1.

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1.3.1

1.3.1.1

1 1992 65

2009 8 27

2009 8 27

2

[redacted]

2015 5 29 80

2015 7 1

2017 29 2017 10 10

2009 20 2015 3 23 78 [redacted] ' È i

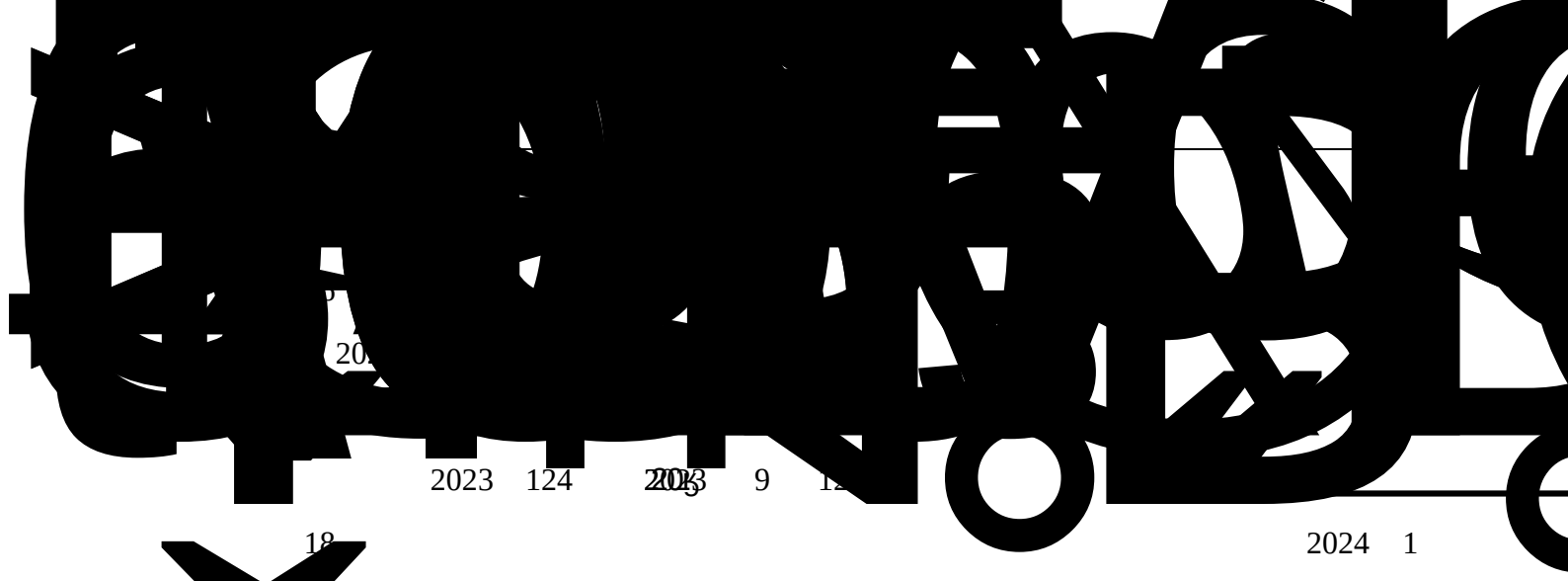
2018 12

2018 12 4

2016

88 2019 7 11 2

2019 9 1



2023 124 2023 9 12

18 2024 1

24 1 19

19 2024

2024 1 2024 1 19

2024-2026 2024 2 2024 1 21

16 GB 18599-2020

17 4 GB 39800.4-2020

18 5 GB/T 2893.5-2020

19 2024 GB/T 50011-2010

1.3.2.2

1 AQ 8001-2007

2 SL 191-2008

3 AQ 2030-2010

4 DL/T 5129-2013

5 NB 35047-2015/XG1-2021

6 SL 274-2020

1.3.3

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2008 5

