

Matematyka stosowana

Zastosowania geometrii wykreślnej w praktyce inżynierskiej

2. Projektowanie placów i dróg dojazdowych

dr inż. arch. Anna Wanclaw

Politechnika Gdańska, Wydział Architektury

Studia inżynierskie, kierunek Gospodarka przestrzenna, semestr III

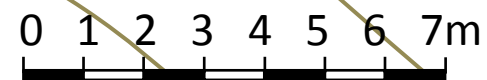
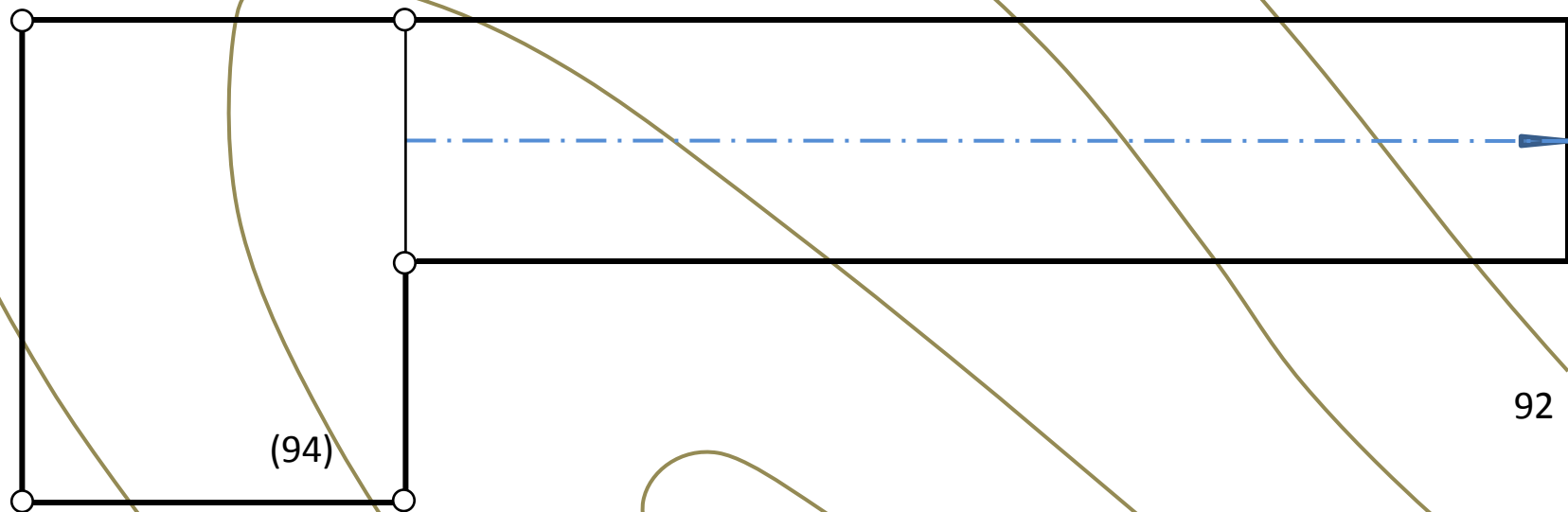
2. Projektowanie placów i dróg dojazdowych

- Projektowanie łuków pionowych drogi

Wokół poziomego placu i drogi dojazdowej założyć skarpy wykopów i nasypów, wyznaczyć ich krawędzie przecięcia się z terenem.

Zaprojektować łagodne przejście z placu w drogę zakładając powierzchnię walcową o promieniu 35 m.

- nachylenie drogi = 15%
- nachylenie skarpy nasypu = 2/3
- nachylenie skarpy wykopu = 4/3
- promień krzywizny pionowej = 35m



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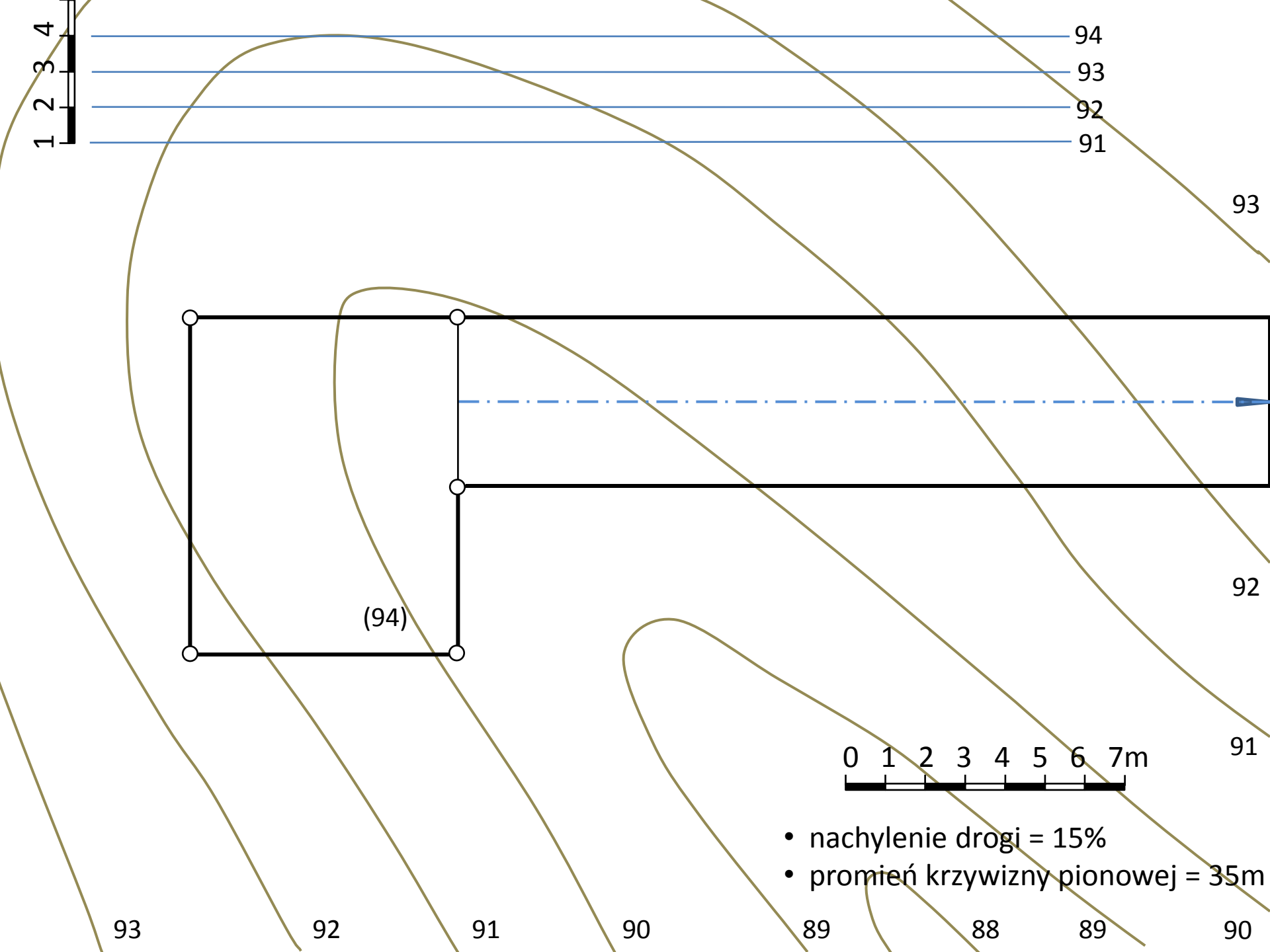
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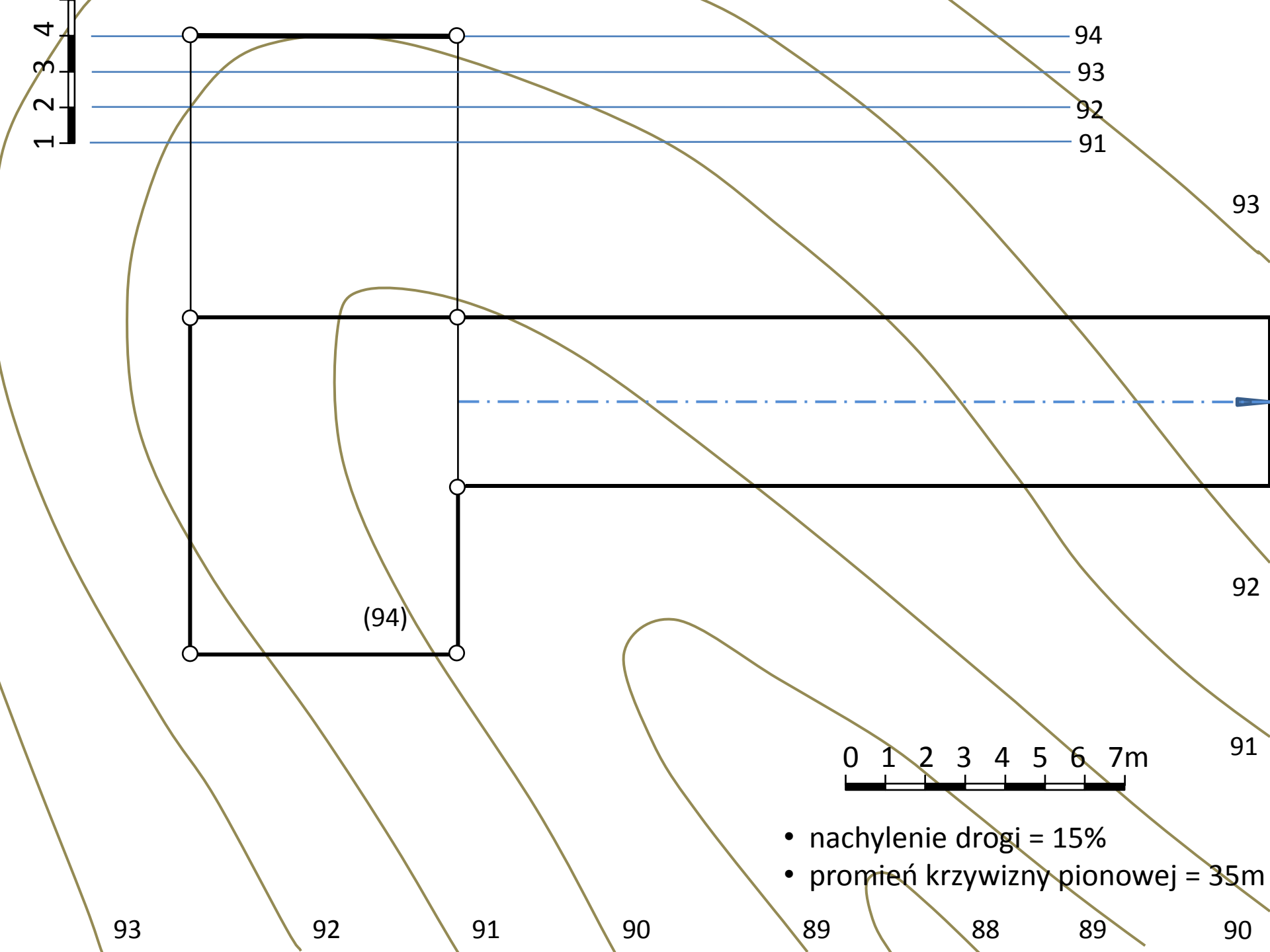
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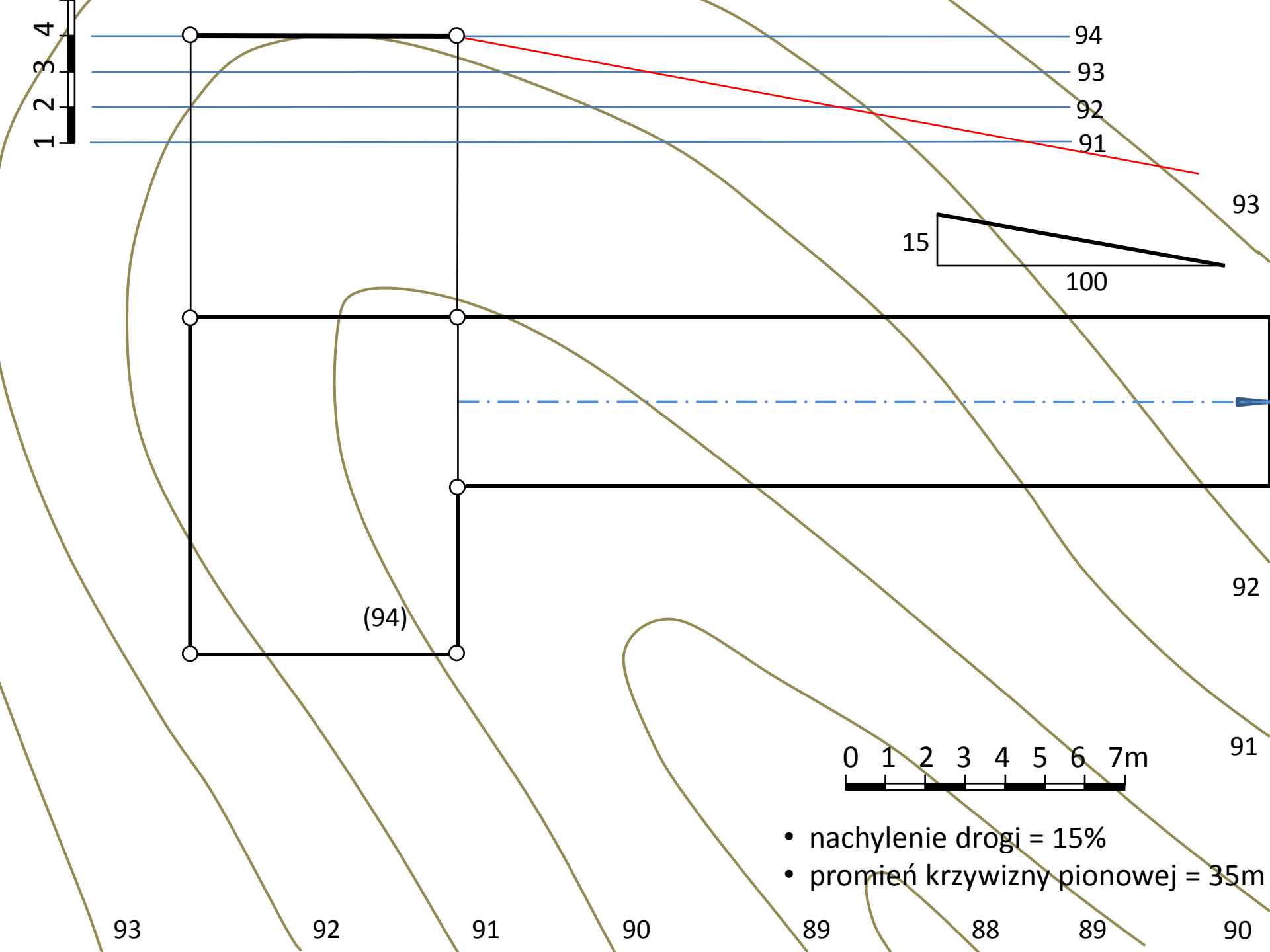
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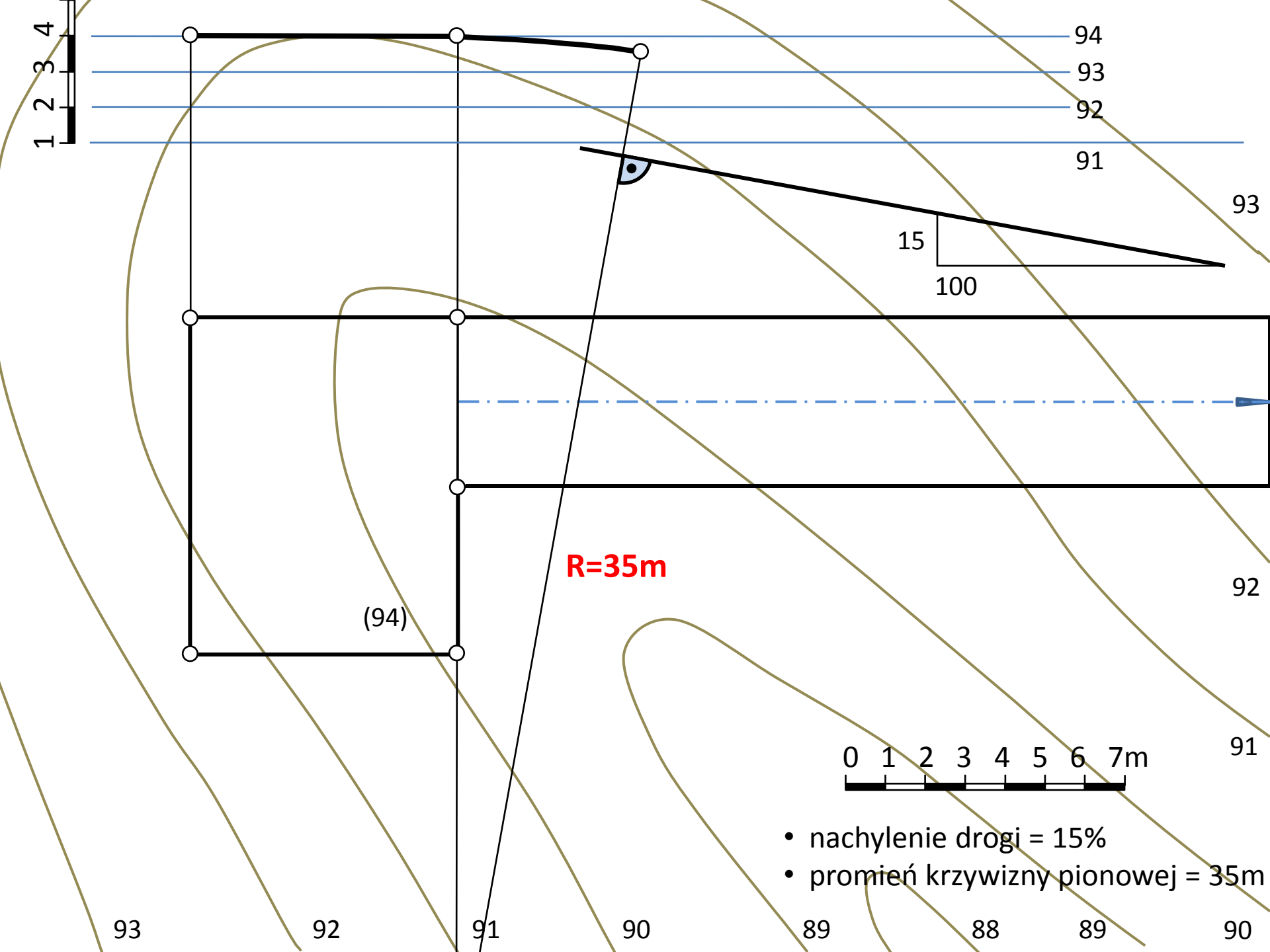
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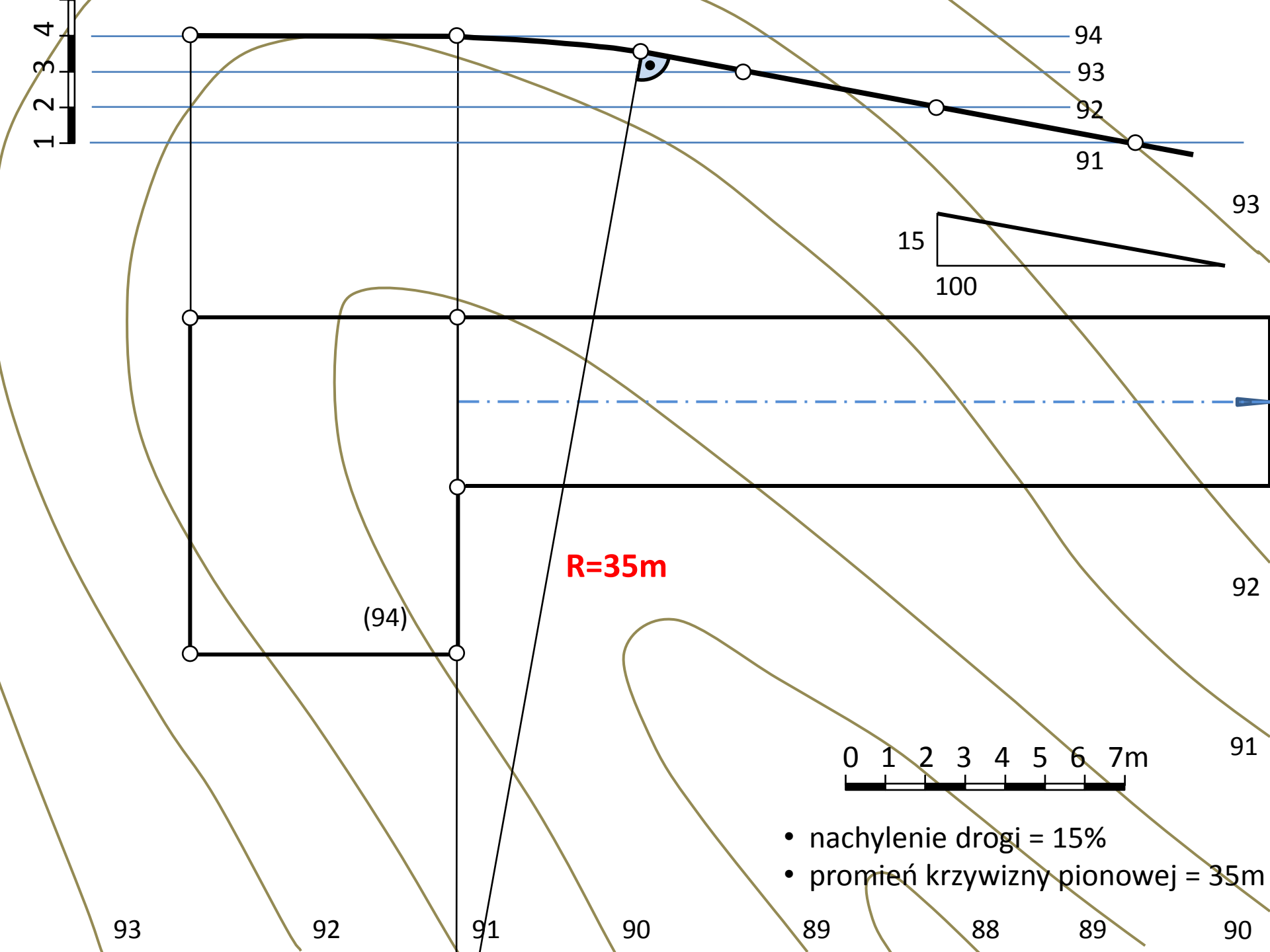
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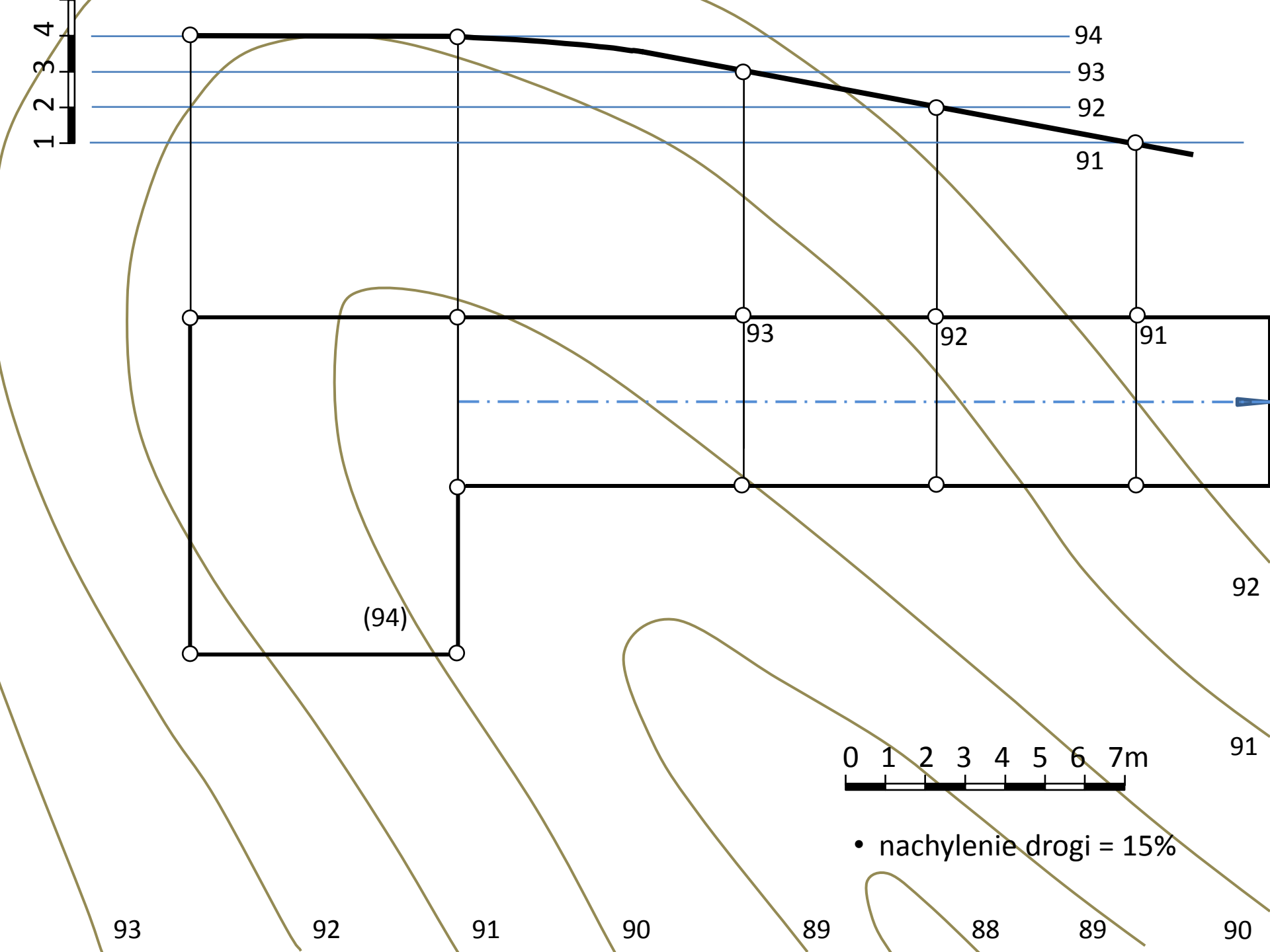


