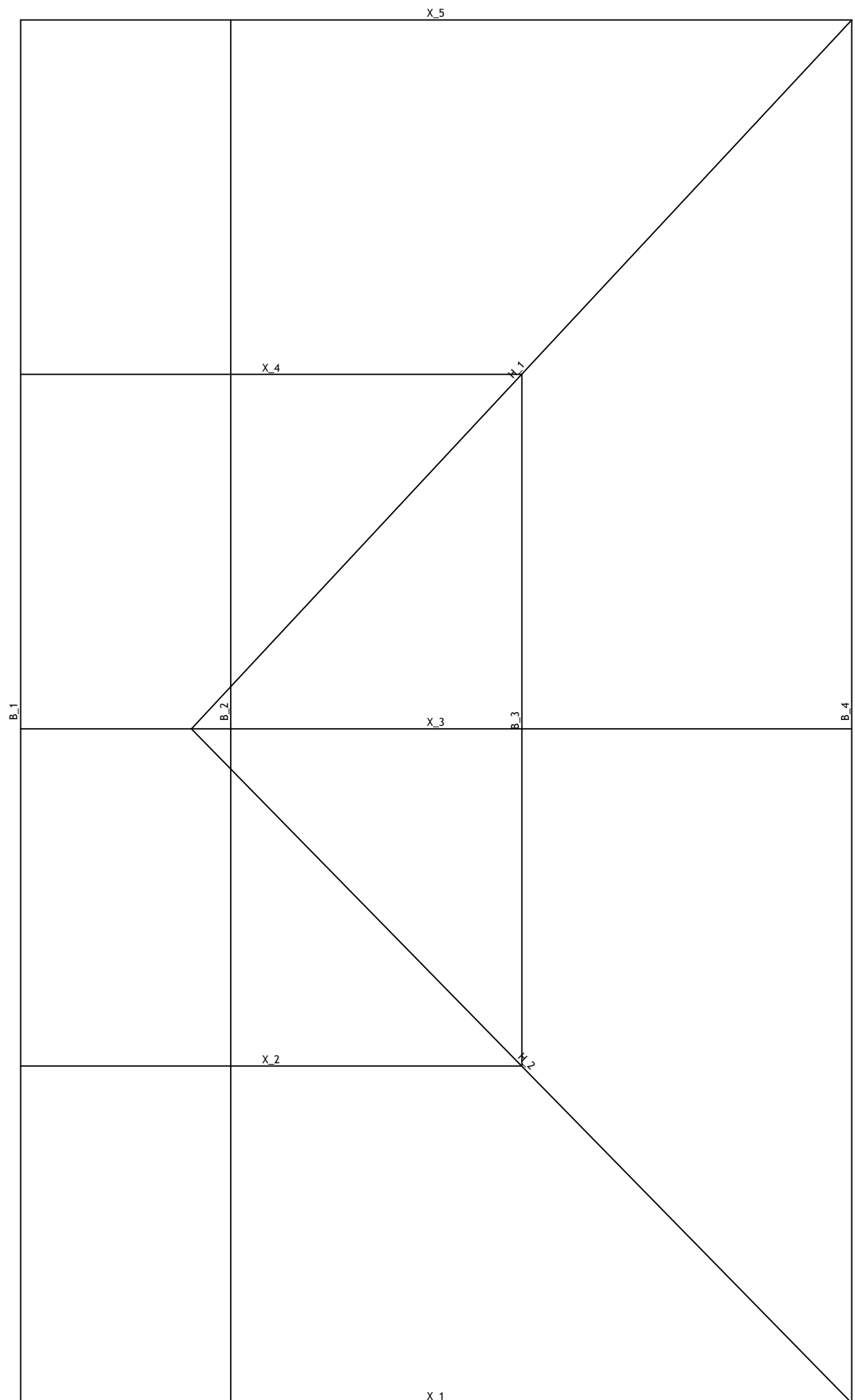
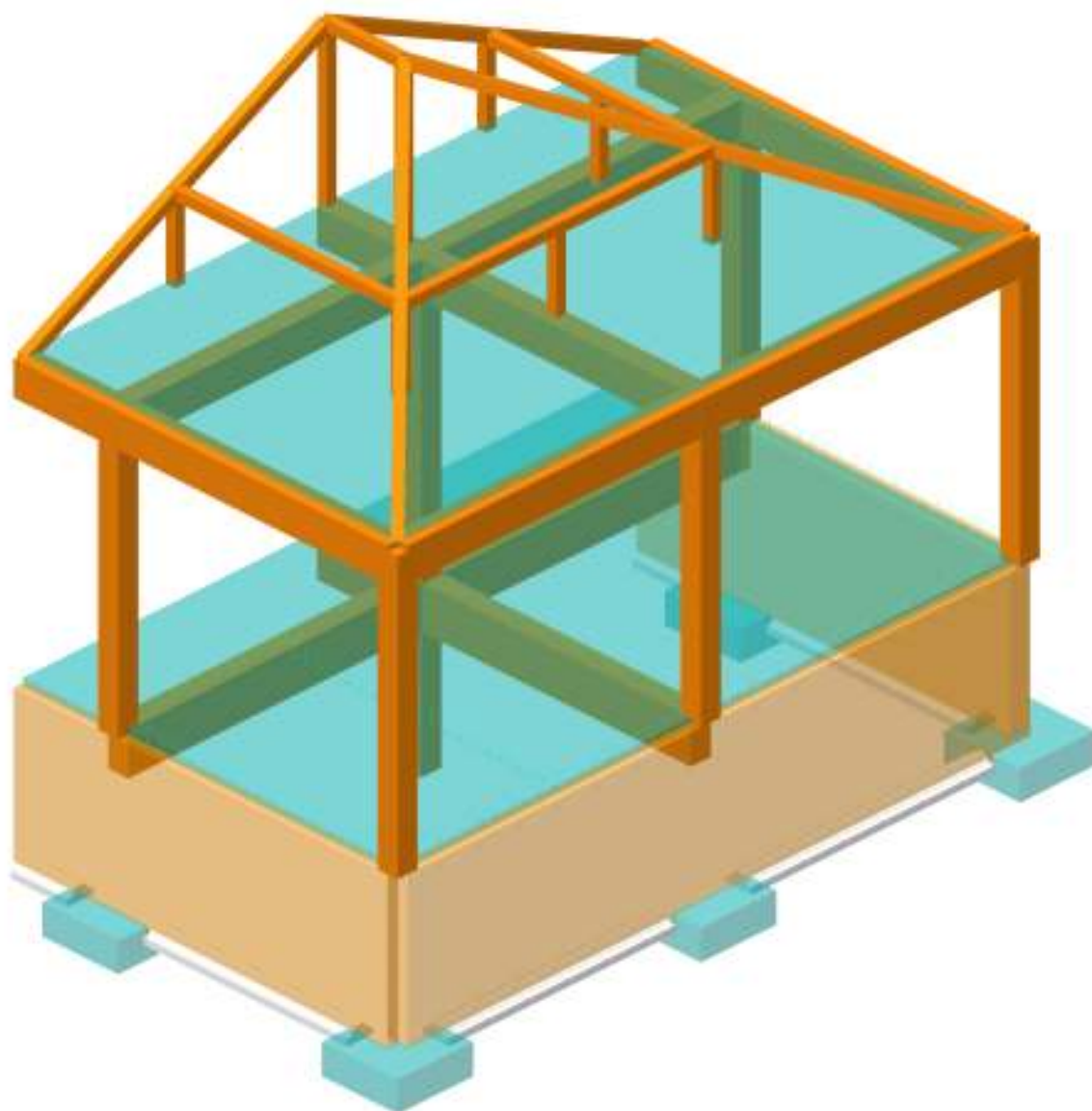
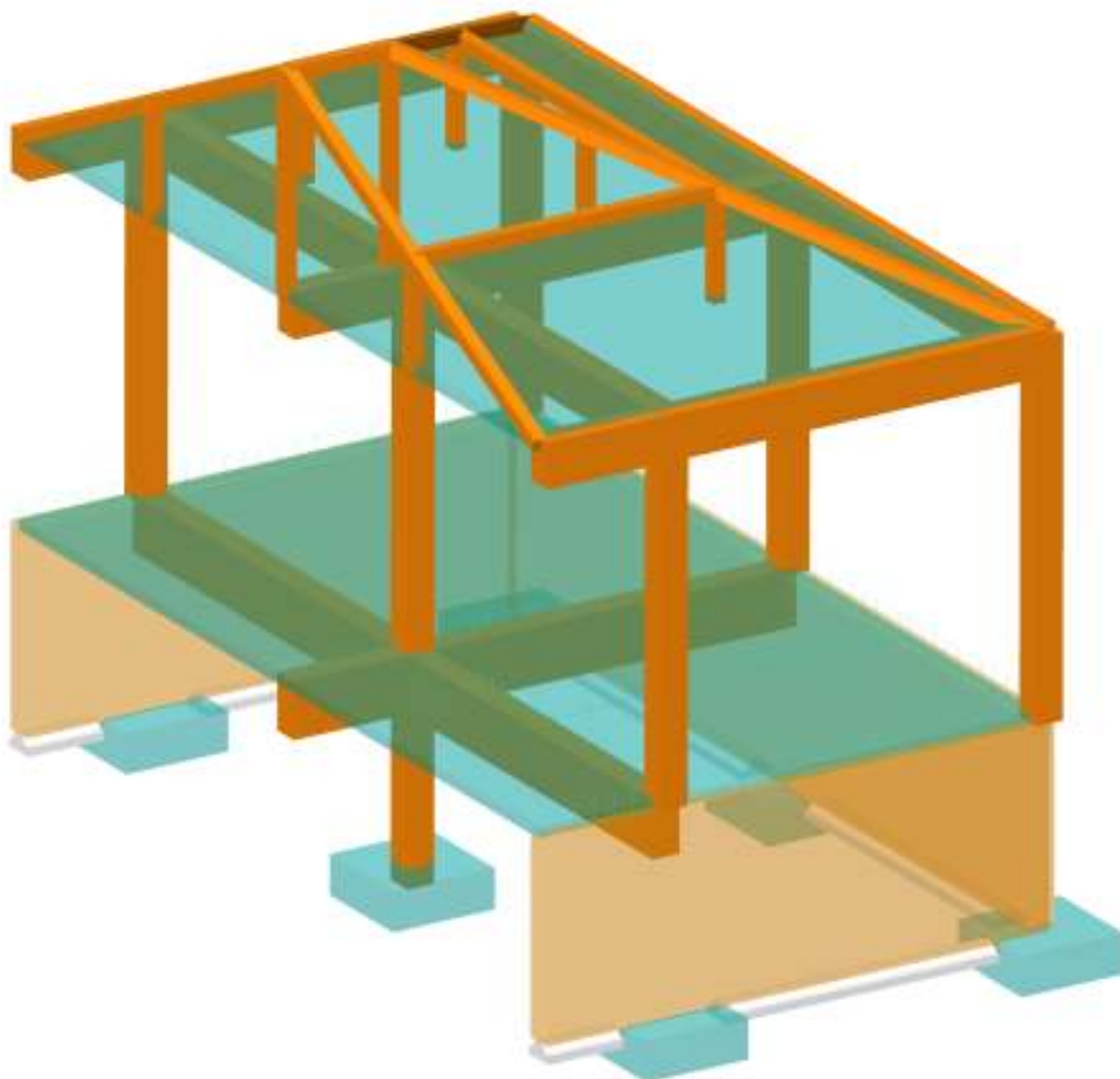
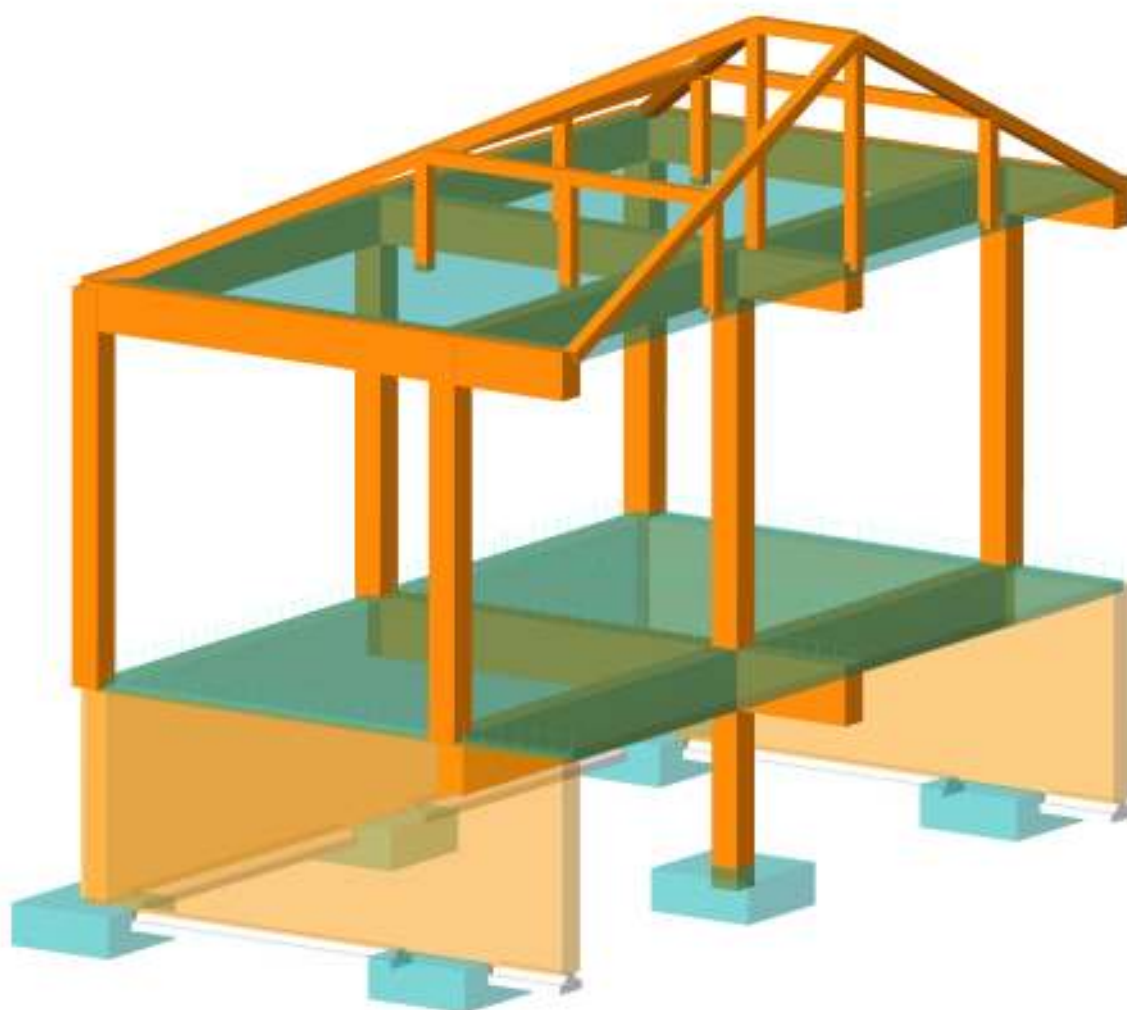
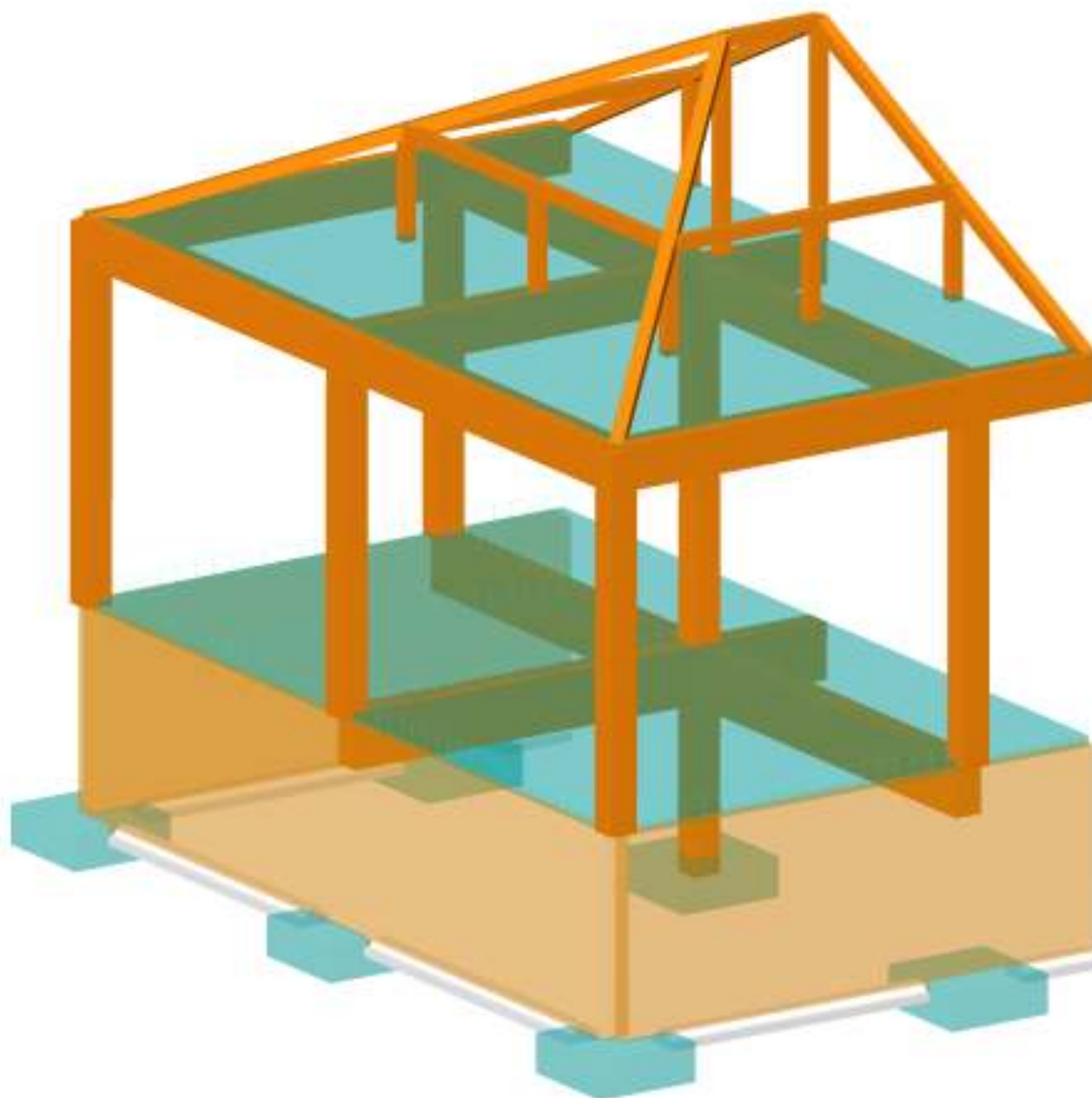