2

2008 5

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2020 12

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2015 9

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2015 9

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2018 4

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2023 6

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2.1.1

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2.1.2

2006

2008

2015 9

2016

2021 -

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2025 11

2.3.4

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+ +

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2.4.1

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16.28m 9.9Ĭ10^{4}m^3 100

2

5.5 t/a

3 t/a

10%

1.5t/m^3

240 /

3

2006 7

138.5m 13.78m 6.0m 1:2.0

0.4m 1.0m

1.0m 1:1.0 100mm

1.0%

141.0m

2.5m 1:4.0 0.3m

4

1.0m 1.5m

0.4m

20m

2.4.2

1

124.7m

140.8m 16.1m 130.4m 2m 163m

5.0m 1:1.9

6.7m

124.7m

140.8m 130.4m 2m

1:2.0 5.0m

1:1.5 0.92

0.4mĬ0.4m 100mm

2

2%

100m 40m 60m

138.4m

3

2% 2.0m

1:2.0 10.0m 6m

40m

2.5

2.5.1

- 251m 142m

0.13km^2 345m

185m

1km

2-2

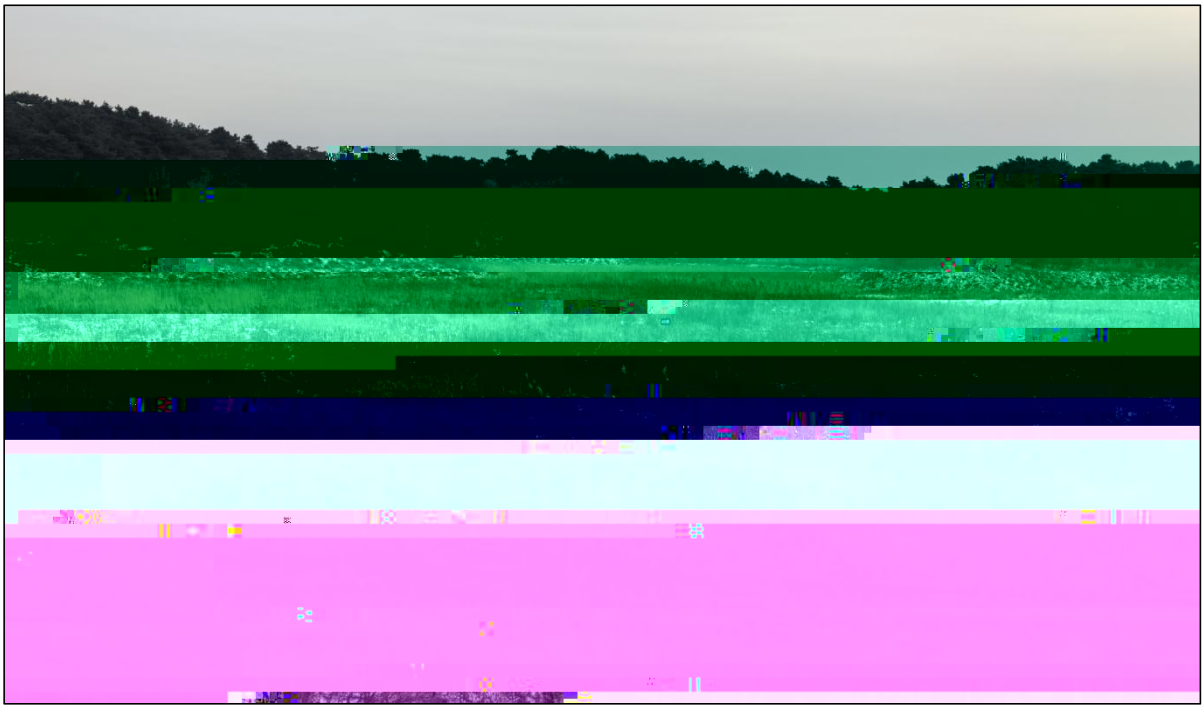
2-4

2.5.4

15m

139.68m 15m 135.62m~137.93m

1%



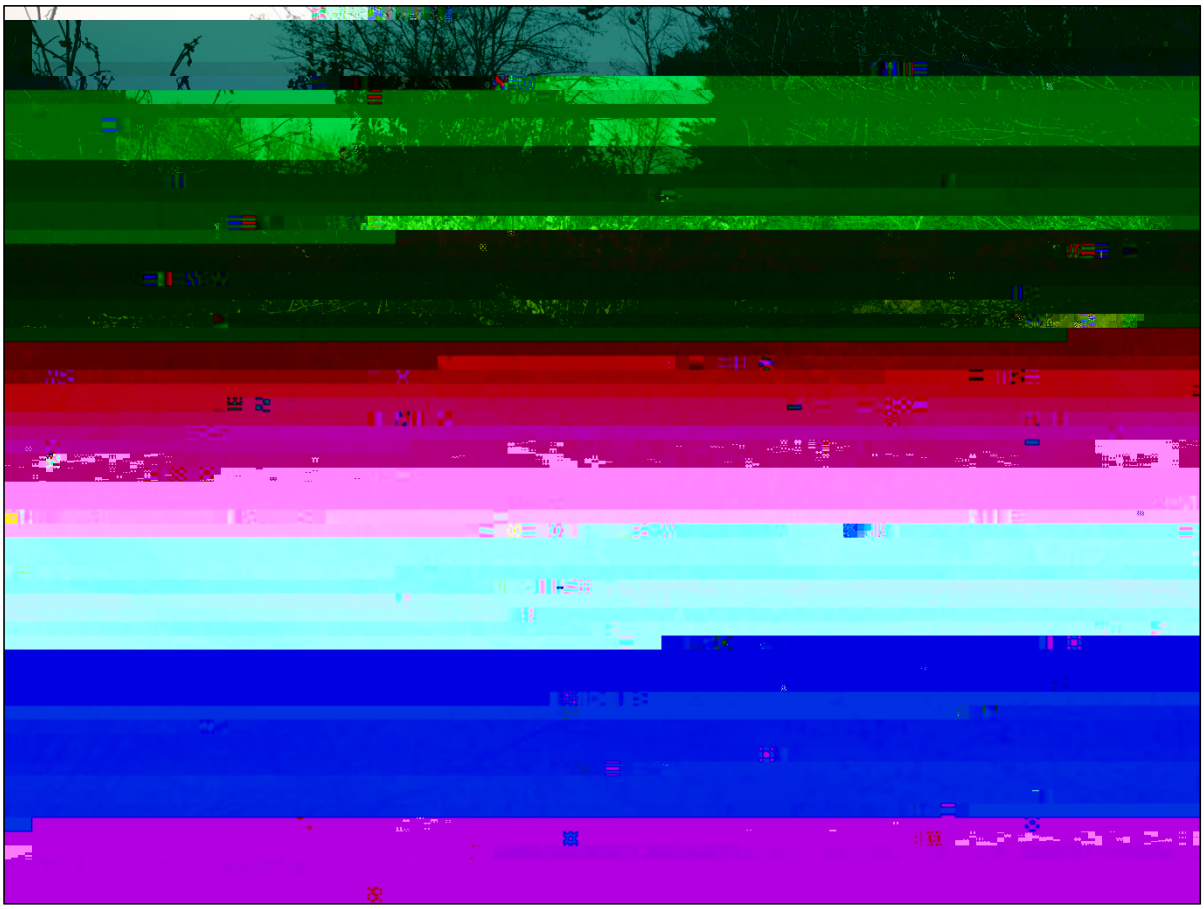