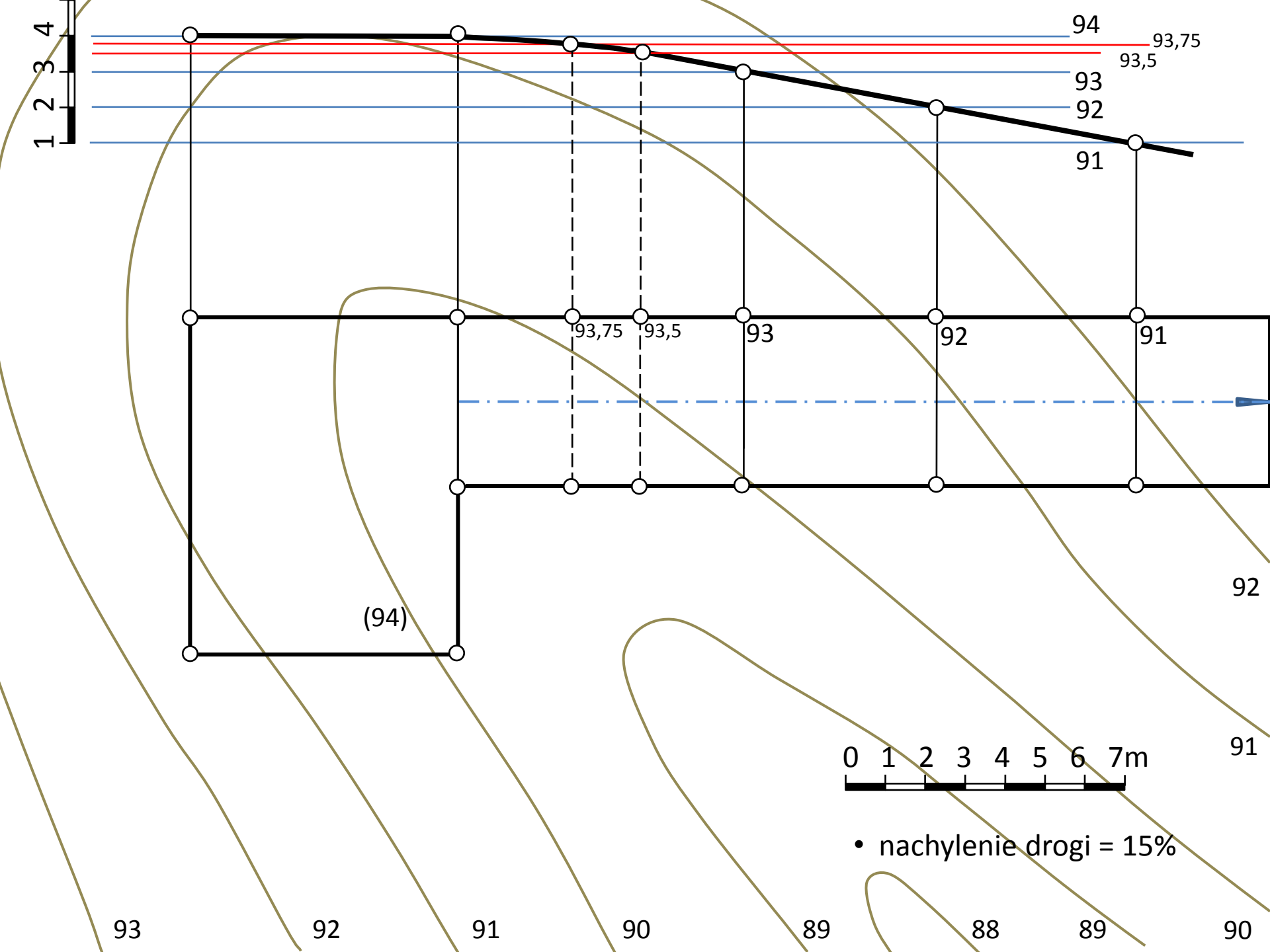


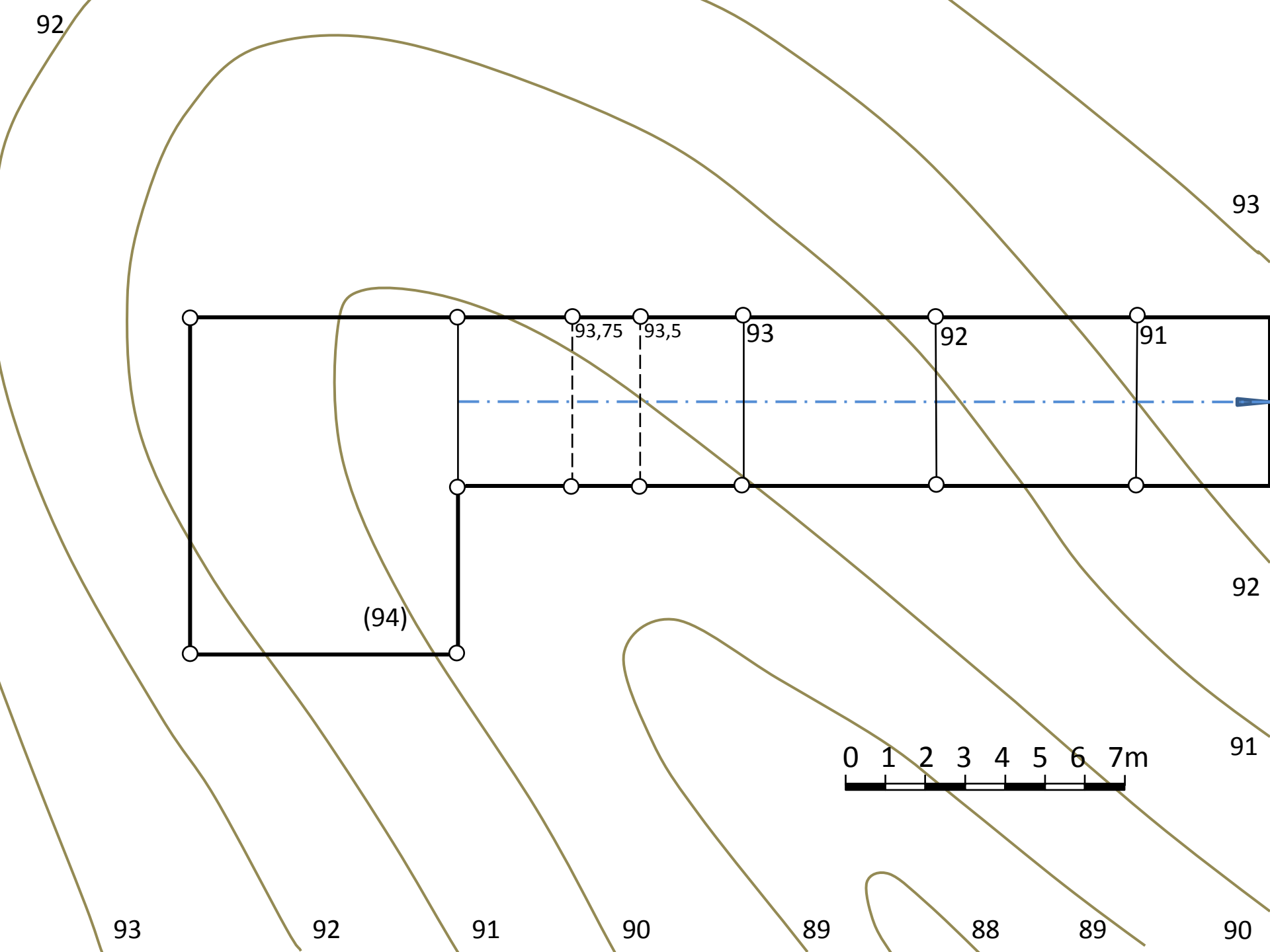


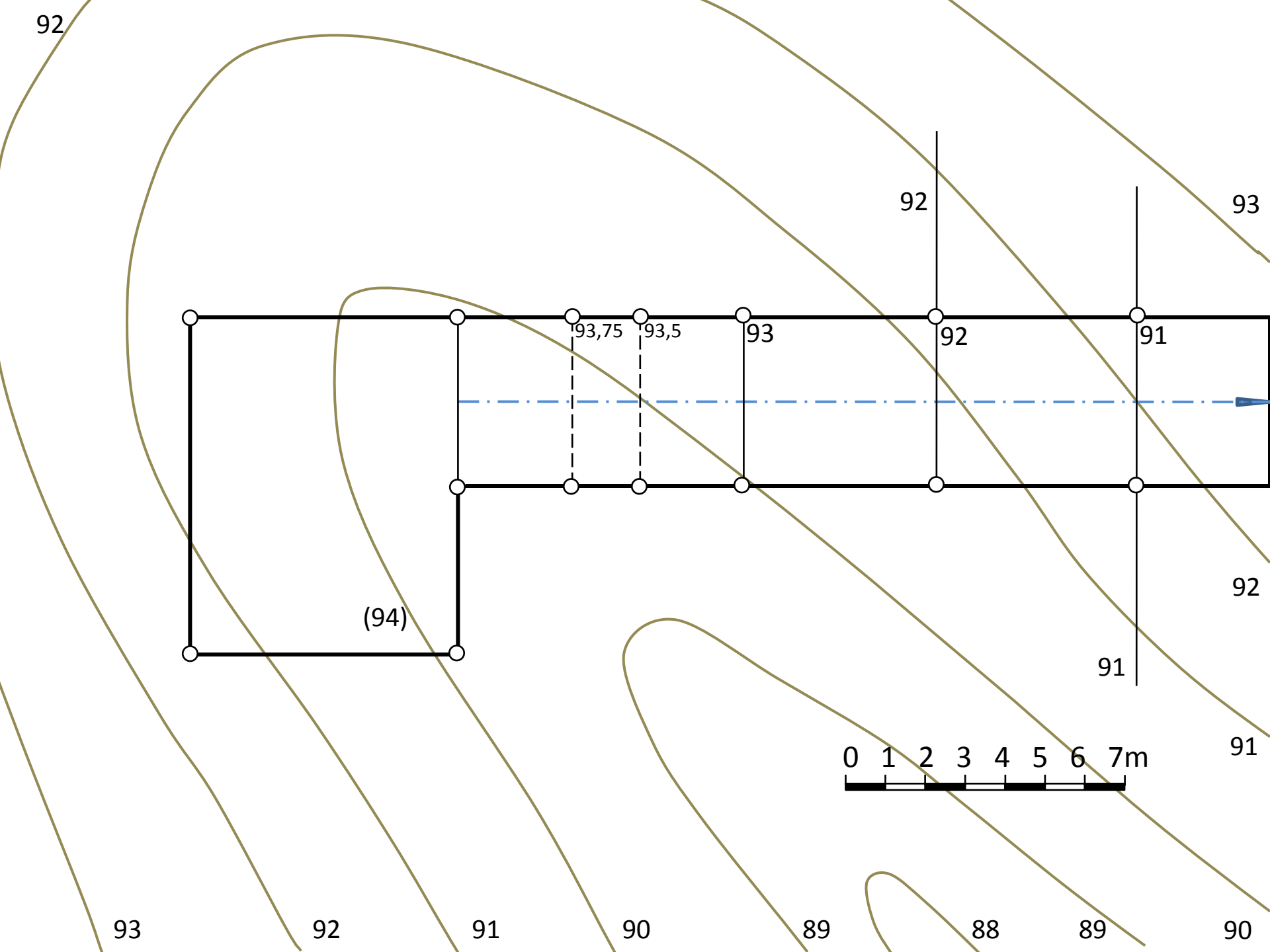


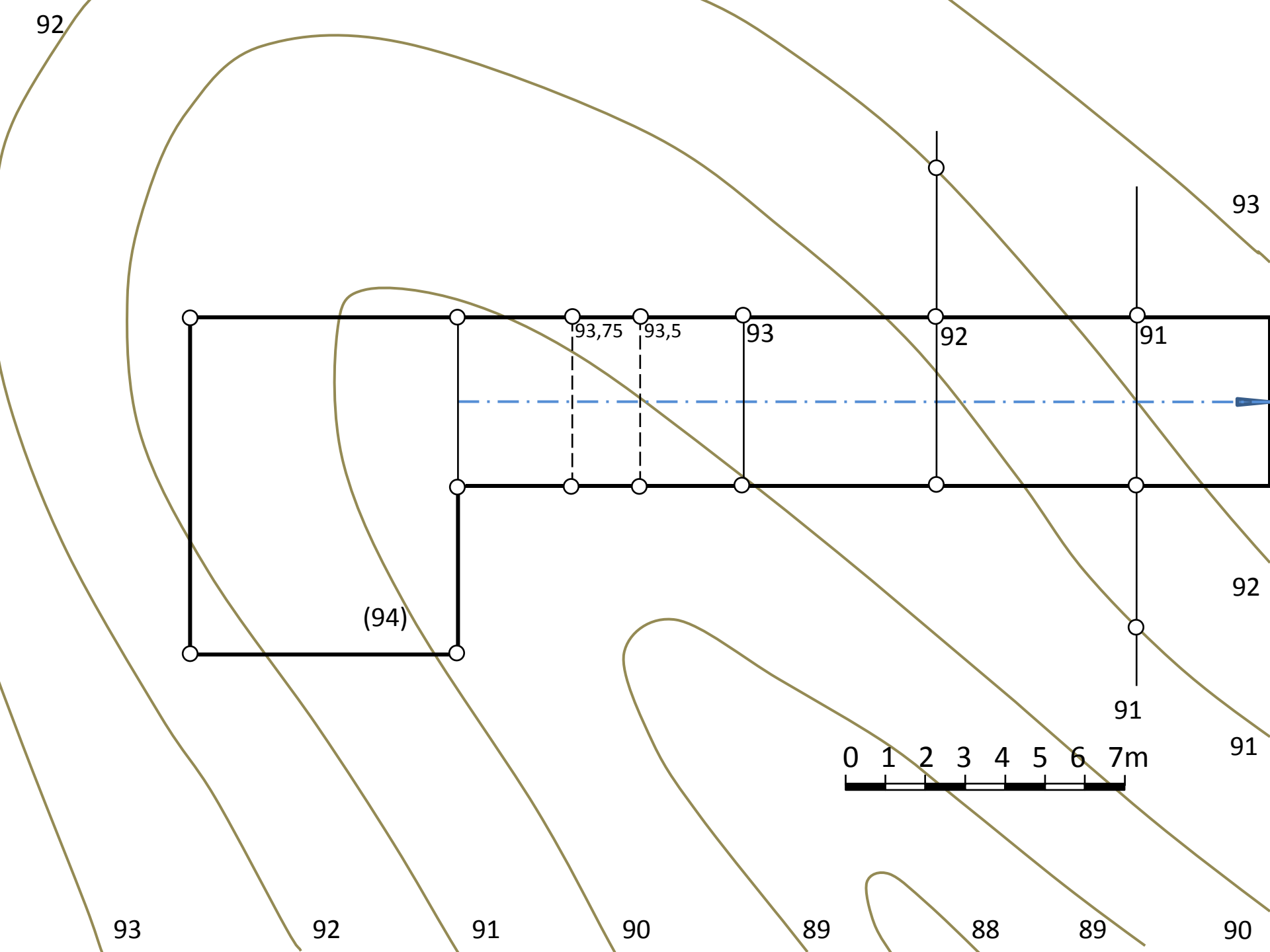


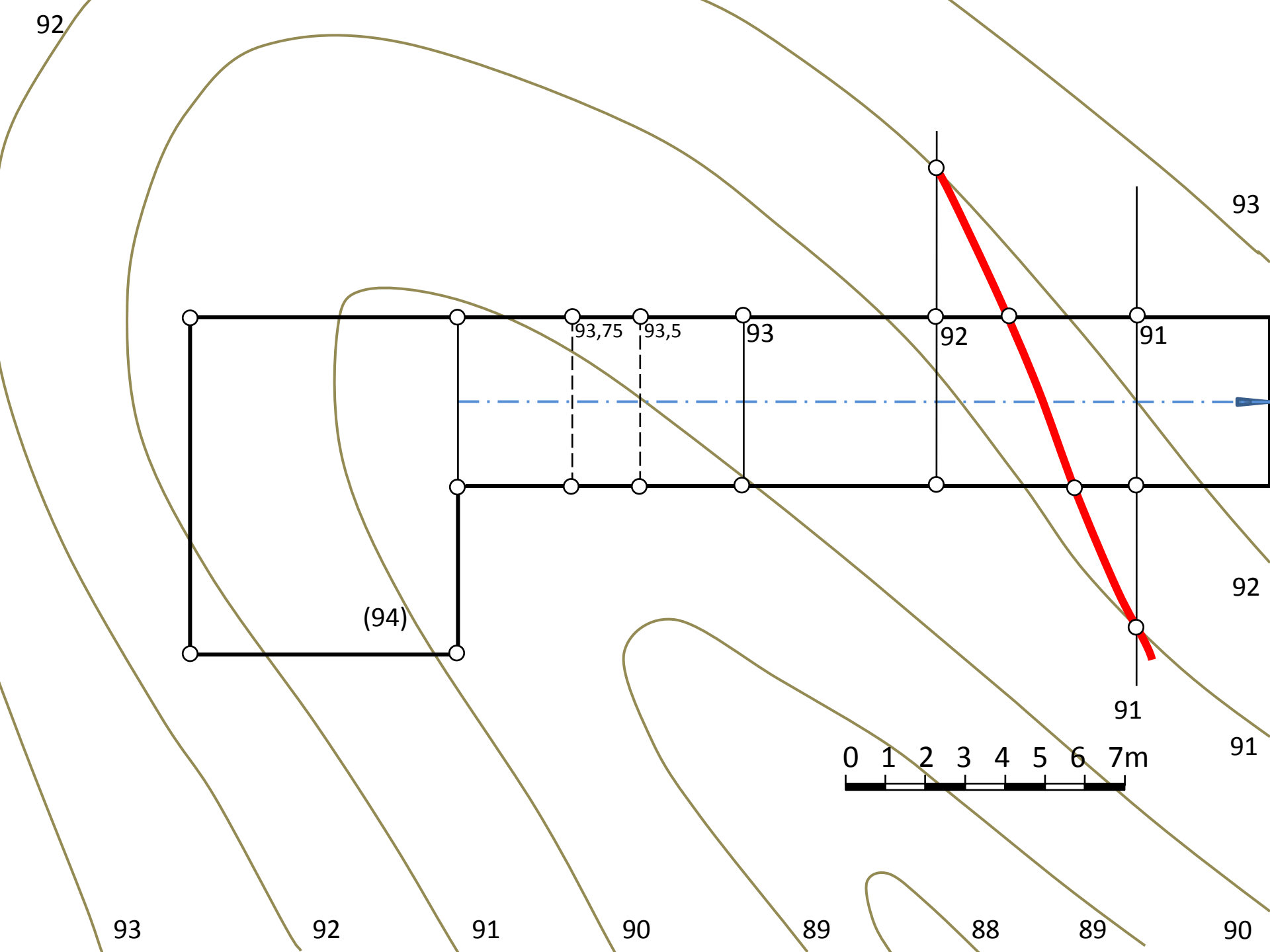








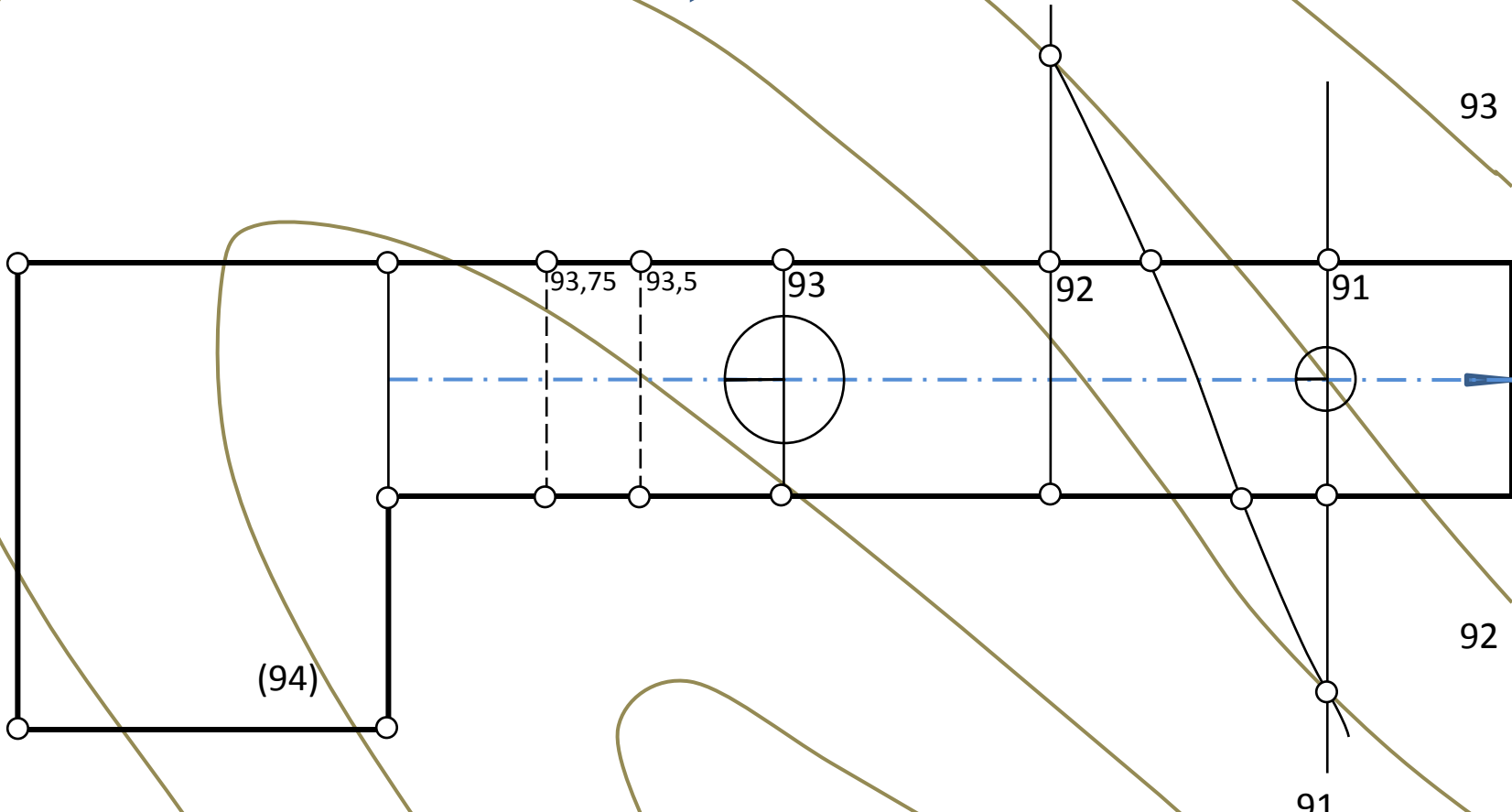




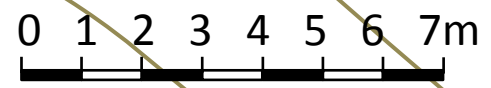


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- nachylenie skarpy nasypu = 2/3  moduł nasypu = 1,5m
- nachylenie skarpy wykopu = 4/3  moduł wykopu = 0,75m