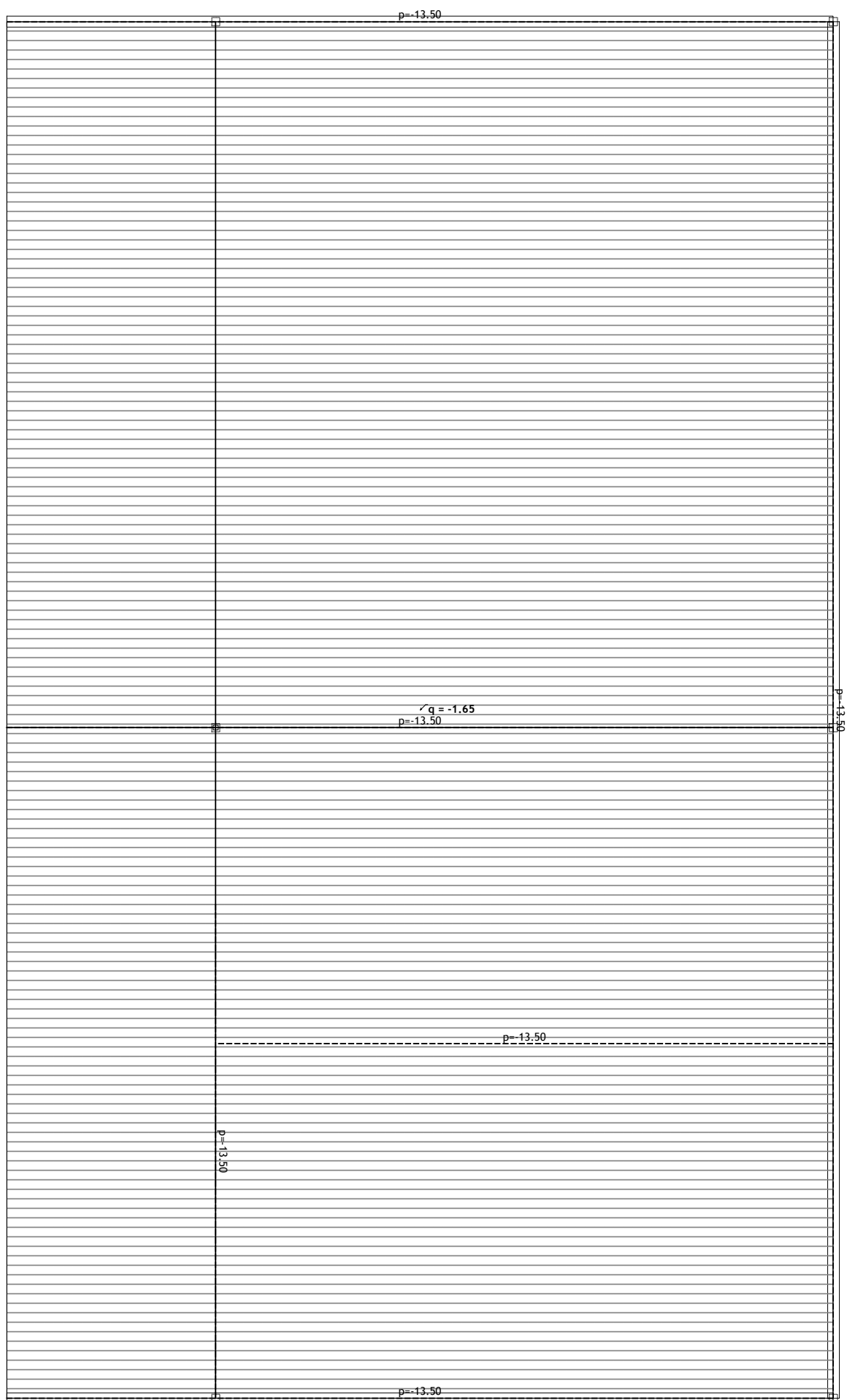




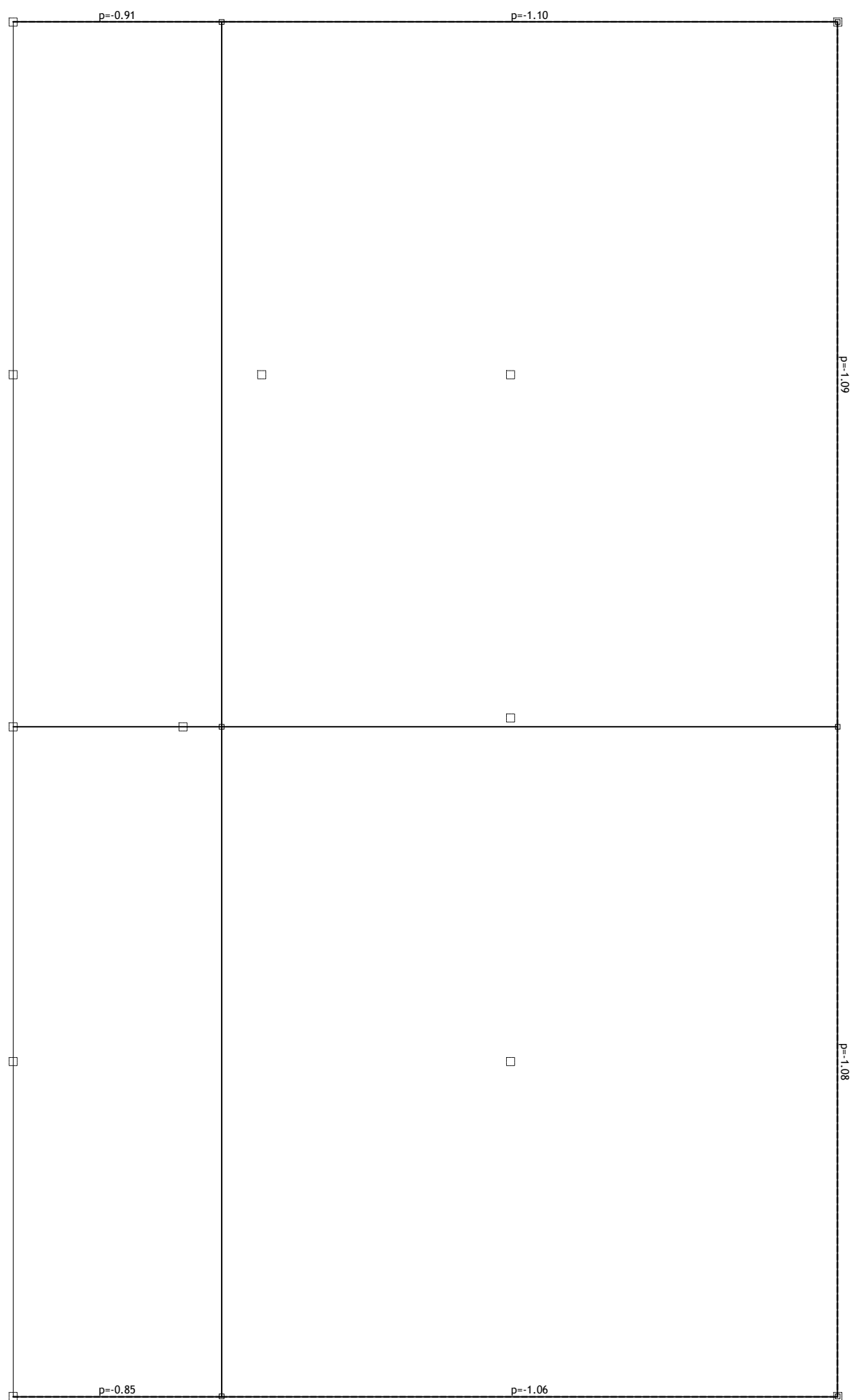




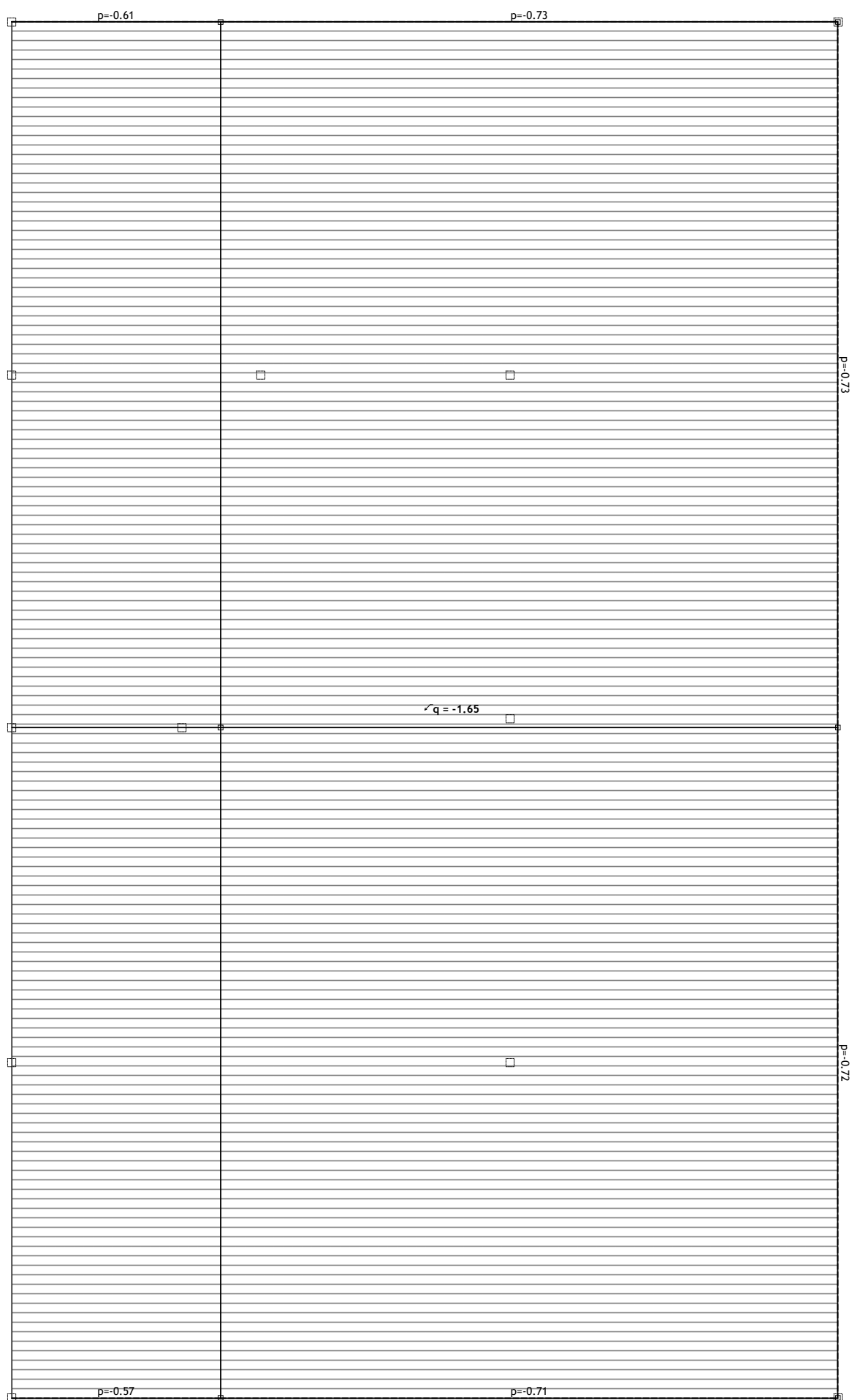


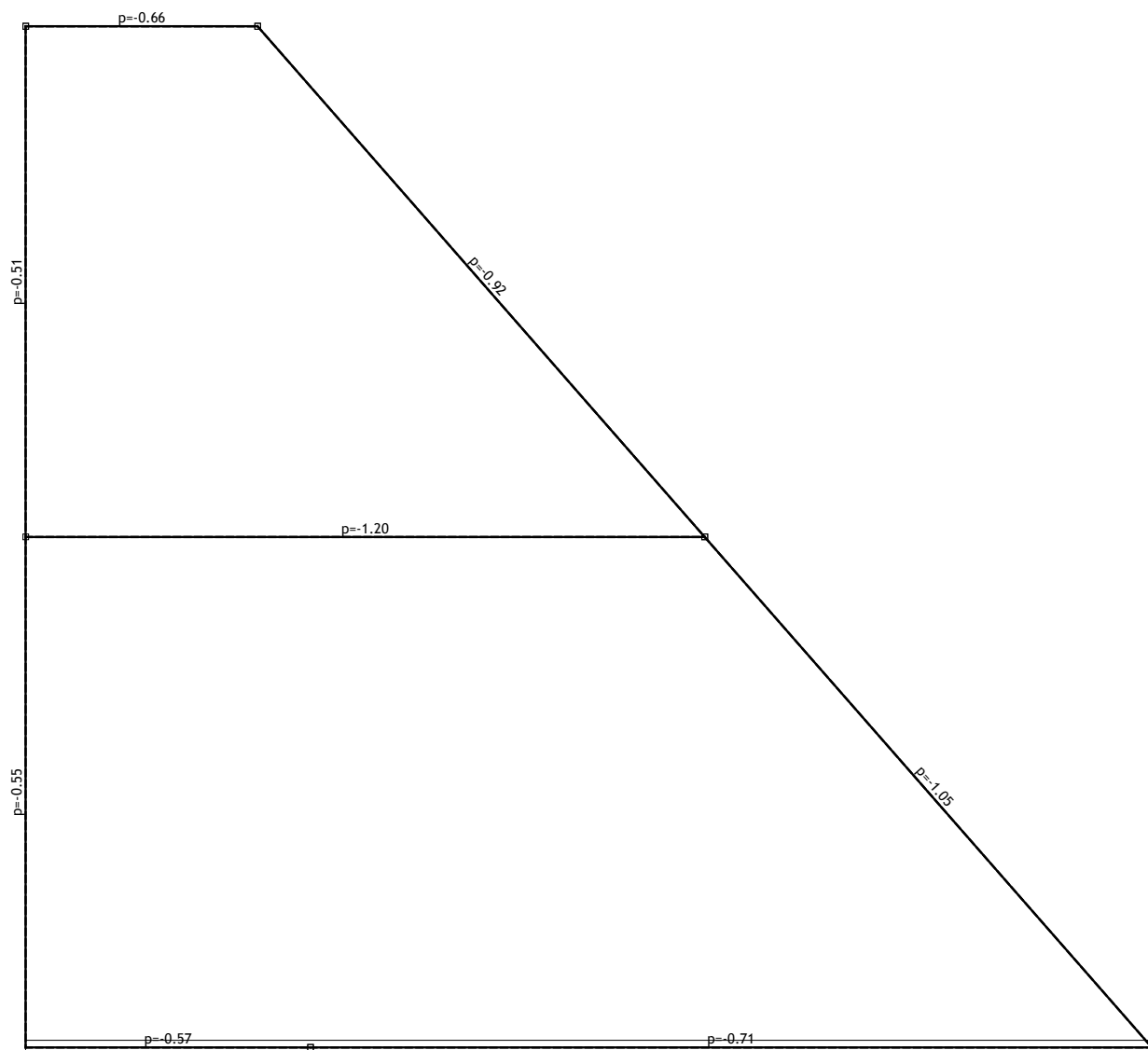


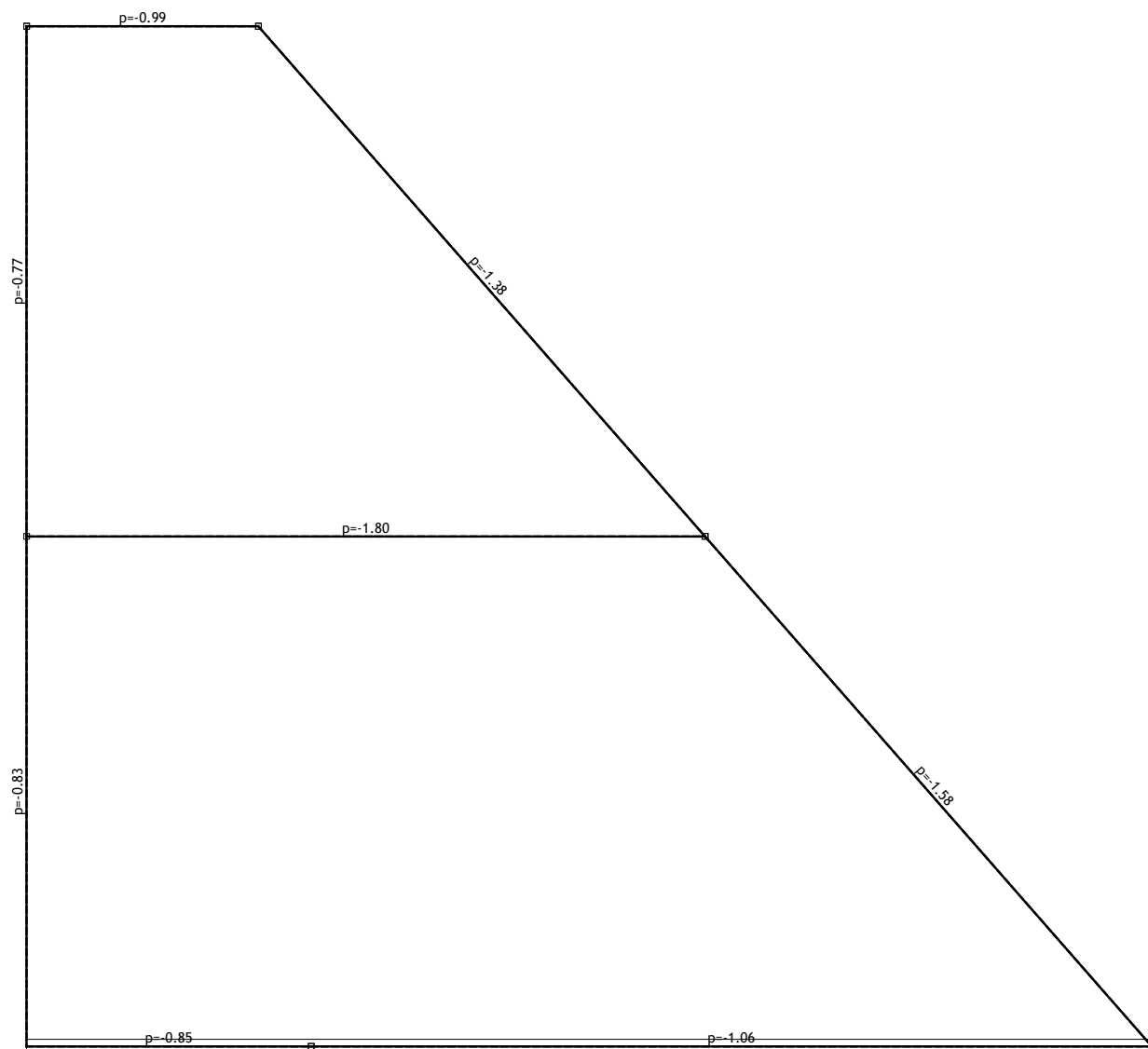
Ниво: [-0.06 m]

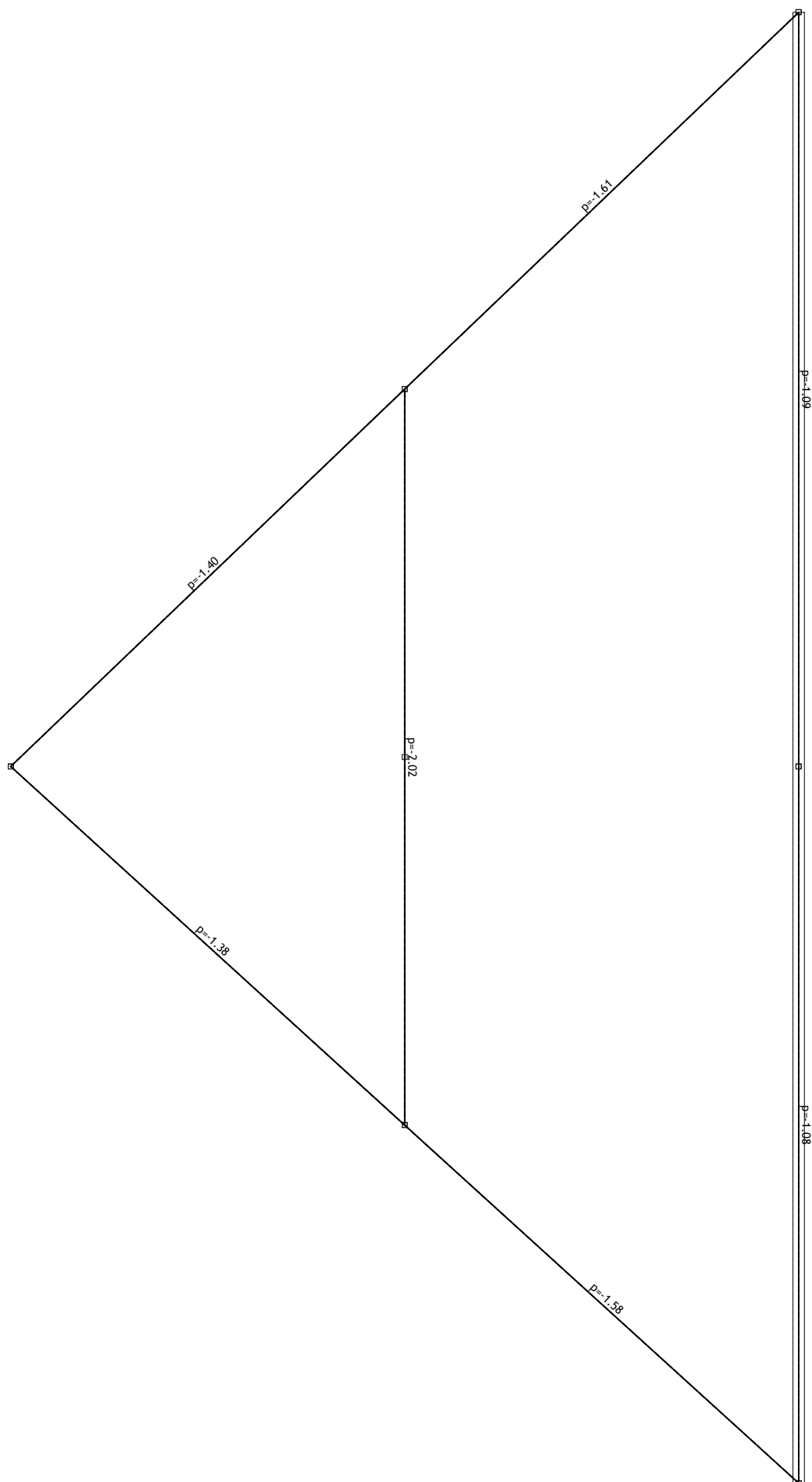


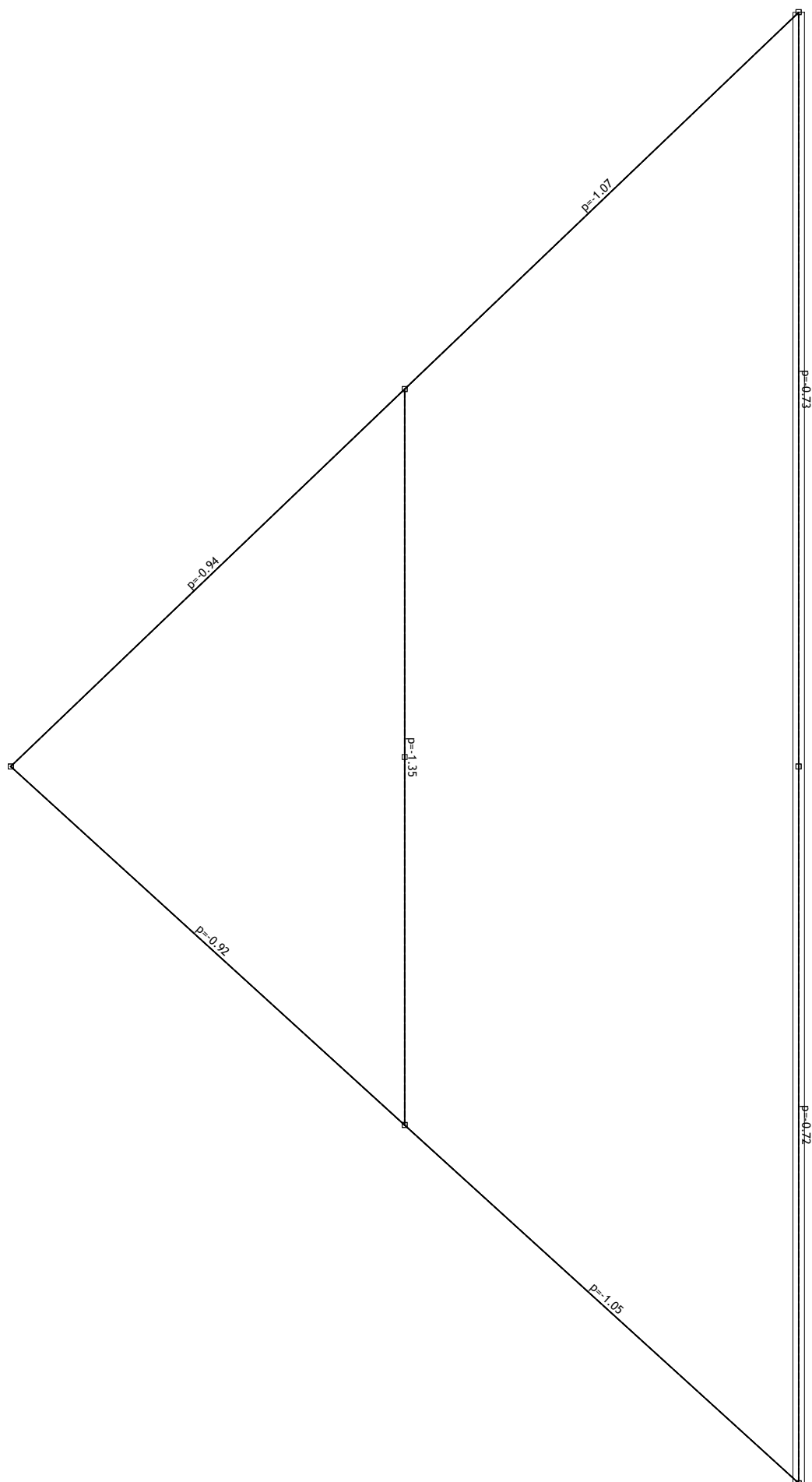


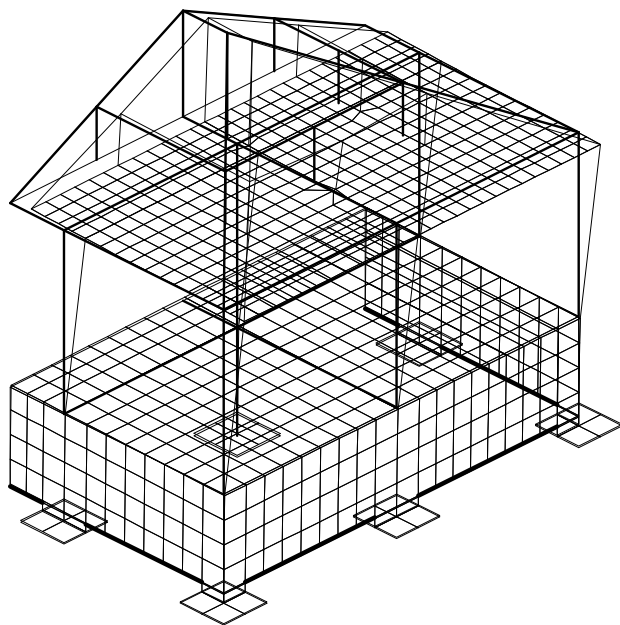




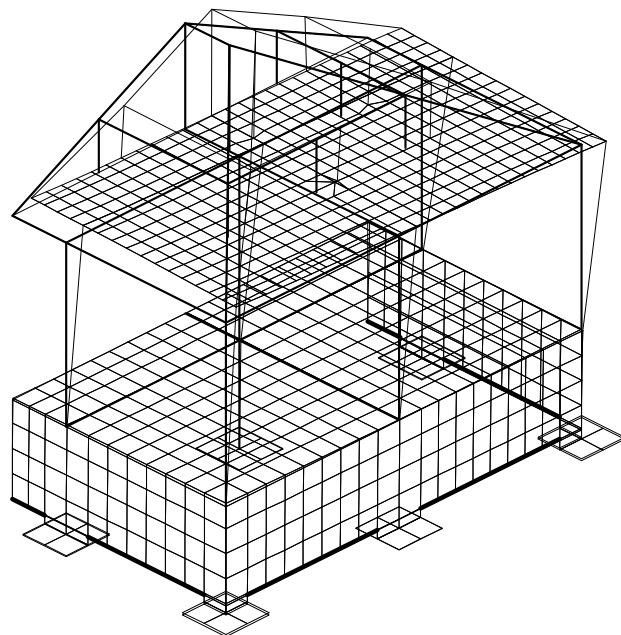




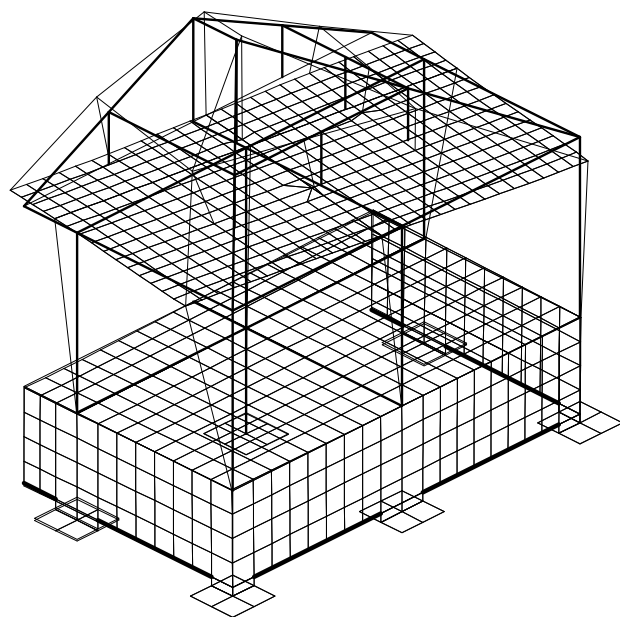




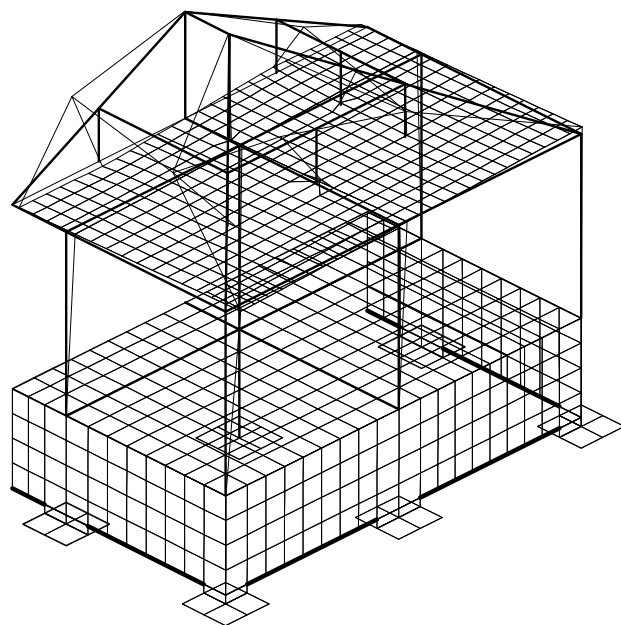
Изометрия  
Форма на трептене: 1/9 [T=0.2859сек / f=3.50Hz]



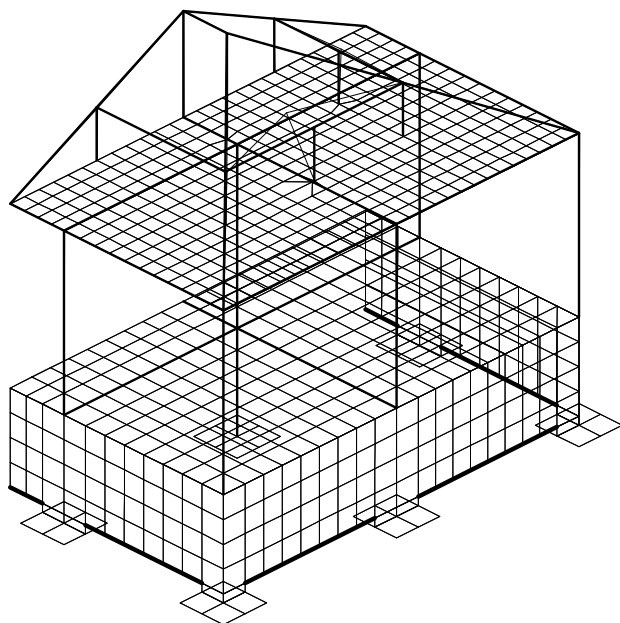
Изометрия  
Форма на трептене: 2/9 [T=0.2792сек / f=3.58Hz]



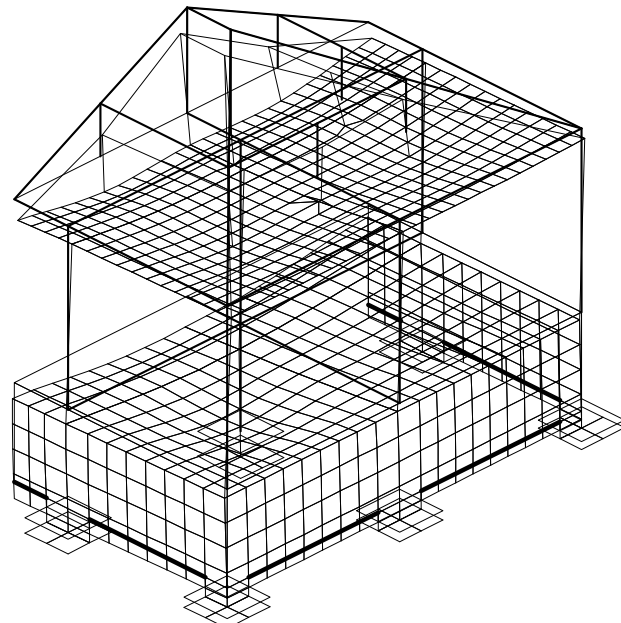
Изометрия  
Форма на трептене: 3/9 [T=0.2068сек / f=4.84Hz]



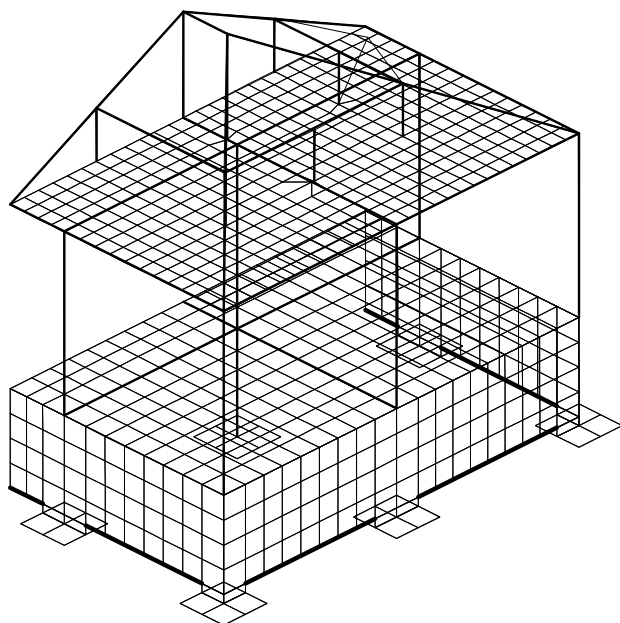
Изометрия  
Форма на трептене: 4/9 [T=0.1342сек / f=7.45Hz]



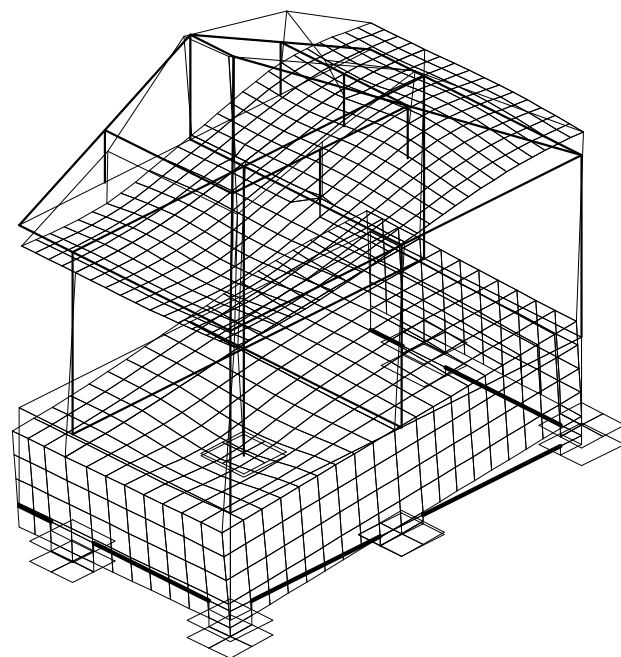
Изометрия  
Форма на трептене: 5/9 [T=0.1302сек / f=7.68Hz]



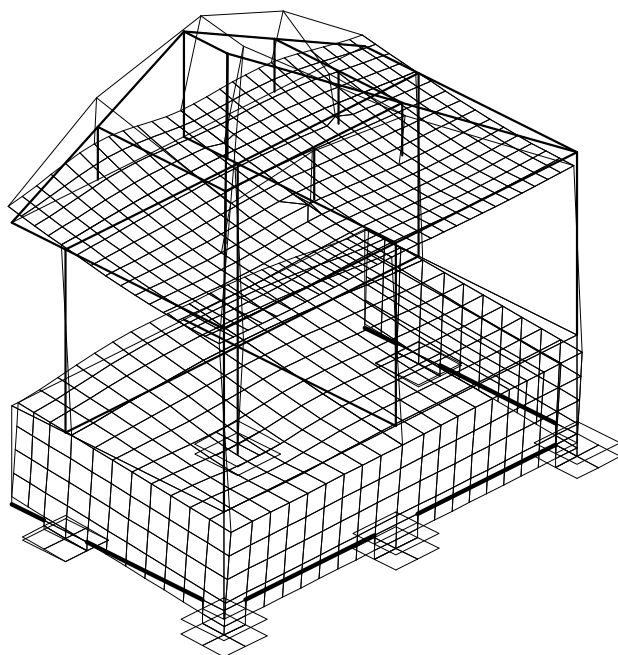
Изометрия  
Форма на трептене: 6/9 [T=0.1104сек / f=9.06Hz]



Изометрия  
Форма на трептене: 7/9 [T=0.0873сек / f=11.46Hz]



Изометрия  
Форма на трептене: 8/9 [T=0.0852сек / f=11.74Hz]



Изометрия  
Форма на трептене: 9/9 [T=0.0790сек / f=12.65Hz]