2-5

2.5.5

2.0m 1.3m 1.8~2.0m 1.3m

137.7m 2%

2-6



2-7

2.5.6

1 3 3

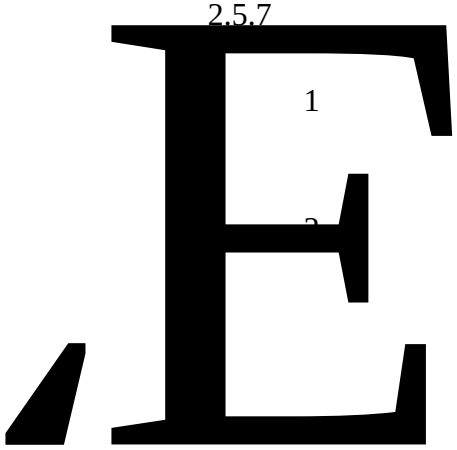
3 1

1

2-8

2-9

2.5.7

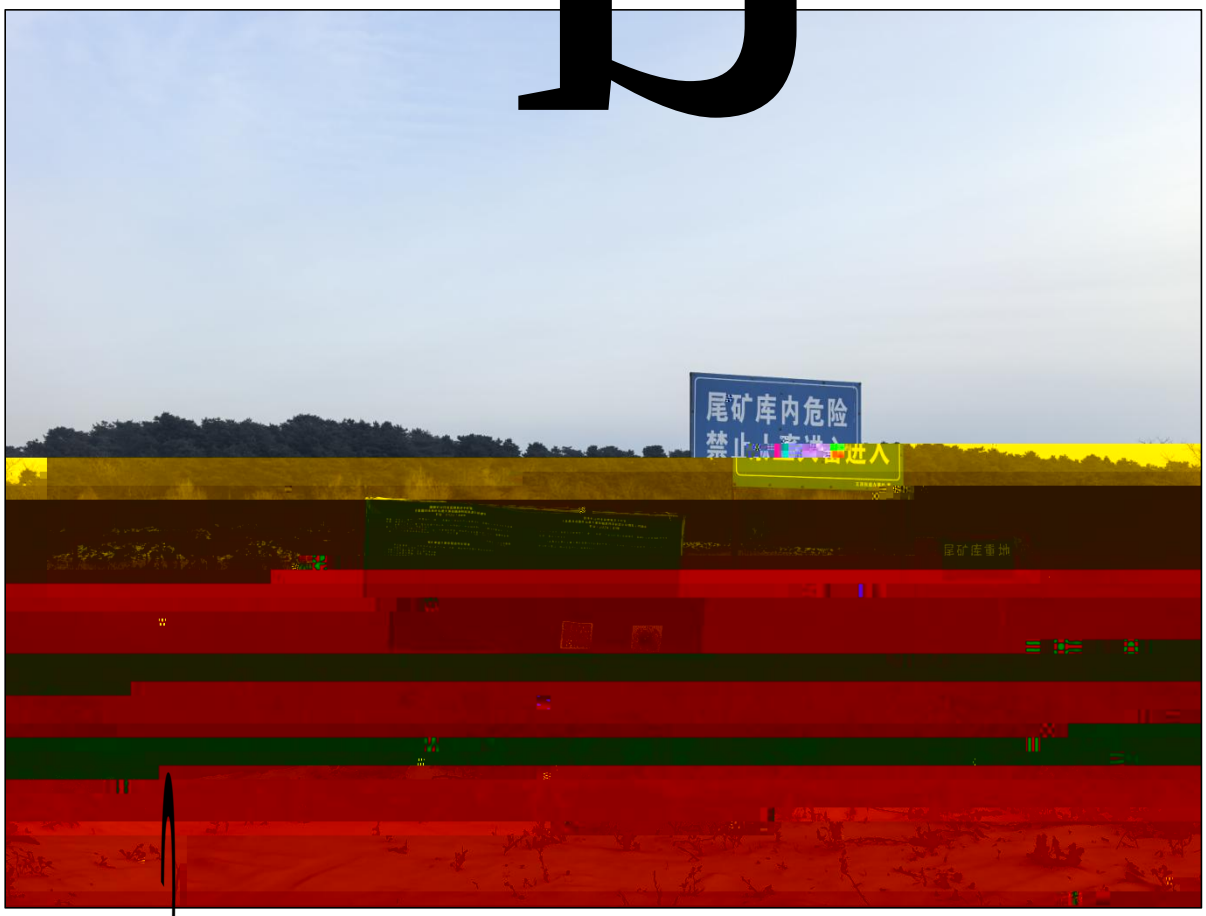


1

3.0m 8%

3

4



2-10

2.5.10

1

2

2001 8 15 2021

4 19

2

3 2025 3 13 2028 12

3

2 1

3.

3.1

3.1.1

3-1

3-1

1		3.1.1		
2		3.1.1		
3		3.1.2		
4		5.2.2		
5		5.2.3		
6		5.2.4		

3

0.8~1.2m

4

5

6

3.1.3

3.2

3.2.1

3-2

3-2

1		5.3.16	2025 6	

7

2025 11

2

6.3.11

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9.3.3

4

9.3.4 ï

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7	9.3.6
8	13.78m 5.0m 1:2.0 13.1m 3.0m 1:2.0