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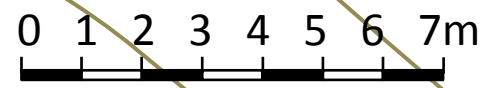
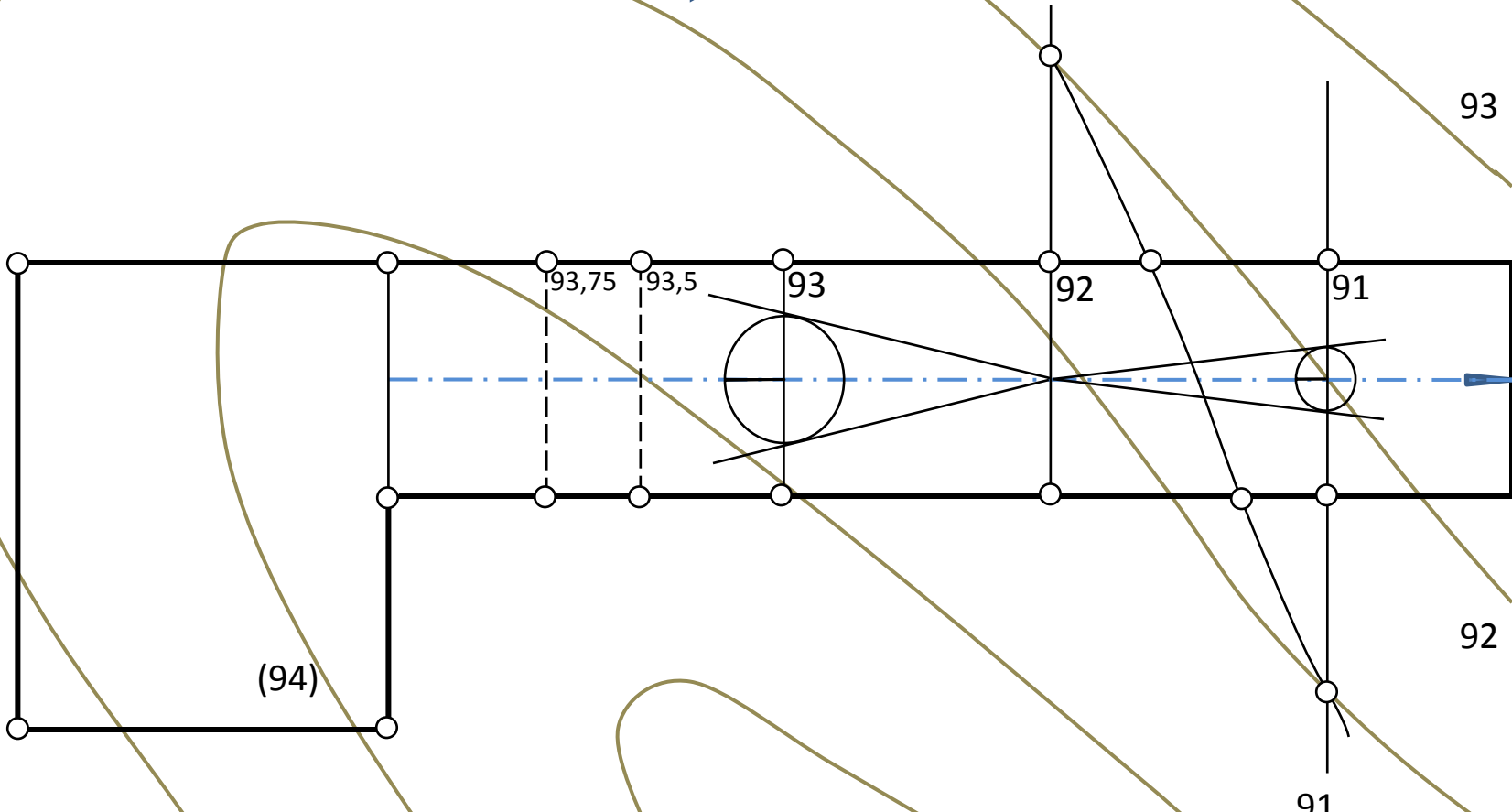
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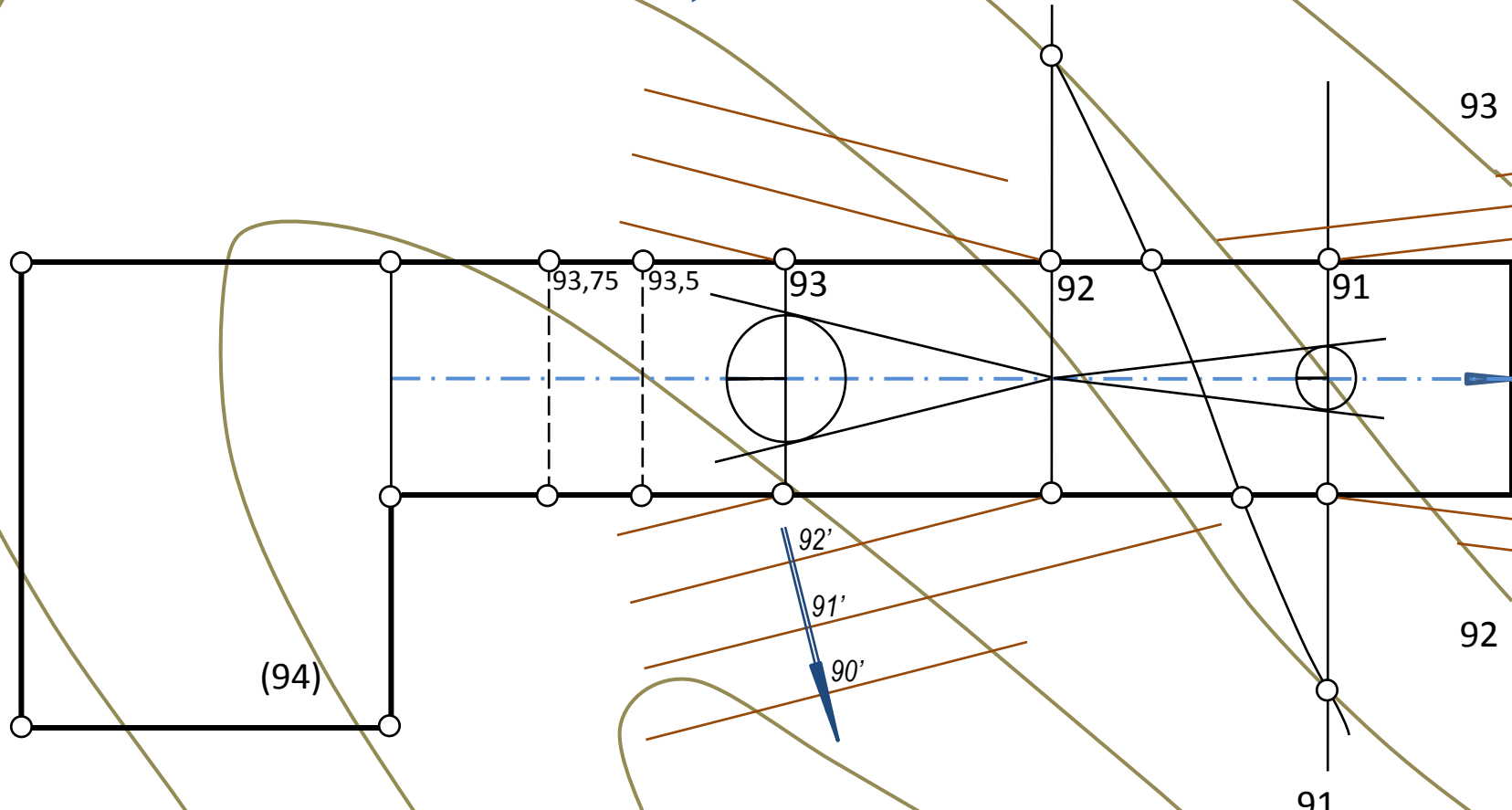
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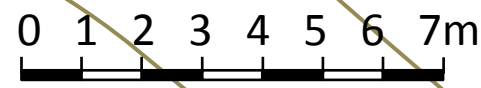
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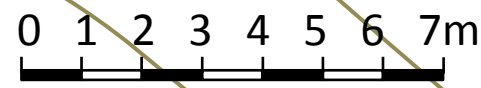
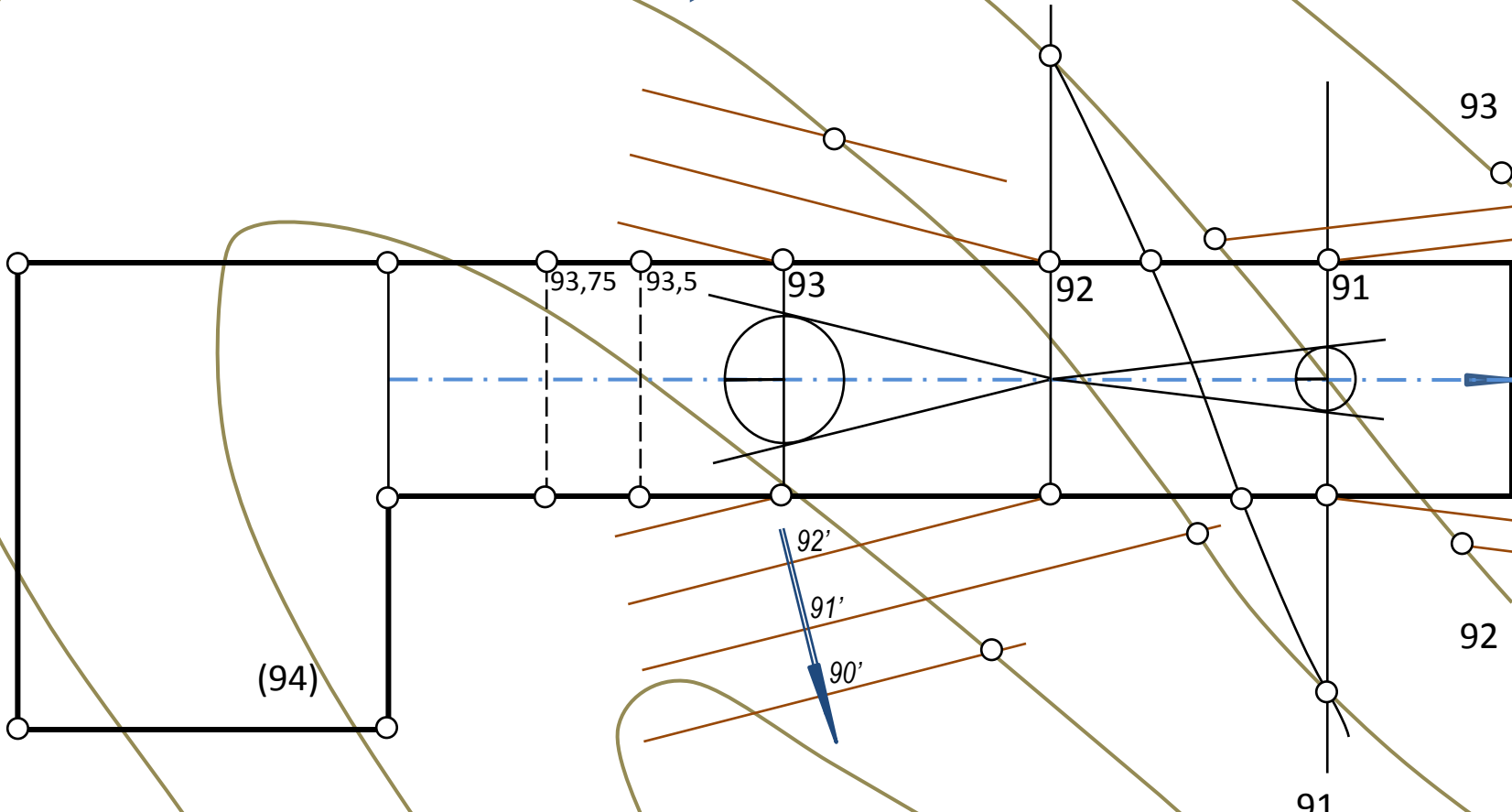
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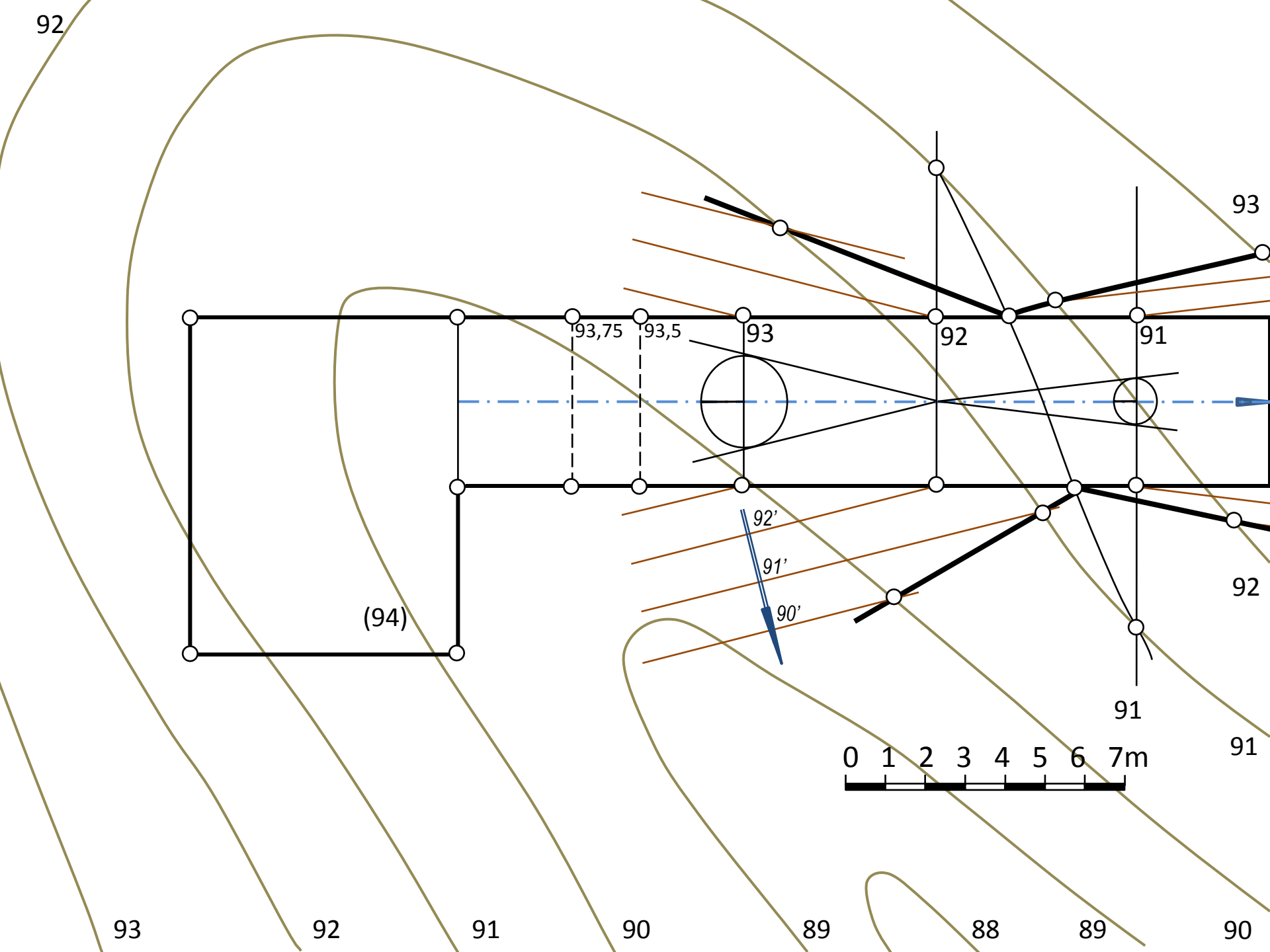
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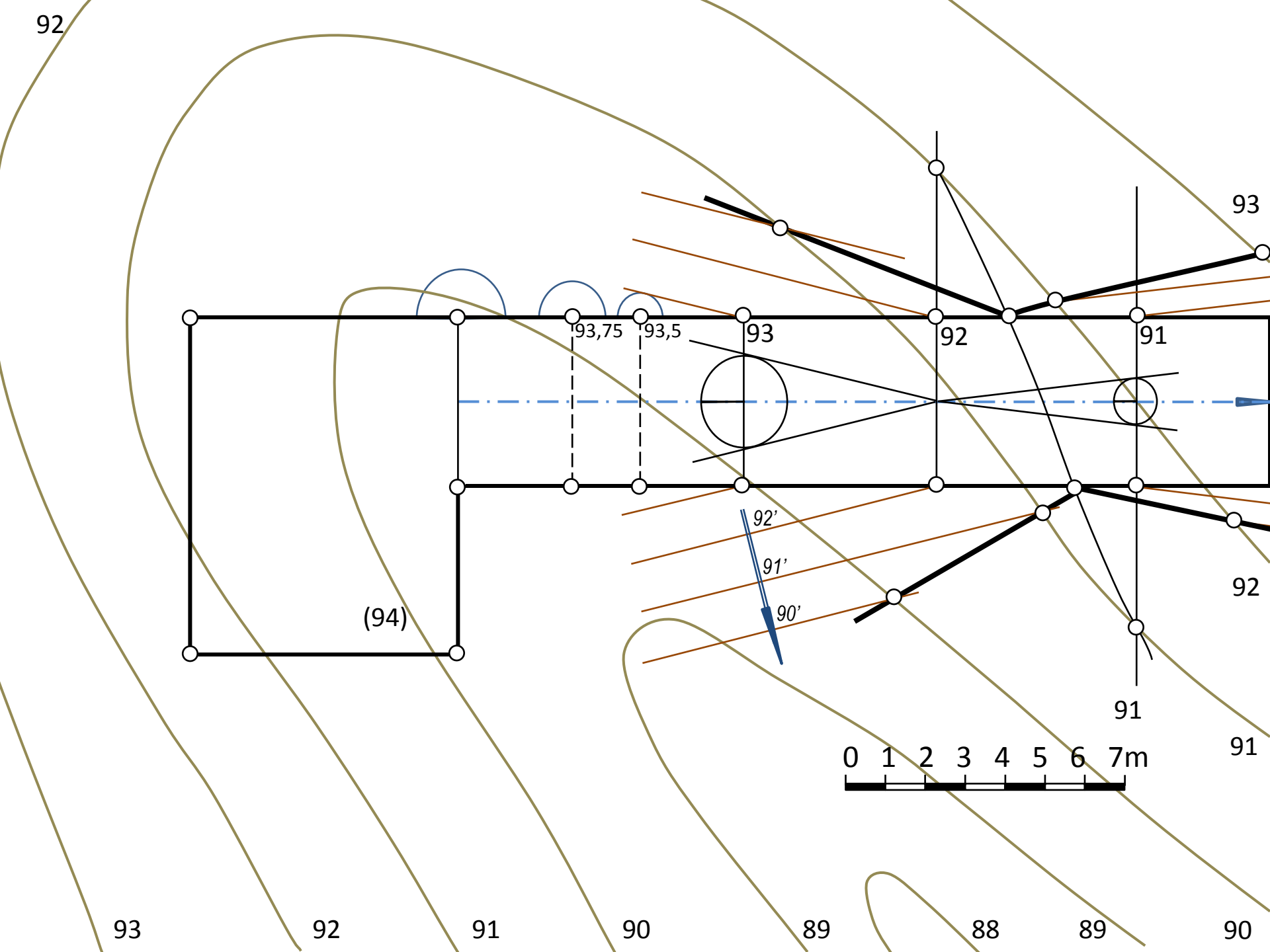