#### Сеизмичен анализ - допълнителни опции:

Коефициент за коравина на опори: 3.500

| Фактори на натоварване за изчисление на масите |                      |            |
|------------------------------------------------|----------------------|------------|
| No                                             | Наименование         | Коефициент |
| 1                                              | Собствено тегло (g)  | 1.00       |
| 2                                              | Постоянен товар      | 1.00       |
| 3                                              | Есплоатационен товар | 0.50       |
| 4                                              | Сняг                 | 0.80       |

| Разпределение на масите по височината на обекта |       |       |       |          |      |
|-------------------------------------------------|-------|-------|-------|----------|------|
| Ниво                                            | Z [m] | X [m] | Y [m] | Маса [T] | T/m2 |
|                                                 | 3.24  | 3.99  | 1.12  | 36.84    | 1.01 |
|                                                 | -0.06 | 4.36  | 0.86  | 72.10    | 1.97 |
|                                                 | -2.00 | 4.57  | 1.10  | 32.65    | 6.03 |
| Общо:                                           | 0.35  | 4.31  | 0.98  | 141.60   |      |

| Положение център на коравините |       |       |       |
|--------------------------------|-------|-------|-------|
| Ниво                           | Z [m] | X [m] | Y [m] |
|                                | 3.24  | 4.42  | 1.10  |
|                                | -0.06 | 6.22  | 1.13  |
|                                | -2.00 | 5.84  | 1.13  |

| Ексцентрицитет по нивата |       |         |         |
|--------------------------|-------|---------|---------|
| Ниво                     | Z [m] | eox [m] | eoy [m] |
|                          | 3.24  | 0.43    | 0.02    |
|                          | -0.06 | 1.86    | 0.27    |
|                          | -2.00 | 1.27    | 0.02    |

| Периоди на трептене на конструкцията |        |        |
|--------------------------------------|--------|--------|
| No                                   | T [s]  | f [Hz] |
| 1                                    | 0.2859 | 3.4981 |
| 2                                    | 0.2792 | 3.5823 |
| 3                                    | 0.2068 | 4.8352 |
| 4                                    | 0.1342 | 7.4489 |

| No | T [s]  | f [Hz] |
|----|--------|--------|
| 5  | 0.1302 | 7.6792 |
| 6  | 0.1104 | 9.0603 |

| No | T [s]  | f [Hz]  |
|----|--------|---------|
| 7  | 0.0873 | 11.4573 |
| 8  | 0.0852 | 11.7379 |
| 9  | 0.0790 | 12.6538 |

# Изчисление - Сеизмичност

Изчисление - Сеизмичност: БДС НПССЗР - 2007

Почва категория: C  
 Сеизмична зона: IX  
 Обект категория: II (C=1.0)  
 Коеф. на реагиране: 0.3  
 Коефициент на затихване: 0.05

## Ъгъл на действие на земетресението:

| Наименование | Kx    | Ky    | Kz    |
|--------------|-------|-------|-------|
|              | 1.000 | 0.000 | 0.000 |
|              | 0.000 | 1.000 | 0.000 |

| Ниво | Z [m] | Форма 1 |         |         | Форма 2 |         |         | Форма 3 |         |         |
|------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|      |       | Px [kN] | Py [kN] | Pz [kN] | Px [kN] | Py [kN] | Pz [kN] | Px [kN] | Py [kN] | Pz [kN] |
|      | 3.24  | 79.20   | 2.01    | 3.17    | 0.06    | -2.33   | 0.00    | 0.00    | 0.17    | 0.00    |
|      | -0.06 | 8.66    | 0.17    | 2.47    | 0.01    | -0.21   | -0.01   | 0.01    | -0.03   | 0.01    |
|      | -2.00 | 0.13    | 0.00    | 0.42    | 0.00    | -0.00   | -0.00   | 0.00    | -0.00   | 0.00    |
|      | Σ=    | 88.00   | 2.18    | 6.06    | 0.08    | -2.55   | -0.01   | 0.01    | 0.14    | 0.01    |

| Ниво | Z [m] | Форма 4 |         |         | Форма 5 |         |         | Форма 6 |         |         |
|------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|      |       | Px [kN] | Py [kN] | Pz [kN] | Px [kN] | Py [kN] | Pz [kN] | Px [kN] | Py [kN] | Pz [kN] |
|      | 3.24  | 0.01    | 0.09    | -0.02   | 0.16    | -0.04   | -0.01   | -0.23   | -0.02   | 1.57    |
|      | -0.06 | 0.01    | 0.00    | -0.00   | 0.07    | -0.01   | -0.01   | 0.32    | 0.03    | 2.38    |
|      | -2.00 | 0.00    | 0.00    | -0.00   | 0.00    | -0.00   | -0.00   | 0.00    | 0.00    | 0.89    |
|      | Σ=    | 0.01    | 0.09    | -0.03   | 0.23    | -0.05   | -0.01   | 0.10    | 0.01    | 4.83    |

| Ниво | Z [m] | Форма 7 |         |         | Форма 8 |         |         | Форма 9 |         |         |
|------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|      |       | Px [kN] | Py [kN] | Pz [kN] | Px [kN] | Py [kN] | Pz [kN] | Px [kN] | Py [kN] | Pz [kN] |
|      | 3.24  | -0.00   | -0.00   | -0.01   | 0.00    | -0.07   | -0.09   | -4.17   | 0.25    | -3.51   |
|      | -0.06 | 0.01    | -0.03   | -0.03   | 0.01    | 0.34    | 0.01    | 20.29   | -2.83   | -12.51  |
|      | -2.00 | 0.00    | -0.00   | -0.01   | -0.00   | 0.01    | -0.03   | 0.32    | -0.04   | -7.26   |
|      | Σ=    | 0.00    | -0.03   | -0.04   | 0.01    | 0.28    | -0.11   | 16.44   | -2.62   | -23.28  |

| Ниво | Z [m] | Всички форми |         |         |
|------|-------|--------------|---------|---------|
|      |       | Px [kN]      | Py [kN] | Pz [kN] |
|      | 3.24  | 75.04        | 0.07    | 1.12    |
|      | -0.06 | 29.38        | -2.58   | -7.68   |
|      | -2.00 | 0.46         | -0.03   | -6.00   |
|      | Σ=    | 104.88       | -2.55   | -12.57  |

| Ниво | Z [m] | Форма 1 |         |         | Форма 2 |         |         | Форма 3 |         |         |
|------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|      |       | Px [kN] | Py [kN] | Pz [kN] | Px [kN] | Py [kN] | Pz [kN] | Px [kN] | Py [kN] | Pz [kN] |
|      | 3.24  | 1.96    | 0.05    | 0.08    | -2.08   | 74.91   | -0.04   | 0.05    | 2.62    | 0.06    |
|      | -0.06 | 0.21    | 0.00    | 0.06    | -0.46   | 6.84    | 0.20    | 0.09    | -0.47   | 0.15    |
|      | -2.00 | 0.00    | 0.00    | 0.01    | -0.00   | 0.09    | 0.00    | 0.00    | -0.00   | 0.01    |
|      | Σ=    | 2.18    | 0.05    | 0.15    | -2.55   | 81.85   | 0.16    | 0.14    | 2.15    | 0.22    |

| Ниво | Z [m] | Форма 4 |         |         | Форма 5 |         |         | Форма 6 |         |         |
|------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|      |       | Px [kN] | Py [kN] | Pz [kN] | Px [kN] | Py [kN] | Pz [kN] | Px [kN] | Py [kN] | Pz [kN] |
|      | 3.24  | 0.05    | 0.61    | -0.12   | -0.03   | 0.01    | 0.00    | -0.01   | -0.00   | 0.10    |
|      | -0.06 | 0.04    | 0.01    | -0.02   | -0.01   | 0.00    | 0.00    | 0.02    | 0.00    | 0.16    |
|      | -2.00 | 0.00    | 0.00    | -0.02   | -0.00   | 0.00    | 0.00    | 0.00    | 0.00    | 0.06    |
|      | Σ=    | 0.09    | 0.61    | -0.17   | -0.05   | 0.01    | 0.00    | 0.01    | 0.00    | 0.32    |

| Ниво | Z [m] | Форма 7 |         |         | Форма 8 |         |         | Форма 9 |         |         |
|------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|      |       | Px [kN] | Py [kN] | Pz [kN] | Px [kN] | Py [kN] | Pz [kN] | Px [kN] | Py [kN] | Pz [kN] |
|      | 3.24  | 0.03    | 0.01    | 0.05    | 0.11    | -1.93   | -2.59   | 0.66    | -0.04   | 0.56    |
|      | -0.06 | -0.06   | 0.27    | 0.24    | 0.16    | 9.91    | 0.23    | -3.23   | 0.45    | 1.99    |
|      | -2.00 | -0.00   | 0.00    | 0.10    | -0.00   | 0.16    | -1.02   | -0.05   | 0.01    | 1.16    |
|      | Σ=    | -0.03   | 0.28    | 0.39    | 0.28    | 8.14    | -3.38   | -2.62   | 0.42    | 3.71    |

| Ниво | Z [m] | Всички форми |         |         |
|------|-------|--------------|---------|---------|
|      |       | Px [kN]      | Py [kN] | Pz [kN] |
|      | 3.24  | 0.75         | 76.24   | -1.91   |
|      | -0.06 | -3.24        | 17.01   | 3.00    |
|      | -2.00 | -0.05        | 0.26    | 0.30    |
|      | Σ=    | -2.55        | 93.50   | 1.40    |

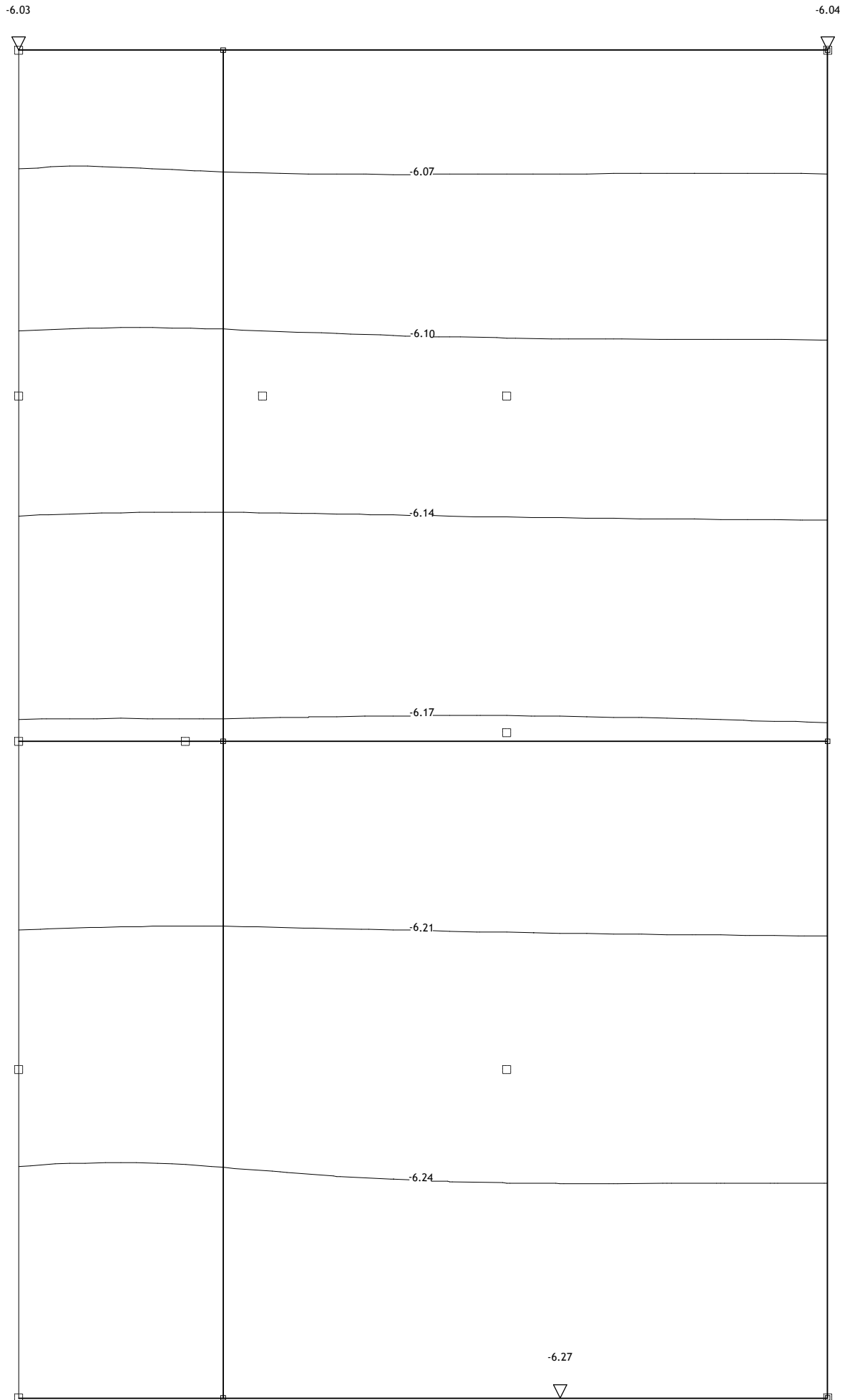
## Коефициент на участие - относително участие

| Форма \ Наименование | 1.    | 2.    |
|----------------------|-------|-------|
| 1                    | 0.839 | 0.001 |
| 2                    | 0.001 | 0.875 |
| 3                    | 0.000 | 0.023 |
| 4                    | 0.000 | 0.007 |
| 5                    | 0.002 | 0.000 |
| 6                    | 0.001 | 0.000 |
| 7                    | 0.000 | 0.003 |
| 8                    | 0.000 | 0.087 |
| 9                    | 0.157 | 0.004 |

## Коефициент на участие - активирана маса

| Форма | UX (%) | UY (%) | UZ (%) | ΣUX (%) | ΣUY (%) | ΣUZ (%) |
|-------|--------|--------|--------|---------|---------|---------|
| 1     | 31.29  | 0.02   | 0.15   | 31.29   | 0.02    | 0.15    |
| 2     | 0.03   | 29.11  | 0.00   | 31.32   | 29.13   | 0.15    |
| 3     | 0.00   | 0.76   | 0.01   | 31.32   | 29.89   | 0.16    |
| 4     | 0.00   | 0.22   | 0.02   | 31.33   | 30.11   | 0.17    |
| 5     | 0.08   | 0.00   | 0.00   | 31.41   | 30.11   | 0.17    |
| 6     | 0.04   | 0.00   | 81.62  | 31.45   | 30.11   | 81.80   |
| 7     | 0.00   | 0.10   | 0.19   | 31.45   | 30.21   | 81.99   |
| 8     | 0.00   | 2.89   | 0.50   | 31.45   | 33.10   | 82.49   |
| 9     | 5.85   | 0.15   | 11.72  | 37.30   | 33.25   | 94.21   |

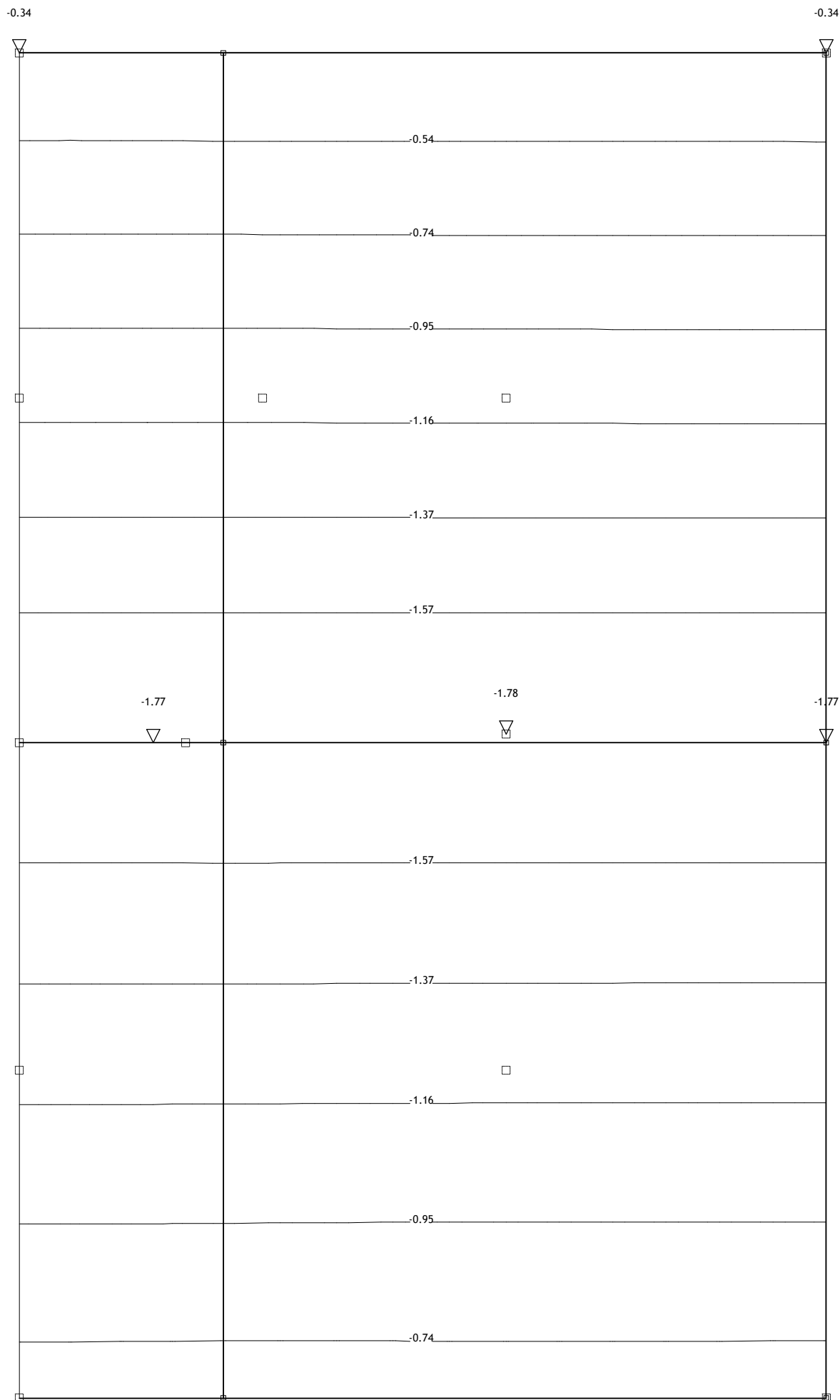
Натов. 10: I+II+III+IV-1xV



Ниво: [3.24 m]

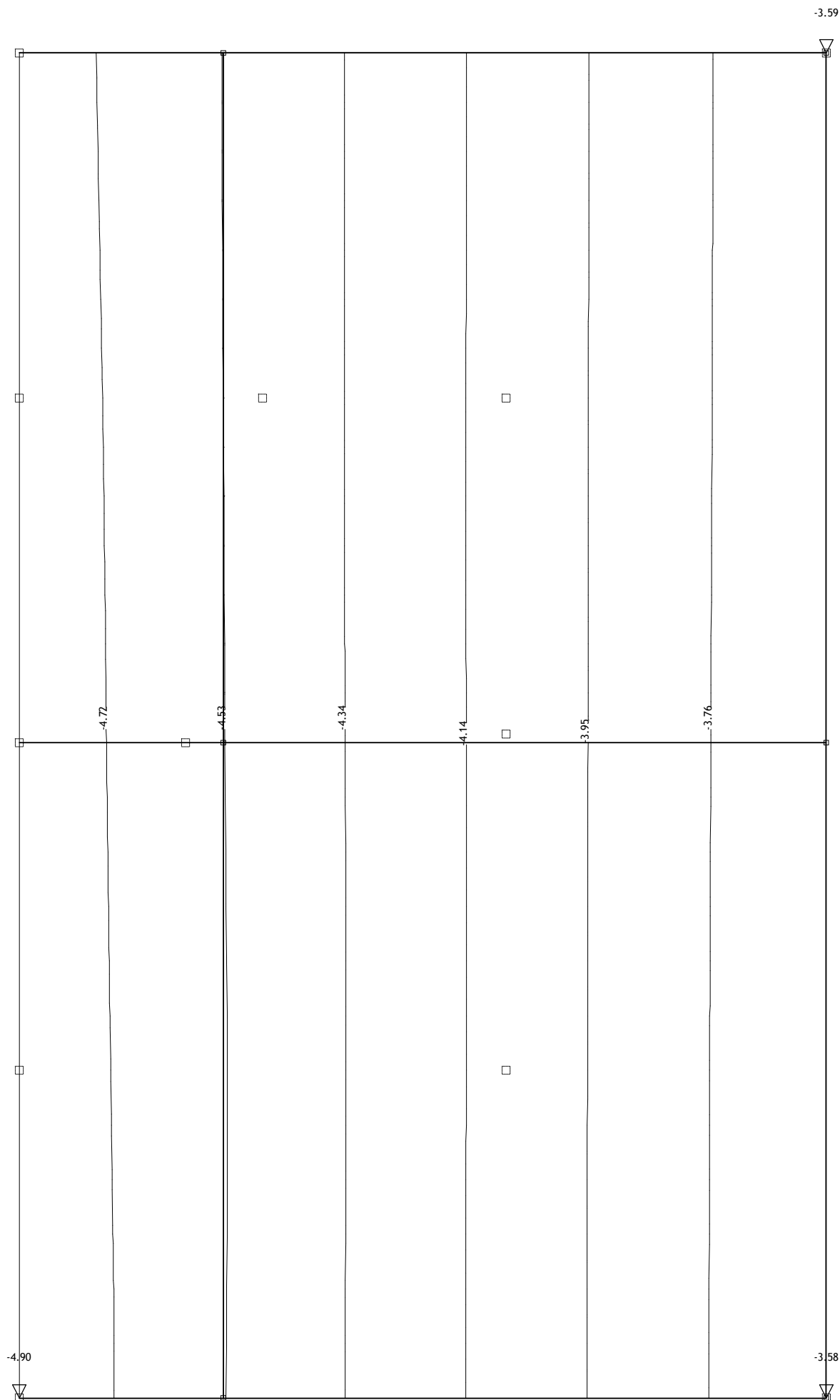
Влияния в плочата: max  $X_0 = -6.03$  / min  $X_0 = -6.27$  m / 1000

Натов. 11: I+II+III+IV+VI



Ниво: [3.24 m]

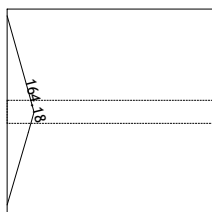
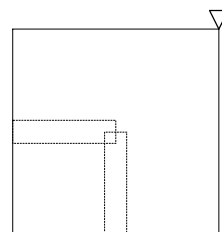
Влияния в плочата: max X<sub>0</sub>= -0.34 / min X<sub>0</sub>= -1.78 m / 1000



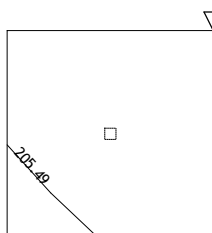
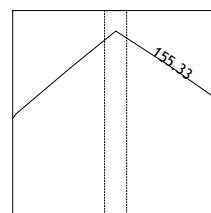
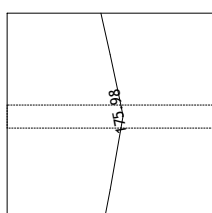
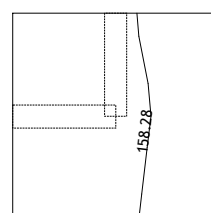
Ниво: [3.24 m]

Влияния в плочата: max  $Y_0 = -3.58$  / min  $Y_0 = -4.90$  m / 1000

149.44

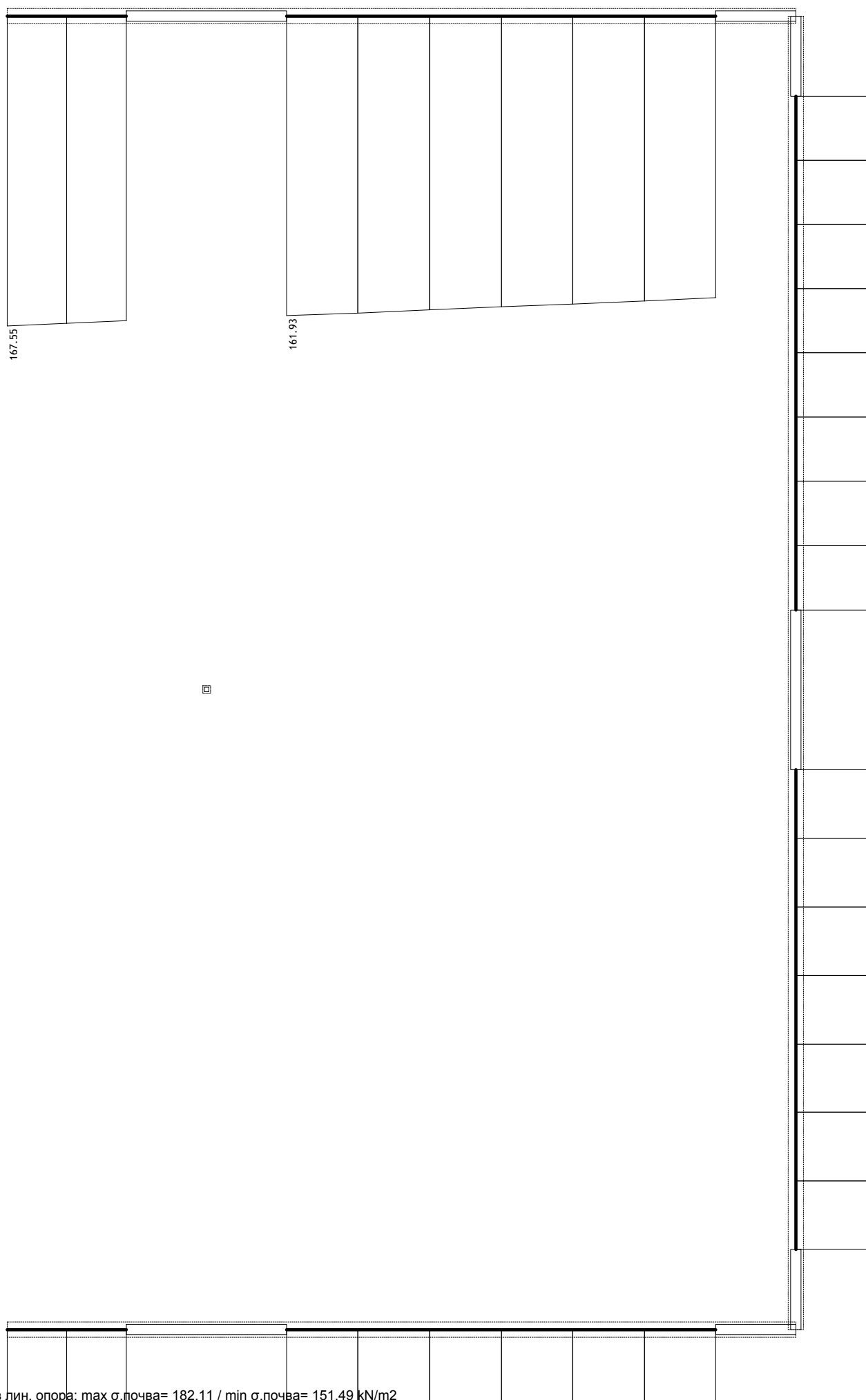


208.43



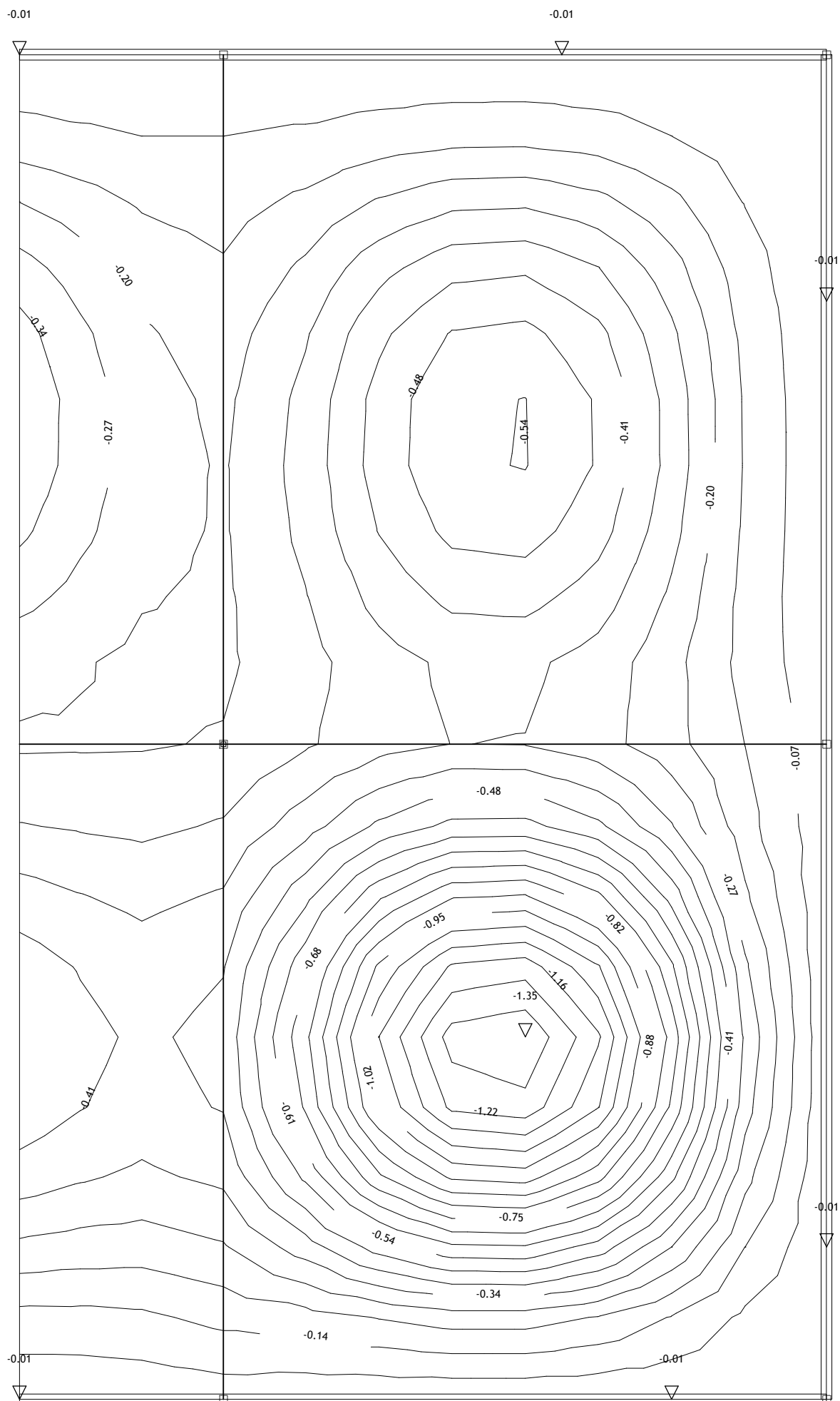
Ниво: [-2.00 m]