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2025 11

3-5

3-5

		kN/m^3	ű(Á)	C kPa
1		19	22.5	18
2		16	28.0	4.25
3		19	18.0	30.0
4		21	40.0	30.0

3.2.3.2

1

GB50863-2013 3-6

3-6

		1	2	3	4	5
				ð ð	ð ð	ð ð
					ð ð	ð ð
		ð ð		ð ð		ð ð
		ð ð				ð ð
				ð ð	ð ð	
					ð ð	
1 1 2 2 3 3						

4	4	
5	5	0.10g

2

A.

$$K = \frac{[(W \pm V)\sec\alpha - ub\sec\alpha]\tan\varphi + cb\sec\alpha}{}$$

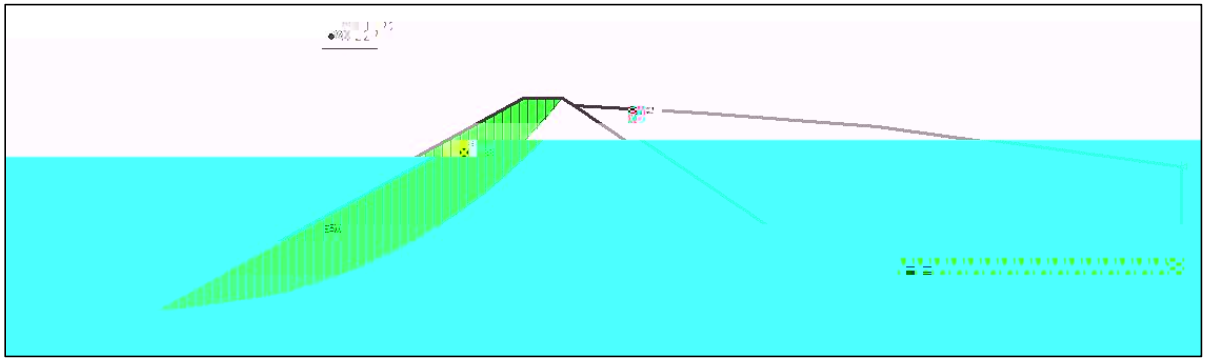
C ű ð

3

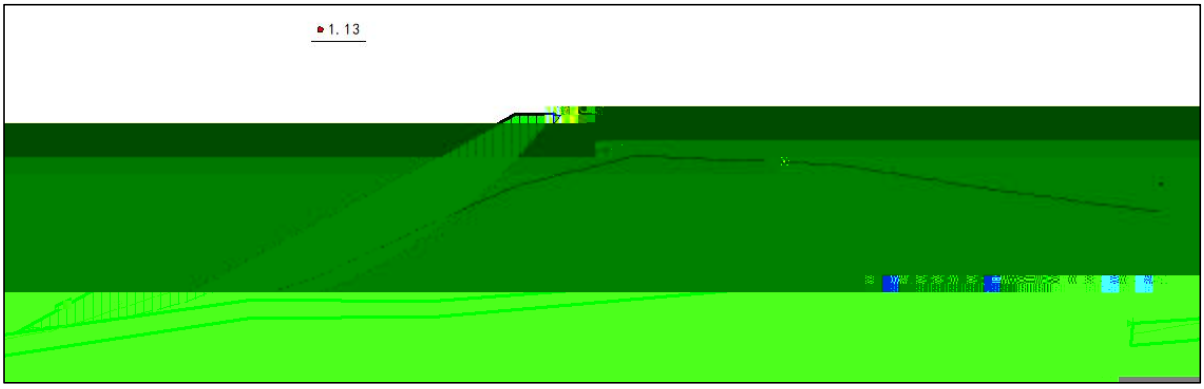
3-7 3-1~3-6

3-7

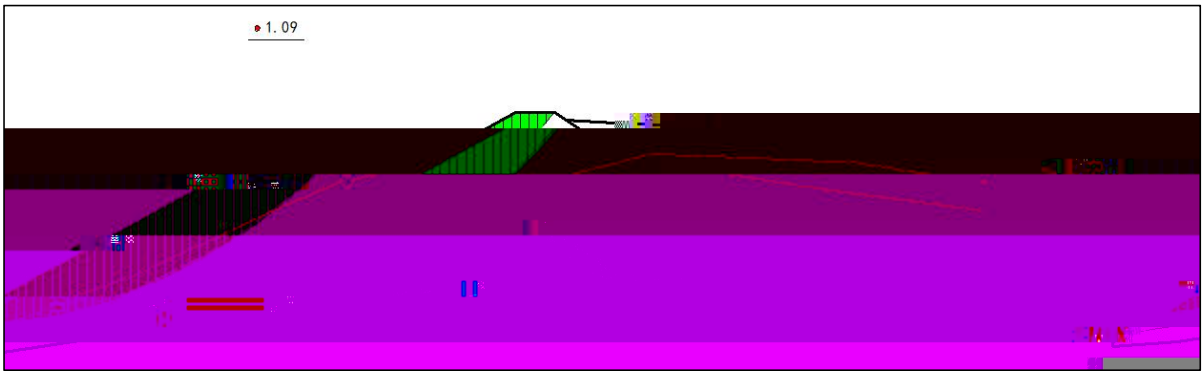
		1.22	1.33	1.15/1.25	
		1.13	1.24	1.05/1.15	
		1.09	1.17	1.00/1.10	