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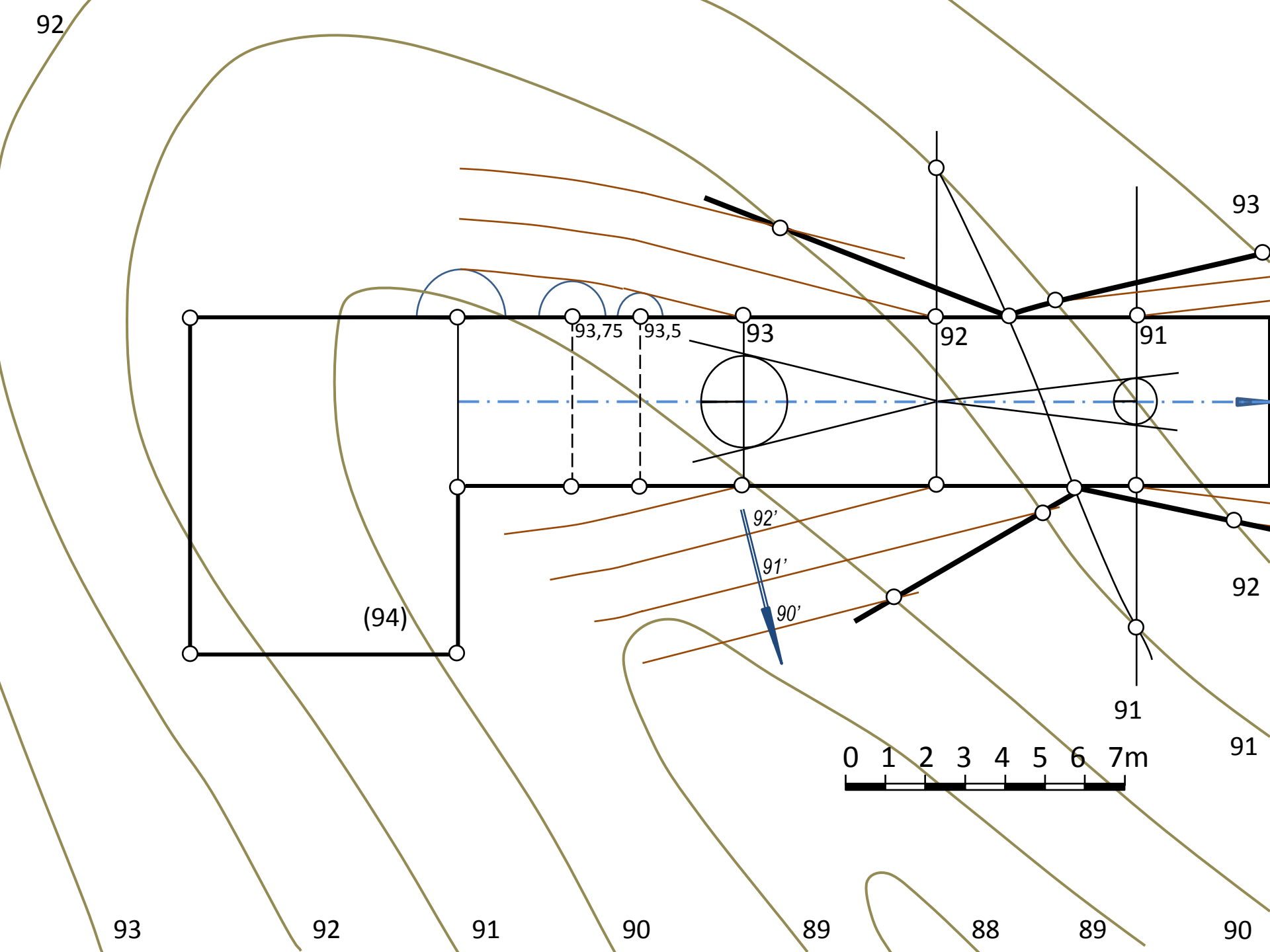
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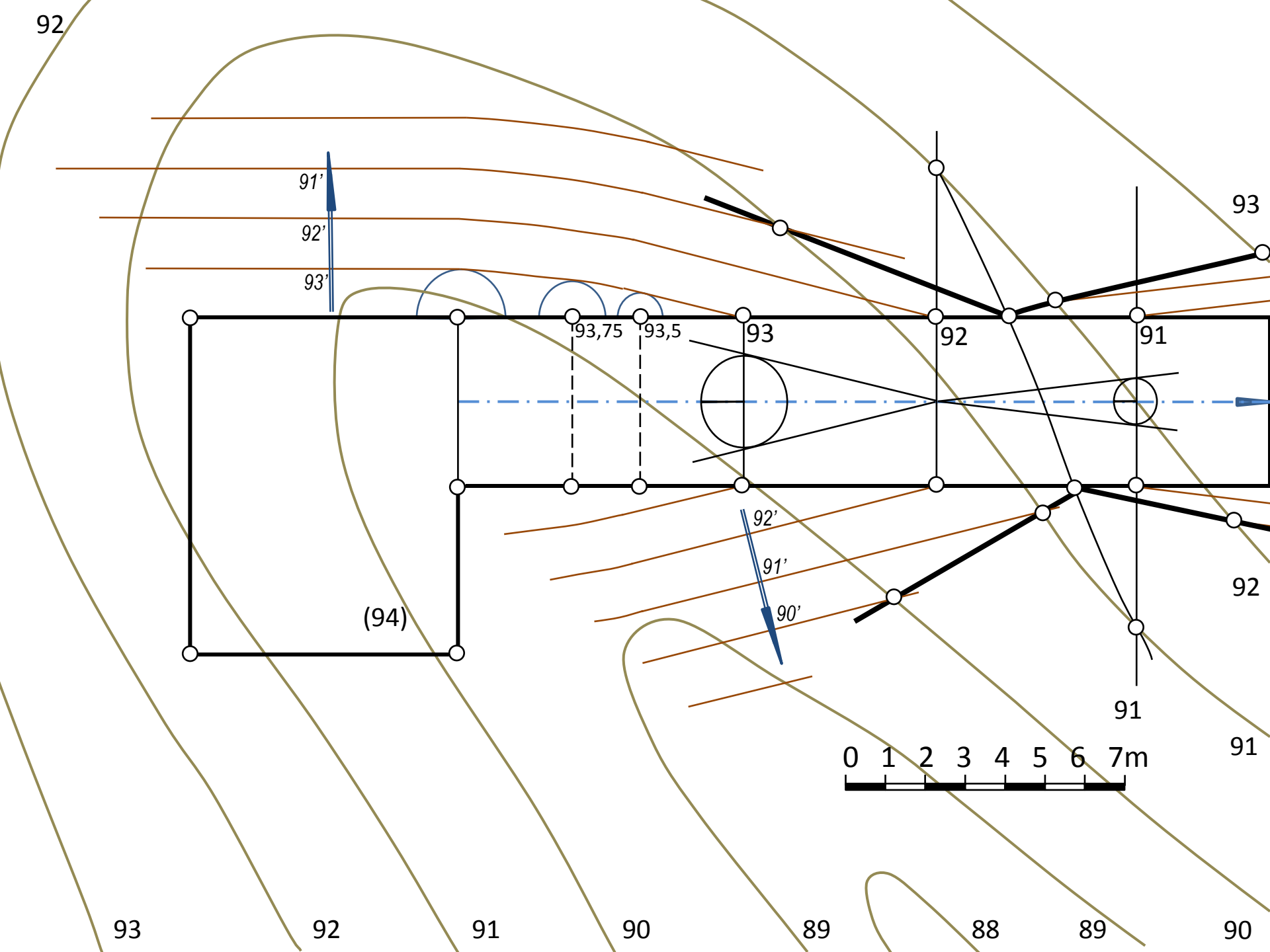
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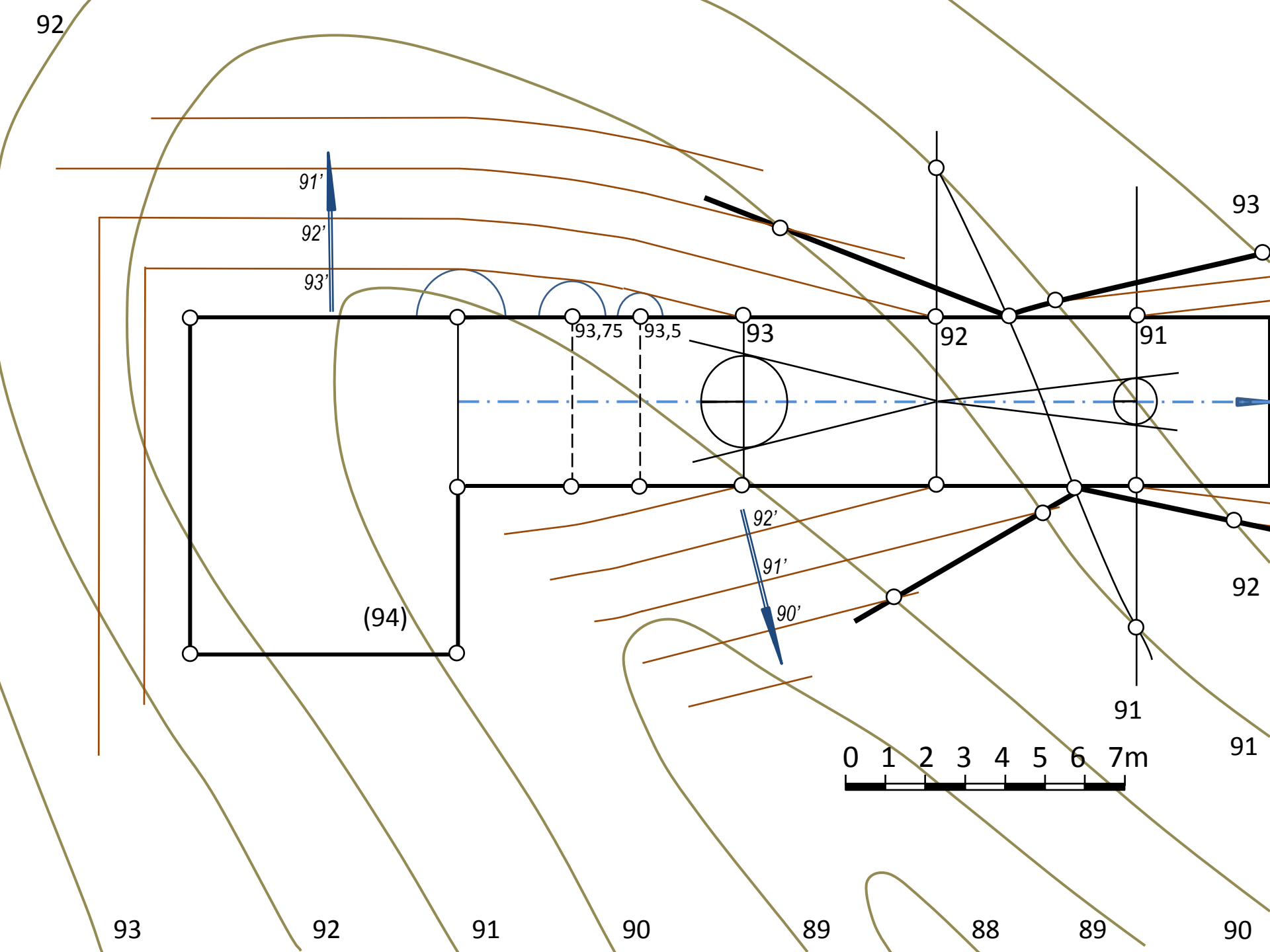
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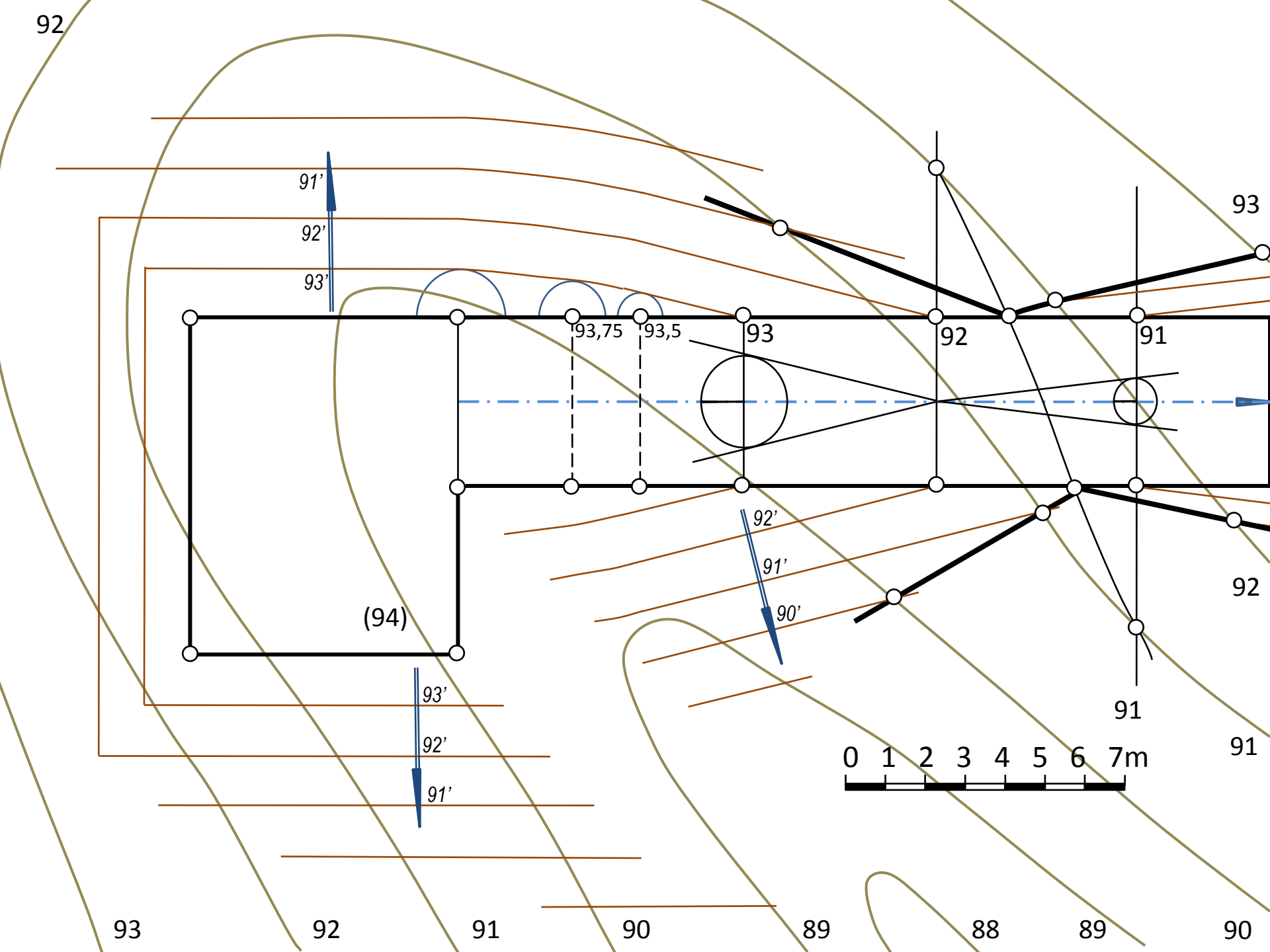
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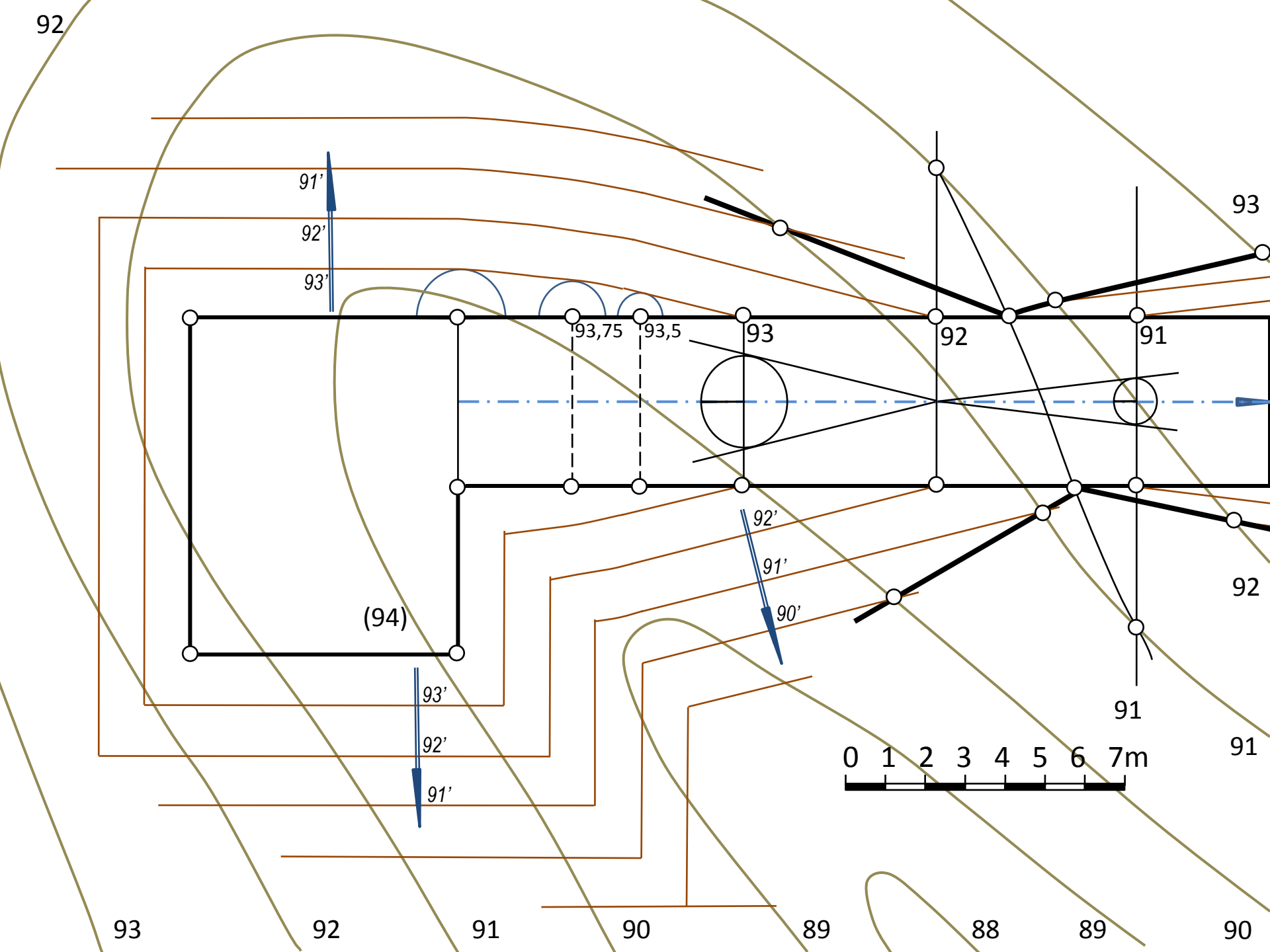
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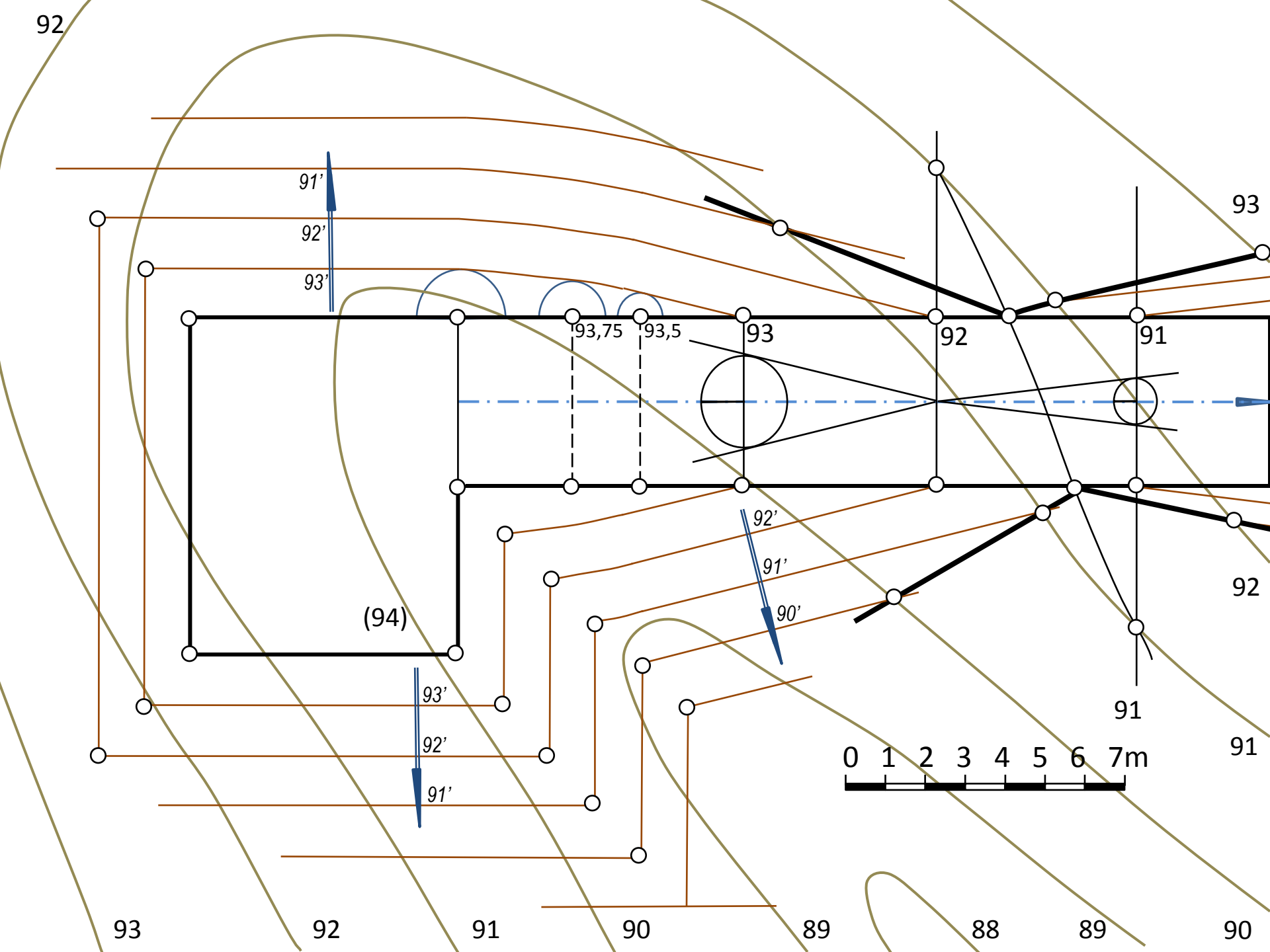