Влияния в пов. опора: max  $\sigma_{\text{почва}}$ = 208.43 / min  $\sigma_{\text{почва}}$ = 149.44 kN/m<sup>2</sup>



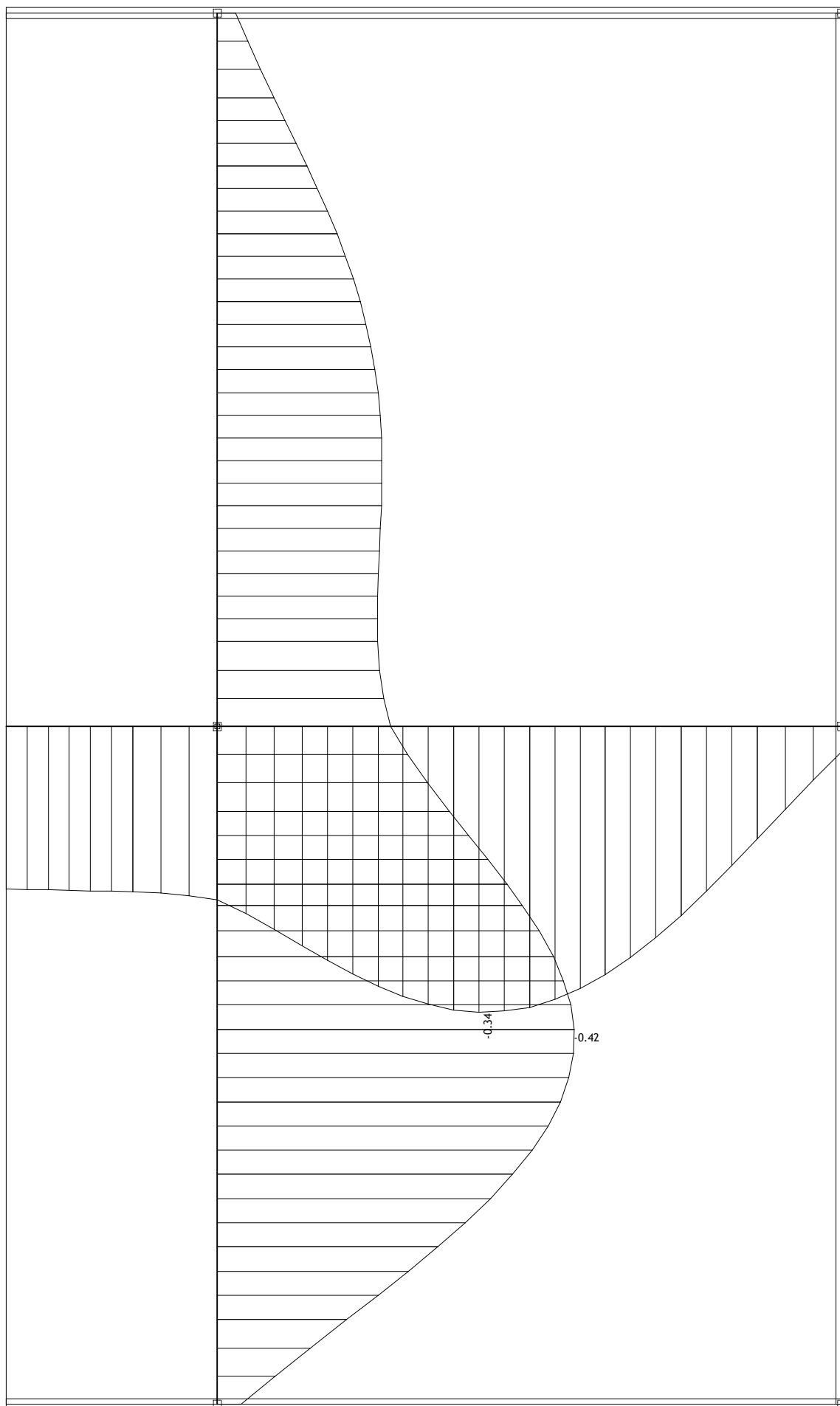
Без Име  
Влияние в лин. опора: max  $\sigma_{\text{почва}}$ = 182.11 / min  $\sigma_{\text{почва}}$ = 151.49 kN/m2

Натов. 5: Нормативна комбинация

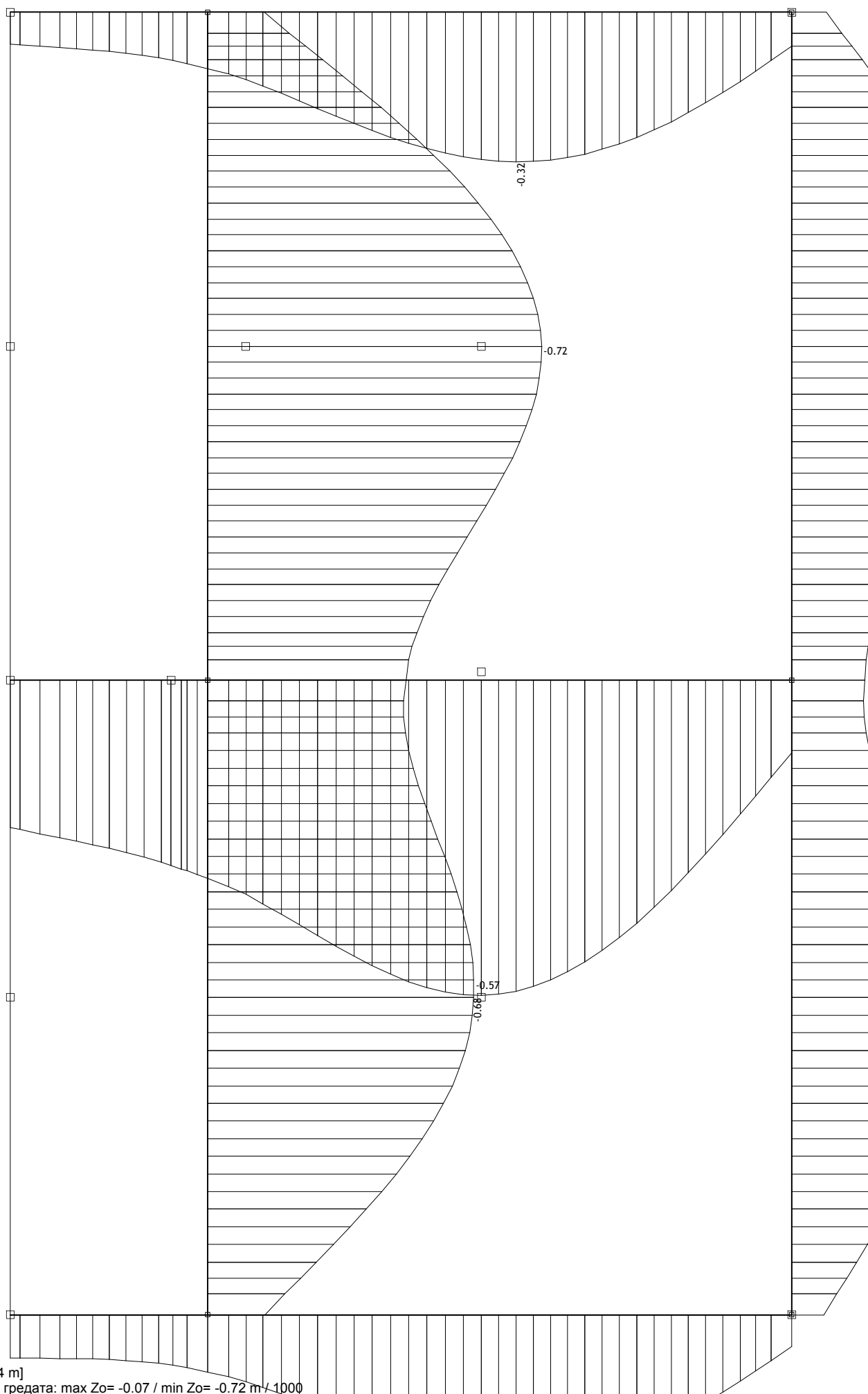


Ниво: [-0.06 m]

Влияния в плочата: max  $Z_0$  = -0.01 / min  $Z_0$  = -1.35 m / 1000

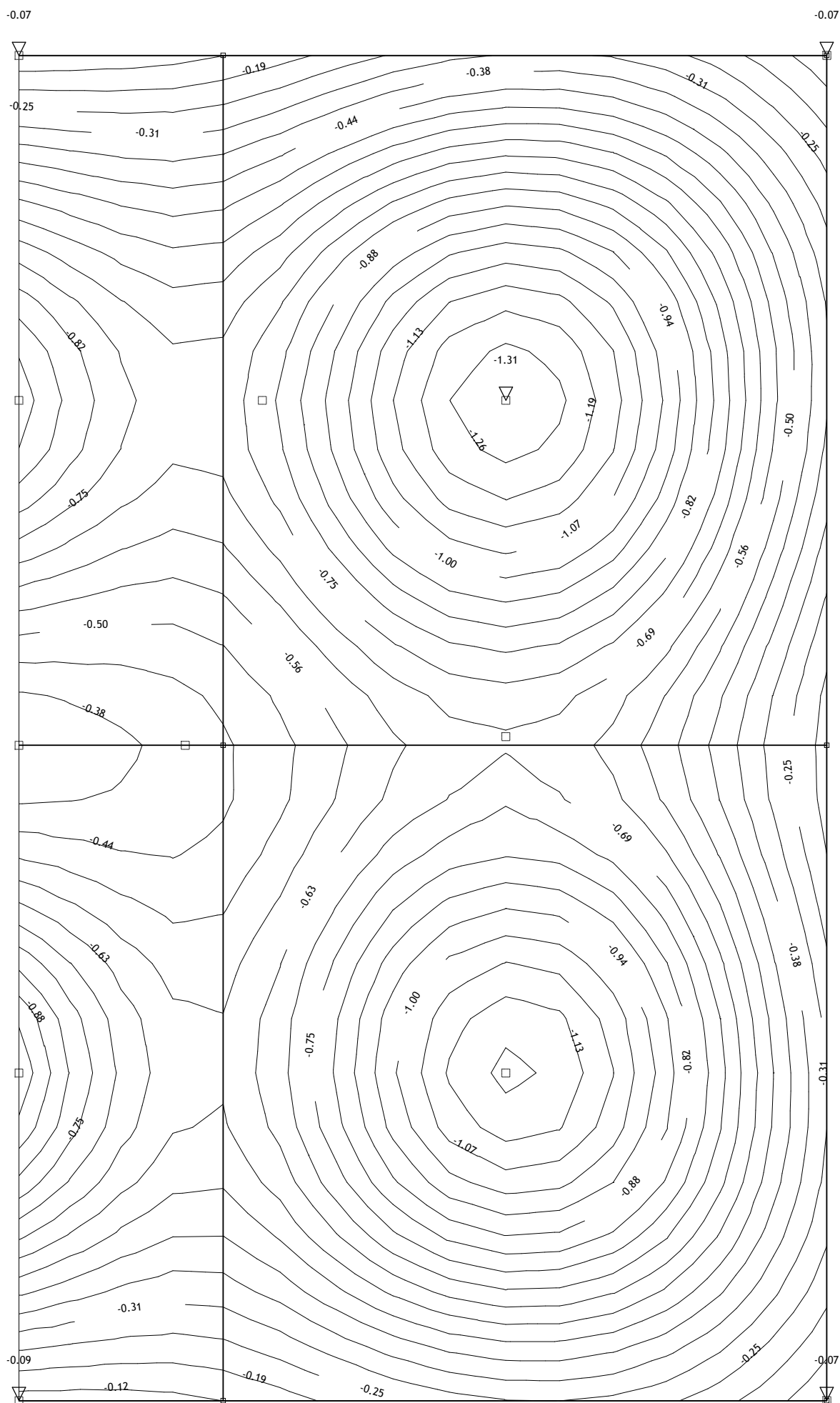


Ниво: [-0.06 m]  
Влияния в гредата: max  $Z_0$  = -0.02 / min  $Z_0$  = -0.43 m / 1000



Ниво: [3.24 m]  
Влияния в гредата: max  $Z_0 = -0.07$  / min  $Z_0 = -0.72$  m / 1000

Натов. 5: Нормативна комбинация

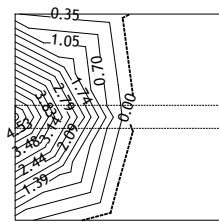
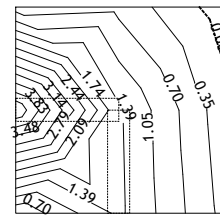
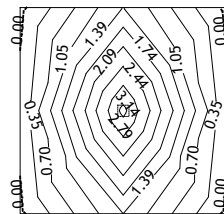
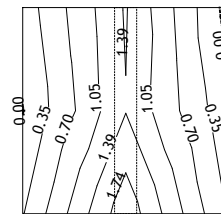
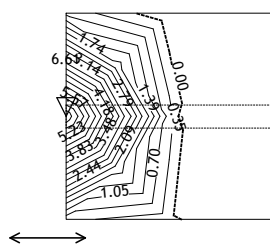
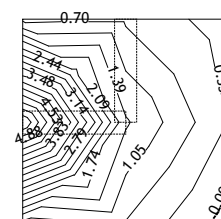


Ниво: [3.24 m]

Влияния в плочата: max Zo= -0.07 / min Zo= -1.31 m / 1000

# Оразмеряване (бетон)

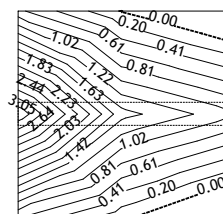
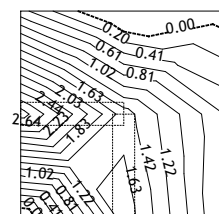
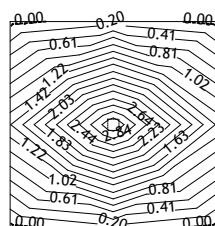
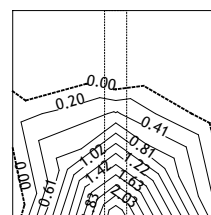
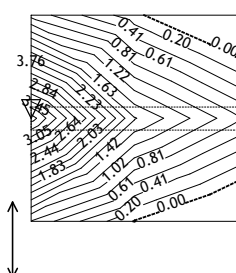
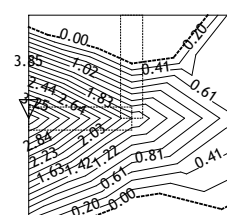
Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III, а=5.00 cm



Ниво: [-2.00 m]

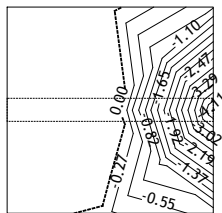
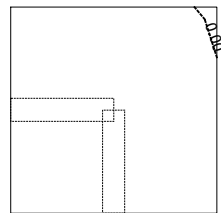
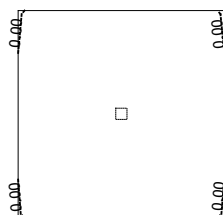
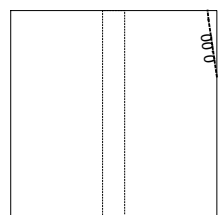
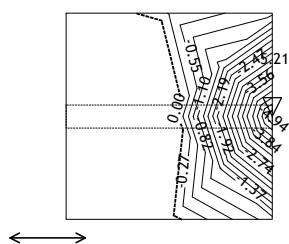
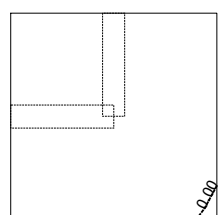
Аа - долна зона - Направление 1 - max Аа1,д= 6.61 cm2/m

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III, а=5.00 cm



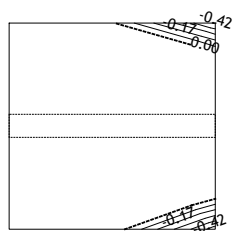
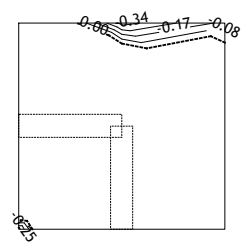
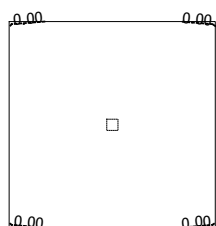
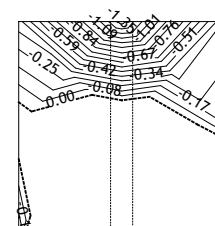
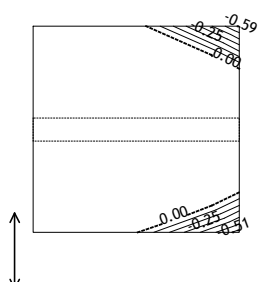
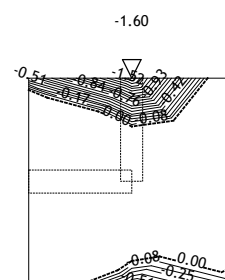
Ниво: [-2.00 m]  
Аа - долна зона - Направление 2 - max Аа2,д= 3.85 cm<sup>2</sup>/m

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III, а=5.00 cm



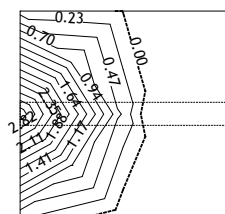
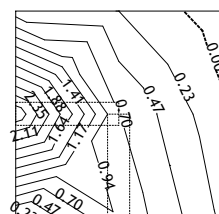
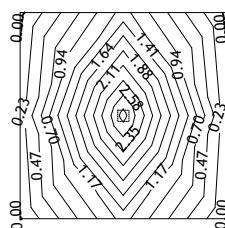
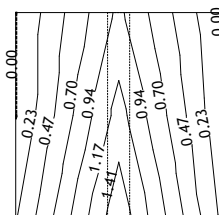
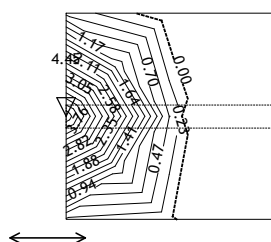
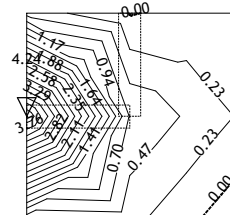
Ниво: [-2.00 m]  
Аа - горна зона - Направление 1 - max Аа1,г= -5.21 cm2/m

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III, а=5.00 cm



Ниво: [-2.00 м]  
Аа - горна зона - Направление 2 - max Аа2,г = -1.60 см2/м

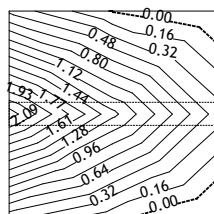
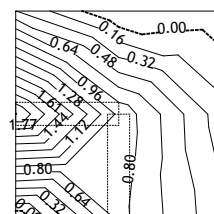
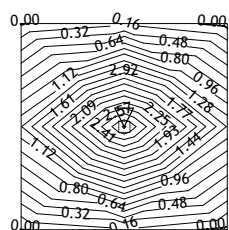
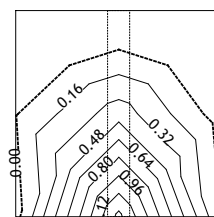
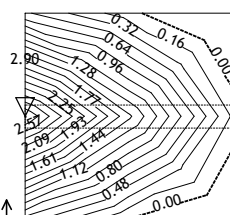
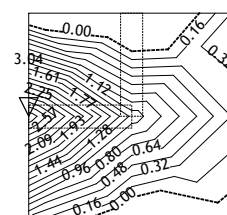
Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III, а=5.00 cm



Ниво: [-2.00 m]

Аа - долна зона - Направление 1 - max Аа1,д= 4.45 cm2/m

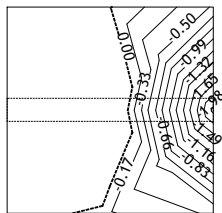
Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III, а=5.00 cm



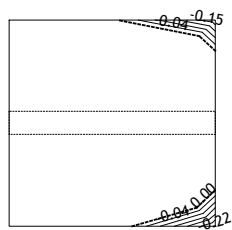
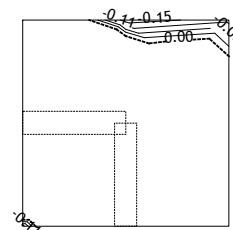
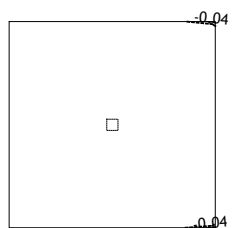
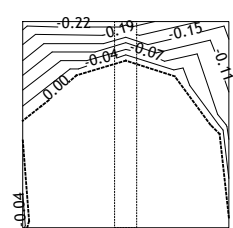
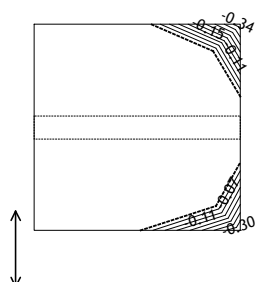
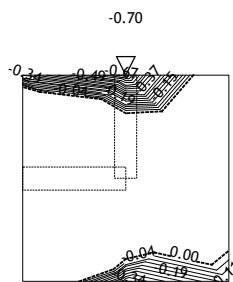
Ниво: [-2.00 m]

Аа - долна зона - Направление 2 - max Аа2,д= 3.04 cm<sup>2</sup>/m

Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III, а=5.00 cm

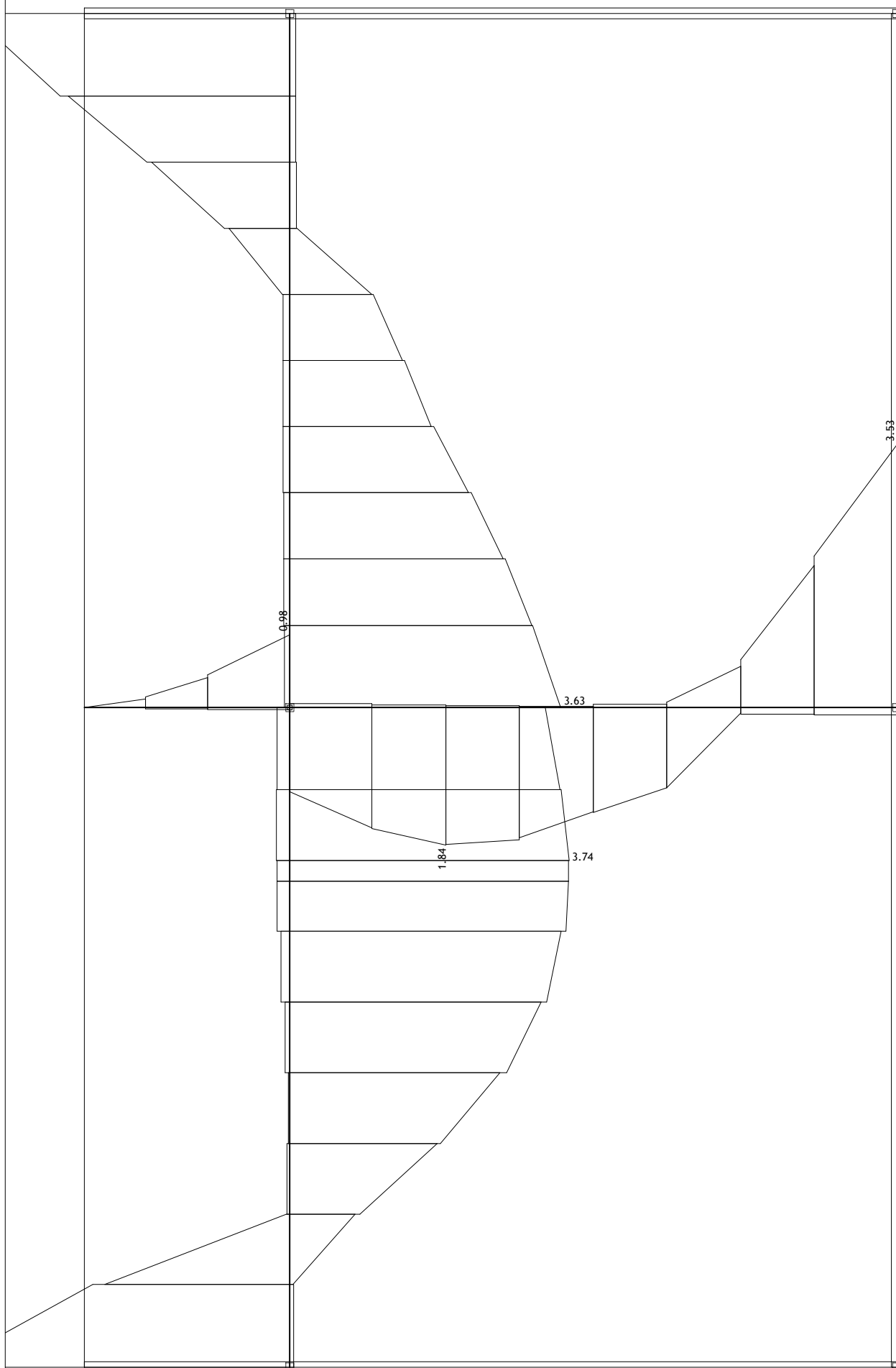


Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III, а=5.00 cm



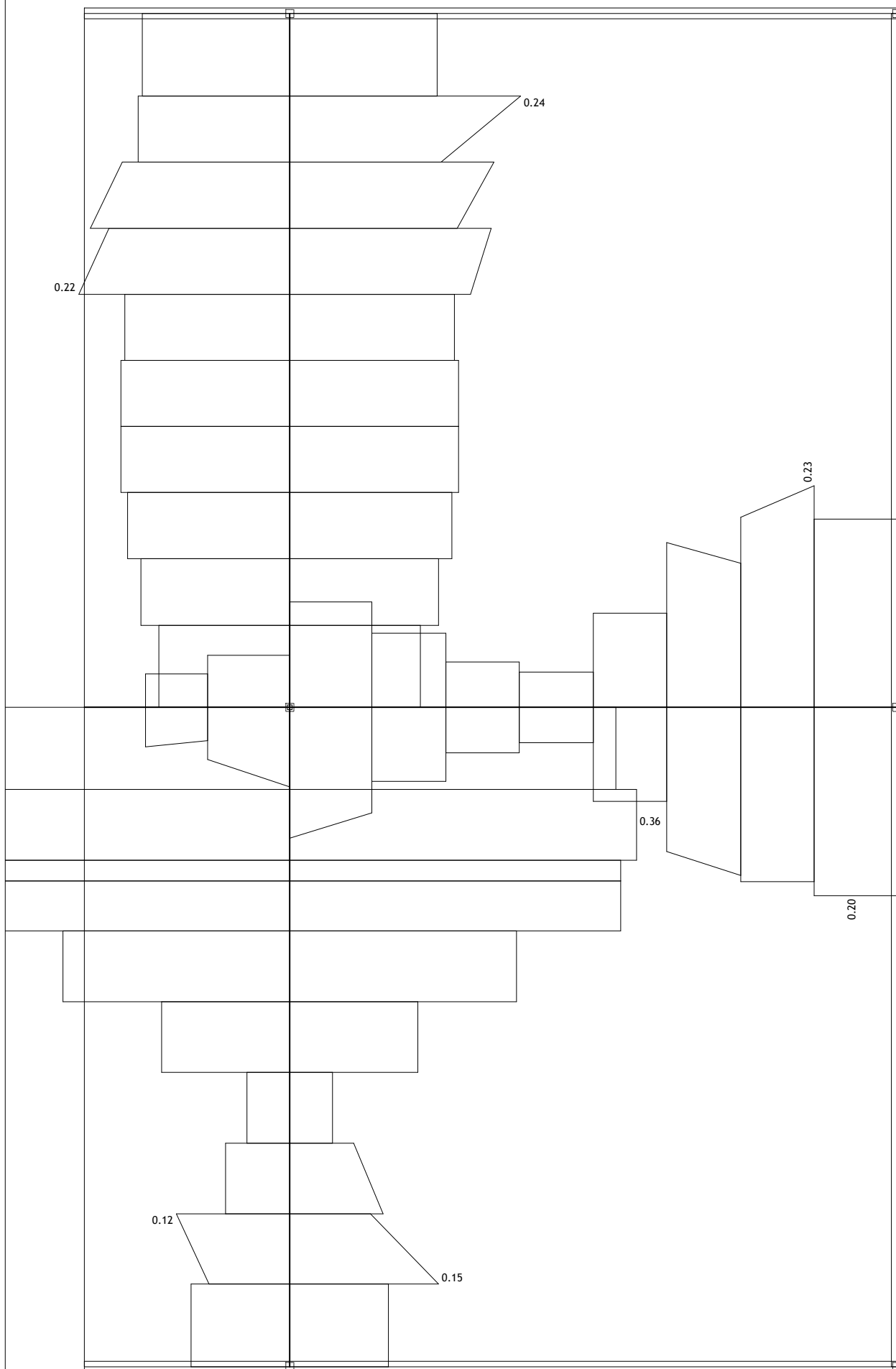
Ниво: [-2.00 m]  
Аа - горна зона - Направление 2 - max Аа2,r= -0.70 cm2/m

