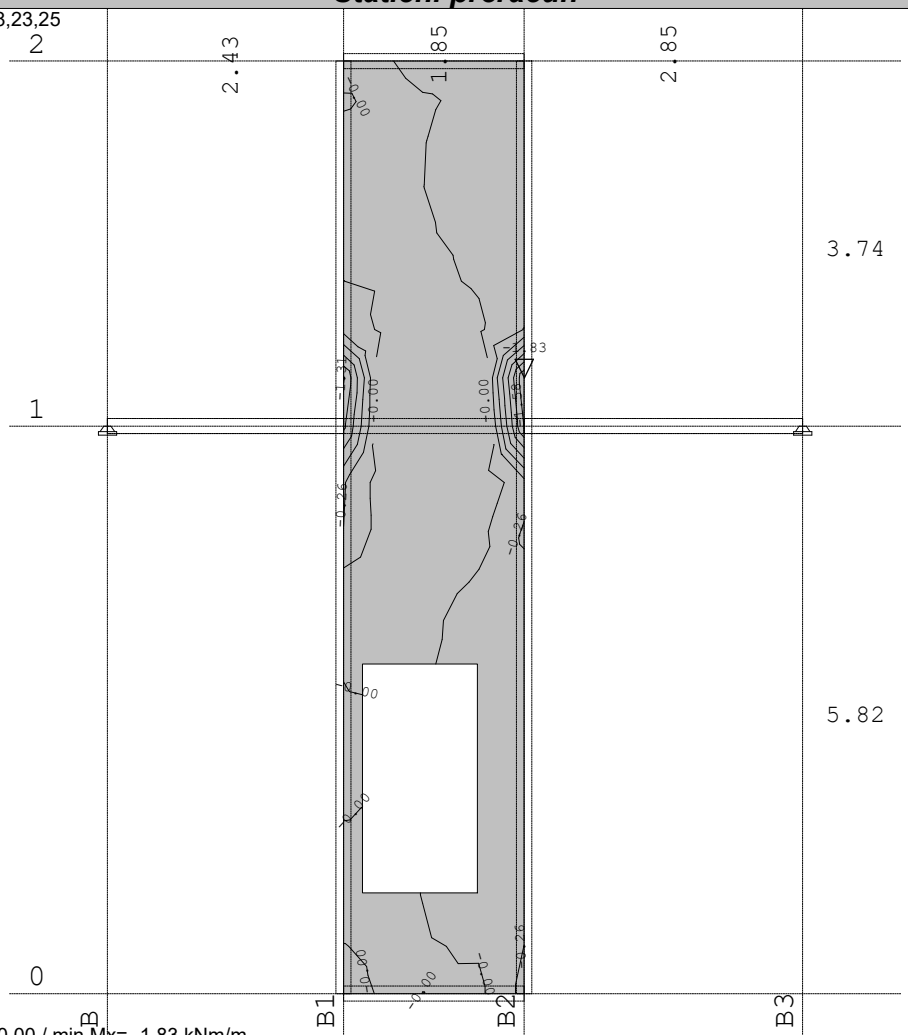
Obt. 31: [Ovo] 5-11,15-18,23,25



Okvir: st Y1
Vplivi v plošči: max My= 1.26 / min My= 0.00 kNm/m

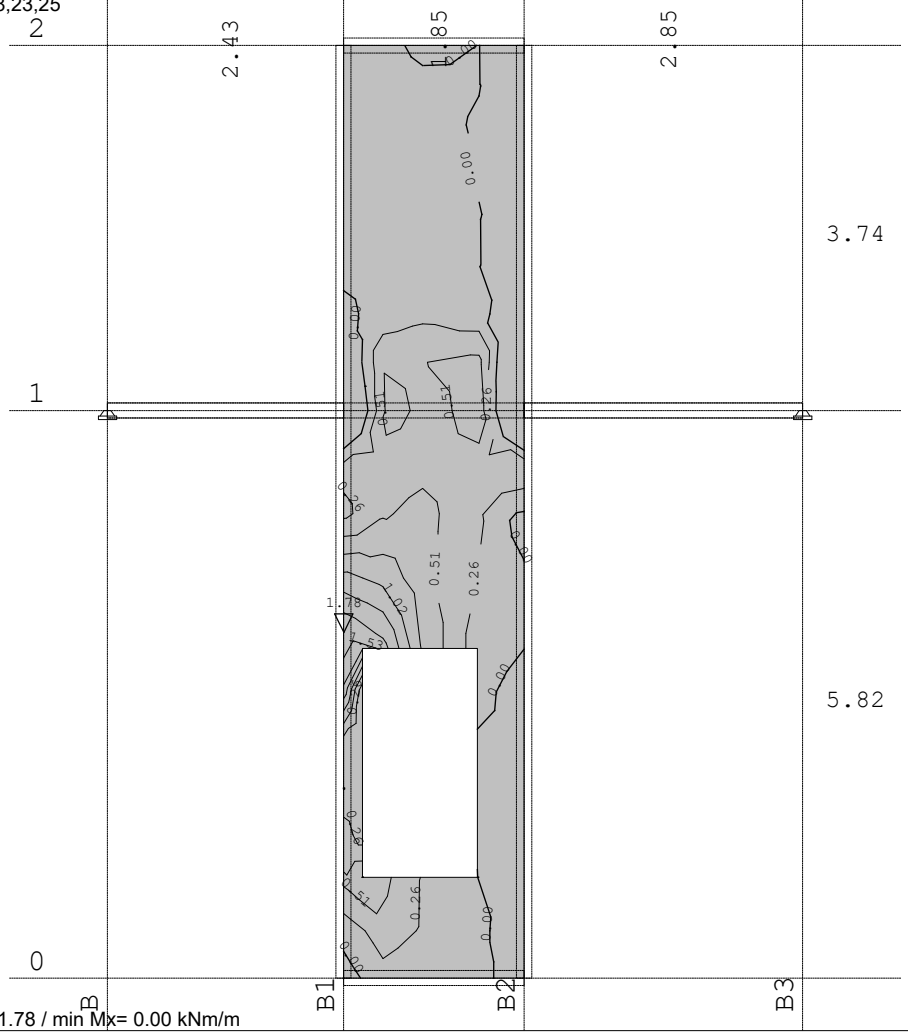
Statični preračun

Obt. 31: [Ovo] 5-11,15-18,23,25



Okvir: st Y1
Vplivi v plošči: max Mx= 0.00 / min Mx= -1.83 kNm/m