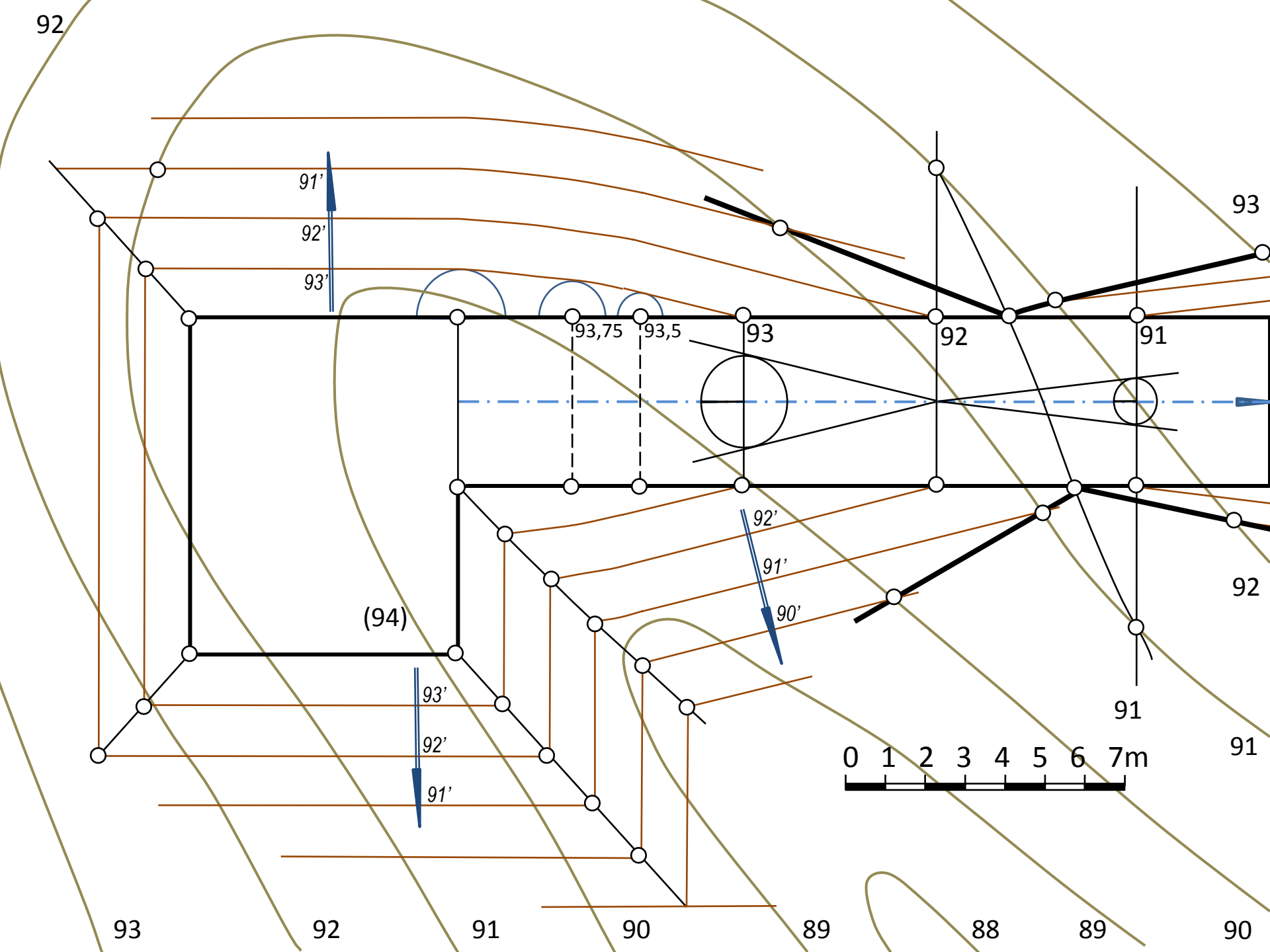


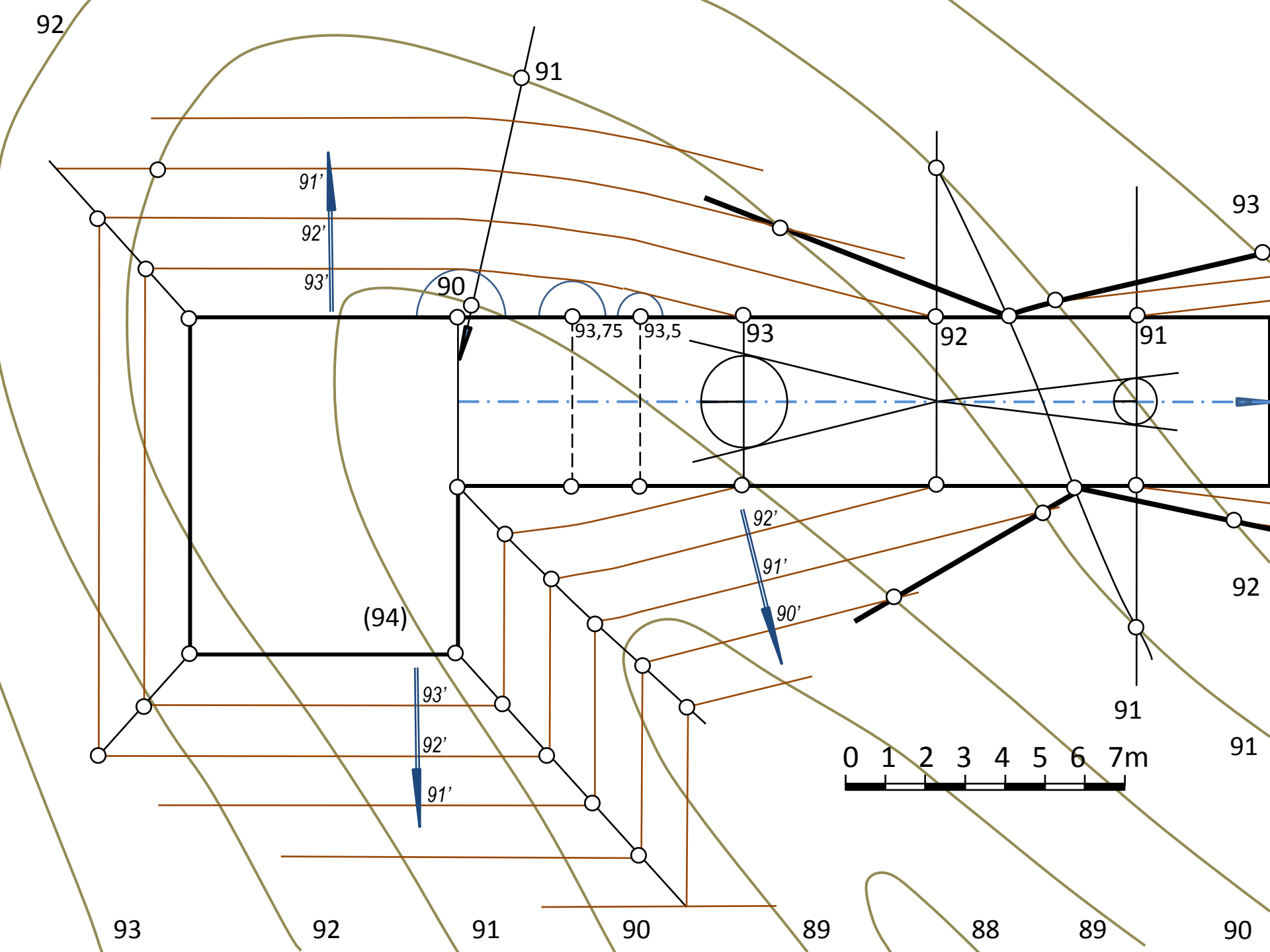


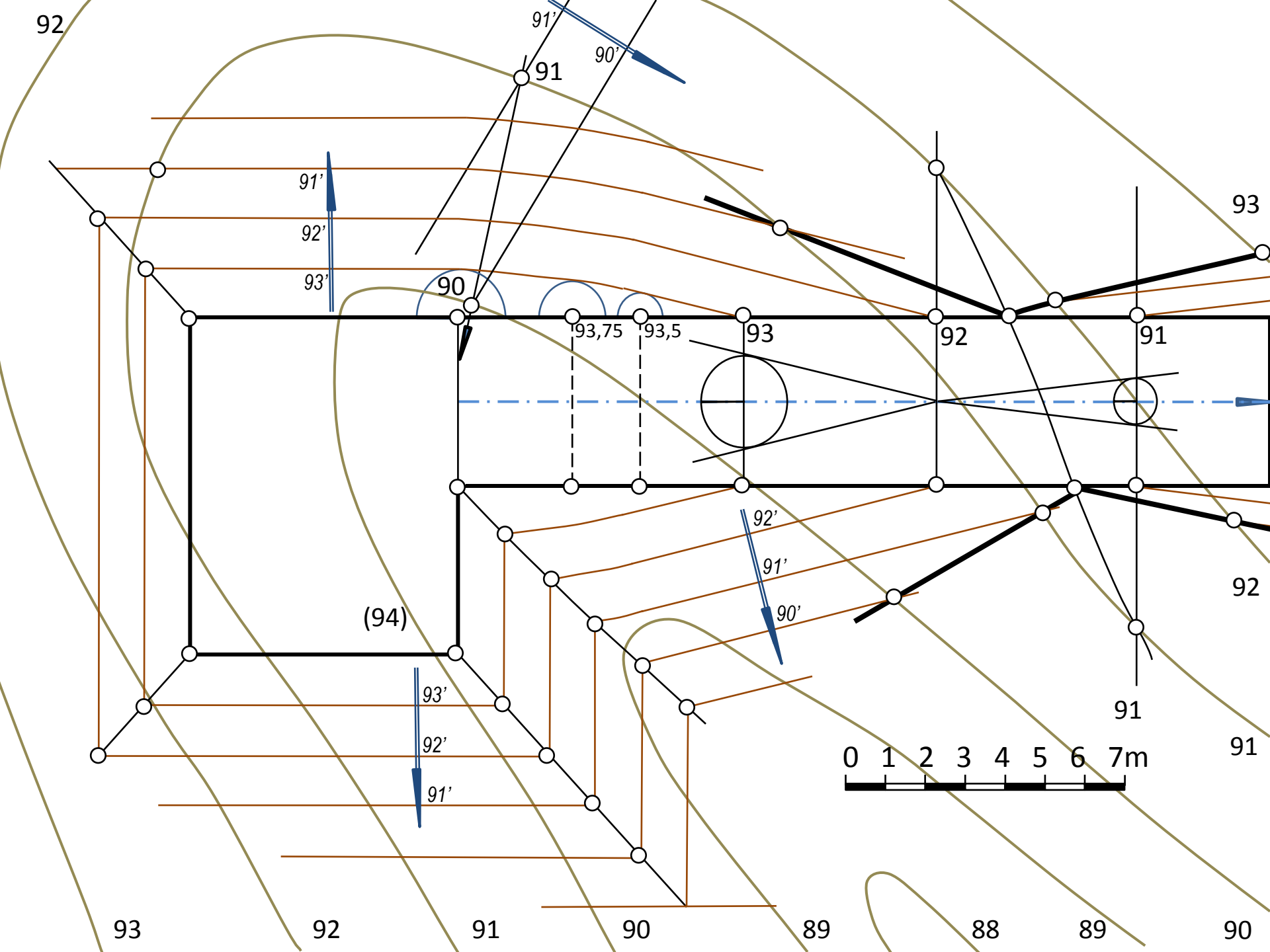


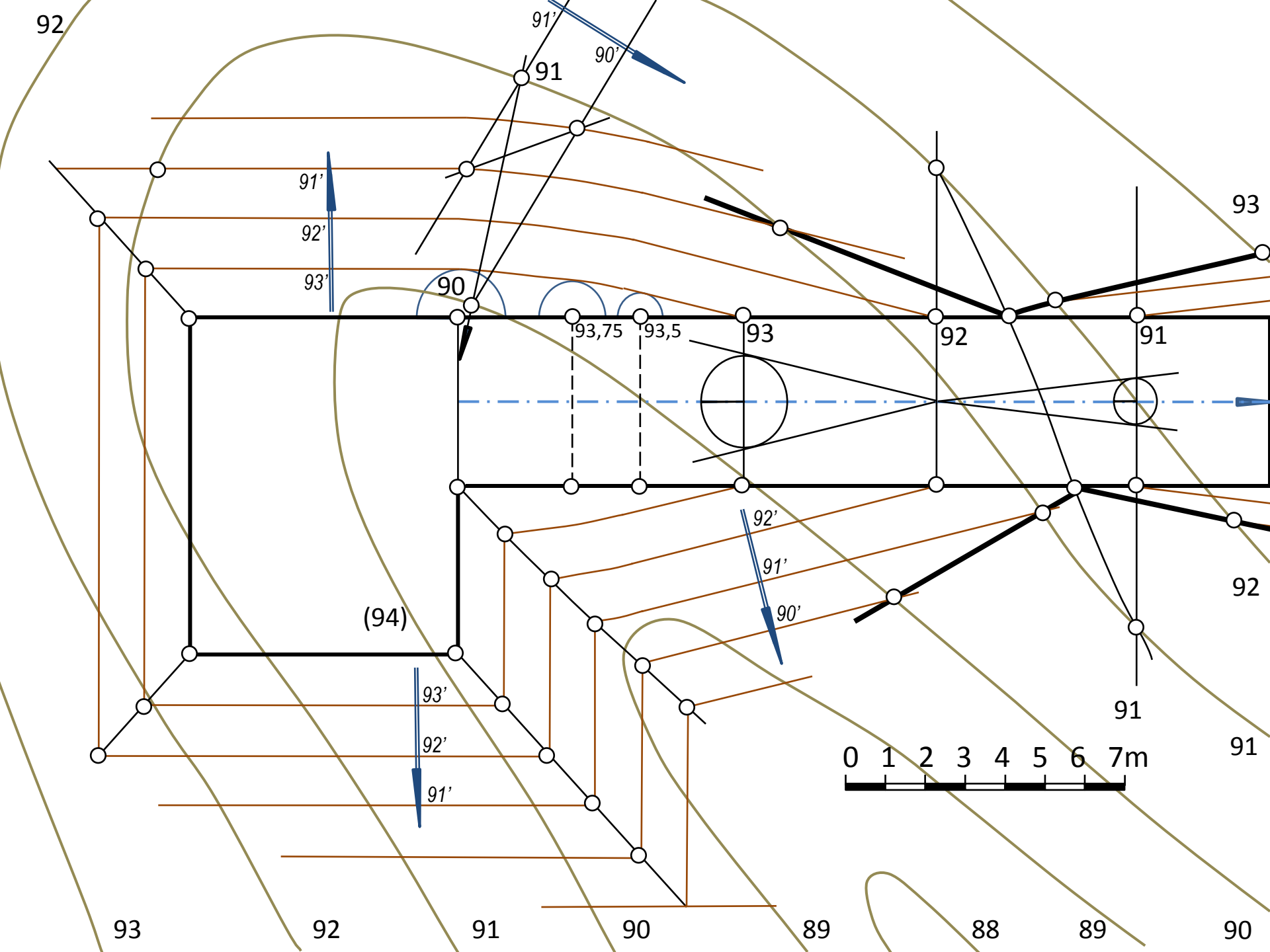


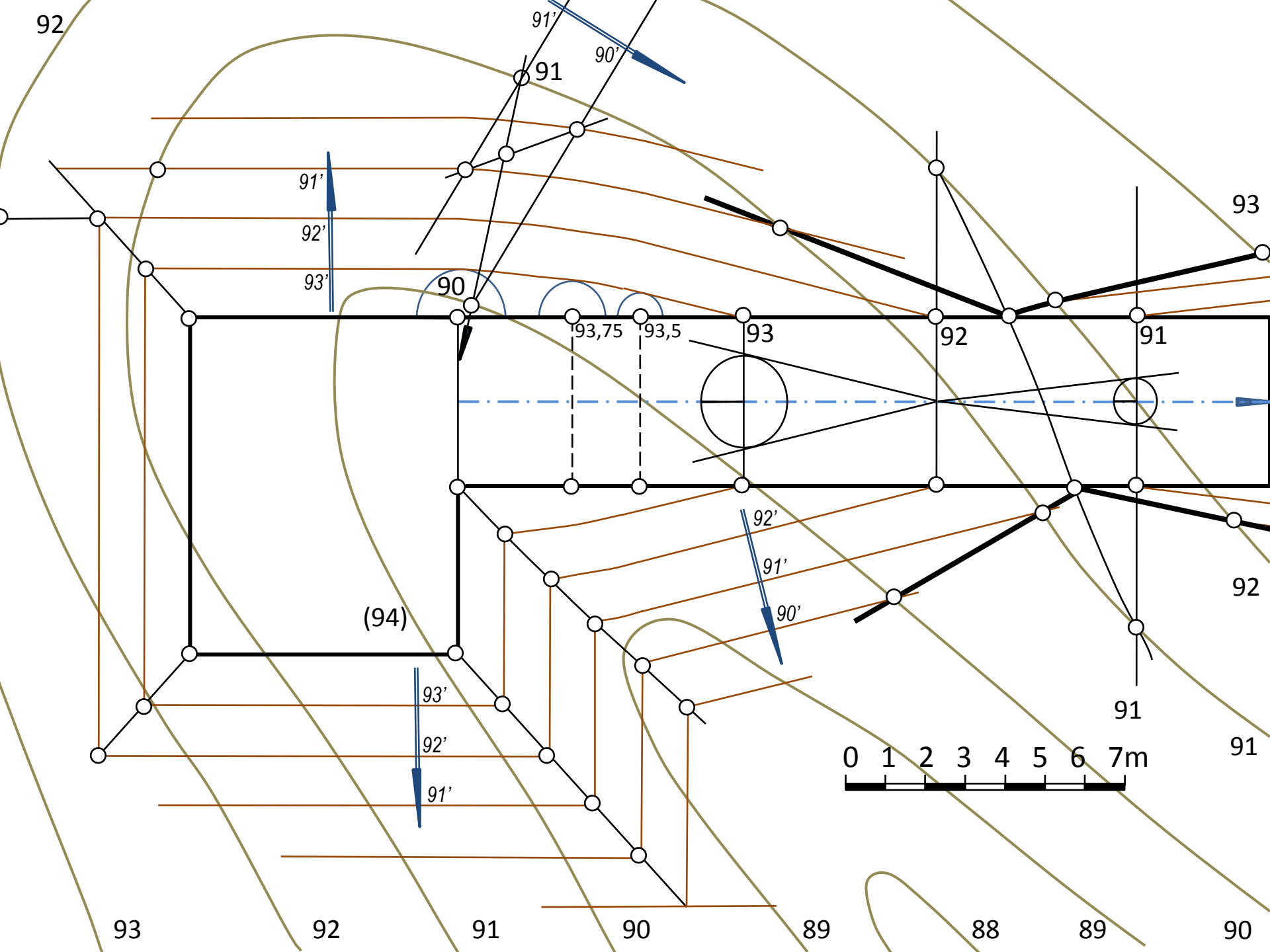


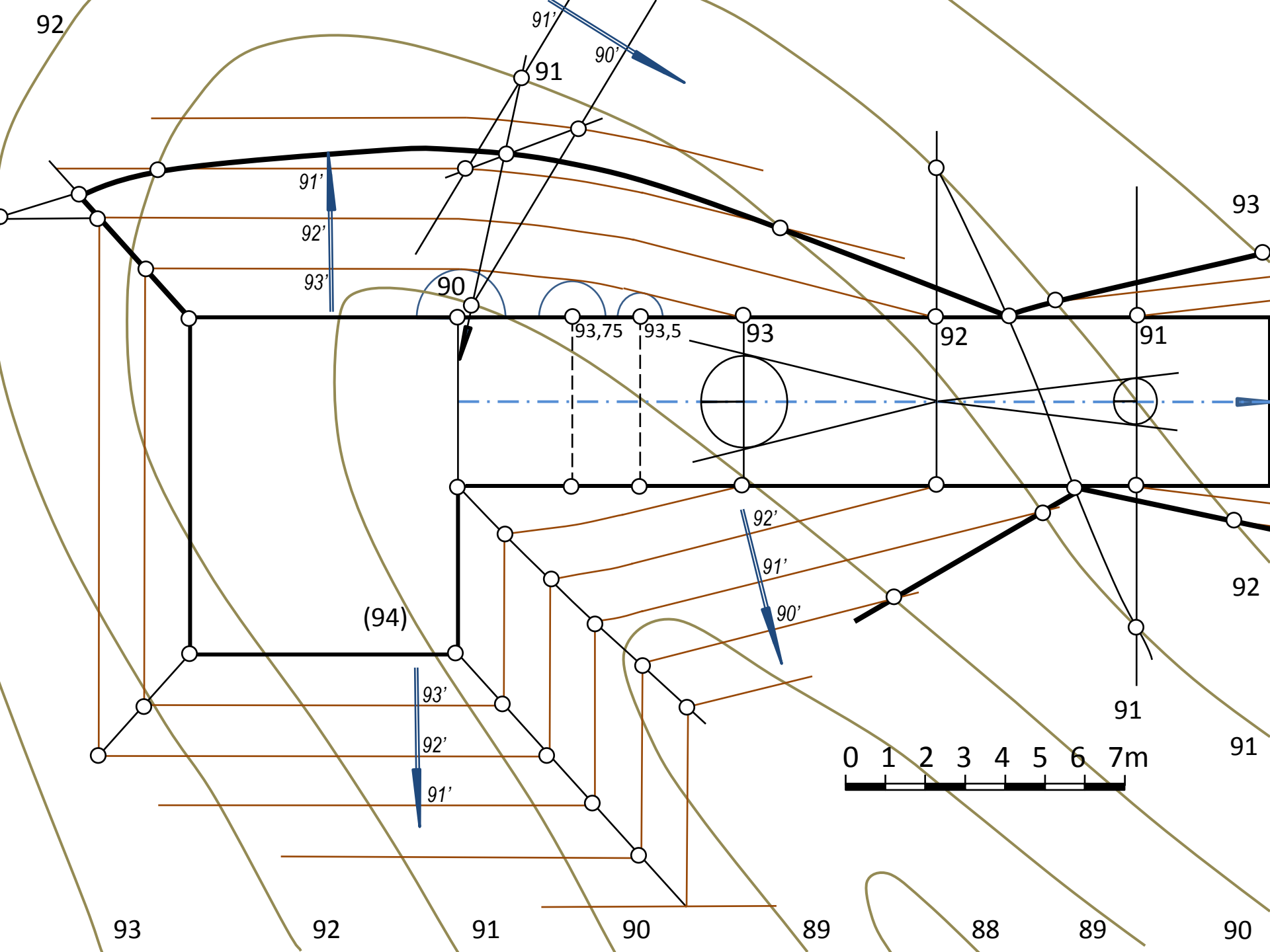


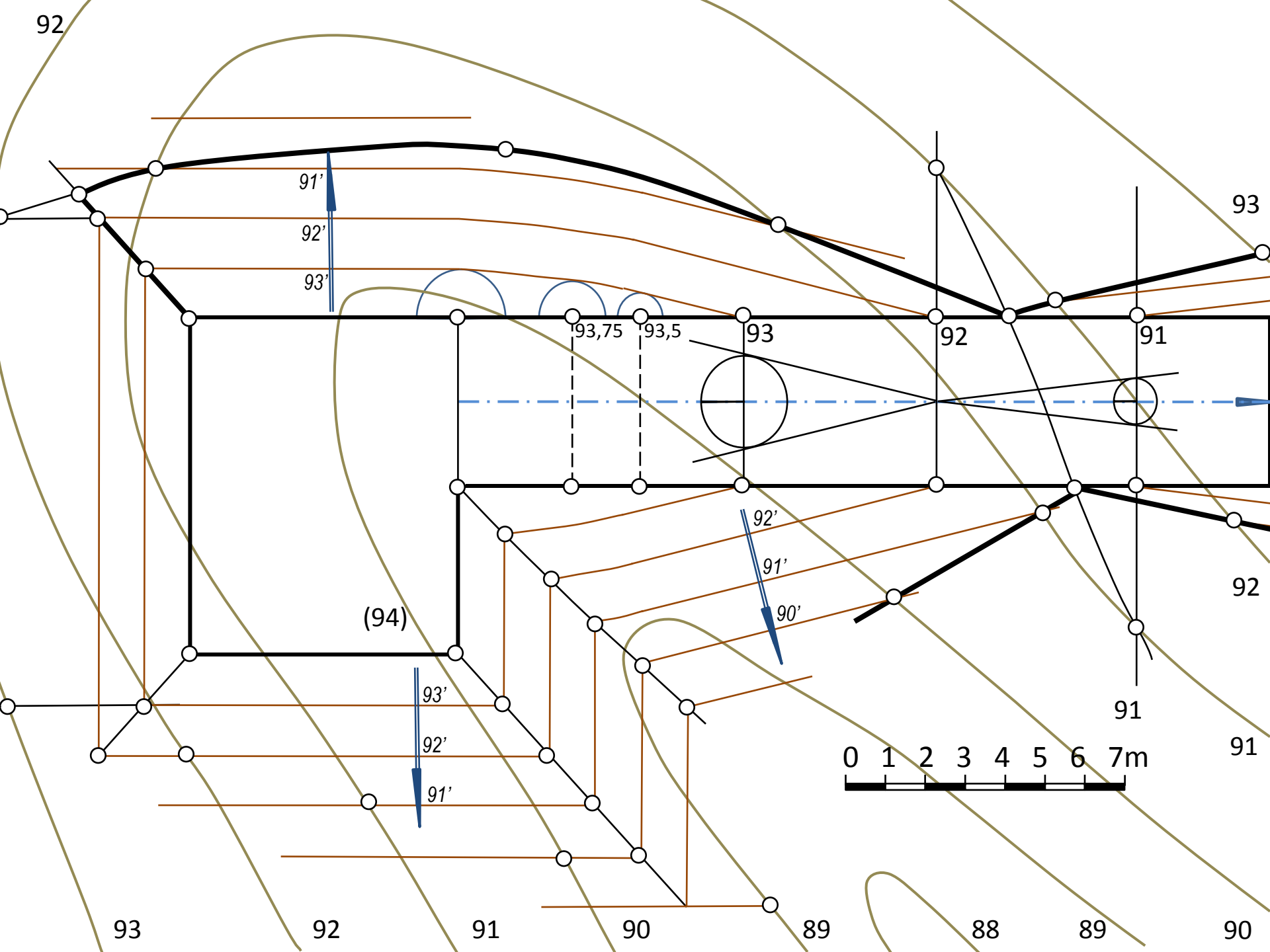


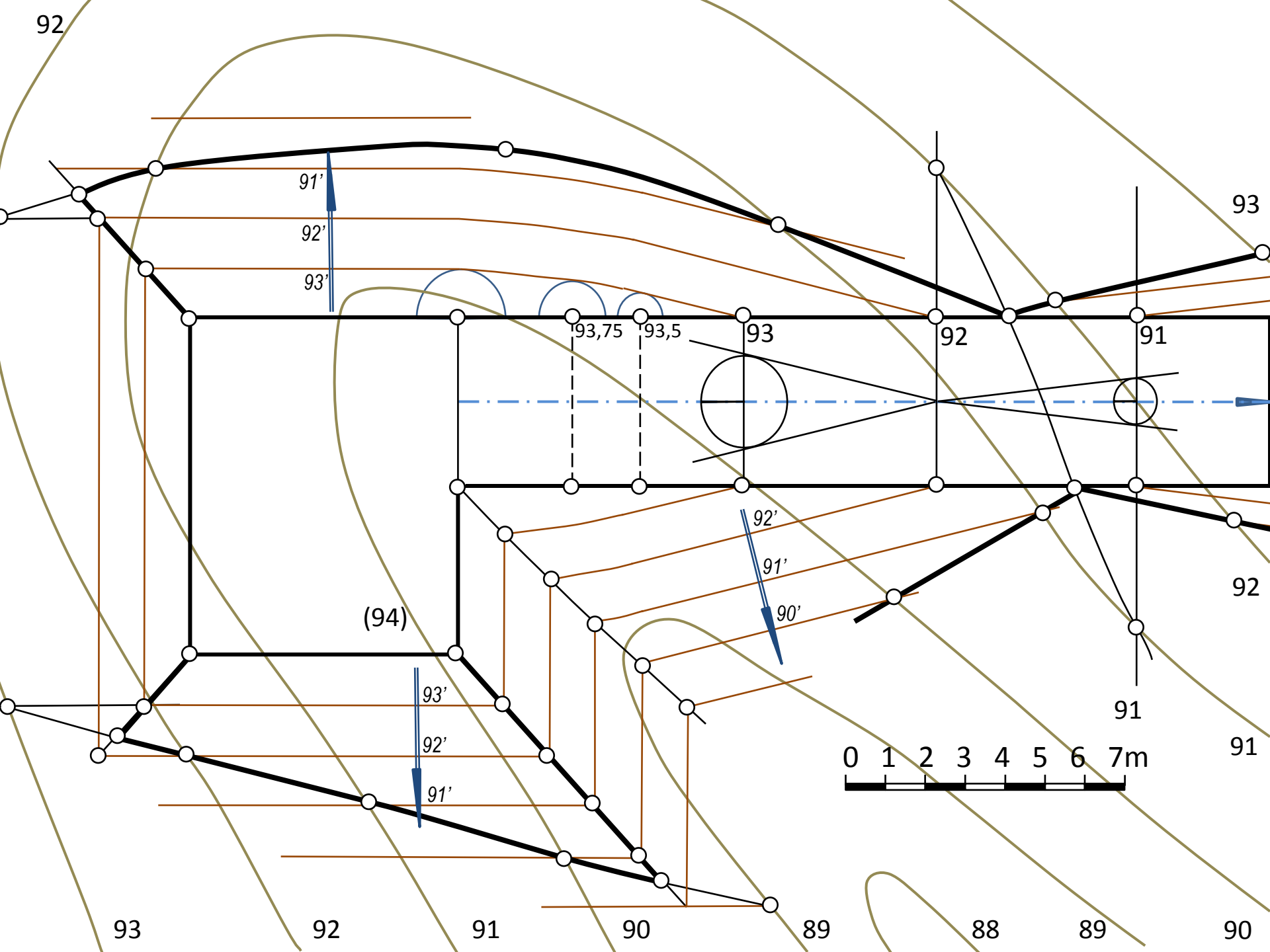


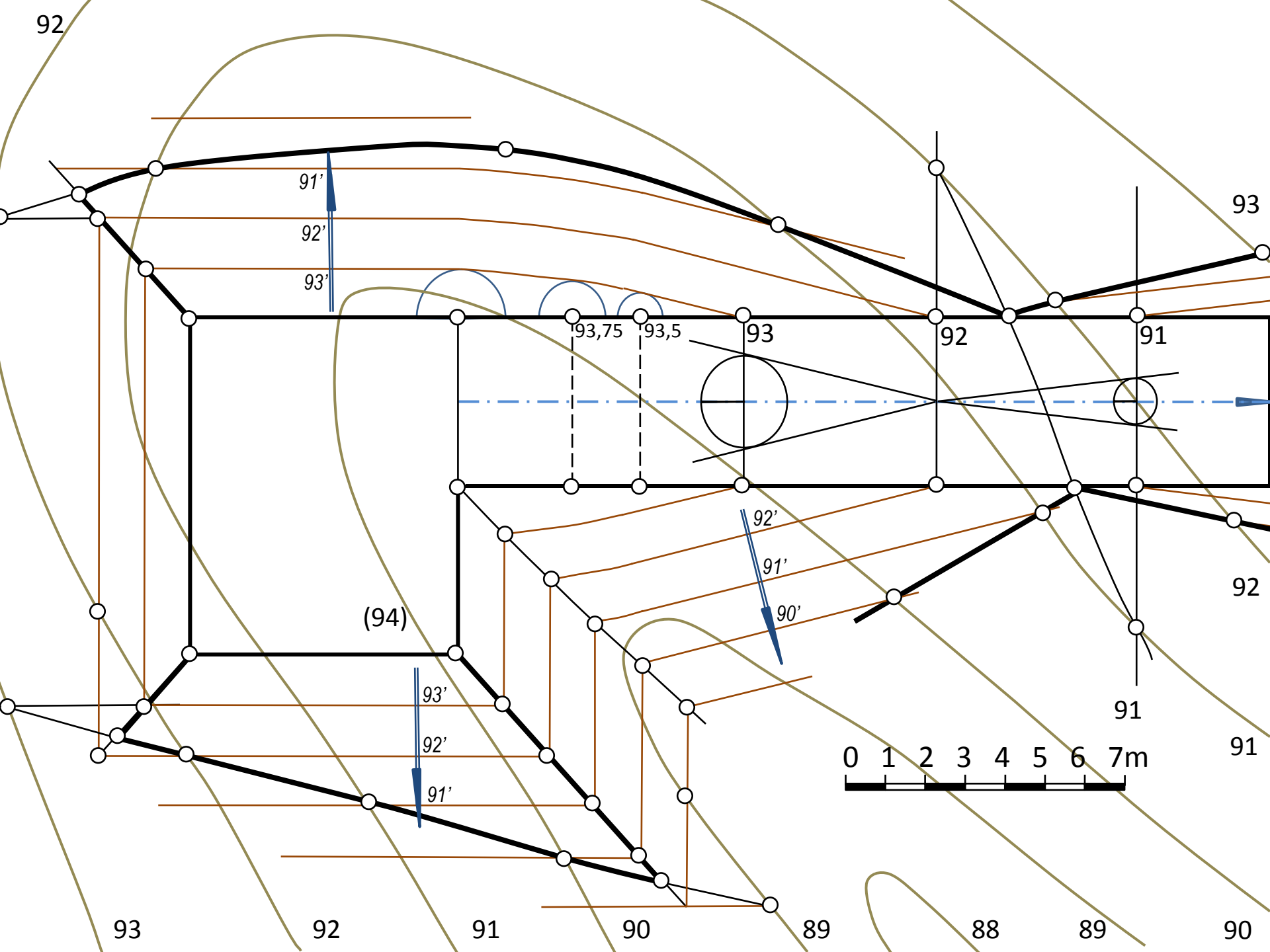


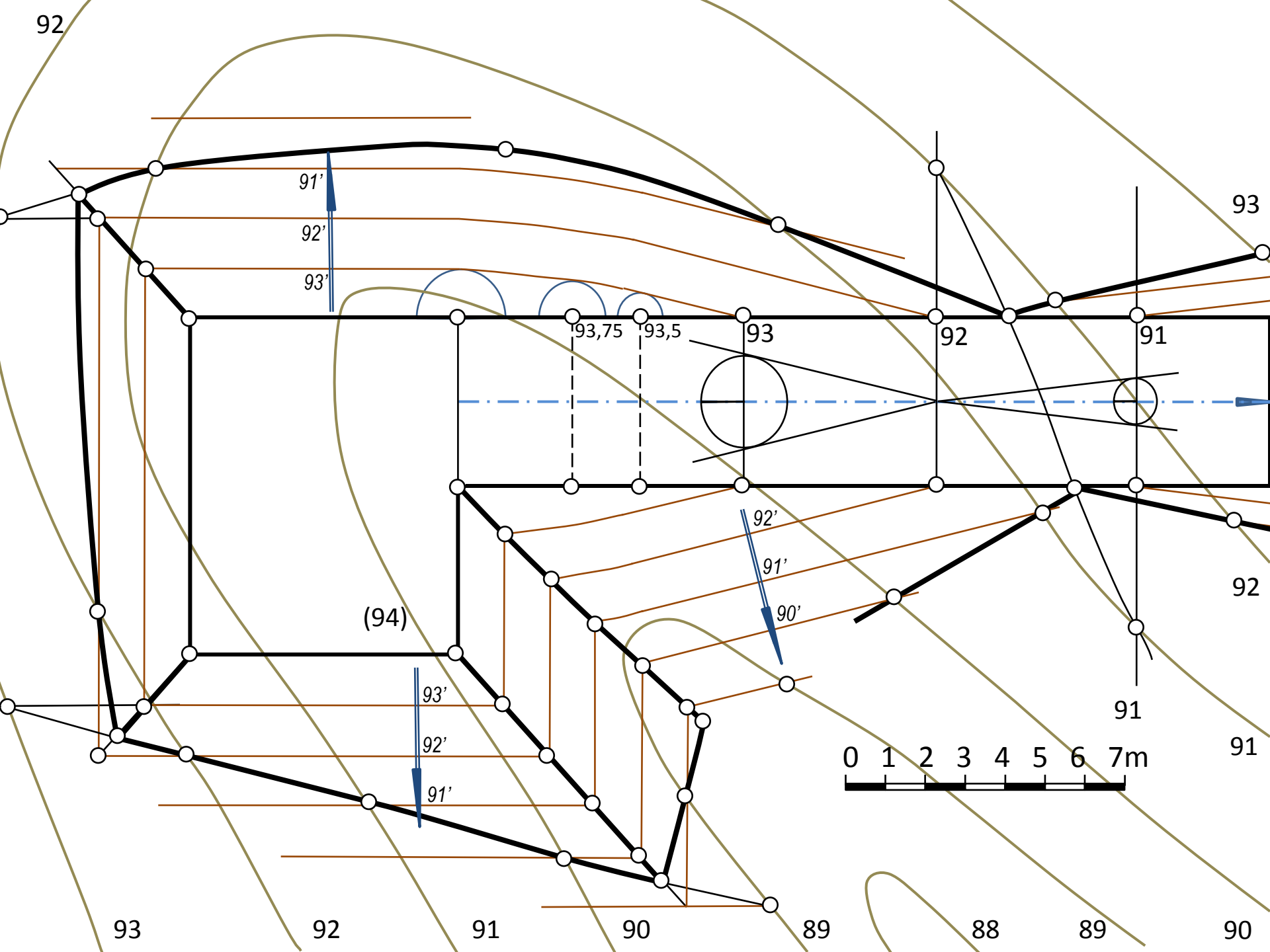


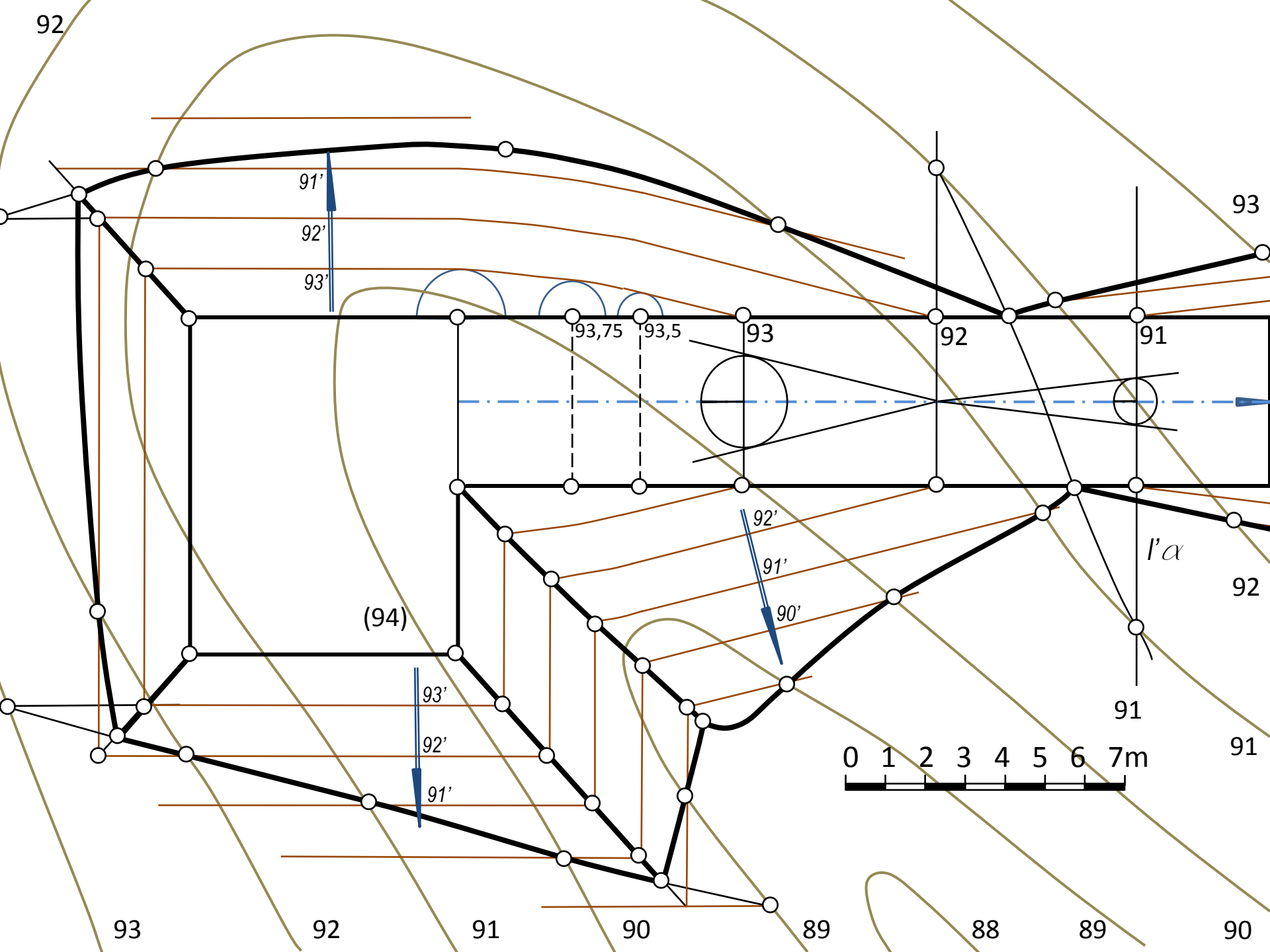






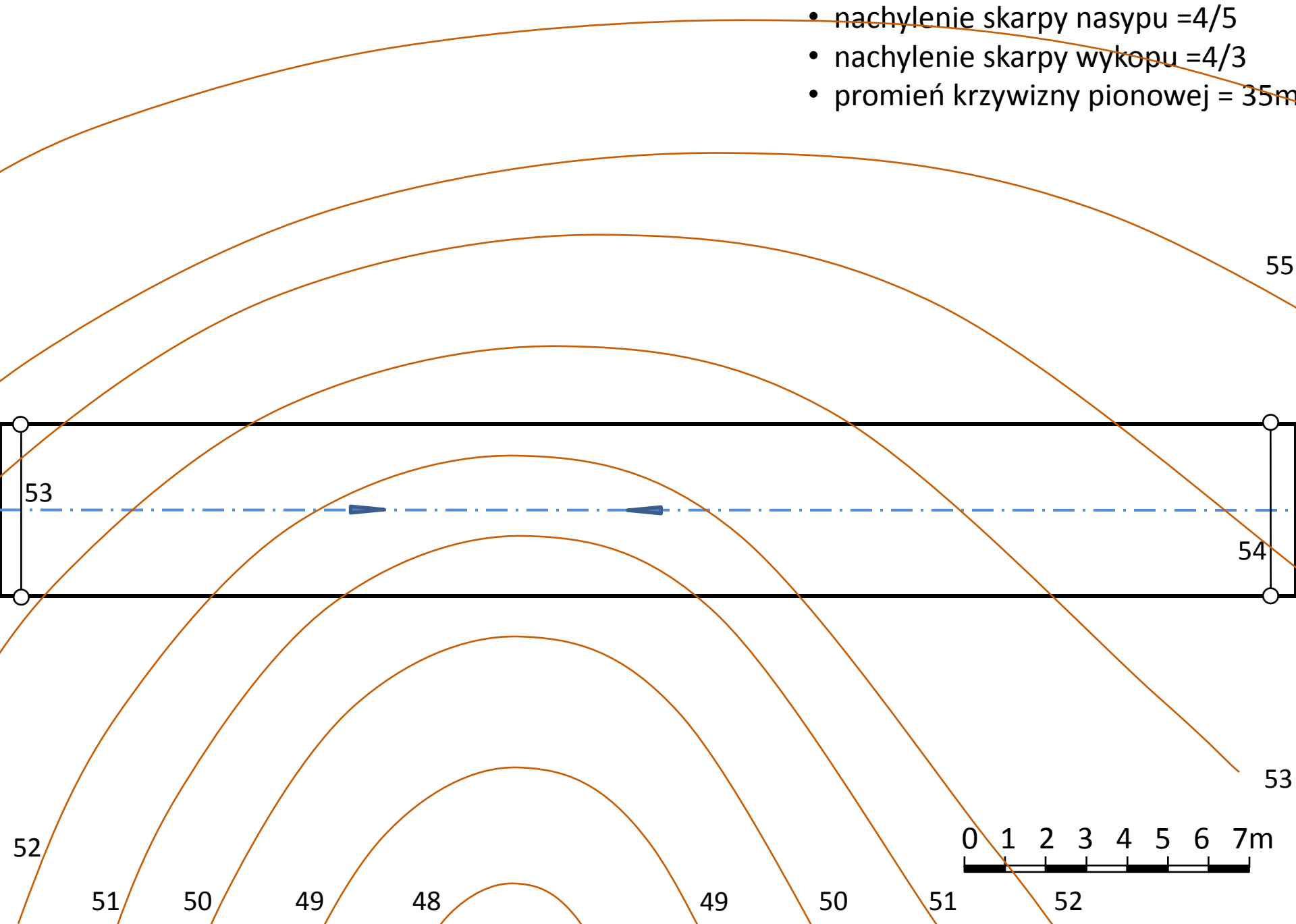