Меродавно натоварване: 16,17  
БДС НПБСК-88, В 20, А III



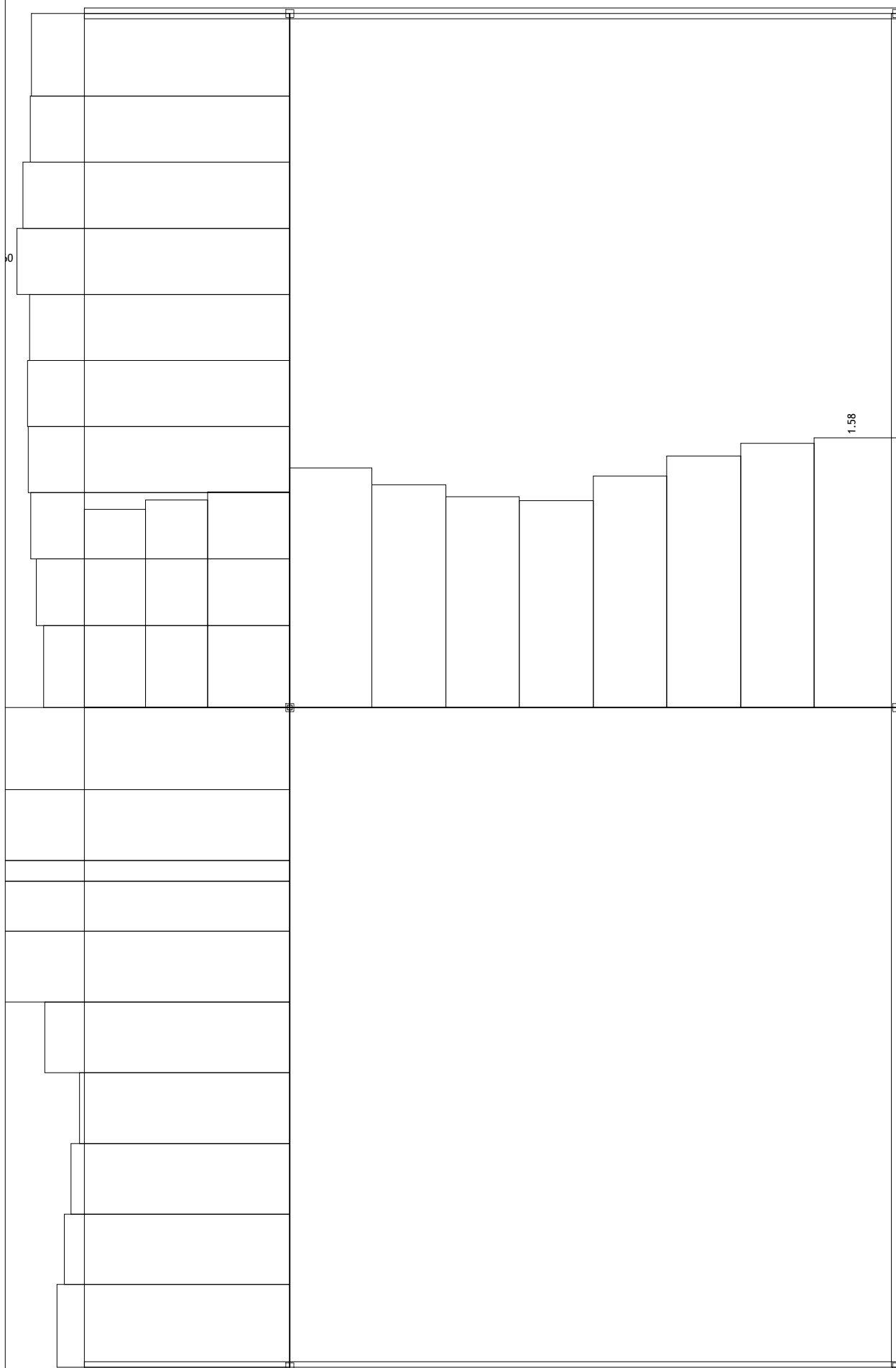
Ниво: [-0.06 m]  
Армировка в греди: max Aa2/Aa1= 4.65 cm<sup>2</sup>

Меродавно натоварване: 16,17  
БДС НПБСК-88, В 20, А III



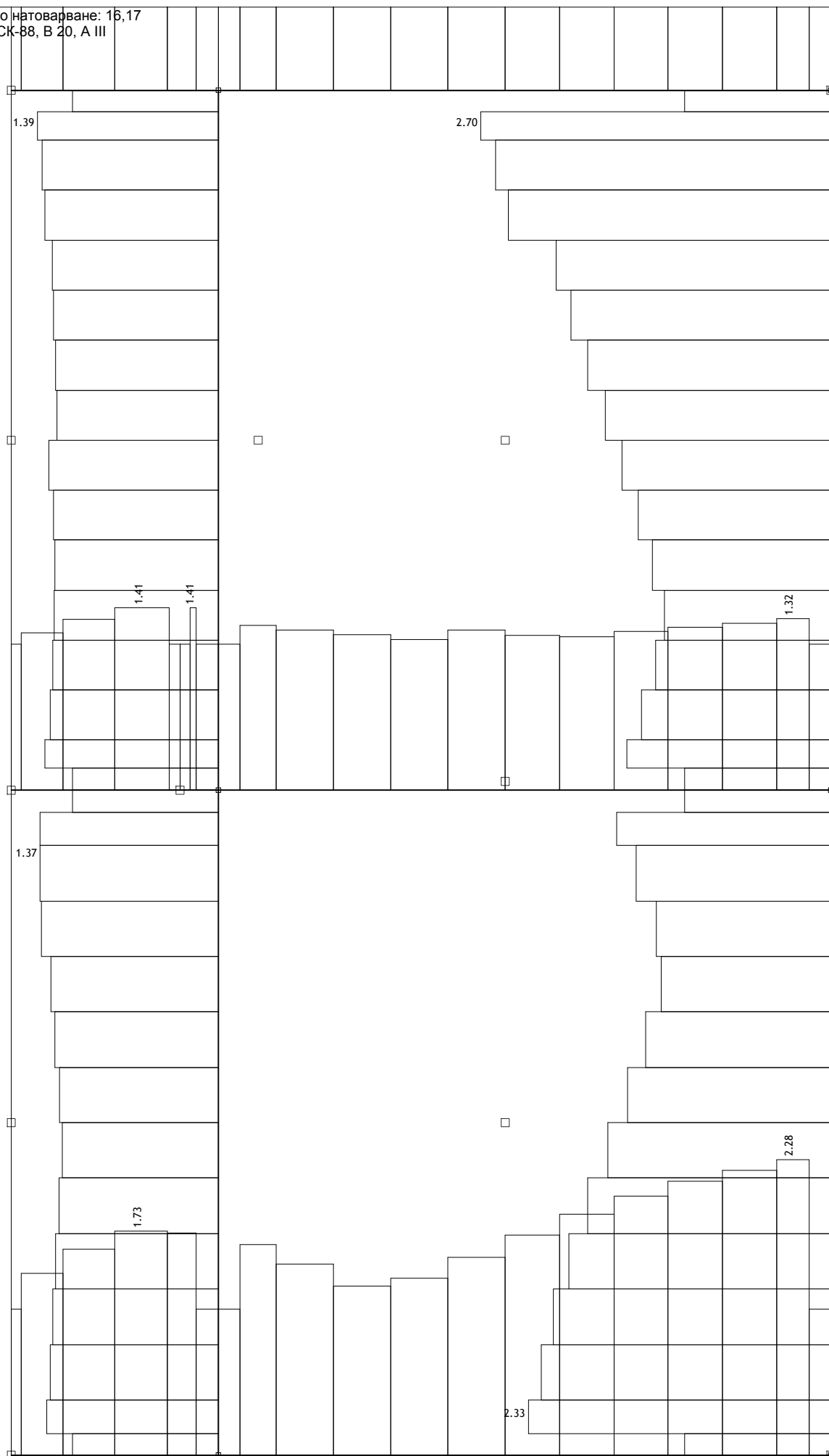
Ниво: [-0.06 m]  
Армировка в греди:  $\max A_{a3}/A_{a4} = 0.36 \text{ cm}^2$

Меродавно натоварване: 16,17  
БДС НПБСК-88, В 20, А III



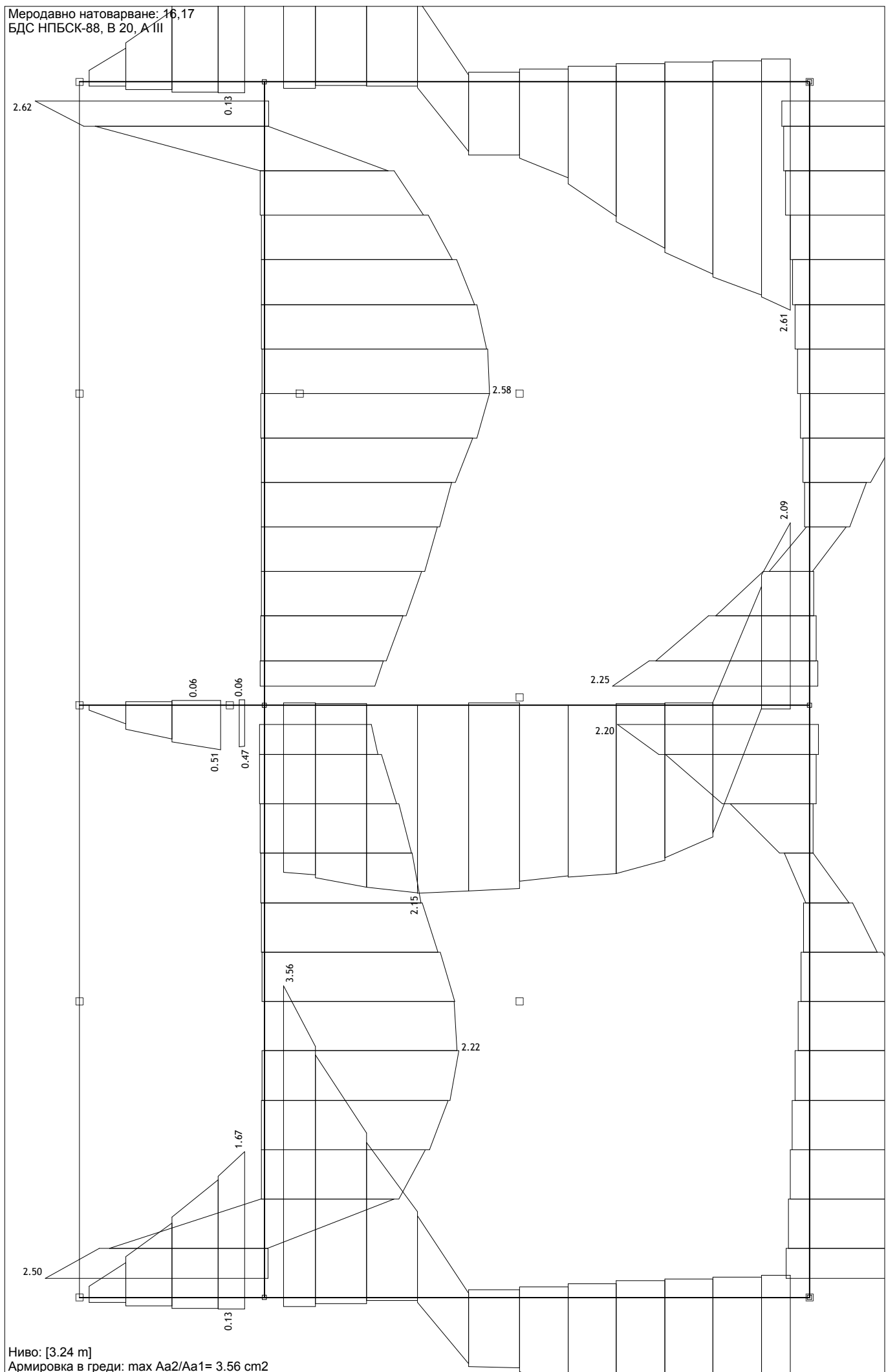
Ниво: [-0.06 m]  
Армировка в греди: max Aa,стр.= 2.03 cm<sup>2</sup>

Меродавно натоварване: 16,17  
БДС НПБСК-88, В 20, А III



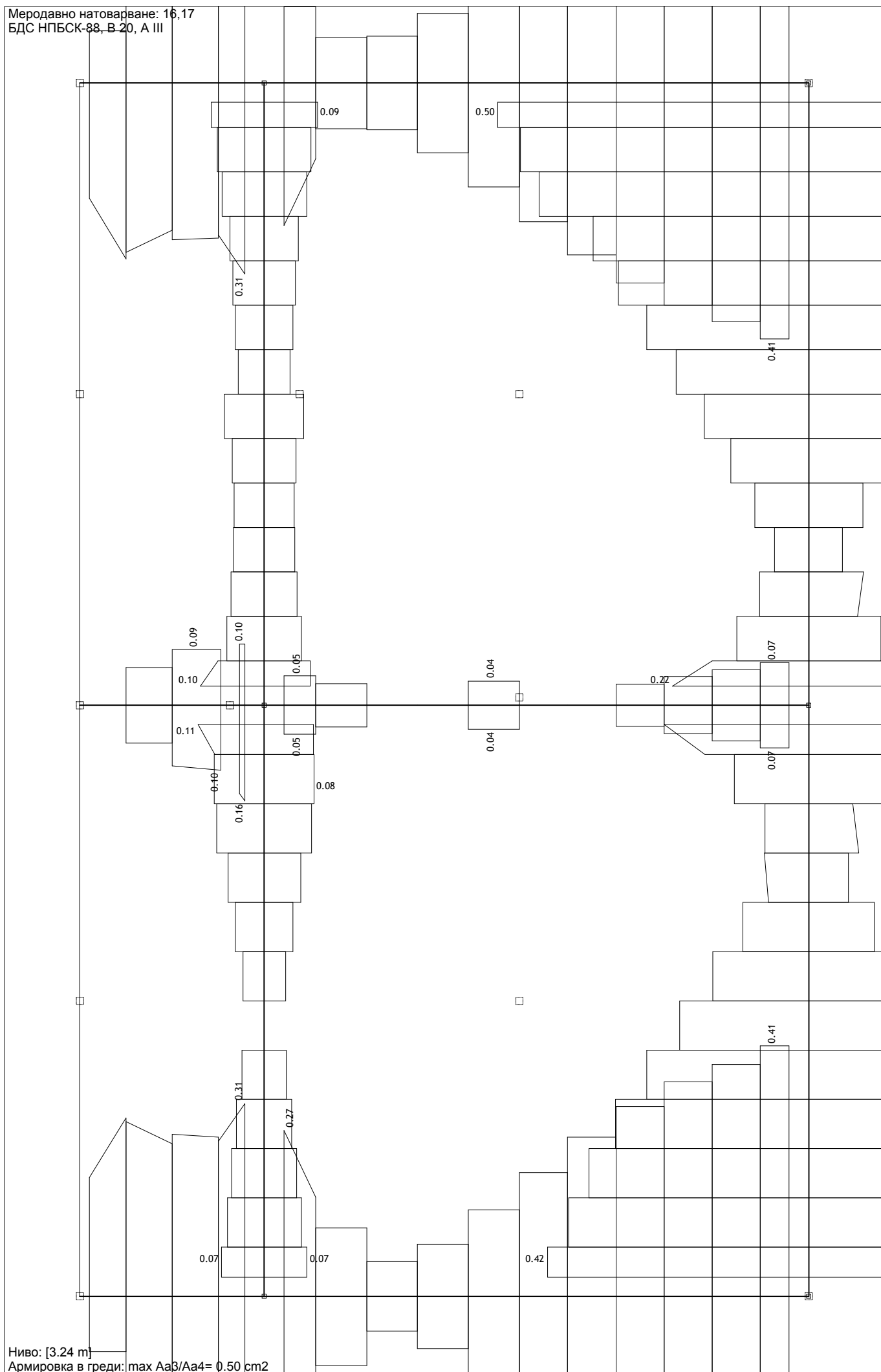
Ниво: [3.24 m]  
Армировка в греди: max Aa,стр.= 2.70 cm<sup>2</sup>

Меродавно натоварване: 16,17  
БДС НПБСК-88, В 20, А III



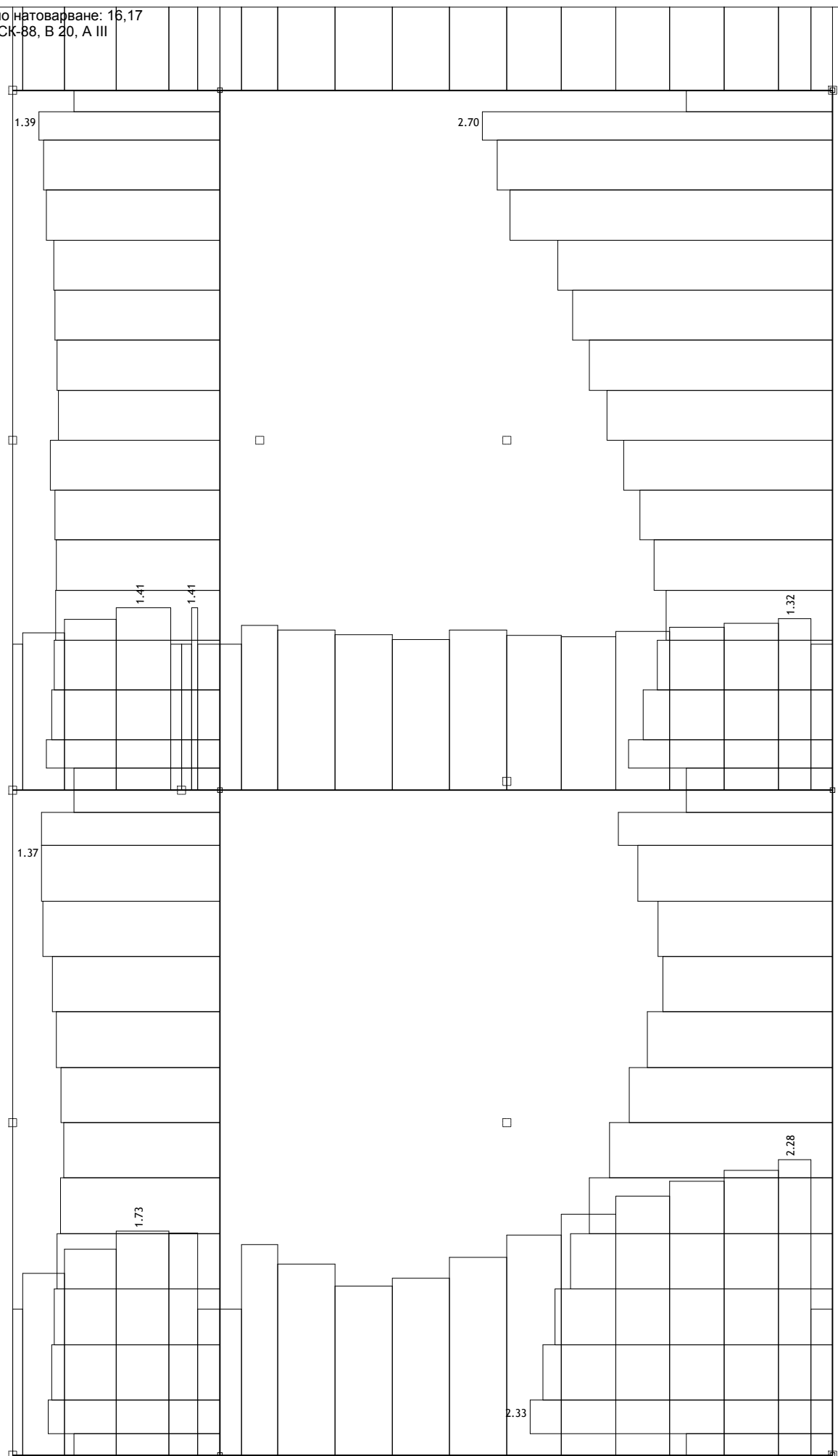
Ниво: [3.24 m]  
Армировка в греди: max Aa2/Aa1= 3.56 cm<sup>2</sup>

Меродавно натоварване: 16,17  
БДС НПБСК-88, В.20, А.III



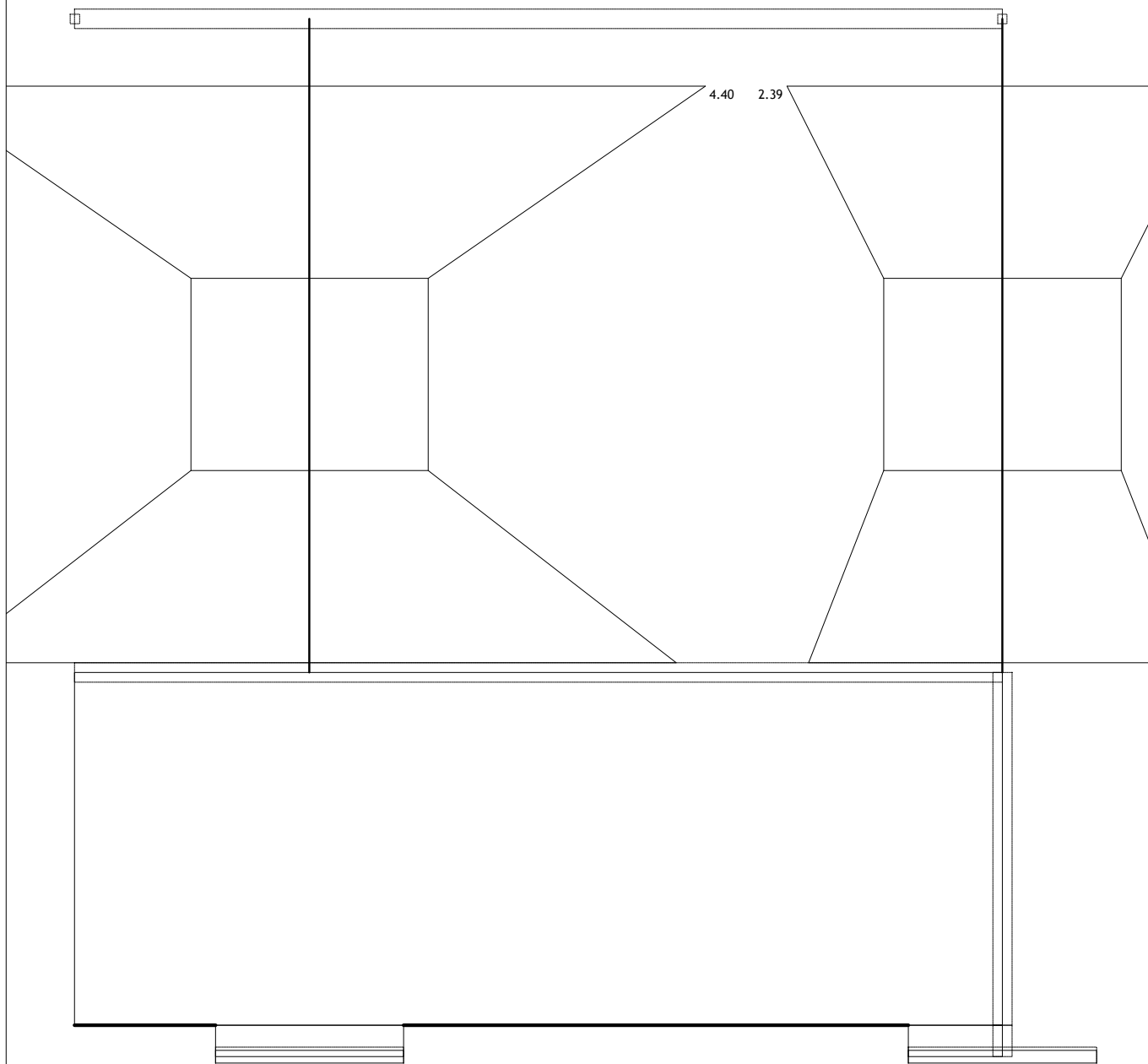
Ниво: [3.24 m]  
Армировка в греди:  $\max A_{a3}/A_{a4} = 0.50 \text{ cm}^2$

Меродавно натоварване: 16,17  
БДС НПБСК-88, В 20, А III



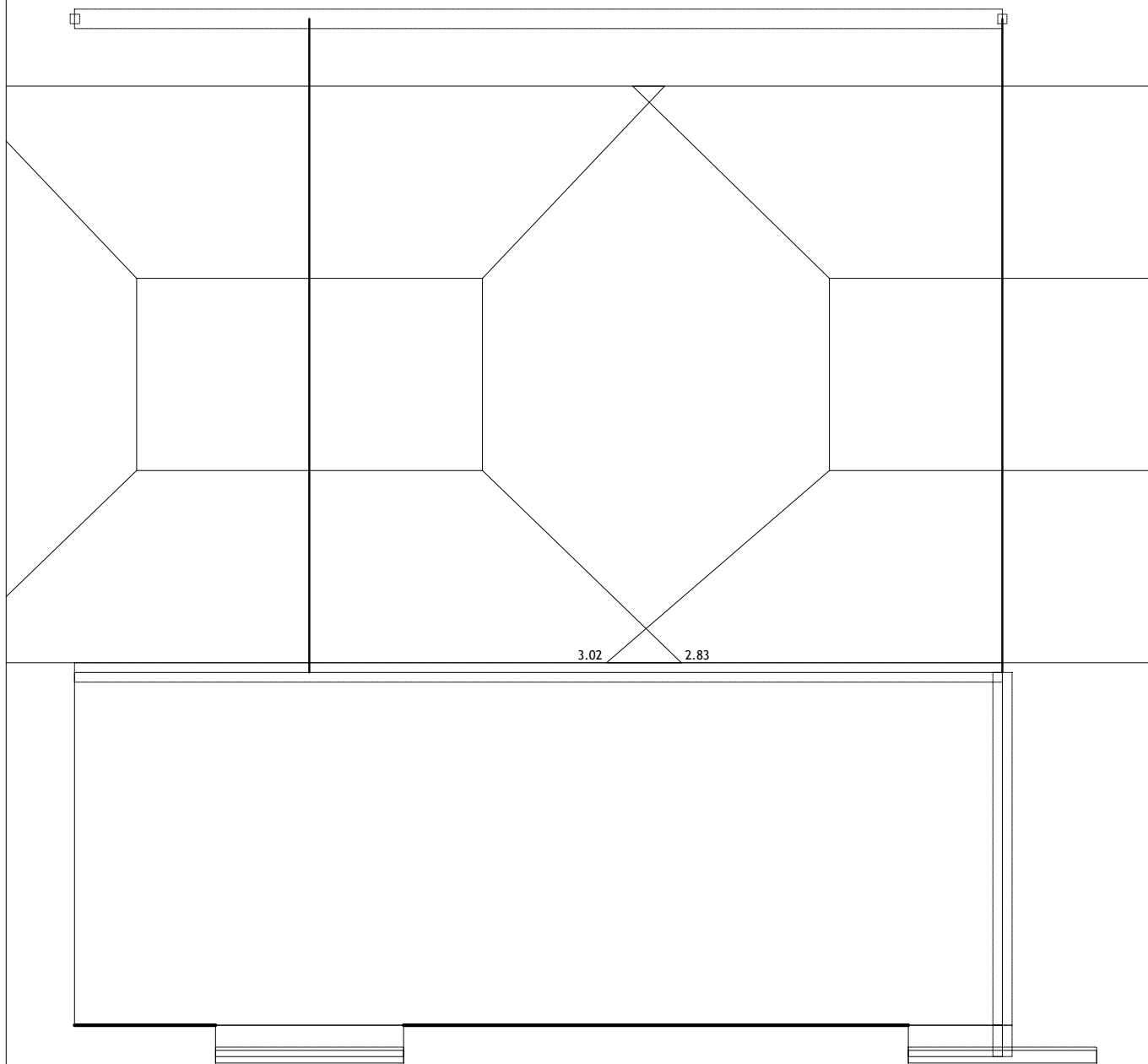
Ниво: [3.24 m]  
Армировка в греди: max Aa,стр.= 2.70 cm<sup>2</sup>