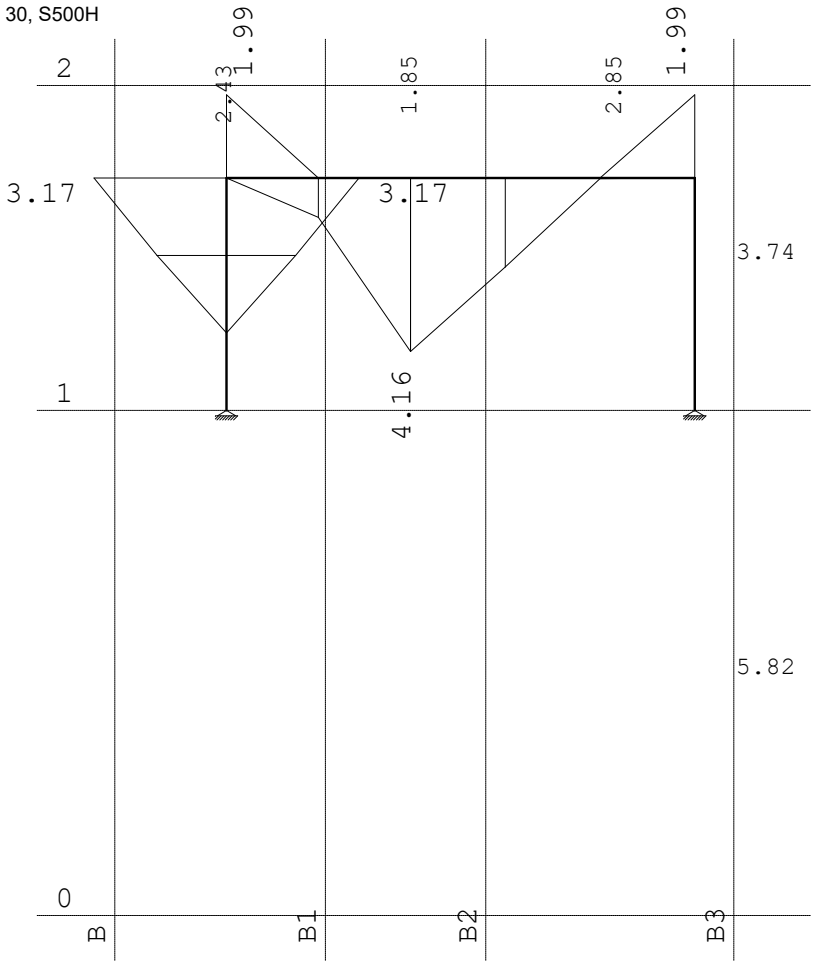
Obt. 31: [Ovo] 5-11,15-18,23,25



Okvir: st Y1
Vplivi v plošči: max Mx= 1.78 / min Mx= 0.00 kNm/m

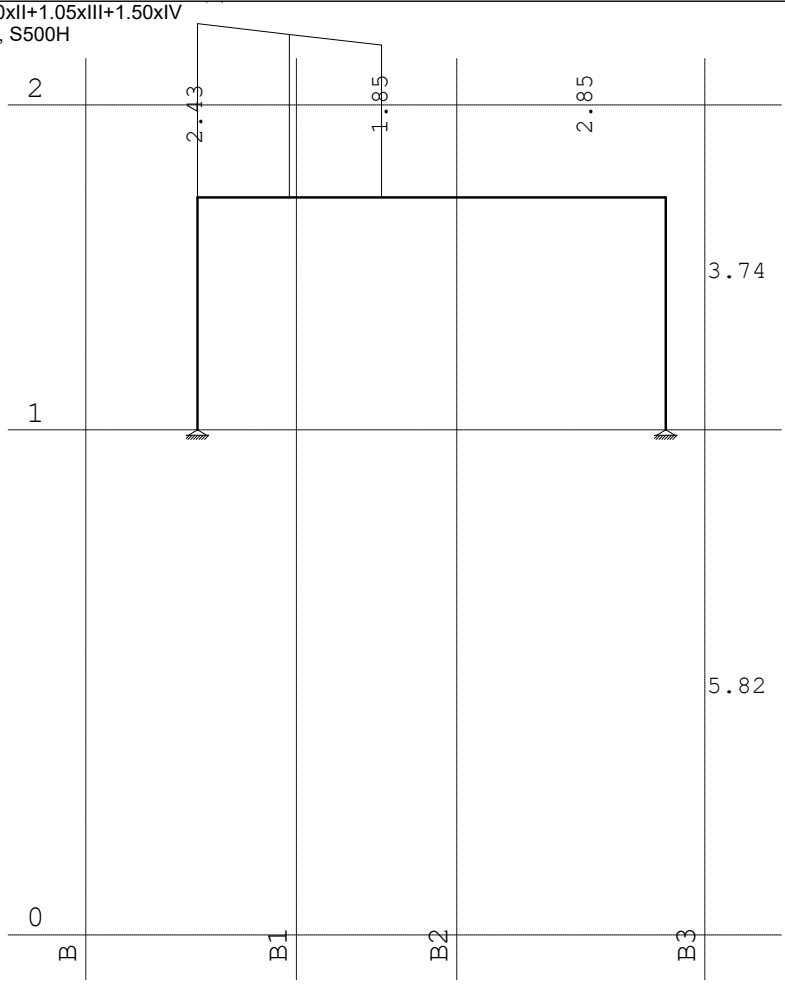
Dimenzioniranje (beton)

Merodajna obtežba: 1.35xI+1.50xII+1.05xIII+1.50xIV
EC 2 (EN 1992-1-1:2004), C 30, S500H