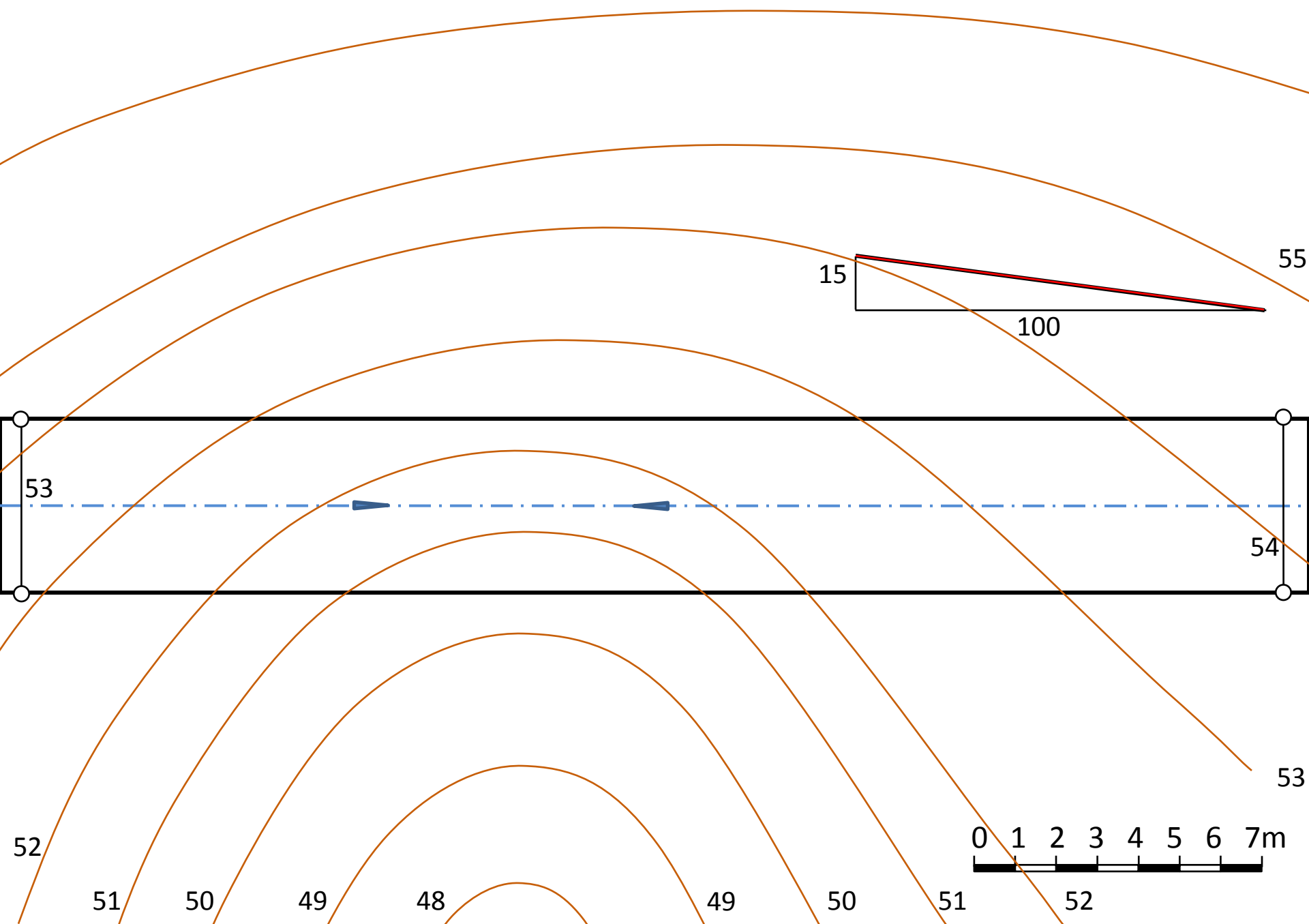


Połączenie odcinków dróg o przeciwnym spadku

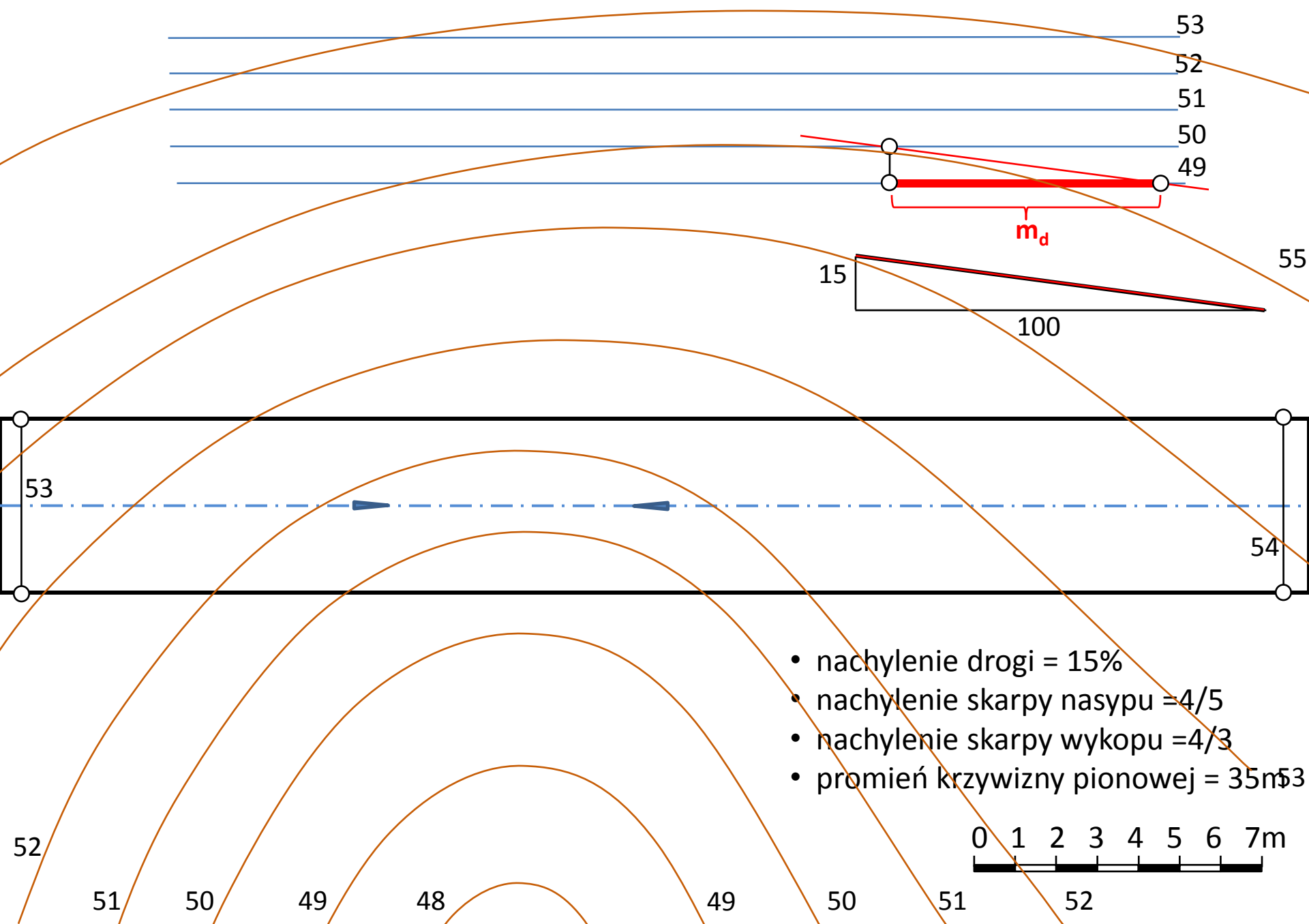
- nachylenie drogi = 15%
- nachylenie skarpy nasypu = 4/5
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- promień krzywizny pionowej = 35m



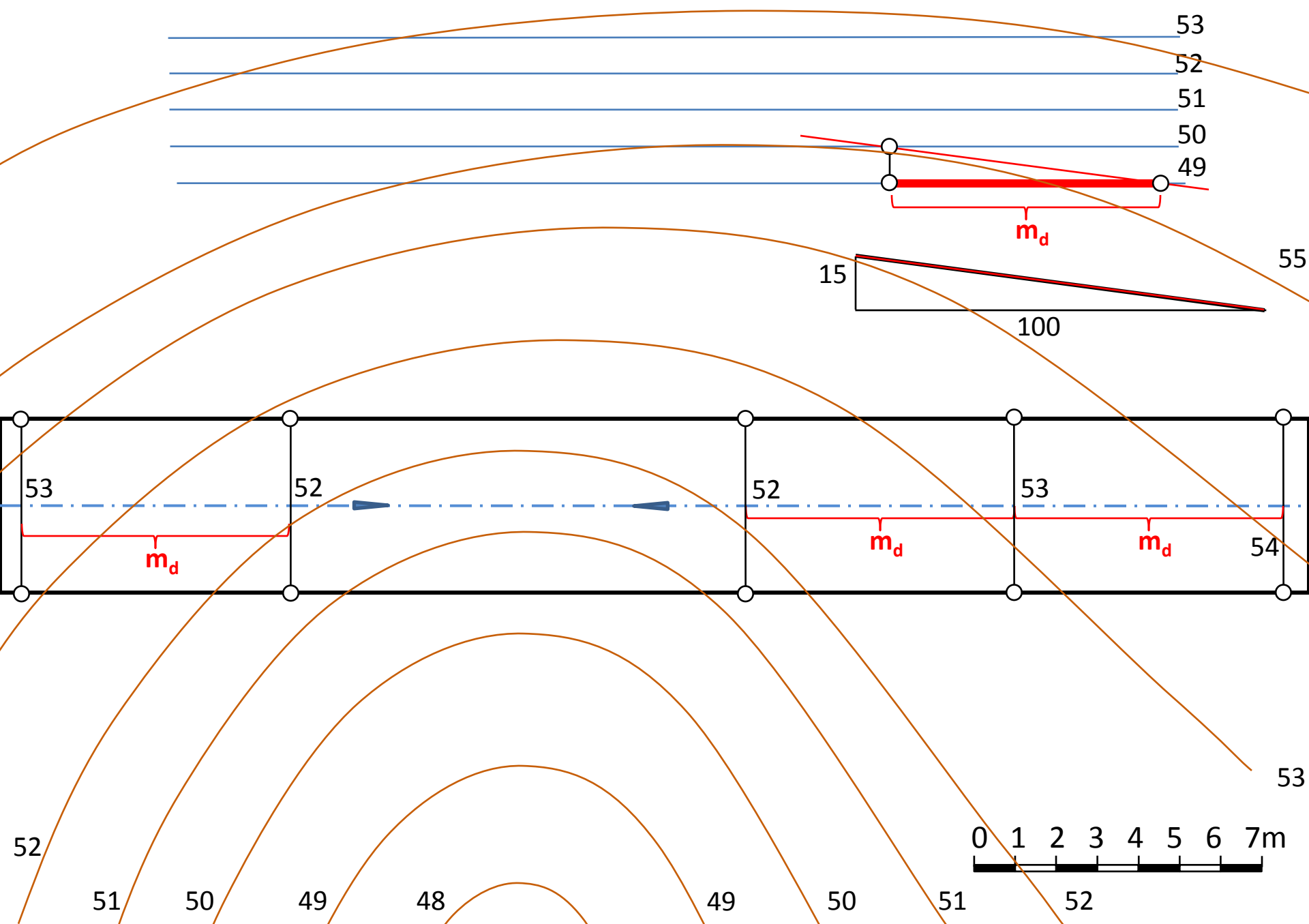
Połączenie odcinków dróg o przeciwnym spadku

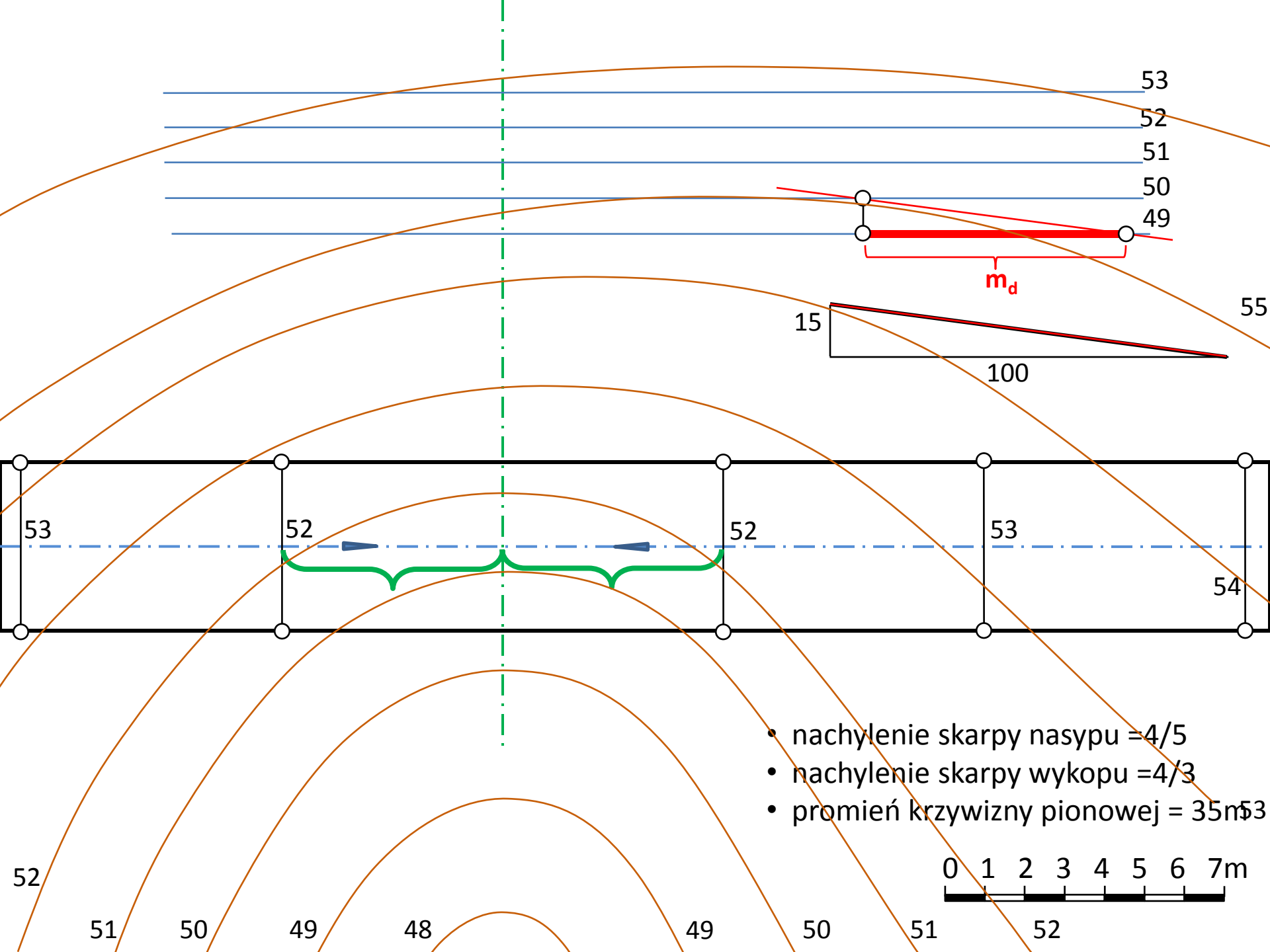


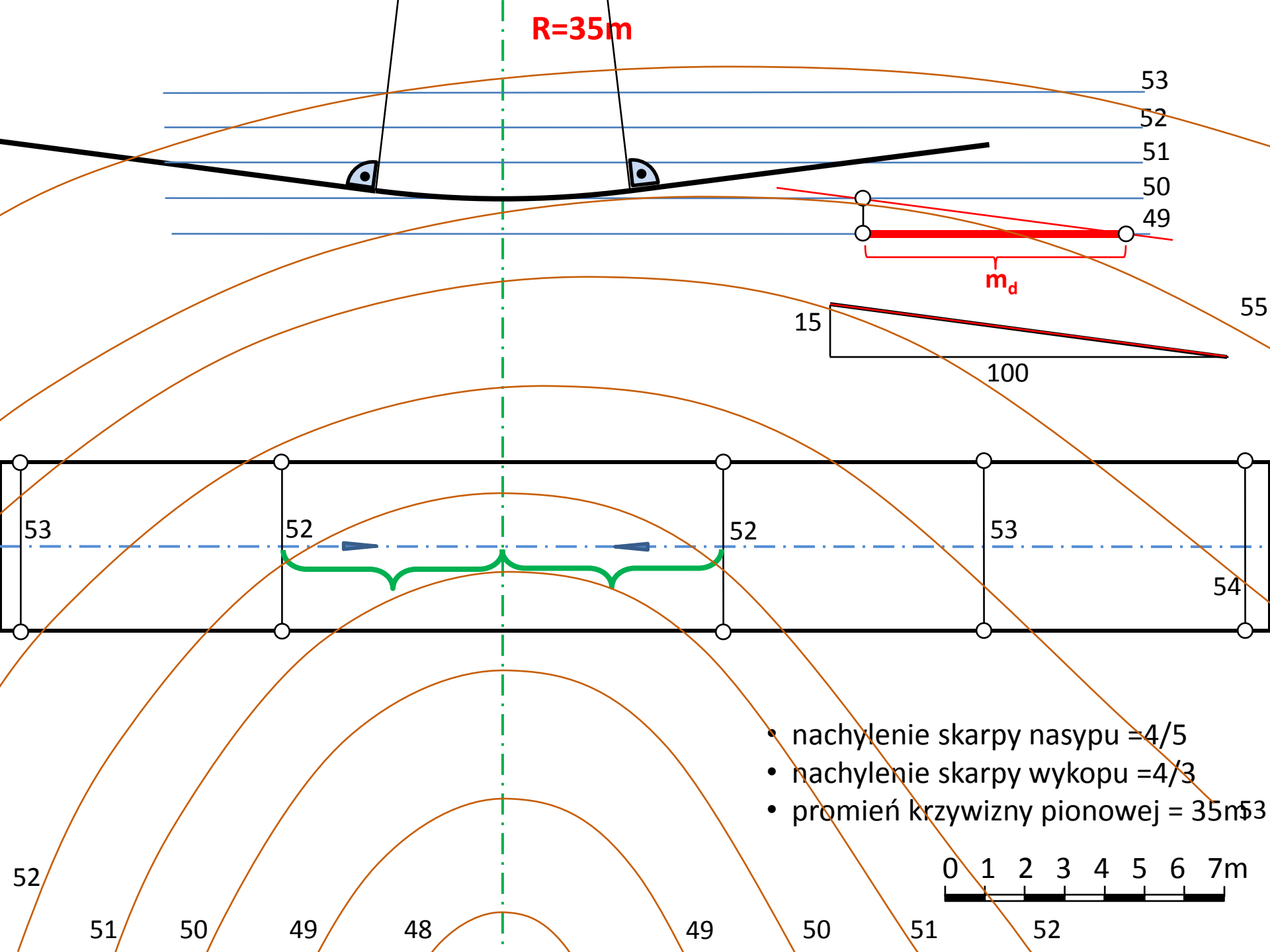
Połączenie odcinków dróg o przeciwnym spadku