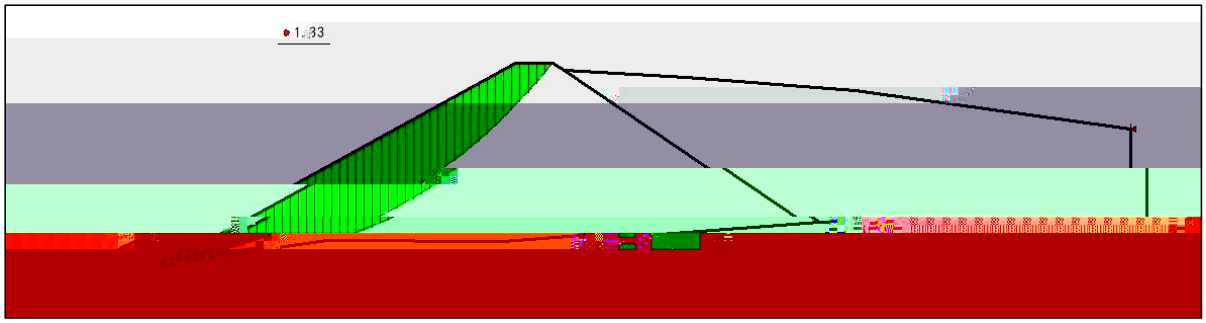
3-1



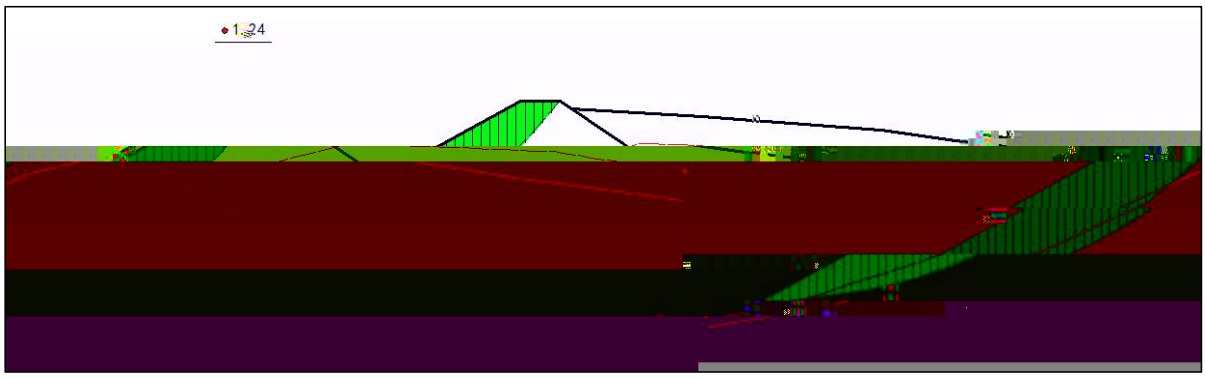
3-2



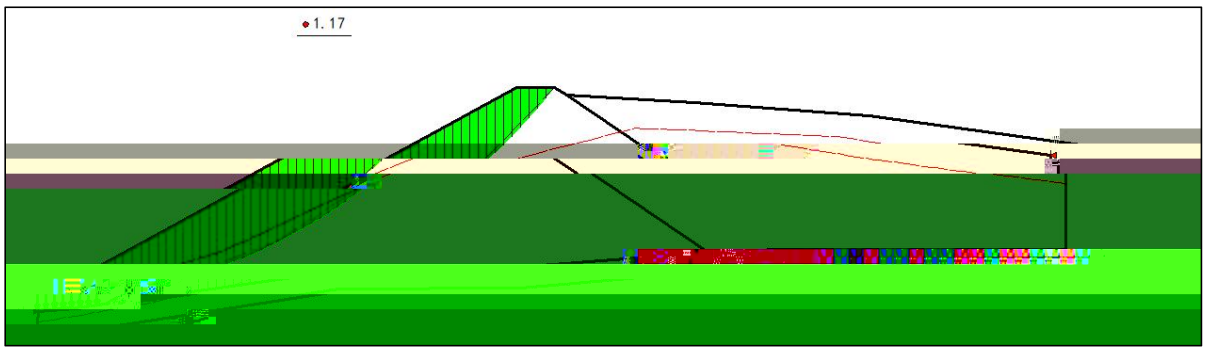
3-3



3-4



3-5