Okvir: st Y2
Armatura v gredah: max Aa2/Aa1= 3.17 / 4.16 cm²

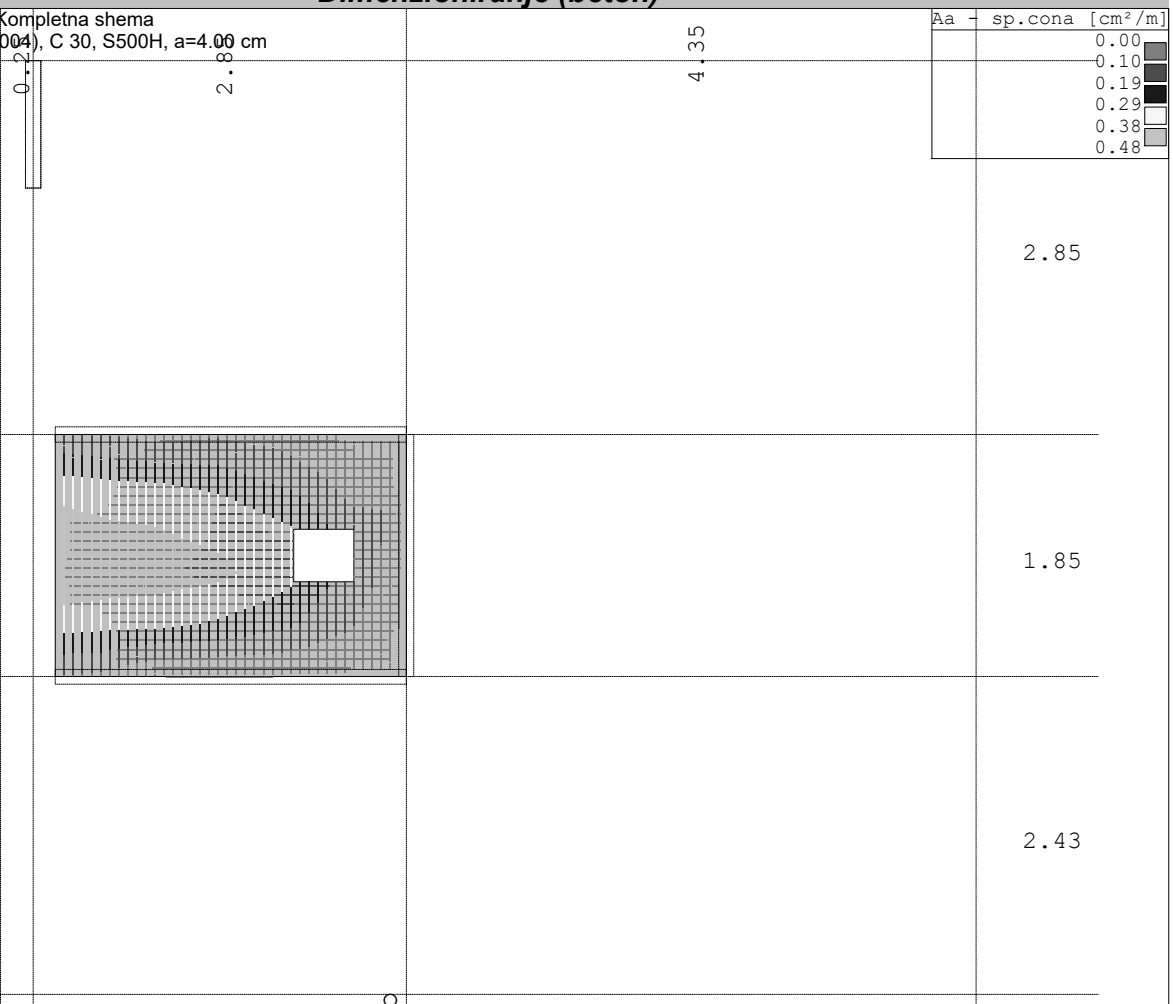
Merodajna obtežba: 1.35xI+1.50xII+1.05xIII+1.50xIV