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III



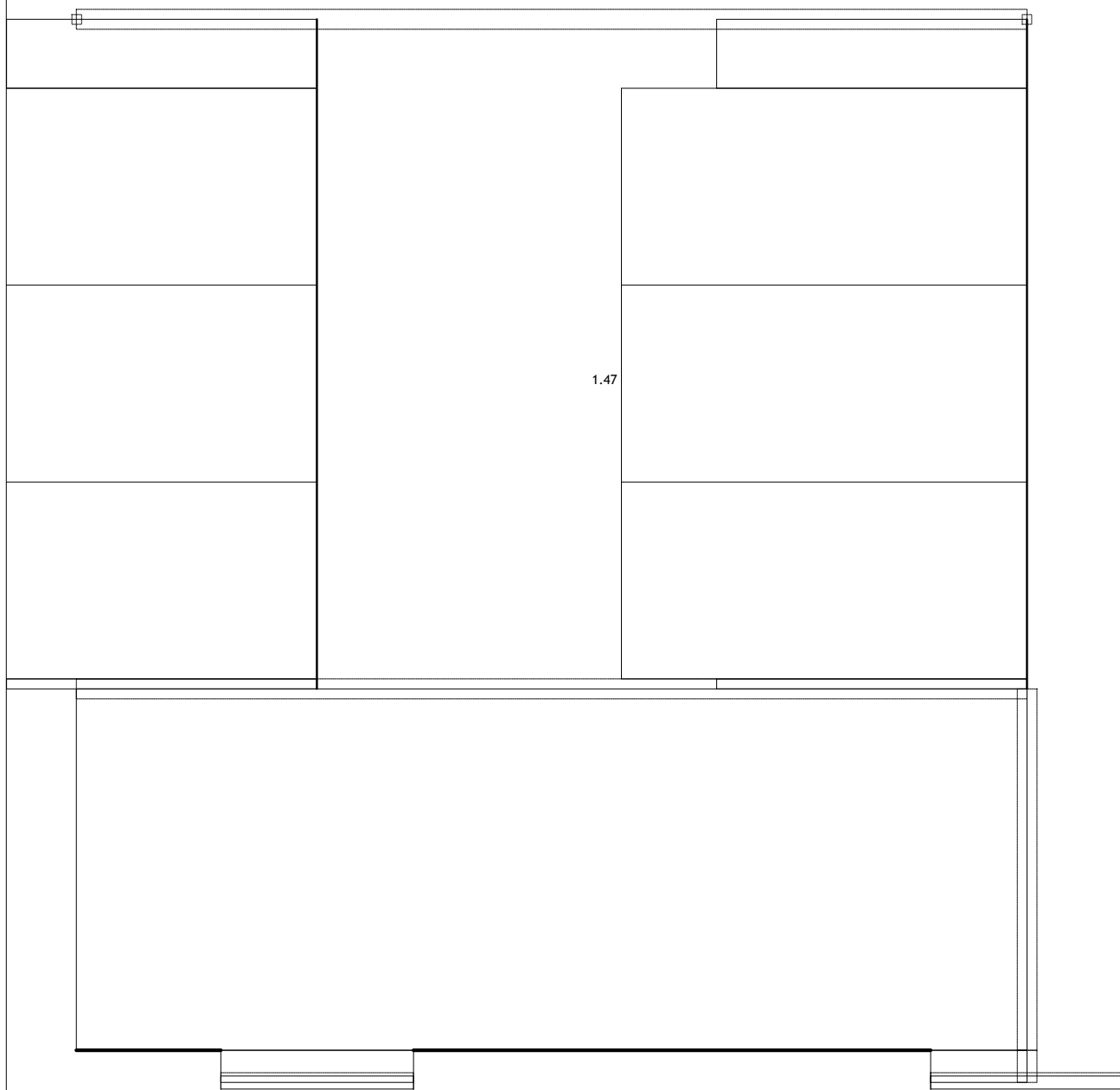
Рамка: X\_5  
Армировка в греди:  $\max A_{a2}/A_{a1} = 4.40 \text{ cm}^2$

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III



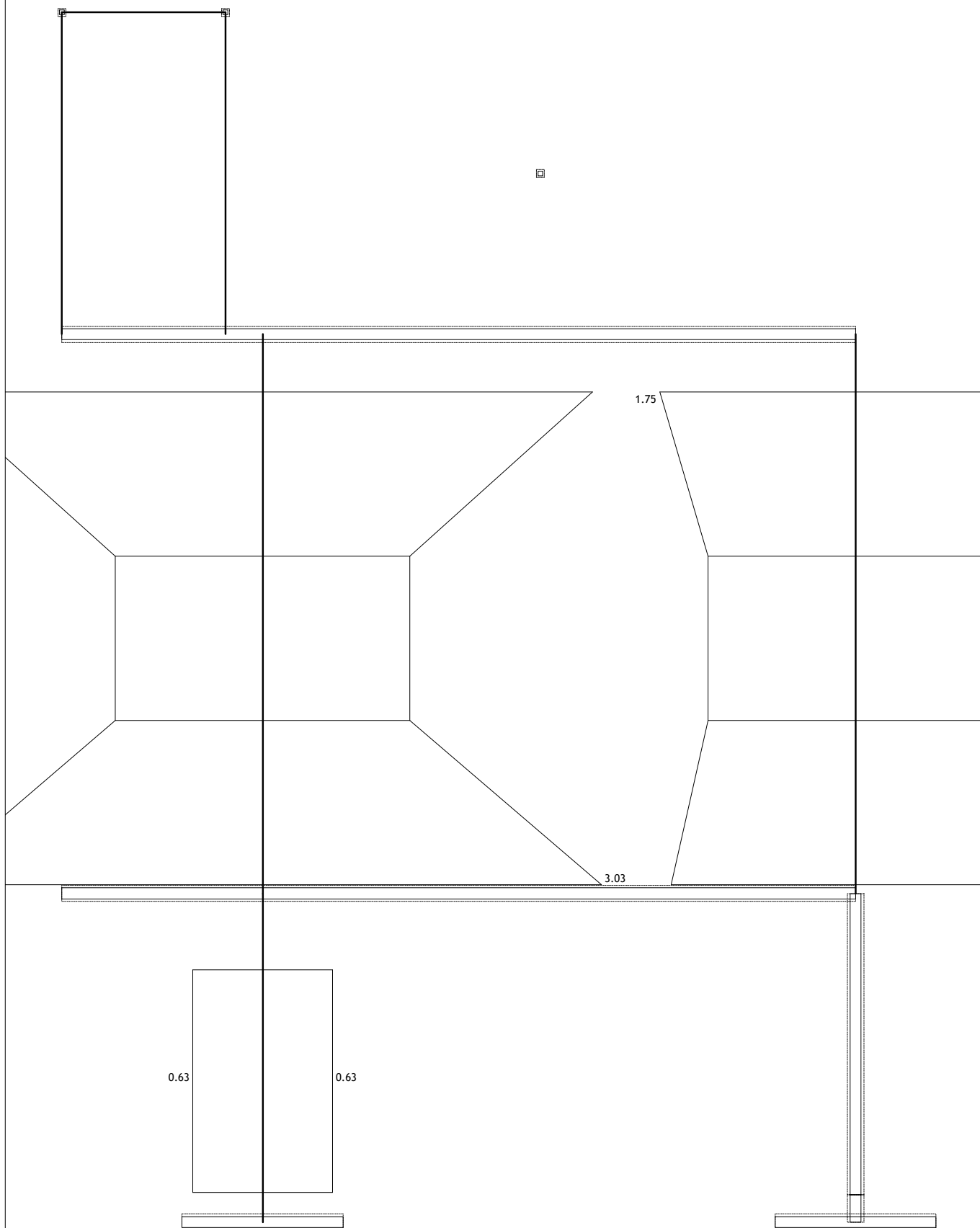
Рамка: X\_5  
Армировка в греди:  $\max A_{a3}/A_{a4} = 3.02 \text{ cm}^2$

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III



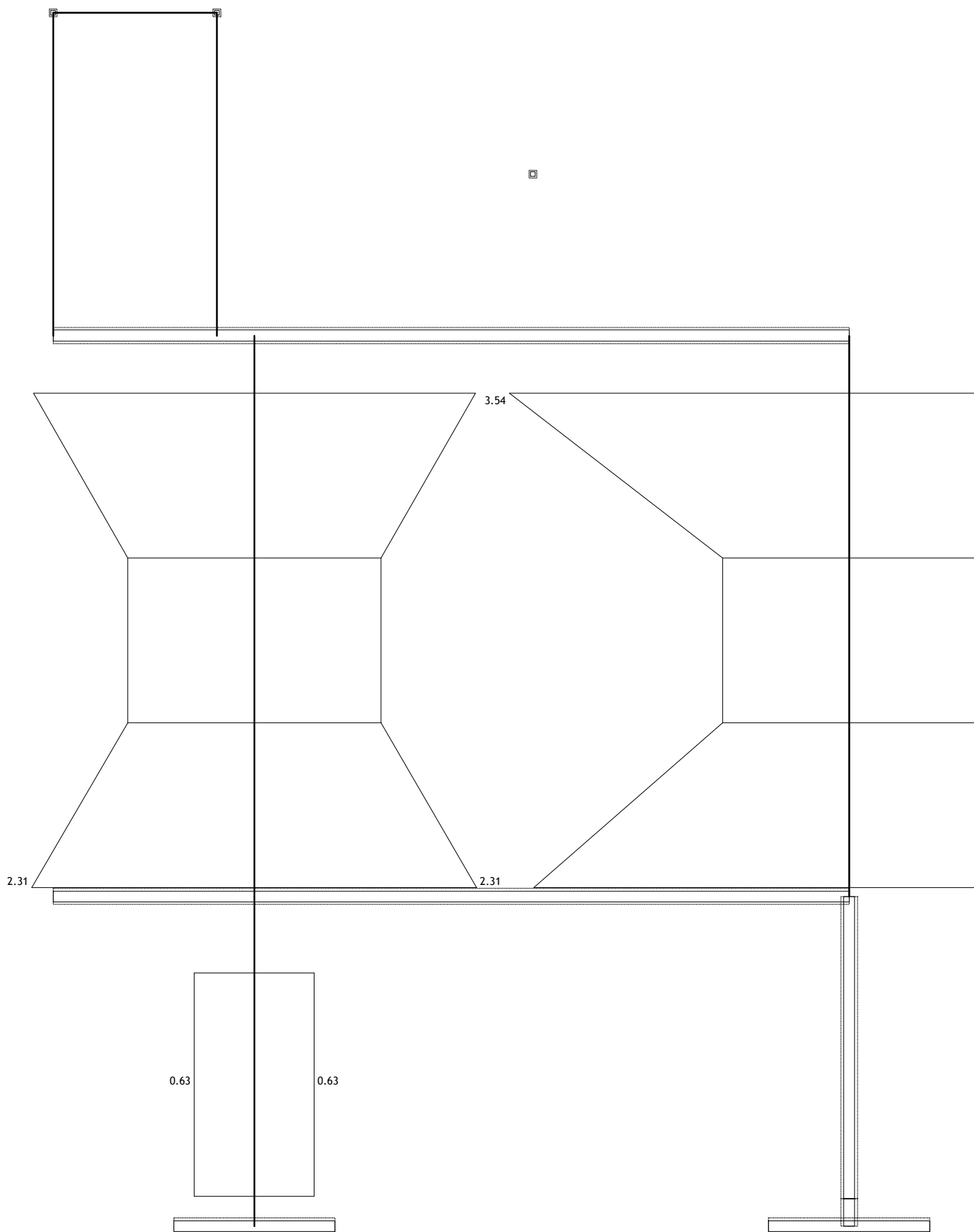
Рамка: X\_5  
Армировка в греди: max Aa,стр.= 1.47 cm2

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III



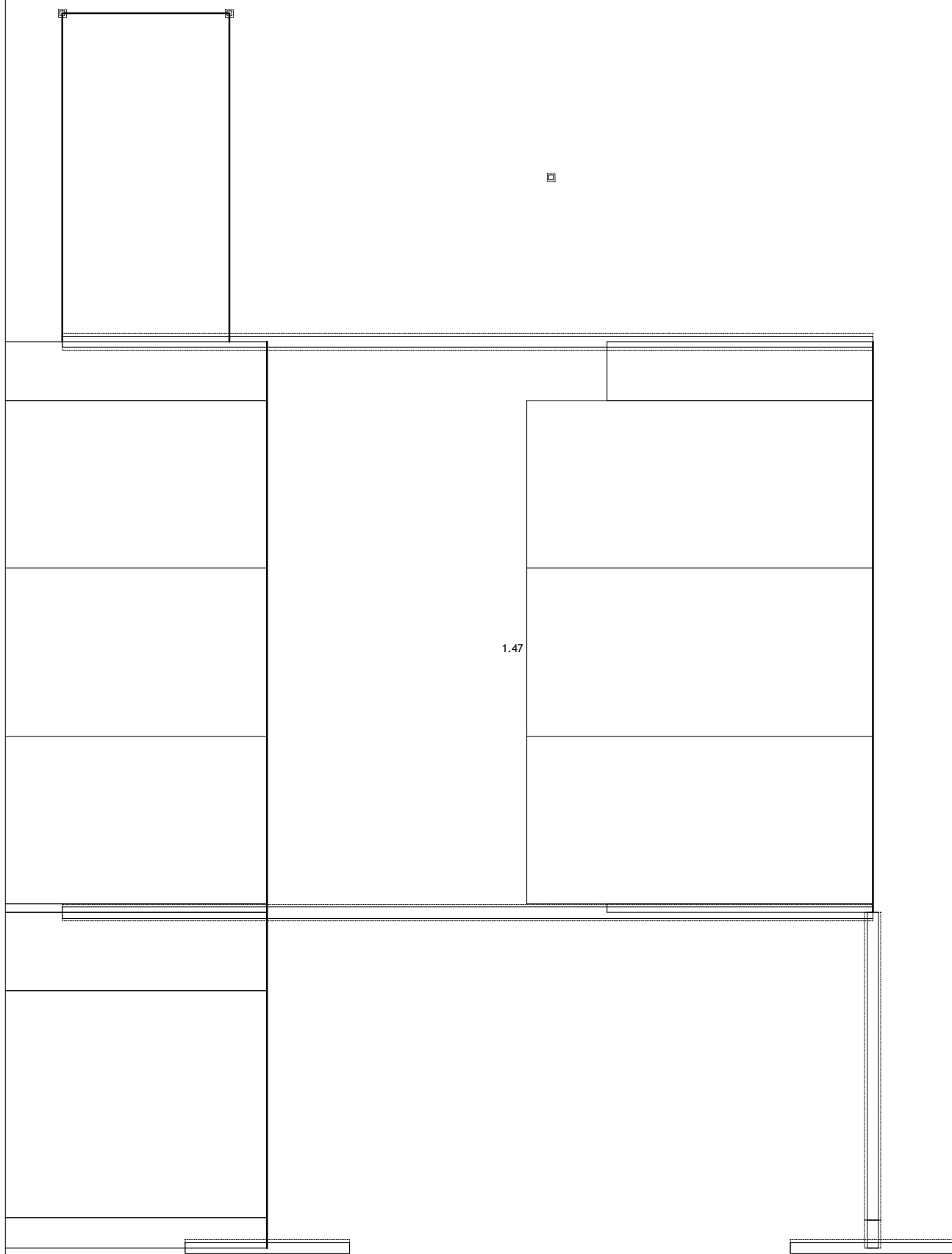
Рамка: X\_3  
Армировка в греди: max Aa2/Aa1= 3.03 cm2

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III



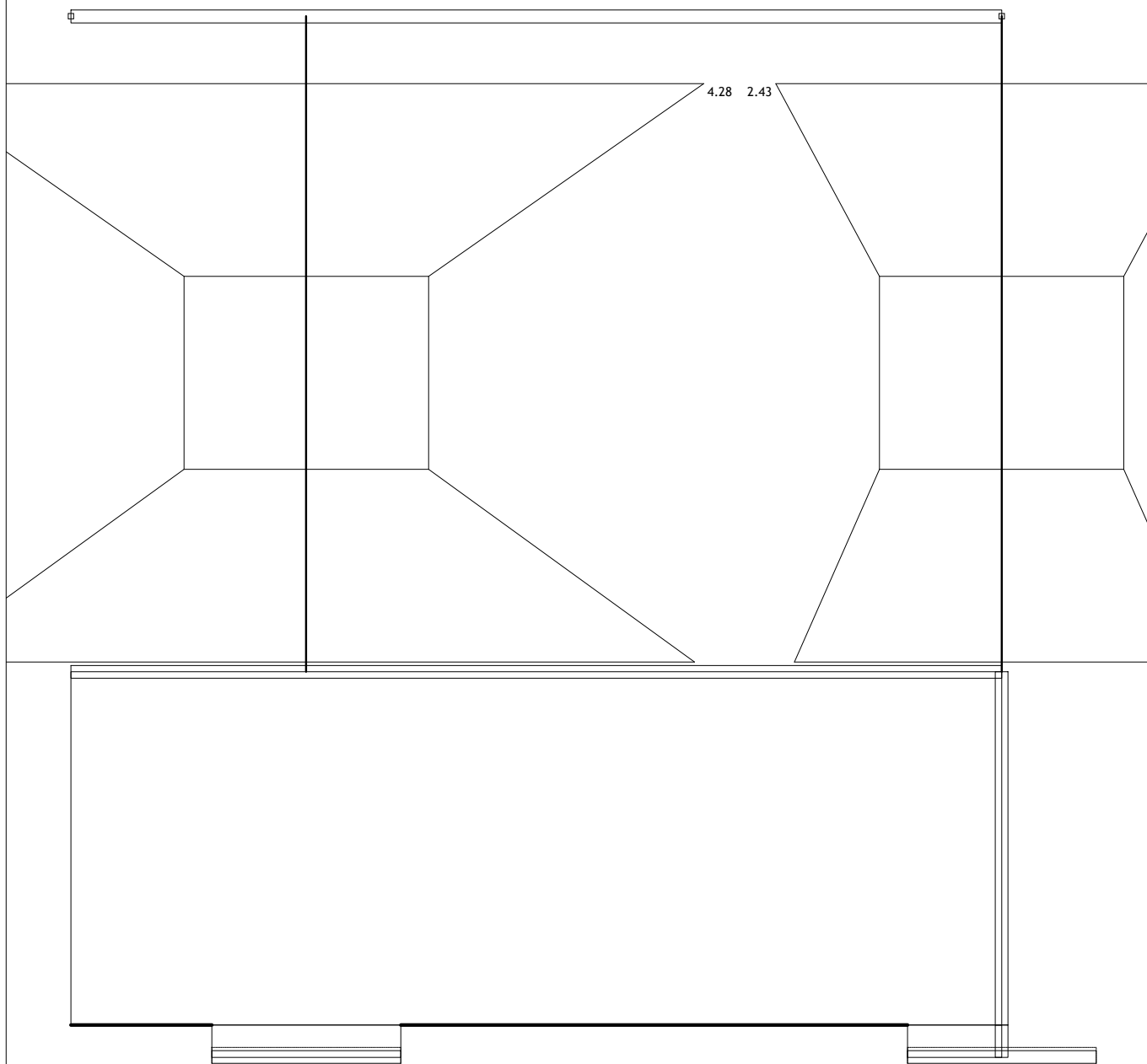
Рамка: X\_3  
Армировка в греди:  $\max A_{a3}/A_{a4} = 3.54 \text{ cm}^2$

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III



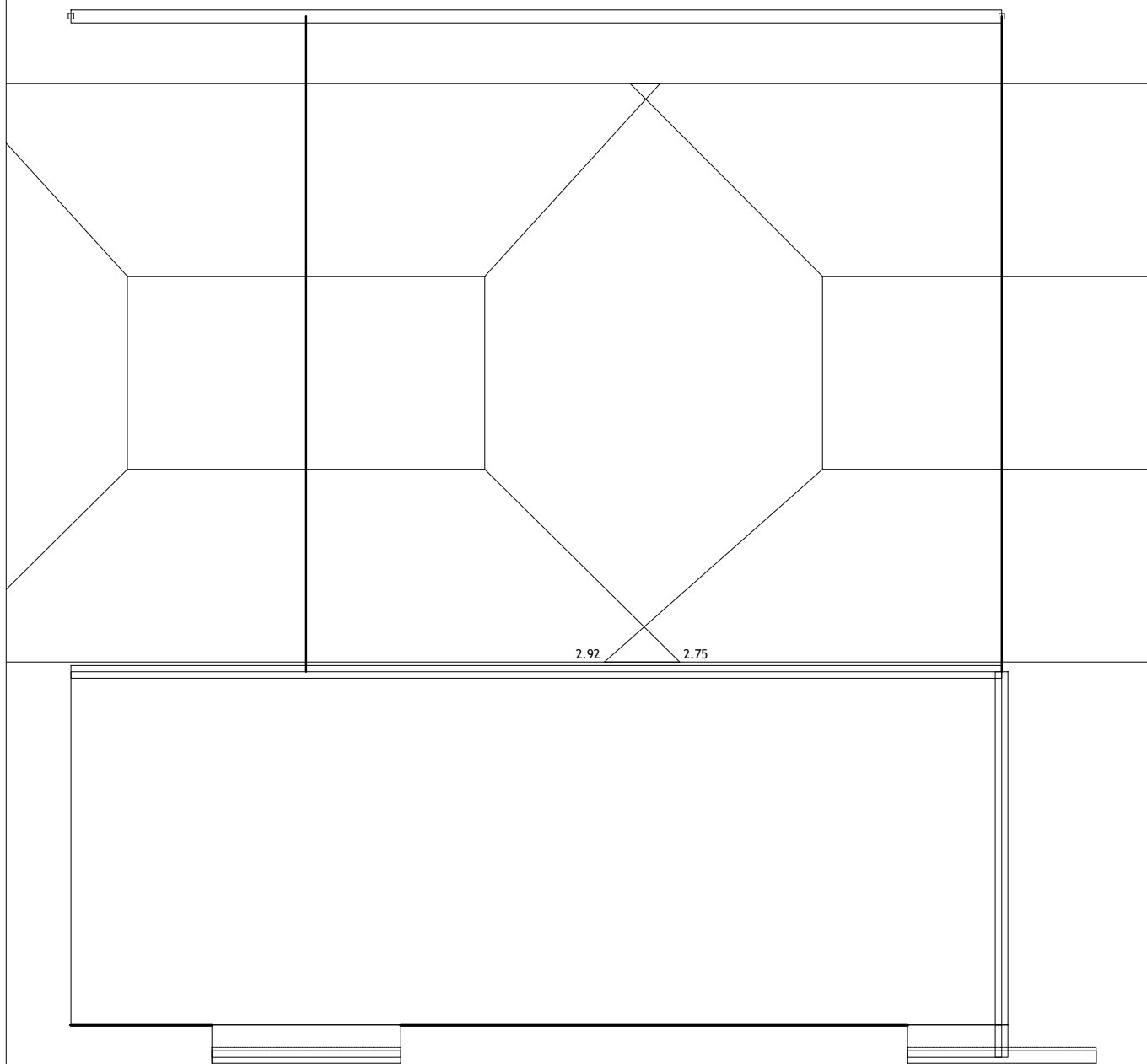
Рамка: X\_3  
Армировка в греди: max Aa,стр.= 1.47 cm2

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III



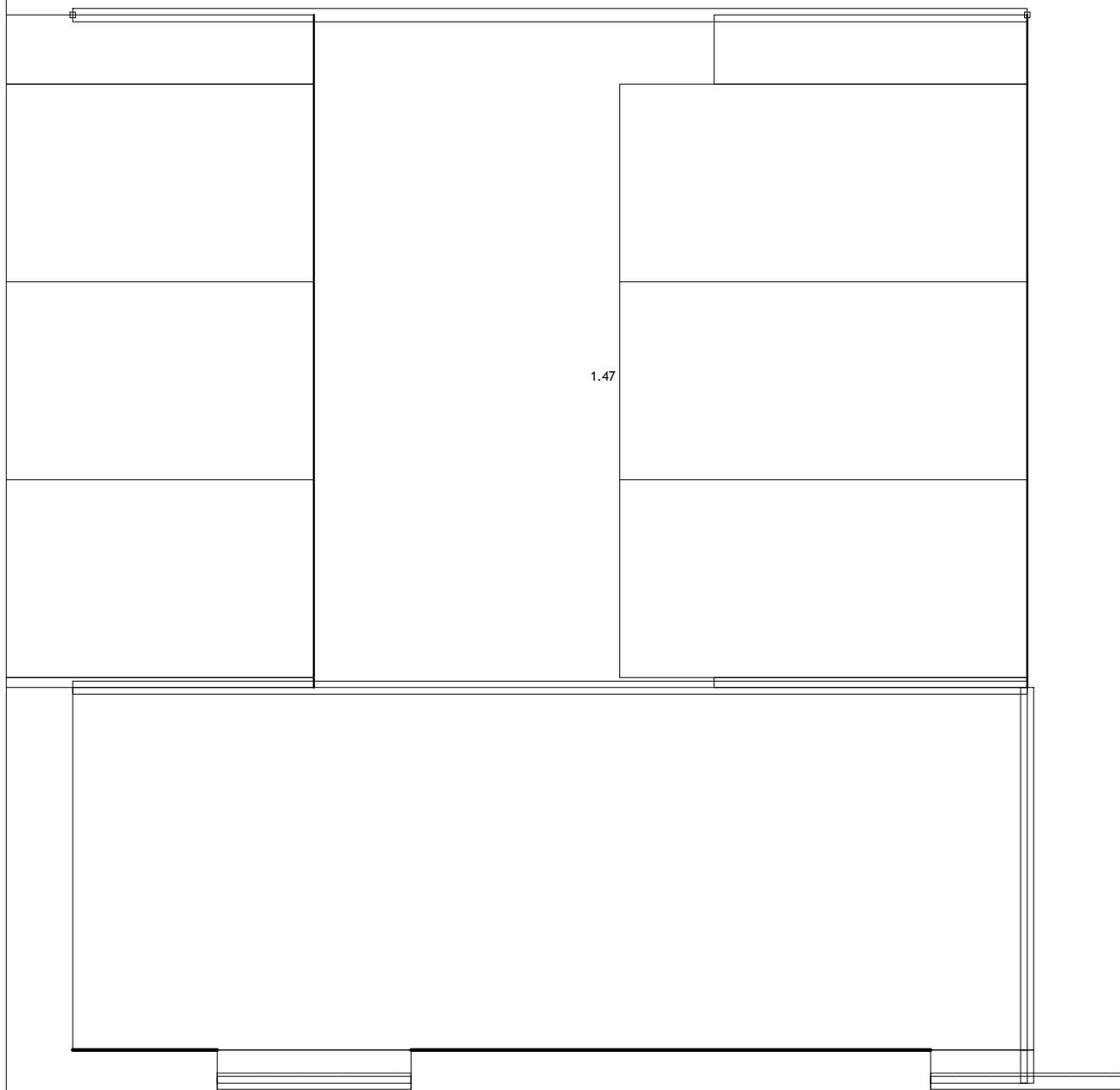
Рамка: X\_1  
Армировка в греди:  $\max A_{a2}/A_{a1} = 4.28 \text{ cm}^2$

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III



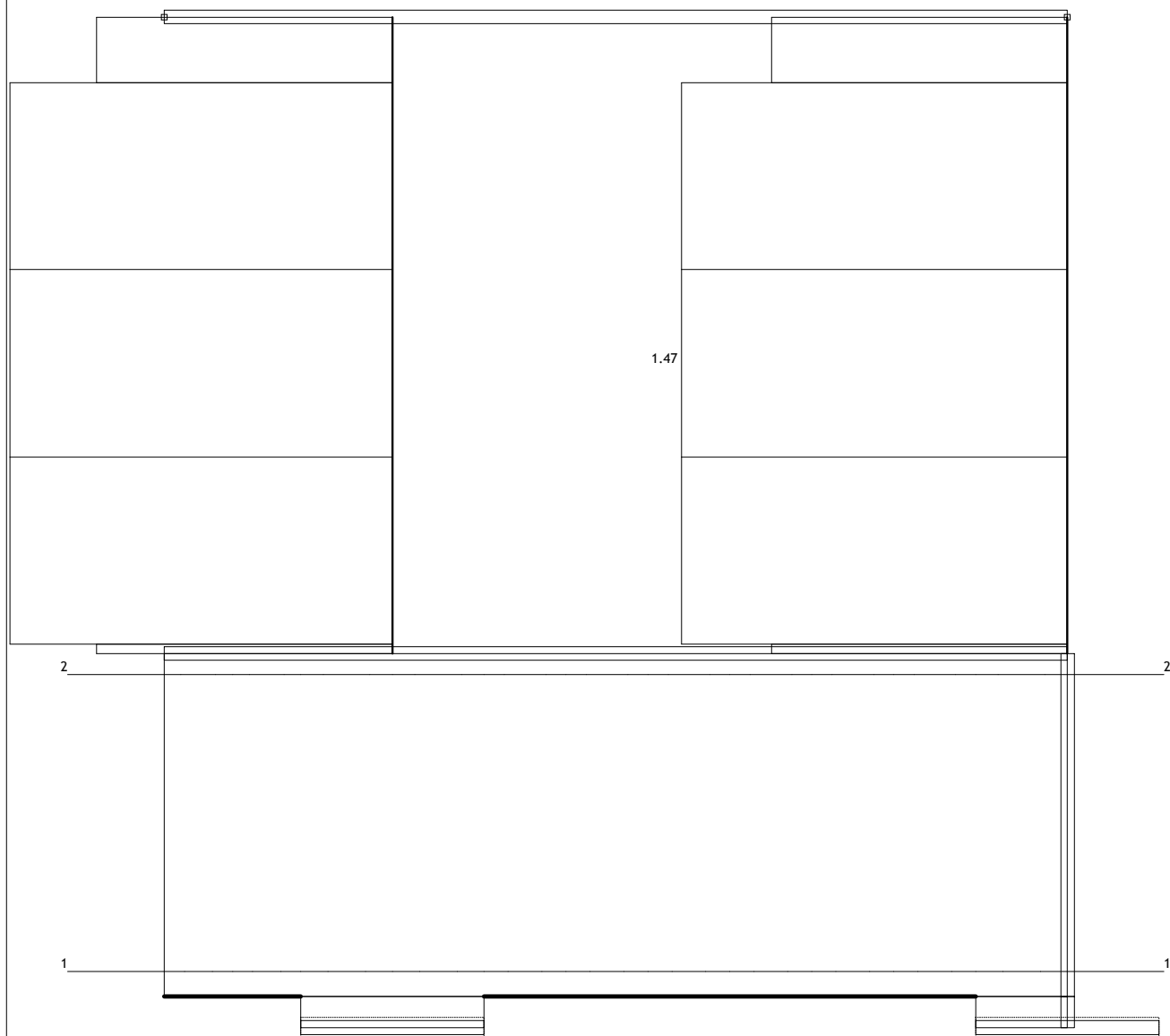
Рамка: X\_1  
Армировка в греди:  $\max A_{a3}/A_{a4} = 2.92 \text{ cm}^2$