3-6

3.3

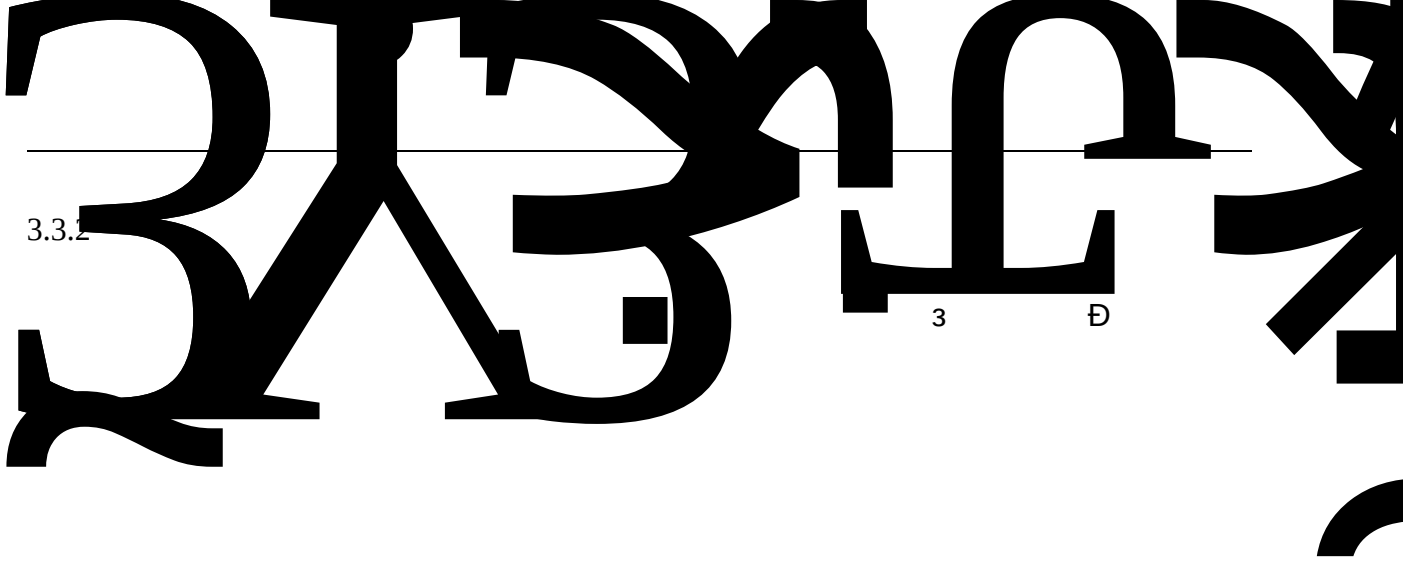
3.3.1

3-8

3-8

1		6.4.1	139.68m 137.7m 15m	
2		6.4.2	2025	
3	ð ð ð ð	6.4.3		
4		6.4.5		
5		6.4.7		