EC 2 (EN 1992-1-1:2004), C 30, S500H



Okvir: st Y2
Armatura v gredah: max Aa,st= 1.70 cm²

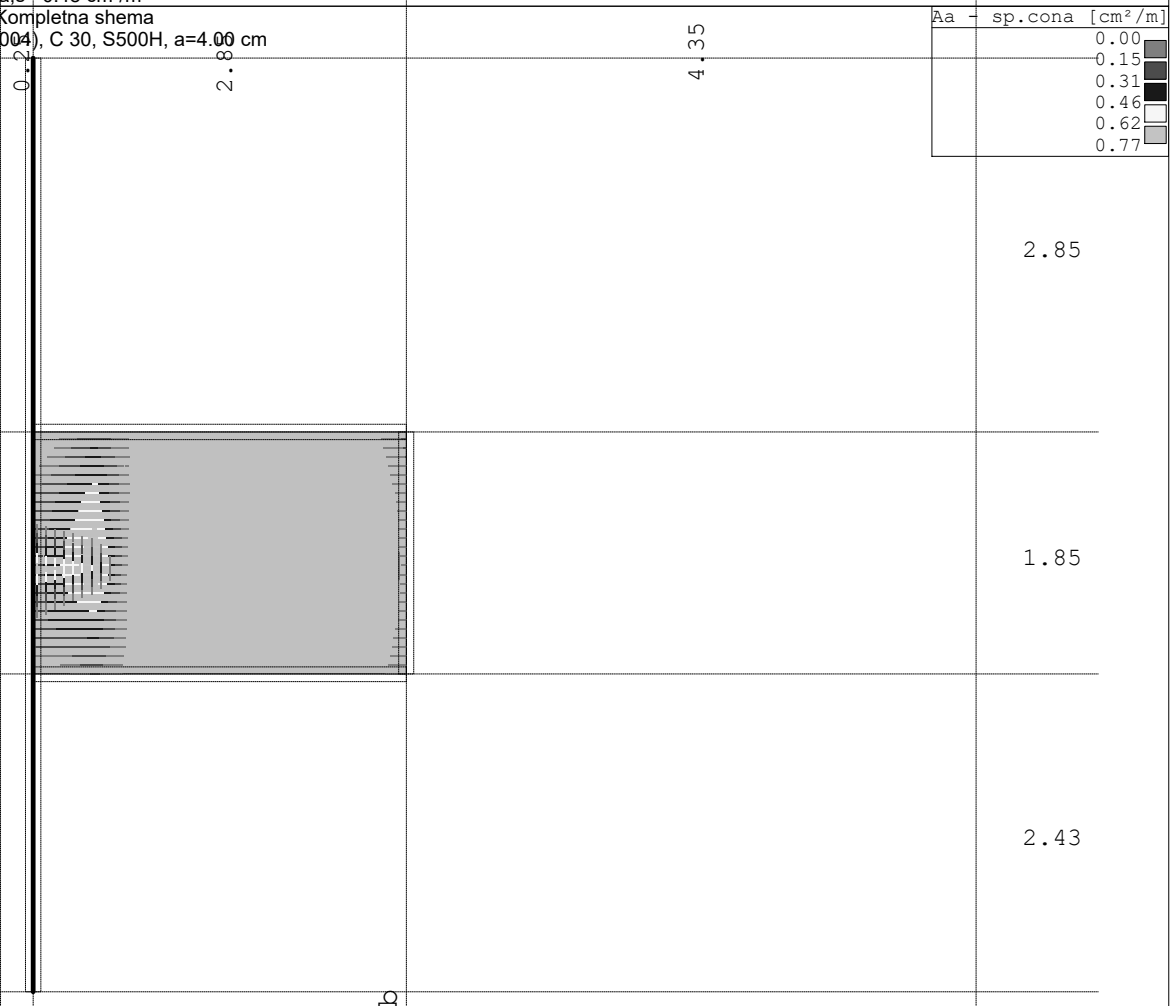
Dimenzioniranje (beton)