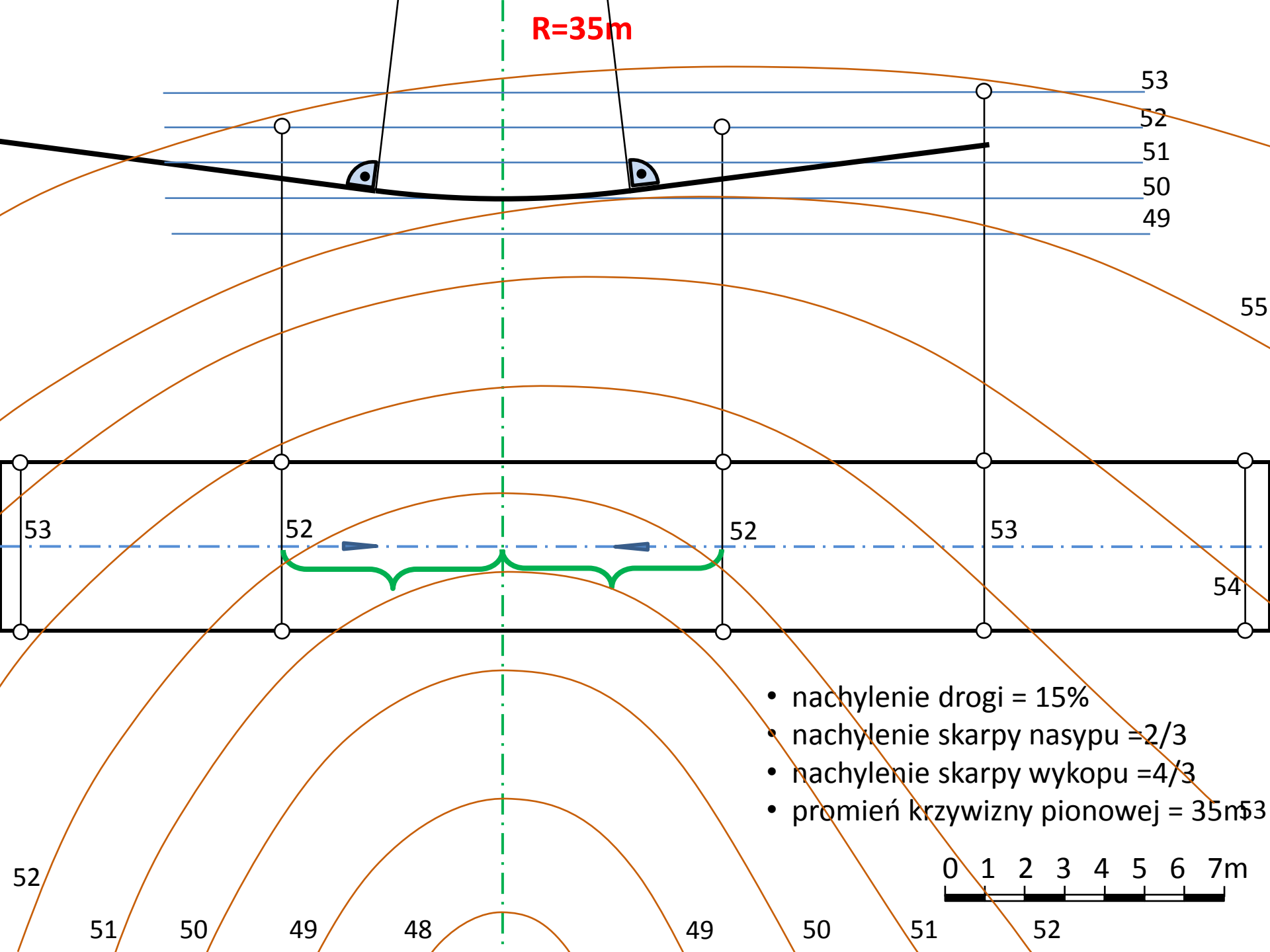


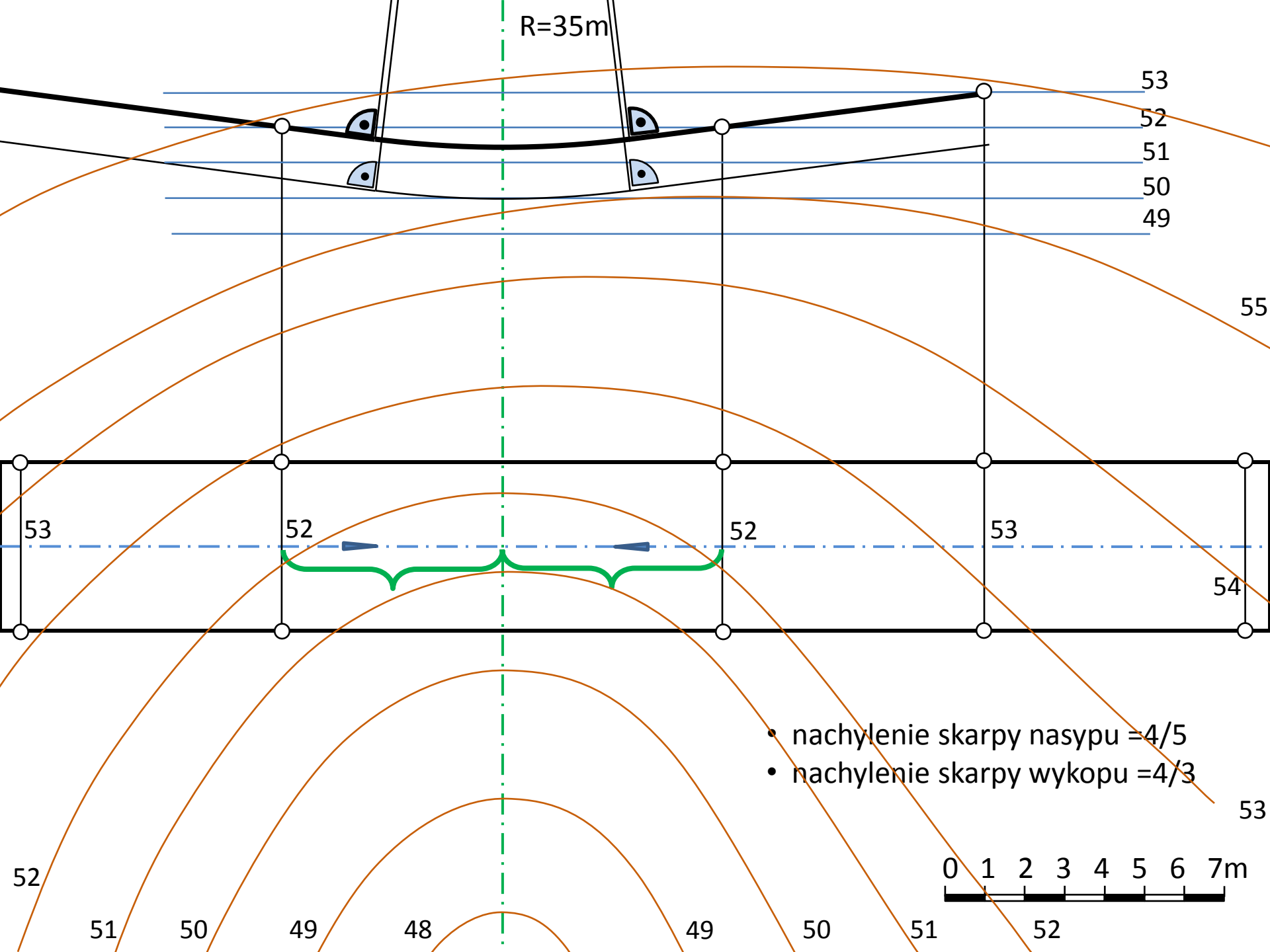
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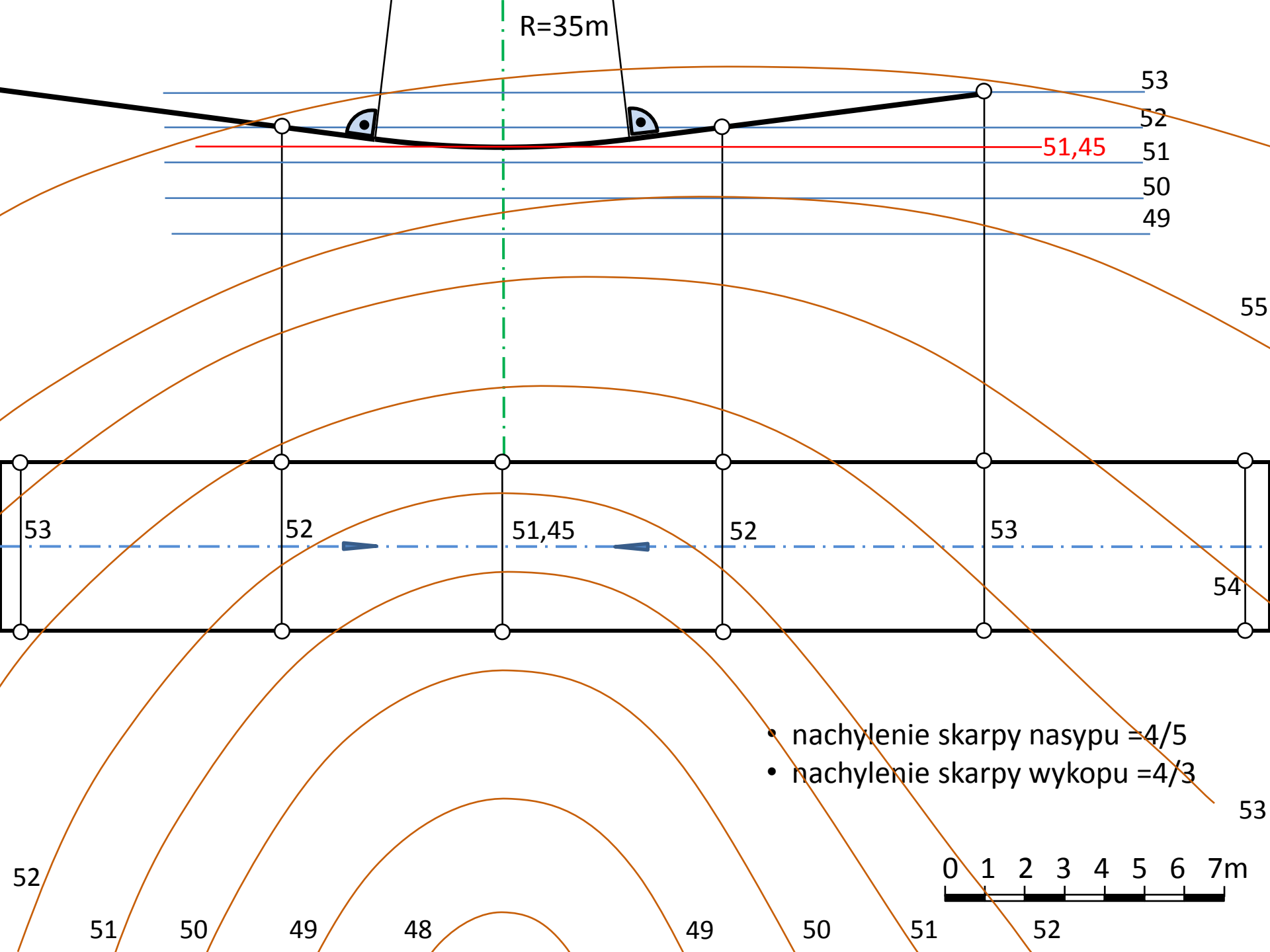


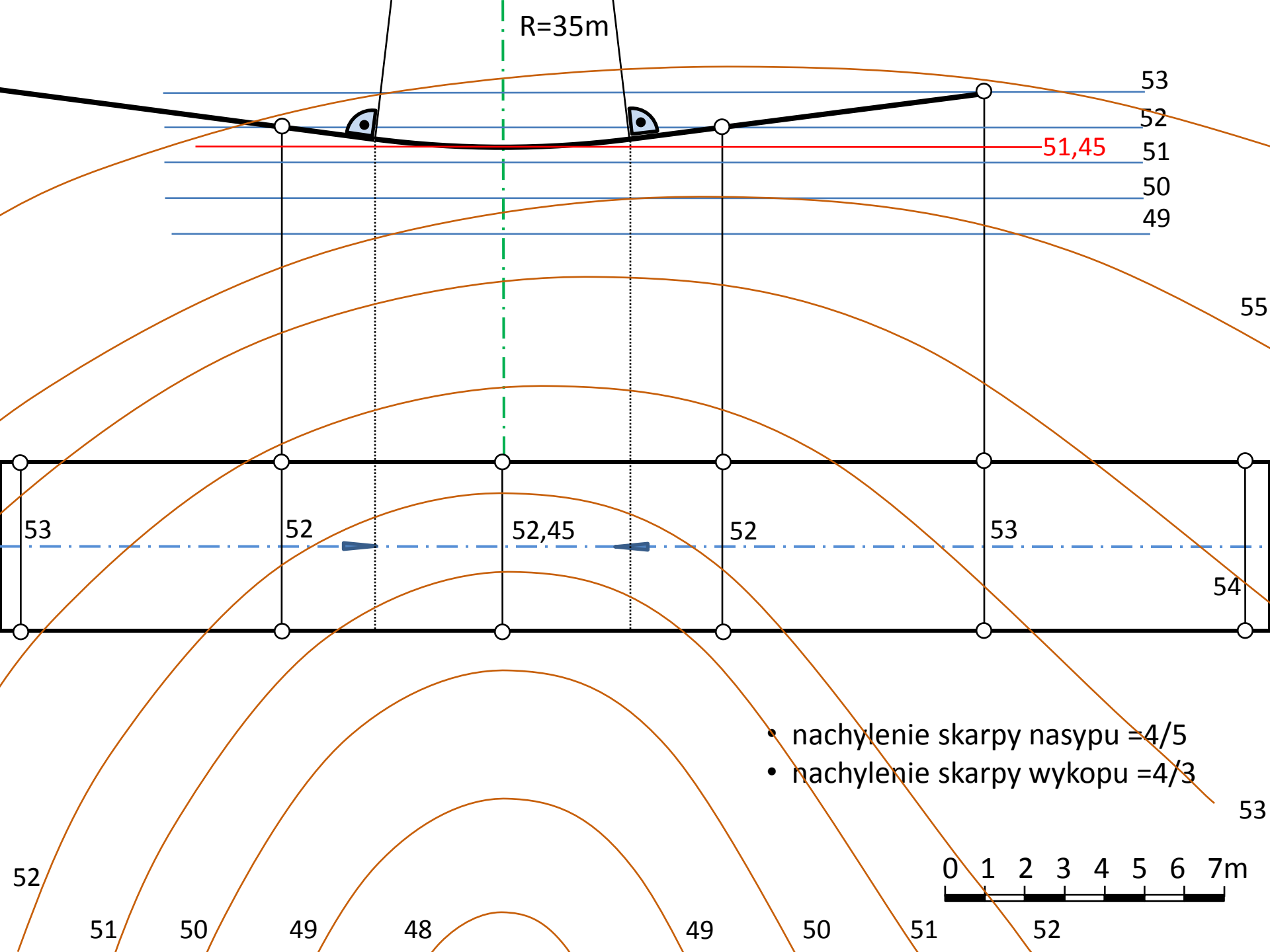










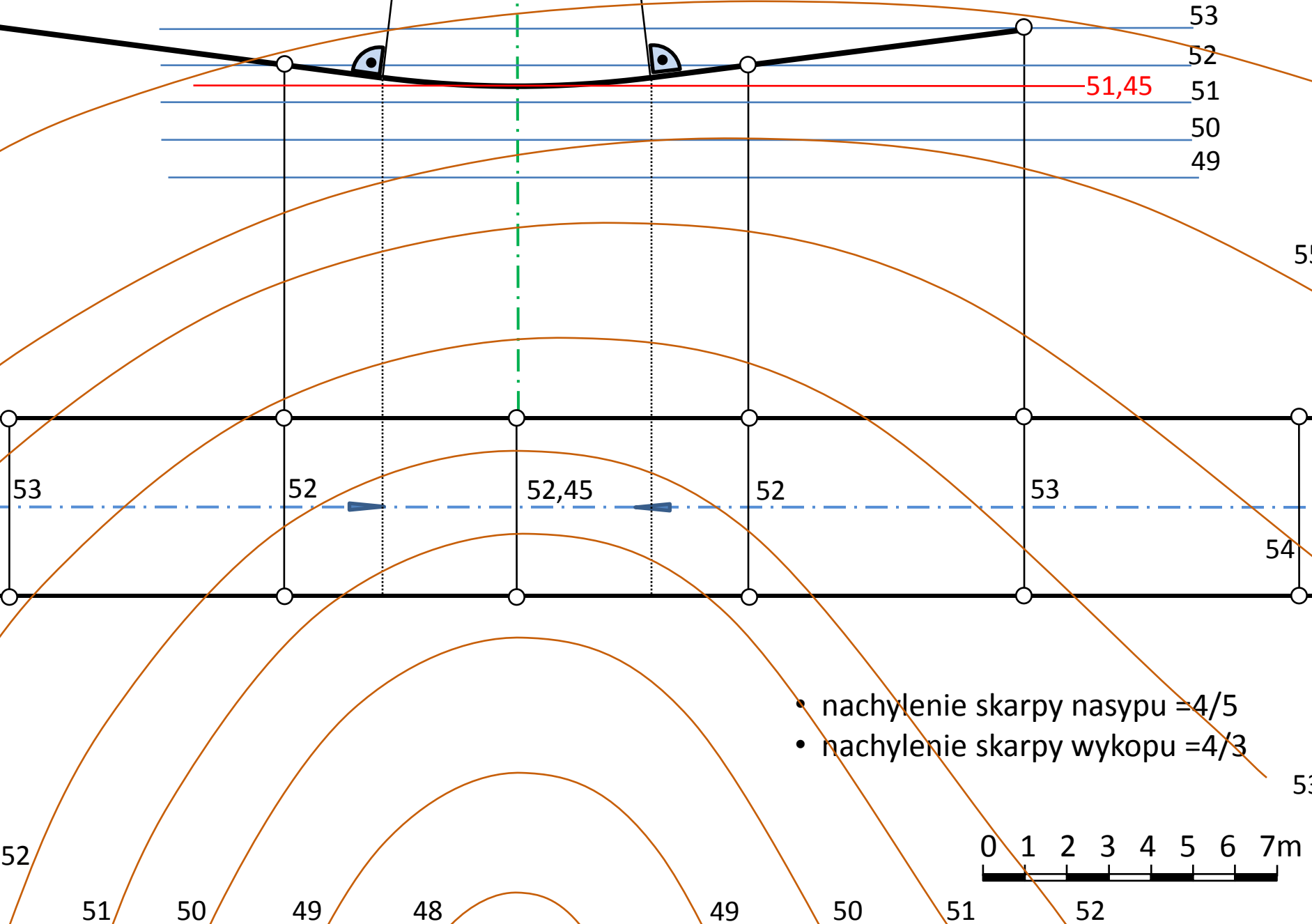
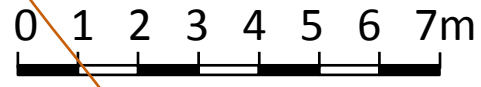


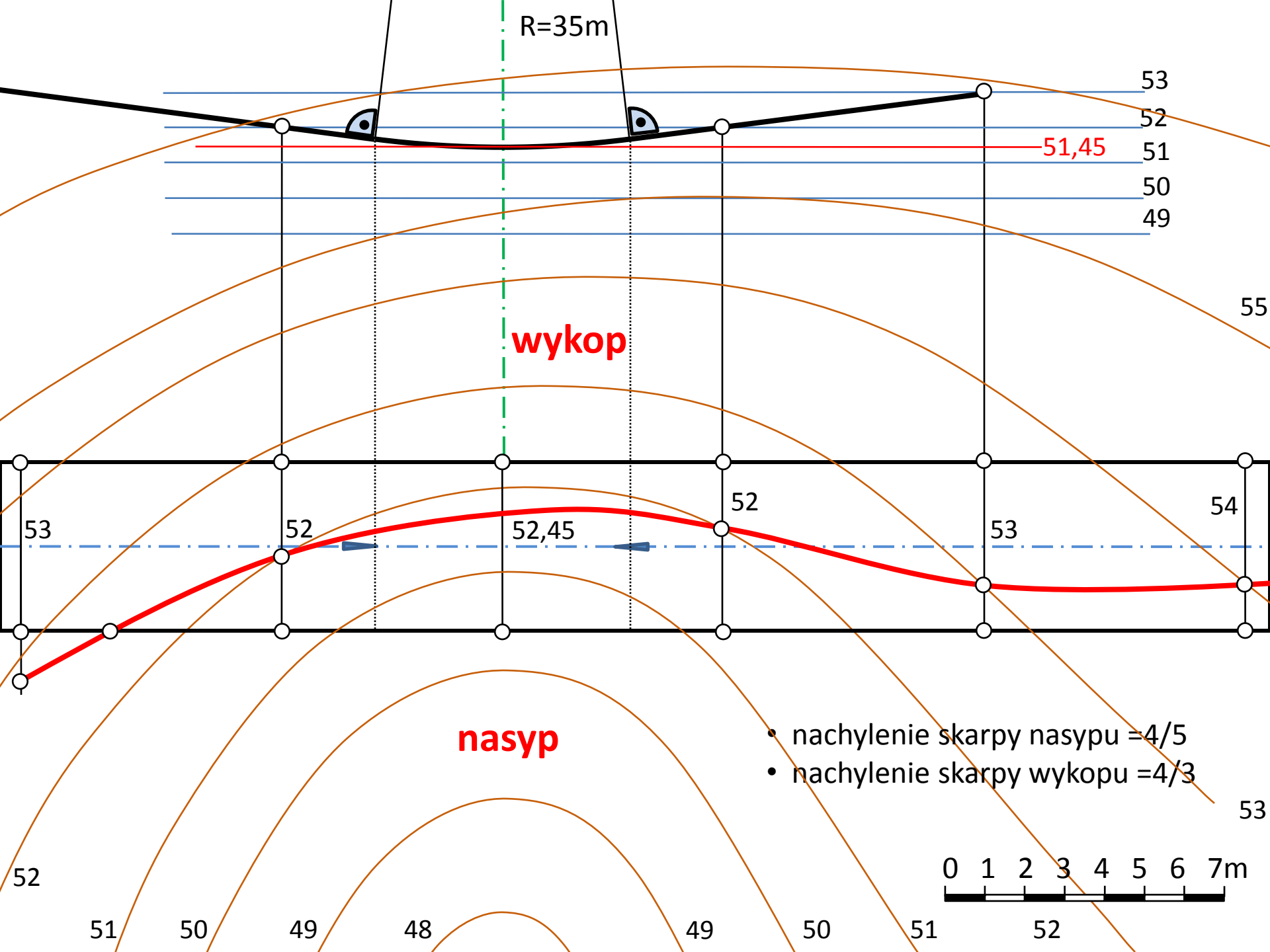
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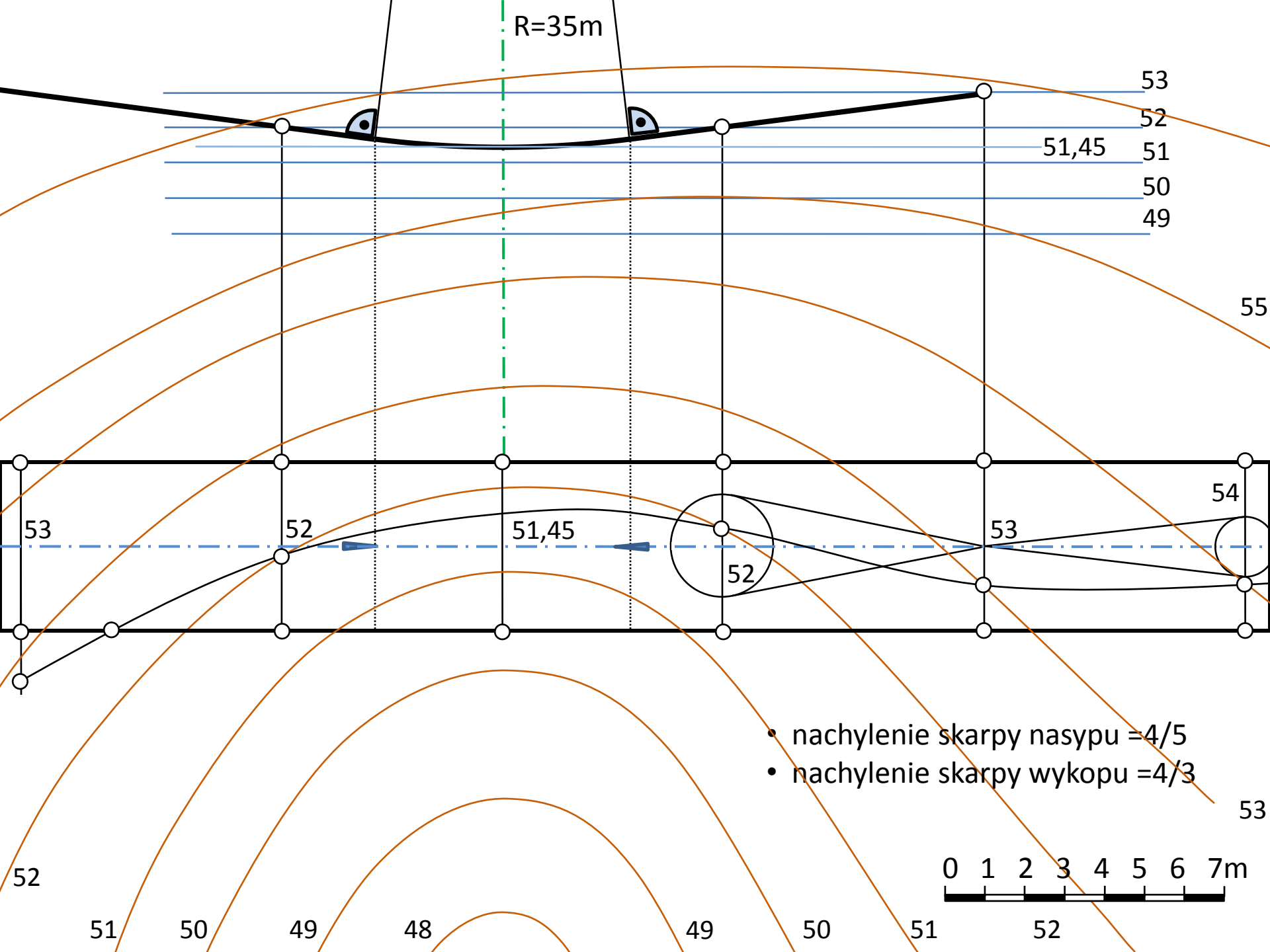
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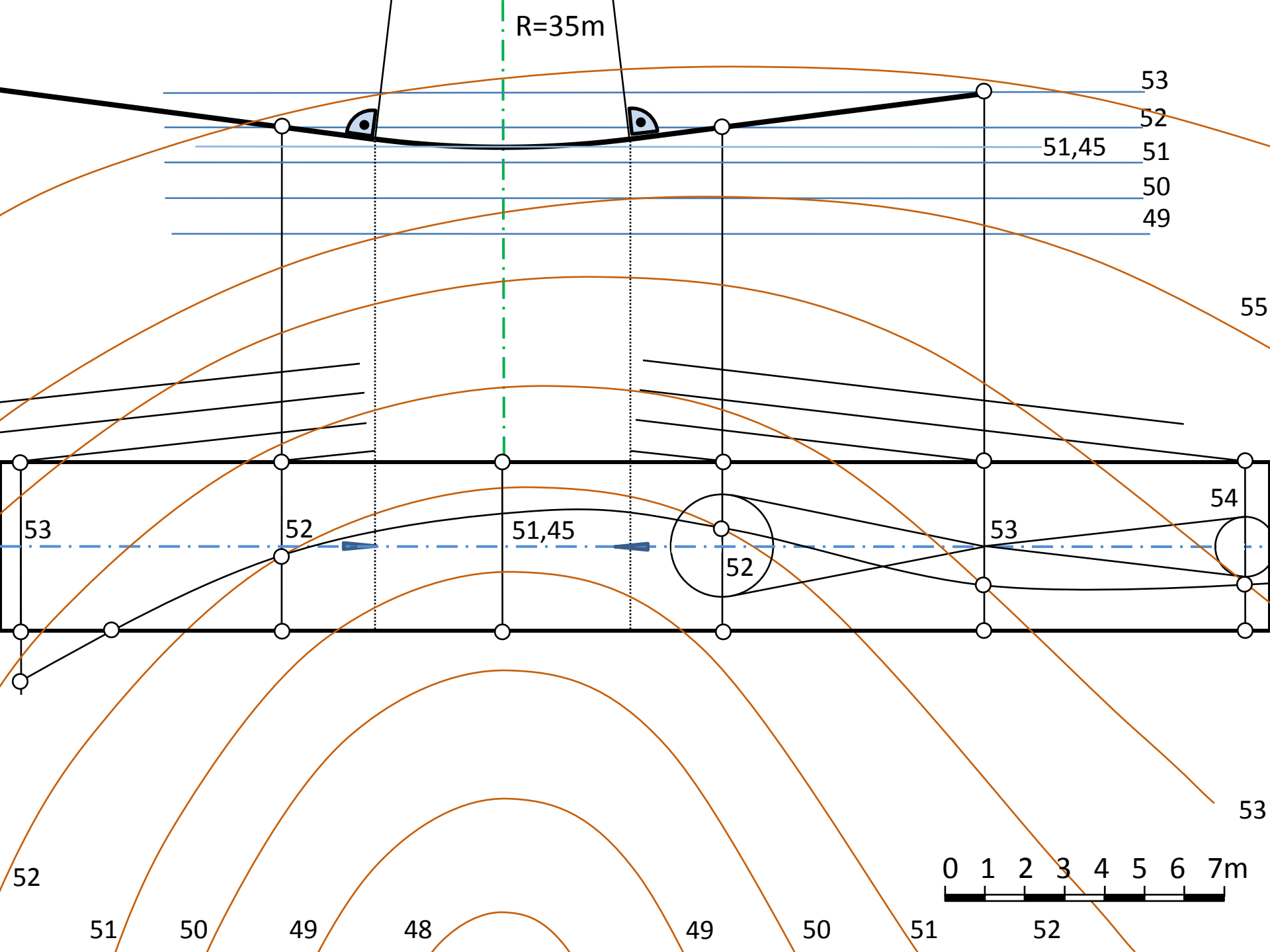
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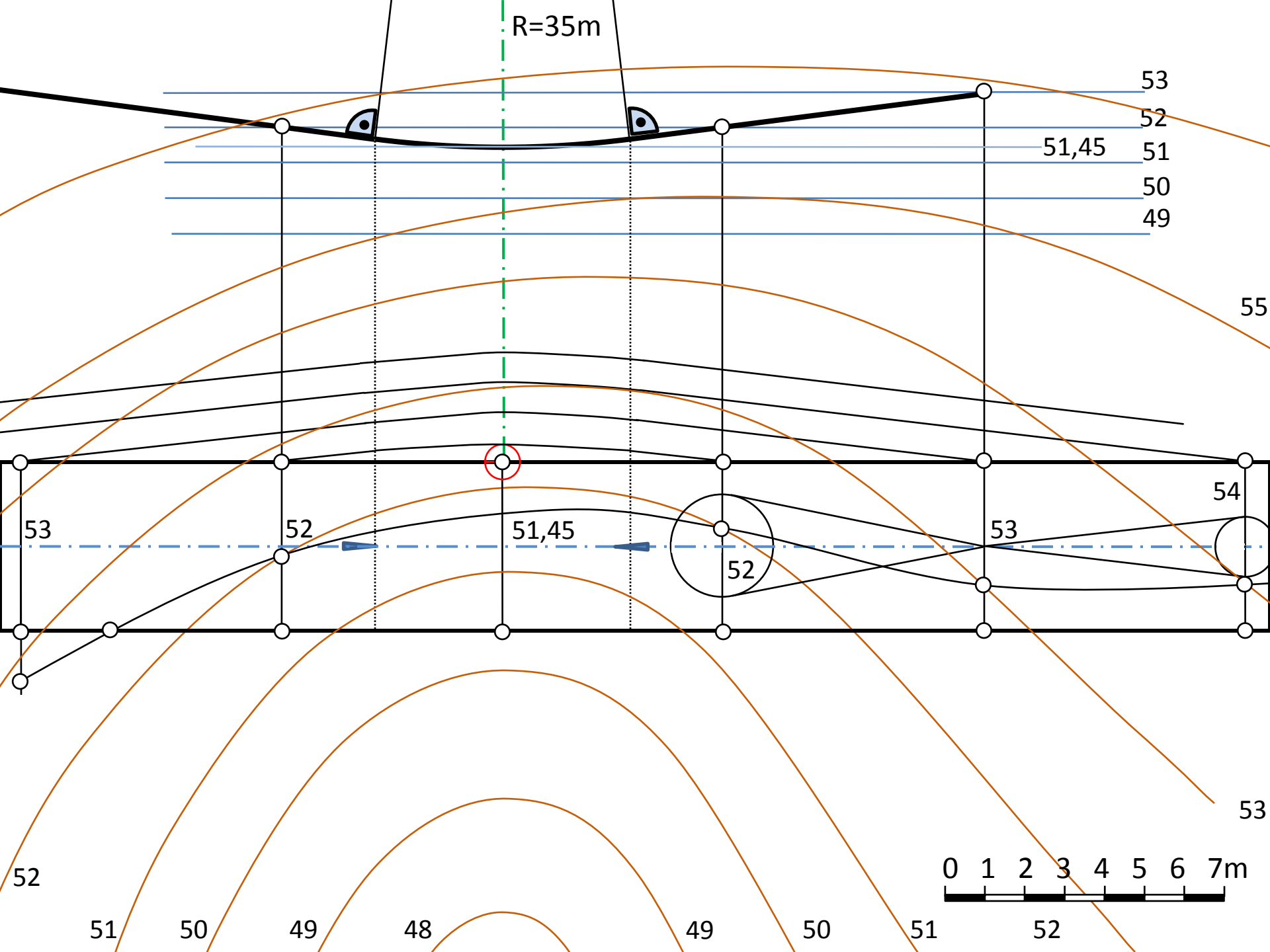
- nachylenie skarpy nasypu $=4/5$
- nachylenie skarpy wykopu $=4/3$