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III



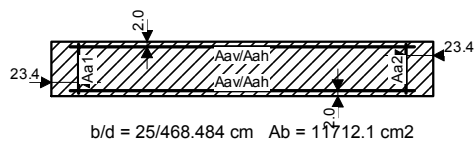
Рамка: X\_1  
Армировка в греди: max Aa,стр.= 1.47 cm2

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III



Рамка: X\_1  
Армировка в греди: max Aa,стр.= 1.47 cm2

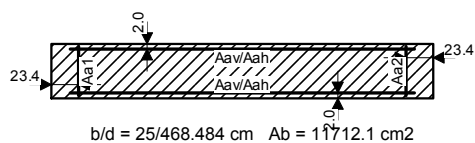
Сечение 1 - 1  
БДС НПБСК-88  
В 20  
Ъглова армировка А III  
Надлъжна армировка А III  
Оразмеряването е извършено за група товарни  
състояния: 18,19



Меродавно натоварване за огъване:  
1.25xI+1.25xII+III+IV-1.25xVII  
Меродавно натоварване за срязване:  
1.25xI+1.25xII+III+IV-1.25xVII  
Md = 353.15 kNm  
Nd = -516.12 kN  
Td = -609.69 kN

Aa1 = 5.86 cm² (мин.:17.57)  
Aa2 = 5.86 cm² (мин.:17.57)  
Aav = ±1.39 cm²/m (мин.:±1.88)  
Aah = ±1.13 cm²/m (мин.:±2.50)

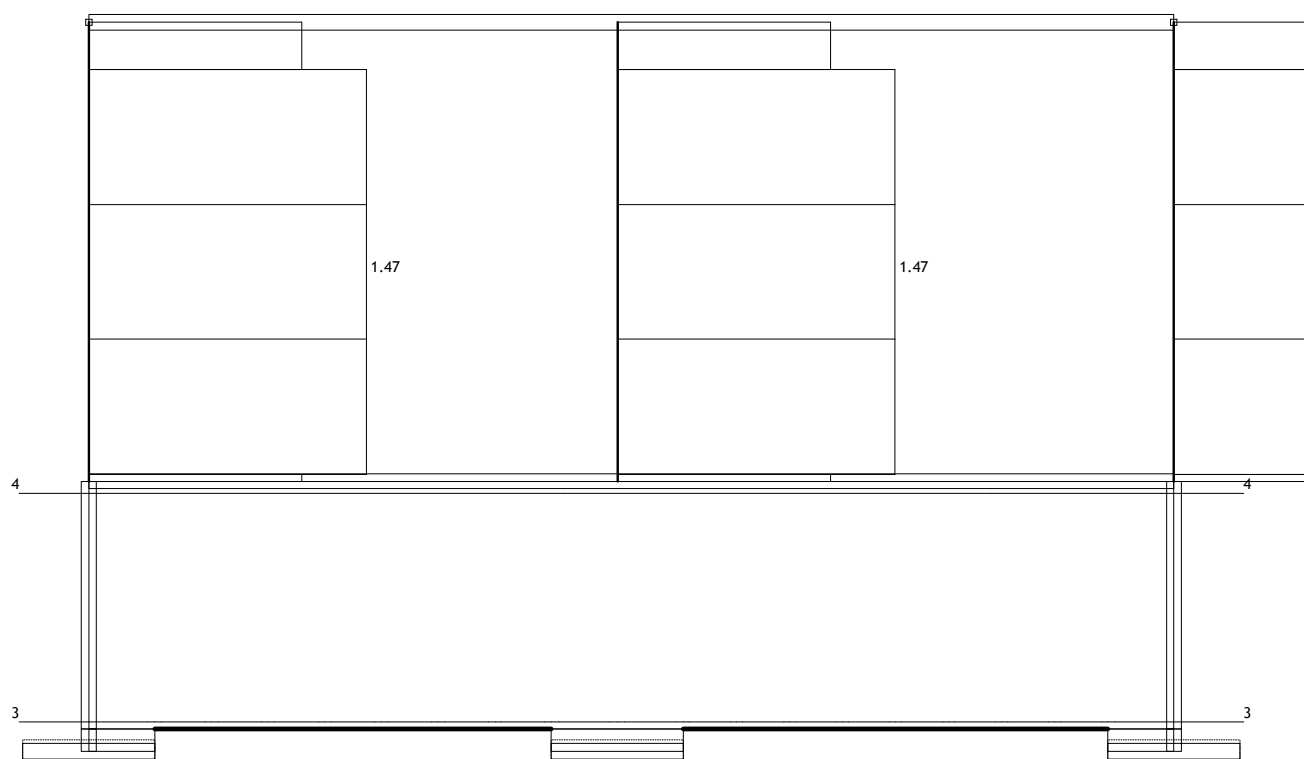
Сечение 2 - 2  
БДС НПБСК-88  
В 20  
Ъглова армировка А III  
Надлъжна армировка А III  
Оразмеряването е извършено за група товарни  
състояния: 18,19



Меродавно натоварване за огъване:  
1.25xI+1.25xII+III+IV-1.25xVII  
Меродавно натоварване за срязване:  
1.25xI+1.25xII+III+IV+1.25xVII  
Md = 302.76 kNm  
Nd = -419.81 kN  
Td = 180.68 kN

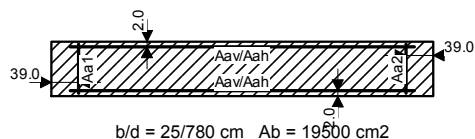
Aa1 = 5.86 cm² (мин.:17.57)  
Aa2 = 5.86 cm² (мин.:17.57)  
Aav = ±1.39 cm²/m (мин.:±1.88)  
Aah = ±1.13 cm²/m (мин.:±2.50)

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III



Рамка: В\_4  
Армировка в греди: max Aa,стр.= 1.47 cm2

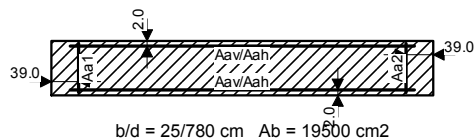
Сечение 3 - 3  
БДС НПБСК-88  
В 20  
Ъглова армировка А III  
Надлъжна армировка А III  
Оразмеряването е извършено за група товарни състояния: 18,19



Меродавно натоварване за огъване:  
1.25xI+1.25xII+III+IV-1.25xVII  
Меродавно натоварване за срязване:  
1.25xI+1.25xII+III+IV-1.25xVII  
Md = -364.92 kNm  
Nd = -646.91 kN  
Td = -300.12 kN

Aa1 = 9.75 cm² (мин.:29.25)  
Aa2 = 9.75 cm² (мин.:29.25)  
Aav = ±1.39 cm²/m (мин.:±1.88)  
Aah = ±1.13 cm²/m (мин.:±2.50)

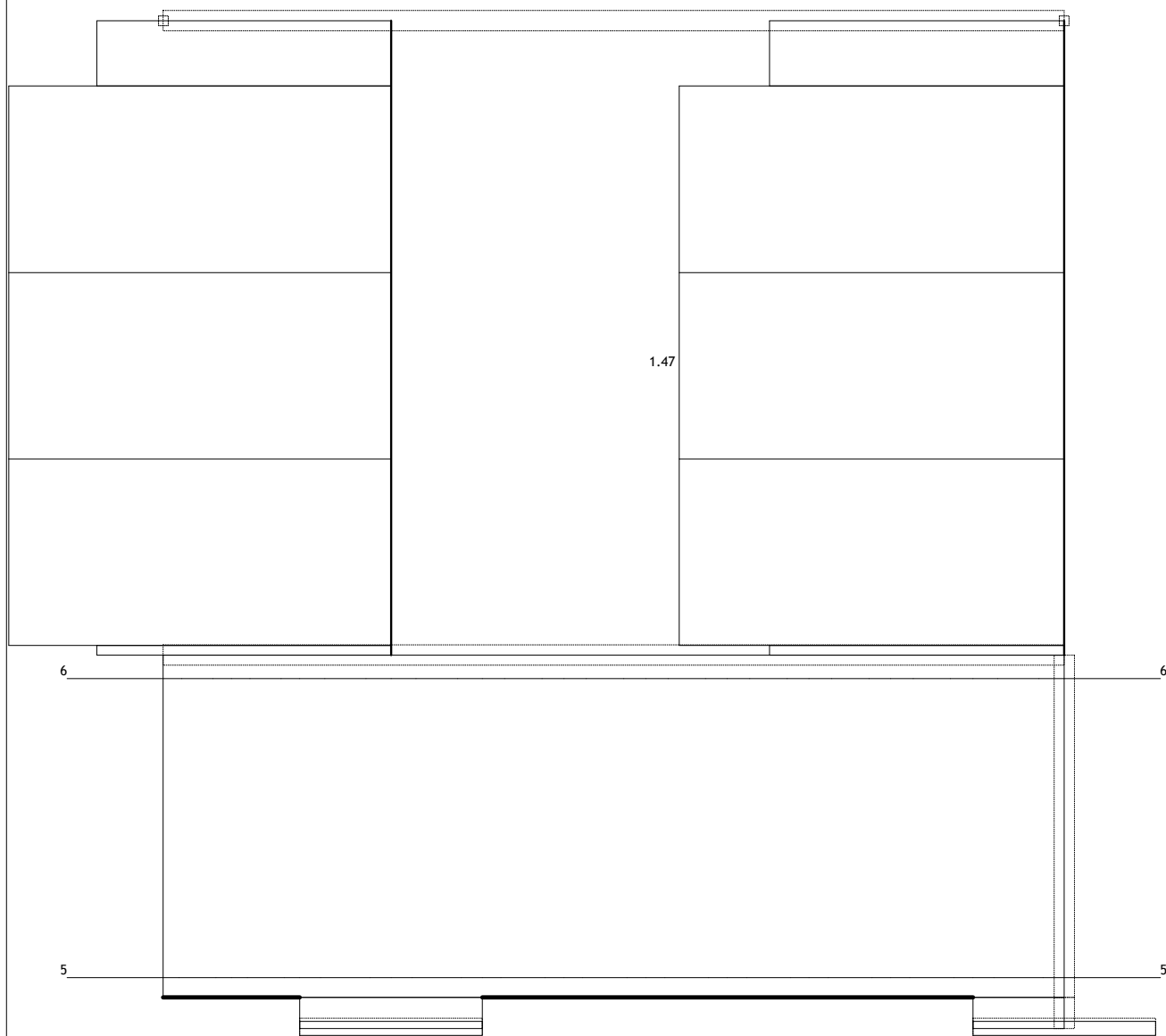
Сечение 4 - 4  
БДС НПБСК-88  
В 20  
Ъглова армировка А III  
Надлъжна армировка А III  
Оразмеряването е извършено за група товарни състояния: 18,19



Меродавно натоварване за огъване:  
1.25xI+1.25xII+III+IV-1.25xVII  
Меродавно натоварване за срязване:  
1.25xI+1.25xII+III+IV-1.25xVII  
Md = -240.62 kNm  
Nd = -574.51 kN  
Td = -183.00 kN

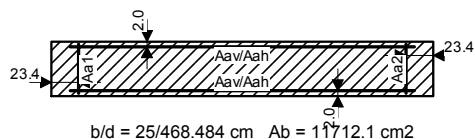
Aa1 = 9.75 cm² (мин.:29.25)  
Aa2 = 9.75 cm² (мин.:29.25)  
Aav = ±1.39 cm²/m (мин.:±1.88)  
Aah = ±1.13 cm²/m (мин.:±2.50)

Меродавно натоварване: 18,19  
БДС НПБСК-88, В 20, А III



Рамка: X\_5  
Армировка в греди: max Aa,стр.= 1.47 cm2

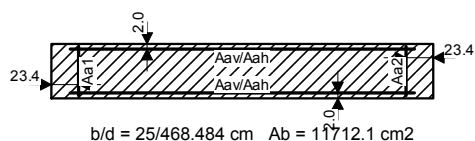
Сечение 5 - 5  
БДС НПБСК-88  
В 20  
Ъглова армировка А III  
Надлъжна армировка А III  
Оразмеряването е извършено за група товарни  
състояния: 18,19



Меродавно натоварване за огъване:  
1.25xI+1.25xII+III+IV-1.25xVII  
Меродавно натоварване за срязване:  
1.25xI+1.25xII+III+IV-1.25xVII  
Md = 361.36 kNm  
Nd = -458.51 kN  
Td = -535.56 kN

Aa1 = 5.86 cm<sup>2</sup> (мин.:17.57)  
Aa2 = 5.86 cm<sup>2</sup> (мин.:17.57)  
Aav = ±1.39 cm<sup>2</sup>/m (мин.:±1.88)  
Aah = ±1.13 cm<sup>2</sup>/m (мин.:±2.50)

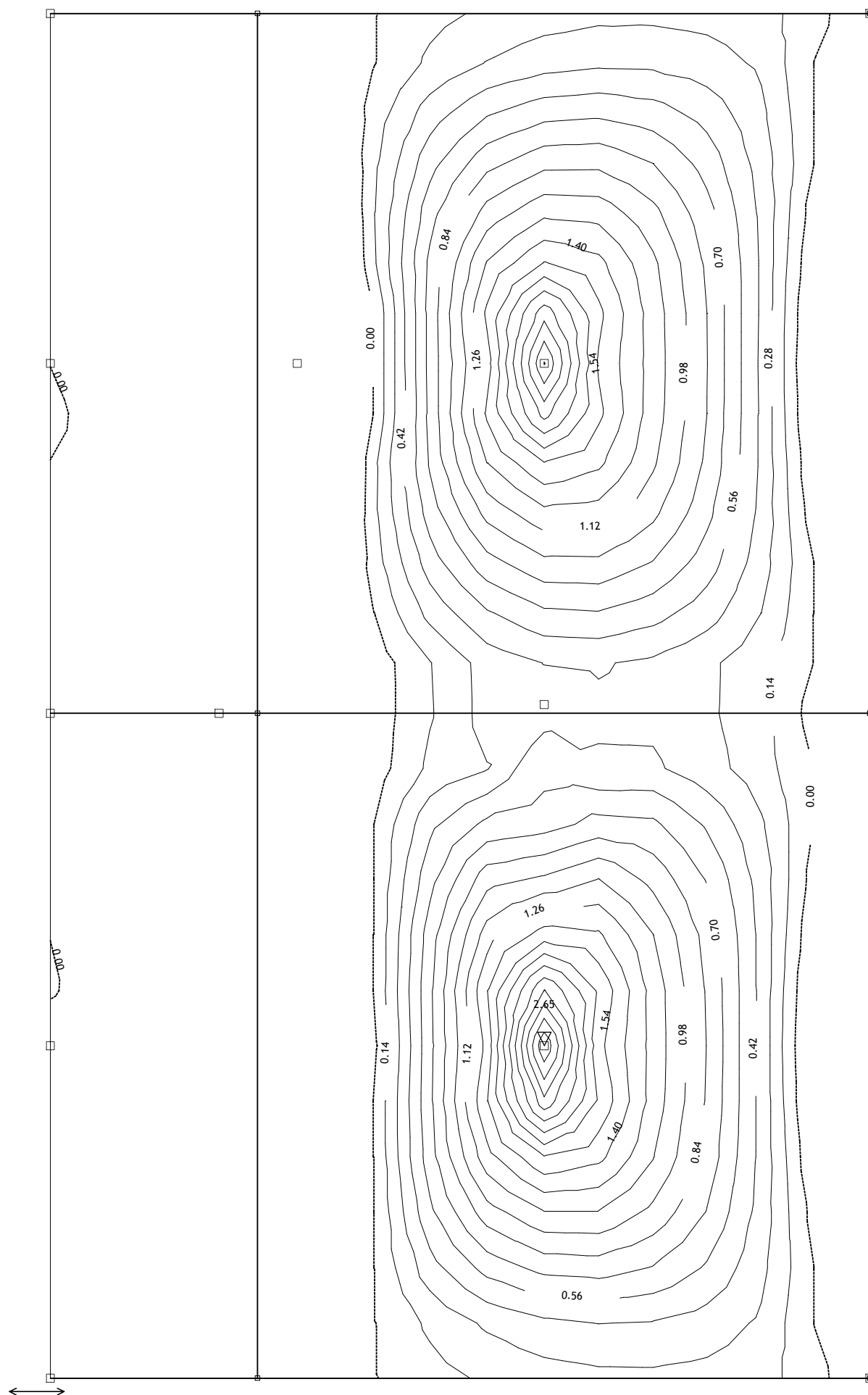
Сечение 6 - 6  
БДС НПБСК-88  
В 20  
Ъглова армировка А III  
Надлъжна армировка А III  
Оразмеряването е извършено за група товарни  
състояния: 18,19



Меродавно натоварване за огъване:  
1.25xI+1.25xII+III+IV-1.25xVII  
Меродавно натоварване за срязване:  
1.25xI+1.25xII+III+IV+1.25xVII  
Md = 269.26 kNm  
Nd = -372.52 kN  
Td = 176.77 kN

Aa1 = 5.86 cm<sup>2</sup> (мин.:17.57)  
Aa2 = 5.86 cm<sup>2</sup> (мин.:17.57)  
Aav = ±1.39 cm<sup>2</sup>/m (мин.:±1.88)  
Aah = ±1.13 cm<sup>2</sup>/m (мин.:±2.50)

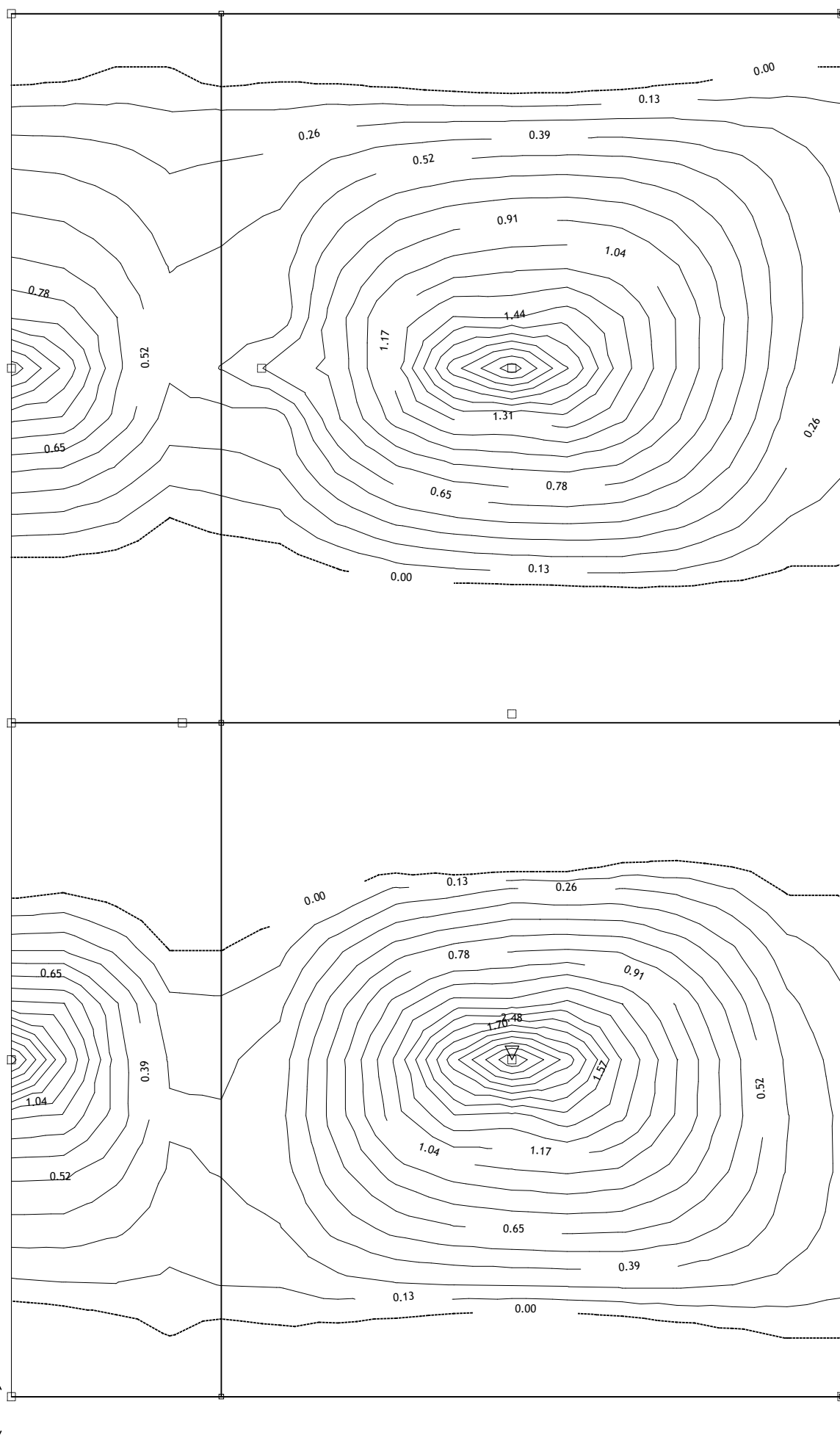
Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III, а=4.00 cm



Ниво: [3.24 m]

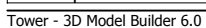
Аа - долна зона - Направление 1 - max Аа<sub>1,д</sub>= 2.65 cm<sup>2</sup>/m

Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III, a=4.00 cm

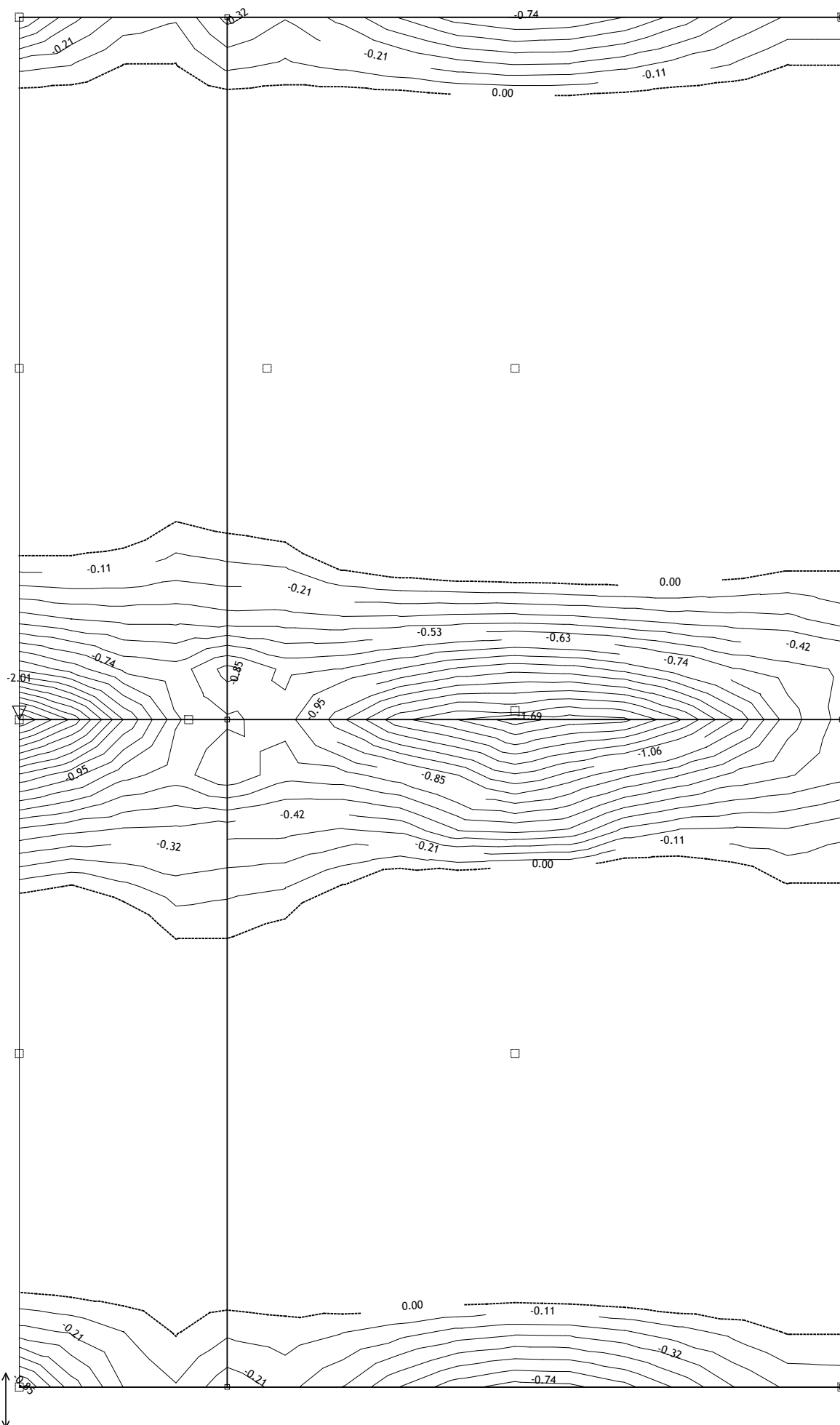


Ниво: [3.24 m]  
Аа - долна зона - Направление 2 - max Аа2,д= 2.48 cm2/m

Ниво: [3.24 m]  
Aa - горна зона - Направление 1 - max Aa1,  $\epsilon = -2.11 \text{ cm}^2/\text{m}$