Merodajna obtežba: Kompletna shema
EC 2 (EN 1992-1-1:2004), C 30, S500H, a=4.00 cm



Nivo: plošča [9.55 m]
Aa - sp.cona - max Aa,s= 0.48 cm²/m

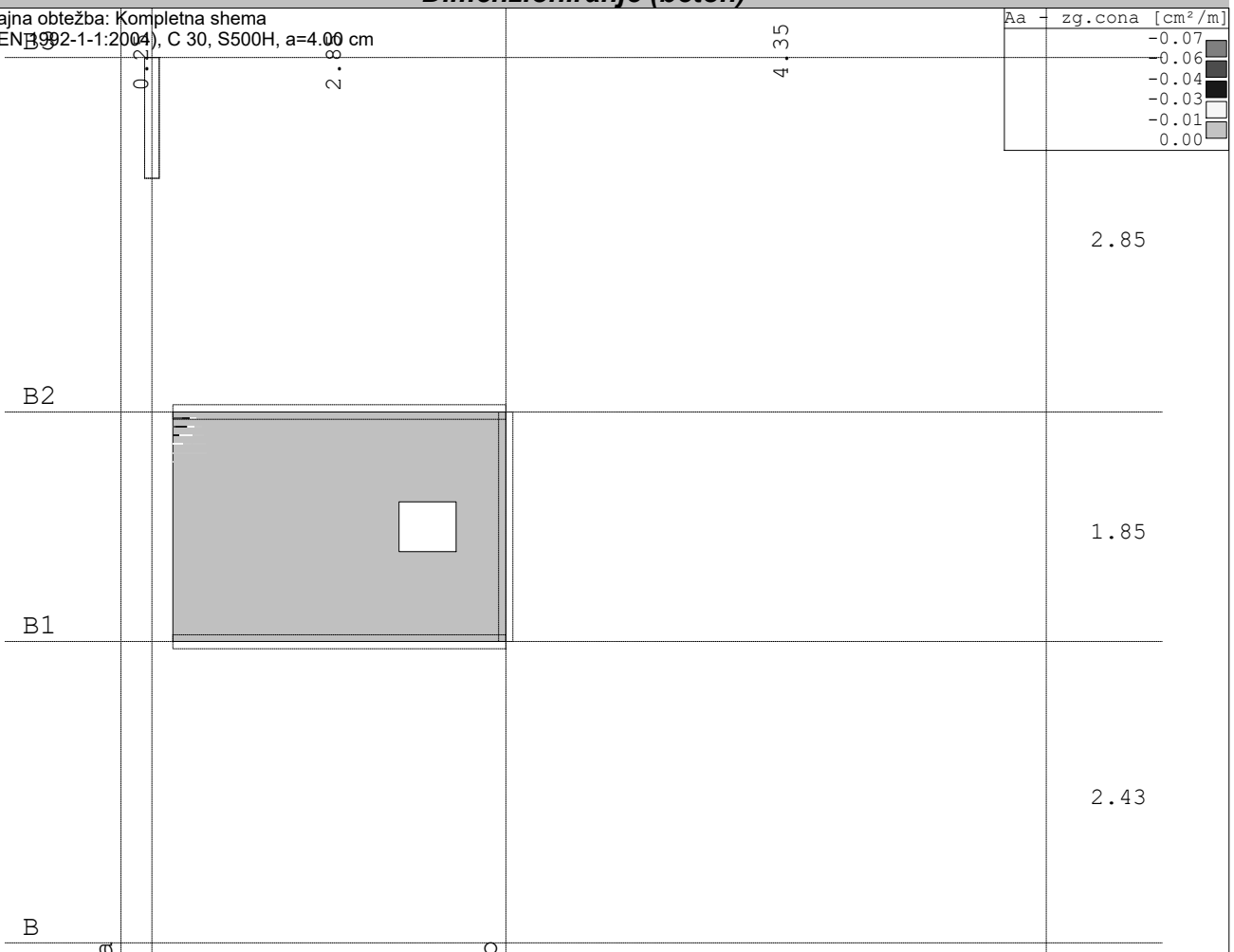
Merodajna obtežba: Kompletna shema
EC 2 (EN 1992-1-1:2004), C 30, S500H, a=4.00 cm