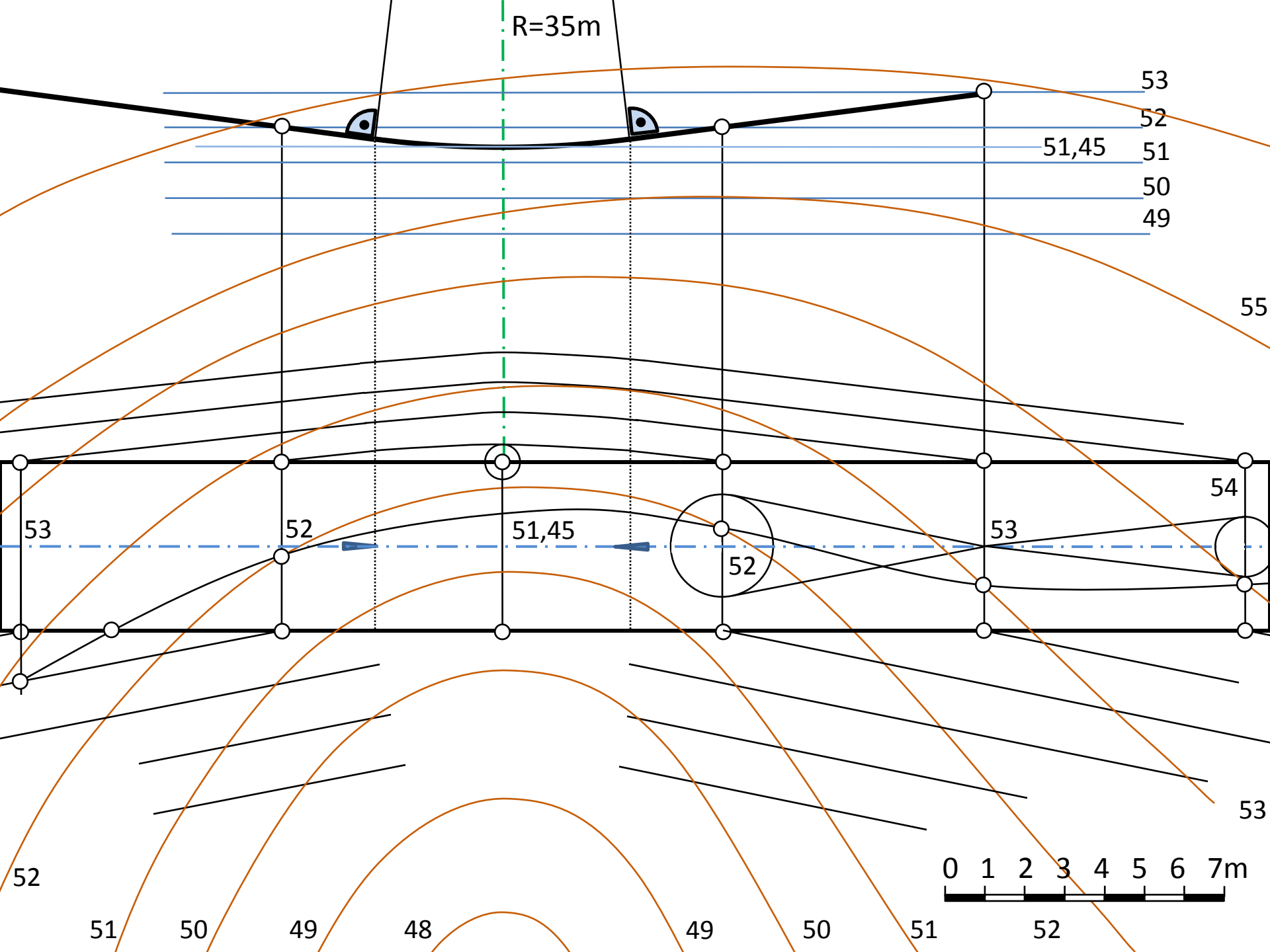


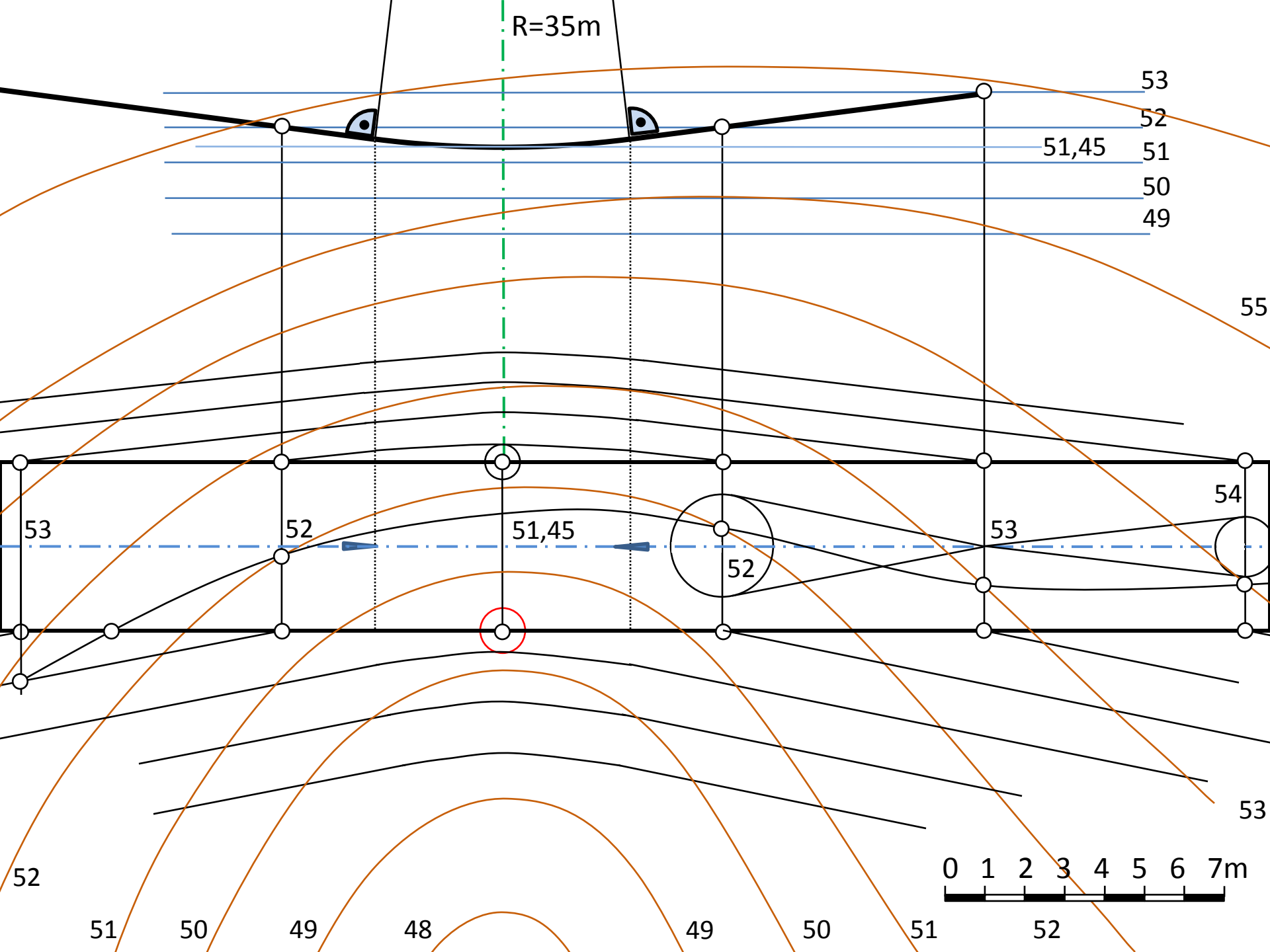


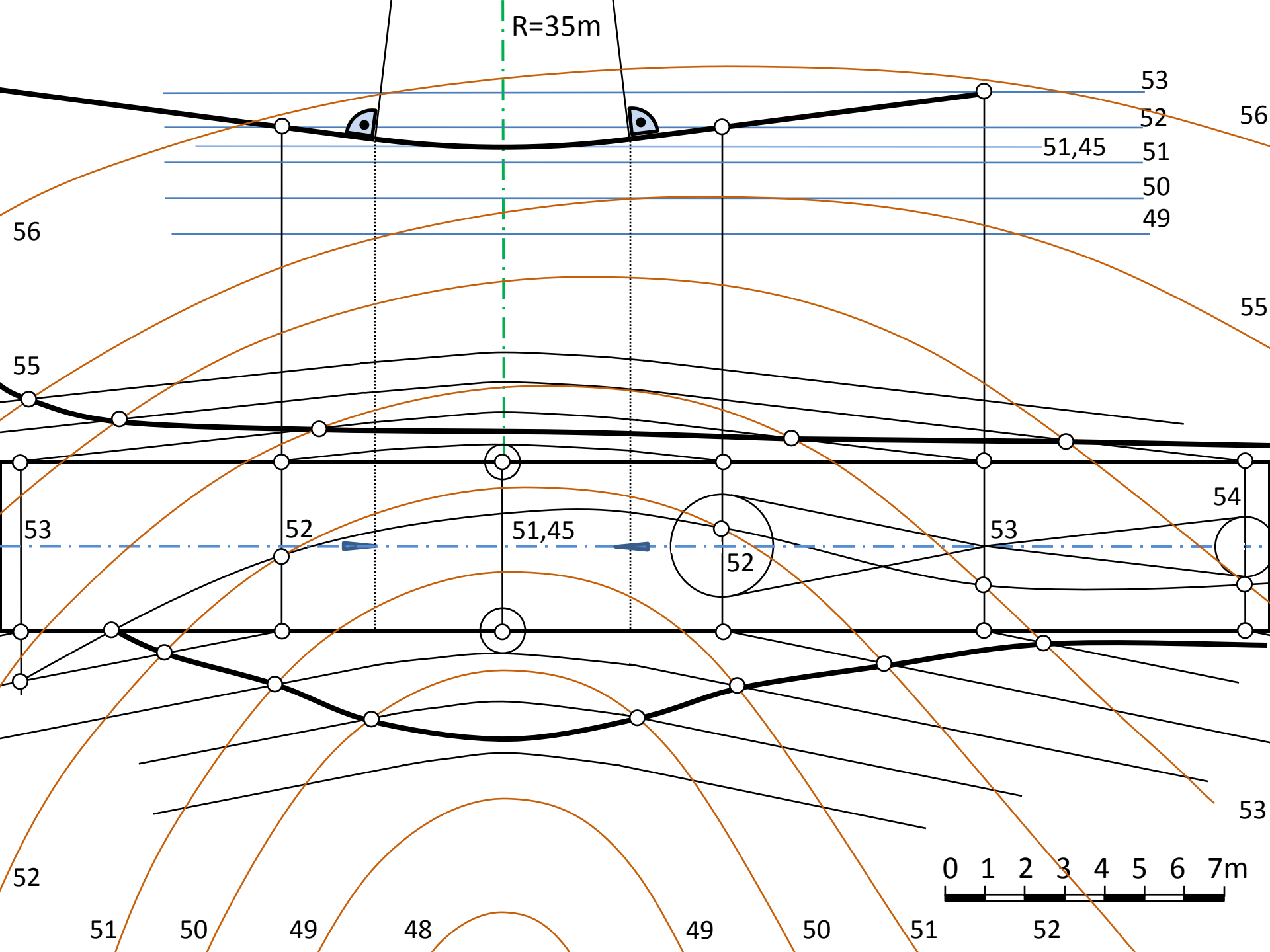






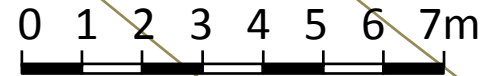
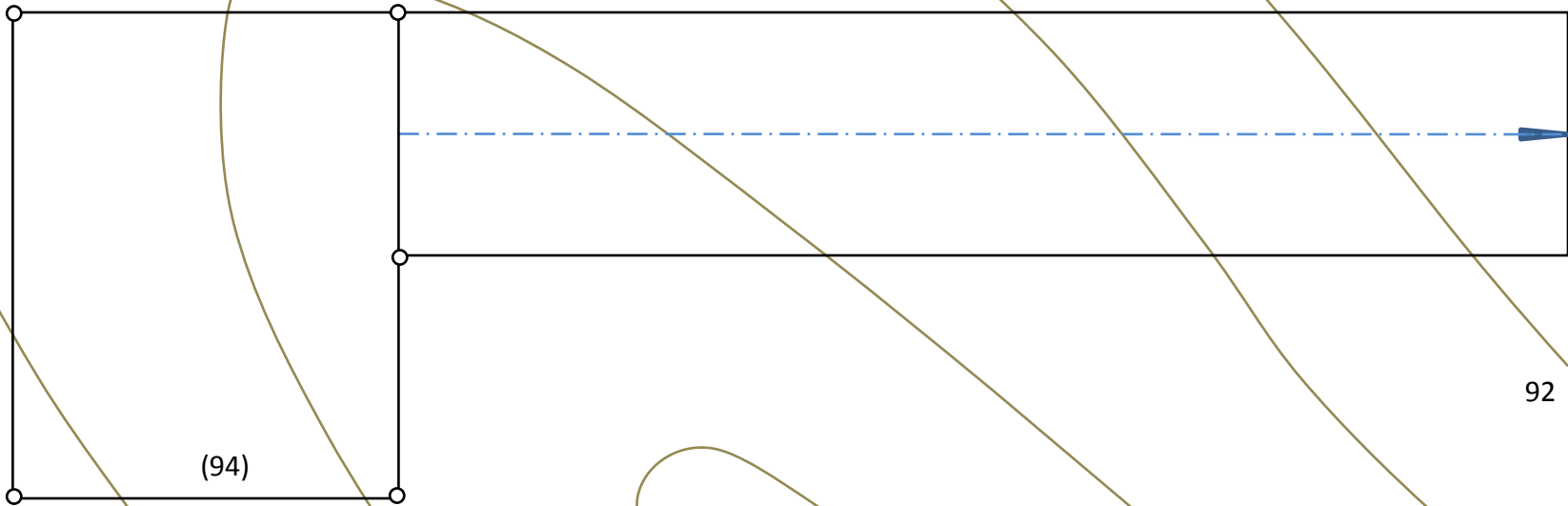






PROJEKT PLACU Z DROGĄ DOJAZDOWĄ

- nachylenie drogi = 15%
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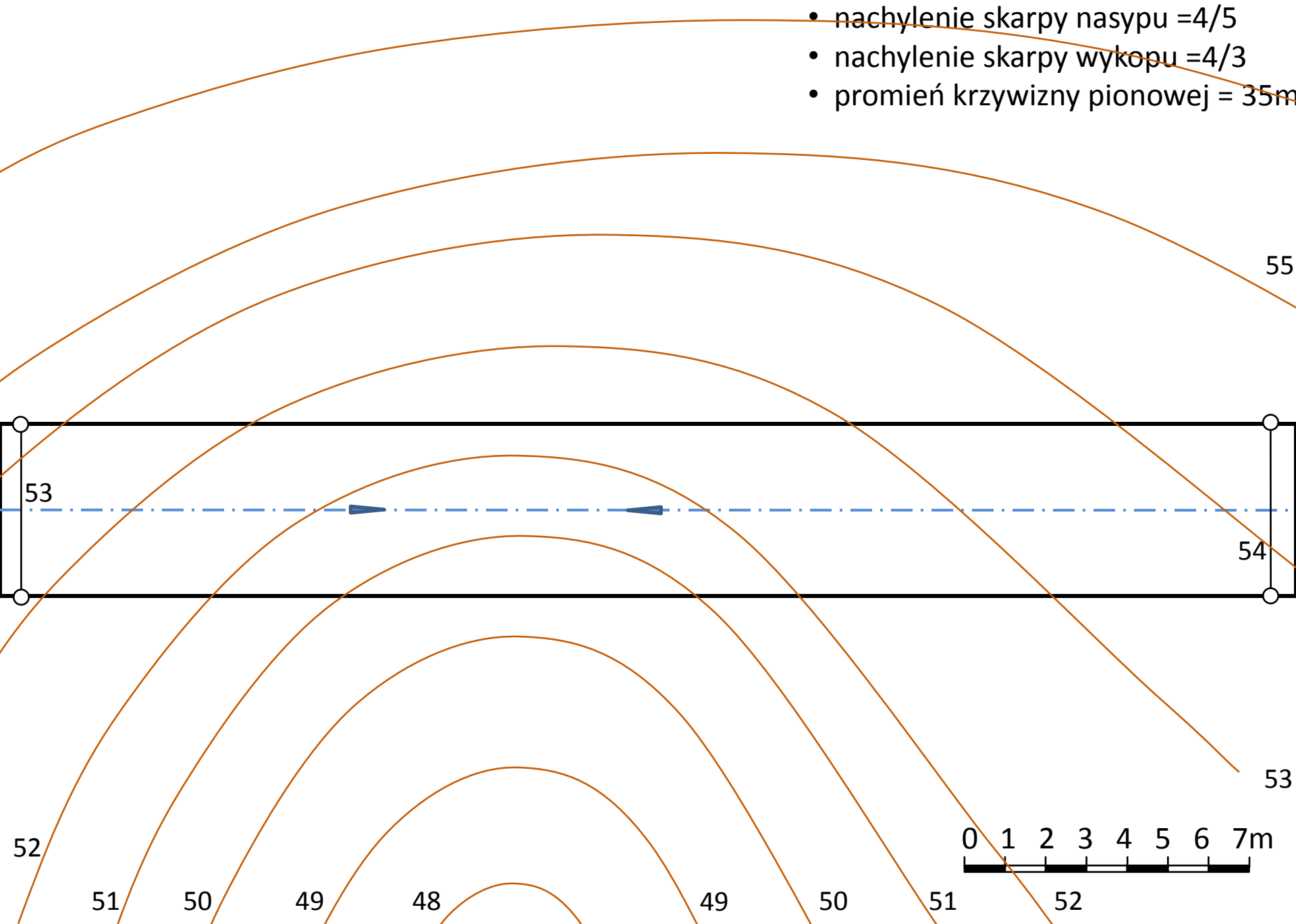
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Połączenie odcinków dróg o przeciwnym spadku

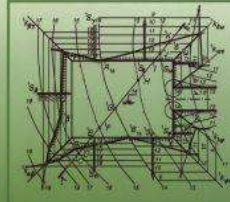
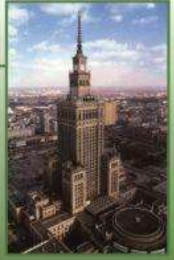
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Iwan KERNICKI

Projektowanie geometryczne placów budowlanych i dróg dojazdowych



WYDAWNICTWO SGGW

Literatura:

- Iwan Kernicki, *Projektowanie geometryczne placów budowlanych i dróg dojazdowych*. Wydawnictwo SGGW, Warszawa 2008
- Literatura: Jerzy Waligórski, *Zasady i zastosowania rzutu cechowanego*, PWN Warszawa, 1961
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- Bożena Kotarska-Lewandowska *GEOMETRIA WYKREŚLNA. ZADANIA TESTOWE*

http://pbc.gda.pl/dlibra/docmetadata?id=9921&from=&dirids=1&ver_id=&lp=1&QI=

<http://pbc.gda.pl/dlibra/doccontent?id=2594&dirids=16> (przebieg drogi w terenie)

<http://pbc.gda.pl/dlibra/doccontent?id=2566&dirids=16> (rzut cechowany – 7 zadań)