3.3.2



3-11

P%

1

$$Q = AC\sqrt{}$$

A ð m^2

C ð

R ð

i ð

n ð

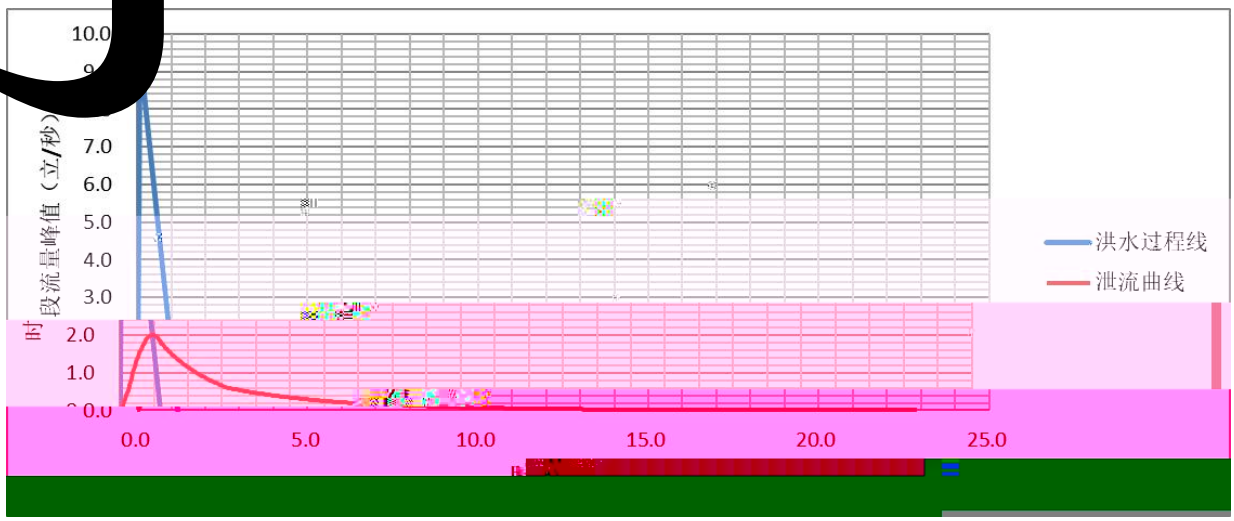
H=1.0m Q=7.7m^3/s

3

139.68m 137.7m 3-14

3-14

m	139.68	ð
/		ð
%	1	ð
m	137.7	ð
m	15	ð
m	0.58	ð
m	138.28	ð
m^3/s	2.0	ð
m	15	40
m	1.4	0.4


10.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
段流量峰值（立/秒）
时
洪水过程线
泄流曲线
0.0
5.0
10.0
15.0
20.0
25.0

3-14

3.3.3.4

3.4

5

5.1

2

3

4

3.6

3-17

3-17

1				

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3.7

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3-19

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6.1.1

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6.1.3

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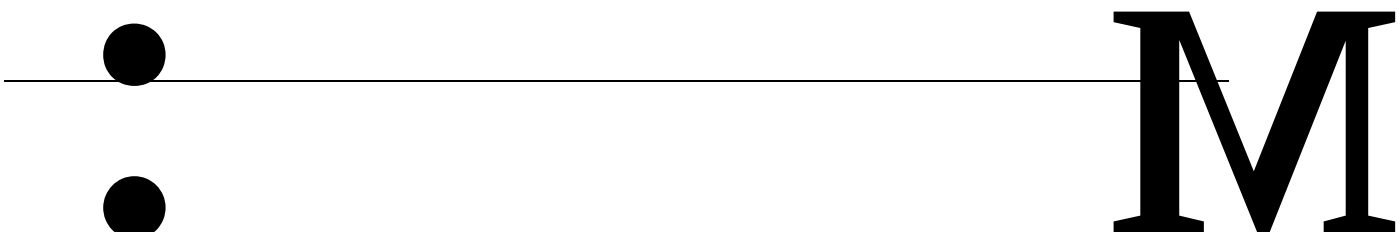

,H

13		10	0.5	1	5	
14		10	3	1	30	
15		10	3	1	30	
16		10	0.5	1	5	
17		10	3	1	30	

4.

4.1

1

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