Nivo: temelj [0.00 m]
Aa - sp.cona - max Aa,s= 0.77 cm²/m

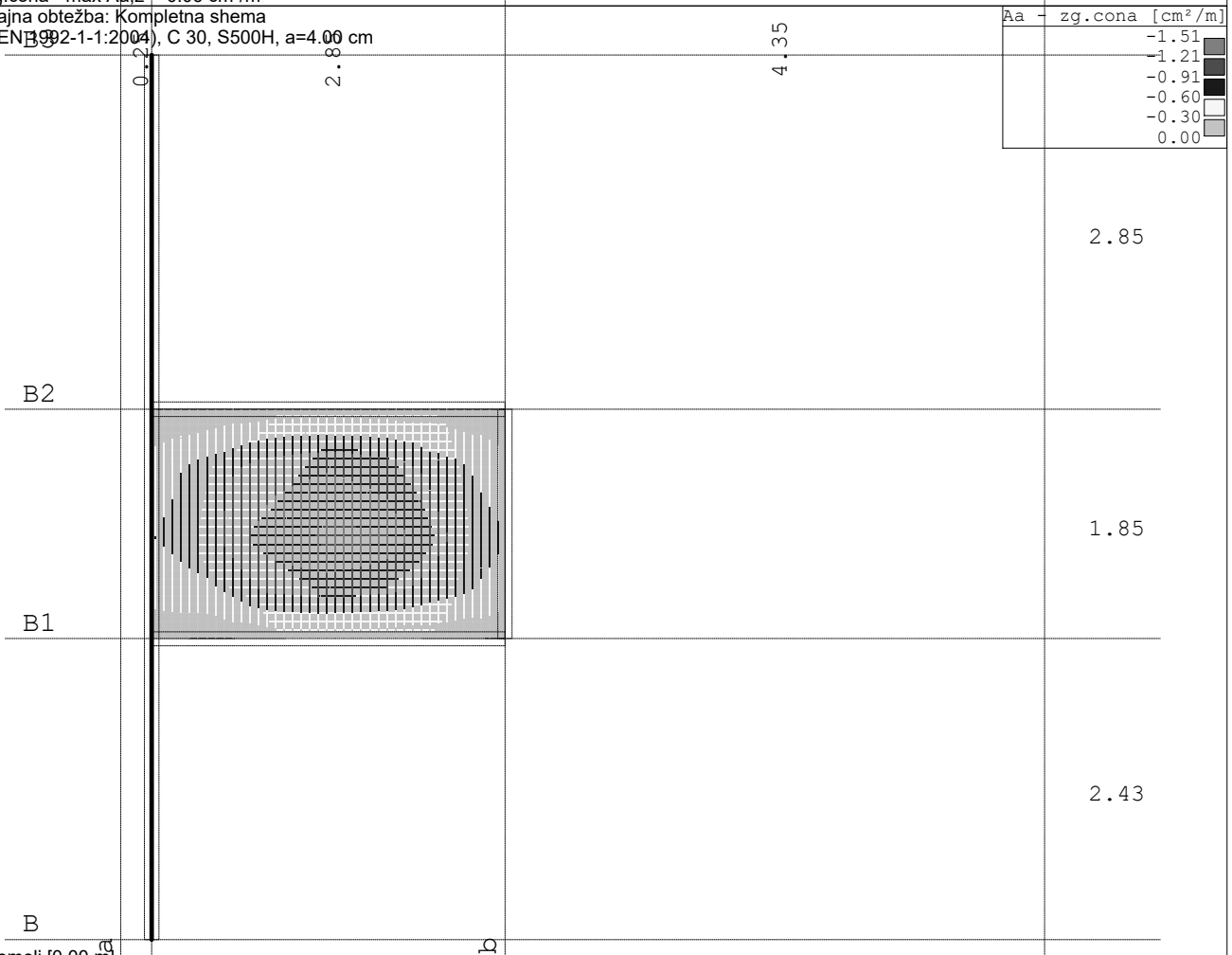
Dimenzioniranje (beton)