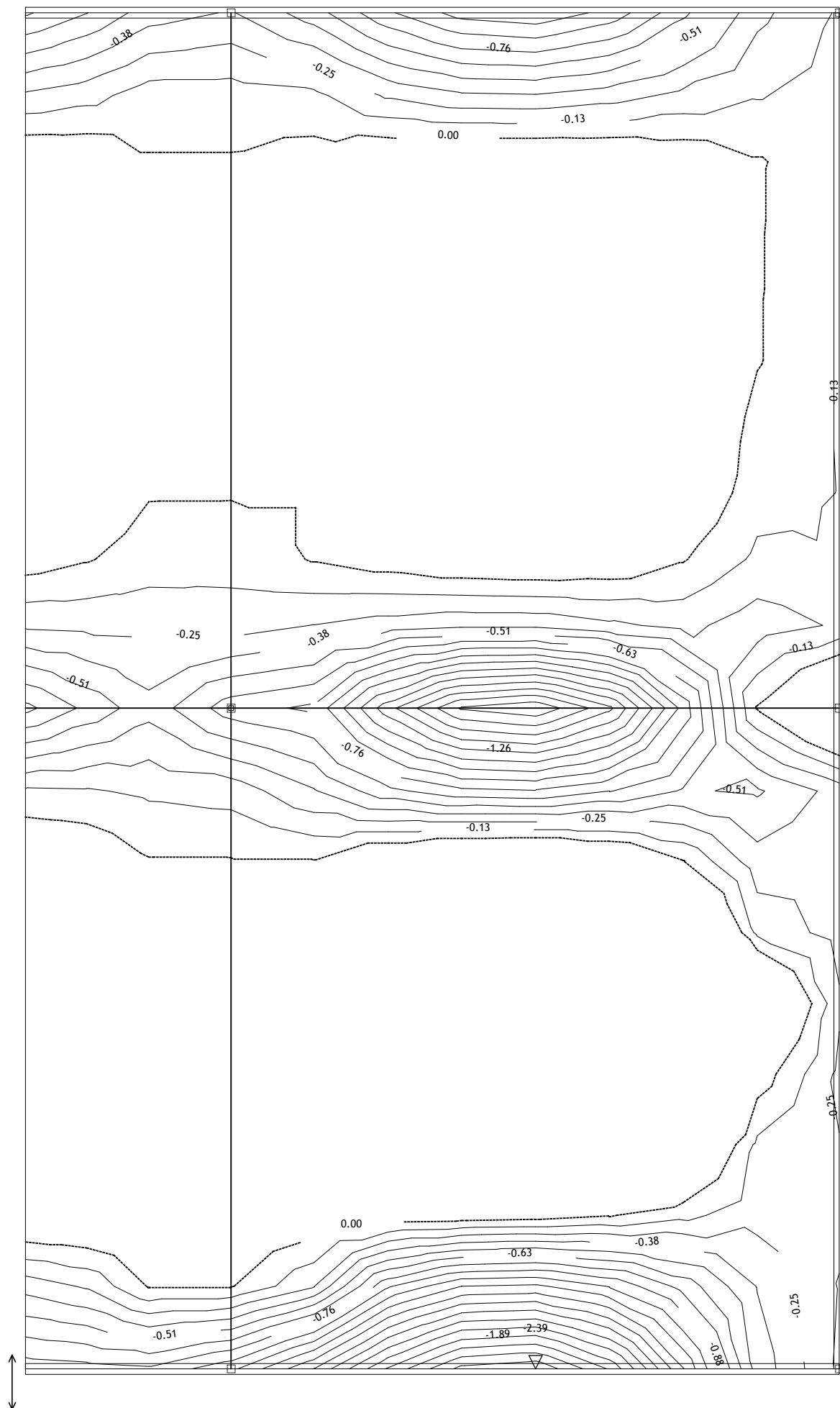


Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III, a=4.00 cm



Ниво: [3.24 m]  
Аа - горна зона - Направление 2 - max Aa2,r= -2.01 cm2/m

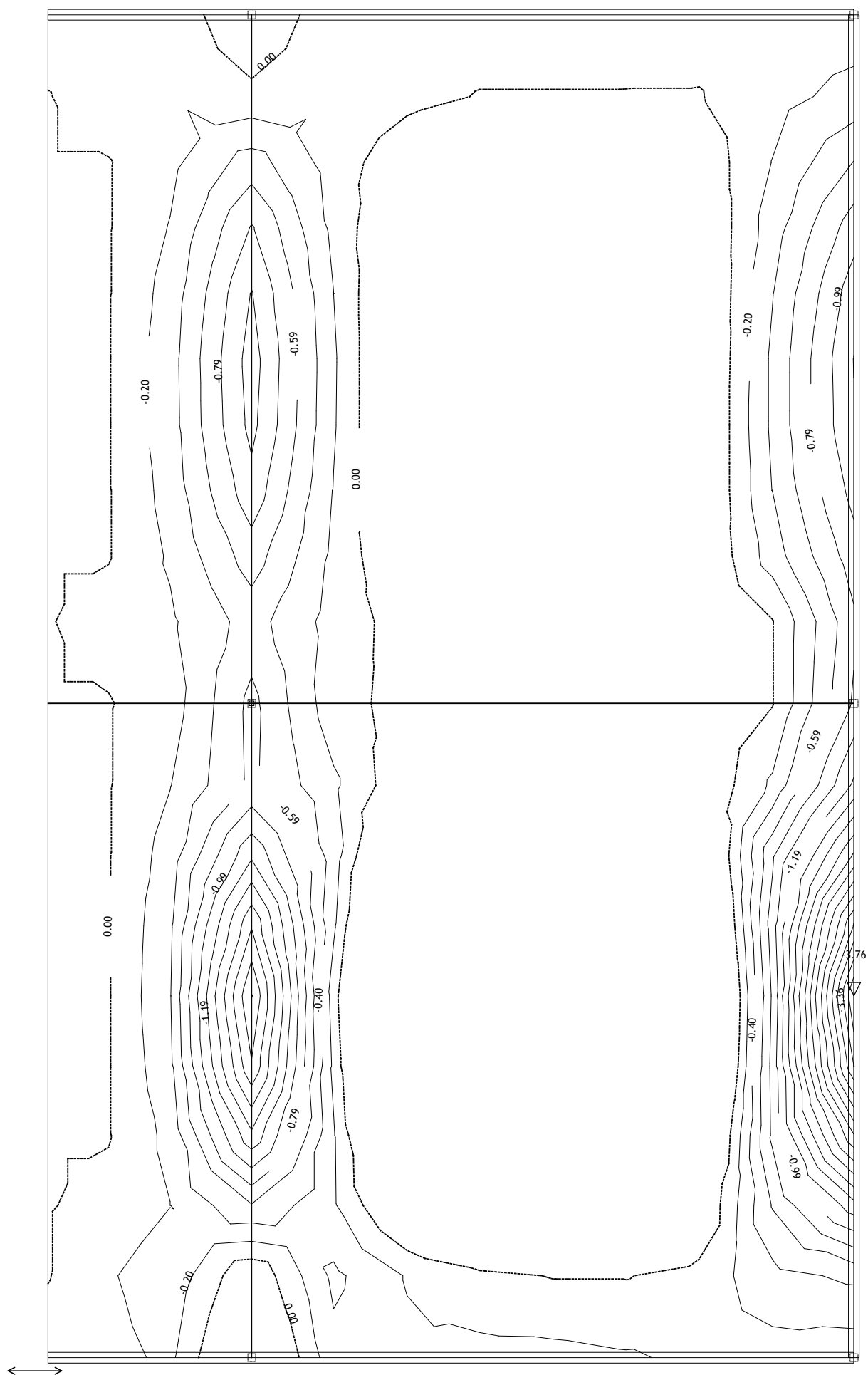
Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III, а=4.00 cm



Ниво: [-0.06 m]

Аа - горна зона - Направление 2 - max Аа2,r= -2.39 cm<sup>2</sup>/m

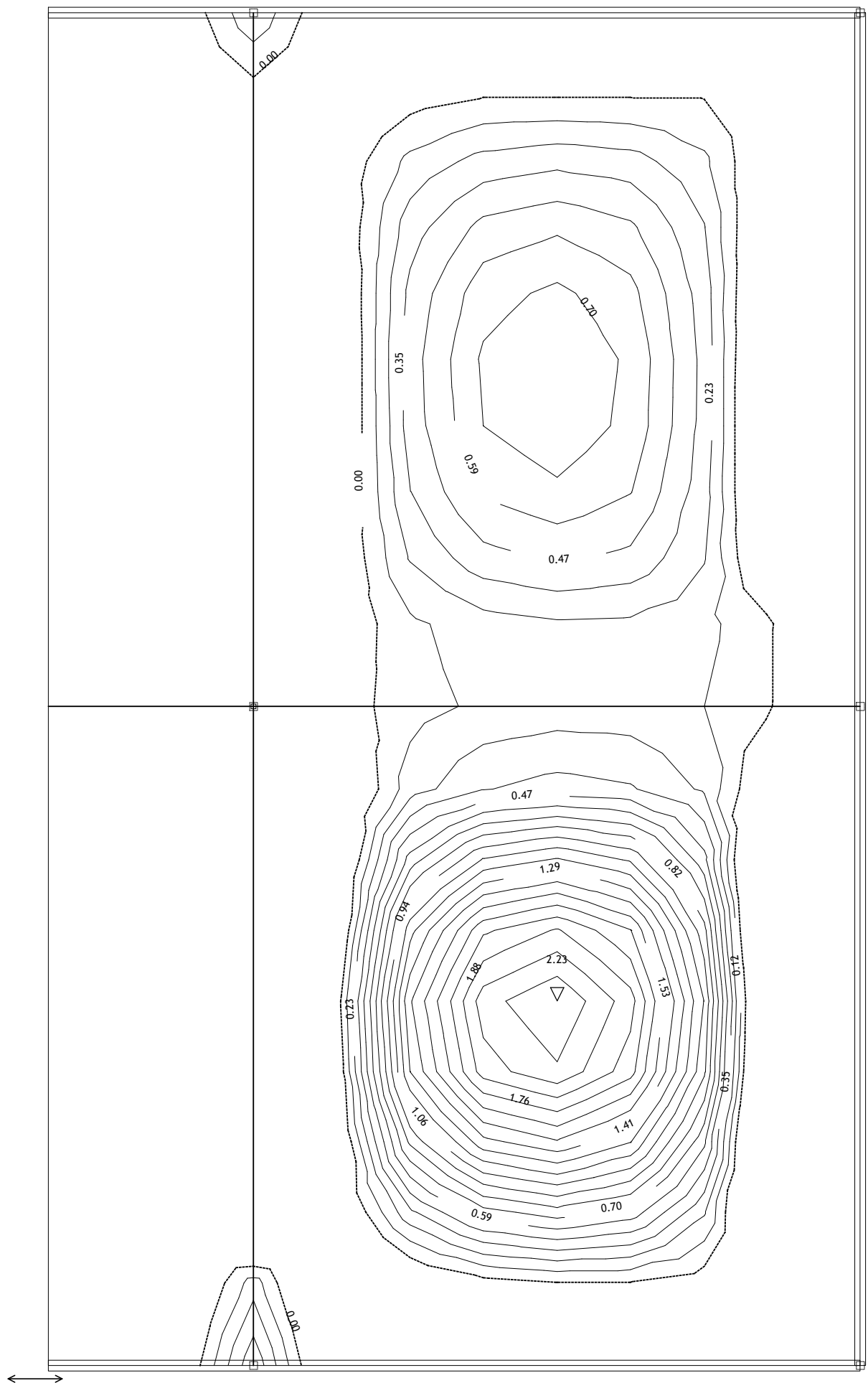
Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III, а=4.00 cm



Ниво: [-0.06 m]

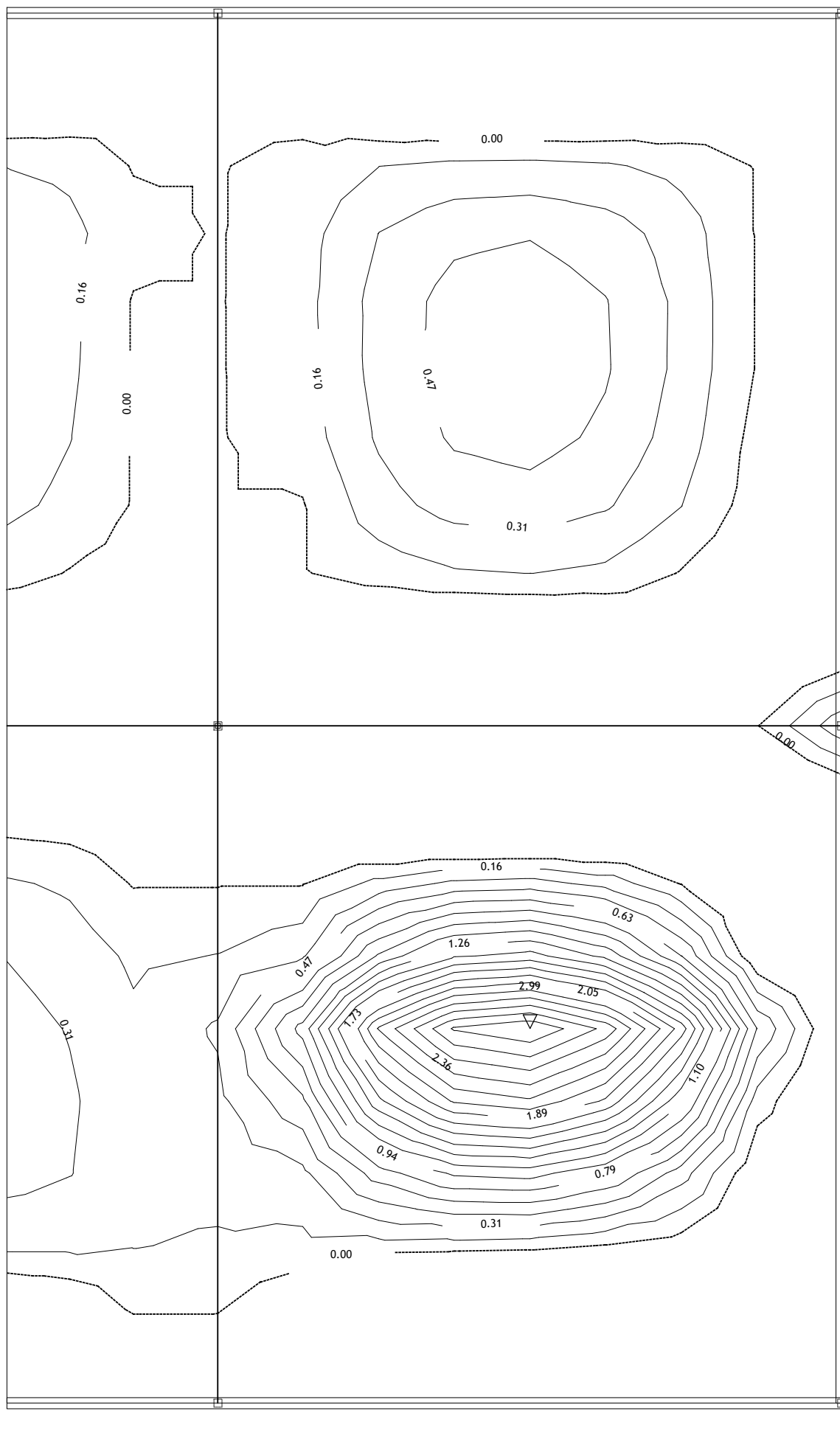
Аа - горна зона - Направление 1 - max Аа1,г= -3.76 cm<sup>2</sup>/m

Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III, a=4.00 cm



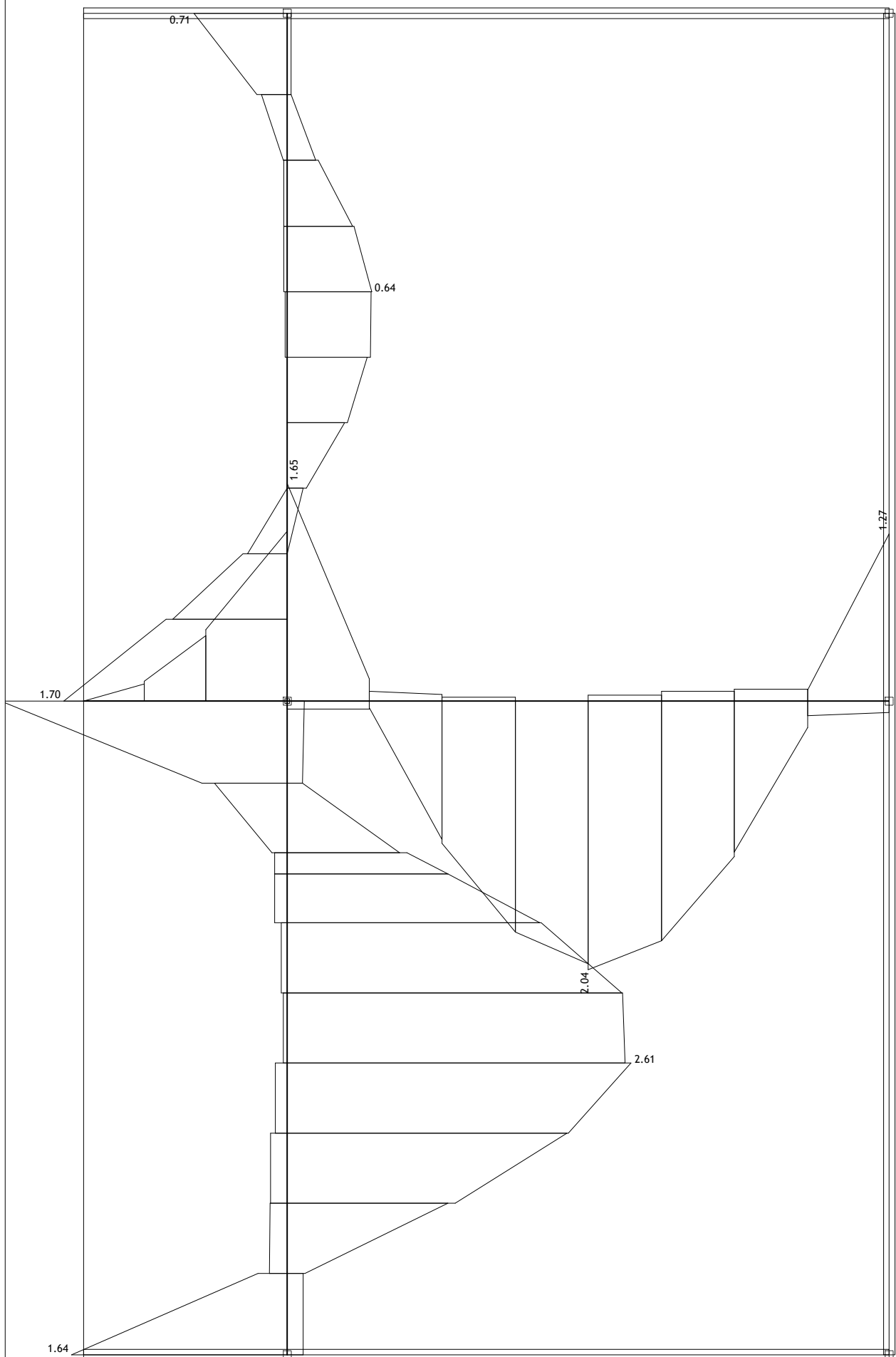
Ниво: [-0.06 m]

Аа - долна зона - Направление 1 - max Аа1,д= 2.23 cm<sup>2</sup>/m



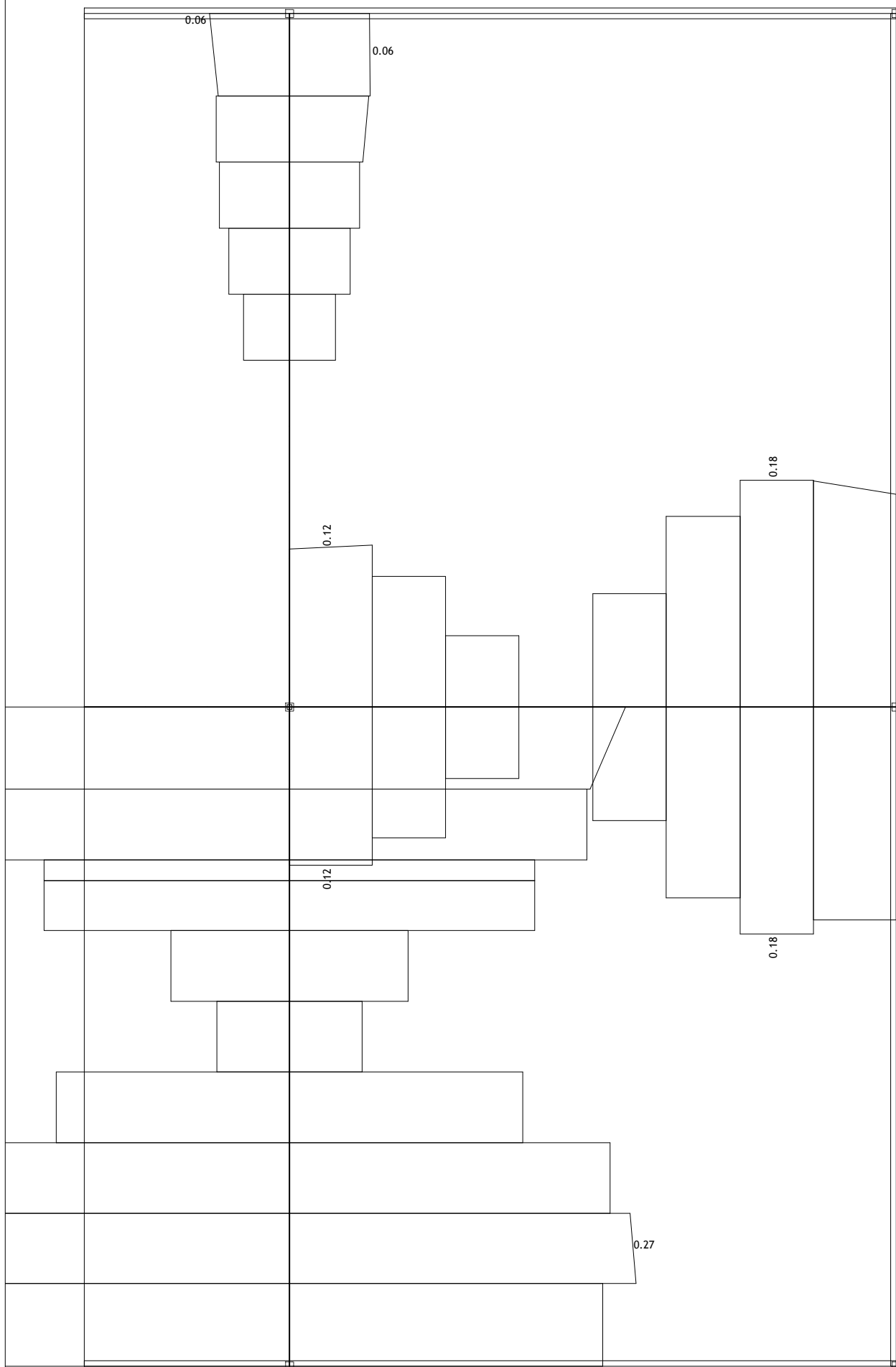
Ниво: [-0.06 m]  
Аа - долна зона - Направление 2 - max Аа2,д= 2.99 cm<sup>2</sup>/m

Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III



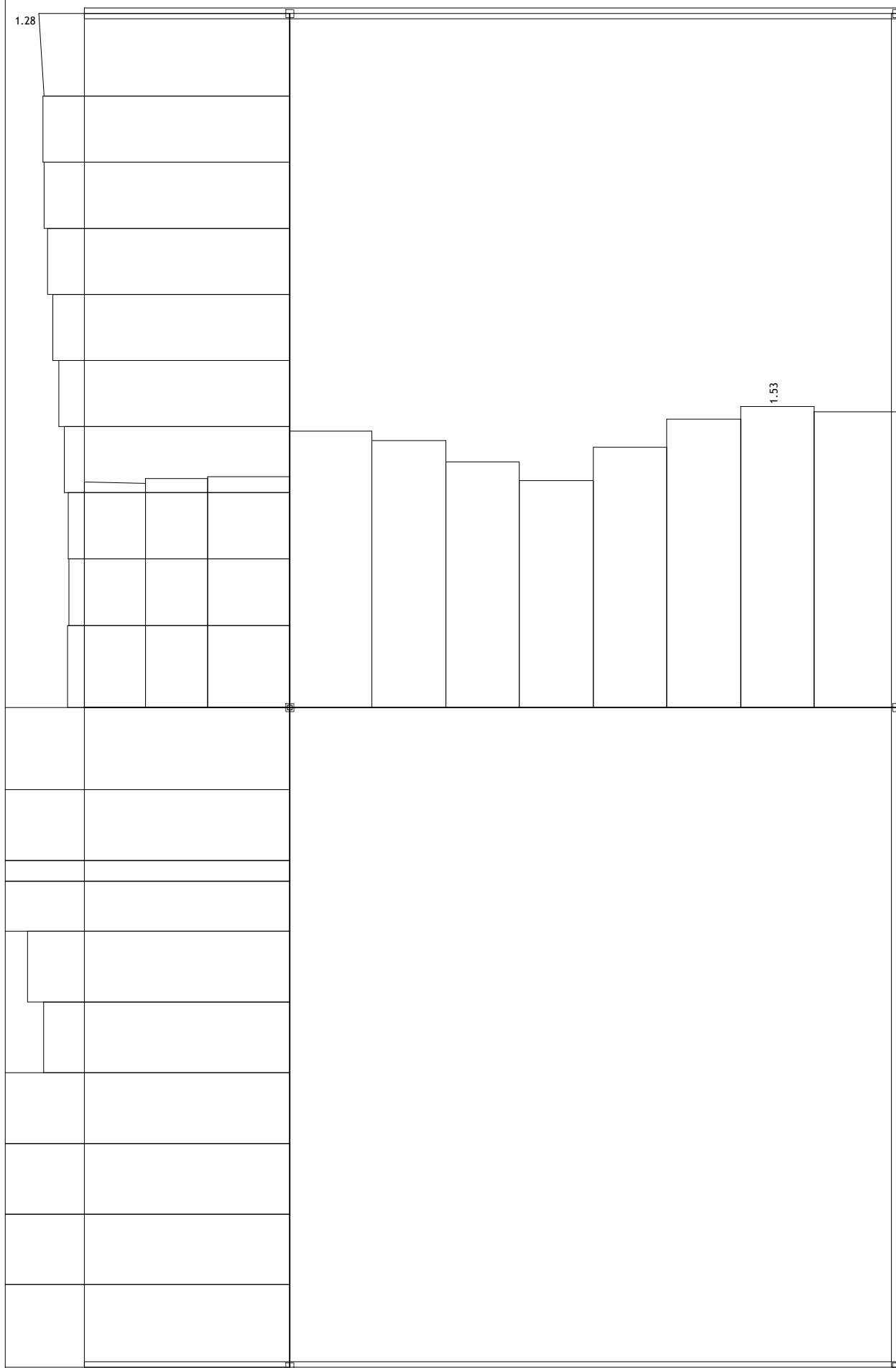
Ниво: [-0.06 m]  
Армировка в греди: max Aa2/Aa1= 2.61 cm<sup>2</sup>

Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III



Ниво: [-0.06 m]  
Армировка в греди: max Aa3/Aa4= 0.27 cm<sup>2</sup>

Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III



Ниво: [-0.06 m]  
Армировка в греди: max Aa,стр.= 1.77 cm<sup>2</sup>

Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III

1.29

2.00

1.22

1.25

1.59

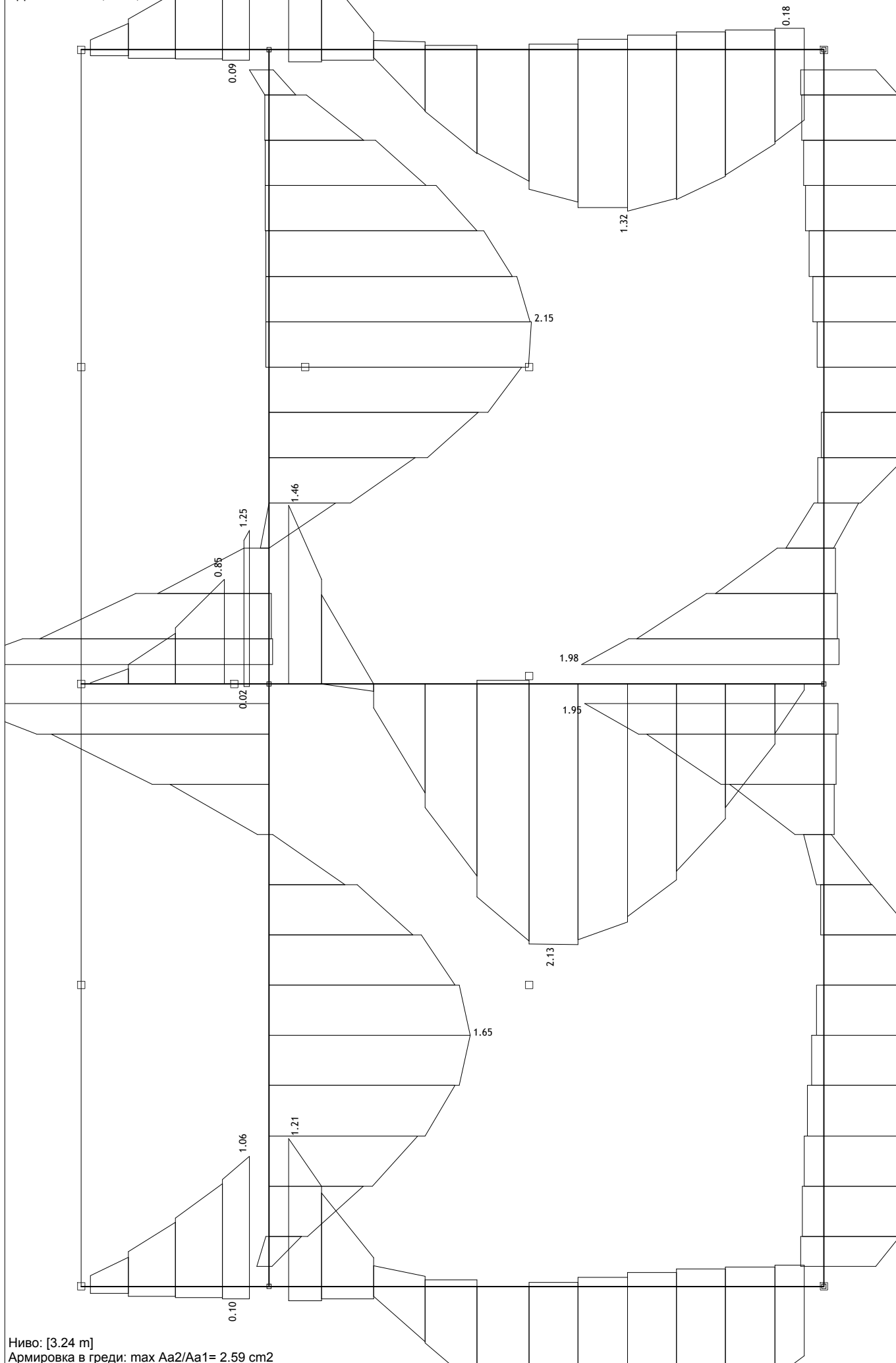
1.92

1.23

1.99

Ниво: [3.24 m]  
Армировка в греди: max Aa,стр.= 2.00 cm<sup>2</sup>

Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III



Ниво: [3.24 m]  
Армировка в греди: max Aa2/Aa1= 2.59 cm2

Меродавно натоварване: 1.20xI+1.35xII+1.30xIII+1.40xIV  
БДС НПБСК-88, В 20, А III

Ниво: [3.24 m]  
Армировка в греди: max Aa3/Aa4= 0.31 cm<sup>2</sup>

[illegible]