Merodajna obtežba: Kompletna shema
EC 2 (EN 1992-1-1:2004), C 30, S500H, a=4.00 cm



Nivo: plošča [9.55 m]
Aa - zg.cona - max Aa,z= -0.06 cm²/m

Merodajna obtežba: Kompletna shema
EC 2 (EN 1992-1-1:2004), C 30, S500H, a=4.00 cm



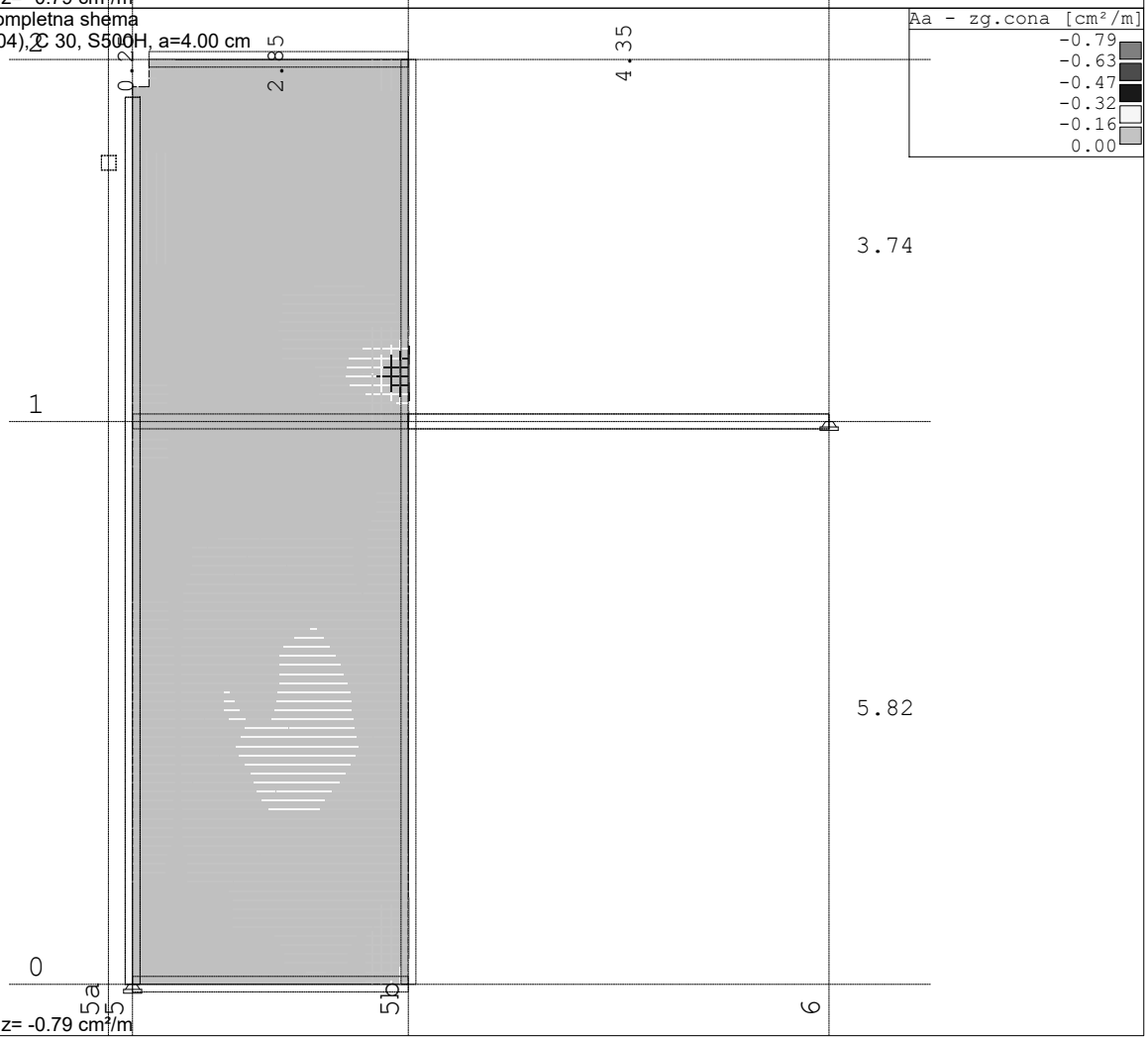
Nivo: temelj [0.00 m]
Aa - zg.cona - max Aa,z= -1.50 cm²/m

Dimenzioniranje (beton)

Merodajna obtežba: Kompletna shema
EC 2 (EN 1992-1-1:2004), C 30, S500H, a=4.00 cm

Okvir: st X1
Aa - zg.cona - max Aa,z= -0.79 cm²/m

Merodajna obtežba: Kompletna shema
EC 2 (EN 1992-1-1:2004), C 30, S500H, a=4.00 cm



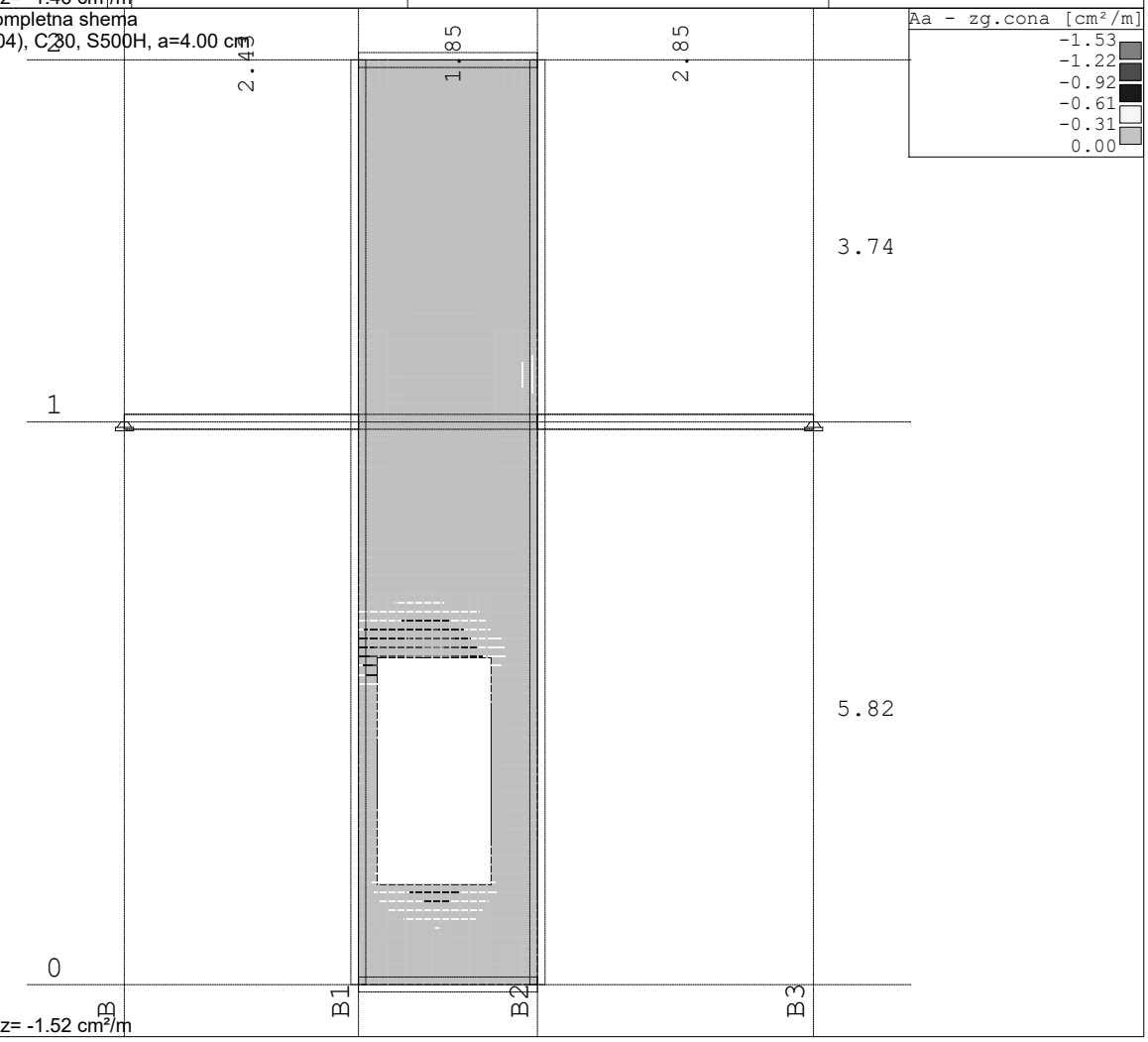
Okvir: st X1
Aa - zg.cona - max Aa,z= -0.79 cm²/m

Dimenzioniranje (beton)

Merodajna obtežba: Kompletna shema
EC 2 (EN 1992-1-1:2004), C 30, S500H, a=4.00 cm

Okvir: st X2
Aa - zg.cona - max Aa,z= -1.46 cm²/m

Merodajna obtežba: Kompletna shema
EC 2 (EN 1992-1-1:2004), C 30, S500H, a=4.00 cm



Okvir: st Y1
Aa - zg.cona - max Aa,z= -1.52 cm²/m